



7450 Ethernet Service Switch  
7750 Service Router  
7950 Extensible Routing System  
Virtualized Service Router  
Release 22.10.R5

## MD-CLI Command Reference Guide

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# 1 Getting started

## 1.1 About this guide

This document describes the commands available in the MD-CLI that can be used to manage the router.

For a list of unsupported features by platform and chassis, see the *SR OS R22.x.Rx Software Release Notes*, part number 3HE 18412 000 x TQZZA.

Command outputs shown in this guide are examples only; actual output may differ depending on supported functionality and user configuration.



**Note:**

This guide generically covers Release 22.x.Rx content and may contain some content that will be released in later maintenance loads. In addition, some SR OS features are platform-specific and may not be available or visible on all platforms. See the *SR OS R22.x.Rx Software Release Notes*, part number 3HE 18412 000 x TQZZA, for information about the supported features and applicable platforms in each load of the Release 22.x.Rx software.

To access the configuration statements within the MD-CLI, the MD-CLI engine must be enabled and the configuration mode must be **mixed** or **model-driven**. For information about using the MD-CLI, see the *7450 ESS, 7750 SR, 7950 XRS, and VSR MD-CLI User Guide*.

## 1.2 Platforms and terminology



**Note:**

Unless explicitly noted otherwise, this guide uses the terminology defined in the following table to collectively designate the specified platforms.

*Table 1: Platforms and terminology*

Platform	Collective platform designation
7450 ESS-7	All
7450 ESS-12	
7750 SR-1	
7750 SR-1-24D	
7750 SR-1-46S	
7750 SR-1-48D	
7750 SR-1-92S	
7750 SR-1x-48D	

Platform	Collective platform designation
7750 SR-1x-92S	
7750 SR-7	
7750 SR-12	
7750 SR-12e	
7750 SR-a4	
7750 SR-a8	
7750 SR-1e	
7750 SR-2e	
7750 SR-3e	
7750 SR-1s	
7750 SR-1se	
7750 SR-2s	
7750 SR-2se	
7750 SR-7s	
7750 SR-14s	
7950 XRS-20	
7950 XRS-20e	
7950 XRS-40	
VSR	
VSR-NRC	
7450 ESS-7	7450 ESS
7450 ESS-12	
7750 SR-1	7750 SR
7750 SR-1-24D	
7750 SR-1-46S	
7750 SR-1-48D	
7750 SR-1-92S	
7750 SR-1x-48D	
7750 SR-1x-92S	
7750 SR-7	

Platform	Collective platform designation
7750 SR-12	
7750 SR-12e	
7750 SR-7	7750 SR-7/12/12e
7750 SR-12	
7750 SR-12e	
7750 SR-7	7750 SR-7/12
7750 SR-12	
7750 SR-a4	7750 SR-a
7750 SR-a8	
7750 SR-1e	7750 SR-e
7750 SR-2e	
7750 SR-3e	
7750 SR-1s	7750 SR-s
7750 SR-1se	
7750 SR-2s	
7750 SR-2se	
7750 SR-7s	
7750 SR-14s	
7950 XRS-20	7950 XRS
7950 XRS-20e	
7950 XRS-40	
VSR	VSR
VSR-NRC	

## 1.3 Conventions

This section describes the general conventions used in this guide.

### 1.3.1 Precautionary and information messages

The following are information symbols used in the documentation.



**DANGER:** Danger warns that the described activity or situation may result in serious personal injury or death. An electric shock hazard could exist. Before you begin work on this equipment, be aware of hazards involving electrical circuitry, be familiar with networking environments, and implement accident prevention procedures.



**WARNING:** Warning indicates that the described activity or situation may, or will, cause equipment damage, serious performance problems, or loss of data.



**Caution:** Caution indicates that the described activity or situation may reduce your component or system performance.



**Note:** Note provides additional operational information.



**Tip:** Tip provides suggestions for use or best practices.

### 1.3.2 Options or substeps in procedures and sequential workflows

Options in a procedure or a sequential workflow are indicated by a bulleted list. In the following example, at step 1, the user must perform the described action. At step 2, the user must perform one of the listed options to complete the step.

#### Example: Options in a procedure

1. User must perform this step.
2. This step offers three options. User must perform one option to complete this step.
  - This is one option.
  - This is another option.
  - This is yet another option.

Substeps in a procedure or a sequential workflow are indicated by letters. In the following example, at step 1, the user must perform the described action. At step 2, the user must perform two substeps (a. and b.) to complete the step.

#### Example: Substeps in a procedure

1. User must perform this step.
2. User must perform all substeps to complete this action.
  - a. This is one substep.
  - b. This is another substep.

## 1.4 MD-CLI command reference

## 1.4.1 MD-CLI tree hierarchy

Table 2: Command syntax symbols

Symbol	Description
	A vertical bar represents an “or” condition, indicating that only one of the parameters in the brackets or parentheses can be selected.
()	Parentheses indicate that one of the parameters must be selected.
[]	Brackets indicate optional parameters.
Bold	Commands in <b>bold</b> indicate commands and keywords.
Italic	Commands in <i>italics</i> indicate that you must enter text for the parameter.

In the following examples, **location** and **graceful-shutdown** are command names. For the **location** command, *keyword* must be one of the keywords **cf1**, **cf2**, or **cf3**. For the **graceful-shutdown** command, *boolean* must be one of the keywords **true** or **false**, although explicitly using the keyword **true** is optional.

**location** *keyword*

*keyword* - (**cf1** | **cf2** | **cf3**)

**graceful-shutdown** *boolean*

*boolean* - ([**true**] | **false**)

The configuration branch of the MD-CLI shows the commands and parameters (also known as elements) that are available, shown in a hierarchical structure as in the following figure.

Figure 1: MD-CLI configuration tree example

```

configure
- cflowd
- active-flow-timeout number
- admin-state keyword
- analyze-gre-payload boolean
- analyze-l2tp-traffic boolean
- analyze-v4overv6-traffic boolean
- apply-groups reference
- apply-groups-exclude reference
- cache-size number
- collector (ipv4-address-no-zone | ipv6-address-no-zone) port number
- admin-state keyword
- aggregation
- as-matrix boolean
- destination-prefix boolean
- protocol-port boolean
- raw boolean
- source-destination-prefix boolean
- source-prefix boolean
- apply-groups reference
- apply-groups-exclude reference
- autonomous-system-type keyword
- description string
- export-filter
- family
- ipv4 boolean
- ipv6 boolean
- l2-ip boolean
- mcast-ipv4 boolean
- mcast-ipv6 boolean
- mpls boolean
- interface-list
- router reference interface-name reference
- service

```

The **configure** context is the root level of the configuration branch within the configuration mode in the MD-CLI. Each chapter of this guide describes a configuration branch in the MD-CLI configuration tree.

Commands are linked to their command descriptions in the configuration tree with some exceptions (for example, to reduce repeated content), including the **apply-groups**, **apply-groups-exclude**, and **groups** commands. These commands are used to direct the use of configuration templates called configuration groups in the configure region at all configuration levels. The **apply-groups** command applies a configuration group at a configuration level and the **apply-groups-exclude** command excludes a configuration group at a configuration level. See "Using configuration groups" in the *7450 ESS, 7750 SR, 7950 XRS, and VSR MD-CLI User Guide* for more information.

Some commands require one or more keys to be entered with the command. For example, the **collector** command has two keys which must be entered: the IP address and the port number. The key name for the IP address (**ip-address**) is optional, however, the key name **port** must be entered before the port number.

```
- collector (ipv4-address-no-zone | ipv6-address-no-zone) port number
```

The command description indicates the required syntax for each command. See [MD-CLI command descriptions](#) for more information.

**collector** [**ip-address**] (*ipv4-address-no-zone | ipv6-address-no-zone*) **port** *number*

Italicized names after a command or parameter name indicate the parameter type. The parameter types include (but are not limited to):

- Boolean (true and false values)
- keyword (enumerated values)
- string

- number
- IPv4 address
- IPv6 address
- MAC address

The **summary-only** parameter, for example, requires a Boolean value. The **autonomous-system** parameter requires a number. For more information about the input values, click the command or parameter name from the MD-CLI tree to be linked to the command description.

```
- summary-only boolean
- autonomous-system number
```

A parameter type may also be a combination of different base types. These parameters are displayed in the MD-CLI tree with the individual parameter types enclosed in round brackets (()), separated by a vertical bar (|). For example, the **indirect** parameter can be configured with either an IPv4 address or IPv6 address:

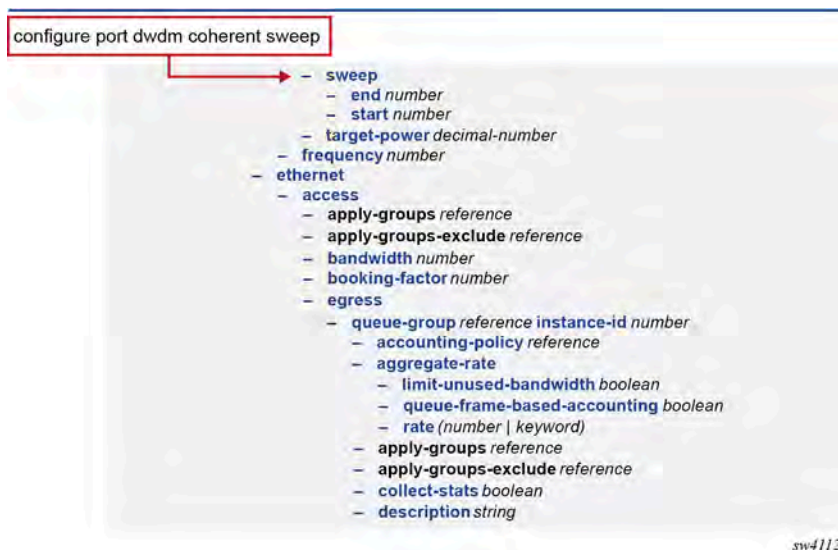
```
- indirect (ipv4-address-no-zone | ipv6-address-no-zone)
```

Allowed values in strings are printable, 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotation marks. Double quotation marks within a string are not supported.

### 1.4.1.1 Context path

In the CLI tree section, a contextual path at the top of a page refers to the full context of the first command on the page, as shown in the following figure.

Figure 2: Command tree navigation



## 1.4.2 MD-CLI command descriptions

The command syntax is shown in the command description, where the command is displayed in bold, followed by any key names and a type. From the MD-CLI tree, the **configure log accounting-policy** command shows that the key for the command is a number:

```
- log
  - accounting-policy number
```

The command description for **accounting-policy** shows that the key for the command is a policy identifier:

**accounting-policy** [**policy-id**] *number*

The square brackets ([ ]) indicate that the **policy-id** key name is optional. From the **policy-id** command description, the range of the identifier is a number from 1 to 99. Therefore, when using the **accounting-policy** command, the following inputs are acceptable:


```
accounting-policy policy-id 15
accounting-policy 25
accounting-policy 1
accounting-policy policy-id 99
```

The following table describes the fields that may be displayed for a command. Not all fields are applicable for all commands.

Table 3: Command descriptions fields

Field	Description
Element Name	Name of the element (command or parameter) and its syntax
Synopsis	Summary description of the element
Context	Full path to the command (with links to parent commands)
Tree	Link to the command in the CLI tree. For key elements, the link is to the parent element.
Description	Detailed description of the element, as needed
String Length	For string elements, the range of the number of characters allowed
Range/Max. Range	For number elements, the range of allowed values. A maximum range may be overridden by a platform-specific range.
Units	Base unit type of the element
Options	Enumerated values allowed for the element. Not all options are available on all platforms.
Default	Default value for the element. Platform-specific defaults are not displayed.



Field	Description
Reference	Reference to an element instance in the configuration or state datastore
Min./Max. Instances	For lists and leaf-lists, the minimum or maximum number of instances for this element
Notes	Information about special attributes of the element, including whether the element is: <ul style="list-style-type: none"> <li>• a key for an element</li> <li>• mandatory</li> <li>• ordered by the user (instead of by the system)</li> <li>• part of a choice of elements</li> </ul>
Introduced	Release in which the element was introduced
Deprecated	Release in which the element was deprecated
Platforms	Hardware platforms on which the element is available. See <a href="#">Platforms and terminology</a> for more information about the platforms. <p> <b>Note:</b> Some SR OS features are platform-specific and therefore may not be available or visible on all platforms. See the <i>SR OS R22.x.Rx Software Release Notes</i>, part number 3HE 18412 000 x TQZZA, for information about platform support.</p>

A description of the element is also available from the online help for the element. For information about using the online help in the MD-CLI, see the *7450 ESS*, *7750 SR*, *7950 XRS*, and *VSR MD-CLI User Guide*.



**Note:**

All options for enumerated types and numerical ranges are listed in the MD-CLI command descriptions, however, not all options or ranges are valid on all platforms.

## 2 Operational commands

This section lists the MD-CLI operational commands.

## 2.1 admin commands

**admin** commands are used to perform administrative functions, such as displaying configuration that is not subject to AAA, manually saving the configuration, clearing user sessions, and rebooting the system.

```

admin
- application-assurance
  - group reference
    - url-list reference
      - upgrade
  - upgrade
- clear
  - security
    - lockout
      - all
      - user string
    - password-history
      - all
      - user string
- disconnect
  - address (ipv4-address-no-zone | ipv6-address-no-zone)
  - op-table-bypass boolean
  - session-id number
  - session-type keyword
  - username string
- nat
  - save-deterministic-script
- reboot
  - [card] keyword
  - hold
  - now
- redundancy
  - force-switchover
    - ignore-status
    - now
  - synchronize
    - boot-environment
    - configuration
- satellite
  - ethernet-satellite reference
    - reboot
      - now
      - upgrade
    - synchronize
    - tech-support
      - [url] string
- save
  - bof
  - configure
  - debug
  - li
  - [url] string
- set
  - time
    - [system-time] string
- show
  - configuration
    - bof
    - booted
    - cflash-id string
    - [cli-path] string

```

---

admin show configuration configure

```
  - configure
  - debug
  - detail
  - flat
  - full-context
  - intended
  - json
  - li
  - running
  - units
  - xml
- support-mode
- system
  - license
    - activate
      - [file-url] string
      - now
    - validate
      - [file-url] string
  - management-interface
    - operations
      - delete-operation
        - [delete-id] number
        - op-table-bypass boolean
      - stop-operation
        - op-table-bypass boolean
        - [stop-id] number
  - security
    - hash-control
      - custom-hash
        - algorithm keyword
        - key string
      - remove-custom-hash
    - system-password
      - admin-password
      - vsd-password
  - telemetry
    - grpc
      - cancel
        - all
        - subscription-id number
- tech-support
  - [url] string
```

## 2.1.1 admin command descriptions

### admin

Synopsis	Enter the administrative context for system operations
Context	<a href="#">admin</a>
Tree	<a href="#">admin</a>
Introduced	16.0.R1
Platforms	All

### application-assurance

Synopsis	Enter the <b>application-assurance</b> context
Context	<a href="#">admin application-assurance</a>
Tree	<a href="#">application-assurance</a>
Description	Commands in this context configure Application Assurance (AA) upgrade and AA group upgrade operations.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### group [[aa-group-id](#)] *reference*

Synopsis	Enter the <b>group</b> list instance
Context	<a href="#">admin application-assurance group reference</a>
Tree	<a href="#">group</a>
Description	Commands in this context configure the attributes of the group-specific upgrade.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### [[aa-group-id](#)] *reference*

Synopsis	AA group ID
Context	<a href="#">admin application-assurance group reference</a>
Tree	<a href="#">group</a>
Reference	<b>state application-assurance group</b> <i>number</i>

Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **url-list** [[url-list-name](#)] *reference*

Synopsis	Enter the <b>url-list</b> list instance
Context	<a href="#">admin application-assurance group reference url-list reference</a>
Tree	<a href="#">url-list</a>
Description	Commands in this context configure the URL list upgrade parameters.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[url-list-name]** *reference*

Synopsis	AA URL list name
Context	<a href="#">admin application-assurance group reference url-list reference</a>
Tree	<a href="#">url-list</a>
Reference	<b>state application-assurance group number url-list string</b>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **upgrade**

Synopsis	Upgrade the referenced URL list
Context	<a href="#">admin application-assurance group reference url-list reference upgrade</a>
Tree	<a href="#">upgrade</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **upgrade**

Synopsis	Upgrade to a new isa-aa.tim file
Context	<a href="#">admin application-assurance upgrade</a>

---

Tree	<a href="#">upgrade</a>
Description	This command loads a new isa-aa.tim file as part of a router-independent signature upgrade. An AA ISA reboot is required for the upgrade to take effect.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## clear

Synopsis	Enter the <b>clear</b> context
Context	<a href="#">admin clear</a>
Tree	<a href="#">clear</a>
Introduced	19.10.R1
Platforms	All

## security

Synopsis	Enter the <b>security</b> context
Context	<a href="#">admin clear security</a>
Tree	<a href="#">security</a>
Introduced	19.10.R1
Platforms	All

## lockout

Synopsis	Reset the lockout timer
Context	<a href="#">admin clear security lockout</a>
Tree	<a href="#">lockout</a>
Introduced	19.10.R1
Platforms	All

## all

Synopsis	Clear lockout of all users
Context	<a href="#">admin clear security lockout all</a>
Tree	<a href="#">all</a>

---

Notes	The following elements are part of a mandatory choice: <b>all</b> or <b>user</b> .
Introduced	19.10.R1
Platforms	All

### **user string**

Synopsis	User to be cleared of lockout
Context	<a href="#">admin clear security lockout user string</a>
Tree	<a href="#">user</a>
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: <b>all</b> or <b>user</b> .
Introduced	19.10.R1
Platforms	All

### **password-history**

Synopsis	Clear the password history
Context	<a href="#">admin clear security password-history</a>
Tree	<a href="#">password-history</a>
Introduced	19.10.R1
Platforms	All

### **all**

Synopsis	Clear password history of all users
Context	<a href="#">admin clear security password-history all</a>
Tree	<a href="#">all</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or <b>user</b> .
Introduced	19.10.R1
Platforms	All

### **user string**

Synopsis	User to be cleared of password history information
Context	<a href="#">admin clear security password-history user string</a>



Tree	<a href="#">user</a>
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: <b>all</b> or <b>user</b> .
Introduced	19.10.R1
Platforms	All

## disconnect

Synopsis	Disconnect a user session
Context	<a href="#">admin disconnect</a>
Tree	<a href="#">disconnect</a>
Introduced	16.0.R1
Platforms	All

## address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the session to disconnect
Context	<a href="#">admin disconnect address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">address</a>
Introduced	19.10.R1
Platforms	All

## op-table-bypass *boolean*

Synopsis	Avoid operation ID allocation
Context	<a href="#">admin disconnect op-table-bypass</a> <i>boolean</i>
Tree	<a href="#">op-table-bypass</a>
Description	When configured to <b>true</b> , the system bypasses the YANG-based operations infrastructure and avoids the allocation of an operation ID. This is useful if the global operations table is full and a delete operation or <b>admin disconnect</b> is required.
Introduced	21.5.R1
Platforms	All

## session-id *number*

Synopsis	ID of the session to disconnect
----------	---------------------------------

---

Context	<a href="#">admin disconnect session-id</a> <i>number</i>
Tree	<a href="#">session-id</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **session-type** *keyword*

Synopsis	Type of session to disconnect
Context	<a href="#">admin disconnect session-type</a> <i>keyword</i>
Tree	<a href="#">session-type</a>
Options	console, bluetooth, telnet, ssh, ftp, netconf, grpc, cron-ehs
Introduced	19.10.R1
Platforms	All

### **username** *string*

Synopsis	Username to disconnect
Context	<a href="#">admin disconnect username</a> <i>string</i>
Tree	<a href="#">username</a>
String Length	1 to 32
Introduced	19.10.R1
Platforms	All

### **nat**

Synopsis	Enter the <b>nat</b> context
Context	<a href="#">admin nat</a>
Tree	<a href="#">nat</a>
Introduced	21.2.R1
Platforms	All

### **save-deterministic-script**

Synopsis	Save script that computes deterministic NAT map entries
----------	---

---

Context	<a href="#">admin nat save-deterministic-script</a>
Tree	<a href="#">save-deterministic-script</a>
Introduced	21.2.R1
Platforms	All

## reboot

Synopsis	Reboot CPM or force an upgrade of system boot ROMs
Context	<a href="#">admin reboot</a>
Tree	<a href="#">reboot</a>
Introduced	16.0.R1
Platforms	All

### [card] keyword

Synopsis	Card to reboot
Context	<a href="#">admin reboot [card] keyword</a>
Tree	<a href="#">[card]</a>
Options	active, standby, upgrade
Introduced	16.0.R1
Platforms	All

## hold

Synopsis	Hold a rebooted standby CPM from coming back online
Context	<a href="#">admin reboot hold</a>
Tree	<a href="#">hold</a>
Introduced	19.10.R1
Platforms	7750 SR-7s, 7750 SR-14s, VSR

## now

Synopsis	Reboot immediately without prompts or confirmation
Context	<a href="#">admin reboot now</a>
Tree	<a href="#">now</a>

Introduced 16.0.R1  
Platforms All

## redundancy

Synopsis Enter the **redundancy** context  
Context [admin redundancy](#)  
Tree [redundancy](#)  
Introduced 16.0.R1  
Platforms All

## force-switchover

Synopsis Force a switchover to the standby CPM  
Context [admin redundancy force-switchover](#)  
Tree [force-switchover](#)  
Introduced 16.0.R1  
Platforms All

## ignore-status

Synopsis Switch to the standby CPM regardless of its status  
Context [admin redundancy force-switchover ignore-status](#)  
Tree [ignore-status](#)  
Introduced 19.10.R1  
Platforms 7950 XRS

## now

Synopsis Force the switchover to the standby CPM immediately  
Context [admin redundancy force-switchover now](#)  
Tree [now](#)  
Introduced 16.0.R1  
Platforms All

## synchronize

Synopsis	Synchronize the standby CPM
Context	<a href="#">admin redundancy synchronize</a>
Tree	<a href="#">synchronize</a>
Introduced	20.10.R1
Platforms	All

## boot-environment

Synopsis	Synchronize all files required for the boot process
Context	<a href="#">admin redundancy synchronize boot-environment</a>
Tree	<a href="#">boot-environment</a>
Notes	The following elements are part of a mandatory choice: <b>boot-environment</b> or <b>configuration</b> .
Introduced	20.10.R1
Platforms	All

## configuration

Synopsis	Synchronize the configuration files
Context	<a href="#">admin redundancy synchronize configuration</a>
Tree	<a href="#">configuration</a>
Description	When specified, the system synchronizes the primary, secondary, and tertiary configuration files.
Notes	The following elements are part of a mandatory choice: <b>boot-environment</b> or <b>configuration</b> .
Introduced	20.10.R1
Platforms	All

## satellite

Synopsis	Perform administrative operations for satellites
Context	<a href="#">admin satellite</a>
Tree	<a href="#">satellite</a>
Introduced	22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ethernet-satellite** [[satellite-id](#)] *reference*

Synopsis Enter the **ethernet-satellite** list instance  
 Context [admin satellite ethernet-satellite](#) *reference*  
 Tree [ethernet-satellite](#)  
 Introduced 22.2.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[satellite-id]** *reference*

Synopsis Satellite ID  
 Context [admin satellite ethernet-satellite](#) *reference*  
 Tree [ethernet-satellite](#)  
 Reference **state satellite ethernet-satellite** *number*  
 Notes This element is part of a list key.  
 Introduced 22.2.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **reboot**

Synopsis Initiate an administrative reboot of the chassis  
 Context [admin satellite ethernet-satellite](#) *reference* **reboot**  
 Tree [reboot](#)  
 Introduced 22.2.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **now**

Synopsis Reboot immediately without prompts or confirmation  
 Context [admin satellite ethernet-satellite](#) *reference* **reboot now**  
 Tree [now](#)  
 Introduced 22.2.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## upgrade

Synopsis	Initiate a firmware image update during the reboot
Context	<a href="#">admin satellite ethernet-satellite</a> <i>reference</i> <a href="#">reboot upgrade</a>
Tree	<a href="#">upgrade</a>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## synchronize

Synopsis	Synchronize the chassis to the boot image
Context	<a href="#">admin satellite ethernet-satellite</a> <i>reference</i> <a href="#">synchronize</a>
Tree	<a href="#">synchronize</a>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## tech-support

Synopsis	Save satellite technical support information
Context	<a href="#">admin satellite ethernet-satellite</a> <i>reference</i> <a href="#">tech-support</a>
Tree	<a href="#">tech-support</a>
Description	<p>This command creates a system core dump. If no file URL is specified and the <b>ts-location</b> command is configured in the <b>configure system security tech-support</b> context, the technical support file is automatically generated by the system with the file name based on the system name and the date and time, and is saved to the directory indicated by the <b>ts-location</b> configuration.</p> <p>The format of the auto-generated file name is ts-XXXXX.YYYYMMDD.HHMMUTC.dat, where:</p> <ul style="list-style-type: none"><li>• XXXXX is the system name with special characters expanded to avoid problems with file systems (for example, a period (.) is expanded to %2E)</li><li>• YYYYMMDD is the date with leading zeros on the year, month, and day</li><li>• HHMM is the hours and minutes in UTC time (24 hour format, always 4 characters, with leading zeros on the hours and minutes)</li></ul> <p><b>Note:</b> This command is not supported over non-interactive interfaces (for example, NETCONF).</p> <p><b>Note:</b> This command should only be used with authorized direction from the Nokia Technical Assistance Center (TAC).</p>
Introduced	22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[url]** *string*

Synopsis URL to save technical support information  
 Context [admin satellite ethernet-satellite](#) *reference* [tech-support \[url\]](#) *string*  
 Tree [\[url\]](#)  
 String Length 1 to 180  
 Notes This element is mandatory.  
 Introduced 22.2.R1  
 Platforms All

### **save**

Synopsis Perform configuration save operations  
 Context [admin save](#)  
 Tree [save](#)  
 Introduced 16.0.R1  
 Platforms All

### **bof**

Synopsis Save the BOF region configuration  
 Context [admin save bof](#)  
 Tree [bof](#)  
 Notes The following elements are part of a choice: **bof**, **configure**, **debug**, or **li**.  
 Introduced 20.10.R1  
 Platforms All

### **configure**

Synopsis Save the configure region configuration  
 Context [admin save configure](#)  
 Tree [configure](#)  
 Notes The following elements are part of a choice: **bof**, **configure**, **debug**, or **li**.



Introduced 20.7.R2  
Platforms All

## debug

Synopsis Save the debug region configuration  
Context [admin save debug](#)  
Tree [debug](#)  
Notes The following elements are part of a choice: **bof**, **configure**, **debug**, or **li**.  
Introduced 21.5.R1  
Platforms All

## li

Synopsis Save the LI region configuration  
Context [admin save li](#)  
Tree [li](#)  
Notes The following elements are part of a choice: **bof**, **configure**, **debug**, or **li**.  
Introduced 19.10.R1  
Platforms All

## [url] string

Synopsis Location to save the configuration  
Context [admin save \[url\] string](#)  
Tree [\[url\]](#)  
Introduced 16.0.R1  
Platforms All

## set

Synopsis Enter the **set** context  
Context [admin set](#)  
Tree [set](#)  
Introduced 19.10.R1

Platforms All

## time

Synopsis System date and time

Context [admin set time](#)

Tree [time](#)

Introduced 19.10.R1

Platforms All

## [system-time] *string*

Synopsis System date and time

Context [admin set time \[system-time\] string](#)

Tree [\[system-time\]](#)

Description This command sets the system date and time. The time zone may optionally be specified. When the time zone is not specified, the system uses the configured system time zone.

Notes This element is mandatory.

Introduced 19.10.R1

Platforms All

## show

Synopsis Enter the **show** context

Context [admin show](#)

Tree [show](#)

Introduced 16.0.R1

Platforms All

## configuration

Synopsis Show the current configuration

Context [admin show configuration](#)

Tree [configuration](#)

Introduced 16.0.R1

Platforms All

## **bof**

Synopsis Show the BOF region configuration  
 Context [admin show configuration bof](#)  
 Tree [bof](#)  
 Notes The following elements are part of a choice: **bof**, **configure**, **debug**, or **li**.  
 Introduced 20.10.R1  
 Platforms All

## **booted**

Synopsis Show the booted BOF configuration  
 Context [admin show configuration booted](#)  
 Tree [booted](#)  
 Notes The following elements are part of a choice: **booted** or **cflash-id**.  
 Introduced 20.10.R1  
 Platforms All

## **cflash-id** *string*

Synopsis Show the BOF configuration file on a compact flash  
 Context [admin show configuration cflash-id string](#)  
 Tree [cflash-id](#)  
 String Length 4 to 6  
 Notes The following elements are part of a choice: **booted** or **cflash-id**.  
 Introduced 20.10.R1  
 Platforms All

## **[cli-path]** *string*

Synopsis Absolute path or relative path from '/'  
 Context [admin show configuration \[cli-path\] string](#)  
 Tree [\[cli-path\]](#)

Introduced 21.10.R1  
Platforms All

## configure

Synopsis Show the configure region configuration  
Context [admin show configuration configure](#)  
Tree [configure](#)  
Notes The following elements are part of a choice: **bof**, **configure**, **debug**, or **li**.  
Introduced 20.7.R1  
Platforms All

## debug

Synopsis Show the debug region configuration  
Context [admin show configuration debug](#)  
Tree [debug](#)  
Notes The following elements are part of a choice: **bof**, **configure**, **debug**, or **li**.  
Introduced 21.5.R1  
Platforms All

## detail

Synopsis Include default and unconfigured values  
Context [admin show configuration detail](#)  
Tree [detail](#)  
Introduced 20.7.R1  
Platforms All

## flat

Synopsis Show the context from the pwc on each line  
Context [admin show configuration flat](#)  
Tree [flat](#)  
Notes The following elements are part of a choice: **flat**, **full-context**, **json**, or **xml**.

Introduced 20.7.R1  
Platforms All

## full-context

Synopsis Show the full context on each line  
Context [admin show configuration full-context](#)  
Tree [full-context](#)  
Notes The following elements are part of a choice: **flat**, **full-context**, **json**, or **xml**.  
Introduced 20.7.R1  
Platforms All

## intended

Synopsis Show the intended configuration  
Context [admin show configuration intended](#)  
Tree [intended](#)  
Notes The following elements are part of a choice: **intended** or **running**.  
Introduced 20.7.R1  
Platforms All

## json

Synopsis Show the output in indented JSON format  
Context [admin show configuration json](#)  
Tree [json](#)  
Notes The following elements are part of a choice: **flat**, **full-context**, **json**, or **xml**.  
Introduced 19.10.R1  
Platforms All

## li

Synopsis Show the LI region configuration  
Context [admin show configuration li](#)  
Tree [li](#)

---

Notes	The following elements are part of a choice: <b>bof</b> , <b>configure</b> , <b>debug</b> , or <b>li</b> .
Introduced	19.10.R1
Platforms	All

## running

Synopsis	Show the running configuration
Context	<a href="#">admin show configuration running</a>
Tree	<a href="#">running</a>
Notes	The following elements are part of a choice: <b>intended</b> or <b>running</b> .
Introduced	20.7.R1
Platforms	All

## units

Synopsis	Include unit types for applicable elements
Context	<a href="#">admin show configuration units</a>
Tree	<a href="#">units</a>
Introduced	20.10.R1
Platforms	All

## xml

Synopsis	Show the output in indented XML format
Context	<a href="#">admin show configuration xml</a>
Tree	<a href="#">xml</a>
Notes	The following elements are part of a choice: <b>flat</b> , <b>full-context</b> , <b>json</b> , or <b>xml</b> .
Introduced	20.7.R1
Platforms	All

## support-mode

Synopsis	Enable the kernel and shell commands
Context	<a href="#">admin support-mode</a>
Tree	<a href="#">support-mode</a>

---

Description	This command enables the <b>kernel</b> and <b>shell</b> commands. <b>Note:</b> This command should only be used with authorized direction from Nokia support.
Introduced	16.0.R4
Platforms	All

## system

Synopsis	Enter the <b>system</b> context
Context	<a href="#">admin system</a>
Tree	<a href="#">system</a>
Introduced	16.0.R6
Platforms	All

## license

Synopsis	Enter the <b>license</b> context
Context	<a href="#">admin system license</a>
Tree	<a href="#">license</a>
Introduced	19.10.R1
Platforms	All

## activate

Synopsis	Load and activate a system license
Context	<a href="#">admin system license activate</a>
Tree	<a href="#">activate</a>
Introduced	19.10.R1
Platforms	All

## **[file-url]** *string*

Synopsis	Location of the license file to activate
Context	<a href="#">admin system license activate [file-url] string</a>
Tree	<a href="#">[file-url]</a>
String Length	1 to 256

Introduced 19.10.R1  
Platforms All

### **now**

Synopsis Activate the license immediately  
Context [admin system license activate now](#)  
Tree [now](#)  
Introduced 19.10.R1  
Platforms All

### **validate**

Synopsis Load and validate a system license  
Context [admin system license validate](#)  
Tree [validate](#)  
Introduced 19.10.R1  
Platforms All

### **[file-url] string**

Synopsis Location of the license file to validate  
Context [admin system license validate \[file-url\] string](#)  
Tree [\[file-url\]](#)  
String Length 1 to 256  
Introduced 19.10.R1  
Platforms All

### **management-interface**

Synopsis Enter the **management-interface** context  
Context [admin system management-interface](#)  
Tree [management-interface](#)  
Introduced 21.5.R1  
Platforms All



## operations

Synopsis	Enter the <b>operations</b> context
Context	<a href="#">admin system management-interface operations</a>
Tree	<a href="#">operations</a>
Description	Commands in this context are used to manage YANG-based operations (for example, <b>admin reboot</b> , or <b>ping</b> ) in model-driven interfaces.
Introduced	21.5.R1
Platforms	All

## delete-operation

Synopsis	Stop and remove an operation
Context	<a href="#">admin system management-interface operations delete-operation</a>
Tree	<a href="#">delete-operation</a>
Description	This command removes an operation and all status and data associated with it. If the operation was executing, it is stopped before removal.
Introduced	21.5.R1
Platforms	All

## [delete-id] *number*

Synopsis	ID of the operation to remove
Context	<a href="#">admin system management-interface operations delete-operation [delete-id] number</a>
Tree	<a href="#">[delete-id]</a>
Range	1 to 10000
Notes	This element is mandatory.
Introduced	21.5.R1
Platforms	All

## op-table-bypass *boolean*

Synopsis	Avoid operation ID allocation
Context	<a href="#">admin system management-interface operations delete-operation op-table-bypass boolean</a>
Tree	<a href="#">op-table-bypass</a>

Description	When configured to <b>true</b> , the system bypasses the YANG-based operations infrastructure and avoids the allocation of an operation ID. This is useful if the global operations table is full and a delete operation or <b>admin disconnect</b> is required.
Introduced	21.5.R1
Platforms	All

## stop-operation

Synopsis	Stop the execution of an operational command
Context	<a href="#">admin system management-interface operations stop-operation</a>
Tree	<a href="#">stop-operation</a>
Description	This command stops the execution of an operational command.  An operation launched as "asynchronous" is not deleted from the system when it is stopped. Status and other data associated with the operation persist until the operation is explicitly deleted using the delete operation command or a retention timeout.
Introduced	21.5.R1
Platforms	All

## op-table-bypass *boolean*

Synopsis	Avoid operation ID allocation
Context	<a href="#">admin system management-interface operations stop-operation op-table-bypass boolean</a>
Tree	<a href="#">op-table-bypass</a>
Description	When configured to <b>true</b> , the system bypasses the YANG-based operations infrastructure and avoids the allocation of an operation ID. This is useful if the global operations table is full and a delete operation or <b>admin disconnect</b> is required.
Introduced	21.5.R1
Platforms	All

## [stop-id] *number*

Synopsis	ID of the operation to stop
Context	<a href="#">admin system management-interface operations stop-operation [stop-id] number</a>
Tree	<a href="#">[stop-id]</a>
Range	1 to 10000
Notes	This element is mandatory.

---

Introduced	21.5.R1
Platforms	All

## security

Synopsis	Enter the <b>security</b> context
Context	<a href="#">admin system security</a>
Tree	<a href="#">security</a>
Introduced	16.0.R6
Platforms	All

## hash-control

Synopsis	Enter the <b>hash-control</b> context
Context	<a href="#">admin system security hash-control</a>
Tree	<a href="#">hash-control</a>
Introduced	16.0.R6
Platforms	All

## custom-hash

Synopsis	Custom encryption
Context	<a href="#">admin system security hash-control custom-hash</a>
Tree	<a href="#">custom-hash</a>
Introduced	16.0.R6
Platforms	All

## algorithm *keyword*

Synopsis	Algorithm for custom encryption
Context	<a href="#">admin system security hash-control custom-hash algorithm <i>keyword</i></a>
Tree	<a href="#">algorithm</a>
Description	This command configures the algorithm for custom encryption. The encryption uses ECB mode, PKCS#7 padding, and Base64 encoding.
Options	3des, aes128, aes192, aes256

---

Notes	This element is mandatory.
Introduced	16.0.R6
Platforms	All

### **key string**

Synopsis	Key for encryption algorithm
Context	<a href="#">admin</a> <a href="#">system</a> <a href="#">security</a> <a href="#">hash-control</a> <a href="#">custom-hash</a> <a href="#">key</a> <i>string</i>
Tree	<a href="#">key</a>
String Length	1 to 71
Notes	This element is mandatory.
Introduced	16.0.R6
Platforms	All

### **remove-custom-hash**

Synopsis	Remove the custom encryption
Context	<a href="#">admin</a> <a href="#">system</a> <a href="#">security</a> <a href="#">hash-control</a> <a href="#">remove-custom-hash</a>
Tree	<a href="#">remove-custom-hash</a>
Introduced	20.10.R1
Platforms	All

### **system-password**

Synopsis	Change a local system password
Context	<a href="#">admin</a> <a href="#">system</a> <a href="#">security</a> <a href="#">system-password</a>
Tree	<a href="#">system-password</a>
Introduced	22.10.R2
Platforms	All

### **admin-password**

Synopsis	Administrative password
Context	<a href="#">admin</a> <a href="#">system</a> <a href="#">security</a> <a href="#">system-password</a> <a href="#">admin-password</a>
Tree	<a href="#">admin-password</a>

---

Notes	The following elements are part of a mandatory choice: <b>admin-password</b> or <b>vsd-password</b> .
Introduced	22.10.R2
Platforms	All

### **vsd-password**

Synopsis	VSD password
Context	<a href="#">admin</a> <a href="#">system</a> <a href="#">security</a> <a href="#">system-password</a> <a href="#">vsd-password</a>
Tree	<a href="#">vsd-password</a>
Notes	The following elements are part of a mandatory choice: <b>admin-password</b> or <b>vsd-password</b> .
Introduced	22.10.R2
Platforms	All

### **telemetry**

Synopsis	Enter the <b>telemetry</b> context
Context	<a href="#">admin</a> <a href="#">system</a> <a href="#">telemetry</a>
Tree	<a href="#">telemetry</a>
Introduced	19.10.R1
Platforms	All

### **grpc**

Synopsis	Enter the <b>grpc</b> context
Context	<a href="#">admin</a> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">grpc</a>
Tree	<a href="#">grpc</a>
Introduced	19.10.R1
Platforms	All

### **cancel**

Synopsis	Cancel the gRPC dynamic telemetry subscription
Context	<a href="#">admin</a> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">grpc</a> <a href="#">cancel</a>
Tree	<a href="#">cancel</a>

Introduced 19.10.R1  
Platforms All

## **all**

Synopsis Cancel gRPC dynamic telemetry for all subscriptions  
Context [admin system telemetry grpc cancel all](#)  
Tree [all](#)  
Notes The following elements are part of a mandatory choice: **all** or **subscription-id**.  
Introduced 19.10.R1  
Platforms All

## **subscription-id** *number*

Synopsis ID of the telemetry subscription to cancel  
Context [admin system telemetry grpc cancel subscription-id number](#)  
Tree [subscription-id](#)  
Max. Range 0 to 4294967295  
Notes The following elements are part of a mandatory choice: **all** or **subscription-id**.  
Introduced 19.10.R1  
Platforms All

## **tech-support**

Synopsis Save technical support information to a file  
Context [admin tech-support](#)  
Tree [tech-support](#)  
Introduced 20.10.R1  
Platforms All

## **[url]** *string*

Synopsis URL to save technical support information  
Context [admin tech-support \[url\] string](#)  
Tree [\[url\]](#)

String Length 1 to 180  
Introduced 20.10.R1  
Platforms All

## 2.2 Configuration mode commands

See “Configuring in the MD-CLI” in the *7450 ESS, 7750 SR, 7950 XRS, and VSR MD-CLI User Guide* for more information.

```
- annotate string
- [cli-path] string
- commit
- comment string
- confirmed
- accept
- cancel
- comment string
- persist-id string
- [timeout] number
- compare string [to] string
- [cli-path] string
- flat
- full-context
- lines number
- netconf-rpc
- summary
- copy
- [cli-path] string
- to string
- discard
- [cli-path] string
- insert string
- after
- [cli-path] string
- before
- [cli-path] string
- beginning
- end
- load keyword
- encryption-key string
- interactive
- [url] string
- rename
- [cli-path] string
- to string
- rollback
- commit-id number
- [rollback-id] (keyword | number)
- update
- /configure
- /bof
- check
- /debug
- /li
- validate
```



## 2.2.1 Configuration mode command descriptions

### **annotate** [[comment-text](#)] *string*

Synopsis	Annotate a configuration element with a comment
Context	<a href="#">annotate</a> <i>string</i>
Tree	<a href="#">annotate</a>
Introduced	21.5.R1
Platforms	All

### **[comment-text]** *string*

Synopsis	Comment for the configuration element
Context	<a href="#">annotate</a> <i>string</i>
Tree	<a href="#">annotate</a>
String Length	0 to 2048
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	All

### **[cli-path]** *string*

Synopsis	Absolute path or relative path from pwc, or 'pwc'
Context	<a href="#">annotate</a> <i>string</i> [ <a href="#">cli-path</a> ] <i>string</i>
Tree	<a href="#">[cli-path]</a>
Notes	This element is mandatory.
Introduced	21.5.R1
Platforms	All

### **commit**

Synopsis	Commit the candidate configuration
Context	<a href="#">commit</a>
Tree	<a href="#">commit</a>

---

Introduced	16.0.R1
Platforms	All

### **comment** *string*

Synopsis	Comment associated with the commit
Context	<a href="#">commit comment string</a>
Tree	<a href="#">comment</a>
String Length	1 to 2048
Introduced	21.10.R1
Platforms	All

### **confirmed**

Synopsis	Explicitly confirm the changes to be accepted
Context	<a href="#">commit confirmed</a>
Tree	<a href="#">confirmed</a>
Introduced	16.0.R1
Platforms	All

### **accept**

Synopsis	Accept an ongoing confirmed commit
Context	<a href="#">commit confirmed accept</a>
Tree	<a href="#">accept</a>
Notes	The following elements are part of a choice: <b>accept</b> , <b>cancel</b> , or ( <b>comment</b> and <b>timeout</b> ).
Introduced	16.0.R1
Platforms	All

### **cancel**

Synopsis	Cancel an ongoing confirmed commit issued and roll back
Context	<a href="#">commit confirmed cancel</a>
Tree	<a href="#">cancel</a>

---

Notes	The following elements are part of a choice: <b>accept</b> , <b>cancel</b> , or ( <b>comment</b> and <b>timeout</b> ).
Introduced	16.0.R1
Platforms	All

### **comment** *string*

Synopsis	Comment associated with the commit
Context	<a href="#">commit confirmed comment</a> <i>string</i>
Tree	<a href="#">comment</a>
String Length	1 to 2048
Notes	The following elements are part of a choice: <b>accept</b> , <b>cancel</b> , or ( <b>comment</b> and <b>timeout</b> ).
Introduced	21.10.R1
Platforms	All

### **persist-id** *string*

Synopsis	Persistent confirmed commit ID
Context	<a href="#">commit confirmed persist-id</a> <i>string</i>
Tree	<a href="#">persist-id</a>
Introduced	16.0.R1
Platforms	All

### **[timeout]** *number*

Synopsis	Confirmed commit expiration timeout interval
Context	<a href="#">commit confirmed [timeout]</a> <i>number</i>
Tree	<a href="#">[timeout]</a>
Range	1 to 65535
Units	minutes
Default	10
Notes	The following elements are part of a choice: <b>accept</b> , <b>cancel</b> , or ( <b>comment</b> and <b>timeout</b> ).
Introduced	16.0.R1

Platforms All

### **compare** [from] *string* to *string*

Synopsis Compare changes between datastores  
Context [compare string \[to\] string](#)  
Tree [compare](#)  
Introduced 16.0.R1  
Platforms All

### **[from]** *string*

Synopsis Source configuration from which to compare  
Context [compare string \[to\] string](#)  
Tree [compare](#)  
Default baseline  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms All

### **[to]** *string*

Synopsis Configuration to compare against source configuration  
Context [compare string \[to\] string](#)  
Tree [compare](#)  
Default candidate  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms All

### **[cli-path]** *string*

Synopsis Absolute path or relative path from pwc  
Context [compare string \[to\] string \[cli-path\] string](#)  
Tree [\[cli-path\]](#)

Introduced	20.10.R1
Platforms	All

## flat

Synopsis	Show the context from the pwc on each line
Context	<a href="#">compare string [to] string flat</a>
Tree	<a href="#">flat</a>
Description	This option shows the hierarchy on each line starting from the present working context.
Notes	The following elements are part of a choice: <b>flat</b> or <b>netconf-rpc</b> .
Introduced	16.0.R1
Platforms	All

## full-context

Synopsis	Show the full context on each line
Context	<a href="#">compare string [to] string full-context</a>
Tree	<a href="#">full-context</a>
Introduced	16.0.R1
Platforms	All

## lines number

Synopsis	Number of lines of context to display before and after
Context	<a href="#">compare string [to] string lines number</a>
Tree	<a href="#">lines</a>
Description	This command specifies the number of lines of context to display before and after changed elements. The context is evaluated separately at each container. If the parameter value is larger than the available context, the maximum available context up to the container boundary is displayed.
Max. Range	0 to 4294967295
Default	0
Introduced	16.0.R1
Platforms	All

## netconf-rpc

Synopsis	Display changes in NETCONF <edit-config> RPC format
Context	<a href="#">compare string [to] string netconf-rpc</a>
Tree	<a href="#">netconf-rpc</a>
Description	This option specifies the display of changes in NETCONF <edit-config> RPC format. This option is only supported with the <b>summary</b> option.
Notes	The following elements are part of a choice: <b>flat</b> or <b>netconf-rpc</b> .
Introduced	21.5.R1
Platforms	All

## summary

Synopsis	Suppress specific differences and display a summary
Context	<a href="#">compare string [to] string summary</a>
Tree	<a href="#">summary</a>
Description	This command allows the suppression of specific differences and displays a summarized comparison. The summarized differences in elements under the highest level container that was deleted is displayed with { ... }. A tilde (~) character is displayed to indicate the new value of an element that has changed.
Introduced	16.0.R1
Platforms	All

## copy

Synopsis	Copy a configuration element to another
Context	<a href="#">copy</a>
Tree	<a href="#">copy</a>
Introduced	20.10.R1
Platforms	All

## [cli-path] string

Synopsis	Absolute path or relative path from pwc, or 'pwc'
Context	<a href="#">copy [cli-path] string</a>
Tree	<a href="#">[cli-path]</a>
Introduced	20.10.R1

---

Platforms All

### **to string**

Synopsis Destination path, or 'pwc'  
Context [copy to string](#)  
Tree [to](#)  
Introduced 20.10.R1  
Platforms All

### **discard**

Synopsis Discard changes in the candidate configuration  
Context [discard](#)  
Tree [discard](#)  
Introduced 16.0.R1  
Platforms All

### **[cli-path] string**

Synopsis Absolute path or relative path from pwc  
Context [discard \[cli-path\] string](#)  
Tree [\[cli-path\]](#)  
Introduced 20.10.R1  
Platforms All

### **insert [new-entry] string**

Synopsis Insert an element into a user-ordered list  
Context [insert string](#)  
Tree [insert](#)  
Introduced 19.10.R1  
Platforms All

**[new-entry] string**

Synopsis	Identification of the new entry
Context	<a href="#">insert string</a>
Tree	<a href="#">insert</a>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**after**

Synopsis	Insert an entry after the specified entry
Context	<a href="#">insert string after</a>
Tree	<a href="#">after</a>
Notes	The following elements are part of a choice: <b>after</b> , <b>before</b> , <b>beginning</b> , or <b>end</b> .
Introduced	19.10.R1
Platforms	All

**[cli-path] string**

Synopsis	Absolute path or relative path from pwc
Context	<a href="#">insert string after [cli-path] string</a>
Tree	<a href="#">[cli-path]</a>
Introduced	19.10.R1
Platforms	All

**before**

Synopsis	Insert an entry before the specified entry
Context	<a href="#">insert string before</a>
Tree	<a href="#">before</a>
Notes	The following elements are part of a choice: <b>after</b> , <b>before</b> , <b>beginning</b> , or <b>end</b> .
Introduced	19.10.R1
Platforms	All



**[cli-path] string**

Synopsis	Absolute path or relative path from pwc
Context	<a href="#">insert string before [cli-path] string</a>
Tree	<a href="#">[cli-path]</a>
Introduced	19.10.R1
Platforms	All

**beginning**

Synopsis	Insert the new entry at the beginning of the list
Context	<a href="#">insert string beginning</a>
Tree	<a href="#">beginning</a>
Notes	The following elements are part of a choice: <b>after</b> , <b>before</b> , <b>beginning</b> , or <b>end</b> .
Introduced	19.10.R1
Platforms	All

**end**

Synopsis	Insert the new entry at the end of the list
Context	<a href="#">insert string end</a>
Tree	<a href="#">end</a>
Notes	The following elements are part of a choice: <b>after</b> , <b>before</b> , <b>beginning</b> , or <b>end</b> .
Introduced	19.10.R1
Platforms	All

**load [mode] keyword**

Synopsis	Load configuration into the candidate configuration
Context	<a href="#">load keyword</a>
Tree	<a href="#">load</a>
Introduced	16.0.R1
Platforms	All

**[mode] keyword**

Synopsis	Load mode
Context	<a href="#">load keyword</a>
Tree	<a href="#">load</a>
Options	merge, full-replace
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**encryption-key string**

Synopsis	Encryption key of the file to be loaded
Context	<a href="#">load keyword encryption-key string</a>
Tree	<a href="#">encryption-key</a>
String Length	8 to 32
Notes	The following elements are part of a mandatory choice: <b>interactive</b> or ( <b>encryption-key</b> and <b>url</b> ).
Introduced	21.7.R1
Platforms	All

**interactive**

Synopsis	Load the configuration interactively
Context	<a href="#">load keyword interactive</a>
Tree	<a href="#">interactive</a>
Description	<p>This command allows the user to enter configuration commands directly in an interactive session.</p> <p>This command is available with the <b>merge</b> option of the <b>load</b> command.</p> <p>See "Loading configuration interactively" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR MD-CLI User Guide</i> for more information.</p>
Notes	The following elements are part of a mandatory choice: <b>interactive</b> or ( <b>encryption-key</b> and <b>url</b> ).
Introduced	22.10.R1
Platforms	All

**[url] string**

Synopsis	Location of the file to be loaded
Context	<a href="#">load</a> keyword <a href="#">[url]</a> string
Tree	<a href="#">[url]</a>
String Length	1 to 255
Notes	The following elements are part of a mandatory choice: <b>interactive</b> or ( <b>encryption-key</b> and <b>url</b> ).
Introduced	16.0.R1
Platforms	All

**rename**

Synopsis	Rename a list element
Context	<a href="#">rename</a>
Tree	<a href="#">rename</a>
Introduced	20.10.R1
Platforms	All

**[cli-path] string**

Synopsis	Source element path to the list, or 'pwc'
Context	<a href="#">rename</a> <a href="#">[cli-path]</a> string
Tree	<a href="#">[cli-path]</a>
Introduced	20.10.R1
Platforms	All

**to string**

Synopsis	Destination key name
Context	<a href="#">rename</a> <a href="#">to</a> string
Tree	<a href="#">to</a>
Introduced	20.10.R1
Platforms	All

## rollback

Synopsis	Roll back to a previous configuration
Context	<a href="#">rollback</a>
Tree	<a href="#">rollback</a>
Introduced	16.0.R1
Platforms	All

## commit-id *number*

Synopsis	Commit ID to roll back to
Context	<a href="#">rollback commit-id <i>number</i></a>
Tree	<a href="#">commit-id</a>
Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>commit-id</b> or <b>rollback-id</b> .
Introduced	22.10.R4
Platforms	All

## [rollback-id] (*keyword* | *number*)

Synopsis	Saved configuration number to roll back to
Context	<a href="#">rollback [rollback-id] (<i>keyword</i>   <i>number</i>)</a>
Tree	<a href="#">[rollback-id]</a>
Range	0 to 200
Options	startup
Notes	The following elements are part of a choice: <b>commit-id</b> or <b>rollback-id</b> .
Introduced	22.10.R4
Platforms	All

## update

Synopsis	Update the candidate baseline
Context	<a href="#">update</a>
Tree	<a href="#">update</a>
Introduced	16.0.R4

---

Platforms All

## **/configure**

Synopsis Update the entire candidate

Context [update /configure](#)

Tree [/configure](#)

Introduced 16.0.R4

Platforms All

## **/bof**

Synopsis Update the entire BOF candidate

Context [update /bof](#)

Tree [/bof](#)

Introduced 20.10.R1

Platforms All

## **check**

Synopsis Perform dry-run update report without an actual update

Context [update check](#)

Tree [check](#)

Introduced 16.0.R4

Platforms All

## **/debug**

Synopsis Update the entire debug candidate

Context [update /debug](#)

Tree [/debug](#)

Introduced 21.5.R1

Platforms All

---

**/li**

Synopsis	Update the entire LI candidate
Context	<a href="#">update /li</a>
Tree	<a href="#">/li</a>
Introduced	19.10.R1
Platforms	All

**validate**

Synopsis	Validate changes in the candidate configuration
Context	<a href="#">validate</a>
Tree	<a href="#">validate</a>
Introduced	16.0.R1
Platforms	All

## 2.3 environment commands

See “Environment commands” in the *7450 ESS, 7750 SR, 7950 XRS, and VSR MD-CLI User Guide* for more information.

```
environment
- command-alias
  - alias string
    - admin-state keyword
    - cli-command string
    - description string
    - mount-point (keyword | string)
    - python-script reference
- command-completion
  - enter boolean
  - space boolean
  - tab boolean
- console
  - length number
  - width number
- info-output
  - always-display
    - admin-state boolean
- message-severity-level
  - cli keyword
- more boolean
- progress-indicator
  - admin-state keyword
  - delay number
  - type keyword
- prompt
  - context boolean
  - newline boolean
  - timestamp boolean
  - uncommitted-changes-indicator boolean
- python
  - memory-reservation number
  - minimum-available-memory number
  - timeout number
- time-display keyword
- time-format keyword
```

## 2.3.1 environment command descriptions

### environment

Synopsis	Configure the environment settings for this session
Context	<a href="#">environment</a>
Tree	<a href="#">environment</a>
Introduced	16.0.R1
Platforms	All

### command-alias

Synopsis	Enter the <b>command-alias</b> context
Context	<a href="#">environment command-alias</a>
Tree	<a href="#">command-alias</a>
Description	<p>Commands in this context create aliases to existing MD-CLI commands or to Python scripts.</p> <p>Aliases may be mounted for use globally or for selected context paths. Arguments and output modifiers may be provided to aliases at configuration or run time.</p>
Introduced	21.7.R1
Platforms	All

### alias [[alias-name](#)] *string*

Synopsis	Enter the <b>alias</b> list instance
Context	<a href="#">environment command-alias alias</a> <i>string</i>
Tree	<a href="#">alias</a>
Description	<p>Commands in this context create aliases to existing MD-CLI commands or to Python applications.</p> <p>Aliases may be mounted for use globally or for selected context paths. Arguments and output modifiers may be provided to aliases at configuration or run time.</p>
Introduced	21.7.R1
Platforms	All



**[alias-name]** *string*

Synopsis	Alias name
Context	<a href="#">environment</a> <a href="#">command-alias</a> <a href="#">alias</a> <i>string</i>
Tree	<a href="#">alias</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the alias
Context	<a href="#">environment</a> <a href="#">command-alias</a> <a href="#">alias</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Description	This command controls the administrative state of the MD-CLI alias. MD-CLI aliases that are administratively disabled cannot be executed, do not autocomplete in operational mode, and do not appear in ? help.
Options	enable, disable
Introduced	21.10.R1
Platforms	All

**cli-command** *string*

Synopsis	CLI command to run when executing the alias
Context	<a href="#">environment</a> <a href="#">command-alias</a> <a href="#">alias</a> <i>string</i> <a href="#">cli-command</a> <i>string</i>
Tree	<a href="#">cli-command</a>
String Length	1 to 255
Notes	The following elements are part of a mandatory choice: <b>cli-command</b> or <b>python-script</b> .
Introduced	21.7.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<a href="#">environment</a> <a href="#">command-alias</a> <a href="#">alias</a> <i>string</i> <a href="#">description</a> <i>string</i>

Tree	<a href="#">description</a>
String Length	1 to 110
Introduced	21.7.R1
Platforms	All

### **mount-point** [[path](#)] (*keyword* | *string*)

Synopsis	Add a list entry for <b>mount-point</b>
Context	<a href="#">environment</a> <a href="#">command-alias</a> <a href="#">alias</a> <i>string</i> <a href="#">mount-point</a> ( <i>keyword</i>   <i>string</i> )
Tree	<a href="#">mount-point</a>
Min. Instances	1
Introduced	21.7.R1
Platforms	All

### **[path]** (*keyword* | *string*)

Synopsis	Mount point where the alias is available
Context	<a href="#">environment</a> <a href="#">command-alias</a> <a href="#">alias</a> <i>string</i> <a href="#">mount-point</a> ( <i>keyword</i>   <i>string</i> )
Tree	<a href="#">mount-point</a>
String Length	1 to 255
Options	global
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	All

### **python-script** *reference*

Synopsis	Python script to run when executing the alias
Context	<a href="#">environment</a> <a href="#">command-alias</a> <a href="#">alias</a> <i>string</i> <a href="#">python-script</a> <i>reference</i>
Tree	<a href="#">python-script</a>
Reference	<b>state</b> <b>python</b> <b>python-script</b> <i>string</i>
Notes	The following elements are part of a mandatory choice: <b>cli-command</b> or <b>python-script</b> .
Introduced	21.7.R1
Platforms	All

## command-completion

Synopsis	Enter the <b>command-completion</b> context
Context	<a href="#">environment command-completion</a>
Tree	<a href="#">command-completion</a>
Introduced	16.0.R1
Platforms	All

## enter *boolean*

Synopsis	Complete the command when the Enter key is pressed
Context	<a href="#">environment command-completion enter <i>boolean</i></a>
Tree	<a href="#">enter</a>
Default	true
Introduced	16.0.R1
Platforms	All

## space *boolean*

Synopsis	Complete the command when the Space key is pressed
Context	<a href="#">environment command-completion space <i>boolean</i></a>
Tree	<a href="#">space</a>
Default	true
Introduced	16.0.R1
Platforms	All

## tab *boolean*

Synopsis	Complete the command when the Tab key is pressed
Context	<a href="#">environment command-completion tab <i>boolean</i></a>
Tree	<a href="#">tab</a>
Default	true
Introduced	16.0.R1
Platforms	All

## console

Synopsis	Enter the <b>console</b> context
Context	<a href="#">environment console</a>
Tree	<a href="#">console</a>
Introduced	16.0.R1
Platforms	All

## length *number*

Synopsis	Number of lines displayed on the console
Context	<a href="#">environment console length <i>number</i></a>
Tree	<a href="#">length</a>
Range	24 to 512
Default	24
Introduced	16.0.R1
Platforms	All

## width *number*

Synopsis	Number of columns displayed on the console
Context	<a href="#">environment console width <i>number</i></a>
Tree	<a href="#">width</a>
Range	80 to 512
Default	80
Introduced	16.0.R1
Platforms	All

## info-output

Synopsis	Enter the <b>info-output</b> context
Context	<a href="#">environment info-output</a>
Tree	<a href="#">info-output</a>
Introduced	22.2.R1
Platforms	All

## always-display

Synopsis	Enter the <b>always-display</b> context
Context	<a href="#">environment info-output always-display</a>
Tree	<a href="#">always-display</a>
Description	Commands in this context specify elements that are always displayed, regardless of whether they are set to their default value.
Introduced	22.2.R1
Platforms	All

## admin-state *boolean*

Synopsis	Always display admin-state elements
Context	<a href="#">environment info-output always-display admin-state <i>boolean</i></a>
Tree	<a href="#">admin-state</a>
Description	When configured to <b>true</b> , the values of the <b>admin-state</b> elements in <b>info</b> output (without the <b>detail</b> option) are always displayed, even if they are the default values.
Default	false
Introduced	22.2.R1
Platforms	All

## message-severity-level

Synopsis	Enter the <b>message-severity-level</b> context
Context	<a href="#">environment message-severity-level</a>
Tree	<a href="#">message-severity-level</a>
Introduced	16.0.R1
Platforms	All

## cli *keyword*

Synopsis	Message severity threshold for CLI messages
Context	<a href="#">environment message-severity-level cli <i>keyword</i></a>
Tree	<a href="#">cli</a>
Options	warning, info

---

Default	info
Introduced	16.0.R1
Platforms	All

### **more** *boolean*

Synopsis	Activate the pager when output is longer than a screen
Context	<a href="#">environment</a> <a href="#">more</a> <i>boolean</i>
Tree	<a href="#">more</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **progress-indicator**

Synopsis	Enter the <b>progress-indicator</b> context
Context	<a href="#">environment</a> <a href="#">progress-indicator</a>
Tree	<a href="#">progress-indicator</a>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the progress indicator
Context	<a href="#">environment</a> <a href="#">progress-indicator</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **delay** *number*

Synopsis	Delay before the progress indicator is displayed
Context	<a href="#">environment</a> <a href="#">progress-indicator</a> <a href="#">delay</a> <i>number</i>

---

Tree	<a href="#">delay</a>
Range	0 to 10000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

### **type** *keyword*

Synopsis	Progress indicator output style
Context	<a href="#">environment</a> <a href="#">progress-indicator</a> <a href="#">type</a> <i>keyword</i>
Tree	<a href="#">type</a>
Options	dots
Default	dots
Introduced	16.0.R1
Platforms	All

### **prompt**

Synopsis	Enter the <b>prompt</b> context
Context	<a href="#">environment</a> <a href="#">prompt</a>
Tree	<a href="#">prompt</a>
Introduced	16.0.R1
Platforms	All

### **context** *boolean*

Synopsis	Show the current command context in the prompt
Context	<a href="#">environment</a> <a href="#">prompt</a> <a href="#">context</a> <i>boolean</i>
Tree	<a href="#">context</a>
Default	true
Introduced	16.0.R1
Platforms	All

**newline** *boolean*

Synopsis	Add a new line before every prompt line
Context	<a href="#">environment prompt newline</a> <i>boolean</i>
Tree	<a href="#">newline</a>
Default	true
Introduced	16.0.R1
Platforms	All

**timestamp** *boolean*

Synopsis	Show the timestamp before the first prompt line
Context	<a href="#">environment prompt timestamp</a> <i>boolean</i>
Tree	<a href="#">timestamp</a>
Default	false
Introduced	16.0.R1
Platforms	All

**uncommitted-changes-indicator** *boolean*

Synopsis	Show an asterisk (*) when uncommitted changes exist
Context	<a href="#">environment prompt uncommitted-changes-indicator</a> <i>boolean</i>
Tree	<a href="#">uncommitted-changes-indicator</a>
Default	true
Introduced	16.0.R1
Platforms	All

**python**

Synopsis	Enter the <b>python</b> context
Context	<a href="#">environment python</a>
Tree	<a href="#">python</a>
Introduced	21.10.R1
Platforms	All



**memory-reservation** *number*

Synopsis	Memory reserved per Python interpreter
Context	<a href="#">environment python memory-reservation</a> <i>number</i>
Tree	<a href="#">memory-reservation</a>
Range	1 to 500
Units	megabytes
Introduced	21.10.R1
Platforms	All

**minimum-available-memory** *number*

Synopsis	Minimum memory requirement to run a Python interpreter
Context	<a href="#">environment python minimum-available-memory</a> <i>number</i>
Tree	<a href="#">minimum-available-memory</a>
Range	5 to 50
Units	percent
Introduced	21.10.R1
Platforms	All

**timeout** *number*

Synopsis	Maximum run time before a Python application is stopped
Context	<a href="#">environment python timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	30 to 86400
Units	seconds
Default	3600
Introduced	21.10.R1
Platforms	All

**time-display** *keyword*

Synopsis	Time zone to display time
Context	<a href="#">environment time-display</a> <i>keyword</i>
Tree	<a href="#">time-display</a>

---

Description	<p>This command configures the time zone for a timestamp displayed in outputs, such as event logs and <b>show</b> commands for the current CLI session.</p> <p>In event logs, the selected time is used to control the timestamps in the CLI output of <b>show log log-id</b> and in YANG state in the /state/log/log-id branch (for logs such as session, cli, memory, SNMP, and NETCONF).</p> <p>Also see the <b>configure log log-id time-format</b> command.</p>
Options	local, utc
Default	local
Introduced	16.0.R1
Platforms	All

### **time-format** *keyword*

Synopsis	Format to display the date and time
Context	<a href="#">environment time-format keyword</a>
Tree	<a href="#">time-format</a>
Description	This command specifies the format of the time display in configuration, state, and certain <b>show</b> command output in the current CLI session.
Options	iso-8601, rfc-1123, rfc-3339
Default	rfc-3339
Introduced	20.5.R1
Platforms	All

## 2.4 file commands

See “File management” in the *7450 ESS, 7750 SR, 7950 XRS, and VSR Basic System Configuration Guide* for more information.

```

file
- change-directory
- [url] (sat-url | cflash-url | string-not-all-spaces | ftp-url)
- checksum
- [type] keyword
- [url] (sat-url | cflash-url | string-not-all-spaces | ftp-tftp-url)
- copy
- client-tls-profile string
- [destination-url] (sat-url | cflash-url | string-not-all-spaces | ftp-tftp-url | http-
url-loose)
- direct-http
- force
- proxy string
- recursive
- [source-url] (sat-url | cflash-url | string-not-all-spaces | ftp-tftp-url | http-url-
loose)
- disable
- active
- cflash-id string
- standby
- edit
- [url] (sat-url | cflash-url | string-not-all-spaces)
- enable
- active
- cflash-id string
- standby
- format
- [cflash-id] string
- list
- reverse
- [sort-order] keyword
- [url] (sat-url | cflash-url | string-not-all-spaces | ftp-url)
- make-directory
- [url] (sat-url | cflash-url | string-not-all-spaces | ftp-url)
- move
- client-tls-profile string
- [destination-url] (sat-url | cflash-url | string-not-all-spaces | ftp-url | http-url-
loose)
- direct-http
- force
- proxy string
- [source-url] (sat-url | cflash-url | string-not-all-spaces | ftp-url | http-url-loose)
- permission
- [attribute] keyword
- [url] (sat-url | cflash-url | string-not-all-spaces)
- remove
- client-tls-profile string
- direct-http
- force
- proxy string
- [url] (sat-url | cflash-url | string-not-all-spaces | ftp-url | http-url-loose)
- remove-directory
- force
- recursive
- [url] (sat-url | cflash-url | string-not-all-spaces | ftp-url)
- repair

```

## file repair [cflash-id]

```
- [cflash-id] string
- show
- client-tls-profile string
- direct-http
- proxy string
- [url] (sat-url | cflash-url | string-not-all-spaces | ftp-tftp-url | http-url-loose)
- unzip
- create-destination
- [destination-url] (sat-url | cflash-url | string-not-all-spaces)
- force
- list
- [source-url] (sat-url | cflash-url | string-not-all-spaces | ftp-tftp-url | http-url-loose)
- version
- [url] (sat-url | cflash-url | string-not-all-spaces | ftp-tftp-url)
```

## 2.4.1 file command descriptions

### file

Synopsis	Perform file operations
Context	<a href="#">file</a>
Tree	<a href="#">file</a>
Description	Commands in this context execute file management operations.
Introduced	20.10.R1
Platforms	All

### change-directory

Synopsis	Change the working directory
Context	<a href="#">file change-directory</a>
Tree	<a href="#">change-directory</a>
Introduced	20.10.R1
Platforms	All

### **[url]** (*sat-url* | *cflash-url* | *string-not-all-spaces* | *ftp-url*)

Synopsis	New working directory URL
Context	<a href="#">file change-directory [url]</a> ( <i>sat-url</i>   <i>cflash-url</i>   <i>string-not-all-spaces</i>   <i>ftp-url</i> )
Tree	<a href="#">[url]</a>
String Length	1 to 200
Default	.
Introduced	20.10.R1
Platforms	All

### checksum

Synopsis	Compute and display checksums
Context	<a href="#">file checksum</a>
Tree	<a href="#">checksum</a>

---

Description	This command computes and displays an image file or a checksum for a file.
Introduced	20.10.R1
Platforms	All

**[type] keyword**

Synopsis	Checksum option type
Context	<a href="#">file checksum</a> <b>[type] keyword</b>
Tree	<a href="#">[type]</a>
Options	image, md5, sha256
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	All

**[url] (*sat-url* | *cflash-url* | *string-not-all-spaces* | *ftp-tftp-url*)**

Synopsis	File URL
Context	<a href="#">file checksum</a> <b>[url]</b> ( <i>sat-url</i>   <i>cflash-url</i>   <i>string-not-all-spaces</i>   <i>ftp-tftp-url</i> )
Tree	<a href="#">[url]</a>
String Length	1 to 200
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	All

**copy**

Synopsis	Copy files
Context	<a href="#">file copy</a>
Tree	<a href="#">copy</a>
Introduced	20.10.R1
Platforms	All

**client-tls-profile *string***

Synopsis	Connect over HTTP with a client TLS profile
----------	---

Context	<a href="#">file copy client-tls-profile</a> <i>string</i>
Tree	<a href="#">client-tls-profile</a>
String Length	1 to 32
Introduced	20.10.R1
Platforms	All

### **[destination-url]** (*sat-url | cflash-url | string-not-all-spaces | ftp-tftp-url | http-url-loose*)

Synopsis	Destination URL or '.' for the working directory
Context	<a href="#">file copy [destination-url]</a> ( <i>sat-url   cflash-url   string-not-all-spaces   ftp-tftp-url   http-url-loose</i> )
Tree	<a href="#">[destination-url]</a>
String Length	1 to 200
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	All

### **direct-http**

Synopsis	Allow direct HTTP connection, do not follow redirects
Context	<a href="#">file copy direct-http</a>
Tree	<a href="#">direct-http</a>
Introduced	20.10.R1
Platforms	All

### **force**

Synopsis	Force copy without prompting before overwriting
Context	<a href="#">file copy force</a>
Tree	<a href="#">force</a>
Introduced	20.10.R1
Platforms	All

**proxy string**

Synopsis	Connect over HTTP with a proxy
Context	<a href="#">file copy proxy string</a>
Tree	<a href="#">proxy</a>
String Length	1 to 255
Introduced	20.10.R1
Platforms	All

**recursive**

Synopsis	Copy sub-directories encountered at the source URL
Context	<a href="#">file copy recursive</a>
Tree	<a href="#">recursive</a>
Description	This command recursively copies files and directories. If files or directories already exist, the operator is prompted to overwrite them. When the <b>force</b> command is enabled, a positive response to the overwrite prompts is assumed, and the operator is not prompted for confirmation. The existing files or directories are overwritten.
Introduced	21.10.R1
Platforms	All

**[source-url]** (*sat-url | cflash-url | string-not-all-spaces | ftp-tftp-url | http-url-loose*)

Synopsis	Source URL
Context	<a href="#">file copy [source-url]</a> ( <i>sat-url   cflash-url   string-not-all-spaces   ftp-tftp-url   http-url-loose</i> )
Tree	<a href="#">[source-url]</a>
String Length	1 to 200
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	All

**disable**

Synopsis	Disable compact flash devices
Context	<a href="#">file disable</a>
Tree	<a href="#">disable</a>
Introduced	20.10.R1



---

Platforms All

### **active**

Synopsis Disable all devices on the active CPM

Context [file disable active](#)

Tree [active](#)

Notes The following elements are part of a choice: **active**, **cflash-id**, or **standby**.

Introduced 20.10.R1

Platforms All

### **cflash-id *string***

Synopsis Disable the compact flash device

Context [file disable cflash-id \*string\*](#)

Tree [cflash-id](#)

String Length 4 to 6

Notes The following elements are part of a choice: **active**, **cflash-id**, or **standby**.

Introduced 20.10.R1

Platforms All

### **standby**

Synopsis Disable all devices on the standby CPM

Context [file disable standby](#)

Tree [standby](#)

Notes The following elements are part of a choice: **active**, **cflash-id**, or **standby**.

Introduced 20.10.R1

Platforms All

### **edit**

Synopsis Edit files with the text editor

Context [file edit](#)

Tree [edit](#)

Description	This command allows users to edit files with the text editor. See "Text editor" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Basic System Configuration Guide</i> for more information.
Introduced	22.10.R1
Platforms	All

### **[url]** (*sat-url* | *cflash-url* | *string-not-all-spaces*)

Synopsis	File URL
Context	<a href="#">file edit</a> <a href="#">[url]</a> ( <i>sat-url</i>   <i>cflash-url</i>   <i>string-not-all-spaces</i> )
Tree	<a href="#">[url]</a>
String Length	1 to 200
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

### **enable**

Synopsis	Enable compact flash devices
Context	<a href="#">file enable</a>
Tree	<a href="#">enable</a>
Introduced	20.10.R1
Platforms	All

### **active**

Synopsis	Enable all devices on the active CPM
Context	<a href="#">file enable active</a>
Tree	<a href="#">active</a>
Notes	The following elements are part of a choice: <b>active</b> , <b>cflash-id</b> , or <b>standby</b> .
Introduced	20.10.R1
Platforms	All

### **cflash-id** *string*

Synopsis	Enable the compact flash device
Context	<a href="#">file enable cflash-id</a> <i>string</i>
Tree	<a href="#">cflash-id</a>
String Length	4 to 6
Notes	The following elements are part of a choice: <b>active</b> , <b>cflash-id</b> , or <b>standby</b> .
Introduced	20.10.R1
Platforms	All

### **standby**

Synopsis	Enable all devices on the standby CPM
Context	<a href="#">file enable standby</a>
Tree	<a href="#">standby</a>
Notes	The following elements are part of a choice: <b>active</b> , <b>cflash-id</b> , or <b>standby</b> .
Introduced	20.10.R1
Platforms	All

### **format**

Synopsis	Format a compact flash device
Context	<a href="#">file format</a>
Tree	<a href="#">format</a>
Introduced	20.10.R1
Platforms	All

### **[cflash-id]** *string*

Synopsis	Compact flash ID
Context	<a href="#">file format [cflash-id]</a> <i>string</i>
Tree	<a href="#">[cflash-id]</a>
String Length	4 to 6
Introduced	20.10.R1
Platforms	All

## list

Synopsis	List directory contents
Context	<a href="#">file list</a>
Tree	<a href="#">list</a>
Introduced	20.10.R1
Platforms	All

## reverse

Synopsis	List files in reverse sort order
Context	<a href="#">file list reverse</a>
Tree	<a href="#">reverse</a>
Introduced	20.10.R1
Platforms	All

## [**sort-order**] *keyword*

Synopsis	Sort order for the directory
Context	<a href="#">file list [sort-order] keyword</a>
Tree	<a href="#">[sort-order]</a>
Options	date, name, size
Introduced	20.10.R1
Platforms	All

## [**url**] (*sat-url* | *cflash-url* | *string-not-all-spaces* | *ftp-url*)

Synopsis	Location of the directory to be listed
Context	<a href="#">file list [url] (sat-url   cflash-url   string-not-all-spaces   ftp-url)</a>
Tree	<a href="#">[url]</a>
String Length	1 to 200
Default	.
Introduced	20.10.R1
Platforms	All

## make-directory

Synopsis	Make a directory
Context	<a href="#">file make-directory</a>
Tree	<a href="#">make-directory</a>
Introduced	20.10.R1
Platforms	All

### [url] (*sat-url* | *cflash-url* | *string-not-all-spaces* | *ftp-url*)

Synopsis	Directory location
Context	<a href="#">file make-directory [url]</a> ( <i>sat-url</i>   <i>cflash-url</i>   <i>string-not-all-spaces</i>   <i>ftp-url</i> )
Tree	<a href="#">[url]</a>
String Length	1 to 200
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	All

## move

Synopsis	Move or rename files or directories
Context	<a href="#">file move</a>
Tree	<a href="#">move</a>
Introduced	20.10.R1
Platforms	All

### client-tls-profile *string*

Synopsis	Connect over HTTP with a client TLS profile
Context	<a href="#">file move client-tls-profile</a> <i>string</i>
Tree	<a href="#">client-tls-profile</a>
String Length	1 to 32
Introduced	20.10.R1
Platforms	All

**[destination-url]** (*sat-url* | *cflash-url* | *string-not-all-spaces* | *ftp-url* | *http-url-loose*)

Synopsis	Destination URL or '.' for the working directory
Context	<a href="#">file move</a> <a href="#">[destination-url]</a> ( <i>sat-url</i>   <i>cflash-url</i>   <i>string-not-all-spaces</i>   <i>ftp-url</i>   <i>http-url-loose</i> )
Tree	<a href="#">[destination-url]</a>
String Length	1 to 200
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	All

**direct-http**

Synopsis	Allow direct HTTP connection, do not follow redirects
Context	<a href="#">file move</a> <a href="#">direct-http</a>
Tree	<a href="#">direct-http</a>
Introduced	20.10.R1
Platforms	All

**force**

Synopsis	Force move without prompting before overwriting
Context	<a href="#">file move</a> <a href="#">force</a>
Tree	<a href="#">force</a>
Introduced	20.10.R1
Platforms	All

**proxy string**

Synopsis	Connect over HTTP with a proxy
Context	<a href="#">file move</a> <a href="#">proxy</a> <a href="#">string</a>
Tree	<a href="#">proxy</a>
String Length	1 to 255
Introduced	20.10.R1
Platforms	All

**[source-url]** (*sat-url* | *cflash-url* | *string-not-all-spaces* | *ftp-url* | *http-url-loose*)

Synopsis	Source URL
Context	<a href="#">file move</a> <a href="#">[source-url]</a> ( <i>sat-url</i>   <i>cflash-url</i>   <i>string-not-all-spaces</i>   <i>ftp-url</i>   <i>http-url-loose</i> )
Tree	<a href="#">[source-url]</a>
String Length	1 to 200
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	All

**permission**

Synopsis	Show or set file permissions
Context	<a href="#">file permission</a>
Tree	<a href="#">permission</a>
Introduced	20.10.R1
Platforms	All

**[attribute]** *keyword*

Synopsis	File permission
Context	<a href="#">file permission</a> <a href="#">[attribute]</a> <i>keyword</i>
Tree	<a href="#">[attribute]</a>
Options	read-only, read-write
Introduced	20.10.R1
Platforms	All

**[url]** (*sat-url* | *cflash-url* | *string-not-all-spaces*)

Synopsis	File URL to set permissions
Context	<a href="#">file permission</a> <a href="#">[url]</a> ( <i>sat-url</i>   <i>cflash-url</i>   <i>string-not-all-spaces</i> )
Tree	<a href="#">[url]</a>
String Length	1 to 200
Introduced	20.10.R1
Platforms	All

## remove

Synopsis	Remove files
Context	<a href="#">file remove</a>
Tree	<a href="#">remove</a>
Introduced	20.10.R1
Platforms	All

## client-tls-profile *string*

Synopsis	Connect over HTTP with a client TLS profile
Context	<a href="#">file remove client-tls-profile <i>string</i></a>
Tree	<a href="#">client-tls-profile</a>
String Length	1 to 32
Introduced	20.10.R1
Platforms	All

## direct-http

Synopsis	Allow direct HTTP connection, do not follow redirects
Context	<a href="#">file remove direct-http</a>
Tree	<a href="#">direct-http</a>
Introduced	20.10.R1
Platforms	All

## force

Synopsis	Force removal without prompting
Context	<a href="#">file remove force</a>
Tree	<a href="#">force</a>
Introduced	20.10.R1
Platforms	All



**proxy string**

Synopsis	Connect over HTTP with a proxy
Context	<a href="#">file remove proxy string</a>
Tree	<a href="#">proxy</a>
String Length	1 to 255
Introduced	20.10.R1
Platforms	All

**[url] (*sat-url* | *cflash-url* | *string-not-all-spaces* | *ftp-url* | *http-url-loose*)**

Synopsis	File URL
Context	<a href="#">file remove [url] (<i>sat-url</i>   <i>cflash-url</i>   <i>string-not-all-spaces</i>   <i>ftp-url</i>   <i>http-url-loose</i>)</a>
Tree	<a href="#">[url]</a>
String Length	1 to 200
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	All

**remove-directory**

Synopsis	Remove directories
Context	<a href="#">file remove-directory</a>
Tree	<a href="#">remove-directory</a>
Introduced	20.10.R1
Platforms	All

**force**

Synopsis	Force removal without prompting
Context	<a href="#">file remove-directory force</a>
Tree	<a href="#">force</a>
Introduced	20.10.R1
Platforms	All

## recursive

Synopsis	Remove directory and contents recursively
Context	<a href="#">file remove-directory recursive</a>
Tree	<a href="#">recursive</a>
Introduced	20.10.R1
Platforms	All

## [url] (*sat-url* | *cflash-url* | *string-not-all-spaces* | *ftp-url*)

Synopsis	Directory URL
Context	<a href="#">file remove-directory [url]</a> ( <i>sat-url</i>   <i>cflash-url</i>   <i>string-not-all-spaces</i>   <i>ftp-url</i> )
Tree	<a href="#">[url]</a>
String Length	1 to 200
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	All

## repair

Synopsis	Repair a compact flash file system
Context	<a href="#">file repair</a>
Tree	<a href="#">repair</a>
Introduced	20.10.R1
Platforms	All

## [cflash-id] *string*

Synopsis	Compact flash ID
Context	<a href="#">file repair [cflash-id] string</a>
Tree	<a href="#">[cflash-id]</a>
String Length	4 to 6
Introduced	20.10.R1
Platforms	All

## show

Synopsis	Display the contents of a file
Context	<a href="#">file show</a>
Tree	<a href="#">show</a>
Introduced	20.10.R1
Platforms	All

## client-tls-profile *string*

Synopsis	Connect over HTTP with a client TLS profile
Context	<a href="#">file show client-tls-profile <i>string</i></a>
Tree	<a href="#">client-tls-profile</a>
String Length	1 to 32
Introduced	20.10.R1
Platforms	All

## direct-http

Synopsis	Allow direct HTTP connection, do not follow redirects
Context	<a href="#">file show direct-http</a>
Tree	<a href="#">direct-http</a>
Introduced	20.10.R1
Platforms	All

## proxy *string*

Synopsis	Connect over HTTP with a proxy
Context	<a href="#">file show proxy <i>string</i></a>
Tree	<a href="#">proxy</a>
String Length	1 to 255
Introduced	20.10.R1
Platforms	All

**[url]** (*sat-url* | *cflash-url* | *string-not-all-spaces* | *ftp-tftp-url* | *http-url-loose*)

Synopsis	File URL
Context	<a href="#">file show [url]</a> ( <i>sat-url</i>   <i>cflash-url</i>   <i>string-not-all-spaces</i>   <i>ftp-tftp-url</i>   <i>http-url-loose</i> )
Tree	<a href="#">[url]</a>
String Length	1 to 200
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	All

**unzip**

Synopsis	Unzip files
Context	<a href="#">file unzip</a>
Tree	<a href="#">unzip</a>
Introduced	20.10.R1
Platforms	All

**create-destination**

Synopsis	Create destination directory if it does not exist
Context	<a href="#">file unzip create-destination</a>
Tree	<a href="#">create-destination</a>
Introduced	20.10.R1
Platforms	All

**[destination-url]** (*sat-url* | *cflash-url* | *string-not-all-spaces*)

Synopsis	Destination URL or '.' for the working directory
Context	<a href="#">file unzip [destination-url]</a> ( <i>sat-url</i>   <i>cflash-url</i>   <i>string-not-all-spaces</i> )
Tree	<a href="#">[destination-url]</a>
String Length	1 to 200
Introduced	20.10.R1
Platforms	All

**force**

Synopsis	Force the unzip operation without prompting
Context	<a href="#">file unzip force</a>
Tree	<a href="#">force</a>
Description	<p>When configured, files and directories that already exist in the destination URL are overwritten without prompting.</p> <p>The system does not automatically create directories explicitly specified by the destination URL. To allow the system to create new directories, use the <b>create-destination</b> command.</p> <p>When unconfigured, the system prompts the user before overwriting a file or directory.</p>
Notes	The following elements are part of a choice: <b>force</b> or <b>list</b> .
Introduced	20.10.R1
Platforms	All

**list**

Synopsis	List the file contents without the unzip operation
Context	<a href="#">file unzip list</a>
Tree	<a href="#">list</a>
Notes	The following elements are part of a choice: <b>force</b> or <b>list</b> .
Introduced	20.10.R1
Platforms	All

**[source-url]** (*sat-url* | *cflash-url* | *string-not-all-spaces* | *ftp-tftp-url* | *http-url-loose*)

Synopsis	Source URL
Context	<a href="#">file unzip [source-url]</a> ( <i>sat-url</i>   <i>cflash-url</i>   <i>string-not-all-spaces</i>   <i>ftp-tftp-url</i>   <i>http-url-loose</i> )
Tree	<a href="#">[source-url]</a>
String Length	1 to 200
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	All

---

## version

Synopsis	Display the version of an SR OS image file
Context	<a href="#">file version</a>
Tree	<a href="#">version</a>
Introduced	20.10.R1
Platforms	All

## [url] (*sat-url* | *cflash-url* | *string-not-all-spaces* | *ftp-tftp-url*)

Synopsis	File URL
Context	<a href="#">file version</a> <a href="#">[url]</a> ( <i>sat-url</i>   <i>cflash-url</i>   <i>string-not-all-spaces</i>   <i>ftp-tftp-url</i> )
Tree	<a href="#">[url]</a>
String Length	1 to 200
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	All

## 2.5 Global commands

Global commands are used for operational functions, such as entering configuration sessions, navigating the CLI, executing OAM commands, and logging into remote hosts.

```

- back number
- bof
  - exclusive
  - private
  - read-only
- configure
  - exclusive
  - global
  - private
  - read-only
- debug
  - exclusive
  - private
  - read-only
- delete string
- edit-config
  - bof
  - debug
  - exclusive
  - global
  - li
  - private
  - read-only
- enable
- exec string
  - echo
- exit
  - all
- history
- info keyword
  - [cli-path] string
  - converted
  - detail
  - flat
  - full-context
  - inheritance
  - json
  - model keyword
  - units
  - xml
- li
  - exclusive
  - private
  - read-only
- logout
- oam
  - efm
    - local-loopback
      - [action] keyword
      - port-id string
    - remote-loopback
      - [action] keyword
      - port-id string
  - eth-cfm
    - eth-test
      - data-length number

```

## oam eth-cfm eth-test [destination]

```

- [destination] (mac-unicast-address-no-zero | number)
- ma-admin-name reference
- md-admin-name reference
- mep-id number
- priority number
- linktrace
- [destination] (mac-unicast-address-no-zero | number)
- ma-admin-name reference
- md-admin-name reference
- mep-id number
- ttl number
- loopback
- [destination] (mac-unicast-address-no-zero | keyword | number)
- interval number
- lbm-padding number
- ma-admin-name reference
- md-admin-name reference
- mep-id number
- priority number
- send-count number
- size number
- timeout number
- one-way-delay-test
- [destination] (mac-unicast-address-no-zero | number)
- ma-admin-name reference
- md-admin-name reference
- mep-id number
- priority number
- two-way-delay-test
- [destination] (mac-unicast-address-no-zero | number)
- ma-admin-name reference
- md-admin-name reference
- mep-id number
- priority number
- two-way-slm-test
- [destination] (mac-unicast-address-no-zero | number)
- interval (number | decimal-number)
- ma-admin-name reference
- md-admin-name reference
- mep-id number
- priority number
- send-count number
- size number
- timeout number
- oam-pm
- action keyword
- session reference
- test-type keyword
- saa
- owner reference test reference
- start
- accounting boolean
- stop
- accounting boolean
- password
- ping
- bypass-routing
- count number
- [destination] (ipv4-address-with-zone | ipv6-address-with-zone | string-not-all-spaces)
- do-not-fragment
- fc keyword
- interface (reference | reference | reference | reference | reference)
- interval (number | decimal-number)

```



## ping next-hop-address

```

- next-hop-address (ipv4-address-no-zone | ipv6-address-no-zone)
- output-format keyword
- pattern (keyword | number)
- router-instance (reference | reference)
- size number
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- subscriber string
- timeout number
- tos number
- ttl number
- pwc
- [path-type] keyword
- previous
- pyexec (string | reference)
- [argument-01] string
- [argument-02] string
- [argument-03] string
- [argument-04] string
- [argument-05] string
- [argument-06] string
- [argument-07] string
- [argument-08] string
- [argument-09] string
- [argument-10] string
- quit-config
- ssh
- [destination] (ipv4-address-with-zone | ipv6-address-with-zone | string-not-all-spaces)
- key-re-exchange
- mbytes (number | keyword)
- minutes (number | keyword)
- login-name string
- router-instance (reference | reference)
- telnet
- [destination] (ipv4-address-with-zone | ipv6-address-with-zone | string-not-all-spaces)
- port number
- router-instance (reference | reference)
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- top
- traceroute
- decode keyword
- dest-port number
- dest-port-udp-fixed
- [destination] (ipv4-address-no-zone | ipv6-address-no-zone | string-not-all-spaces)
- detail
- min-ttl number
- numeric
- probe-count number
- protocol keyword
- router-instance (reference | reference)
- size number
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- tos number
- ttl number
- wait number
- tree
- [cli-path] string
- detail
- flat

```

## 2.5.1 Global command descriptions

### **back** [[levels](#)] *number*

Synopsis	Move back one or more levels
Context	<a href="#">back</a> <i>number</i>
Tree	<a href="#">back</a>
Introduced	16.0.R1
Platforms	All

### **[levels]** *number*

Synopsis	Number of levels to move up
Context	<a href="#">back</a> <i>number</i>
Tree	<a href="#">back</a>
Range	1 to 4294967295
Default	1
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **bof**

Synopsis	Enter a candidate configuration mode
Context	<a href="#">bof</a>
Tree	<a href="#">bof</a>
Introduced	20.10.R1
Platforms	All

### **exclusive**

Synopsis	Enter exclusive configuration mode
Context	<a href="#">bof</a> <a href="#">exclusive</a>
Tree	<a href="#">exclusive</a>
Introduced	20.10.R1

---

Platforms All

### private

Synopsis Enter private configuration mode

Context [bof private](#)

Tree [private](#)

Introduced 20.10.R1

Platforms All

### read-only

Synopsis Enter read-only configuration mode

Context [bof read-only](#)

Tree [read-only](#)

Introduced 20.10.R1

Platforms All

### configure

Synopsis Enter a candidate configuration mode

Context [configure](#)

Tree [configure](#)

Introduced 16.0.R2

Platforms All

### exclusive

Synopsis Enter exclusive configuration mode

Context [configure exclusive](#)

Tree [exclusive](#)

Introduced 16.0.R2

Platforms All

## global

Synopsis	Enter global configuration mode
Context	<a href="#">configure global</a>
Tree	<a href="#">global</a>
Introduced	16.0.R2
Platforms	All

## private

Synopsis	Enter private configuration mode
Context	<a href="#">configure private</a>
Tree	<a href="#">private</a>
Introduced	16.0.R4
Platforms	All

## read-only

Synopsis	Enter read-only configuration mode
Context	<a href="#">configure read-only</a>
Tree	<a href="#">read-only</a>
Introduced	16.0.R2
Platforms	All

## debug

Synopsis	Enter a candidate configuration mode
Context	<a href="#">debug</a>
Tree	<a href="#">debug</a>
Introduced	21.5.R1
Platforms	All

## exclusive

Synopsis	Enter exclusive configuration mode
Context	<a href="#">debug exclusive</a>

---

Tree	<a href="#">exclusive</a>
Introduced	21.5.R1
Platforms	All

### **private**

Synopsis	Enter private configuration mode
Context	<a href="#">debug private</a>
Tree	<a href="#">private</a>
Introduced	21.5.R1
Platforms	All

### **read-only**

Synopsis	Enter read-only configuration mode
Context	<a href="#">debug read-only</a>
Tree	<a href="#">read-only</a>
Introduced	21.5.R1
Platforms	All

### **delete** [\[cli-path\]](#) *string*

Synopsis	Delete an element
Context	<a href="#">delete</a> <i>string</i>
Tree	<a href="#">delete</a>
Introduced	16.0.R1
Platforms	All

### **[cli-path]** *string*

Synopsis	Absolute path or relative path from pwc
Context	<a href="#">delete</a> <i>string</i>
Tree	<a href="#">delete</a>
Notes	This element is part of a list key.
Introduced	16.0.R1

---

Platforms All

## **edit-config**

Synopsis Enter a configuration mode

Context [edit-config](#)

Tree [edit-config](#)

Introduced 16.0.R1

Platforms All

## **bof**

Synopsis Enter the bof configuration context

Context [edit-config bof](#)

Tree [bof](#)

Introduced 20.10.R1

Platforms All

## **debug**

Synopsis Enter the debug configuration context

Context [edit-config debug](#)

Tree [debug](#)

Introduced 21.5.R1

Platforms All

## **exclusive**

Synopsis Enter exclusive configuration mode

Context [edit-config exclusive](#)

Tree [exclusive](#)

Introduced 16.0.R1

Platforms All

## global

Synopsis	Enter global configuration mode
Context	<a href="#">edit-config global</a>
Tree	<a href="#">global</a>
Introduced	16.0.R1
Platforms	All

## li

Synopsis	Enter the li configuration context
Context	<a href="#">edit-config li</a>
Tree	<a href="#">li</a>
Introduced	19.10.R1
Platforms	All

## private

Synopsis	Enter private configuration mode
Context	<a href="#">edit-config private</a>
Tree	<a href="#">private</a>
Introduced	16.0.R4
Platforms	All

## read-only

Synopsis	Enter read-only configuration mode
Context	<a href="#">edit-config read-only</a>
Tree	<a href="#">read-only</a>
Introduced	16.0.R1
Platforms	All

## enable

Synopsis	Enable administrative mode
Context	<a href="#">enable</a>

---

Tree	<a href="#">enable</a>
Introduced	20.2.R1
Platforms	All

### **exec** [[url](#)] *string*

Synopsis	Execute commands from a file
Context	<a href="#">exec</a> <i>string</i>
Tree	<a href="#">exec</a>
Introduced	16.0.R1
Platforms	All

### **[url]** *string*

Synopsis	Location of the file to be executed
Context	<a href="#">exec</a> <i>string</i>
Tree	<a href="#">exec</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **echo**

Synopsis	Display the commands as they are being executed
Context	<a href="#">exec</a> <i>string</i> <a href="#">echo</a>
Tree	<a href="#">echo</a>
Introduced	16.0.R1
Platforms	All

### **exit**

Synopsis	Return to the previous context or to operational root
Context	<a href="#">exit</a>
Tree	<a href="#">exit</a>
Introduced	16.0.R1



Platforms All

## all

Synopsis Return to the root context

Context [exit all](#)

Tree [all](#)

Introduced 16.0.R1

Platforms All

## history

Synopsis Show the command history

Context [history](#)

Tree [history](#)

Introduced 16.0.R1

Platforms All

## info [[from](#)] *keyword*

Synopsis Show the information under the present working context

Context [info keyword](#)

Tree [info](#)

Introduced 16.0.R1

Platforms All

## [\[from\]](#) *keyword*

Synopsis Source datastore

Context [info keyword](#)

Tree [info](#)

Description This command specifies the source datastore. This option is not supported for **state** elements.

Options candidate, running, baseline, intended

Notes This element is part of a list key.

Introduced	16.0.R1
Platforms	All

**[cli-path]** *string*

Synopsis	Absolute path or relative path from pwc
Context	<a href="#">info keyword</a> <a href="#">[cli-path]</a> <i>string</i>
Tree	<a href="#">[cli-path]</a>
Introduced	20.10.R1
Platforms	All

**converted**

Synopsis	Include converted third-party model configuration from the running datastore
Context	<a href="#">info keyword</a> <a href="#">converted</a>
Tree	<a href="#">converted</a>
Description	<p>This option specifies the inclusion of converted configuration values from third party models in the output and is only available when <b>configure system management-interface yang-modules openconfig-modules</b> is set to <b>true</b>.</p> <p>This option should only be used in the <b>configure</b> region when third party models are used. The output with this option is the same as <b>info</b> when used in other configuration regions.</p> <p>This option is not supported for <b>state</b> elements.</p>
Introduced	16.0.R1
Platforms	All

**detail**

Synopsis	Include default and unconfigured values
Context	<a href="#">info keyword</a> <a href="#">detail</a>
Tree	<a href="#">detail</a>
Introduced	16.0.R1
Platforms	All

**flat**

Synopsis	Show the context from the pwc on each line
----------	--

---

Context	<a href="#">info keyword flat</a>
Tree	<a href="#">flat</a>
Description	This option shows the hierarchy on each line starting from the present working context.
Notes	The following elements are part of a choice: <b>flat</b> , <b>json</b> , or <b>xml</b> .
Introduced	16.0.R1
Platforms	All

### full-context

Synopsis	Show the full context on each line
Context	<a href="#">info keyword full-context</a>
Tree	<a href="#">full-context</a>
Introduced	16.0.R1
Platforms	All

### inheritance

Synopsis	Include configuration inherited from configuration groups
Context	<a href="#">info keyword inheritance</a>
Tree	<a href="#">inheritance</a>
Description	<p>This option specifies the inclusion of configuration inherited from configuration groups in the output.</p> <p>This option should only be used in the <b>configure</b> region when configuration groups are used. The output with this option is the same as <b>info</b> when used in other configuration regions.</p> <p>This option is not supported for <b>state</b> elements.</p>
Introduced	16.0.R1
Platforms	All

### json

Synopsis	Show the output in indented JSON IETF format
Context	<a href="#">info keyword json</a>
Tree	<a href="#">json</a>
Notes	The following elements are part of a choice: <b>flat</b> , <b>json</b> , or <b>xml</b> .
Introduced	19.10.R1

Platforms All

### **model** *keyword*

Synopsis Model for which to display converted output

Context [info keyword](#) [model keyword](#)

Tree [model](#)

Description This option specifies the model which displays the converted output.  
This option is only supported with the **converted** option and is only available when **configure system management-interface yang-modules openconfig-modules** is set to **true**.

Options all, openconfig

Default all

Introduced 20.7.R1

Platforms All

### **units**

Synopsis Include unit types for applicable elements

Context [info keyword](#) [units](#)

Tree [units](#)

Introduced 20.5.R1

Platforms All

### **xml**

Synopsis Show the output in indented XML format

Context [info keyword](#) [xml](#)

Tree [xml](#)

Notes The following elements are part of a choice: **flat**, **json**, or **xml**.

Introduced 20.7.R1

Platforms All

### **li**

Synopsis Enter a candidate configuration mode

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Context	<a href="#">li</a>
Tree	<a href="#">li</a>
Introduced	19.10.R1
Platforms	All

### **exclusive**

Synopsis	Enter exclusive configuration mode
Context	<a href="#">li exclusive</a>
Tree	<a href="#">exclusive</a>
Introduced	19.10.R1
Platforms	All

### **private**

Synopsis	Enter private configuration mode
Context	<a href="#">li private</a>
Tree	<a href="#">private</a>
Introduced	19.10.R1
Platforms	All

### **read-only**

Synopsis	Enter read-only configuration mode
Context	<a href="#">li read-only</a>
Tree	<a href="#">read-only</a>
Introduced	19.10.R1
Platforms	All

### **logout**

Synopsis	Exit the CLI session
Context	<a href="#">logout</a>
Tree	<a href="#">logout</a>
Introduced	16.0.R1

---

Platforms All

## oam

Synopsis Perform OAM tests

Context [oam](#)

Tree [oam](#)

Introduced 20.2.R1

Platforms All

## efm

Synopsis Enter the **efm** context

Context [oam efm](#)

Tree [efm](#)

Introduced 20.2.R1

Platforms All

## local-loopback

Synopsis Start or stop local loopback test on a port

Context [oam efm local-loopback](#)

Tree [local-loopback](#)

Introduced 20.2.R1

Platforms All

## [action] keyword

Synopsis Action type for the test

Context [oam efm local-loopback \[action\] keyword](#)

Tree [\[action\]](#)

Options start, stop

Notes This element is mandatory.

Introduced 20.2.R1

Platforms All

**port-id string**

Synopsis	Port ID for the test
Context	<a href="#">oam efm local-loopback port-id string</a>
Tree	<a href="#">port-id</a>
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

**remote-loopback**

Synopsis	Start or stop remote loopback test on a port
Context	<a href="#">oam efm remote-loopback</a>
Tree	<a href="#">remote-loopback</a>
Introduced	20.2.R1
Platforms	All

**[action] keyword**

Synopsis	Action type for the test
Context	<a href="#">oam efm remote-loopback [action] keyword</a>
Tree	<a href="#">[action]</a>
Options	start, stop
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

**port-id string**

Synopsis	Port ID for the test
Context	<a href="#">oam efm remote-loopback port-id string</a>
Tree	<a href="#">port-id</a>
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

## eth-cfm

Synopsis	Initiate an Ethernet Connectivity Fault Management test
Context	<a href="#">oam eth-cfm</a>
Tree	<a href="#">eth-cfm</a>
Introduced	20.2.R1
Platforms	All

## eth-test

Synopsis	Initiate an OAM ETH-CFM test
Context	<a href="#">oam eth-cfm eth-test</a>
Tree	<a href="#">eth-test</a>
Introduced	20.2.R1
Platforms	All

## data-length *number*

Synopsis	Size of the padding to be added to the frame
Context	<a href="#">oam eth-cfm eth-test data-length <i>number</i></a>
Tree	<a href="#">data-length</a>
Range	64 to 1500
Default	64
Introduced	20.2.R1
Platforms	All

## [**destination**] (*mac-unicast-address-no-zero* | *number*)

Synopsis	Destination MAC address or remote MEP ID of the peer
Context	<a href="#">oam eth-cfm eth-test [<b>destination</b>] (<i>mac-unicast-address-no-zero</i>   <i>number</i>)</a>
Tree	<a href="#">[<b>destination</b>]</a>
Range	1 to 8191
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All



**ma-admin-name** *reference*

Synopsis	Association name
Context	<a href="#">oam eth-cfm eth-test ma-admin-name reference</a>
Tree	<a href="#">ma-admin-name</a>
Reference	<b>state eth-cfm domain string association string</b>
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

**md-admin-name** *reference*

Synopsis	Domain name
Context	<a href="#">oam eth-cfm eth-test md-admin-name reference</a>
Tree	<a href="#">md-admin-name</a>
Reference	<b>state eth-cfm domain string</b>
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

**mep-id** *number*

Synopsis	Local Maintenance Association Endpoint (MEP) ID
Context	<a href="#">oam eth-cfm eth-test mep-id number</a>
Tree	<a href="#">mep-id</a>
Range	1 to 8191
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

**priority** *number*

Synopsis	Frame priority that can be manipulated by QoS policies
Context	<a href="#">oam eth-cfm eth-test priority number</a>

Tree	<a href="#">priority</a>
Range	0 to 7
Default	7
Introduced	20.2.R1
Platforms	All

## linktrace

Synopsis	Initiate a linktrace test
Context	<a href="#">oam eth-cfm linktrace</a>
Tree	<a href="#">linktrace</a>
Introduced	20.2.R1
Platforms	All

### [**destination**] (*mac-unicast-address-no-zero | number*)

Synopsis	Destination MAC address or remote MEP ID of the peer
Context	<a href="#">oam eth-cfm linktrace [destination]</a> ( <i>mac-unicast-address-no-zero   number</i> )
Tree	<a href="#">[destination]</a>
Range	1 to 8191
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

### **ma-admin-name** *reference*

Synopsis	Association name
Context	<a href="#">oam eth-cfm linktrace ma-admin-name reference</a>
Tree	<a href="#">ma-admin-name</a>
Reference	<b>state eth-cfm domain string association string</b>
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

### **md-admin-name** *reference*

Synopsis	Domain name
Context	<a href="#">oam eth-cfm linktrace md-admin-name reference</a>
Tree	<a href="#">md-admin-name</a>
Reference	<b>state eth-cfm domain string</b>
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

### **mep-id** *number*

Synopsis	Local Maintenance Association Endpoint (MEP) ID
Context	<a href="#">oam eth-cfm linktrace mep-id number</a>
Tree	<a href="#">mep-id</a>
Range	1 to 8191
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

### **ttl** *number*

Synopsis	Time to live for a returned linktrace
Context	<a href="#">oam eth-cfm linktrace ttl number</a>
Tree	<a href="#">ttl</a>
Range	0 to 255
Default	64
Introduced	20.2.R1
Platforms	All

### **loopback**

Synopsis	Initiate a loopback test
Context	<a href="#">oam eth-cfm loopback</a>
Tree	<a href="#">loopback</a>

Introduced 20.2.R1  
 Platforms All

**[destination]** (*mac-unicast-address-no-zero | keyword | number*)

Synopsis Destination MAC address or remote MEP ID of the peer  
 Context [oam eth-cfm loopback \[destination\]](#) (*mac-unicast-address-no-zero | keyword | number*)  
 Tree [\[destination\]](#)  
 Range 1 to 8191  
 Options multicast  
 Notes This element is mandatory.  
 Introduced 20.2.R1  
 Platforms All

**interval** *number*

Synopsis Time between probes within the test run  
 Context [oam eth-cfm loopback interval](#) *number*  
 Tree [interval](#)  
 Range 0 to 600  
 Units deciseconds  
 Default 0  
 Introduced 20.2.R1  
 Platforms All

**lbm-padding** *number*

Synopsis Data portion size of the data TLV, no octet string  
 Context [oam eth-cfm loopback lbm-padding](#) *number*  
 Tree [lbm-padding](#)  
 Description This command specifies the size of the data portion of the data TLV which does not allow for an optional octet string.  
 MSDU is not processed when setting is in use. A value of 0 means that no data TLV is added to the packet. This is specified with an octet string. This parameter and **size** are mutually exclusive.  
 Range 0 | 3 to 9778

---

Default	0
Introduced	20.2.R1
Platforms	All

### **ma-admin-name** *reference*

Synopsis	Association name
Context	<a href="#">oam eth-cfm loopback ma-admin-name reference</a>
Tree	<a href="#">ma-admin-name</a>
Reference	<b>state eth-cfm domain string association string</b>
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

### **md-admin-name** *reference*

Synopsis	Domain name
Context	<a href="#">oam eth-cfm loopback md-admin-name reference</a>
Tree	<a href="#">md-admin-name</a>
Reference	<b>state eth-cfm domain string</b>
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

### **mep-id** *number*

Synopsis	Local Maintenance Association Endpoint (MEP) ID
Context	<a href="#">oam eth-cfm loopback mep-id number</a>
Tree	<a href="#">mep-id</a>
Range	1 to 8191
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

### **priority number**

Synopsis	Frame priority that can be manipulated by QoS policies
Context	<a href="#">oam eth-cfm loopback priority number</a>
Tree	<a href="#">priority</a>
Range	0 to 7
Introduced	20.2.R1
Platforms	All

### **send-count number**

Synopsis	Number of loopback messages to send
Context	<a href="#">oam eth-cfm loopback send-count number</a>
Tree	<a href="#">send-count</a>
Range	1 to 1024
Default	1
Introduced	20.2.R1
Platforms	All

### **size number**

Synopsis	Data portion size of the data TLV, octet string allowed
Context	<a href="#">oam eth-cfm loopback size number</a>
Tree	<a href="#">size</a>
Description	<p>This command specifies the size of the data portion of the data TLV allowing for an optional octet string to be included.</p> <p>A value of 0 means that no data TLV is added to the packet. This parameter and <b>lbm-padding</b> are mutually exclusive.</p>
Range	0 to 1500
Units	bytes
Default	0
Introduced	20.2.R1
Platforms	All

**timeout** *number*

Synopsis	Wait time for a reply to a sent message request
Context	<a href="#">oam eth-cfm loopback timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Description	This command specifies the time the router waits for a message reply after sending a message request.  Upon expiration of the timeout, the router assumes that the message response is not received. Any response received after the timeout is silently discarded.
Range	1 to 10
Units	seconds
Default	5
Introduced	20.2.R1
Platforms	All

**one-way-delay-test**

Synopsis	Initiate a one-way delay test
Context	<a href="#">oam eth-cfm one-way-delay-test</a>
Tree	<a href="#">one-way-delay-test</a>
Introduced	20.2.R1
Platforms	All

**[destination]** (*mac-unicast-address-no-zero* | *number*)

Synopsis	Destination MAC address or remote MEP ID of the peer
Context	<a href="#">oam eth-cfm one-way-delay-test [destination]</a> ( <i>mac-unicast-address-no-zero</i>   <i>number</i> )
Tree	<a href="#">[destination]</a>
Range	1 to 8191
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

**ma-admin-name** *reference*

Synopsis	Association name
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Context	<a href="#">oam eth-cfm one-way-delay-test ma-admin-name</a> <i>reference</i>
Tree	<a href="#">ma-admin-name</a>
Reference	<b>state eth-cfm domain</b> <i>string</i> <b>association</b> <i>string</i>
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

### **md-admin-name** *reference*

Synopsis	Domain name
Context	<a href="#">oam eth-cfm one-way-delay-test md-admin-name</a> <i>reference</i>
Tree	<a href="#">md-admin-name</a>
Reference	<b>state eth-cfm domain</b> <i>string</i>
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

### **mep-id** *number*

Synopsis	Local Maintenance Association Endpoint (MEP) ID
Context	<a href="#">oam eth-cfm one-way-delay-test mep-id</a> <i>number</i>
Tree	<a href="#">mep-id</a>
Range	1 to 8191
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

### **priority** *number*

Synopsis	Frame priority that can be manipulated by QoS policies
Context	<a href="#">oam eth-cfm one-way-delay-test priority</a> <i>number</i>
Tree	<a href="#">priority</a>
Range	0 to 7
Default	7



Introduced 20.2.R1  
 Platforms All

### **two-way-delay-test**

Synopsis Initiate a two-way delay test  
 Context [oam eth-cfm two-way-delay-test](#)  
 Tree [two-way-delay-test](#)  
 Introduced 20.2.R1  
 Platforms All

### **[destination]** (*mac-unicast-address-no-zero | number*)

Synopsis Destination MAC address or remote MEP ID of the peer  
 Context [oam eth-cfm two-way-delay-test \[destination\]](#) (*mac-unicast-address-no-zero | number*)  
 Tree [\[destination\]](#)  
 Range 1 to 8191  
 Notes This element is mandatory.  
 Introduced 20.2.R1  
 Platforms All

### **ma-admin-name** *reference*

Synopsis Association name  
 Context [oam eth-cfm two-way-delay-test ma-admin-name](#) *reference*  
 Tree [ma-admin-name](#)  
 Reference **state eth-cfm domain string association string**  
 Notes This element is mandatory.  
 Introduced 20.2.R1  
 Platforms All

### **md-admin-name** *reference*

Synopsis Domain name  
 Context [oam eth-cfm two-way-delay-test md-admin-name](#) *reference*

---

Tree	<a href="#">md-admin-name</a>
Reference	<b>state eth-cfm domain</b> <i>string</i>
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

### **mep-id** *number*

Synopsis	Local Maintenance Association Endpoint (MEP) ID
Context	<a href="#">oam eth-cfm two-way-delay-test mep-id</a> <i>number</i>
Tree	<a href="#">mep-id</a>
Range	1 to 8191
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

### **priority** *number*

Synopsis	Frame priority that can be manipulated by QoS policies
Context	<a href="#">oam eth-cfm two-way-delay-test priority</a> <i>number</i>
Tree	<a href="#">priority</a>
Range	0 to 7
Default	7
Introduced	20.2.R1
Platforms	All

### **two-way-slm-test**

Synopsis	Initiate a two-way SLM test in SAA
Context	<a href="#">oam eth-cfm two-way-slm-test</a>
Tree	<a href="#">two-way-slm-test</a>
Introduced	20.2.R1
Platforms	All

**[destination]** (*mac-unicast-address-no-zero | number*)

Synopsis	Destination MAC address or remote MEP ID of the peer
Context	<a href="#">oam eth-cfm two-way-slm-test [destination]</a> ( <i>mac-unicast-address-no-zero   number</i> )
Tree	<a href="#">[destination]</a>
Range	1 to 8191
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

**interval** (*number | decimal-number*)

Synopsis	Time between probes within the test run
Context	<a href="#">oam eth-cfm two-way-slm-test interval</a> ( <i>number   decimal-number</i> )
Tree	<a href="#">interval</a>
Range	1 to 10
Units	seconds
Default	5
Introduced	20.2.R1
Platforms	All

**ma-admin-name** *reference*

Synopsis	Association name
Context	<a href="#">oam eth-cfm two-way-slm-test ma-admin-name</a> <i>reference</i>
Tree	<a href="#">ma-admin-name</a>
Reference	<b>state eth-cfm domain string association string</b>
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

**md-admin-name** *reference*

Synopsis	Domain name
Context	<a href="#">oam eth-cfm two-way-slm-test md-admin-name</a> <i>reference</i>

---

Tree	<a href="#">md-admin-name</a>
Reference	<b>state eth-cfm domain string</b>
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

### **mep-id number**

Synopsis	Local Maintenance Association Endpoint (MEP) ID
Context	<a href="#">oam eth-cfm two-way-slm-test mep-id number</a>
Tree	<a href="#">mep-id</a>
Range	1 to 8191
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

### **priority number**

Synopsis	Frame priority that can be manipulated by QoS policies
Context	<a href="#">oam eth-cfm two-way-slm-test priority number</a>
Tree	<a href="#">priority</a>
Range	0 to 7
Default	7
Introduced	20.2.R1
Platforms	All

### **send-count number**

Synopsis	Number of two-way SLM test messages to send
Context	<a href="#">oam eth-cfm two-way-slm-test send-count number</a>
Tree	<a href="#">send-count</a>
Range	1 to 1000
Default	1
Introduced	20.2.R1

Platforms All

### **size number**

Synopsis Data portion size of the data TLV, octet string allowed

Context [oam eth-cfm two-way-slm-test size number](#)

Tree [size](#)

Description This command specifies the size of the data portion of the data TLV allowing for an optional octet string to be included.

Range 0 to 1500

Units bytes

Default 0

Introduced 20.2.R1

Platforms All

### **timeout number**

Synopsis Wait time for a reply to a sent message request

Context [oam eth-cfm two-way-slm-test timeout number](#)

Tree [timeout](#)

Description This command specifies the time the router waits for a message reply after sending a message request.

Upon expiration of the timeout, the router assumes that the message response is not received. Any response received after the timeout is silently discarded.

Range 1 to 10

Units seconds

Default 5

Introduced 20.2.R1

Platforms All

### **oam-pm**

Synopsis Initiate an on-demand OAM Performance Monitoring test

Context [oam oam-pm](#)

Tree [oam-pm](#)

Introduced 20.2.R1

Platforms All

### **action** *keyword*

Synopsis OAM-PM test action  
Context [oam oam-pm action keyword](#)  
Tree [action](#)  
Options start, stop  
Notes This element is mandatory.  
Introduced 20.2.R1  
Platforms All

### **session** *reference*

Synopsis OAM-PM session name  
Context [oam oam-pm session reference](#)  
Tree [session](#)  
Reference **state oam-pm session string**  
Notes This element is mandatory.  
Introduced 20.2.R1  
Platforms All

### **test-type** *keyword*

Synopsis Test type  
Context [oam oam-pm test-type keyword](#)  
Tree [test-type](#)  
Options dm, dmm, lmm, slm, twamp-light  
Notes This element is mandatory.  
Introduced 20.2.R1  
Platforms All

### **saa**

Synopsis Enter the **saa** context

---

Context	<a href="#">oam saa</a>
Tree	<a href="#">saa</a>
Introduced	22.10.R1
Platforms	All

### **owner** [[owner-name](#)] *reference* [test](#) *reference*

Synopsis	SAA owner name
Context	<a href="#">oam saa owner</a> <i>reference</i> <a href="#">test</a> <i>reference</i>
Tree	<a href="#">owner</a>
Introduced	22.10.R1
Platforms	All

### **[owner-name]** *reference*

Synopsis	Name of the owner of SAA test to be stopped or started
Context	<a href="#">oam saa owner</a> <i>reference</i> <a href="#">test</a> <i>reference</i>
Tree	<a href="#">owner</a>
Reference	<b>state saa owner</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

### **test** *reference*

Synopsis	Name of the SAA test to be stopped or started
Context	<a href="#">oam saa owner</a> <i>reference</i> <a href="#">test</a> <i>reference</i>
Tree	<a href="#">owner</a>
Reference	<b>state saa owner</b> <i>string</i> <b>test</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

## start

Synopsis	Start the SAA test
Context	<a href="#">oam saa owner</a> <i>reference</i> <a href="#">test</a> <i>reference</i> <a href="#">start</a>
Tree	<a href="#">start</a>
Introduced	22.10.R1
Platforms	All

## accounting *boolean*

Synopsis	Disable recording results in accounting policy
Context	<a href="#">oam saa owner</a> <i>reference</i> <a href="#">test</a> <i>reference</i> <a href="#">start accounting boolean</a>
Tree	<a href="#">accounting</a>
Default	true
Introduced	22.10.R1
Platforms	All

## stop

Synopsis	Stop the SAA test
Context	<a href="#">oam saa owner</a> <i>reference</i> <a href="#">test</a> <i>reference</i> <a href="#">stop</a>
Tree	<a href="#">stop</a>
Introduced	22.10.R1
Platforms	All

## accounting *boolean*

Synopsis	Disable recording results in accounting policy
Context	<a href="#">oam saa owner</a> <i>reference</i> <a href="#">test</a> <i>reference</i> <a href="#">stop accounting boolean</a>
Tree	<a href="#">accounting</a>
Default	true
Introduced	22.10.R1
Platforms	All



## password

Synopsis	Change the local user password
Context	<a href="#">password</a>
Tree	<a href="#">password</a>
Introduced	20.10.R1
Platforms	All

## ping

Synopsis	Ping an IP address or DNS name
Context	<a href="#">ping</a>
Tree	<a href="#">ping</a>
Introduced	19.10.R1
Platforms	All

## bypass-routing

Synopsis	Bypass routing table when sending ping request to host
Context	<a href="#">ping bypass-routing</a>
Tree	<a href="#">bypass-routing</a>
Description	When configured, the system bypasses the routing table when sending the ping request to a host on a directly-attached network. If the host is not on a directly-attached network, an error is returned.
Notes	The following elements are part of a choice: <b>bypass-routing</b> , <b>interface</b> , <b>next-hop-address</b> , or <b>subscriber</b> .
Introduced	19.10.R1
Platforms	All

## count *number*

Synopsis	Number of ping requests to send to the remote host
Context	<a href="#">ping count <i>number</i></a>
Tree	<a href="#">count</a>
Range	1 to 100000
Units	packets
Default	5

Introduced 19.10.R1  
 Platforms All

**[destination]** (*ipv4-address-with-zone | ipv6-address-with-zone | string-not-all-spaces*)

Synopsis Destination IP address or DNS name  
 Context [ping \[destination\]](#) (*ipv4-address-with-zone | ipv6-address-with-zone | string-not-all-spaces*)  
 Tree [\[destination\]](#)  
 String Length 1 to 128  
 Notes This element is mandatory.  
 Introduced 19.10.R1  
 Platforms All

**do-not-fragment**

Synopsis Do not fragment the request frame  
 Context [ping do-not-fragment](#)  
 Tree [do-not-fragment](#)  
 Description This command sets the do-not-fragment bit in the IPv4 header. This prevents packet fragmentation along the path when there is an MTU mismatch.  
 Introduced 19.10.R1  
 Platforms All

**fc keyword**

Synopsis Forwarding class option for the transmitted packet  
 Context [ping fc keyword](#)  
 Tree [fc](#)  
 Options be, l2, af, l1, h2, ef, h1, nc  
 Default nc  
 Introduced 19.10.R1  
 Platforms All

**interface** (*reference | reference | reference | reference | reference*)

Synopsis	Sending interface name
Context	<a href="#">ping interface</a> ( <i>reference   reference   reference   reference   reference</i> )
Tree	<a href="#">interface</a>
Reference	<b>state router</b> <i>string interface string</i> <b>state service ies</b> <i>string interface string</i> <b>state service ies</b> <i>string subscriber-interface string</i> <b>state service vprn</b> <i>string interface string</i> <b>state service vprn</b> <i>string subscriber-interface string</i>
Notes	The following elements are part of a choice: <b>bypass-routing</b> , <b>interface</b> , <b>next-hop-address</b> , or <b>subscriber</b> .
Introduced	19.10.R1
Platforms	All

**interval** (*number | decimal-number*)

Synopsis	Time between consecutive ping requests
Context	<a href="#">ping interval</a> ( <i>number   decimal-number</i> )
Tree	<a href="#">interval</a>
Range	1 to 10000
Units	seconds
Default	1
Introduced	19.10.R1
Platforms	All

**next-hop-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Next-hop address to send packet, ignoring routing table
Context	<a href="#">ping next-hop-address</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">next-hop-address</a>
Description	This command specifies the next-hop address. The system does not use the routing table and the address must be on an adjacent router attached to a common subnet.
Notes	The following elements are part of a choice: <b>bypass-routing</b> , <b>interface</b> , <b>next-hop-address</b> , or <b>subscriber</b> .
Introduced	19.10.R1

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Platforms All

### **output-format** *keyword*

Synopsis Output format  
Context [ping output-format keyword](#)  
Tree [output-format](#)  
Options summary, detail  
Default detail  
Introduced 19.10.R1  
Platforms All

### **pattern** (*keyword | number*)

Synopsis Pattern string to include in the packet  
Context [ping pattern \(keyword | number\)](#)  
Tree [pattern](#)  
Range 0 to 65535  
Options sequential  
Default sequential  
Introduced 19.10.R1  
Platforms All

### **router-instance** (*reference | reference*)

Synopsis Router name or VPRN service name  
Context [ping router-instance \(reference | reference\)](#)  
Tree [router-instance](#)  
Default Base  
Reference **state router** *string*  
**state service vprn** *string*  
Introduced 19.10.R1  
Platforms All

**size number**

Synopsis	Request packet size including ICMP header and payload
Context	<a href="#">ping size number</a>
Tree	<a href="#">size</a>
Range	0 to 16384
Units	bytes
Default	56
Introduced	19.10.R1
Platforms	All

**source-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Source IP address used in the ICMP Echo Request packet
Context	<a href="#">ping source-address</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">source-address</a>
Introduced	19.10.R1
Platforms	All

**subscriber string**

Synopsis	Subscriber ID for sending ICMP Echo Request packets
Context	<a href="#">ping subscriber string</a>
Tree	<a href="#">subscriber</a>
String Length	1 to 64
Notes	The following elements are part of a choice: <b>bypass-routing</b> , <b>interface</b> , <b>next-hop-address</b> , or <b>subscriber</b> .
Introduced	19.10.R1
Platforms	All

**timeout number**

Synopsis	Wait time for the ICMP Echo Reply packet
Context	<a href="#">ping timeout number</a>
Tree	<a href="#">timeout</a>

---

Description	This command specifies the time to wait for the ICMP Echo Reply packet. The timer is started when the last ICMP Echo Request is sent.
Range	1 to 10
Units	seconds
Default	5
Introduced	19.10.R2
Platforms	All

### **tos number**

Synopsis	Type of Service (ToS) bits in the IP header
Context	<a href="#">ping tos number</a>
Tree	<a href="#">tos</a>
Range	0 to 255
Default	0
Introduced	19.10.R1
Platforms	All

### **ttl number**

Synopsis	Time to Live (TTL) included in the request packet
Context	<a href="#">ping ttl number</a>
Tree	<a href="#">ttl</a>
Range	1 to 128
Default	64
Introduced	19.10.R1
Platforms	All

### **pwc**

Synopsis	Show the present working context
Context	<a href="#">pwc</a>
Tree	<a href="#">pwc</a>
Introduced	16.0.R1
Platforms	All

**[path-type] keyword**

Synopsis	Alternative format to display the path
Context	<a href="#">pwc [path-type] keyword</a>
Tree	<a href="#">[path-type]</a>
Description	This command provides alternative formats to display the present working context. The <b>gnmi-path</b> option replaces the <b>xpath</b> option.
Options	model-path, gnmi-path, cli-path, json-instance-path
Introduced	19.10.R1
Platforms	All

**previous**

Synopsis	Display previous working context
Context	<a href="#">pwc previous</a>
Tree	<a href="#">previous</a>
Introduced	16.0.R1
Platforms	All

**pyexec [url] (string | reference)**

Synopsis	Execute a Python application
Context	<a href="#">pyexec (string   reference)</a>
Tree	<a href="#">pyexec</a>
Introduced	21.7.R1
Platforms	All

**[url] (string | reference)**

Synopsis	Location of the script to be executed
Context	<a href="#">pyexec (string   reference)</a>
Tree	<a href="#">pyexec</a>
Reference	<b>state python python-script string</b>
Notes	This element is part of a list key.
Introduced	21.7.R1

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Platforms All

**[argument-01]** *string*

Synopsis First argument  
Context [pyexec](#) (*string* | *reference*) [\[argument-01\]](#) *string*  
Tree [\[argument-01\]](#)  
Introduced 21.7.R1  
Platforms All

**[argument-02]** *string*

Synopsis Second argument  
Context [pyexec](#) (*string* | *reference*) [\[argument-02\]](#) *string*  
Tree [\[argument-02\]](#)  
Introduced 21.7.R1  
Platforms All

**[argument-03]** *string*

Synopsis Third argument  
Context [pyexec](#) (*string* | *reference*) [\[argument-03\]](#) *string*  
Tree [\[argument-03\]](#)  
Introduced 21.7.R1  
Platforms All

**[argument-04]** *string*

Synopsis Fourth argument  
Context [pyexec](#) (*string* | *reference*) [\[argument-04\]](#) *string*  
Tree [\[argument-04\]](#)  
Introduced 21.7.R1  
Platforms All



**[argument-05] string**

Synopsis	Fifth argument
Context	<a href="#">pyexec</a> ( <i>string</i>   <i>reference</i> ) <a href="#">[argument-05]</a> <i>string</i>
Tree	<a href="#">[argument-05]</a>
Introduced	21.7.R1
Platforms	All

**[argument-06] string**

Synopsis	Sixth argument
Context	<a href="#">pyexec</a> ( <i>string</i>   <i>reference</i> ) <a href="#">[argument-06]</a> <i>string</i>
Tree	<a href="#">[argument-06]</a>
Introduced	21.7.R1
Platforms	All

**[argument-07] string**

Synopsis	Seventh argument
Context	<a href="#">pyexec</a> ( <i>string</i>   <i>reference</i> ) <a href="#">[argument-07]</a> <i>string</i>
Tree	<a href="#">[argument-07]</a>
Introduced	21.7.R1
Platforms	All

**[argument-08] string**

Synopsis	Eight argument
Context	<a href="#">pyexec</a> ( <i>string</i>   <i>reference</i> ) <a href="#">[argument-08]</a> <i>string</i>
Tree	<a href="#">[argument-08]</a>
Introduced	21.7.R1
Platforms	All

**[argument-09] string**

Synopsis	Ninth argument
Context	<a href="#">pyexec</a> ( <i>string</i>   <i>reference</i> ) <a href="#">[argument-09]</a> <i>string</i>

Tree	<a href="#">[argument-09]</a>
Introduced	21.7.R1
Platforms	All

**[argument-10]** *string*

Synopsis	Tenth argument
Context	<a href="#">pyexec</a> ( <i>string</i>   <i>reference</i> ) <a href="#">[argument-10]</a> <i>string</i>
Tree	<a href="#">[argument-10]</a>
Introduced	21.7.R1
Platforms	All

**quit-config**

Synopsis	Exit the candidate configuration mode
Context	<a href="#">quit-config</a>
Tree	<a href="#">quit-config</a>
Introduced	16.0.R1
Platforms	All

**ssh**

Synopsis	SSH to an IP address or DNS name
Context	<a href="#">ssh</a>
Tree	<a href="#">ssh</a>
Introduced	20.7.R1
Platforms	All

**[destination]** (*ipv4-address-with-zone* | *ipv6-address-with-zone* | *string-not-all-spaces*)

Synopsis	Destination IP address or DNS name
Context	<a href="#">ssh</a> <a href="#">[destination]</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i>   <i>string-not-all-spaces</i> )
Tree	<a href="#">[destination]</a>
String Length	1 to 128

---

Notes	This element is mandatory.
Introduced	20.7.R1
Platforms	All

## key-re-exchange

Synopsis	Enter the <b>key-re-exchange</b> context
Context	<a href="#">ssh key-re-exchange</a>
Tree	<a href="#">key-re-exchange</a>
Introduced	20.7.R1
Platforms	All

## mbytes (*number* | *keyword*)

Synopsis	Maximum bytes before initiating key re-exchange
Context	<a href="#">ssh key-re-exchange mbytes</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbytes</a>
Description	This command specifies the number of bytes transmitted on an SSH session, after which the SSH client initiates the key re-exchange.
Range	1 to 64000
Units	megabytes
Options	infinite
Default	1024
Introduced	20.7.R1
Platforms	All

## minutes (*number* | *keyword*)

Synopsis	Time after which SSH client initiates key re-exchange
Context	<a href="#">ssh key-re-exchange minutes</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">minutes</a>
Range	1 to 1440
Units	minutes
Options	infinite
Default	60

Introduced 20.7.R1  
Platforms All

### **login-name** *string*

Synopsis SSH login username  
Context [ssh login-name string](#)  
Tree [login-name](#)  
String Length 1 to 32  
Introduced 20.7.R1  
Platforms All

### **router-instance** (*reference* | *reference*)

Synopsis Router name or VPRN service name  
Context [ssh router-instance \(reference | reference\)](#)  
Tree [router-instance](#)  
Default Base  
Reference **state router string**  
**state service vprn string**  
Introduced 20.7.R1  
Platforms All

### **telnet**

Synopsis Telnet to an IP address or DNS name  
Context [telnet](#)  
Tree [telnet](#)  
Description This command opens a Telnet session to a remote host. In SR-series networks, the Telnet servers limit Telnet clients to three login attempts; if unsuccessful, the Telnet client session disconnects. The number is not user configurable.  
Introduced 20.7.R1  
Platforms All

**[destination]** (*ipv4-address-with-zone | ipv6-address-with-zone | string-not-all-spaces*)

Synopsis	Destination IP address or DNS name
Context	<a href="#">telnet [destination]</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone   string-not-all-spaces</i> )
Tree	<a href="#">[destination]</a>
Description	This command specifies the IP address or DNS name (if DNS name resolution is configured) of the remote host for the Telnet session.
String Length	1 to 128
Notes	This element is mandatory.
Introduced	20.7.R1
Platforms	All

**port number**

Synopsis	Remote host TCP port for the Telnet connection
Context	<a href="#">telnet port number</a>
Tree	<a href="#">port</a>
Range	1 to 65535
Default	23
Introduced	20.7.R1
Platforms	All

**router-instance** (*reference | reference*)

Synopsis	Router name or VPRN service name
Context	<a href="#">telnet router-instance</a> ( <i>reference   reference</i> )
Tree	<a href="#">router-instance</a>
Default	Base
Reference	<b>state router</b> <i>string</i> <b>state service vprn</b> <i>string</i>
Introduced	20.7.R1
Platforms	All

**source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source IP address of the Telnet packets
Context	<a href="#">telnet source-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">source-address</a>
Introduced	20.7.R1
Platforms	All

**top**

Synopsis	Move to the top level of the context
Context	<a href="#">top</a>
Tree	<a href="#">top</a>
Introduced	16.0.R1
Platforms	All

**traceroute**

Synopsis	Show the route taken to an IP address or DNS name
Context	<a href="#">traceroute</a>
Tree	<a href="#">traceroute</a>
Introduced	19.10.R1
Platforms	All

**decode** *keyword*

Synopsis	Perform original datagram parsing functions
Context	<a href="#">traceroute decode</a> <i>keyword</i>
Tree	<a href="#">decode</a>
Options	none, original-datagram
Default	none
Introduced	22.7.R1
Platforms	All

**dest-port *number***

Synopsis	Transport protocol destination port number
Context	<a href="#">traceroute dest-port <i>number</i></a>
Tree	<a href="#">dest-port</a>
Range	1 to 65535
Default	33434
Introduced	20.10.R1
Platforms	All

**dest-port-udp-fixed**

Synopsis	Avoid increment of destination port number for UDP test
Context	<a href="#">traceroute dest-port-udp-fixed</a>
Tree	<a href="#">dest-port-udp-fixed</a>
Introduced	21.10.R1
Platforms	All

**[destination] (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *string-not-all-spaces*)**

Synopsis	Destination IP address or DNS name
Context	<a href="#">traceroute [destination] (<i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>   <i>string-not-all-spaces</i>)</a>
Tree	<a href="#">[destination]</a>
String Length	1 to 128
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

**detail**

Synopsis	Display MPLS label stack information or TCP port status
Context	<a href="#">traceroute detail</a>
Tree	<a href="#">detail</a>
Introduced	19.10.R1
Platforms	All

**min-ttl** *number*

Synopsis	First hop traceroute probes using the TTL value
Context	<a href="#">traceroute min-ttl</a> <i>number</i>
Tree	<a href="#">min-ttl</a>
Description	This command specifies the first hop traceroute probes, using the <b>t</b> tl value.
Range	1 to 255
Default	1
Introduced	21.10.R1
Platforms	All

**numeric**

Synopsis	Display IP addresses instead of DNS names
Context	<a href="#">traceroute numeric</a>
Tree	<a href="#">numeric</a>
Introduced	19.10.R1
Platforms	All

**probe-count** *number*

Synopsis	Number of probes to send per hop
Context	<a href="#">traceroute probe-count</a> <i>number</i>
Tree	<a href="#">probe-count</a>
Range	1 to 10
Default	3
Introduced	20.10.R1
Platforms	All

**protocol** *keyword*

Synopsis	Packet type to send
Context	<a href="#">traceroute protocol</a> <i>keyword</i>
Tree	<a href="#">protocol</a>



Description	This command sets the transport protocol, UDP or TCP, for the traceroute packet. A targeted VPRN service silently discards TCP traceroutes and only responds to UDP traceroutes.
Options	udp, tcp
Default	udp
Introduced	21.10.R1
Platforms	All

### **router-instance** (*reference* | *reference*)

Synopsis	Router name or VPRN service name
Context	<a href="#">traceroute router-instance</a> ( <i>reference</i>   <i>reference</i> )
Tree	<a href="#">router-instance</a>
Default	Base
Reference	<b>state router</b> <i>string</i> <b>state service vprn</b> <i>string</i>
Introduced	19.10.R1
Platforms	All

### **size number**

Synopsis	Number of pad bytes in each transmitted packet
Context	<a href="#">traceroute size number</a>
Tree	<a href="#">size</a>
Range	0 to 9786
Units	bytes
Default	0
Introduced	21.10.R1
Platforms	All

### **source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source address of the probe packets
Context	<a href="#">traceroute source-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">source-address</a>

---

Description	This command specifies the source address of the probe packets. If the IP address is not one of the interfaces of the device, the system returns an error.
Introduced	19.10.R1
Platforms	All

**tos number**

Synopsis	Type of Service (ToS) bits in the IP header
Context	<a href="#">traceroute tos number</a>
Tree	<a href="#">tos</a>
Range	0 to 255
Default	0
Introduced	19.10.R1
Platforms	All

**ttl number**

Synopsis	Maximum number of hops (TTL) to probe
Context	<a href="#">traceroute ttl number</a>
Tree	<a href="#">ttl</a>
Range	1 to 255
Default	30
Introduced	19.10.R1
Platforms	All

**wait number**

Synopsis	Time to wait for a response to the probe
Context	<a href="#">traceroute wait number</a>
Tree	<a href="#">wait</a>
Range	10 to 60000
Units	milliseconds
Default	5000
Introduced	19.10.R1
Platforms	All

## tree

Synopsis	Show the command tree under the present working context
Context	<a href="#">tree</a>
Tree	<a href="#">tree</a>
Introduced	16.0.R1
Platforms	All

## [cli-path] string

Synopsis	Absolute path or relative path from pwc
Context	<a href="#">tree [cli-path] string</a>
Tree	<a href="#">[cli-path]</a>
Introduced	20.10.R1
Platforms	All

## detail

Synopsis	Display the tree with keys and field values
Context	<a href="#">tree detail</a>
Tree	<a href="#">detail</a>
Introduced	16.0.R1
Platforms	All

## flat

Synopsis	Show the context from the pwc on each line
Context	<a href="#">tree flat</a>
Tree	<a href="#">flat</a>
Introduced	16.0.R1
Platforms	All

## 2.6 Output modifier commands

See “Using Output modifiers in the MD-CLI” in the *7450 ESS, 7750 SR, 7950 XRS, and VSR MD-CLI User Guide* for more information.

```
- |
- count
- match string
  - ignore-case boolean
  - invert-match boolean
  - max-count number
  - post-lines number
  - pre-lines number
- no-more
- pyexec (string | reference)
  - [argument-01] string
  - [argument-02] string
  - [argument-03] string
  - [argument-04] string
  - [argument-05] string
  - [argument-06] string
  - [argument-07] string
  - [argument-08] string
  - [argument-09] string
  - [argument-10] string
- reverse-dns
- > (cflash-url | ftp-tftp-url)
```

## 2.6.1 Output modifier command descriptions

|

Synopsis	Apply an output modifier
Context	
Tree	
Introduced	16.0.R1
Platforms	All

### count

Synopsis	Show the line count of the output
Context	<a href="#">count</a>
Tree	<a href="#">count</a>
Introduced	16.0.R1
Platforms	All

### match [\[pattern\]](#) *string*

Synopsis	Match on a string (") or regular expression (')
Context	<a href="#">match</a> <i>string</i>
Tree	<a href="#">match</a>
Introduced	16.0.R1
Platforms	All

### [\[pattern\]](#) *string*

Synopsis	String (") or regular expression (') pattern to match
Context	<a href="#">match</a> <i>string</i>
Tree	<a href="#">match</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**ignore-case** *boolean*

Synopsis	Ignore case in pattern match
Context	<a href="#">match string ignore-case boolean</a>
Tree	<a href="#">ignore-case</a>
Default	false
Introduced	16.0.R1
Platforms	All

**invert-match** *boolean*

Synopsis	Invert the pattern match selection
Context	<a href="#">match string invert-match boolean</a>
Tree	<a href="#">invert-match</a>
Default	false
Introduced	16.0.R1
Platforms	All

**max-count** *number*

Synopsis	Maximum number of displayed matches
Context	<a href="#">match string max-count number</a>
Tree	<a href="#">max-count</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

**post-lines** *number*

Synopsis	Number of lines to display following the matched line
Context	<a href="#">match string post-lines number</a>
Tree	<a href="#">post-lines</a>
Range	0 to 4294967295
Default	0
Introduced	16.0.R1

Platforms All

### **pre-lines** *number*

Synopsis Number of lines to display preceding the matched line  
 Context | [match string pre-lines number](#)  
 Tree [pre-lines](#)  
 Range 0 to 4294967295  
 Default 0  
 Introduced 16.0.R1  
 Platforms All

### **no-more**

Synopsis Prevent pagination for the displayed output  
 Context | [no-more](#)  
 Tree [no-more](#)  
 Introduced 16.0.R1  
 Platforms All

### **pyexec** [[url](#)] (*string | reference*)

Synopsis Execute a Python application  
 Context | [pyexec \(string | reference\)](#)  
 Tree [pyexec](#)  
 Introduced 21.7.R1  
 Platforms All

### **[url]** (*string | reference*)

Synopsis Location of the script to be executed  
 Context | [pyexec \(string | reference\)](#)  
 Tree [pyexec](#)  
 Reference **state python python-script string**  
 Notes This element is part of a list key.

Introduced 21.7.R1  
Platforms All

**[argument-01] string**

Synopsis First argument  
Context | [pyexec \(string | reference\) \[argument-01\] string](#)  
Tree [\[argument-01\]](#)  
Introduced 21.7.R1  
Platforms All

**[argument-02] string**

Synopsis Second argument  
Context | [pyexec \(string | reference\) \[argument-02\] string](#)  
Tree [\[argument-02\]](#)  
Introduced 21.7.R1  
Platforms All

**[argument-03] string**

Synopsis Third argument  
Context | [pyexec \(string | reference\) \[argument-03\] string](#)  
Tree [\[argument-03\]](#)  
Introduced 21.7.R1  
Platforms All

**[argument-04] string**

Synopsis Fourth argument  
Context | [pyexec \(string | reference\) \[argument-04\] string](#)  
Tree [\[argument-04\]](#)  
Introduced 21.7.R1  
Platforms All



**[argument-05]** *string*

Synopsis	Fifth argument
Context	<a href="#">pyexec</a> ( <i>string</i>   <i>reference</i> ) <a href="#">[argument-05]</a> <i>string</i>
Tree	<a href="#">[argument-05]</a>
Introduced	21.7.R1
Platforms	All

**[argument-06]** *string*

Synopsis	Sixth argument
Context	<a href="#">pyexec</a> ( <i>string</i>   <i>reference</i> ) <a href="#">[argument-06]</a> <i>string</i>
Tree	<a href="#">[argument-06]</a>
Introduced	21.7.R1
Platforms	All

**[argument-07]** *string*

Synopsis	Seventh argument
Context	<a href="#">pyexec</a> ( <i>string</i>   <i>reference</i> ) <a href="#">[argument-07]</a> <i>string</i>
Tree	<a href="#">[argument-07]</a>
Introduced	21.7.R1
Platforms	All

**[argument-08]** *string*

Synopsis	Eight argument
Context	<a href="#">pyexec</a> ( <i>string</i>   <i>reference</i> ) <a href="#">[argument-08]</a> <i>string</i>
Tree	<a href="#">[argument-08]</a>
Introduced	21.7.R1
Platforms	All

**[argument-09]** *string*

Synopsis	Ninth argument
Context	<a href="#">pyexec</a> ( <i>string</i>   <i>reference</i> ) <a href="#">[argument-09]</a> <i>string</i>

Tree [\[argument-09\]](#)  
 Introduced 21.7.R1  
 Platforms All

### **[argument-10]** *string*

Synopsis Tenth argument  
 Context [| pyexec \(string | reference\) \[argument-10\] string](#)  
 Tree [\[argument-10\]](#)  
 Introduced 21.7.R1  
 Platforms All

### **reverse-dns**

Synopsis Resolve IP addresses to DNS names in input  
 Context [| reverse-dns](#)  
 Tree [reverse-dns](#)  
 Introduced 22.7.R1  
 Platforms All

### **> [url]** (*cflash-url | ftp-tftp-url*)

Synopsis Redirect output to a file  
 Context [> \(cflash-url | ftp-tftp-url\)](#)  
 Tree [>](#)  
 Introduced 16.0.R4  
 Platforms All

### **[url]** (*cflash-url | ftp-tftp-url*)

Synopsis Location to save the output  
 Context [> \(cflash-url | ftp-tftp-url\)](#)  
 Tree [>](#)  
 String Length 1 to 199  
 Notes This element is part of a list key.

Introduced	16.0.R4
Platforms	All

## 3 Configuration commands

This section lists MD-CLI configuration commands.

### 3.1 aaa commands

```

configure
- aaa
  - apply-groups reference
  - apply-groups-exclude reference
  - diameter
    - node string
      - apply-groups reference
      - apply-groups-exclude reference
      - connection
        - ipv4
          - allow-connections boolean
          - local-address string
        - ipv6
          - allow-connections boolean
          - local-address string
        - timer number
      - description string
      - origin-realm string
      - peer index number
        - address (ipv4-address-no-zone | ipv6-address-no-zone)
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - connection-timer number
        - default-peer boolean
        - destination-host string
        - preference number
        - route index number
          - application keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - preference number
          - realm string
        - watchdog-timer number
      - python-policy reference
      - router-instance string
    - peer-policy string
      - applications
        - gx boolean
        - gy boolean
        - nasreq boolean
      - apply-groups reference
      - apply-groups-exclude reference
      - connection-timer number
      - description string
      - ipv4-source-address string
      - ipv6-source-address string
      - origin-host string
      - origin-realm string
      - peer string
        - address (ipv4-address-no-zone | ipv6-address-no-zone)
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - connection-timer number
        - destination-host string
        - destination-realm string
        - preference number
        - statistics

```

configure aaa diameter peer-policy peer transaction-timer

```

- transaction-timer number
- transport
  - port-number number
  - watchdog-timer number
- proxy
  - admin-state keyword
  - local-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - mcs-peer
    - address reference
    - apply-groups reference
    - apply-groups-exclude reference
    - sync-tag string
    - router-instance string
  - python-policy reference
  - role keyword
  - router-instance string
  - transaction-timer number
  - vendor-support keyword
  - watchdog-timer number
- radius
  - acct-on-off-group string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - coa-port number
  - isa-policy string
  - accounting
    - include-attributes
      - acct-delay-time boolean
      - acct-triggered-reason boolean
      - called-station-id boolean
      - calling-station-id boolean
      - circuit-id boolean
      - class boolean
      - credit-control-quota boolean
      - dhcp-options boolean
      - dhcp-vendor-class-id boolean
      - frame-counters boolean
      - framed-ip-address boolean
      - framed-ip-netmask boolean
      - framed-ipv6-prefix boolean
      - hardware-timestamp boolean
      - ipv6-address boolean
      - mac-address boolean
      - millisecond-event-timestamp boolean
      - multi-session-id boolean
      - nas-identifier boolean
      - nas-ip-address boolean
      - nas-ipv6-address boolean
      - nas-port boolean
      - nas-port-id boolean
      - nas-port-type boolean
      - nat-inside-service-id boolean
      - nat-outside-ip-address boolean
      - nat-outside-service-id boolean
      - nat-port-range-block boolean
      - nat-subscriber-string boolean
      - octet-counters boolean
      - proxied-subscriber-data boolean
      - release-reason boolean
      - remote-id boolean
      - rssi boolean
      - session-time boolean
      - subscriber-id boolean

```

configure aaa radius isa-policy accounting include-attributes toserver-dhcp6-options

```

- toserver-dhcp6-options boolean
- ue-creation-type boolean
- user-name boolean
- wlan-ssid-vlan boolean
- xconnect-tunnel-home-address boolean
- xconnect-tunnel-local-ipv6-address boolean
- xconnect-tunnel-remote-ipv6-address boolean
- xconnect-tunnel-service boolean
- xconnect-tunnel-type boolean
- nat-periodic-update
- interval number
- rate-limit (number | keyword)
- update-triggers
- address-state boolean
- soft-quota-exhausted boolean
- apply-groups reference
- apply-groups-exclude reference
- authentication
- include-attributes
- called-station-id boolean
- calling-station-id boolean
- circuit-id boolean
- dhcp-vendor-class-id boolean
- framed-ip-address boolean
- ipv6-address boolean
- mac-address boolean
- nas-identifier boolean
- nas-ip-address boolean
- nas-ipv6-address boolean
- nas-port boolean
- nas-port-id boolean
- nas-port-type boolean
- remote-id boolean
- toserver-dhcp-options boolean
- toserver-dhcp6-options boolean
- wlan-ssid-vlan boolean
- xconnect-tunnel-home-address boolean
- description string
- nas-ip-address-origin keyword
- password string
- python-policy reference
- servers
- access-algorithm keyword
- ipv6
- mtu number
- source-prefix string
- router-instance string
- server number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
- purpose
- accounting
- udp-port number
- authentication
- udp-port number
- coa
- udp-port number
- secret string
- source-address-range string
- timeout number
- total-tries number
- user-name

```

configure aaa radius isa-policy user-name format

- **format** *keyword*
- **mac-format** *keyword*
- **l2tp-accounting-policy** *string*
  - **accounting-type**
    - **session** *boolean*
    - **tunnel** *boolean*
  - **acct-tunnel-connection-fmt** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **include-radius-attribute**
    - **calling-station-id** *boolean*
    - **nas-identifier** *boolean*
    - **nas-port**
      - **bit-spec** *string*
    - **nas-port-id**
      - **prefix-string** *string*
      - **suffix** *keyword*
    - **nas-port-type**
      - **type** (*keyword* | *number*)
  - **radius-server-policy** *reference*
- **route-downloader** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **base-user-name** *string*
  - **default-metric** *number*
  - **default-tag** *number*
  - **description** *string*
  - **download-interval** *number*
  - **max-routes** *number*
  - **password** *string*
  - **radius-server-policy** *reference*
  - **retry-interval**
    - **max** *number*
    - **min** *number*
- **server-policy** *string*
  - **acct-on-off**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **monitor** *reference*
    - **oper-state-change**
      - **group** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **python-policy** *reference*
  - **servers**
    - **access-algorithm** *keyword*
    - **buffering**
      - **acct-interim**
        - **lifetime** *number*
        - **max** *number*
        - **min** *number*
      - **acct-start**
        - **lifetime** *number*
        - **max** *number*
        - **min** *number*
      - **acct-stop**
        - **lifetime** *number*
        - **max** *number*
        - **min** *number*
    - **health-check**
      - **down-timeout** *number*



---

configure aaa radius server-policy servers health-check test-account

- **test-account**
  - **admin-state** *keyword*
  - **interval** *number*
  - **password** *string*
  - **user-name** *string*
  - **hold-down-time** *number*
  - **ipv6-source-address** *string*
  - **retry-count** *number*
  - **router-instance** *string*
  - **server** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **server-name** *string*
  - **source-address** *string*
  - **stickiness** *boolean*
  - **timeout** *number*
- **wpp**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **portal-group** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **portal** *string* **name** *string*
  - **system-name** *string*

### 3.1.1 aaa command descriptions

#### aaa

Synopsis	Enter the <b>aaa</b> context
Context	<b>configure aaa</b>
Tree	<a href="#">aaa</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

#### diameter

Synopsis	Enter the <b>diameter</b> context
Context	<b>configure aaa diameter</b>
Tree	<a href="#">diameter</a>
Description	Commands in this context configure Diameter Base parameters.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

#### node [[origin-host](#)] *string*

Synopsis	Enter the <b>node</b> list instance
Context	<b>configure aaa diameter node <i>string</i></b>
Tree	<a href="#">node</a>
Max. Instances	32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

#### [\[origin-host\]](#) *string*

Synopsis	Origin-Host AVP
Context	<b>configure aaa diameter node <i>string</i></b>
Tree	<a href="#">node</a>
String Length	1 to 80

Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## connection

Synopsis	Enter the <b>connection</b> context
Context	<b>configure</b> <a href="#">aaa diameter node</a> <i>string</i> <b>connection</b>
Tree	<a href="#">connection</a>
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">aaa diameter node</a> <i>string</i> <b>connection</b> <b>ipv4</b>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## allow-connections *boolean*

Synopsis	Listen on local address for incoming peer connections
Context	<b>configure</b> <a href="#">aaa diameter node</a> <i>string</i> <b>connection</b> <b>ipv4</b> <b>allow-connections</b> <i>boolean</i>
Tree	<a href="#">allow-connections</a>
Description	<p>When configured to <b>true</b>, this command is used in multi-chassis redundancy where the local Diameter node accepts connection from the inter-chassis peer. The peer requesting the connection must have the same Diameter name as the local peer and its source address must match the IP address of the locally configured destination peer.</p> <p>The IPv4 address on which the node listens for incoming connection is the configured source address of the local peer. This source IPv4 address can reference any local interface, including loopbacks.</p> <p>When configured to <b>false</b>, incoming requests for connections are refused.</p>
Default	false
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**local-address** *string*

Synopsis	IPv4 source address for the TCP peer connection
Context	<b>configure</b> <a href="#">aaa diameter node</a> <i>string</i> <a href="#">connection ipv4</a> <a href="#">local-address</a> <i>string</i>
Tree	<a href="#">local-address</a>
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipv6**

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure</b> <a href="#">aaa diameter node</a> <i>string</i> <a href="#">connection ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**allow-connections** *boolean*

Synopsis	Listen on local address for incoming peer connections
Context	<b>configure</b> <a href="#">aaa diameter node</a> <i>string</i> <a href="#">connection ipv6</a> <a href="#">allow-connections</a> <i>boolean</i>
Tree	<a href="#">allow-connections</a>
Default	false
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**local-address** *string*

Synopsis	IPv6 source address for the TCP peer connection
Context	<b>configure</b> <a href="#">aaa diameter node</a> <i>string</i> <a href="#">connection ipv6</a> <a href="#">local-address</a> <i>string</i>
Tree	<a href="#">local-address</a>
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**timer number**

Synopsis	Wait time before attempting reconnection to peer
Context	<b>configure</b> <a href="#">aaa diameter node</a> <i>string</i> <a href="#">connection timer</a> <i>number</i>
Tree	<a href="#">timer</a>
Description	This command configures the time the system waits before attempting to reconnect to a peer after the connection is lost.
Range	1 to 1000
Units	seconds
Default	30
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">aaa diameter node</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**origin-realm string****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Origin-realm name
Context	<b>configure</b> <a href="#">aaa diameter node</a> <i>string</i> <a href="#">origin-realm</a> <i>string</i>
Tree	<a href="#">origin-realm</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**peer index number**

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure</b> <b>aaa diameter node</b> <i>string</i> <b>peer index number</b>
Tree	<b>peer</b>
Max. Instances	5
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**index number**

Synopsis	Index of a peer within the node
Context	<b>configure</b> <b>aaa diameter node</b> <i>string</i> <b>peer index number</b>
Tree	<b>peer</b>
Range	1 to 5
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Diameter peer address
Context	<b>configure</b> <b>aaa diameter node</b> <i>string</i> <b>peer index number</b> <b>address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>address</b>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the Diameter peer
Context	<b>configure</b> <b>aaa diameter node</b> <i>string</i> <b>peer index number</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable

Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**connection-timer** *number*

Synopsis	Wait time before attempting reconnection to peer
Context	<b>configure</b> <a href="#">aaa diameter node</a> <i>string</i> <a href="#">peer index</a> <i>number</i> <b>connection-timer</b> <i>number</i>
Tree	<a href="#">connection-timer</a>
Range	1 to 1000
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**default-peer** *boolean*

Synopsis	Use the peer as default route for realm-based routing
Context	<b>configure</b> <a href="#">aaa diameter node</a> <i>string</i> <a href="#">peer index</a> <i>number</i> <b>default-peer</b> <i>boolean</i>
Tree	<a href="#">default-peer</a>
Default	false
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**destination-host** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Destination-Host AVP string for Diameter messages
Context	<b>configure</b> <a href="#">aaa diameter node</a> <i>string</i> <a href="#">peer index</a> <i>number</i> <b>destination-host</b> <i>string</i>
Tree	<a href="#">destination-host</a>
String Length	1 to 80
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**preference number**

Synopsis	Diameter routing preference for a peer
Context	<b>configure</b> <i>aaa diameter node string peer index number preference number</i>
Tree	<i>preference</i>
Range	1 to 100
Default	50
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**route index number**

Synopsis	Enter the <b>route</b> list instance
Context	<b>configure</b> <i>aaa diameter node string peer index number route index number</i>
Tree	<i>route</i>
Max. Instances	15
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**index number**

Synopsis	Static Diameter route ID
Context	<b>configure</b> <i>aaa diameter node string peer index number route index number</i>
Tree	<i>route</i>
Description	This command configures the ID of the static route used to reach remote realms that are not directly connected to the origin realm. The route can also be used to override the route preference (peer preference) of the directly-connected realms.
Range	1 to 15
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**application** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Diameter application to which the route applies
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">diameter node</a> <i>string</i> <a href="#">peer index</a> <i>number</i> <a href="#">route index</a> <i>number</i> <a href="#">application</a> <i>keyword</i>
Tree	<a href="#">application</a>
Description	This command specifies the Diameter application in the destination realm reachable via the static route.
Options	nasreq, gy, gx
Notes	This element is mandatory.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**preference** *number*

Synopsis	Static route preference; lower value is preferred
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">diameter node</a> <i>string</i> <a href="#">peer index</a> <i>number</i> <a href="#">route index</a> <i>number</i> <a href="#">preference</a> <i>number</i>
Tree	<a href="#">preference</a>
Description	This command configures the preference of the static route. The preference is compared with the preference values of all other static and dynamic routes. The dynamic route is a realm route learned directly from the peer via the Capabilities Exchange process during the peer negotiation phase. The preference value of the dynamic route is configured directly under the peer configuration. A lower preference value is preferred for route selection.
Range	1 to 100
Default	50
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**realm** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Destination realm reachable via the static route
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">diameter</a> <a href="#">node</a> <i>string</i> <a href="#">peer</a> <a href="#">index</a> <i>number</i> <a href="#">route</a> <a href="#">index</a> <i>number</i> <a href="#">realm</a> <i>string</i>
Tree	<a href="#">realm</a>
String Length	1 to 80
Notes	This element is mandatory.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **watchdog-timer** *number*

Synopsis	Time between consecutive watchdog messages
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">diameter</a> <a href="#">node</a> <i>string</i> <a href="#">peer</a> <a href="#">index</a> <i>number</i> <a href="#">watchdog-timer</a> <i>number</i>
Tree	<a href="#">watchdog-timer</a>
Range	1 to 1000
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **python-policy** *reference*

Synopsis	Python policy for received or sent Diameter messages
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">diameter</a> <a href="#">node</a> <i>string</i> <a href="#">python-policy</a> <i>reference</i>
Tree	<a href="#">python-policy</a>
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **router-instance** *string*

Synopsis	Router in which this node connects to its peers
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">diameter</a> <a href="#">node</a> <i>string</i> <a href="#">router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>
Default	Base
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**peer-policy** [**name**] *string***WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	Enter the <b>peer-policy</b> list instance
Context	<b>configure</b> <a href="#">aaa diameter peer-policy string</a>
Tree	<a href="#">peer-policy</a>
Max. Instances	32
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string***WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	Diameter peer policy name
Context	<b>configure</b> <a href="#">aaa diameter peer-policy string</a>
Tree	<a href="#">peer-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**applications****WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	Enter the <b>applications</b> context
Context	<b>configure</b> <a href="#">aaa diameter peer-policy string applications</a>
Tree	<a href="#">applications</a>
Introduced	16.0.R4

Deprecated 20.2.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **gx** *boolean*



**WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis Advertise Gx application support in CER messages  
 Context **configure** [aaa](#) [diameter](#) [peer-policy](#) [string](#) [applications](#) **gx** *boolean*  
 Tree [gx](#)  
 Default false  
 Introduced 16.0.R4  
 Deprecated 20.2.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **gy** *boolean*



**WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis Advertise Gy application support in CER messages  
 Context **configure** [aaa](#) [diameter](#) [peer-policy](#) [string](#) [applications](#) **gy** *boolean*  
 Tree [gy](#)  
 Default false  
 Introduced 16.0.R4  
 Deprecated 20.2.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **nasreq** *boolean*



**WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis Advertise NASREQ application support in CER messages  
 Context **configure** [aaa](#) [diameter](#) [peer-policy](#) [string](#) [applications](#) **nasreq** *boolean*  
 Tree [nasreq](#)

Default	false
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **connection-timer** *number*



**WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	Wait time before attempting reconnection to peer
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">diameter</a> <a href="#">peer-policy</a> <i>string</i> <a href="#">connection-timer</a> <i>number</i>
Tree	<a href="#">connection-timer</a>
Range	1 to 1000
Units	seconds
Default	30
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*



**WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	Text description
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">diameter</a> <a href="#">peer-policy</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipv4-source-address** *string***WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	IPv4 source address for peering connection
Context	<b>configure</b> <a href="#">aaa diameter peer-policy</a> <i>string</i> <a href="#">ipv4-source-address</a> <i>string</i>
Tree	<a href="#">ipv4-source-address</a>
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipv6-source-address** *string***WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	IPv6 source address for IPv6 peering connection
Context	<b>configure</b> <a href="#">aaa diameter peer-policy</a> <i>string</i> <a href="#">ipv6-source-address</a> <i>string</i>
Tree	<a href="#">ipv6-source-address</a>
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**origin-host** *string***WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	Origin-Host AVP sent in all Diameter messages
Context	<b>configure</b> <a href="#">aaa diameter peer-policy</a> <i>string</i> <a href="#">origin-host</a> <i>string</i>
Tree	<a href="#">origin-host</a>
String Length	1 to 80
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**origin-realm** *string***WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	Origin-Realm AVP sent in all Diameter messages
Context	<b>configure</b> <a href="#">aaa diameter peer-policy</a> <i>string</i> <a href="#">origin-realm</a> <i>string</i>
Tree	<a href="#">origin-realm</a>
String Length	1 to 80
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**peer** [[peer-name](#)] *string***WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure</b> <a href="#">aaa diameter peer-policy</a> <i>string</i> <a href="#">peer</a> <i>string</i>
Tree	<a href="#">peer</a>
Max. Instances	5
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[peer-name]** *string***WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	Diameter peer name
Context	<b>configure</b> <a href="#">aaa diameter peer-policy</a> <i>string</i> <a href="#">peer</a> <i>string</i>
Tree	<a href="#">peer</a>
String Length	1 to 32
Notes	This element is part of a list key.

Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



**WARNING:**

This element is deprecated and will be removed in a future release.



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Diameter peer address
Context	<b>configure</b> <b>aaa</b> <b>diameter</b> <b>peer-policy</b> <i>string</i> <b>peer</b> <i>string</i> <b>address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>address</b>
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*



**WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	Administrative state of the peer
Context	<b>configure</b> <b>aaa</b> <b>diameter</b> <b>peer-policy</b> <i>string</i> <b>peer</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**connection-timer** *number***WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	Wait time before attempting reconnection to a peer
Context	<b>configure</b> <a href="#">aaa diameter peer-policy string peer string connection-timer number</a>
Tree	<a href="#">connection-timer</a>
Range	1 to 1000
Units	seconds
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**destination-host** *string***WARNING:**

This element is deprecated and will be removed in a future release.

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination-Host AVP string for Diameter messages
Context	<b>configure</b> <a href="#">aaa diameter peer-policy string peer string destination-host string</a>
Tree	<a href="#">destination-host</a>
String Length	1 to 80
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**destination-realm** *string***WARNING:**

This element is deprecated and will be removed in a future release.

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination-Realm AVP string for Diameter messages
Context	<b>configure</b> <a href="#">aaa diameter peer-policy string peer string destination-realm string</a>
Tree	<a href="#">destination-realm</a>
String Length	1 to 80
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**preference number****WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	Peer preference of the Diameter peer policy
Context	<b>configure</b> <a href="#">aaa diameter peer-policy string peer string preference number</a>
Tree	<a href="#">preference</a>
Range	1 to 100
Default	50
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**statistics****WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	Enter the <b>statistics</b> context
Context	<b>configure</b> <a href="#">aaa diameter peer-policy string peer string statistics</a>
Tree	<a href="#">statistics</a>
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**transaction-timer** *number***WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	Timeout for base Diameter messages (DWR, CER, DPR)
Context	<b>configure</b> <a href="#">aaa diameter peer-policy string peer string transaction-timer number</a>
Tree	<a href="#">transaction-timer</a>
Range	1 to 1000
Units	seconds
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**transport****WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	Enter the <b>transport</b> context
Context	<b>configure</b> <a href="#">aaa diameter peer-policy string peer string transport</a>
Tree	<a href="#">transport</a>
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**port-number** *number***WARNING:**

This element is deprecated and will be removed in a future release.

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination TCP port number for the policy peer
Context	<b>configure</b> <a href="#">aaa diameter peer-policy string peer string transport port-number number</a>

Tree	<a href="#">port-number</a>
Range	1 to 65535
Default	3868
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **watchdog-timer** *number*



#### **WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	Time between consecutive watchdog messages
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">diameter</a> <a href="#">peer-policy</a> <i>string</i> <a href="#">peer</a> <i>string</i> <a href="#">watchdog-timer</a> <i>number</i>
Tree	<a href="#">watchdog-timer</a>
Range	1 to 1000
Units	seconds
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **proxy**



#### **WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	Enter the <b>proxy</b> context
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">diameter</a> <a href="#">peer-policy</a> <i>string</i> <a href="#">proxy</a>
Tree	<a href="#">proxy</a>
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword***WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	Administrative state of Diameter proxy
Context	<b>configure</b> <a href="#">aaa diameter peer-policy</a> <i>string</i> <a href="#">proxy admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**local-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

This element is deprecated and will be removed in a future release.

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Source IP address on which the Diameter proxy listens
Context	<b>configure</b> <a href="#">aaa diameter peer-policy</a> <i>string</i> <a href="#">proxy local-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">local-address</a>
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mcs-peer****WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	Enable the <b>mcs-peer</b> context
Context	<b>configure</b> <a href="#">aaa diameter peer-policy</a> <i>string</i> <a href="#">proxy mcs-peer</a>

Tree	<a href="#">mcs-peer</a>
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **address** *reference*



**WARNING:**

This element is deprecated and will be removed in a future release.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MCS peer address
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">diameter</a> <a href="#">peer-policy</a> <i>string</i> <a href="#">proxy</a> <a href="#">mcs-peer</a> <a href="#">address</a> <i>reference</i>
Tree	<a href="#">address</a>
Reference	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Notes	This element is mandatory.
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sync-tag** *string*



**WARNING:**

This element is deprecated and will be removed in a future release.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Synchronization tag shared by MCS peers
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">diameter</a> <a href="#">peer-policy</a> <i>string</i> <a href="#">proxy</a> <a href="#">mcs-peer</a> <a href="#">sync-tag</a> <i>string</i>
Tree	<a href="#">sync-tag</a>
String Length	1 to 32
Notes	This element is mandatory.

Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **router-instance** *string*



**WARNING:**

This element is deprecated and will be removed in a future release.



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Routing context associated with Diameter proxy
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">diameter</a> <a href="#">peer-policy</a> <i>string</i> <a href="#">proxy</a> <a href="#">router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **python-policy** *reference*



**WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	Name of the python policy for Diameter processing
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">diameter</a> <a href="#">peer-policy</a> <i>string</i> <a href="#">python-policy</a> <i>reference</i>
Tree	<a href="#">python-policy</a>
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i>
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**role** *keyword***WARNING:**

This element is deprecated and will be removed in a future release.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Client or proxy role of a Diameter peer policy
Context	<b>configure</b> <a href="#">aaa diameter peer-policy</a> <i>string</i> <b>role</b> <i>keyword</i>
Tree	<a href="#">role</a>
Options	client, proxy
Default	client
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**router-instance** *string***WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	Diameter peer policy router
Context	<b>configure</b> <a href="#">aaa diameter peer-policy</a> <i>string</i> <b>router-instance</b> <i>string</i>
Tree	<a href="#">router-instance</a>
Default	Base
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**transaction-timer** *number***WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	Timeout for base Diameter messages (DWR, CER, DPR)
Context	<b>configure</b> <a href="#">aaa diameter peer-policy</a> <i>string</i> <b>transaction-timer</b> <i>number</i>



Tree	<a href="#">transaction-timer</a>
Range	1 to 1000
Units	seconds
Default	30
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **vendor-support** *keyword*



**WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	Vendor support announced in the capability exchange
Context	<b>configure</b> <a href="#">aaa diameter peer-policy</a> <i>string</i> <a href="#">vendor-support</a> <i>keyword</i>
Tree	<a href="#">vendor-support</a>
Options	vodafone, three-gpp
Default	three-gpp
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **watchdog-timer** *number*



**WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	Time between consecutive watchdog messages
Context	<b>configure</b> <a href="#">aaa diameter peer-policy</a> <i>string</i> <a href="#">watchdog-timer</a> <i>number</i>
Tree	<a href="#">watchdog-timer</a>
Range	1 to 1000
Units	seconds
Default	30
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**radius**

Synopsis	Enter the <b>radius</b> context
Context	<b>configure</b> <a href="#">aaa radius</a>
Tree	<a href="#">radius</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**acct-on-off-group** [[name](#)] *string*

Synopsis	Enter the <b>acct-on-off-group</b> list instance
Context	<b>configure</b> <a href="#">aaa radius acct-on-off-group</a> <i>string</i>
Tree	<a href="#">acct-on-off-group</a>
Max. Instances	32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	Group name for accounting on/off
Context	<b>configure</b> <a href="#">aaa radius acct-on-off-group</a> <i>string</i>
Tree	<a href="#">acct-on-off-group</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">aaa radius acct-on-off-group</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **coa-port** *number*

Synopsis RADIUS listening port for CoA and Disconnect messages  
 Context **configure** *aaa radius coa-port number*  
 Tree [coa-port](#)  
 Range 1647 | 1700 | 1812 | 3799  
 Default 3799  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **isa-policy** [*name*] *string*

Synopsis Enter the **isa-policy** list instance  
 Context **configure** *aaa radius isa-policy string*  
 Tree [isa-policy](#)  
 Max. Instances 8  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis ISA RADIUS policy name referenced by a NAT application  
 Context **configure** *aaa radius isa-policy string*  
 Tree [isa-policy](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **accounting**

Synopsis Enter the **accounting** context

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Context	<b>configure</b> <a href="#">aaa radius isa-policy string accounting</a>
Tree	<a href="#">accounting</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **include-attributes**

Synopsis	Enter the <b>include-attributes</b> context
Context	<b>configure</b> <a href="#">aaa radius isa-policy string accounting include-attributes</a>
Tree	<a href="#">include-attributes</a>
Description	Commands in this context specify the attributes to include in the RADIUS accounting messages.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **acct-delay-time** *boolean*

Synopsis	Include the accounting delay time attribute
Context	<b>configure</b> <a href="#">aaa radius isa-policy string accounting include-attributes acct-delay-time boolean</a>
Tree	<a href="#">acct-delay-time</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **acct-triggered-reason** *boolean*

Synopsis	Include the accounting triggered reason attribute
Context	<b>configure</b> <a href="#">aaa radius isa-policy string accounting include-attributes acct-triggered-reason boolean</a>
Tree	<a href="#">acct-triggered-reason</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**called-station-id** *boolean*

Synopsis	Include the Called-Station-Id attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <a href="#">string</a> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">called-station-id</a> <i>boolean</i>
Tree	<a href="#">called-station-id</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**calling-station-id** *boolean*

Synopsis	Include the Calling-Station-Id attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <a href="#">string</a> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">calling-station-id</a> <i>boolean</i>
Tree	<a href="#">calling-station-id</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**circuit-id** *boolean*

Synopsis	Include the Agent-Circuit-Id attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <a href="#">string</a> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">circuit-id</a> <i>boolean</i>
Tree	<a href="#">circuit-id</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**class** *boolean*

Synopsis	Include the Class attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <a href="#">string</a> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">class</a> <i>boolean</i>
Tree	<a href="#">class</a>
Default	false
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **credit-control-quota** *boolean*

Synopsis Add unconsumed volume quota to Credit-Control-Quota

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [credit-control-quota](#) *boolean*

Tree [credit-control-quota](#)

Default false

Introduced 21.7.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dhcp-options** *boolean*

Synopsis Include the Alc-ToServer-Dhcp-Options attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [dhcp-options](#) *boolean*

Tree [dhcp-options](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dhcp-vendor-class-id** *boolean*

Synopsis Include the Alc-Dhcp-Vendor-Class-Id attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [dhcp-vendor-class-id](#) *boolean*

Tree [dhcp-vendor-class-id](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **frame-counters** *boolean*

Synopsis Include Acct-Input-Packets and Acct-Output-Packets

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [frame-counters](#) *boolean*

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Tree	<a href="#">frame-counters</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **framed-ip-address** *boolean*

Synopsis	Include the Framed-IP-Address attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">framed-ip-address</a> <i>boolean</i>
Tree	<a href="#">framed-ip-address</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **framed-ip-netmask** *boolean*

Synopsis	Include the Framed-IP-Netmask attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">framed-ip-netmask</a> <i>boolean</i>
Tree	<a href="#">framed-ip-netmask</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **framed-ipv6-prefix** *boolean*

Synopsis	Include the Framed-IPv6-Prefix attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">framed-ipv6-prefix</a> <i>boolean</i>
Tree	<a href="#">framed-ipv6-prefix</a>
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**hardware-timestamp** *boolean*

Synopsis	Include the Event-Timestamp attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <a href="#">string</a> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">hardware-timestamp</a> <i>boolean</i>
Tree	<a href="#">hardware-timestamp</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ipv6-address** *boolean*

Synopsis	Include the Alc-Ipv6-Address attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <a href="#">string</a> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">ipv6-address</a> <i>boolean</i>
Tree	<a href="#">ipv6-address</a>
Description	When configured to <b>true</b> , the IA_NA address of the UE is included in the accounting message if an active IA_NA lease exists. When configured to <b>false</b> , the address is not included.
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mac-address** *boolean*

Synopsis	Include the Alc-Client-Hardware-Addr attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <a href="#">string</a> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">mac-address</a> <i>boolean</i>
Tree	<a href="#">mac-address</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**millisecond-event-timestamp** *boolean*

Synopsis	Include the Alc-Millisecond-Event-Timestamp attribute
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Context	<b>configure</b> <a href="#">aaa radius isa-policy string accounting include-attributes millisecond-event-timestamp</a> <i>boolean</i>
Tree	<a href="#">millisecond-event-timestamp</a>
Description	When configured to <b>true</b> , the router includes the Alc-Millisecond-Event-Timestamp attribute in the accounting message. This attribute includes the time the accounting event was logged in milliseconds since Jan 1, 1970 00:00:00 UTC. When configured to <b>false</b> , the router does not include this attribute.
Default	false
Introduced	20.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **multi-session-id** *boolean*

Synopsis	Include the Acct-Multi-Session-Id attribute
Context	<b>configure</b> <a href="#">aaa radius isa-policy string accounting include-attributes multi-session-id</a> <i>boolean</i>
Tree	<a href="#">multi-session-id</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nas-identifier** *boolean*

Synopsis	Include the NAS-Identifier attribute
Context	<b>configure</b> <a href="#">aaa radius isa-policy string accounting include-attributes nas-identifier</a> <i>boolean</i>
Tree	<a href="#">nas-identifier</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nas-ip-address** *boolean*

Synopsis	Include the NAS-IP-Address attribute
Context	<b>configure</b> <a href="#">aaa radius isa-policy string accounting include-attributes nas-ip-address</a> <i>boolean</i>
Tree	<a href="#">nas-ip-address</a>

Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nas-ipv6-address** *boolean*

Synopsis	Include the NAS-IPv6-Address attribute
Context	<b>configure</b> <a href="#">aaa radius isa-policy</a> <i>string</i> <a href="#">accounting include-attributes nas-ipv6-address</a> <i>boolean</i>
Tree	<a href="#">nas-ipv6-address</a>
Description	<p>When configured to <b>true</b>, the router includes the NAS-IPv6-Address attribute in RADIUS accounting messages using the address specified in the <b>configure aaa radius isa-policy nas-ip-address-origin</b> command. The NAS-IPv6-Address attribute is included in both IPv4 and IPv6 RADIUS connections.</p> <p>When configured to <b>false</b>, the router does not include the NAS-IPv6-Address attribute in RADIUS accounting messages.</p>
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nas-port** *boolean*

Synopsis	Include the NAS-Port attribute
Context	<b>configure</b> <a href="#">aaa radius isa-policy</a> <i>string</i> <a href="#">accounting include-attributes nas-port</a> <i>boolean</i>
Tree	<a href="#">nas-port</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nas-port-id** *boolean*

Synopsis	Include the NAS-Port-Id attribute
Context	<b>configure</b> <a href="#">aaa radius isa-policy</a> <i>string</i> <a href="#">accounting include-attributes nas-port-id</a> <i>boolean</i>
Tree	<a href="#">nas-port-id</a>
Default	false
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nas-port-type** *boolean*

Synopsis Include the NAS-Port-Type attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [nas-port-type](#) *boolean*

Tree [nas-port-type](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nat-inside-service-id** *boolean*

Synopsis Include NAT inside service ID in Alc-Serv-Id attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [nat-inside-service-id](#) *boolean*

Tree [nat-inside-service-id](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nat-outside-ip-address** *boolean*

Synopsis Include the Alc-Nat-Outside-Ip-Addr attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [nat-outside-ip-address](#) *boolean*

Tree [nat-outside-ip-address](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nat-outside-service-id** *boolean*

Synopsis Include NAT outside service ID in Alc-Serv-Id attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [nat-outside-service-id](#) *boolean*

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Tree	<a href="#">nat-outside-service-id</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nat-port-range-block** *boolean*

Synopsis	Include the Alc-Nat-Port-Range attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">nat-port-range-block</a> <i>boolean</i>
Tree	<a href="#">nat-port-range-block</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nat-subscriber-string** *boolean*

Synopsis	Include the Alc-Subsc-ID-Str attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">nat-subscriber-string</a> <i>boolean</i>
Tree	<a href="#">nat-subscriber-string</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **octet-counters** *boolean*

Synopsis	Include Acct-Input-Octets and Acct-Output-Octets
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">octet-counters</a> <i>boolean</i>
Tree	<a href="#">octet-counters</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**proxied-subscriber-data** *boolean*

Synopsis	Include subscriber data as RADIUS attributes
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">proxied-subscriber-data</a> <i>boolean</i>
Tree	<a href="#">proxied-subscriber-data</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**release-reason** *boolean*

Synopsis	Include reason in the Acct-Terminate-Cause attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">release-reason</a> <i>boolean</i>
Tree	<a href="#">release-reason</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**remote-id** *boolean*

Synopsis	Include the Agent-Remote-Id attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">remote-id</a> <i>boolean</i>
Tree	<a href="#">remote-id</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**rsi** *boolean*

Synopsis	Include the Alc-RSSI attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">rsi</a> <i>boolean</i>
Tree	<a href="#">rsi</a>
Default	false
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **session-time** *boolean*

Synopsis Include the Acct-Session-Time attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [session-time](#) *boolean*

Tree [session-time](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **subscriber-id** *boolean*

Synopsis Include the Alc-Subsc-ID-Str attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [subscriber-id](#) *boolean*

Tree [subscriber-id](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **toserver-dhcp6-options** *boolean*

Synopsis Include the Alc-ToServer-Dhcp6-Options attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [toserver-dhcp6-options](#) *boolean*

Tree [toserver-dhcp6-options](#)

Default false

Introduced 16.0.R4

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ue-creation-type** *boolean*

Synopsis Include the Alc-Wlan-Ue-Creation-Type attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [ue-creation-type](#) *boolean*

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Tree	<a href="#">ue-creation-type</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **user-name** *boolean*

Synopsis	Include the User-Name attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">user-name</a> <i>boolean</i>
Tree	<a href="#">user-name</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **wlan-ssid-vlan** *boolean*

Synopsis	Include per-SSID VLAN in Alc-Wlan-SSID-VLAN attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">wlan-ssid-vlan</a> <i>boolean</i>
Tree	<a href="#">wlan-ssid-vlan</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **xconnect-tunnel-home-address** *boolean*

Synopsis	Include the Alc-Xconnect-Tunnel-Home-Ipv6 attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">xconnect-tunnel-home-address</a> <i>boolean</i>
Tree	<a href="#">xconnect-tunnel-home-address</a>
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**xconnect-tunnel-local-ipv6-address** *boolean*

Synopsis	Include the Alc-Xconnect-Tunnel-Local-Ipv6 attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <a href="#">string</a> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">xconnect-tunnel-local-ipv6-address</a> <i>boolean</i>
Tree	<a href="#">xconnect-tunnel-local-ipv6-address</a>
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**xconnect-tunnel-remote-ipv6-address** *boolean*

Synopsis	Include the Alc-Xconnect-Tunnel-Remote-Ipv6 attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <a href="#">string</a> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">xconnect-tunnel-remote-ipv6-address</a> <i>boolean</i>
Tree	<a href="#">xconnect-tunnel-remote-ipv6-address</a>
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**xconnect-tunnel-service** *boolean*

Synopsis	Include the Alc-Xconnect-Tunnel-Service attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <a href="#">string</a> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">xconnect-tunnel-service</a> <i>boolean</i>
Tree	<a href="#">xconnect-tunnel-service</a>
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**xconnect-tunnel-type** *boolean*

Synopsis	Include the Alc-Xconnect-Tunnel-Type attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <a href="#">string</a> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">xconnect-tunnel-type</a> <i>boolean</i>
Tree	<a href="#">xconnect-tunnel-type</a>
Default	false



Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nat-periodic-update**

Synopsis	Enter the <b>nat-periodic-update</b> context
Context	<b>configure</b> <a href="#">aaa radius isa-policy string accounting nat-periodic-update</a>
Tree	<a href="#">nat-periodic-update</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **interval** *number*

Synopsis	Interval for periodic RADIUS Interim-Update messages
Context	<b>configure</b> <a href="#">aaa radius isa-policy string accounting nat-periodic-update interval number</a>
Tree	<a href="#">interval</a>
Range	1 to 72
Units	hours
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rate-limit** (*number* | *keyword*)

Synopsis	Rate limit for periodic RADIUS Interim-Update messages
Context	<b>configure</b> <a href="#">aaa radius isa-policy string accounting nat-periodic-update rate-limit (number   keyword)</a>
Tree	<a href="#">rate-limit</a>
Range	1 to 100000
Units	packets per second
Options	unlimited
Default	unlimited
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## update-triggers

Synopsis	Enter the <b>update-triggers</b> context
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">accounting</a> <a href="#">update-triggers</a>
Tree	<a href="#">update-triggers</a>
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## address-state *boolean*

Synopsis	Send an Interim-Update when address allocated or freed
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">accounting</a> <a href="#">update-triggers</a> <a href="#">address-state</a> <i>boolean</i>
Tree	<a href="#">address-state</a>
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## soft-quota-exhausted *boolean*

Synopsis	Send interim update when soft volume quota is reached
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">accounting</a> <a href="#">update-triggers</a> <a href="#">soft-quota-exhausted</a> <i>boolean</i>
Tree	<a href="#">soft-quota-exhausted</a>
Default	false
Introduced	21.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## authentication

Synopsis	Enter the <b>authentication</b> context
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">authentication</a>
Tree	<a href="#">authentication</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## include-attributes

Synopsis	Enter the <b>include-attributes</b> context
Context	<b>configure</b> <a href="#">aaa radius isa-policy string authentication include-attributes</a>
Tree	<a href="#">include-attributes</a>
Description	Commands in this context specify the attributes to include in the RADIUS authentication messages.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## called-station-id *boolean*

Synopsis	Include the Called-Station-Id attribute
Context	<b>configure</b> <a href="#">aaa radius isa-policy string authentication include-attributes called-station-id boolean</a>
Tree	<a href="#">called-station-id</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## calling-station-id *boolean*

Synopsis	Include the Calling-Station-Id attribute
Context	<b>configure</b> <a href="#">aaa radius isa-policy string authentication include-attributes calling-station-id boolean</a>
Tree	<a href="#">calling-station-id</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## circuit-id *boolean*

Synopsis	Include the Agent-Circuit-Id attribute
Context	<b>configure</b> <a href="#">aaa radius isa-policy string authentication include-attributes circuit-id boolean</a>
Tree	<a href="#">circuit-id</a>
Default	false
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dhcp-vendor-class-id** *boolean*

Synopsis Include the Alc-DHCP-Vendor-Class-Id attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [authentication](#) [include-attributes](#) [dhcp-vendor-class-id](#) *boolean*

Tree [dhcp-vendor-class-id](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **framed-ip-address** *boolean*

Synopsis Include the Framed-IP-Address attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [authentication](#) [include-attributes](#) [framed-ip-address](#) *boolean*

Tree [framed-ip-address](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipv6-address** *boolean*

Synopsis Include the Alc-IPv6-address attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [authentication](#) [include-attributes](#) [ipv6-address](#) *boolean*

Tree [ipv6-address](#)

Default false

Introduced 16.0.R4

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mac-address** *boolean*

Synopsis Include the Alc-Client-Hardware-Addr attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [authentication](#) [include-attributes](#) [mac-address](#) *boolean*

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Tree	<a href="#">mac-address</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nas-identifier** *boolean*

Synopsis	Include the NAS-Identifier attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">authentication</a> <a href="#">include-attributes</a> <a href="#">nas-identifier</a> <i>boolean</i>
Tree	<a href="#">nas-identifier</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nas-ip-address** *boolean*

Synopsis	Include the NAS-IP-Address attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">authentication</a> <a href="#">include-attributes</a> <a href="#">nas-ip-address</a> <i>boolean</i>
Tree	<a href="#">nas-ip-address</a>
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nas-ipv6-address** *boolean*

Synopsis	Include the NAS-IPv6-Address attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">authentication</a> <a href="#">include-attributes</a> <a href="#">nas-ipv6-address</a> <i>boolean</i>
Tree	<a href="#">nas-ipv6-address</a>
Description	<p>When configured to <b>true</b>, the router includes the NAS-IPv6-Address attribute in RADIUS authentication messages using the address specified in the <b>configure aaa radius isa-policy nas-ip-address-origin</b> command. The NAS-IPv6-Address attribute is included in both IPv4 and IPv6 RADIUS connections.</p> <p>When configured to <b>false</b>, the router does not include the NAS-IPv6-Address attribute in RADIUS authentication messages.</p>

Introduced 22.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nas-port** *boolean*

Synopsis Include the NAS-Port attribute  
Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [authentication](#) [include-attributes](#) **nas-port** *boolean*  
Tree [nas-port](#)  
Default false  
Introduced 16.0.R4  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nas-port-id** *boolean*

Synopsis Include the NAS-Port-Id attribute  
Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [authentication](#) [include-attributes](#) **nas-port-id** *boolean*  
Tree [nas-port-id](#)  
Default false  
Introduced 16.0.R4  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nas-port-type** *boolean*

Synopsis Include the NAS-Port-Type attribute  
Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [authentication](#) [include-attributes](#) **nas-port-type** *boolean*  
Tree [nas-port-type](#)  
Default false  
Introduced 16.0.R4  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **remote-id** *boolean*

Synopsis Include the Agent-Remote-Id attribute

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Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">authentication</a> <a href="#">include-attributes</a> <a href="#">remote-id</a> <i>boolean</i>
Tree	<a href="#">remote-id</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **toserver-dhcp-options** *boolean*

Synopsis	Include the Alc-ToServer-Dhcp-Options attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">authentication</a> <a href="#">include-attributes</a> <a href="#">toserver-dhcp-options</a> <i>boolean</i>
Tree	<a href="#">toserver-dhcp-options</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **toserver-dhcp6-options** *boolean*

Synopsis	Include the Alc-ToServer-Dhcp6-Options attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">authentication</a> <a href="#">include-attributes</a> <a href="#">toserver-dhcp6-options</a> <i>boolean</i>
Tree	<a href="#">toserver-dhcp6-options</a>
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **wlan-ssid-vlan** *boolean*

Synopsis	Include per-SSID VLAN in Alc-Wlan-SSID-VLAN attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">authentication</a> <a href="#">include-attributes</a> <a href="#">wlan-ssid-vlan</a> <i>boolean</i>
Tree	<a href="#">wlan-ssid-vlan</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**xconnect-tunnel-home-address** *boolean*

Synopsis	Include the Alc-Xconnect-Tunnel-Home-Ipv6 attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">authentication</a> <a href="#">include-attributes</a> <a href="#">xconnect-tunnel-home-address</a> <i>boolean</i>
Tree	<a href="#">xconnect-tunnel-home-address</a>
Default	false
Introduced	16.0.R5
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nas-ip-address-origin** *keyword*

Synopsis	NAS-IP-Address attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">nas-ip-address-origin</a> <i>keyword</i>
Tree	<a href="#">nas-ip-address-origin</a>
Options	system-ip, isa-ip
Default	system-ip
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**password** *string*

Synopsis	Password used in the RADIUS access requests
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">password</a> <i>string</i>
Tree	<a href="#">password</a>
String Length	1 to 42



Introduced 16.0.R4  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **python-policy** *reference*

Synopsis Python policy used for modifying RADIUS messages  
Context **configure** [aaa radius isa-policy string python-policy reference](#)  
Tree [python-policy](#)  
Reference **configure** [python python-policy string](#)  
Introduced 16.0.R4  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **servers**

Synopsis Enter the **servers** context  
Context **configure** [aaa radius isa-policy string servers](#)  
Tree [servers](#)  
Introduced 16.0.R4  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **access-algorithm** *keyword*

Synopsis Algorithm that accesses the RADIUS servers  
Context **configure** [aaa radius isa-policy string servers access-algorithm keyword](#)  
Tree [access-algorithm](#)  
Options direct, round-robin, hash-based, direct-priority  
Default direct  
Introduced 16.0.R4  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipv6**

Synopsis Enter the **ipv6** context  
Context **configure** [aaa radius isa-policy string servers ipv6](#)  
Tree [ipv6](#)

Description	Commands in this context configure how to communicate with IPv6 RADIUS servers.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mtu number**

Synopsis	MTU used to fragment outgoing IPv6 RADIUS packets
Context	<b>configure</b> <a href="#">aaa radius isa-policy string servers ipv6 mtu number</a>
Tree	<a href="#">mtu</a>
Range	1280 to 9000
Default	9000
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **source-prefix string**

Synopsis	Prefix containing individual source addresses per ISA
Context	<b>configure</b> <a href="#">aaa radius isa-policy string servers ipv6 source-prefix string</a>
Tree	<a href="#">source-prefix</a>
Description	This command configures an IPv6 prefix containing individual /128 addresses. These addresses are used as the source address for connections to IPv6 RADIUS servers.  The prefix must be large enough to accommodate all BB-ISAs or ESA VMs in the system.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **router-instance string**

Synopsis	Routing instance
Context	<b>configure</b> <a href="#">aaa radius isa-policy string servers router-instance string</a>
Tree	<a href="#">router-instance</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**server** [[index](#)] *number*

Synopsis	Enter the <b>server</b> list instance
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">servers</a> <a href="#">server</a> <i>number</i>
Tree	<a href="#">server</a>
Max. Instances	10
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[index]** *number*

Synopsis	RADIUS server ID
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">servers</a> <a href="#">server</a> <i>number</i>
Tree	<a href="#">server</a>
Range	1 to 10
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the ISA RADIUS server
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">servers</a> <a href="#">server</a> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP address of the RADIUS server
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Context	<b>configure</b> <a href="#">aaa radius isa-policy string servers server number ip-address</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">ip-address</a>
Description	This command configures the IP address of the RADIUS server. Two RADIUS servers cannot have the same IP address. An error message is generated if the server address is a duplicate.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## purpose



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>purpose</b> context
Context	<b>configure</b> <a href="#">aaa radius isa-policy string servers server number purpose</a>
Tree	<a href="#">purpose</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## accounting



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>accounting</b> context
Context	<b>configure</b> <a href="#">aaa radius isa-policy string servers server number purpose accounting</a>
Tree	<a href="#">accounting</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**udp-port** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA RADIUS server accounting UDP port
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">servers</a> <a href="#">server</a> <i>number</i> <a href="#">purpose</a> <a href="#">accounting</a> <a href="#">udp-port</a> <i>number</i>
Tree	<a href="#">udp-port</a>
Range	1 to 65535
Default	1813
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**authentication****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>authentication</b> context
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">servers</a> <a href="#">server</a> <i>number</i> <a href="#">purpose</a> <a href="#">authentication</a>
Tree	<a href="#">authentication</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**udp-port** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA RADIUS server authentication UDP port
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">servers</a> <a href="#">server</a> <i>number</i> <a href="#">purpose</a> <a href="#">authentication</a> <a href="#">udp-port</a> <i>number</i>
Tree	<a href="#">udp-port</a>
Range	1 to 65535
Default	1812

Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**coa****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>coa</b> context
Context	<b>configure</b> <a href="#">aaa radius isa-policy string servers server number purpose coa</a>
Tree	<a href="#">coa</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**udp-port number****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA RADIUS server change of authorization UDP port
Context	<b>configure</b> <a href="#">aaa radius isa-policy string servers server number purpose coa udp-port number</a>
Tree	<a href="#">udp-port</a>
Range	1 to 65535
Default	3799
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**secret string****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Secret key to access the RADIUS server
Context	<b>configure</b> <a href="#">aaa radius isa-policy string servers server number secret string</a>

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Tree	<a href="#">secret</a>
String Length	1 to 115
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **source-address-range** *string*

Synopsis	Starting IP address of the IP address range
Context	<b>configure</b> <a href="#">aaa radius isa-policy</a> <i>string</i> <a href="#">servers source-address-range</a> <i>string</i>
Tree	<a href="#">source-address-range</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **timeout** *number*

Synopsis	Timeout for a response from the RADIUS server
Context	<b>configure</b> <a href="#">aaa radius isa-policy</a> <i>string</i> <a href="#">servers timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	1 to 90
Units	seconds
Default	5
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **total-tries** *number*

Synopsis	Maximum number of tries toward the same RADIUS server
Context	<b>configure</b> <a href="#">aaa radius isa-policy</a> <i>string</i> <a href="#">servers total-tries</a> <i>number</i>
Tree	<a href="#">total-tries</a>
Range	1 to 10
Default	3
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## user-name

Synopsis	Enter the <b>user-name</b> context
Context	<b>configure</b> <a href="#">aaa radius isa-policy</a> <i>string</i> <a href="#">user-name</a>
Tree	<a href="#">user-name</a>
Description	Commands in this context define the format of the username field in the UE authentication request sent to the RADIUS server. For authentication of IPv6 triggers (ICMPv6, DHCPv6, IPv6 data-trigger) the username format will always fall back to MAC only.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## format *keyword*

Synopsis	Username format in RADIUS message
Context	<b>configure</b> <a href="#">aaa radius isa-policy</a> <i>string</i> <a href="#">user-name</a> <a href="#">format</a> <i>keyword</i>
Tree	<a href="#">format</a>
Options	mac, mac-ip, dhcp-vendor, circuit-id
Default	mac
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## mac-format *keyword*

Synopsis	MAC address format when contacting RADIUS server
Context	<b>configure</b> <a href="#">aaa radius isa-policy</a> <i>string</i> <a href="#">user-name</a> <a href="#">mac-format</a> <i>keyword</i>
Tree	<a href="#">mac-format</a>
Options	alu, ieee
Default	alu
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## l2tp-accounting-policy [[name](#)] *string*

Synopsis	Enter the <b>l2tp-accounting-policy</b> list instance
Context	<b>configure</b> <a href="#">aaa radius</a> <a href="#">l2tp-accounting-policy</a> <i>string</i>
Tree	<a href="#">l2tp-accounting-policy</a>



Max. Instances	32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	L2TP RADIUS accounting policy name
Context	<b>configure</b> <a href="#">aaa radius l2tp-accounting-policy</a> <i>string</i>
Tree	<a href="#">l2tp-accounting-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**accounting-type**

Synopsis	Enter the <b>accounting-type</b> context
Context	<b>configure</b> <a href="#">aaa radius l2tp-accounting-policy</a> <i>string</i> <b>accounting-type</b>
Tree	<a href="#">accounting-type</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**session** *boolean*

Synopsis	Enable per-session accounting
Context	<b>configure</b> <a href="#">aaa radius l2tp-accounting-policy</a> <i>string</i> <b>accounting-type</b> <b>session</b> <i>boolean</i>
Tree	<a href="#">session</a>
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**tunnel** *boolean*

Synopsis	Enable per-tunnel accounting
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Context	<b>configure</b> <a href="#">aaa radius l2tp-accounting-policy</a> <i>string</i> <a href="#">accounting-type</a> <a href="#">tunnel</a> <i>boolean</i>
Tree	<a href="#">tunnel</a>
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **acct-tunnel-connection-fmt** *string*

Synopsis	Accounting tunnel connection ASCII specification
Context	<b>configure</b> <a href="#">aaa radius l2tp-accounting-policy</a> <i>string</i> <a href="#">acct-tunnel-connection-fmt</a> <i>string</i>
Tree	<a href="#">acct-tunnel-connection-fmt</a>
String Length	1 to 253
Default	%n
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">aaa radius l2tp-accounting-policy</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **include-radius-attribute**

Synopsis	Enter the <b>include-radius-attribute</b> context
Context	<b>configure</b> <a href="#">aaa radius l2tp-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a>
Tree	<a href="#">include-radius-attribute</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### calling-station-id *boolean*

Synopsis	Include the Calling-Station-Id attribute
Context	<b>configure</b> <a href="#">aaa radius l2tp-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">calling-station-id</a> <i>boolean</i>
Tree	<a href="#">calling-station-id</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### nas-identifier *boolean*

Synopsis	Include the NAS-Identifier attribute
Context	<b>configure</b> <a href="#">aaa radius l2tp-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">nas-identifier</a> <i>boolean</i>
Tree	<a href="#">nas-identifier</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### nas-port

Synopsis	Enable the <b>nas-port</b> context
Context	<b>configure</b> <a href="#">aaa radius l2tp-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">nas-port</a>
Tree	<a href="#">nas-port</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### bit-spec *string*

Synopsis	RADIUS NAS-Port attribute
Context	<b>configure</b> <a href="#">aaa radius l2tp-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">nas-port</a> <a href="#">bit-spec</a> <i>string</i>
Tree	<a href="#">bit-spec</a>
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **nas-port-id**

Synopsis Enable the **nas-port-id** context

Context **configure** [aaa radius l2tp-accounting-policy](#) *string* [include-radius-attribute](#) [nas-port-id](#)

Tree [nas-port-id](#)

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **prefix-string** *string*

Synopsis Prefix string added to RADIUS NAS-Port attribute

Context **configure** [aaa radius l2tp-accounting-policy](#) *string* [include-radius-attribute](#) [nas-port-id](#)  
[prefix-string](#) *string*

Tree [prefix-string](#)

String Length 1 to 8

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **suffix** *keyword*

Synopsis NAS-Port-Id suffix type

Context **configure** [aaa radius l2tp-accounting-policy](#) *string* [include-radius-attribute](#) [nas-port-id](#)  
[suffix](#) *keyword*

Tree [suffix](#)

Options circuit-id, remote-id

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **nas-port-type**

Synopsis Enable the **nas-port-type** context

Context **configure** [aaa radius l2tp-accounting-policy](#) *string* [include-radius-attribute](#) [nas-port-type](#)

Tree [nas-port-type](#)

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **type** (*keyword* | *number*)

Synopsis Value for RADIUS NAS-Port-Type attribute

Context **configure** [aaa radius l2tp-accounting-policy](#) *string* [include-radius-attribute](#) [nas-port-type](#) **type** (*keyword* | *number*)

Tree [type](#)

Range 0 to 255

Options rfc-aligned

Default rfc-aligned

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-server-policy** *reference*

Synopsis RADIUS server policy referenced

Context **configure** [aaa radius l2tp-accounting-policy](#) *string* [radius-server-policy](#) *reference*

Tree [radius-server-policy](#)

Reference **configure** [aaa radius](#) [server-policy](#) *string*

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **route-downloader** [[name](#)] *string*

Synopsis Enter the **route-downloader** list instance

Context **configure** [aaa radius](#) [route-downloader](#) *string*

Tree [route-downloader](#)

Max. Instances 1

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis RADIUS route downloader name

Context	<b>configure</b> <a href="#">aaa radius route-downloader</a> <i>string</i>
Tree	<a href="#">route-downloader</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of this route downloader
Context	<b>configure</b> <a href="#">aaa radius route-downloader</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **base-user-name** *string*

Synopsis	Prefix of the username used as access requests
Context	<b>configure</b> <a href="#">aaa radius route-downloader</a> <i>string</i> <b>base-user-name</b> <i>string</i>
Tree	<a href="#">base-user-name</a>
Description	This command sets the prefix for the username that is used for access requests. The actual name used is a concatenation of this string, the “-” (dash) character and a monotonically increasing integer.
String Length	1 to 32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **default-metric** *number*

Synopsis	Default metric that RTM imported routes acquire
Context	<b>configure</b> <a href="#">aaa radius route-downloader</a> <i>string</i> <b>default-metric</b> <i>number</i>
Tree	<a href="#">default-metric</a>
Range	0 to 254

Default	2
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **default-tag** *number*

Synopsis	Default tag of this route downloader
Context	<b>configure</b> <a href="#">aaa radius route-downloader</a> <i>string default-tag number</i>
Tree	<a href="#">default-tag</a>
Range	0 to 4294967295
Default	0
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">aaa radius route-downloader</a> <i>string description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **download-interval** *number*

Synopsis	Wait time between consecutive runs of the process
Context	<b>configure</b> <a href="#">aaa radius route-downloader</a> <i>string download-interval number</i>
Tree	<a href="#">download-interval</a>
Range	1 to 1440
Units	minutes
Default	720
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**max-routes** *number*

Synopsis	Maximum routes imported by this route downloader
Context	<b>configure</b> <a href="#">aaa radius route-downloader</a> <i>string max-routes number</i>
Tree	<a href="#">max-routes</a>
Range	1 to 200000
Default	200000
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**password** *string*

Synopsis	Route downloader password for RADIUS access requests
Context	<b>configure</b> <a href="#">aaa radius route-downloader</a> <i>string password string</i>
Tree	<a href="#">password</a>
String Length	1 to 71
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**radius-server-policy** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	RADIUS server policy referenced
Context	<b>configure</b> <a href="#">aaa radius route-downloader</a> <i>string radius-server-policy reference</i>
Tree	<a href="#">radius-server-policy</a>
Reference	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**retry-interval**

Synopsis	Enter the <b>retry-interval</b> context
Context	<b>configure</b> <a href="#">aaa radius route-downloader</a> <i>string retry-interval</i>
Tree	<a href="#">retry-interval</a>



Description	Commands in this context configure parameters of the retry interval timer, which is an exponential backoff timer. The system retries sending an Access Request message after the previous message was unanswered (for example, a RADIUS failure or ICMP port unreachable error).
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max number**

Synopsis	Maximum duration of the retry interval
Context	<b>configure</b> <a href="#">aaa radius route-downloader</a> <i>string</i> <a href="#">retry-interval</a> <a href="#">max</a> <i>number</i>
Tree	<a href="#">max</a>
Range	1 to 1440
Units	minutes
Default	20
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **min number**

Synopsis	Minimum duration of the retry interval
Context	<b>configure</b> <a href="#">aaa radius route-downloader</a> <i>string</i> <a href="#">retry-interval</a> <a href="#">min</a> <i>number</i>
Tree	<a href="#">min</a>
Description	This command specifies the minimum duration of the retry interval. This duration grows exponentially after each sequential failure.
Range	1 to 1440
Units	minutes
Default	10
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **server-policy** [[name](#)] *string*

Synopsis	Enter the <b>server-policy</b> list instance
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i>
Tree	<a href="#">server-policy</a>

Max. Instances	32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	RADIUS server policy name
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i>
Tree	<a href="#">server-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**acct-on-off**

Synopsis	Enable the <b>acct-on-off</b> context
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <b>acct-on-off</b>
Tree	<a href="#">acct-on-off</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**monitor** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Accounting on/off group name
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <b>acct-on-off</b> <b>monitor</b> <i>reference</i>
Tree	<a href="#">monitor</a>
Reference	<b>configure</b> <a href="#">aaa radius acct-on-off-group</a> <i>string</i>
Notes	The following elements are part of a choice: <b>monitor</b> or <b>oper-state-change</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## oper-state-change

Synopsis	Enable the <b>oper-state-change</b> context
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">acct-on-off oper-state-change</a>
Tree	<a href="#">oper-state-change</a>
Notes	The following elements are part of a choice: <b>monitor</b> or <b>oper-state-change</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## group reference

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Operational state for a group
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">acct-on-off oper-state-change group reference</a>
Tree	<a href="#">group</a>
Reference	<b>configure</b> <a href="#">aaa radius acct-on-off-group</a> <i>string</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## description string

Synopsis	Text description
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## python-policy reference

Synopsis	Python policy for RADIUS packets to/from RADIUS servers
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">python-policy reference</a>
Tree	<a href="#">python-policy</a>

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Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## servers

Synopsis	Enter the <b>servers</b> context
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">server-policy</a> <i>string</i> <a href="#">servers</a>
Tree	<a href="#">servers</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## access-algorithm *keyword*

Synopsis	Algorithm to select a RADIUS server from the pool
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">server-policy</a> <i>string</i> <a href="#">servers</a> <a href="#">access-algorithm</a> <i>keyword</i>
Tree	<a href="#">access-algorithm</a>
Options	direct, round-robin, hash-based
Default	direct
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## buffering

Synopsis	Enter the <b>buffering</b> context
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">server-policy</a> <i>string</i> <a href="#">servers</a> <a href="#">buffering</a>
Tree	<a href="#">buffering</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## acct-interim

Synopsis	Enable the <b>acct-interim</b> context
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">server-policy</a> <i>string</i> <a href="#">servers</a> <a href="#">buffering</a> <a href="#">acct-interim</a>
Tree	<a href="#">acct-interim</a>

Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lifetime** *number*

Synopsis	Time accounting message can be in retransmission buffer
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers buffering acct-interim</a> <i>lifetime number</i>
Tree	<a href="#">lifetime</a>
Range	1 to 25
Units	hours
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max** *number*

Synopsis	Maximum time between accounting message resend attempts
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers buffering acct-interim</a> <i>max number</i>
Tree	<a href="#">max</a>
Range	1 to 3600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **min** *number*

Synopsis	Minimum time between accounting message resend attempts
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers buffering acct-interim</a> <i>min number</i>
Tree	<a href="#">min</a>
Range	1 to 3600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **acct-start**

Synopsis Enable the **acct-start** context  
Context **configure** [aaa radius server-policy](#) *string* [servers buffering acct-start](#)  
Tree [acct-start](#)  
Introduced 20.7.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lifetime number**

Synopsis Time accounting message can be in retransmission buffer  
Context **configure** [aaa radius server-policy](#) *string* [servers buffering acct-start lifetime number](#)  
Tree [lifetime](#)  
Range 1 to 25  
Units hours  
Notes This element is mandatory.  
Introduced 20.7.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max number**

Synopsis Maximum time between accounting message resend attempts  
Context **configure** [aaa radius server-policy](#) *string* [servers buffering acct-start max number](#)  
Tree [max](#)  
Range 1 to 3600  
Units seconds  
Notes This element is mandatory.  
Introduced 20.7.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **min number**

Synopsis Minimum time between accounting message resend attempts

Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers buffering acct-start</a> <i>min</i> <i>number</i>
Tree	<a href="#">min</a>
Range	1 to 3600
Units	seconds
Notes	This element is mandatory.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **acct-stop**

Synopsis	Enable the <b>acct-stop</b> context
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers buffering acct-stop</a>
Tree	<a href="#">acct-stop</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lifetime** *number*

Synopsis	Time accounting message can be in retransmission buffer
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers buffering acct-stop lifetime</a> <i>number</i>
Tree	<a href="#">lifetime</a>
Range	1 to 25
Units	hours
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max** *number*

Synopsis	Maximum time between accounting message resend attempts
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers buffering acct-stop max</a> <i>number</i>
Tree	<a href="#">max</a>
Range	1 to 3600
Units	seconds
Notes	This element is mandatory.

Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **min number**

Synopsis	Minimum time between accounting message resend attempts
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers buffering acct-stop min number</a>
Tree	<a href="#">min</a>
Range	1 to 3600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **health-check**

Synopsis	Enter the <b>health-check</b> context
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers health-check</a>
Tree	<a href="#">health-check</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **down-timeout number**

Synopsis	Wait time before declaring RADIUS server out-of-service
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers health-check down-timeout number</a>
Tree	<a href="#">down-timeout</a>
Range	1 to 340
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **test-account**

Synopsis	Enter the <b>test-account</b> context
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Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers health-check test-account</a>
Tree	<a href="#">test-account</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the health check
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers health-check test-account admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **interval** *number*

Synopsis	Time for test account to check health of RADIUS servers
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers health-check test-account interval</a> <i>number</i>
Tree	<a href="#">interval</a>
Range	1 to 60
Units	seconds
Default	3
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **password** *string*

Synopsis	Test account password for RADIUS server health check
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers health-check test-account password</a> <i>string</i>
Tree	<a href="#">password</a>
String Length	1 to 115
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **user-name** *string*

Synopsis Username to send access requests to probe RADIUS server

Context **configure** [aaa radius server-policy](#) *string* [servers health-check test-account user-name](#) *string*

Tree [user-name](#)

String Length 1 to 64

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **hold-down-time** *number*

Synopsis Hold time before reusing a RADIUS server that was down

Context **configure** [aaa radius server-policy](#) *string* [servers hold-down-time](#) *number*

Tree [hold-down-time](#)

Range 30 to 86400

Units seconds

Default 30

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv6-source-address** *string*

Synopsis Source address for IPv6 RADIUS datagrams

Context **configure** [aaa radius server-policy](#) *string* [servers ipv6-source-address](#) *string*

Tree [ipv6-source-address](#)

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **retry-count** *number*

Synopsis Number of retries for contacting the RADIUS server

Context **configure** [aaa radius server-policy](#) *string* [servers retry-count](#) *number*

Tree [retry-count](#)

Range	1 to 256
Default	3
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **router-instance** *string*

Synopsis	RADIUS routing instance
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers</a> <a href="#">router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **server** [[server-index](#)] *number*

Synopsis	Enter the <b>server</b> list instance
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers</a> <a href="#">server</a> <i>number</i>
Tree	<a href="#">server</a>
Max. Instances	32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[server-index]** *number*

Synopsis	RADIUS server index
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers</a> <a href="#">server</a> <i>number</i>
Tree	<a href="#">server</a>
Range	1 to 16
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**server-name** *string*

Synopsis	RADIUS server name
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers server</a> <i>number</i> <a href="#">server-name</a> <i>string</i>
Tree	<a href="#">server-name</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**source-address** *string*

Synopsis	Source address of RADIUS messages
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers source-address</a> <i>string</i>
Tree	<a href="#">source-address</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**stickiness** *boolean*

Synopsis	Allow stickiness in a multi-server application
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers stickiness</a> <i>boolean</i>
Tree	<a href="#">stickiness</a>
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**timeout** *number*

Synopsis	Time until the next retry to the RADIUS server
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	1 to 340
Units	seconds
Default	5
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## wpp

Synopsis Enter the **wpp** context

Context **configure** [aaa wpp](#)

Tree [wpp](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## portal-group [[group-name](#)] *string*

Synopsis Enter the **portal-group** list instance

Context **configure** [aaa wpp portal-group](#) *string*

Tree [portal-group](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [\[group-name\]](#) *string*

Synopsis Portal group name

Context **configure** [aaa wpp portal-group](#) *string*

Tree [portal-group](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis Administrative state of the portal group

Context **configure** [aaa wpp portal-group](#) *string* **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
 Context **configure** [aaa wpp portal-group](#) *string* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **portal** [[router-instance](#)] *string* [name](#) *string*

Synopsis Add a list entry for **portal**  
 Context **configure** [aaa wpp portal-group](#) *string* [portal](#) *string* [name](#) *string*  
 Tree [portal](#)  
 Max. 8  
 Instances  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[router-instance]** *string*

Synopsis Router on which the portal is configured  
 Context **configure** [aaa wpp portal-group](#) *string* [portal](#) *string* [name](#) *string*  
 Tree [portal](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **name** *string*

Synopsis Web portal server name  
 Context **configure** [aaa wpp portal-group](#) *string* [portal](#) *string* [name](#) *string*

---

Tree	<a href="#">portal</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **system-name** *string*

Synopsis	System name used in WPP protocol messages
Context	<b>configure</b> <a href="#">aaa wpp system-name</a> <i>string</i>
Tree	<a href="#">system-name</a>
String Length	1 to 16
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## 3.2 application-assurance commands

```

configure
- application-assurance
  - aarp number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - master-selection-mode keyword
    - peer (ipv4-address-no-zone | ipv6-address-no-zone)
    - peer-endpoint
      - sap
        - encap-type keyword
        - sap-id string
        - spoke-sdp string
      - priority number
  - apply-groups reference
  - apply-groups-exclude reference
  - cflowd
    - field string
      - apply-groups reference
      - apply-groups-exclude reference
      - comment string
  - flow-attribute
    - attribute string
      - apply-groups reference
      - apply-groups-exclude reference
      - comment string
  - group number
    - apply-groups reference
    - apply-groups-exclude reference
    - certificate-profile string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - file string
  - cflowd
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - collector (ipv4-address-no-zone | ipv6-address-no-zone) port number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
    - comprehensive
      - apply-groups reference
      - apply-groups-exclude reference
      - flow-rate number
      - flow-rate-2 number
      - template
        - apply-groups reference
        - apply-groups-exclude reference
        - dynamic-fields
          - admin-state keyword
          - field string
        - field-selection keyword
  - direct-export
    - collector number

```



configure application-assurance group cflowd direct-export collector address

```

- address (ipv4-address-no-zone | ipv6-address-no-zone) port number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - vlan-id number
- export-override
  - mode keyword
  - prefix string
- obfuscation
  - aes-128-encryption-key string
  - aes-256-encryption-key string
- rtp-performance
  - apply-groups reference
  - apply-groups-exclude reference
  - audio-template
    - apply-groups reference
    - apply-groups-exclude reference
    - dynamic-fields
      - admin-state keyword
      - field string
    - field-selection keyword
  - flow-rate number
  - flow-rate-2 number
  - video-template
    - apply-groups reference
    - apply-groups-exclude reference
    - dynamic-fields
      - admin-state keyword
      - field string
    - field-selection keyword
  - voice-template
    - apply-groups reference
    - apply-groups-exclude reference
    - dynamic-fields
      - admin-state keyword
      - field string
    - field-selection keyword
- tcp-performance
  - apply-groups reference
  - apply-groups-exclude reference
  - flow-rate number
  - flow-rate-2 number
  - template
    - apply-groups reference
    - apply-groups-exclude reference
    - dynamic-fields
      - admin-state keyword
      - field string
    - field-selection keyword
- template-retransmit number
- volume
  - rate number
  - template
    - apply-groups reference
    - apply-groups-exclude reference
    - dynamic-fields
      - admin-state keyword
      - field string
    - field-selection keyword
- dns-ip-cache string
  - admin-state keyword

```

configure application-assurance group dns-ip-cache apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **dns-match**
  - **domain** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **expression** *string*
  - **trusted-server-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **server-name** *string*
- **ip-cache**
  - **high-watermark** *number*
  - **low-watermark** *number*
  - **size** *number*
  - **static-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
- **http-enrich** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **field** *string*
    - **aes-initialization-vector** *string*
    - **anti-spoof** *boolean*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **calling-line-id** *boolean*
    - **encode**
      - **cert-profile** *reference*
      - **key**
        - **type** *keyword*
        - **value** *string*
    - **md5-salt** *string*
    - **name** *string*
    - **static-string** *string*
  - **rat-type-enrichment**
    - **rat-type** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **rat-string** *string*
- **http-error-redirect** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **error-code** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **custom-message-size** *number*
  - **http-host** *string*
  - **participant-id** *string*
  - **template** *number*
- **http-notification** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **interval** (*number | keyword*)
  - **script-url** *string*
  - **template** *number*
- **http-redirect** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*

configure application-assurance group http-redirect apply-groups-exclude

- **apply-groups-exclude** *reference*
- **captive-redirect**
  - **vlan-id** *number*
- **description** *string*
- **redirect-https** *boolean*
- **redirect-url** *string*
- **tcp-client-reset** *boolean*
- **template** *number*
- **ip-identification-assist**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **passive-dns**
    - **monitor** *boolean*
    - **trusted-server** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **comment** *string*
- **partition** *number*
  - **aa-sub-congestion-detection**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **rat-type** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **rtt-threshold** (*number* | *keyword*)
    - **rtt-threshold** (*number* | *keyword*)
    - **rtt-threshold-tolerance** *number*
  - **aa-sub-remote** *boolean*
  - **access-network-location**
    - **source** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
    - **rat-type** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **rtt-threshold** (*number* | *keyword*)
    - **rtt-threshold** (*number* | *keyword*)
    - **rtt-threshold-tolerance** *number*
    - **source-level** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **aqp-initial-lookup** *boolean*
  - **cflowd**
    - **export-type** *keyword*
    - **admin-state** *keyword*
    - **app-group** *reference*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
    - **rate-choice** *keyword*
    - **application** *reference*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
    - **rate-choice** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **description** *string*
  - **event-log** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **buffer-type** *keyword*
    - **max-entries** *number*

configure application-assurance group partition event-log syslog

- **syslog**
  - **address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
  - **description** *string*
  - **facility** *keyword*
  - **port** *number*
  - **severity** *keyword*
  - **vlan-id** *number*
- **gtp**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **gtp-filter** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **gtp-in-gtp** *keyword*
    - **gtp-tunnel-database**
      - **default-tunnel-endpoint-limit** *number*
      - **validate-gtp-tunnels** *boolean*
      - **validate-sequence-number** *boolean*
      - **validate-source-ip-addr** *boolean*
  - **imsi-apn-filter**
    - **default-action** *keyword*
    - **entry** *number*
      - **action** *keyword*
      - **apn** *string*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **imsi-mcc-mnc-prefix** *string*
      - **src-gsn**
        - **ip-prefix** (*ipv4-prefix | ipv6-prefix*)
        - **ip-prefix-list** *reference*
- **log**
  - **action** *keyword*
  - **event-log** *reference*
  - **max-payload-length** *number*
  - **message-type**
    - **default-action** *keyword*
    - **entry** *number*
      - **action** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **value** (*number | keyword*)
  - **message-type-gtp-v2**
    - **default-action** *keyword*
    - **entry** *number*
      - **action** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **value** (*number | keyword*)
- **gtpc-inspection** *boolean*
- **log**
  - **action** *keyword*
  - **event-log** *reference*
- **mode** *keyword*
- **http-match-all-requests** *boolean*
- **http-x-online-host** *boolean*
- **ip-identification-contribute** *boolean*
- **ip-prefix-list** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **prefix** (*ipv4-prefix | ipv6-prefix*)
    - **apply-groups** *reference*

configure application-assurance group partition ip-prefix-list prefix apply-groups-exclude

```

    - apply-groups-exclude reference
    - name string
- policy
  - app-filter
    - entry number
      - admin-state keyword
      - application reference
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - expression number
        - apply-groups reference
        - apply-groups-exclude reference
        - eq string
        - neq string
        - type keyword
      - flow-setup-direction keyword
      - http-match-all-requests boolean
      - http-port
        - eq
          - port-list reference
          - port-number number
        - neq
          - port-list reference
          - port-number number
      - ip-identification-assist boolean
      - ip-protocol
        - eq (number | keyword)
        - neq (number | keyword)
      - network-address
        - eq
          - ip-prefix (ipv4-prefix | ipv6-prefix)
          - ip-prefix-list reference
        - neq
          - ip-prefix (ipv4-prefix | ipv6-prefix)
          - ip-prefix-list reference
      - protocol
        - eq (string | named-item)
        - neq (string | named-item)
      - server-address
        - eq
          - dns-ip-cache reference
          - ip-prefix (ipv4-prefix | ipv6-prefix)
          - ip-prefix-list reference
          - masked-ip
            - address (ipv4-address-no-zone | ipv6-address-no-zone)
            - netmask (ipv4-address-no-zone | ipv6-address-no-zone)
        - neq
          - dns-ip-cache reference
          - ip-prefix (ipv4-prefix | ipv6-prefix)
          - ip-prefix-list reference
          - masked-ip
            - address (ipv4-address-no-zone | ipv6-address-no-zone)
            - netmask (ipv4-address-no-zone | ipv6-address-no-zone)
      - server-port
        - eq
          - first-packet-policy keyword
          - port-list reference
          - port-number number
          - range
            - end number
            - start number
        - gt
          - port-number number

```

configure application-assurance group partition policy app-filter entry server-port lt

```

    - lt
      - port-number number
    - neq
      - port-list reference
      - port-number number
      - range
        - end number
        - start number
  - app-group string
    - apply-groups reference
    - apply-groups-exclude reference
    - charging-group reference
    - description string
    - export-id number
  - app-profile string
    - aa-sub-suppressible boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - capacity-cost number
    - characteristic reference
      - apply-groups reference
      - apply-groups-exclude reference
      - value reference
    - description string
    - divert boolean
  - app-qos-policy
    - entry number
      - action
        - abandon-tcp-optimization boolean
        - apply-groups reference
        - apply-groups-exclude reference
        - bandwidth-policer
          - anl reference
          - dual-bucket reference
          - single-bucket reference
        - dns-ip-cache reference
        - drop boolean
        - error-drop
          - event-log reference
        - flow-count-limit-policer
          - event-log reference
          - policer-name reference
        - flow-setup-rate-policer
          - event-log reference
          - policer-name reference
        - fragment-drop
          - drop-scope keyword
          - event-log reference
        - gtp-filter reference
        - http-enrich reference
        - http-error-redirect reference
        - http-notification reference
        - http-redirect
          - flow-type keyword
          - name reference
        - mirror-source
          - all-inclusive boolean
          - mirror-service reference
        - overload-drop
          - event-log reference
      - remark
        - dscp
          - in-profile keyword
          - out-profile keyword

```

configure application-assurance group partition policy app-qos-policy entry action remark fc

```

- fc keyword
- priority keyword
- sctp-filter reference
- session-filter reference
- tcp-mss-adjust number
- tcp-validate reference
- tls-enrich reference
- url-filter
  - characteristic reference
  - name reference
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- description string
- match
  - aa-sub
    - esm
      - eq string
      - neq string
    - esm-mac
      - eq string
      - neq string
    - sap
      - eq string
      - neq string
    - spoke-sdp
      - eq string
      - neq string
    - transit
      - eq string
      - neq string
  - aa-sub-tethering keyword
  - app-group
    - eq reference
    - neq reference
  - application
    - eq reference
    - neq reference
  - apply-groups reference
  - apply-groups-exclude reference
  - characteristic reference
    - apply-groups reference
    - apply-groups-exclude reference
  - eq reference
  - neq reference
  - charging-group
    - eq reference
    - neq reference
  - dscp
    - eq keyword
    - neq keyword
  - dst-ip
    - eq
      - ip-prefix (ipv4-prefix | ipv6-prefix)
      - ip-prefix-list reference
    - neq
      - ip-prefix (ipv4-prefix | ipv6-prefix)
      - ip-prefix-list reference
  - dst-port
    - eq
      - port-list reference
      - port-number number
      - range
        - end number

```

configure application-assurance group partition policy app-qos-policy entry match dst-port eq range start

```

    - start number
  - neq
    - port-list reference
    - port-number number
    - range
      - end number
      - start number
  - flow-attribute string
  - apply-groups reference
  - apply-groups-exclude reference
  - confidence
    - eq number
    - gte number
    - lt number
  - ip-protocol
    - eq (number | keyword)
    - neq (number | keyword)
  - src-ip
    - eq
      - ip-prefix (ipv4-prefix | ipv6-prefix)
      - ip-prefix-list reference
    - neq
      - ip-prefix (ipv4-prefix | ipv6-prefix)
      - ip-prefix-list reference
  - src-port
    - eq
      - port-list reference
      - port-number number
      - range
        - end number
        - start number
    - neq
      - port-list reference
      - port-number number
      - range
        - end number
        - start number
  - traffic-direction keyword
- app-service-options
  - characteristic string
    - apply-groups reference
    - apply-groups-exclude reference
    - default-value string
    - value string
- application string
  - app-group reference
  - apply-groups reference
  - apply-groups-exclude reference
  - charging-group reference
  - description string
  - export-id number
- apply-groups reference
- apply-groups-exclude reference
- charging-filter
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - charging-group reference
    - description string
  - match
    - app-group
      - eq reference
      - neq reference

```



configure application-assurance group partition policy charging-filter entry match application

```

    - application
      - eq reference
      - neq reference
    - flow-attribute string
      - apply-groups reference
      - apply-groups-exclude reference
    - confidence
      - eq number
      - gte number
      - lt number
    - tethered-flow
  - charging-group string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - export-id number
    - notify-start-stop keyword
  - custom-protocol string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - expression number
      - apply-groups reference
      - apply-groups-exclude reference
      - direction keyword
      - eq string
      - offset number
    - ip-protocol keyword
  - default-charging-group reference
  - default-tethered-charging-group reference
- policy-override
  - aa-sub
    - sap string
      - apply-groups reference
      - apply-groups-exclude reference
      - characteristic reference
        - apply-groups reference
        - apply-groups-exclude reference
        - value reference
      - spoke-sdp string
        - apply-groups reference
        - apply-groups-exclude reference
        - characteristic reference
          - apply-groups reference
          - apply-groups-exclude reference
          - value reference
      - transit string
        - apply-groups reference
        - apply-groups-exclude reference
        - characteristic reference
          - apply-groups reference
          - apply-groups-exclude reference
          - value reference
    - port-list string
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - port number
      - range start number end number
  - sctp-filter string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string

```

configure application-assurance group partition sctp-filter event-log

- **event-log** *reference*
- **ppid**
  - **default-action** *keyword*
  - **entry** *number*
    - **action** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **value** (*number* | *keyword*)
- **ppid-range**
  - **max** *number*
  - **min** *number*
- **session-filter** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **default-action**
  - **action** *keyword*
  - **event-log** *reference*
- **description** *string*
- **entry** *number*
  - **action**
    - **deny**
    - **event-log** *reference*
    - **http-redirect** *reference*
    - **permit**
    - **tcp-optimizer** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **match**
    - **dst-ip**
      - **dns-ip-cache** *reference*
      - **ip-prefix** (*ipv4-prefix* | *ipv6-prefix*)
      - **ip-prefix-list** *reference*
    - **dst-port**
      - **eq** *number*
      - **gt** *number*
      - **lt** *number*
      - **port-list** *reference*
      - **range**
        - **end** *number*
        - **start** *number*
    - **ip-protocol** (*number* | *keyword*)
    - **src-ip**
      - **ip-prefix** (*ipv4-prefix* | *ipv6-prefix*)
      - **ip-prefix-list** *reference*
    - **src-port**
      - **eq** *number*
      - **gt** *number*
      - **lt** *number*
      - **port-list** *reference*
      - **range**
        - **end** *number*
        - **start** *number*
  - **shallow-inspection** *boolean*
  - **statistics**
    - **aa-admit-deny**
      - **accounting-policy** *reference*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **collect-stats** *boolean*
      - **gtp-filter-stats** *boolean*
      - **policer-stats** *boolean*
      - **policer-stats-resources** *boolean*
      - **sctp-filter-stats** *boolean*

configure application-assurance group partition statistics aa-admit-deny session-filter-stats

- **session-filter-stats** *boolean*
- **tcp-validate-stats** *boolean*
- **aa-app-group**
  - **accounting-policy** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **collect-stats** *boolean*
- **aa-application**
  - **accounting-policy** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **collect-stats** *boolean*
- **aa-partition**
  - **accounting-policy** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **collect-stats** *boolean*
  - **tethering-stats** *boolean*
  - **traffic-type-stats** *boolean*
- **aa-protocol**
  - **accounting-policy** *reference*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **collect-stats** *boolean*
- **aa-sub**
  - **accounting-policy** *reference*
  - **aggregate-stats-export-using** *keyword*
  - **app-group** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **export-using** *keyword*
  - **application** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **export-using** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **charging-group** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **export-using** *keyword*
  - **collect-stats** *boolean*
  - **exclude-tcp-retrans** *boolean*
  - **max-throughput-stats** *boolean*
  - **protocol** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **export-using** *keyword*
  - **radius-accounting-policy** *reference*
  - **usage-monitoring** *boolean*
- **aa-sub-study** *keyword*
  - **aa-sub**
    - **esm** *string*
    - **esm-mac** *string*
    - **sap** *string*
    - **spoke-sdp** *string*
    - **transit** *string*
  - **accounting-policy** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **collect-stats** *boolean*
- **tcp-validate** *string*
  - **apply-groups** *reference*

configure application-assurance group partition tcp-validate apply-groups-exclude

- **apply-groups-exclude** *reference*
- **description** *string*
- **log**
  - **all** *boolean*
  - **event-log** *reference*
- **strict** *boolean*
- **tethering-detection**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **single-device**
    - **expected-ttl** *number*
- **threshold-crossing-alert**
  - **criteria** *keyword* **direction** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **high-watermark** *number*
    - **low-watermark** *number*
  - **gtp-filter** *reference* **criteria** *keyword* **direction** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **high-watermark** *number*
    - **low-watermark** *number*
  - **gtp-filter-entry** *reference* **entry-id** *number* **direction** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **high-watermark** *number*
    - **low-watermark** *number*
  - **policer** *string* **direction** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **high-watermark** *number*
    - **low-watermark** *number*
  - **sctp-filter** *reference* **criteria** *keyword* **direction** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **high-watermark** *number*
    - **low-watermark** *number*
  - **sctp-filter-entry** *reference* **entry-id** *reference* **direction** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **high-watermark** *number*
    - **low-watermark** *number*
  - **session-filter** *reference* **criteria** *keyword* **direction** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **high-watermark** *number*
    - **low-watermark** *number*
  - **session-filter-entry** *reference* **entry-id** *reference* **direction** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **high-watermark** *number*
    - **low-watermark** *number*
  - **tcp-validate** *reference* **direction** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **high-watermark** *number*
    - **low-watermark** *number*
  - **transit-ip-policy** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **default-app-profile** *reference*
    - **description** *string*
    - **detect-seen-ip** *boolean*

configure application-assurance group partition transit-ip-policy dhcp

- **dhcp**
  - **admin-state** *keyword*
- **diameter**
  - **admin-state** *keyword*
  - **application-policy** *reference*
- **ipv6-address-prefix-length** *number*
- **radius**
  - **admin-state** *keyword*
  - **authentication-policy** *reference*
  - **seen-ip-radius-acct-policy** *reference*
- **static-aa-sub** *string*
  - **app-profile** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **ip** (*ipv4-unicast-address | ipv6-prefix*)
- **sub-ident-policy** *reference*
- **transit-auto-create**
  - **admin-state** *keyword*
  - **inactivity-monitor** *boolean*
- **transit-prefix-policy** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **aa-sub** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **match**
      - **aa-sub-ip** (*ipv4-prefix | ipv6-prefix*)
      - **network-ip** (*ipv4-prefix | ipv6-prefix*)
  - **static-aa-sub** *string*
    - **app-profile** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **is-remote** *boolean*
- **waplx**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **policer**
  - **anl-bandwidth-policer** *string*
    - **action** *keyword*
    - **adaptation-rule**
      - **pir** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **mbs** *number*
    - **rate-percentage** *number*
    - **rate-percentage-stage-2** *number*
  - **dual-bucket-bandwidth-policer** *string*
    - **adaptation-rule**
      - **cir** *keyword*
      - **pir** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **cbs** *number*
    - **cir** (*number | keyword*)
    - **congestion-override**
      - **cbs** *number*
      - **cir** (*number | keyword*)
      - **mbs** *number*
      - **pir** (*number | keyword*)
    - **congestion-override-stage-2**

configure application-assurance group policer dual-bucket-bandwidth-policer congestion-override-stage-2 cbs

```

- cbs number
- cir (number | keyword)
- mbs number
- pir (number | keyword)
- description string
- mbs number
- pir (number | keyword)
- time-of-day-override number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - cbs number
  - cir (number | keyword)
  - description string
  - mbs number
  - pir (number | keyword)
  - time-range
    - daily
      - all-days
      - end string
      - on keyword
      - start string
    - weekly
      - end
      - day keyword
      - time string
      - start
      - day keyword
      - time string
- flow-count-limit-policer string
  - action keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - granularity keyword
  - limit-gtp-flows boolean
  - peak-flow-count (number | keyword)
  - time-of-day-override number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - peak-flow-count (number | keyword)
    - time-range
      - daily
        - all-days
        - end string
        - on keyword
        - start string
      - weekly
        - end
        - day keyword
        - time string
        - start
        - day keyword
        - time string
- flow-setup-rate-policer string
  - action keyword
  - adaptation-rule
    - peak-flow-setup-rate keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - flow-setup-rate-burst-size number

```

configure application-assurance group policer flow-setup-rate-policer granularity

- **granularity** *keyword*
- **peak-flow-setup-rate** (*number* | *keyword*)
- **time-of-day-override** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **flow-setup-rate-burst-size** *number*
  - **peak-flow-setup-rate** (*number* | *keyword*)
  - **time-range**
    - **daily**
      - **all-days**
      - **end** *string*
      - **on** *keyword*
      - **start** *string*
    - **weekly**
      - **end**
        - **day** *keyword*
        - **time** *string*
      - **start**
        - **day** *keyword*
        - **time** *string*
- **single-bucket-bandwidth-policer** *string*
  - **action** *keyword*
  - **adaptation-rule**
    - **pir** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **congestion-override**
    - **mbs** *number*
    - **pir** (*number* | *keyword*)
  - **congestion-override-stage-2**
    - **mbs** *number*
    - **pir** (*number* | *keyword*)
  - **description** *string*
  - **granularity** *keyword*
  - **mbs** *number*
  - **pir** (*number* | *keyword*)
  - **time-of-day-override** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **mbs** *number*
    - **pir** (*number* | *keyword*)
    - **time-range**
      - **daily**
        - **all-days**
        - **end** *string*
        - **on** *keyword*
        - **start** *string*
      - **weekly**
        - **end**
          - **day** *keyword*
          - **time** *string*
        - **start**
          - **day** *keyword*
          - **time** *string*
  - **tcp-optimizer** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **dack-timeout** *number*
    - **description** *string*
    - **initial-cwnd** *number*

configure application-assurance group tcp-optimizer initial-ss-threshold

- **initial-ss-threshold** *(number | keyword)*
- **network-rtt-threshold** *number*
- **tcp-stack** *keyword*
- **url-filter** *string*
  - **admin-state** *keyword*
  - **apply-function-specific-behaviour** *boolean*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **default-action**
    - **allow**
    - **block-all**
    - **block-http-redirect** *reference*
  - **description** *string*
  - **http-redirect** *reference*
  - **http-request-filtering** *keyword*
  - **icap**
    - **custom-x-header** *string*
    - **default-action**
      - **allow**
      - **block-all**
      - **block-http-redirect** *reference*
    - **http-redirect** *reference*
  - **server** *(ipv4-address-no-zone | ipv6-address-no-zone) port number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **vlan-id** *number*
- **local-filtering**
  - **allow-list** *reference*
  - **deny-list** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **default-action**
      - **allow**
      - **block-all**
      - **block-http-redirect** *reference*
    - **http-redirect** *reference*
- **web-service**
  - **category-set** *number*
  - **classification-overrides**
    - **entry** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **category-name** *string*
      - **expression** *string*
  - **classifier** *keyword*
  - **default-action**
    - **allow**
    - **block-all**
    - **block-http-redirect** *reference*
  - **default-profile** *reference*
  - **dns-server** *(ipv4-address-no-zone | ipv6-address-no-zone)*
  - **fqdn** *string*
  - **http-redirect** *reference*
  - **profile** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **block**
      - **category** *string*
      - **description** *string*
    - **vlan-id** *number*
- **url-list** *string*
  - **admin-state** *keyword*



configure application-assurance group url-list apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **file** *string*
- **host-expressions** *boolean*
- **key** *string*
- **size** *keyword*
- **http-enrich**
  - **field** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **comment** *string*
- **http-error-redirect**
  - **error-code** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **comment** *string*
- **template** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **comment** *string*
- **http-notification**
  - **template** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **comment** *string*
- **http-redirect**
  - **template** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **comment** *string*
- **protocol** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **radius-accounting-policy** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **interim-update-interval** *number*
  - **radius-accounting-server**
    - **access-algorithm** *keyword*
    - **retry** *number*
    - **router-instance** *string*
    - **server** *number*
      - **address** *string*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **port** *number*
      - **secret** *string*
    - **source-address** *string*
    - **timeout** *number*
  - **significant-change** *number*
- **usage-alert-thresholds**
  - **bit-rate-high-wmark** (*number* | *keyword*)
  - **bit-rate-low-wmark** *number*
  - **datapath-cpu-high-wmark** (*number* | *keyword*)
  - **datapath-cpu-low-wmark** *number*
  - **flow-setup-rate-high-wmark** (*number* | *keyword*)
  - **flow-setup-rate-low-wmark** *number*
  - **flow-table-high-wmark** *number*
  - **flow-table-low-wmark** *number*
  - **packet-rate-high-wmark** (*number* | *keyword*)
  - **packet-rate-low-wmark** *number*

### 3.2.1 application-assurance command descriptions

#### application-assurance

Synopsis	Enter the <b>application-assurance</b> context
Context	<b>configure</b> <a href="#">application-assurance</a>
Tree	<a href="#">application-assurance</a>
Description	Commands in this context configure the attributes of Application Assurance (AA) operations.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

#### **aarp** [[aarp-id](#)] *number*

Synopsis	Enter the <b>aarp</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">aarp</a> <i>number</i>
Tree	<a href="#">aarp</a>
Description	Commands in this context define an Application Assurance Redundancy Protocol (AARP) instance. This instance is paired with the same AARP ID in a peer node, as part of the configuration to provide flow and packet asymmetry removal for traffic of a multi-homed SAP or spoke SDP.
Max. Instances	100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

#### [\[aarp-id\]](#) *number*

Synopsis	AARP ID
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">aarp</a> <i>number</i>
Tree	<a href="#">aarp</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the AARP instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">aarp</a> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">aarp</a> <i>number</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**master-selection-mode** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	AARP master selection mode
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">aarp</a> <i>number</i> <b>master-selection-mode</b> <i>keyword</i>
Tree	<a href="#">master-selection-mode</a>
Description	This command configures the AARP mode of operation with the peer instance. The modes affect the AARP state machine behavior according to the specified behavior.
Options	minimize-switchovers, inter-chassis-efficiency, priority-based-balance
Default	minimize-switchovers
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**peer** (*ipv4-address-no-zone | ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	AARP peer IP address
Context	<b>configure</b> <a href="#">application-assurance aarp number peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">peer</a>
Description	This command defines the IP address of the AARP peer router, which must be a routable system IP address. If no peer is configured when the AARP is administratively enabled, it is configured as a single node AARP instance.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**peer-endpoint**

Synopsis	Enter the <b>peer-endpoint</b> context
Context	<b>configure</b> <a href="#">application-assurance aarp number peer-endpoint</a>
Tree	<a href="#">peer-endpoint</a>
Description	Commands in this context specify the attributes of the peer endpoint parent AA subscriber of the AARP peer.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**sap**

Synopsis	Enable the <b>sap</b> context
Context	<b>configure</b> <a href="#">application-assurance aarp number peer-endpoint sap</a>
Tree	<a href="#">sap</a>
Notes	The following elements are part of a choice: <b>sap</b> or <b>spoke-sdp</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**encap-type** *keyword*

Synopsis	Encapsulation type for peer endpoint SAP
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">aarp</a> <i>number</i> <a href="#">peer-endpoint</a> <a href="#">sap</a> <a href="#">encap-type</a> <i>keyword</i>
Tree	<a href="#">encap-type</a>
Options	null, dot1q, qinq
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **sap-id** *string*

Synopsis	AARP peer endpoint SAP ID
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">aarp</a> <i>number</i> <a href="#">peer-endpoint</a> <a href="#">sap</a> <a href="#">sap-id</a> <i>string</i>
Tree	<a href="#">sap-id</a>
String Length	1 to 45
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **spoke-sdp** *string*

Synopsis	AARP peer endpoint spoke SDP
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">aarp</a> <i>number</i> <a href="#">peer-endpoint</a> <a href="#">spoke-sdp</a> <i>string</i>
Tree	<a href="#">spoke-sdp</a>
String Length	3 to 16
Notes	The following elements are part of a choice: <b>sap</b> or <b>spoke-sdp</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **priority** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	AARP priority
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">aarp</a> <i>number</i> <a href="#">priority</a> <i>number</i>

Tree	<a href="#">priority</a>
Description	This command defines the priority for the AARP instance. The priority value is used to determine the master and backup upon initialization or rebalance.
Range	0 to 255
Default	100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **cflowd**

Synopsis	Enter the <b>cflowd</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">cflowd</a>
Tree	<a href="#">cflowd</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **field** [[field-name](#)] *string*

Synopsis	Enter the <b>field</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">cflowd</a> <a href="#">field</a> <i>string</i>
Tree	<a href="#">field</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **[field-name]** *string*

Synopsis	Cflowd record field name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">cflowd</a> <a href="#">field</a> <i>string</i>
Tree	<a href="#">field</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**comment** *string*

Synopsis	User information comment
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">cflowd field</a> <i>string</i> <b>comment</b> <i>string</i>
Tree	<a href="#">comment</a>
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**flow-attribute**

Synopsis	Enter the <b>flow-attribute</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">flow-attribute</a>
Tree	<a href="#">flow-attribute</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**attribute** [[attribute-name](#)] *string*

Synopsis	Enter the <b>attribute</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">flow-attribute</a> <a href="#">attribute</a> <i>string</i>
Tree	<a href="#">attribute</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[attribute-name]** *string*

Synopsis	Attribute name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">flow-attribute</a> <a href="#">attribute</a> <i>string</i>
Tree	<a href="#">attribute</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**comment** *string*

Synopsis	User information comment
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">flow-attribute</a> <a href="#">attribute</a> <i>string</i> <b>comment</b> <i>string</i>
Tree	<a href="#">comment</a>
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**group** [[aa-group-id](#)] *number*

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i>
Tree	<a href="#">group</a>
Description	Commands in this context configure an Application Assurance group and partition parameters.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[aa-group-id]** *number*

Synopsis	AA group ID
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i>
Tree	<a href="#">group</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**certificate-profile** [[cert-prof-name](#)] *string*

Synopsis	Enter the <b>certificate-profile</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">certificate-profile</a> <i>string</i>
Tree	<a href="#">certificate-profile</a>
Description	Commands in this context create a certificate profile to be used for certificate-based encryption in HTTP header enrichment.



Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[cert-prof-name]** *string*

Synopsis AA group certificate profile name  
Context **configure** [application-assurance](#) [group](#) *number* [certificate-profile](#) *string*  
Tree [certificate-profile](#)  
String Length 1 to 32  
Notes This element is part of a list key.  
Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the AA certificate profile  
Context **configure** [application-assurance](#) [group](#) *number* [certificate-profile](#) *string* **admin-state** *keyword*  
Tree [admin-state](#)  
Options enable, disable  
Default disable  
Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
Context **configure** [application-assurance](#) [group](#) *number* [certificate-profile](#) *string* **description** *string*  
Tree [description](#)  
String Length 1 to 80  
Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**file string****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Certificate file name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">certificate-profile</a> <i>string</i> <a href="#">file</a> <i>string</i>
Tree	<a href="#">file</a>
String Length	1 to 95
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**cflowd**

Synopsis	Enter the <b>cflowd</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">cflowd</a>
Tree	<a href="#">cflowd</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of cflowd export
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">cflowd</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**collector** [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [port](#) *number*

Synopsis	Enter the <b>collector</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">cflowd</a> <a href="#">collector</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">port</a> <i>number</i>
Tree	<a href="#">collector</a>

Description	Commands in this context configure flow data collectors for cflowd data. In the current release, the system supports IPv4 addresses only for the cflowd collector host.
Max. Instances	2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the remote cflowd collector host
Context	<b>configure</b> <b>application-assurance</b> <b>group</b> <i>number</i> <b>cflowd collector</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>port</b> <i>number</i>
Tree	<b>collector</b>
Description	This command configures the IP address of the remote cflowd collector host. In the current release, the system supports IPv4 addresses only for the cflowd collector host.
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port number**

Synopsis	Cflowd collector host port number
Context	<b>configure</b> <b>application-assurance</b> <b>group</b> <i>number</i> <b>cflowd collector</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>port</b> <i>number</i>
Tree	<b>collector</b>
Description	This command configures the UDP port number used by the remote cflowd collector host. In the MD-CLI, the default port is 4739.
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the cflowd export
Context	<b>configure</b> <a href="#">application-assurance group number cflowd collector</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">port number admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number cflowd collector</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">port number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**comprehensive**

Synopsis	Enter the <b>comprehensive</b> context
Context	<b>configure</b> <a href="#">application-assurance group number cflowd comprehensive</a>
Tree	<a href="#">comprehensive</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**flow-rate** *number*

Synopsis	Cflowd flow sampling rate
Context	<b>configure</b> <a href="#">application-assurance group number cflowd comprehensive flow-rate number</a>
Tree	<a href="#">flow-rate</a>
Range	1 to 1000
Units	flows per second

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **flow-rate-2** *number*

Synopsis	Cflowd per-flow second sampling rate
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">cflowd comprehensive flow-rate-2 number</a>
Tree	<a href="#">flow-rate-2</a>
Range	1 to 1000
Units	flows per second
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **template**

Synopsis	Enter the <b>template</b> context
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">cflowd comprehensive template</a>
Tree	<a href="#">template</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dynamic-fields**

Synopsis	Enter the <b>dynamic-fields</b> context
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">cflowd comprehensive template dynamic-fields</a>
Tree	<a href="#">dynamic-fields</a>
Description	Commands in this context configure the fields that are included in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the dynamic fields
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">cflowd</a> <a href="#">comprehensive</a> <a href="#">template</a> <a href="#">dynamic-fields</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **field** [[field-name](#)] *string*

Synopsis	Add a list entry for <b>field</b>
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">cflowd</a> <a href="#">comprehensive</a> <a href="#">template</a> <a href="#">dynamic-fields</a> <a href="#">field</a> <i>string</i>
Tree	<a href="#">field</a>
Description	This command adds a dynamic field to be included in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[field-name]** *string*

Synopsis	Cflowd template dynamic field name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">cflowd</a> <a href="#">comprehensive</a> <a href="#">template</a> <a href="#">dynamic-fields</a> <a href="#">field</a> <i>string</i>
Tree	<a href="#">field</a>
Description	<p>This command specifies the name of the field to be included in the exported cflowd template.</p> <ul style="list-style-type: none"> <li>• Common to all templates are the following values: flowStartSeconds   flowDuration Milliseconds   postIpprecedence   aaProt   aaApp   aaAppGrp   hostName   hostName Extended   deviceId   deviceMfgId   deviceOsId   ipFamily   deviceOsVer1   device OsVer2   deviceOsVer3   aniType   aniTopology   aniCongestionState   apn   charge Id   mnc   imsi   msisdN   sgw-sgsnAddr   pgw-ggsnAddr   bsid   ratType   regionId   cellId   timeZone   aaChargingGrp   flowAttr_video   flowAttr_abr_service   flowAttr_audio   flowAttr_encrypted   flowAttr_download   flowAttr_upload   flowAttr_realtime_communication   aaSubTetheringState   imei   ipTTL   imei roamingStatus   mcc   uli   chargingChar   plmnid   customerId</li> <li>• When AA is deployed in FWA SR, the following value applies: ApnExtended</li> <li>• For the rtp-voice template only, the following values apply: flowStartSeconds   flow Duration Milliseconds   postIpprecedence   aaProt   aaApp   aaAppGrp   rtpBurstCount   rtpAvgBurstLengthMs   rtpGapCount   rtpAvgGapLengthMs   MAPDV   RBurst   RGap   SSRC</li> </ul>

- For the rtp-video template only, the following values apply: flowStartSeconds | flowDurationMilliseconds | postItpPrecedence | aaProt | aaApp | aaAppGrp | rtpRefClockRate | MOSAV | VSTQ | estimatedPSNR | GoPType | avgGoPLength | avgInterIframeGap | imageWidth | imageHeight | frameRate | slicesPerIframe | SSRC | videoInterlaced | IFrameReceived | IFrameImpaired | PFrameReceived | PFrameImpaired | BFrameReceived | BFrameImpaired | SIFrameReceived | SIFrameImpaired | SPFrameReceived | SPFrameImpaired | frameInterArrivalJitter | IFrameInterArrivalJitter | avgFrameArrivalDelay
- For the rtp-audio template only, the following values apply: flowStartSeconds | flowDurationMilliseconds | postItpPrecedence | aaProt | aaApp | aaAppGrp | rtpBurstCount | rtpAvgBurstLengthPkts | rtpGapCount | rtpAvgGapLengthPkts | PPDVM | rtpNumAudioChannels | rtpRefClockRate | rtpPeakAudioBw | SSRC | hostName
- For volume and comprehensive templates, the following values apply: tcpSessionEstDelay | tcpRetransmittedBytes | tcpRetransmittedPackets

String Length 1 to 32

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### field-selection *keyword*

Synopsis Field selection method

Context **configure** [application-assurance](#) [group](#) *number* [cflowd](#) [comprehensive](#) [template](#) [field-selection](#) *keyword*

Tree [field-selection](#)

Description This command configures the method for selecting the fields to be included in the exported cflowd template.

Options legacy, dynamic

Default legacy

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### direct-export

Synopsis Enter the **direct-export** context

Context **configure** [application-assurance](#) [group](#) *number* [cflowd](#) [direct-export](#)

Tree [direct-export](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**collector** [[collector-id](#)] *number*

Synopsis	Enter the <b>collector</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">cflowd direct-export collector</a> <i>number</i>
Tree	<a href="#">collector</a>
Max. Instances	16
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[collector-id]** *number*

Synopsis	Cflowd direct export collector ID
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">cflowd direct-export collector</a> <i>number</i>
Tree	<a href="#">collector</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**address** [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [port](#) *number*

Synopsis	Enter the <b>address</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">cflowd direct-export collector</a> <i>number</i> <a href="#">address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">port</a> <i>number</i>
Tree	<a href="#">address</a>
Description	Commands in this context configure the cflowd direct export collector IP address. In the current release, the system supports IPv4 addresses only for the cflowd direct export collector.
Max. Instances	2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the remote cflowd collector host
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">cflowd</a> <a href="#">direct-export</a> <a href="#">collector</a> <i>number</i> <a href="#">address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">port</a> <i>number</i>
Tree	<a href="#">address</a>
Description	This command configures the IP address of the remote cflowd collector host. In the current release, the system supports IPv4 addresses only for the cflowd collector host.
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port number**

Synopsis	Cflowd collector host port number
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">cflowd</a> <a href="#">direct-export</a> <a href="#">collector</a> <i>number</i> <a href="#">address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">port</a> <i>number</i>
Tree	<a href="#">address</a>
Description	This command configures the UDP port number used by the remote cflowd collector host. In the MD-CLI, the default port is 4739.
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of the direct export collector
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">cflowd</a> <a href="#">direct-export</a> <a href="#">collector</a> <i>number</i> <a href="#">address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">port</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Description	This command sets the administrative state of the cflowd direct export collector. In the current release, the system supports IPv4 addresses only for the cflowd direct export collector.

Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">cflowd direct-export collector number</a> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **vlan-id** *number*

Synopsis	Cflowd direct export VLAN ID
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">cflowd direct-export vlan-id number</a>
Tree	<a href="#">vlan-id</a>
Range	1 to 4094
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **export-override**

Synopsis	Enter the <b>export-override</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">cflowd export-override</a>
Tree	<a href="#">export-override</a>
Description	<p>Commands in this context configure the AA subtype used in the cflowd record export. The cflowd statistics exported to the cflowd collector look identical to AA for the type of system defined by the mode. The following cflowd export fields are affected:</p> <ul style="list-style-type: none"> <li>• The cflowd export observation point (field 138) mode is derived from the export-override category that is selected.</li> <li>• The cflowd export AA_Subscriber_Type (field 12) mode is modified as configured, using existing field types.</li> </ul>

- The cflowd interface name is used as the sub-ID field, optionally modified to use the configured **mode** and **prefix** commands for global identifiers.

All AA cflowd record types are affected by export override. To change the export override or prefix, cflowd must first be disabled. When this command is set back to the default, the prefix is also set back to its default.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### mode keyword



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	AA cflowd export override mode
Context	<b>configure</b> <a href="#">application-assurance group number cflowd export-override mode keyword</a>
Tree	<a href="#">mode</a>
Description	This command specifies the type of system emulated for the cflowd export.
Options	mobile, ifname-obfuscate
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### prefix string



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	AA group cflowd export override prefix
Context	<b>configure</b> <a href="#">application-assurance group number cflowd export-override prefix string</a>
Tree	<a href="#">prefix</a>
Description	This command specifies the prefix-string associated with the export override. The prefix string specifies up to an 8 character string. If the 8 character prefix is "ABCDEFG_" for a particular node, the cflowd export override would generate IPv4 interface names such as ABCDEF_G_255.255.255.255 or IPv6 as ABCDEF_G_2001:DB8:EF01:2345::/64. By default, the prefix is left blank.
String Length	1 to 8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## obfuscation

Synopsis	Enter the <b>obfuscation</b> context
Context	<b>configure</b> <a href="#">application-assurance group number cflowd obfuscation</a>
Tree	<a href="#">obfuscation</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## aes-128-encryption-key *string*

Synopsis	AES-128 encryption key
Context	<b>configure</b> <a href="#">application-assurance group number cflowd obfuscation aes-128-encryption-key string</a>
Tree	<a href="#">aes-128-encryption-key</a>
Description	This command specifies the AES-128 key used to encrypt export cflowd fields.
String Length	51
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## aes-256-encryption-key *string*

Synopsis	AES-256 encryption key
Context	<b>configure</b> <a href="#">application-assurance group number cflowd obfuscation aes-256-encryption-key string</a>
Tree	<a href="#">aes-256-encryption-key</a>
Description	This command specifies the AES-256 key used to encrypt exported cflowd fields.
String Length	71
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## rtp-performance

Synopsis	Enter the <b>rtp-performance</b> context
Context	<b>configure</b> <a href="#">application-assurance group number cflowd rtp-performance</a>
Tree	<a href="#">rtp-performance</a>

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## audio-template

Synopsis	Enter the <b>audio-template</b> context
Context	<b>configure</b> <a href="#">application-assurance group number cflowd rtp-performance audio-template</a>
Tree	<a href="#">audio-template</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dynamic-fields

Synopsis	Enter the <b>dynamic-fields</b> context
Context	<b>configure</b> <a href="#">application-assurance group number cflowd rtp-performance audio-template dynamic-fields</a>
Tree	<a href="#">dynamic-fields</a>
Description	Commands in this context configure dynamic fields to be included in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of the dynamic fields
Context	<b>configure</b> <a href="#">application-assurance group number cflowd rtp-performance audio-template dynamic-fields admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## field [[field-name](#)] *string*

Synopsis	Add a list entry for <b>field</b>
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">cflowd</a> <a href="#">rtp-performance</a> <a href="#">audio-template</a> <a href="#">dynamic-fields</a> <a href="#">field</a> <i>string</i>
Tree	<a href="#">field</a>
Description	This command adds a list entry for fields to include in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### [field-name] *string*

Synopsis	Cflowd template dynamic field name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">cflowd</a> <a href="#">rtp-performance</a> <a href="#">audio-template</a> <a href="#">dynamic-fields</a> <a href="#">field</a> <i>string</i>
Tree	<a href="#">field</a>
Description	<p>This command specifies the name of the field to be included in the exported cflowd template.</p> <ul style="list-style-type: none"> <li>• Common to all templates are the following values: flowStartSeconds   flowDuration Milliseconds   postIpPrecedence   aaProt   aaApp   aaAppGrp   hostName   hostName Extended   deviceId   deviceMfgId   deviceOsId   ipFamily   deviceOsVer1   device OsVer2   deviceOsVer3   aniType   aniTopology   aniCongestionState   apn   charge Id   mnc   imsi   msisdn   sgw-sgsnAddr   pgw-ggsnAddr   bsid   ratType   regionId   cellId   timeZone   aaChargingGrp   flowAttr_video   flowAttr_abr_service   flowAttr_audio   flowAttr_encrypted   flowAttr_download   flowAttr_upload   flowAttr_realtime_communication   aaSubTetheringState   imei   ipTTL   imei roamingStatus   mcc   uli   chargingChar   plmnid   customerId</li> <li>• When AA is deployed in FWA SR, the following value applies: ApnExtended</li> <li>• For the rtp-voice template only, the following values apply: flowStartSeconds   flow DurationMilliseconds   postIpPrecedence   aaProt   aaApp   aaAppGrp   rtpBurstCount   rtpAvgBurstLengthMs   rtpGapCount   rtpAvgGapLengthMs   MAPDV   RBurst   RGap   SSRC</li> <li>• For the rtp-video template only, the following values apply: flowStartSeconds   flow DurationMilliseconds   postIpPrecedence   aaProt   aaApp   aaAppGrp   rtpRefClock Rate   MOSAV   VSTQ   estimatedPSNR   GoPType   avgGoPLength   avgInterFrame Gap   imageWidth   imageHeight   frameRate   slicesPerFrame   SSRC   video Interlaced   IFrameReceived   IFrameImpaired   PFrameReceived   PFrameImpaired   BFrameReceived   BFrameImpaired   SIFrameReceived   SIFrameImpaired   SPFrameReceived   SPFrameImpaired   frameInterArrivalJitter   IFrameInterArrival Jitter   avgFrameArrivalDelay</li> <li>• For the rtp-audio template only, the following values apply: flowStartSeconds   flow DurationMilliseconds   postIpPrecedence   aaProt   aaApp   aaAppGrp   rtpBurst Count   rtpAvgBurstLengthPkts   rtpGapCount   rtpAvgGapLengthPkts   PPDVM   rtp NumAudioChannels   rtpRefClockRate   rtpPeakAudioBw   SSRC   hostName</li> <li>• For volume and comprehensive templates, the following values apply: tcpSessionEst Delay   tcpRetransmittedBytes   tcpRetransmittedPackets</li> </ul>

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **field-selection** *keyword*

Synopsis	Field selection method
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">cflowd</a> <a href="#">rtp-performance</a> <a href="#">audio-template</a> <b>field-selection</b> <i>keyword</i>
Tree	<a href="#">field-selection</a>
Description	This command configures the method for selecting the fields to be included in the exported cflowd template.
Options	legacy, dynamic
Default	legacy
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **flow-rate** *number*

Synopsis	Cflowd flow sampling rate
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">cflowd</a> <a href="#">rtp-performance</a> <b>flow-rate</b> <i>number</i>
Tree	<a href="#">flow-rate</a>
Range	1 to 1000
Units	flows per second
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **flow-rate-2** *number*

Synopsis	Cflowd per-flow second sampling rate
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">cflowd</a> <a href="#">rtp-performance</a> <b>flow-rate-2</b> <i>number</i>
Tree	<a href="#">flow-rate-2</a>
Range	1 to 1000

Units	flows per second
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## video-template

Synopsis	Enter the <b>video-template</b> context
Context	<b>configure</b> <a href="#">application-assurance group number cflowd rtp-performance video-template</a>
Tree	<a href="#">video-template</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dynamic-fields

Synopsis	Enter the <b>dynamic-fields</b> context
Context	<b>configure</b> <a href="#">application-assurance group number cflowd rtp-performance video-template dynamic-fields</a>
Tree	<a href="#">dynamic-fields</a>
Description	Commands in this context configure dynamic fields to be included in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of the dynamic fields
Context	<b>configure</b> <a href="#">application-assurance group number cflowd rtp-performance video-template dynamic-fields admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**field** [*field-name*] *string*

Synopsis	Add a list entry for <b>field</b>
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">cflowd</a> <a href="#">rtp-performance</a> <a href="#">video-template</a> <a href="#">dynamic-fields</a> <b>field</b> <i>string</i>
Tree	<a href="#">field</a>
Description	This command adds a list entry for the fields to include in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[field-name]** *string*

Synopsis	Cflowd template dynamic field name
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">cflowd</a> <a href="#">rtp-performance</a> <a href="#">video-template</a> <a href="#">dynamic-fields</a> <b>field</b> <i>string</i>
Tree	<a href="#">field</a>
Description	<p>This command specifies the name of the field to be included in the exported cflowd template.</p> <ul style="list-style-type: none"> <li>• Common to all templates are the following values: flowStartSeconds   flowDuration Milliseconds   postIpPrecedence   aaProt   aaApp   aaAppGrp   hostName   hostName Extended   deviceId   deviceMfgId   deviceOsId   ipFamily   deviceOsVer1   device OsVer2   deviceOsVer3   aniType   aniTopology   aniCongestionState   apn   charge Id   mnc   imsi   msisdn   sgw-sgsnAddr   pgw-ggsnAddr   bsid   ratType   regionId   cellId   timeZone   aaChargingGrp   flowAttr_video   flowAttr_abr_service   flowAttr_audio   flowAttr_encrypted   flowAttr_download   flowAttr_upload   flowAttr_realtime_communication   aaSubTetheringState   imei   ipTTL   imei roamingStatus   mcc   uli   chargingChar   plmnid   customerId</li> <li>• When AA is deployed in FWA SR, the following value applies: ApnExtended</li> <li>• For the rtp-voice template only, the following values apply: flowStartSeconds   flow DurationMilliseconds   postIpPrecedence   aaProt   aaApp   aaAppGrp   rtpBurstCount   rtpAvgBurstLengthMs   rtpGapCount   rtpAvgGapLengthMs   MAPDV   RBurst   RGap   SSRC</li> <li>• For the rtp-video template only, the following values apply: flowStartSeconds   flow DurationMilliseconds   postIpPrecedence   aaProt   aaApp   aaAppGrp   rtpRefClock Rate   MOSAV   VSTQ   estimatedPSNR   GoPType   avgGoPLength   avgInterIframe Gap   imageWidth   imageHeight   frameRate   slicesPerIframe   SSRC   video Interlaced   IFrameReceived   IFrameImpaired   PFrameReceived   PFrameImpaired   BFrameReceived   BFrameImpaired   SIFrameReceived   SIFrameImpaired   SPFrameReceived   SPFrameImpaired   frameInterArrivalJitter   IFrameInterArrival Jitter   avgFrameArrivalDelay</li> <li>• For the rtp-audio template only, the following values apply: flowStartSeconds   flow DurationMilliseconds   postIpPrecedence   aaProt   aaApp   aaAppGrp   rtpBurst Count   rtpAvgBurstLengthPkts   rtpGapCount   rtpAvgGapLengthPkts   PPDVM   rtp NumAudioChannels   rtpRefClockRate   rtpPeakAudioBw   SSRC   hostName</li> </ul>

- For volume and comprehensive templates, the following values apply: tcpSessionEst Delay | tcpRetransmittedBytes |tcpRetransmittedPackets

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### field-selection *keyword*

Synopsis	Field selection method
Context	<b>configure</b> <a href="#">application-assurance group number cflowd rtp-performance video-template field-selection keyword</a>
Tree	<a href="#">field-selection</a>
Description	This command configures the method for selecting the fields to be included in the exported cflowd template.
Options	legacy, dynamic
Default	legacy
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### voice-template

Synopsis	Enter the <b>voice-template</b> context
Context	<b>configure</b> <a href="#">application-assurance group number cflowd rtp-performance voice-template</a>
Tree	<a href="#">voice-template</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### dynamic-fields

Synopsis	Enter the <b>dynamic-fields</b> context
Context	<b>configure</b> <a href="#">application-assurance group number cflowd rtp-performance voice-template dynamic-fields</a>
Tree	<a href="#">dynamic-fields</a>
Description	Commands in this context configure dynamic fields to be included in the exported cflowd template.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the dynamic fields
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">cflowd</a> <a href="#">rtp-performance</a> <a href="#">voice-template</a> <a href="#">dynamic-fields</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **field** [[field-name](#)] *string*

Synopsis	Add a list entry for <b>field</b>
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">cflowd</a> <a href="#">rtp-performance</a> <a href="#">voice-template</a> <a href="#">dynamic-fields</a> <b>field</b> <i>string</i>
Tree	<a href="#">field</a>
Description	This command adds a cflowd record field to the list included in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[field-name]** *string*

Synopsis	Cflowd template dynamic field name
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">cflowd</a> <a href="#">rtp-performance</a> <a href="#">voice-template</a> <a href="#">dynamic-fields</a> <b>field</b> <i>string</i>
Tree	<a href="#">field</a>
Description	This command specifies the name of the field to be included in the exported cflowd template. <ul style="list-style-type: none"> <li>Common to all templates are the following values: flowStartSeconds   flowDuration Milliseconds   postItpPrecedence   aaProt   aaApp   aaAppGrp   hostName   hostName Extended   deviceId   deviceMfgId   deviceOsId   ipFamily   deviceOsVer1   device OsVer2   deviceOsVer3   aniType   aniTopology   aniCongestionState   apn   charge Id   mnc   imsi   msisdn   sgw-sgsnAddr   pgw-ggsnAddr   bsid   ratType   regionId  </li> </ul>

cellId | timeZone | aaChargingGrp | flowAttr\_video | flowAttr\_abr\_service | flowAttr\_audio | flowAttr\_encrypted | flowAttr\_download | flowAttr\_upload | flowAttr\_realtime\_communication | aaSubTetheringState | imei | ipTTL | imei\_roamingStatus | mcc | uli | chargingChar | plmnid | customerId

- When AA is deployed in FWA SR, the following value applies: ApnExtended
- For the rtp-voice template only, the following values apply: flowStartSeconds | flowDurationMilliseconds | postIpPrecedence | aaProt | aaApp | aaAppGrp | rtpBurstCount | rtpAvgBurstLengthMs | rtpGapCount | rtpAvgGapLengthMs | MAPDV | RBurst | RGap | SSRC
- For the rtp-video template only, the following values apply: flowStartSeconds | flowDurationMilliseconds | postIpPrecedence | aaProt | aaApp | aaAppGrp | rtpRefClockRate | MOSAV | VSTQ | estimatedPSNR | GoPType | avgGoPLength | avgInterFrameGap | imageWidth | imageHeight | frameRate | slicesPerIFrame | SSRC | videoInterlaced | IFrameReceived | IFrameImpaired | PFrameReceived | PFrameImpaired | BFrameReceived | BFrameImpaired | SIFrameReceived | SIFrameImpaired | SPFrameReceived | SPFrameImpaired | frameInterArrivalJitter | IFrameInterArrivalJitter | avgFrameArrivalDelay
- For the rtp-audio template only, the following values apply: flowStartSeconds | flowDurationMilliseconds | postIpPrecedence | aaProt | aaApp | aaAppGrp | rtpBurstCount | rtpAvgBurstLengthPkts | rtpGapCount | rtpAvgGapLengthPkts | PPDVM | rtpNumAudioChannels | rtpRefClockRate | rtpPeakAudioBw | SSRC | hostName
- For volume and comprehensive templates, the following values apply: tcpSessionEstDelay | tcpRetransmittedBytes | tcpRetransmittedPackets

String Length 1 to 32

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### field-selection *keyword*

Synopsis Field selection method

Context **configure** [application-assurance group](#) *number* [cflowd](#) [rtp-performance](#) [voice-template](#) **field-selection** *keyword*

Tree [field-selection](#)

Description This command configures the method for selecting the fields to be included in the exported cflowd template.

Options legacy, dynamic

Default legacy

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## tcp-performance

Synopsis	Enter the <b>tcp-performance</b> context
Context	<b>configure</b> <a href="#">application-assurance group number cflowd tcp-performance</a>
Tree	<a href="#">tcp-performance</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## flow-rate *number*

Synopsis	Cflowd flow sampling rate
Context	<b>configure</b> <a href="#">application-assurance group number cflowd tcp-performance flow-rate number</a>
Tree	<a href="#">flow-rate</a>
Range	1 to 1000
Units	flows per second
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## flow-rate-2 *number*

Synopsis	Cflowd per-flow second sampling rate
Context	<b>configure</b> <a href="#">application-assurance group number cflowd tcp-performance flow-rate-2 number</a>
Tree	<a href="#">flow-rate-2</a>
Range	1 to 1000
Units	flows per second
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## template

Synopsis	Enter the <b>template</b> context
Context	<b>configure</b> <a href="#">application-assurance group number cflowd tcp-performance template</a>
Tree	<a href="#">template</a>
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dynamic-fields

Synopsis Enter the **dynamic-fields** context

Context **configure** [application-assurance group number cflowd tcp-performance template dynamic-fields](#)

Tree [dynamic-fields](#)

Description Commands in this context configure the fields to be included in the exported cflowd template.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis Administrative state of the dynamic fields

Context **configure** [application-assurance group number cflowd tcp-performance template dynamic-fields admin-state keyword](#)

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## field [[field-name](#)] *string*

Synopsis Add a list entry for **field**

Context **configure** [application-assurance group number cflowd tcp-performance template dynamic-fields field string](#)

Tree [field](#)

Description This command adds a list entry for fields to include in the exported cflowd template.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[field-name]** *string*

Synopsis	Cflowd template dynamic field name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">cflowd</a> <a href="#">tcp-performance</a> <a href="#">template</a> <a href="#">dynamic-fields</a> <a href="#">field</a> <i>string</i>
Tree	<a href="#">field</a>
Description	<p>This command specifies the name of the field to be included in the exported cflowd template.</p> <ul style="list-style-type: none"> <li>• Common to all templates are the following values: flowStartSeconds   flowDuration Milliseconds   postIpPrecedence   aaProt   aaApp   aaAppGrp   hostName   hostName Extended   deviceId   deviceMfgId   deviceOsId   ipFamily   deviceOsVer1   device OsVer2   deviceOsVer3   aniType   aniTopology   aniCongestionState   apn   charge Id   mnc   imsi   msisdn   sgw-sgsnAddr   pgw-ggsnAddr   bsid   ratType   regionId   cellId   timeZone   aaChargingGrp   flowAttr_video   flowAttr_abr_service   flowAttr_audio   flowAttr_encrypted   flowAttr_download   flowAttr_upload   flowAttr_realtime_communication   aaSubTetheringState   imei   ipTTL   imei roamingStatus   mcc   uli   chargingChar   plmnid   customerId</li> <li>• When AA is deployed in FWA SR, the following value applies: ApnExtended</li> <li>• For the rtp-voice template only, the following values apply: flowStartSeconds   flow DurationMilliseconds   postIpPrecedence   aaProt   aaApp   aaAppGrp   rtpBurstCount   rtpAvgBurstLengthMs   rtpGapCount   rtpAvgGapLengthMs   MAPDV   RBurst   RGap   SSRC</li> <li>• For the rtp-video template only, the following values apply: flowStartSeconds   flow DurationMilliseconds   postIpPrecedence   aaProt   aaApp   aaAppGrp   rtpRefClock Rate   MOSAV   VSTQ   estimatedPSNR   GoPType   avgGoPLength   avgInterFrame Gap   imageWidth   imageHeight   frameRate   slicesPerFrame   SSRC   video Interlaced   IFrameReceived   IFrameImpaired   PFrameReceived   PFrameImpaired   BFrameReceived   BFrameImpaired   SIFrameReceived   SIFrameImpaired   SPFrameReceived   SPFrameImpaired   frameInterArrivalJitter   IFrameInterArrival Jitter   avgFrameArrivalDelay</li> <li>• For the rtp-audio template only, the following values apply: flowStartSeconds   flow DurationMilliseconds   postIpPrecedence   aaProt   aaApp   aaAppGrp   rtpBurst Count   rtpAvgBurstLengthPkts   rtpGapCount   rtpAvgGapLengthPkts   PPDVM   rtp NumAudioChannels   rtpRefClockRate   rtpPeakAudioBw   SSRC   hostName</li> <li>• For volume and comprehensive templates, the following values apply: tcpSessionEst Delay   tcpRetransmittedBytes   tcpRetransmittedPackets</li> </ul>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**field-selection** *keyword*

Synopsis	Field selection method
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">cflowd tcp-performance template field-selection</a> <i>keyword</i>
Tree	<a href="#">field-selection</a>
Description	This command configures the method for selecting the fields to be included in the exported cflowd template.
Options	legacy, dynamic
Default	legacy
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**template-retransmit** *number*

Synopsis	Template retransmit time
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">cflowd template-retransmit</a> <i>number</i>
Tree	<a href="#">template-retransmit</a>
Range	10 to 600
Units	seconds
Default	600
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**volume**

Synopsis	Enter the <b>volume</b> context
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">cflowd volume</a>
Tree	<a href="#">volume</a>
Description	Commands in this context configure the cflowd volume export.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**rate** *number*

Synopsis	Cflowd packet sampling rate
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Context	<b>configure</b> <a href="#">application-assurance group number cflowd volume rate number</a>
Tree	<a href="#">rate</a>
Range	1 to 10000
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## template

Synopsis	Enter the <b>template</b> context
Context	<b>configure</b> <a href="#">application-assurance group number cflowd volume template</a>
Tree	<a href="#">template</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dynamic-fields

Synopsis	Enter the <b>dynamic-fields</b> context
Context	<b>configure</b> <a href="#">application-assurance group number cflowd volume template dynamic-fields</a>
Tree	<a href="#">dynamic-fields</a>
Description	Commands in this context configure the fields to be included in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of the dynamic fields
Context	<b>configure</b> <a href="#">application-assurance group number cflowd volume template dynamic-fields admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**field** [*field-name*] *string*

Synopsis	Add a list entry for <b>field</b>
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">cflowd volume template dynamic-fields</a> <i>field string</i>
Tree	<a href="#">field</a>
Description	This command adds a list entry for the fields to be included in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[field-name]** *string*

Synopsis	Cflowd template dynamic field name
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">cflowd volume template dynamic-fields</a> <i>field string</i>
Tree	<a href="#">field</a>
Description	<p>This command specifies the name of the field to be included in the exported cflowd template.</p> <ul style="list-style-type: none"> <li>• Common to all templates are the following values: flowStartSeconds   flowDuration Milliseconds   postIIPPrecedence   aaProt   aaApp   aaAppGrp   hostName   hostName Extended   deviceId   deviceMfgId   deviceOsId   ipFamily   deviceOsVer1   device OsVer2   deviceOsVer3   aniType   aniTopology   aniCongestionState   apn   charge Id   mnc   imsi   msisdn   sgw-sgsnAddr   pgw-ggsnAddr   bsid   ratType   regionId   cellId   timeZone   aaChargingGrp   flowAttr_video   flowAttr_abr_service   flowAttr_audio   flowAttr_encrypted   flowAttr_download   flowAttr_upload   flowAttr_realtime_communication   aaSubTetheringState   imei   ipTTL   imei roamingStatus   mcc   uli   chargingChar   plmnid   customerId</li> <li>• When AA is deployed in FWA SR, the following value applies: ApnExtended</li> <li>• For the rtp-voice template only, the following values apply: flowStartSeconds   flow DurationMilliseconds   postIIPPrecedence   aaProt   aaApp   aaAppGrp   rtpBurstCount   rtpAvgBurstLengthMs   rtpGapCount   rtpAvgGapLengthMs   MAPDV   RBurst   RGap   SSRC</li> <li>• For the rtp-video template only, the following values apply: flowStartSeconds   flow DurationMilliseconds   postIIPPrecedence   aaProt   aaApp   aaAppGrp   rtpRefClock Rate   MOSAV   VSTQ   estimatedPSNR   GoPType   avgGoPLength   avgInterIframe Gap   imageWidth   imageHeight   frameRate   slicesPerIframe   SSRC   video Interlaced   IFrameReceived   IFrameImpaired   PFrameReceived   PFrameImpaired   BFrameReceived   BFrameImpaired   SIFrameReceived   SIFrameImpaired   SPFrameReceived   SPFrameImpaired   frameInterArrivalJitter   IFrameInterArrival Jitter   avgFrameArrivalDelay</li> <li>• For the rtp-audio template only, the following values apply: flowStartSeconds   flow DurationMilliseconds   postIIPPrecedence   aaProt   aaApp   aaAppGrp   rtpBurst</li> </ul>

Count| rtpAvgBurstLengthPkts | rtpGapCount |rtpAvgGapLengthPkts | PPDVM | rtp  
NumAudioChannels |rtpRefClockRate |rtpPeakAudioBw | SSRC | hostName

- For volume and comprehensive templates, the following values apply: tcpSessionEst  
Delay | tcpRetransmittedBytes |tcpRetransmittedPackets

String Length 1 to 32

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **field-selection** *keyword*

Synopsis Field selection method

Context **configure** [application-assurance](#) [group](#) *number* [cflowd](#) [volume](#) [template](#) [field-selection](#)  
*keyword*

Tree [field-selection](#)

Description This command configures the method for selecting the fields to be included in the  
exported cflowd template.

Options legacy, dynamic

Default legacy

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dns-ip-cache** [[dns-ip-cache-name](#)] *string*

Synopsis Enter the **dns-ip-cache** list instance

Context **configure** [application-assurance](#) [group](#) *number* [dns-ip-cache](#) *string*

Tree [dns-ip-cache](#)

Description Commands in this context configure a DNS IP cache that is used to snoop DNS  
requests generated by subscribers, to populate a cache of IP addresses that match a  
specified list of domain names. In the context of strengthening URL-content charging,  
Operators may also specify a list of trusted DNS servers to populate the DNS IP cache.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[dns-ip-cache-name]** *string*

Synopsis DNS IP cache name within the AA group

Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">dns-ip-cache</a> <i>string</i>
Tree	<a href="#">dns-ip-cache</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the AA DNS IP cache object
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">dns-ip-cache</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">dns-ip-cache</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dns-match**

Synopsis	Enter the <b>dns-match</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">dns-ip-cache</a> <i>string</i> <b>dns-match</b>
Tree	<a href="#">dns-match</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**domain** [**domain-name**] *string*

Synopsis	Enter the <b>domain</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number dns-ip-cache string dns-match domain string</a>
Tree	<a href="#">domain</a>
Description	Commands in this context configure a domain expression to populate the DNS IP cache.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[domain-name]** *string*

Synopsis	DNS IP cache domain name
Context	<b>configure</b> <a href="#">application-assurance group number dns-ip-cache string dns-match domain string</a>
Tree	<a href="#">domain</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**expression** *string*

Synopsis	AA DNS domain expression to match
Context	<b>configure</b> <a href="#">application-assurance group number dns-ip-cache string dns-match domain string expression string</a>
Tree	<a href="#">expression</a>
Description	This command specifies a domain name expression string used to define a pattern match. The domain expression uses the same syntax as the expressions used in <b>configure application-assurance group partition policy app-filter entry app-filters</b> configuration.
String Length	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**trusted-server-address** [[dns-server-address](#)] ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#))

Synopsis	Enter the <b>trusted-server-address</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number dns-ip-cache string dns-match trusted-server-address</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> )
Tree	<a href="#">trusted-server-address</a>
Description	Commands in this context configure a trusted DNS server address. DNS responses from this DNS server are used to populate the DNS IP cache.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[dns-server-address]** ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#))

Synopsis	Trusted DNS server address
Context	<b>configure</b> <a href="#">application-assurance group number dns-ip-cache string dns-match trusted-server-address</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> )
Tree	<a href="#">trusted-server-address</a>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**server-name** *string*

Synopsis	DNS server name
Context	<b>configure</b> <a href="#">application-assurance group number dns-ip-cache string dns-match trusted-server-address</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">server-name string</a>
Tree	<a href="#">server-name</a>
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip-cache**

Synopsis	Enter the <b>ip-cache</b> context
Context	<b>configure</b> <a href="#">application-assurance group number dns-ip-cache string ip-cache</a>
Tree	<a href="#">ip-cache</a>

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **high-watermark** *number*

Synopsis	High watermark value for the DNS IP cache
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">dns-ip-cache</a> <i>string</i> <a href="#">ip-cache</a> <b>high-watermark</b> <i>number</i>
Tree	<a href="#">high-watermark</a>
Description	This command configures the high watermark value for the DNS IP cache. When the number of cached IP addresses exceeds the threshold, the system generates a trap.
Range	0 to 100
Default	90
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **low-watermark** *number*

Synopsis	Low watermark value for the DNS IP cache
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">dns-ip-cache</a> <i>string</i> <a href="#">ip-cache</a> <b>low-watermark</b> <i>number</i>
Tree	<a href="#">low-watermark</a>
Description	This command configures the low watermark value for the DNS IP cache. When the number of cached IP addresses exceeds the high watermark threshold, the system generates a trap based on the high watermark. The trap clears after the number of cached IP addresses drops below the configured low watermark value.
Range	0 to 100
Default	80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **size** *number*

Synopsis	Maximum number of IP addresses stored in the cache
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">dns-ip-cache</a> <i>string</i> <a href="#">ip-cache</a> <b>size</b> <i>number</i>
Tree	<a href="#">size</a>

Range	10 to 64000
Default	10
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **static-address** [[static-ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Add a list entry for <b>static-address</b>
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">dns-ip-cache</a> <i>string</i> <a href="#">ip-cache</a> <a href="#">static-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">static-address</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[static-ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Trusted IP address for the DNS IP cache
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">dns-ip-cache</a> <i>string</i> <a href="#">ip-cache</a> <a href="#">static-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">static-address</a>
Description	This command configures an IP address to be used as a trusted IP address. For packets whose destination IP address matches that of the trusted IP address, a cache hit is assumed.
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **http-enrich** [[http-enrich-name](#)] *string*

Synopsis	Enter the <b>http-enrich</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">http-enrich</a> <i>string</i>
Tree	<a href="#">http-enrich</a>
Description	Commands in this context configure the attributes of the HTTP enrichment policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**[http-enrich-name]** *string*

Synopsis	HTTP header enrichment policy name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">http-enrich</a> <i>string</i>
Tree	<a href="#">http-enrich</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the HTTP enrichment policy
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">http-enrich</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">http-enrich</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**field** [[field-name](#)] *string*

Synopsis	Enter the <b>field</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">http-enrich</a> <i>string</i> <a href="#">field</a> <i>string</i>
Tree	<a href="#">field</a>
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[field-name]** *string*

Synopsis Field name to insert into the HTTP header

Context **configure** **application-assurance** **group** *number* **http-enrich** *string* **field** *string*

Tree **field**

Description This command specifies the field type to insert into the HTTP header. The command must be repeated for each field to be inserted. The same field cannot be inserted twice into the header under different header names.

**Note:** AA can insert two copies of the following fields in the same HTTP header (with a different header name):

imei-hyphenated, imei-hyphenated-2, imsi, imsi-2, static-string, static-string-2, user-location-raw, and user-location-raw2.

The following field types are supported in any deployment:

static-string - header name for the inserted string

static-string-2 - header name for the inserted string

subscriber-id - header name for the subscriber ID

subscriber-ip - header name for the subscriber IP address

The following field types are supported in Fixed Wireless Access (FWA) deployments only:

apn - complete APN string

apn-ni - APN Network Identifier (APN-NI) used by the UE

billing-type - UE charging type (charging characteristics)

dynamic-acr - dynamic Anonymous Customer Record (ACR)

static-acr - static ACR

imei-hyphenated - subscriber IMEI with format AABBBBBB-CCCCCC-EE

imei-hyphenated-2 - subscriber IMEI with format AABBBBBB-CCCCCC-EE

imei-sv - subscriber IMEI with format AABBBBBBCCCCCEE

imsi - subscriber IMSI

imsi-2 - subscriber IMSI

msisdn - subscriber MSISDN

msisdn-ts - subscriber MSISDN appended with the UNIX timestamp

msisdn-without-cc - subscriber MSISDN without a country code

pgw-ggsn-address - PGW/GGSN address serving the UE

plmn-id - Public Land Mobile Network (PLMN) ID of the SGSN/MME

rat-type - Radio Access Technology (RAT) type

timestamp - timestamp inserted in UNIX time format; for example, 1531204313

user-location - UE LOCATION (ULI)  
 user-location-3gpp - ULI encoded as defined in 3GPP 29.061  
 user-location-raw - ULI in raw format:<ULI-TYPE1>[+<ULI-TYPE2>]=<ULI HEX>  
 Example: x-locinfo: TAI+ECGI=1300622c46130062014adf16  
 user-location-raw-2 - ULI in raw format:<ULI-TYPE1>[+<ULI-TYPE2>]=<ULI HEX>  
 Example: x-locinfo: TAI+ECGI=1300622c46130062014adf16

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### aes-initialization-vector *string*

Synopsis	Initialization vector for the AES CBC encryption
Context	<b>configure</b> <a href="#">application-assurance group number http-enrich string field string aes-initialization-vector string</a>
Tree	<a href="#">aes-initialization-vector</a>
Description	This command configures the initialization vector used for the AES CBC encryption. The vector consists of 34 characters, that is, 0x followed by exactly 32 hexadecimal characters.
String Length	34
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### anti-spoof *boolean*

Synopsis	Enable anti-spoofing
Context	<b>configure</b> <a href="#">application-assurance group number http-enrich string field string anti-spoof boolean</a>
Tree	<a href="#">anti-spoof</a>
Description	When configured to <b>true</b> , this command enables the HTTP header enrichment anti-spoofing functionality.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**calling-line-id** *boolean*

Synopsis	Enable calling line identification
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">http-enrich string field string</a> <a href="#">calling-line-id boolean</a>
Tree	<a href="#">calling-line-id</a>
Description	When configured to <b>true</b> , this command configures the HTTP header for “x-up-calling-line-id” anti-spoofing.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**encode**

Synopsis	Enter the <b>encode</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">http-enrich string field string</a> <a href="#">encode</a>
Tree	<a href="#">encode</a>
Description	Commands in this context configure the encoding applied to the HTTP header enrichment field.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**cert-profile** *reference*

Synopsis	Certificate profile name used for encryption
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">http-enrich string field string</a> <a href="#">encode cert-profile reference</a>
Tree	<a href="#">cert-profile</a>
Reference	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">certificate-profile string</a>
Notes	The following elements are part of a choice: <b>cert-profile</b> or <b>key</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**key**

Synopsis	Enter the <b>key</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">http-enrich string field string</a> <a href="#">encode key</a>

Tree	<a href="#">key</a>
Description	Commands in this context configure the encryption fields.
Notes	The following elements are part of a choice: <b>cert-profile</b> or <b>key</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **type** *keyword*

Synopsis	Encoding type
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">http-enrich</a> <a href="#">string</a> <a href="#">field</a> <a href="#">string</a> <a href="#">encode</a> <a href="#">key</a> <a href="#">type</a> <i>keyword</i>
Tree	<a href="#">type</a>
Description	This command configures the encoding/ encryption method.
Options	md5, rc4, rc4-md5-base64, aes128, aes256, aes128cbc, aes256cbc
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **value** *string*

Synopsis	Secret key for encrypting the field
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">http-enrich</a> <a href="#">string</a> <a href="#">field</a> <a href="#">string</a> <a href="#">encode</a> <a href="#">key</a> <a href="#">value</a> <i>string</i>
Tree	<a href="#">value</a>
String Length	1 to 114
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **md5-salt** *string*

Synopsis	MD5 salt string
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">http-enrich</a> <a href="#">string</a> <a href="#">field</a> <a href="#">string</a> <a href="#">md5-salt</a> <a href="#">string</a>
Tree	<a href="#">md5-salt</a>
Description	This command configures an MD5 salt string. The configured string is appended to the parameter before performing MD5 hashing of the field.
String Length	1 to 16

Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **name** *string*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	HTTP header field name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">http-enrich</a> <a href="#">string</a> <a href="#">field</a> <a href="#">string</a> <a href="#">name</a> <a href="#">string</a>
Tree	<a href="#">name</a>
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **static-string** *string*

Synopsis	HTTP header enrichment template field static string
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">http-enrich</a> <a href="#">string</a> <a href="#">field</a> <a href="#">string</a> <a href="#">static-string</a> <a href="#">string</a>
Tree	<a href="#">static-string</a>
String Length	1 to 16
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rat-type-enrichment**

Synopsis	Enter the <b>rat-type-enrichment</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">http-enrich</a> <a href="#">string</a> <a href="#">rat-type-enrichment</a>
Tree	<a href="#">rat-type-enrichment</a>
Description	Commands in this context configure Radio Access Type (RAT) enrichment.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**rat-type** [[rat-type-name](#)] *keyword*

Synopsis	Enter the <b>rat-type</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">http-enrich</a> <i>string</i> <a href="#">rat-type-enrichment</a> <a href="#">rat-type</a> <i>keyword</i>
Tree	<a href="#">rat-type</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[rat-type-name]** *keyword*

Synopsis	RAT type name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">http-enrich</a> <i>string</i> <a href="#">rat-type-enrichment</a> <a href="#">rat-type</a> <i>keyword</i>
Tree	<a href="#">rat-type</a>
Description	This command configures a customised RAT value for the specified RAT-Type.
Options	utran, geran, wlan, gan, hspa-evol, eutran, virtual, eutran-nb, ehrpd, hrpd, cdma-1x, umb, wifi, nr, lte-m
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**rat-string** *string*

Synopsis	Customised RAT type value
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">http-enrich</a> <i>string</i> <a href="#">rat-type-enrichment</a> <a href="#">rat-type</a> <i>keyword</i> <a href="#">rat-string</a> <i>string</i>
Tree	<a href="#">rat-string</a>
String Length	1 to 31
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**http-error-redirect** [[http-error-redirect-name](#)] *string*

Synopsis	Enter the <b>http-error-redirect</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">http-error-redirect</a> <i>string</i>

Tree	<a href="#">http-error-redirect</a>
Description	Commands in this context configure an HTTP error redirect policy that contains important information relevant to the redirect server.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[http-error-redirect-name] string**

Synopsis	HTTP error redirect policy name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">http-error-redirect</a> <i>string</i>
Tree	<a href="#">http-error-redirect</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state keyword**

Synopsis	Administrative state of the HTTP error redirect object
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">http-error-redirect</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">http-error-redirect</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**error-code** [[error-code-value](#)] *number*

Synopsis	Enter the <b>error-code</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">http-error-redirect string error-code number</a>
Tree	<a href="#">error-code</a>
Description	Commands in this context configure the HTTP error status codes to which a redirect action is applied. Only messages with sizes less than that configured for the <b>custom-message-size</b> command are eligible for redirect action.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[error-code-value]** *number*

Synopsis	HTTP error code value for an HTTP error redirect
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">http-error-redirect string error-code number</a>
Tree	<a href="#">error-code</a>
Range	400 to 999
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**custom-message-size** *number*

Synopsis	HTTP error redirect error code custom message size
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">http-error-redirect string error-code number custom-message-size number</a>
Tree	<a href="#">custom-message-size</a>
Description	This command specifies the maximum message size above which an HTTP error redirect is not performed.
Max. Range	0 to 4294967295
Units	octets
Default	1024
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**http-host string**

Synopsis	HTTP host for the HTTP error redirect object
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">http-error-redirect string</a> <a href="#">http-host string</a>
Tree	<a href="#">http-host</a>
Description	This command specifies the HTTP hostname of the landing server (Barefruit or Xerocole). It is used in the HTTP GET operation from the client (which is being redirected) to the redirect search landing server. The hostname must contain a valid IP address or HTTP hostname or URI for the HTTP GET from the client to the landing server.
String Length	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**participant-id string**

Synopsis	Participant ID for the HTTP error redirect object
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">http-error-redirect string</a> <a href="#">participant-id string</a>
Tree	<a href="#">participant-id</a>
Description	This command specifies a string assigned to the operator by Barefruit. It is used by Barefruit landing servers (applies to template # 1 only).
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**template number**

Synopsis	Template ID for the HTTP error redirect object
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">http-error-redirect string</a> <a href="#">template number</a>
Tree	<a href="#">template</a>
Description	This command configures the template of parameters passed from the AA-ISA to the redirect server using JavaScript in the redirect packet. The template is specific to the redirect server used in the network. Currently, two partners are supported with AA-ISA redirect solution, Barefruit, and Xerocole.
Max. Range	0 to 4294967295
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **http-notification** [[http-notification-name](#)] *string*

Synopsis Enter the **http-notification** list instance

Context **configure** [application-assurance group number](#) [http-notification string](#)

Tree [http-notification](#)

Description Commands in this context configure an HTTP notification object for the subscriber in-browser notification.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[http-notification-name]** *string*

Synopsis HTTP notification policy name

Context **configure** [application-assurance group number](#) [http-notification string](#)

Tree [http-notification](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the AA HTTP notification object

Context **configure** [application-assurance group number](#) [http-notification string](#) **admin-state keyword**

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description

Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">http-notification</a> <a href="#">string</a> <a href="#">description</a> <a href="#">string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **interval** (*number* | *keyword*)

Synopsis	Minimum HTTP response notification interval
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">http-notification</a> <a href="#">string</a> <a href="#">interval</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">interval</a>
Range	1 to 1440
Units	minutes
Options	one-time
Default	one-time
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **script-url** *string*

Synopsis	Script URL inserted into the HTTP response
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">http-notification</a> <a href="#">string</a> <a href="#">script-url</a> <a href="#">string</a>
Tree	<a href="#">script-url</a>
Description	This command configures the URL of the script used by the HTTP notification policy.
String Length	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **template** *number*

Synopsis	Template ID for the AA HTTP notification object
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">http-notification</a> <a href="#">string</a> <a href="#">template</a> <a href="#">number</a>
Tree	<a href="#">template</a>

Description	This command configures the template that defines the format and attributes included in the HTTP notification message.
Max. Range	0 to 4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **http-redirect** [[http-redirect-name](#)] *string*

Synopsis	Enter the <b>http-redirect</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">http-redirect</a> <i>string</i>
Tree	<a href="#">http-redirect</a>
Description	Commands in this context configure the parameters of the HTTP redirect policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[http-redirect-name]** *string*

Synopsis	HTTP redirect policy name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">http-redirect</a> <i>string</i>
Tree	<a href="#">http-redirect</a>
Description	This command specifies the applied HTTP redirect name. If no redirect name is specified, HTTP redirect is not enabled.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the AA HTTP redirect object
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">http-redirect</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **captive-redirect**

**Synopsis** Enter the **captive-redirect** context

**Context** **configure** [application-assurance group number](#) [http-redirect string](#) **captive-redirect**

**Tree** [captive-redirect](#)

**Description** Commands in this context configure the captive redirect capability for an HTTP redirect policy. HTTP redirect policies using captive redirect can be used in conjunction with a session-filter policy to terminate TCP flows in the ISA-AA card before reaching the Internet to redirect subscribers to the predefined redirect URL.

Non-HTTP TCP flows are TCP reset. Captive redirect uses the provisioned VLAN ID to send the HTTP response to subscribers; therefore, this VLAN ID must be properly assigned in the same VPN as the subscriber.

The operator can select the URL arguments to include in the redirect URL using either a specific template ID or by configuring the redirect URL using a supported macro substitution keyword.

**Introduced** 21.10.R1

**Platforms** 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **vlan-id number**

**Synopsis** Captive redirect VLAN ID

**Context** **configure** [application-assurance group number](#) [http-redirect string](#) **captive-redirect** [vlan-id number](#)

**Tree** [vlan-id](#)

**Description** This command configures the VLAN ID for a captive redirect. Captive redirect uses the provisioned VLAN ID to send the HTTP response to subscribers; therefore, this VLAN ID must be properly assigned in the same VPN as the subscriber.

**Range** 1 to 4094

**Introduced** 21.10.R1

**Platforms** 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **description string**

**Synopsis** Text description

**Context** **configure** [application-assurance group number](#) [http-redirect string](#) **description** [string](#)

**Tree** [description](#)

String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **redirect-https** *boolean*

Synopsis	Enable HTTPS redirect
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">http-redirect string</a> <b>redirect-https</b> <i>boolean</i>
Tree	<a href="#">redirect-https</a>
Description	When set to <b>true</b> , the HTTP redirect policy redirects HTTPS sessions to the configured redirect URL.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **redirect-url** *string*

Synopsis	HTTP redirect URL
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">http-redirect string</a> <b>redirect-url</b> <i>string</i>
Tree	<a href="#">redirect-url</a>
Description	<p>This command configures the HTTP redirect URL which is the URL (page) that the user is redirected to when an HTTP redirect takes effect.</p> <p>The operator can select the URL arguments to include in the redirect URL, using either a specific template ID or by configuring any of the following macro substitution keywords:</p> <ul style="list-style-type: none"> <li>• \$URL - The Request-URI in the HTTP GET Request received</li> <li>• \$SUB - The subscriber ID</li> <li>• \$IP - The IP address of the subscriber host</li> <li>• \$RTRID - The router ID</li> <li>• \$URLPRM - The HTTP URL parameter associated with the subscriber</li> <li>• \$MAC - The UE MAC address</li> <li>• \$SAP - The UE SAP</li> <li>• \$CID - The circuit ID or interface ID of the subscriber</li> <li>• \$RID - The remote ID of the subscriber</li> <li>• \$CATID - The URL filter web-service rating category identifier</li> <li>• \$CATNAME - The URL filter web-service rating category name</li> </ul>

Only ESM and ESM-MAC sub types support \$MAC, \$SAP, \$CID, and \$RID macro substitution.

String Length	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tcp-client-reset** *boolean*

Synopsis	Enable TCP client reset
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">http-redirect string</a> <b>tcp-client-reset</b> <i>boolean</i>
Tree	<a href="#">tcp-client-reset</a>
Description	When set to <b>true</b> , this command enables an HTTP-redirect policy to initiate a TCP reset towards the client if the AA policy results in a redirect with packet drop but the HTTP redirect cannot be delivered. Scenarios for this include HTTP (TLS) sessions, blocking of non-HTTP TCP traffic, and blocking of existing flows after a policy re-evaluation of an existing subscriber.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **template** *number*

Synopsis	Template ID for the HTTP redirect object
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">http-redirect string</a> <b>template</b> <i>number</i>
Tree	<a href="#">template</a>
Description	This command configures the template that defines which parameters are appended to the HTTP host redirect field in the redirect message. The HTTP redirect template provides HTTP 302 redirect containing only the URL specified in the redirect policy, with no other parameters.
Max. Range	0 to 4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-identification-assist**

Synopsis	Enter the <b>ip-identification-assist</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <b>ip-identification-assist</b>



Tree	<a href="#">ip-identification-assist</a>
Description	<p>Commands in this context configure the IP identification assist feature, which uses IP addresses to assist in traffic identification.</p> <p>This optional mechanism is enabled by default and consults an internally generated and stored database when app-filters fail to classify the traffic as one of the configured applications from the AppDB.</p> <p>Use the <b>configure application-assurance group ip-identification-assist admin-state</b> command to disable the administrative state of the IP identification assist feature.</p>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of IP identification assist
Context	<b>configure</b> <a href="#">application-assurance group number ip-identification-assist admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **passive-dns**

Synopsis	Enter the <b>passive-dns</b> context
Context	<b>configure</b> <a href="#">application-assurance group number ip-identification-assist passive-dns</a>
Tree	<a href="#">passive-dns</a>
Description	Commands in this context configure passive DNS monitoring for the IP identification assist feature.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **monitor** *boolean*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use passive DNS monitoring to collect IP addresses
Context	<b>configure</b> <a href="#">application-assurance group number ip-identification-assist passive-dns monitor</a> <i>boolean</i>
Tree	<a href="#">monitor</a>
Description	When configured to <b>true</b> , the router collects IP addresses by passively monitoring DNS traffic. The router uses the collected IP addresses to build its internal database.
Default	true
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **trusted-server** [[ip-address](#)] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Enter the <b>trusted-server</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number ip-identification-assist passive-dns trusted-server</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">trusted-server</a>
Description	Commands in this context configure a DNS server that the IP identification assist feature is allowed to passively monitor.
Max. Instances	64
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[ip-address]** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the DNS server
Context	<b>configure</b> <a href="#">application-assurance group number ip-identification-assist passive-dns trusted-server</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">trusted-server</a>
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **comment** *string*

Synopsis	Name or description to associate with the DNS server
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">ip-identification-assist</a> <a href="#">passive-dns</a> <a href="#">trusted-server</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">comment</a> <i>string</i>
Tree	<a href="#">comment</a>
String Length	0 to 32
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **partition** [[aa-partition-id](#)] *number*

Synopsis	Enter the <b>partition</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i>
Tree	<a href="#">partition</a>
Description	Commands in this context configure the AA partition-related policies.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[aa-partition-id]** *number*

Synopsis	Partition ID within the AA group
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i>
Tree	<a href="#">partition</a>
Range	0 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **aa-sub-congestion-detection**

Synopsis	Enter the <b>aa-sub-congestion-detection</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">aa-sub-congestion-detection</a>
Tree	<a href="#">aa-sub-congestion-detection</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of congestion detection
Context	<b>configure</b> <a href="#">application-assurance group number partition number aa-sub-congestion-detection admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**rat-type** [[rat-type-name](#)] *keyword*

Synopsis	Enter the <b>rat-type</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number aa-sub-congestion-detection rat-type</a> <i>keyword</i>
Tree	<a href="#">rat-type</a>
Description	Commands in this context configure the RAT types for which unique RTT thresholds are configured.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[rat-type-name]** *keyword*

Synopsis	Mobile radio access technology (RAT) type
Context	<b>configure</b> <a href="#">application-assurance group number partition number aa-sub-congestion-detection rat-type</a> <i>keyword</i>
Tree	<a href="#">rat-type</a>
Options	utran, geran, wlan, gan, hspa-evol, eutran, virtual, eutran-nb, ehrpd, hrpd, cdma-1x, umb, wifi, nr, lte-m
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**rtt-threshold** (*number* | *keyword*)

Synopsis	Round trip time congestion threshold for a RAT type
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Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">aa-sub-congestion-detection rat-type</a> <i>keyword</i> <a href="#">rtt-threshold</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">rtt-threshold</a>
Description	This command configures the maximum acceptable round trip time (RTT) under no congestion. Any measured RTT above the threshold is considered an indication of possible congestion.
Range	1 to 500
Units	milliseconds
Options	not-applicable
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rtt-threshold** (*number* | *keyword*)

Synopsis	Round trip time congestion threshold
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">aa-sub-congestion-detection rtt-threshold</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">rtt-threshold</a>
Description	This command configures the default round trip delay threshold used by the DEM gateway algorithm to determine subscriber congestion for NLB-DEM. This default value is used when the current RAT-Type is not known, or has no associated configured RTT threshold.
Range	1 to 500
Units	milliseconds
Options	not-applicable
Default	173
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rtt-threshold-tolerance** *number*

Synopsis	RTT threshold tolerance for congestion detection
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">aa-sub-congestion-detection rtt-threshold-tolerance</a> <i>number</i>
Tree	<a href="#">rtt-threshold-tolerance</a>

Description	This command configures the round trip delay threshold tolerance used by the DEM gateway algorithm to determine subscriber-level congestion.
Range	0 to 100
Units	percent
Default	50
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **aa-sub-remote** *boolean*

Synopsis	Reverse subscriber traffic direction
Context	<b>configure</b> <a href="#">application-assurance group number partition number aa-sub-remote boolean</a>
Tree	<a href="#">aa-sub-remote</a>
Description	When configured to <b>true</b> , the direction of the from-subscriber and to-subscriber traffic is reversed for this group partition.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **access-network-location**

Synopsis	Enter the <b>access-network-location</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number access-network-location</a>
Tree	<a href="#">access-network-location</a>
Description	Commands in this context configure parameters related to dynamic experience management, also known as Access Network Location (ANL).
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **source** [[source-type](#)] *keyword*

Synopsis	Enter the <b>source</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number access-network-location source keyword</a>
Tree	<a href="#">source</a>

Description	Commands in this context configure location sources for dynamic experience management.
Max. Instances	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### [source-type] *keyword*

Synopsis	Access network location source
Context	<b>configure</b> <a href="#">application-assurance group number partition number access-network-location source</a> <i>keyword</i>
Tree	<a href="#">source</a>
Description	This command specifies the location or access technology. AA supports access points for WLGW access points or ULI-2gpp for mobile (for example, FWA).
Options	mobile-3g, access-point, uli-3gpp
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### rat-type [[rat-type-name](#)] *keyword*

Synopsis	Enter the <b>rat-type</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number access-network-location source</a> <i>keyword</i> <a href="#">rat-type</a> <i>keyword</i>
Tree	<a href="#">rat-type</a>
Description	Commands in this context configure the RAT types for which unique RTT thresholds are configured.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### [[rat-type-name](#)] *keyword*

Synopsis	Access network location RAT type
Context	<b>configure</b> <a href="#">application-assurance group number partition number access-network-location source</a> <i>keyword</i> <a href="#">rat-type</a> <i>keyword</i>
Tree	<a href="#">rat-type</a>

Options	utran, geran, wlan, gan, hspa-evol, eutran, virtual, eutran-nb, ehrpd, hrpd, cdma-1x, umb, wifi, nr, lte-m
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rtt-threshold** (*number* | *keyword*)

Synopsis	RTT congestion threshold for a RAT type
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">access-network-location source</a> <i>keyword</i> <a href="#">rat-type</a> <i>keyword</i> <b>rtt-threshold</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">rtt-threshold</a>
Description	This command specifies the maximum acceptable round trip time (RTT) under no congestion. Any measured RTT above the threshold is considered an indication of possible congestion.
Range	1 to 500
Units	milliseconds
Options	not-applicable
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rtt-threshold** (*number* | *keyword*)

Synopsis	Source round trip time congestion threshold
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">access-network-location source</a> <i>keyword</i> <b>rtt-threshold</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">rtt-threshold</a>
Description	This command configures the default round trip delay threshold used by the DEM gateway algorithm to determine ANL congestion. This default value is used when either the ANL RAT-Type is not known or has no associated configured RTT threshold.
Range	1 to 500
Units	milliseconds
Options	not-applicable
Default	173
Introduced	21.10.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rtt-threshold-tolerance** *number*

Synopsis Source round trip time congestion threshold tolerance

Context **configure** [application-assurance group number](#) [partition number](#) [access-network-location source keyword](#) **rtt-threshold-tolerance** *number*

Tree [rtt-threshold-tolerance](#)

Description This command configures the ANL round trip delay threshold tolerance used by the DEM gateway algorithm to determine ANL-level congestion.

Range 0 to 100

Units percent

Default 50

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **source-level** *keyword*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Access network location source level

Context **configure** [application-assurance group number](#) [partition number](#) [access-network-location source keyword](#) **source-level** *keyword*

Tree [source-level](#)

Options cell, transport-network-link, mac-vlan

Default cell

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **aqp-initial-lookup** *boolean*

Synopsis Enable AQP initial lookup

Context **configure** [application-assurance group number](#) [partition number](#) **aqp-initial-lookup** *boolean*

Tree [aqp-initial-lookup](#)

Description	<p>When configured to <b>true</b>, this command allows AA to perform application QoS policy (AQP) lookups on flows prior to complete application identification. As usual, AQP will be looked up again when identification is complete. Without this, AA executes AQPs that are part of the sub-default policy. The sub-default policy is formed by regular AQPs that contain ASOs, subID, or flow direction as matching conditions.</p> <p>This behavior is required, for example, to apply GTP and SCTP filtering on the first packet of a new GTP/SCTP flow (AQP matching conditions).</p> <p>When configured to <b>false</b>, AA only performs AQP lookups when identification is complete.</p>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## cflowd

Synopsis	Enter the <b>cflowd</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number cflowd</a>
Tree	<a href="#">cflowd</a>
Description	Commands in this context configure the AA partition-based cflowd fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## export-type [[flow-export-type](#)] keyword

Synopsis	Enter the <b>export-type</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number cflowd export-type keyword</a>
Tree	<a href="#">export-type</a>
Description	Commands in this context configure the scope of traffic subjected to AA cflowd export.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## [[flow-export-type](#)] keyword

Synopsis	Cflowd flow export type for the partition
Context	<b>configure</b> <a href="#">application-assurance group number partition number cflowd export-type keyword</a>

Tree	<a href="#">export-type</a>
Description	This command allows the operator to configure the scope of traffic that can be sampled for cflowd export for the configured cflowd template.
Options	volume, tcp-performance, rtp-performance, comprehensive
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of cflowd export
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">cflowd</a> <a href="#">export-type</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **app-group** [[app-group-name](#)] *reference*

Synopsis	Enter the <b>app-group</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">cflowd</a> <a href="#">export-type</a> <i>keyword</i> <a href="#">app-group</a> <i>reference</i>
Tree	<a href="#">app-group</a>
Description	Commands in this context configure application groups for flow sampling and cflowd export.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### [[app-group-name](#)] *reference*

Synopsis	Application group name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">cflowd</a> <a href="#">export-type</a> <i>keyword</i> <a href="#">app-group</a> <i>reference</i>
Tree	<a href="#">app-group</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-group</a> <i>string</i>

Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rate-choice** *keyword*

Synopsis	Cflowd rate to use for sampling
Context	<b>configure</b> <a href="#">application-assurance group number partition number cflowd export-type keyword app-group reference rate-choice keyword</a>
Tree	<a href="#">rate-choice</a>
Options	flow-rate, flow-rate-2
Default	flow-rate
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **application** [[application-name](#)] *reference*

Synopsis	Enter the <b>application</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number cflowd export-type keyword application reference</a>
Tree	<a href="#">application</a>
Description	Commands in this context configure applications for flow sampling and cflowd export.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[application-name]** *reference*

Synopsis	Application name
Context	<b>configure</b> <a href="#">application-assurance group number partition number cflowd export-type keyword application reference</a>
Tree	<a href="#">application</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy application string</a>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**rate-choice** *keyword*

Synopsis	Cflowd rate to use for sampling
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">cflowd</a> <a href="#">export-type</a> <a href="#">keyword</a> <a href="#">application</a> <a href="#">reference</a> <b>rate-choice</b> <i>keyword</i>
Tree	<a href="#">rate-choice</a>
Options	flow-rate, flow-rate-2
Default	flow-rate
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**event-log** [[event-log-name](#)] *string*

Synopsis	Enter the <b>event-log</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">event-log</a> <i>string</i>
Tree	<a href="#">event-log</a>
Description	Commands in this context configure an event log.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[event-log-name]** *string*

Synopsis	Partition event log name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">event-log</a> <i>string</i>
Tree	<a href="#">event-log</a>
String Length	1 to 32

Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the event log
Context	<b>configure</b> <a href="#">application-assurance group number partition number event-log string admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **buffer-type** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Event log buffer type
Context	<b>configure</b> <a href="#">application-assurance group number partition number event-log string buffer-type keyword</a>
Tree	<a href="#">buffer-type</a>
Options	linear, circular, syslog
Default	linear
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **max-entries** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of entries for the event log
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Context	<b>configure</b> <a href="#">application-assurance group number partition number event-log string max-entries number</a>
Tree	<a href="#">max-entries</a>
Range	1 to 100000
Default	500
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## syslog



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>syslog</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number event-log string syslog</a>
Tree	<a href="#">syslog</a>
Description	Commands in this context configure the syslog options for the partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## address (*ipv4-address-no-zone | ipv6-address-no-zone*)



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Syslog host IP address
Context	<b>configure</b> <a href="#">application-assurance group number partition number event-log string syslog address (<i>ipv4-address-no-zone   ipv6-address-no-zone</i>)</a>
Tree	<a href="#">address</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## description *string*

Synopsis	Text description
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">event-log</a> <i>string</i> <a href="#">syslog</a> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **facility** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	AA syslog facility
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">event-log</a> <i>string</i> <a href="#">syslog</a> <a href="#">facility</a> <i>keyword</i>
Tree	<a href="#">facility</a>
Description	This command configures the syslog facility. The syslog facility is an information field associated with a syslog message. It is defined by the syslog protocol and provides an indication of which part of the system originated the message.
Options	kernel, user, mail, systemd, auth, syslogd, printer, netnews, uucp, cron, authpriv, ftp, ntp, logaudit, logalert, cron2, local0, local1, local2, local3, local4, local5, local6, local7
Default	local7
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Syslog host UDP port
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">event-log</a> <i>string</i> <a href="#">syslog</a> <a href="#">port</a> <i>number</i>
Tree	<a href="#">port</a>
Description	This command specifies the UDP port used by application assurance for the syslog events.
Max. Range	0 to 65535



Default	514
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **severity** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Syslog message severity level threshold
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">event-log</a> <a href="#">string</a> <a href="#">syslog</a> <b>severity</b> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	emergency, alert, critical, error, warning, notice, info, debug
Default	info
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **vlan-id** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA service port VLAN ID for sending syslog traffic
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">event-log</a> <a href="#">string</a> <a href="#">syslog</a> <b>vlan-id</b> <i>number</i>
Tree	<a href="#">vlan-id</a>
Description	This command configures the service port VLAN ID to be used by application assurance to provide syslog events. This VLAN ID also needs to be configured for the application assurance interface.
Range	1 to 4094
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**gtp**

Synopsis	Enter the <b>gtp</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp</a>
Tree	<a href="#">gtp</a>
Description	Commands in this context configure GTP parameters.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of GTP
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**gtp-filter** [[gtp-filter-name](#)] *string*

Synopsis	Enter the <b>gtp-filter</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string</a>
Tree	<a href="#">gtp-filter</a>
Description	Commands in this context allow AA to treat traffic on UDP port number 2152 as GTP-U. Without further specifying any other parameters within this GTP context, AA performs basic GTP-U header sanity checks and discards packets that are malformed. This GTP context also allows the operator to configure various GTP filters.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[gtp-filter-name]** *string*

Synopsis	GTP filter name
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string</a>
Tree	<a href="#">gtp-filter</a>

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">gtp</a> <a href="#">gtp-filter</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **gtp-in-gtp** *keyword*

Synopsis	GTP in GTP packet filtering
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">gtp</a> <a href="#">gtp-filter</a> <i>string</i> <a href="#">gtp-in-gtp</a> <i>keyword</i>
Tree	<a href="#">gtp-in-gtp</a>
Options	deny, permit
Default	permit
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **gtp-tunnel-database**

Synopsis	Enter the <b>gtp-tunnel-database</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">gtp</a> <a href="#">gtp-filter</a> <i>string</i> <a href="#">gtp-tunnel-database</a>
Tree	<a href="#">gtp-tunnel-database</a>
Description	Commands in this context configure GTP advanced firewall functions, such as validating GTP tunnels, sequence numbers, and source IP addresses).
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**default-tunnel-endpoint-limit** *number*

Synopsis	Default GTP tunnel endpoint limit
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string gtp-tunnel-database default-tunnel-endpoint-limit number</a>
Tree	<a href="#">default-tunnel-endpoint-limit</a>
Description	This command configures the maximum number of GTP endpoints requested in GTP-C messages by using, for example, the PDP Context Create message type.  The <b>validate-gtp-tunnels</b> command must be enabled before using this command.
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**validate-gtp-tunnels** *boolean*

Synopsis	Enable GTP tunnel validation
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string gtp-tunnel-database validate-gtp-tunnels boolean</a>
Tree	<a href="#">validate-gtp-tunnels</a>
Description	When configured to <b>true</b> , this command configures GTP tunnel validation. This allows for the validation of TEIDs and is a prerequisite for sequence checking and UE IP address validation. This command is only applicable when AA GTP FW is deployed on S8/S5/Gp/Gn interfaces. The <b>gtpc-inspection</b> command in the <b>configure application-assurance group partition gtp</b> context must be configured to true before using this command.  When configured to <b>false</b> , the GTP tunnels cannot be validated.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**validate-sequence-number** *boolean*

Synopsis	Enable GTP sequence number checking
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string gtp-tunnel-database validate-sequence-number boolean</a>
Tree	<a href="#">validate-sequence-number</a>

Description	<p>When configured to <b>true</b>, this command enables GTP sequence number checking. GTP packets that fail the sequence number check are discarded.</p> <p>The <b>validate-gtp-tunnels</b> command in the <b>configure application-assurance group partition gtp gtp-filter gtp-tunnel-database</b> context must be configured to <b>true</b> before using this command.</p> <p>When configured to <b>false</b>, the GTP packet sequence number cannot be checked.</p>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **validate-source-ip-addr** *boolean*

Synopsis	Validate source IP address in GTP frames
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">gtp</a> <a href="#">gtp-filter</a> <i>string</i> <a href="#">gtp-tunnel-database</a> <a href="#">validate-source-ip-addr</a> <i>boolean</i>
Tree	<a href="#">validate-source-ip-addr</a>
Description	<p>When configured to <b>true</b>, this command enables checking for spoofed or invalid UE IP addresses. Upstream GTP packets that contain invalid UE IP addresses are discarded. When a packet is dropped due to source-ip-address “invalid source IP add”, the statistics counter is updated.</p> <p>The <b>validate-gtp-tunnels</b> command in the <b>configure application-assurance group partition gtp gtp-filter gtp-tunnel-database</b> context must be configured to <b>true</b> before using this command.</p> <p>When configured to <b>false</b>, the spoofed or invalid UE IP addresses cannot be checked.</p>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **imsi-apn-filter**

Synopsis	Enter the <b>imsi-apn-filter</b> context
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">gtp</a> <a href="#">gtp-filter</a> <i>string</i> <a href="#">imsi-apn-filter</a>
Tree	<a href="#">imsi-apn-filter</a>
Description	<p>Commands in this context configure IMSI and APN filtering.</p> <p>The <b>gtpc-inspection</b> command in the <b>configure application-assurance group partition gtp</b> context must be configured to true before using this command.</p> <p>This command is only applicable to the GTP packets that contain IMSI or APN information elements (IEs).</p>

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **default-action** *keyword*

Synopsis	IMSI APN filter default action
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">gtp gtp-filter</a> <i>string</i> <a href="#">imsi-apn-filter</a> <b>default-action</b> <i>keyword</i>
Tree	<a href="#">default-action</a>
Options	deny, permit
Default	permit
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **entry** [[entry-id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">gtp gtp-filter</a> <i>string</i> <a href="#">imsi-apn-filter</a> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Description	Commands in this context configure an entry within the IMSI-APN filter to allow for IMSI-APN match and action configuration.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[entry-id]** *number*

Synopsis	AA IMSI-APN filter entry ID
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">gtp gtp-filter</a> <i>string</i> <a href="#">imsi-apn-filter</a> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Description	This command specifies the index in the IMSI-APN list that defines a custom filtering action.
Range	1031 to 2030
Notes	This element is part of a list key.
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **action** *keyword*

Synopsis IMSI APN filter entry action

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [gtp gtp-filter](#) *string*  
[imsi-apn-filter entry](#) *number* **action** *keyword*

Tree [action](#)

Options deny, permit

Default permit

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **apn** *string*

Synopsis APN as GTP filter match criterion

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [gtp gtp-filter](#) *string*  
[imsi-apn-filter entry](#) *number* **apn** *string*

Tree [apn](#)

Description This command configures a matching condition for an APN configured as a GTP filter. If no APN is specified, the entry is not checked for the APN IE in GTP-C packets. The values for this command are:

- `string`: The extracted APN must match string exactly.
- `^string`: The extracted APN must start with string.
- `string$`: The extracted APN must end with string.
- `WILDCARD_APN`: Special string that indicates that the extracted APN must be "\*" (that is, a length octet with value one, followed by the ASCII code for the asterisk)
- `EMPTY_APN`: Special string that indicates that the extracted APN must be empty (that is, "")
- `ANY_APN`: Special string that indicates that the extracted APN IE must be present and can have any value in order for the filter entry to match

String Length 1 to 100

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**imsi-mcc-mnc-prefix** *string*

Synopsis	IMSI (MCC-MNC) prefix as GTP filter match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string</a> <a href="#">imsi-apn-filter entry number imsi-mcc-mnc-prefix string</a>
Tree	<a href="#">imsi-mcc-mnc-prefix</a>
Description	This command configures a matching condition for the IMSI (MCC-MNC) prefix. This string represents the IMSI prefix to be matched against the IMSI IE of the packet, or the special value ANY_IMSI to indicate that an IMSI IE must be present as a matching condition regardless of the IMSI IE value. If no MCC-MNC prefix is specified, the entry will match GTP packets that have an IMSI IE containing any value.
String Length	1 to 8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**src-gsn**

Synopsis	Enter the <b>src-gsn</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string</a> <a href="#">imsi-apn-filter entry number src-gsn</a>
Tree	<a href="#">src-gsn</a>
Description	Commands in this context configure a matching condition for the GSN IP address. The IP address value is checked only against the source IP address of the GTP packets that contain an APN IE or an IMSI IE.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip-prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Source GSN IP address prefix as filter match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string</a> <a href="#">imsi-apn-filter entry number src-gsn ip-prefix (ipv4-prefix   ipv6-prefix)</a>
Tree	<a href="#">ip-prefix</a>
Description	This command specifies a valid unicast address associated with the IMSI-APN filter entry.
Notes	The following elements are part of a choice: <b>ip-prefix</b> or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**ip-prefix-list** *reference*

Synopsis	Source GSN IP address prefix list as match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string imsi-apn-filter entry number src-gsn ip-prefix-list reference</a>
Tree	<a href="#">ip-prefix-list</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number ip-prefix-list string</a>
Notes	The following elements are part of a choice: <b>ip-prefix</b> or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**log**

Synopsis	Enter the <b>log</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string log</a>
Tree	<a href="#">log</a>
Description	Commands in this context configure the AA group partition GTP filter log.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**action** *keyword*

Synopsis	GTP filter action to be logged
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string log action keyword</a>
Tree	<a href="#">action</a>
Options	deny, permit, all
Default	deny
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**event-log** *reference*

Synopsis	Event-log name to capture GTP filter events
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string log event-log reference</a>

Tree	<a href="#">event-log</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number event-log string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **max-payload-length** *number*

Synopsis	Maximum allowed GTP payload length
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string max-payload-length number</a>
Tree	<a href="#">max-payload-length</a>
Range	0 to 65535
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **message-type**

Synopsis	Enter the <b>message-type</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string message-type</a>
Tree	<a href="#">message-type</a>
Description	Commands in this context configure the GTP message-type filtering. If no message type is specified within a filter, all GTP message types are allowed.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **default-action** *keyword*

Synopsis	GTP message type default action
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string message-type default-action keyword</a>
Tree	<a href="#">default-action</a>
Options	deny, permit
Default	permit
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**entry** [**entry-id**] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">gtp</a> <a href="#">gtp-filter</a> <i>string</i> <a href="#">message-type</a> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Description	Commands in this context configure an entry for a specific GTPv1 message type value.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[entry-id]** *number*

Synopsis	GTP filter entry ID
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">gtp</a> <a href="#">gtp-filter</a> <i>string</i> <a href="#">message-type</a> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Description	This command specifies the index in the GTPv1 message value list that defines a custom message-type action.
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**action** *keyword*

Synopsis	GTPv1 filter message entry action
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">gtp</a> <a href="#">gtp-filter</a> <i>string</i> <a href="#">message-type</a> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <i>keyword</i>
Tree	<a href="#">action</a>
Options	deny, permit
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**value** (*number* | *keyword*)**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	GTPv1 filter message type value
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">gtp gtp-filter</a> <i>string</i> <a href="#">message-type entry</a> <i>number</i> <b>value</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">value</a>
Range	1 to 255
Options	echo-request, echo-response, version-not-supported, node-alive-request, node-alive-response, redirection-request, redirection-response, create-pdp-context-request, create-pdp-context-response, update-pdp-context-request, update-pdp-context-response, delete-pdp-context-request, delete-pdp-context-response, initiate-pdp-context-activation-request, initiate-pdp-context-activation-response, error-indication, pdu-notification-request, pdu-notification-response, pdu-notification-reject-request, pdu-notification-reject-response, supported-extension-headers-notification, send-routing-information-for-gprs-request, send-routing-information-for-gprs-response, failure-report-request, failure-report-response, note-ms-gprs-present-request, note-ms-gprs-present-response, identification-request, identification-response, sgsn-context-request, sgsn-context-response, sgsn-context-acknowledge, forward-relocation-request, forward-relocation-response, forward-relocation-complete, relocation-cancel-request, relocation-cancel-response, forward-srns-context, forward-relocation-complete-acknowledge, forward-srns-context-acknowledge, ran-information-relay, mbms-notification-request, mbms-notification-response, mbms-notification-reject-request, mbms-notification-reject-response, create-mbms-context-request, create-mbms-context-response, update-mbms-context-request, update-mbms-context-response, delete-mbms-context-request, delete-mbms-context-response, mbms-registration-request, mbms-registration-response, mbms-de-registration-request, mbms-de-registration-response, mbms-session-start-request, mbms-session-start-response, mbms-session-stop-request, mbms-session-stop-response, mbms-session-update-request, mbms-session-update-response, ms-info-change-notification-request, ms-info-change-notification-response, data-record-transfer-request, data-record-transfer-response, end-marker, g-pdu
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**message-type-gtp-v2**

Synopsis	Enter the <b>message-type-gtp-v2</b> context
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Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string message-type-gtp-v2</a>
Tree	<a href="#">message-type-gtp-v2</a>
Description	<p>Commands in this context configure the GTPv2 message-type filtering.</p> <p>If message-type GTPv2 is not specified within a filter, all GTP message types are allowed, except for the messages that are dropped by GTP-C inspection because they violate the expected GTP protocol for the deployment interface (for example, roaming deployment).</p> <p>The <b>gtpc-inspection</b> command in the <b>configure application-assurance group partition gtp</b> context must be configured to true before configuring GTPv2 message-type filtering.</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **default-action** *keyword*

Synopsis	GTPv2 message type default action
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string message-type-gtp-v2 default-action keyword</a>
Tree	<a href="#">default-action</a>
Options	deny, permit
Default	permit
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **entry** [[entry-id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string message-type-gtp-v2 entry number</a>
Tree	<a href="#">entry</a>
Description	Commands in this context configure an entry for a specific GTPv2 message type value.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[entry-id] number**

Synopsis	GTPv2 filter entry ID
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string message-type-gtp-v2 entry number</a>
Tree	<a href="#">entry</a>
Description	This command configures the index in the GTP message value list that defines a custom message-type action.
Range	516 to 770
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**action keyword**

Synopsis	GTPv2 filter message entry action
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string message-type-gtp-v2 entry number action keyword</a>
Tree	<a href="#">action</a>
Description	This command specifies the action to take for packets that match this GTPv2 filter message entry.
Options	deny, permit
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**value (number | keyword)****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	GTPv2 filter message type value
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string message-type-gtp-v2 entry number value (number   keyword)</a>
Tree	<a href="#">value</a>
Range	1 to 255

Options	echo-request, echo-response, version-not-supported-indication, create-session-request, create-session-response, modify-bearer-request, modify-bearer-response, delete-session-request, delete-session-response, change-notification-request, change-notification-response, remote-ue-report-notification, remote-ue-report-acknowledge, modify-bearer-command, modify-bearer-failure-indication, delete-bearer-command, delete-bearer-failure-indication, bearer-resource-command, bearer-resource-failure-indication, downlink-data-notification-failure-indication, trace-session-activation, trace-session-deactivation, stop-paging-indication, create-bearer-request, create-bearer-response, update-bearer-request, update-bearer-response, delete-bearer-request, delete-bearer-response, delete-pdn-connection-set-request, delete-pdn-connection-set-response, pgw-downlink-triggering-notification, pgw-downlink-triggering-acknowledge, identification-request, identification-response, context-request, context-response, context-acknowledge, forward-relocation-request, forward-relocation-response, forward-relocation-complete-notification, forward-relocation-complete-acknowledge, forward-access-context-notification, forward-access-context-acknowledge, relocation-cancel-request, relocation-cancel-response, configuration-transfer-tunnel, detach-notification, detach-acknowledge, cs-paging-indication, ran-information-relay, alert-mme-notification, alert-mme-acknowledge, ue-activity-notification, ue-activity-acknowledge, isr-status-indication, create-forwarding-tunnel-request, create-forwarding-tunnel-response, suspend-notification, suspend-acknowledge, resume-notification, resume-acknowledge, create-indirect-data-forwarding-tunnel-request, create-indirect-data-forwarding-tunnel-response, delete-indirect-data-forwarding-tunnel-request, delete-indirect-data-forwarding-tunnel-response, release-access-bearers-request, release-access-bearers-response, downlink-data-notification, downlink-data-notification-acknowledge, pgw-restart-notification, pgw-restart-notification-acknowledge, update-pdn-connection-set-request, update-pdn-connection-set-response, modify-access-bearers-request, modify-access-bearers-response, mbms-session-start-request, mbms-session-start-response, mbms-session-update-request, mbms-session-update-response, mbms-session-stop-request, mbms-session-stop-response
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **gtpc-inspection** *boolean*

Synopsis	Enable inspection of GTP-C packets
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">gtp</a> <a href="#">gtpc-inspection</a> <i>boolean</i>
Tree	<a href="#">gtpc-inspection</a>

Description	When configured to <b>true</b> , this command enables the inspection of GTP-C packets. This is relevant only when AA GTP FW is deployed on S8/S5/Gp/Gn interfaces. This command must be enabled before configuring related features, such as APN filtering, GTP tunnel validation, message-type-v2 filtering, sequence number validation, and SRC IP validation.  When configured to <b>false</b> , GTP-C packet inspection cannot be performed.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## log

Synopsis	Enter the <b>log</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp log</a>
Tree	<a href="#">log</a>
Description	Commands in this context configure the AA group partition GTP log.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## action keyword

Synopsis	GTP log action
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp log action keyword</a>
Tree	<a href="#">action</a>
Description	This command specifies the action on which the GTP log is raised.
Options	deny, permit, all
Default	deny
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## event-log reference

Synopsis	Event log reference for logging GTP events
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp log event-log reference</a>
Tree	<a href="#">event-log</a>



Reference	<b>configure</b> <a href="#">application-assurance group number partition number event-log string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mode keyword****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	GTP mode
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp mode keyword</a>
Tree	<a href="#">mode</a>
Options	filtering, untunneling
Default	filtering
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**http-match-all-requests boolean**

Synopsis	Enable HTTP matching for all requests for an expression
Context	<b>configure</b> <a href="#">application-assurance group number partition number http-match-all-requests boolean</a>
Tree	<a href="#">http-match-all-requests</a>
Description	When configured to <b>true</b> , this command enables HTTP matching for all requests for an HTTP expression.  When configured to <b>false</b> , this command restores the default and removes the matching request for this particular expression.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**http-x-online-host boolean**

Synopsis	Enable X-Online-Host header field
Context	<b>configure</b> <a href="#">application-assurance group number partition number http-x-online-host boolean</a>

Tree	<a href="#">http-x-online-host</a>
Description	When configured to <b>true</b> , this command enables the X-Online-Host header field as a replacement for the HTTP Host header field.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-identification-contribute** *boolean*

Synopsis	Contribute traffic info from this partition to group
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">ip-identification-contribute</a> <i>boolean</i>
Tree	<a href="#">ip-identification-contribute</a>
Description	When configured to <b>true</b> , the router collects information from traffic in this partition and contributes it to the database that is built by the IP identification assist feature at the group level.
Default	true
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-prefix-list** [[ip-prefix-list-name](#)] *string*

Synopsis	Enter the <b>ip-prefix-list</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">ip-prefix-list</a> <i>string</i>
Tree	<a href="#">ip-prefix-list</a>
Description	Commands in this context configure an IP prefix list.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[ip-prefix-list-name]** *string*

Synopsis	AA IP prefix list name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">ip-prefix-list</a> <i>string</i>
Tree	<a href="#">ip-prefix-list</a>
String Length	1 to 32
Notes	This element is part of a list key.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">ip-prefix-list</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **prefix** [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the <b>prefix</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">ip-prefix-list</a> <i>string</i> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">prefix</a>
Description	Commands in this context configure an IP prefix within the list.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	AA IP prefix
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">ip-prefix-list</a> <i>string</i> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">prefix</a>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **name** *string*

Synopsis	AA IP prefix name
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">ip-prefix-list</a> <i>string</i> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">name</a> <i>string</i>
Tree	<a href="#">name</a>
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## policy

Synopsis	Enter the <b>policy</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a>
Tree	<a href="#">policy</a>
Description	Commands in this context configure the fields for the Application Assurance policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## app-filter

Synopsis	Enter the <b>app-filter</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-filter</a>
Tree	<a href="#">app-filter</a>
Description	Commands in this context configure an application filter for Application Assurance.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## entry [[entry-id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Description	<p>Commands in this context create an application filter entry.</p> <p>Application filter entries are an ordered list. The lowest numerical entry that matches the flow defines the application for that flow.</p> <p>An application filter entry or entries configure match attributes of an application.</p>
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[entry-id]** *number*

Synopsis Application filter entry ID

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-filter](#) [entry](#) *number*

Tree [entry](#)

Range 1 to 65535

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the AA application filter entry

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-filter](#) [entry](#) *number* [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **application** *reference*

Synopsis Application name

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-filter](#) [entry](#) *number* [application](#) *reference*

Tree [application](#)

Reference **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [application](#) *string*

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-filter entry number</a> <i>description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**expression** [[expr-index](#)] *number*

Synopsis	Enter the <b>expression</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-filter entry number</a> <a href="#">expression number</a>
Tree	<a href="#">expression</a>
Description	Commands in this context configure string values to use in the application definition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[[expr-index](#)]** *number*

Synopsis	Application filter matching expression identifier
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-filter entry number</a> <a href="#">expression number</a>
Tree	<a href="#">expression</a>
Range	1 to 4
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**eq** *string*

Synopsis	Exact match for application filter matching expression
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-filter entry number</a> <a href="#">expression number</a> <a href="#">eq string</a>
Tree	<a href="#">eq</a>

String Length	1 to 255
Notes	The following elements are part of a mandatory choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**neq string**

Synopsis	Non-match for application filter matching expression
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number expression number neq string</a>
Tree	<a href="#">neq</a>
String Length	1 to 255
Notes	The following elements are part of a mandatory choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**type keyword**

Synopsis	Application filter matching expression type
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number expression number type keyword</a>
Tree	<a href="#">type</a>
Options	http-host, http-uri, http-referer, sip-ua, sip-uri, sip-mt, citrix-app, http-user-agent, h323-product-id, tls-cert-subj-org-name, tls-cert-subj-common-name, rtsp-host, rtsp-uri, rtsp-ua, rtmp-page-host, rtmp-page-uri, rtmp-swf-host, rtmp-swf-uri, rtmp-tc-host, rtmp-tc-uri, dns-domain-name
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**flow-setup-direction keyword**

Synopsis	Traffic flow direction for the application filter entry
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number flow-setup-direction keyword</a>
Tree	<a href="#">flow-setup-direction</a>
Options	subscriber-to-network, network-to-subscriber, both

Default	both
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **http-match-all-requests** *boolean*

Synopsis	Enable HTTP matching for all requests
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-filter entry number</a> <a href="#">http-match-all-requests boolean</a>
Tree	<a href="#">http-match-all-requests</a>
Description	When configured to <b>true</b> , this command enables HTTP matching for all requests for an HTTP expression. When configured to <b>false</b> , this command restores the default for this app-filter entry which matches the first request.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **http-port**

Synopsis	Enter the <b>http-port</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-filter entry number</a> <a href="#">http-port</a>
Tree	<a href="#">http-port</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **eq**

Synopsis	Enter the <b>eq</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-filter entry number</a> <a href="#">http-port eq</a>
Tree	<a href="#">eq</a>
Description	Commands in this context configure the exact value as the match criterion.
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port-list** *reference*

Synopsis Port list name

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [policy app-filter entry](#) *number* [http-port eq port-list reference](#)

Tree [port-list](#)

Reference **configure** [application-assurance group](#) *number* [partition](#) *number* [port-list](#) *string*

Notes The following elements are part of a choice: **port-list** or **port-number**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port-number** *number*

Synopsis Server port number

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [policy app-filter entry](#) *number* [http-port eq port-number](#) *number*

Tree [port-number](#)

Range 0 | 1 to 65535

Default 0

Notes The following elements are part of a choice: **port-list** or **port-number**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **neq**

Synopsis Enter the **neq** context

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [policy app-filter entry](#) *number* [http-port neq](#)

Tree [neq](#)

Description Commands in this context configure the non-match criterion used.

Notes The following elements are part of a choice: **eq** or **neq**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port-list** *reference*

Synopsis	Port list name
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-filter entry number</a> <a href="#">http-port neq port-list reference</a>
Tree	<a href="#">port-list</a>
Reference	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">port-list string</a>
Notes	The following elements are part of a choice: <b>port-list</b> or <b>port-number</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port-number** *number*

Synopsis	Server port number
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-filter entry number</a> <a href="#">http-port neq port-number number</a>
Tree	<a href="#">port-number</a>
Range	0   1 to 65535
Default	0
Notes	The following elements are part of a choice: <b>port-list</b> or <b>port-number</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip-identification-assist** *boolean*

Synopsis	Enable IP identification assist for this entry
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-filter entry number</a> <a href="#">ip-identification-assist boolean</a>
Tree	<a href="#">ip-identification-assist</a>
Description	<p>When configured to <b>true</b>, the router performs a network IP address lookup that overrides the assigned application if it finds the network IP address in its internal application-IP database.</p> <p>If an IP match is found, the application assigned from the app-filter is overridden with the application from the IP lookup. This also affects the app-group and charging group.</p> <p>If an IP match is not found, the application assigned from the app-filter is not overridden and remains (including the app-group and charging group).</p>

When configured to **false**, this command disables the router from performing a network IP address lookup and overriding the assigned application.

Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ip-protocol

Synopsis	Enter the <b>ip-protocol</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <i>number</i> <b>ip-protocol</b>
Tree	<a href="#">ip-protocol</a>
Description	Commands in this context configure the IP protocol to use in the application definition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## eq (*number* | *keyword*)

Synopsis	Exact match criterion used for the IP protocol number
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <i>number</i> <b>ip-protocol</b> <b>eq</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">eq</a>
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## neq (*number* | *keyword*)

Synopsis	Non-match criterion used for the IP protocol number
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <i>number</i> <b>ip-protocol</b> <b>neq</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">neq</a>
Range	0 to 255

Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## network-address

Synopsis	Enter the <b>network-address</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">network-address</a>
Tree	<a href="#">network-address</a>
Description	Commands in this context configure the network address to use for the application filter entry. The network address is the address on the network side of AA, independent of whether the subscriber is acting as a client or server and is not normally used in AA app-filters. The network address will match the destination IP address in a from-sub flow or the source IP address in a to-sub flow.
Notes	The following elements are part of a choice: <b>network-address</b> or <b>server-address</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## eq

Synopsis	Enter the <b>eq</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">network-address</a> <a href="#">eq</a>
Tree	<a href="#">eq</a>
Description	Commands in this context specify an exact value as the match criterion for the network address.
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ip-prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">network-address</a> <a href="#">eq</a> <a href="#">ip-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">ip-prefix</a>
Notes	The following elements are part of a choice: <b>ip-prefix</b> or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-prefix-list** *reference*

Synopsis	IP prefix list
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">network-address</a> <a href="#">eq</a> <a href="#">ip-prefix-list</a> <i>reference</i>
Tree	<a href="#">ip-prefix-list</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">ip-prefix-list</a> <i>string</i>
Notes	The following elements are part of a choice: <b>ip-prefix</b> or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **neq**

Synopsis	Enter the <b>neq</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">network-address</a> <a href="#">neq</a>
Tree	<a href="#">neq</a>
Description	Commands in this context specify the non-match criterion used for the network address.
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">network-address</a> <a href="#">neq</a> <a href="#">ip-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">ip-prefix</a>
Notes	The following elements are part of a choice: <b>ip-prefix</b> or <b>ip-prefix-list</b> .

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-prefix-list** *reference*

Synopsis	IP prefix list
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number network-address neq ip-prefix-list reference</a>
Tree	<a href="#">ip-prefix-list</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number ip-prefix-list string</a>
Notes	The following elements are part of a choice: <b>ip-prefix</b> or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **protocol**

Synopsis	Enter the <b>protocol</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number protocol</a>
Tree	<a href="#">protocol</a>
Description	Commands in this context configure the protocol signature in the application definition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **eq** (*string* | *named-item*)

Synopsis	Exact match criterion used for the AA protocol name
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number protocol eq (string   named-item)</a>
Tree	<a href="#">eq</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**neq** (*string* | *named-item*)

Synopsis	Non-match criterion used for the AA protocol name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">protocol</a> <b>neq</b> ( <i>string</i>   <i>named-item</i> )
Tree	<a href="#">neq</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**server-address**

Synopsis	Enter the <b>server-address</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <i>number</i> <b>server-address</b>
Tree	<a href="#">server-address</a>
Description	Commands in this context configure the server address to use for the application filter entry. The server address is the address on the server end of a client-server session.
Notes	The following elements are part of a choice: <b>network-address</b> or <b>server-address</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**eq**

Synopsis	Enter the <b>eq</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">server-address</a> <b>eq</b>
Tree	<a href="#">eq</a>
Description	Commands in this context configure the attributes of the IP address used for the exact match criterion for the application flow.
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**dns-ip-cache** *reference*

Synopsis	DNS IP cache name
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-address eq dns-ip-cache reference</a>
Tree	<a href="#">dns-ip-cache</a>
Reference	<b>configure</b> <a href="#">application-assurance group number dns-ip-cache string</a>
Notes	The following elements are part of a choice: <b>dns-ip-cache</b> , <b>ip-prefix</b> , <b>ip-prefix-list</b> , or <b>masked-ip</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip-prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-address eq ip-prefix (ipv4-prefix   ipv6-prefix)</a>
Tree	<a href="#">ip-prefix</a>
Notes	The following elements are part of a choice: <b>dns-ip-cache</b> , <b>ip-prefix</b> , <b>ip-prefix-list</b> , or <b>masked-ip</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip-prefix-list** *reference*

Synopsis	IP prefix list
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-address eq ip-prefix-list reference</a>
Tree	<a href="#">ip-prefix-list</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number ip-prefix-list string</a>
Notes	The following elements are part of a choice: <b>dns-ip-cache</b> , <b>ip-prefix</b> , <b>ip-prefix-list</b> , or <b>masked-ip</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**masked-ip**

Synopsis	Enter the <b>masked-ip</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-address eq masked-ip</a>
Tree	<a href="#">masked-ip</a>
Description	Commands in this context configure the attributes of a masked IP address.
Notes	The following elements are part of a choice: <b>dns-ip-cache</b> , <b>ip-prefix</b> , <b>ip-prefix-list</b> , or <b>masked-ip</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**address** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IPv4 or IPv6 address mask
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-address eq masked-ip address (ipv4-address-no-zone   ipv6-address-no-zone)</a>
Tree	<a href="#">address</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**netmask** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IPv4 or IPv6 address mask
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-address eq masked-ip netmask (ipv4-address-no-zone   ipv6-address-no-zone)</a>
Tree	<a href="#">netmask</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**neq**

Synopsis	Enter the <b>neq</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-address neq</a>
Tree	<a href="#">neq</a>

Description	Commands in this context configure the attributes of the IP address used for non-matching criteria in the application flow.
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dns-ip-cache** *reference*

Synopsis	DNS IP cache name
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-address neq dns-ip-cache reference</a>
Tree	<a href="#">dns-ip-cache</a>
Reference	<b>configure</b> <a href="#">application-assurance group number dns-ip-cache string</a>
Notes	The following elements are part of a choice: <b>dns-ip-cache</b> , <b>ip-prefix</b> , <b>ip-prefix-list</b> , or <b>masked-ip</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-prefix** (*ipv4-prefix | ipv6-prefix*)

Synopsis	IP prefix
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-address neq ip-prefix (ipv4-prefix   ipv6-prefix)</a>
Tree	<a href="#">ip-prefix</a>
Notes	The following elements are part of a choice: <b>dns-ip-cache</b> , <b>ip-prefix</b> , <b>ip-prefix-list</b> , or <b>masked-ip</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-prefix-list** *reference*

Synopsis	IP prefix list
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-address neq ip-prefix-list reference</a>
Tree	<a href="#">ip-prefix-list</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number ip-prefix-list string</a>

Notes	The following elements are part of a choice: <b>dns-ip-cache</b> , <b>ip-prefix</b> , <b>ip-prefix-list</b> , or <b>masked-ip</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## masked-ip

Synopsis	Enter the <b>masked-ip</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-address neq masked-ip</a>
Tree	<a href="#">masked-ip</a>
Description	Commands in this context configure the attributes of a masked IP address.
Notes	The following elements are part of a choice: <b>dns-ip-cache</b> , <b>ip-prefix</b> , <b>ip-prefix-list</b> , or <b>masked-ip</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IPv4 or IPv6 address mask
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-address neq masked-ip address (ipv4-address-no-zone   ipv6-address-no-zone)</a>
Tree	<a href="#">address</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## netmask (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IPv4 or IPv6 address mask
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-address neq masked-ip netmask (ipv4-address-no-zone   ipv6-address-no-zone)</a>
Tree	<a href="#">netmask</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## server-port

Synopsis	Enter the <b>server-port</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-port</a>
Tree	<a href="#">server-port</a>
Description	Commands in this context specify the server TCP or UDP port number to use in the application definition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## eq

Synopsis	Enter the <b>eq</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-port eq</a>
Tree	<a href="#">eq</a>
Description	Commands in this context configure the exact value as the match criterion for the server TCP or UDP number in the app-filter.
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## first-packet-policy *keyword*

Synopsis	First packet policy
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-port eq first-packet-policy keyword</a>
Tree	<a href="#">first-packet-policy</a>
Description	This command configures the action to perform on the first packet.
Options	first-packet-trusted, first-packet-validate
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port-list** *reference*

Synopsis	Port-list name used in application filter criteria
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">server-port</a> <a href="#">eq</a> <a href="#">port-list</a> <i>reference</i>
Tree	<a href="#">port-list</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">port-list</a> <i>string</i>
Notes	The following elements are part of a choice: <b>port-list</b> , <b>port-number</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port-number** *number*

Synopsis	Server port number used as match criterion
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">server-port</a> <a href="#">eq</a> <a href="#">port-number</a> <i>number</i>
Tree	<a href="#">port-number</a>
Range	0   1 to 65535
Default	0
Notes	The following elements are part of a choice: <b>port-list</b> , <b>port-number</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**range**

Synopsis	Enter the <b>range</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">server-port</a> <a href="#">eq</a> <a href="#">range</a>
Tree	<a href="#">range</a>
Description	Commands in this context specify the match value as the match criterion based on the starting or ending port number.
Notes	The following elements are part of a choice: <b>port-list</b> , <b>port-number</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end number**

Synopsis	TCP/UDP ending port number
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-port eq range end number</a>
Tree	<a href="#">end</a>
Range	0   1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**start number**

Synopsis	TCP/UDP starting port number
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-port eq range start number</a>
Tree	<a href="#">start</a>
Range	0   1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**gt**

Synopsis	Enter the <b>gt</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-port gt</a>
Tree	<a href="#">gt</a>
Description	Commands in this context specify the greater than value as the match criterion for the server port number for the app-filter.
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port-number number**

Synopsis	Server port number used as match criterion
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Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-port gt port-number number</a>
Tree	<a href="#">port-number</a>
Range	0   1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**lt**

Synopsis	Enter the <b>lt</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-port lt</a>
Tree	<a href="#">lt</a>
Description	Commands in this context specify the less than value as the match criterion for the server port number for the app-filter.
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port-number number**

Synopsis	Server port number used as match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-port lt port-number number</a>
Tree	<a href="#">port-number</a>
Range	0   1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**neq**

Synopsis	Enter the <b>neq</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-port neq</a>

Tree	<a href="#">neq</a>
Description	Commands in this context configure non-match criterion used for the server TCP or UDP number in the app-filter.
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port-list** *reference*

Synopsis	Port-list name used in application filter criteria
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-filter entry number</a> <a href="#">server-port neq port-list reference</a>
Tree	<a href="#">port-list</a>
Reference	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">port-list string</a>
Notes	The following elements are part of a choice: <b>port-list</b> , <b>port-number</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port-number** *number*

Synopsis	Server port number used as match criterion
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-filter entry number</a> <a href="#">server-port neq port-number number</a>
Tree	<a href="#">port-number</a>
Range	0   1 to 65535
Default	0
Notes	The following elements are part of a choice: <b>port-list</b> , <b>port-number</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **range**

Synopsis	Enter the <b>range</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-filter entry number</a> <a href="#">server-port neq range</a>
Tree	<a href="#">range</a>



Description	Commands in this context specify the match value as the match criterion based on the starting or ending port number.
Notes	The following elements are part of a choice: <b>port-list</b> , <b>port-number</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **end number**

Synopsis	TCP/UDP ending port number
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-port neq range end number</a>
Tree	<a href="#">end</a>
Range	0   1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **start number**

Synopsis	TCP/UDP starting port number
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-port neq range start number</a>
Tree	<a href="#">start</a>
Range	0   1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **app-group** [\[application-group-name\]](#) *string*

Synopsis	Enter the <b>app-group</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-group string</a>
Tree	<a href="#">app-group</a>
Description	Commands in this context create an application group for an application assurance policy.
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[application-group-name] string**

Synopsis Application group name

Context **configure** [application-assurance group number partition number policy app-group string](#)

Tree [app-group](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **charging-group reference**

Synopsis Charging group used in the AA application group policy

Context **configure** [application-assurance group number partition number policy app-group string charging-group reference](#)

Tree [charging-group](#)

Reference **configure** [application-assurance group number partition number policy charging-group string](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description string**

Synopsis Text description

Context **configure** [application-assurance group number partition number policy app-group string description string](#)

Tree [description](#)

String Length 1 to 80

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **export-id number**

Synopsis App group export ID used in RADIUS accounting export

Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-group</a> <i>string</i> <a href="#">export-id</a> <i>number</i>
Tree	<a href="#">export-id</a>
Description	This command assigns an export ID value to a charging group, an application group, or an application that RADIUS accounting uses for accounting export identification. This export ID is encoded in the top two bytes of the RADIUS accounting VSA to identify which charging group the counter value represents.  If no export ID is assigned, the counter cannot be added to the AA subscriber stats RADIUS export-type. After a charging group index is referenced, it cannot be deleted without removing the reference.
Range	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **app-profile** [[app-profile-name](#)] *string*

Synopsis	Enter the <b>app-profile</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i>
Tree	<a href="#">app-profile</a>
Description	Commands in this context create an application profile and configure the profile parameters.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[app-profile-name]** *string*

Synopsis	App-profile name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i>
Tree	<a href="#">app-profile</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **aa-sub-suppressible** *boolean*

Synopsis	Enable AA suppression for subs with this app profile
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i> <a href="#">aa-sub-suppressible</a> <i>boolean</i>
Tree	<a href="#">aa-sub-suppressible</a>
Description	When configured to <b>true</b> , this command configures the ability to suppress Application Assurance for subscribers with this application profile.  This function is used in the context of an SRRP group interface. If an SRRP group interface is configured as <b>configure service ies subscriber-interface group-interface suppress-aa-sub</b> or <b>configure service vprn subscriber-interface group-interface suppress-aa-sub</b> , then subscribers with an application profile configured as suppressible are not diverted to Application Assurance.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### capacity-cost *number*

Synopsis	Application profile capacity cost
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i> <a href="#">capacity-cost</a> <i>number</i>
Tree	<a href="#">capacity-cost</a>
Description	This command configures an application profile capacity cost.  Capacity cost based load balancing allows a cost to be assigned to diverted SAPs (with the application profile). This allows for load balancing SAPs between ISAs and acts as a threshold to notify the operator if capacity planning is exceeded.
Range	1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### characteristic [[characteristic-name](#)] *reference*

Synopsis	Enter the <b>characteristic</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i> <a href="#">characteristic</a> <i>reference</i>
Tree	<a href="#">characteristic</a>
Description	Commands in this context assign one of the existing values of an existing application service option characteristic to the application profile.
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### [**characteristic-name**] *reference*

Synopsis Application service option characteristic name

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-profile](#) *string* [characteristic](#) *reference*

Tree [characteristic](#)

Reference **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-service-options](#) [characteristic](#) *string*

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **value** *reference*

Synopsis ASO characteristic value name

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-profile](#) *string* [characteristic](#) *reference* [value](#) *reference*

Tree [value](#)

Reference **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-service-options](#) [characteristic](#) *string* [value](#) *string*

Notes This element is mandatory.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-profile](#) *string* [description](#) *string*

Tree [description](#)

String Length 1 to 80

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**divert *boolean***

Synopsis	Enable traffic redirection to AA ISAs or ESA VMs
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-profile string</a> <b>divert <i>boolean</i></b>
Tree	<a href="#">divert</a>
Description	When configured to <b>true</b> , this command enables the redirection of traffic to AA ISAs or ESA VMs for the system-wide forwarding classes diverted to Application Assurance ( <b>configure isa application-assurance-group divert-fc</b> ) for AA subscribers using this application profile.  When configured to <b>false</b> , this command stops the redirection of traffic to AA ISAs or ESA VMs for the AA subscribers using this application profile.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**app-qos-policy**

Synopsis	Enter the <b>app-qos-policy</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-qos-policy</a>
Tree	<a href="#">app-qos-policy</a>
Description	Commands in this context configure an application QoS policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**entry [[entry-id](#)] *number***

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-qos-policy</a> <b>entry <i>number</i></b>
Tree	<a href="#">entry</a>
Description	Commands in this context create an application QoS policy (AQP) entry.  A flow that matches multiple AQP entries will have multiple AQP entries actions applied. If a conflict occurs for two or more actions, the action from the AQP entry with the lowest numerical value takes precedence.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[entry-id] number**

Synopsis	AQP entry ID
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number</a>
Tree	<a href="#">entry</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**action**

Synopsis	Enter the <b>action</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action</a>
Tree	<a href="#">action</a>
Description	Commands in this context configure AQP actions to be performed on flows that match the match criteria of the AQP entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**abandon-tcp-optimization boolean**

Synopsis	Abandon TCPO for this entry
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action abandon-tcp-optimization boolean</a>
Tree	<a href="#">abandon-tcp-optimization</a>
Description	When configured to <b>true</b> , this command disables TCPO for flows matching this AQP entry.
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## bandwidth-policer

Synopsis	Enter the <b>bandwidth-policer</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-qos-policy entry number</a> <a href="#">action bandwidth-policer</a>
Tree	<a href="#">bandwidth-policer</a>
Description	<p>Commands in this context assign an existing bandwidth policer as an action on flows matching this AQP entry.</p> <p>The match criteria for the AQP entry must specify a unidirectional traffic direction before a policer action can be configured. If a policer is used in one direction in an AQP match entry, the same policer name cannot be used by another AQP entry that uses different traffic direction match criteria.</p> <p>When multiple policers apply to a single flow, the final action on a packet is the worst case of all policer outcomes (for example, if one of the policers marks packet out of profile, the final marking will reflect that).</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## anl reference

Synopsis	Access network locator bandwidth policer
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-qos-policy entry number</a> <a href="#">action bandwidth-policer anl reference</a>
Tree	<a href="#">anl</a>
Description	This command creates an Application Assurance policy profile for a policer instance for each ANL that limits traffic bandwidth in the scope of that ANL. For ANL, only single-bucket bandwidth policers can be configured.
Reference	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer anl-bandwidth-policer string</a>
Notes	The following elements are part of a choice: <b>anl</b> , <b>dual-bucket</b> , or <b>single-bucket</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dual-bucket reference

Synopsis	Dual bucket bandwidth limiting policer
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-qos-policy entry number</a> <a href="#">action bandwidth-policer dual-bucket reference</a>
Tree	<a href="#">dual-bucket</a>



Description	This command creates an Application Assurance policy profile for a dual bucket (PIR) bandwidth limiting policer.
Reference	<b>configure</b> <a href="#">application-assurance group number policer dual-bucket-bandwidth-policer string</a>
Notes	The following elements are part of a choice: <b>anl</b> , <b>dual-bucket</b> , or <b>single-bucket</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **single-bucket** *reference*

Synopsis	Single bucket bandwidth limiting policer
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action bandwidth-policer single-bucket reference</a>
Tree	<a href="#">single-bucket</a>
Description	This command creates an Application Assurance policy profile for a single bucket (PIR) bandwidth limiting policer.
Reference	<b>configure</b> <a href="#">application-assurance group number policer single-bucket-bandwidth-policer string</a>
Notes	The following elements are part of a choice: <b>anl</b> , <b>dual-bucket</b> , or <b>single-bucket</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dns-ip-cache** *reference*

Synopsis	DNS IP cache name
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action dns-ip-cache reference</a>
Tree	<a href="#">dns-ip-cache</a>
Reference	<b>configure</b> <a href="#">application-assurance group number dns-ip-cache string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **drop** *boolean*

Synopsis	Enable drop action for the AQP entry
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Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action drop boolean</a>
Tree	<a href="#">drop</a>
Description	When configured to <b>true</b> , all flow traffic matching this AQP entry is dropped. The drop action is performed first and no other action is invoked on that flow even if multiple other actions exist for the flow because of one or more AQP entry matches. When configured to <b>false</b> , this command disables the drop action on flows matching this AQP entry.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## error-drop

Synopsis	Enable the <b>error-drop</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action error-drop</a>
Tree	<a href="#">error-drop</a>
Description	Commands in this context configure a drop action for error flows (for instance, bad IP checksums or TCP/UDP port 0).
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## event-log *reference*

Synopsis	Event log action for the AQP entry
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action error-drop event-log reference</a>
Tree	<a href="#">event-log</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number event-log string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## flow-count-limit-policer

Synopsis	Enter the <b>flow-count-limit-policer</b> context
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Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action flow-count-limit-policer</a>
Tree	<a href="#">flow-count-limit-policer</a>
Description	<p>Commands in this context assign an existing flow count limit policer as an action on flows matching this AQP entry.</p> <p>The match criteria for the AQP entry must specify a unidirectional traffic direction before a policer action can be configured. If a policer is used in one direction in an AQP match entry, the same policer name cannot be used by another AQP entry that uses different traffic direction match criteria.</p> <p>When multiple policers are applied to a single flow, the final action on a packet is the worst case of all policer outcomes (for example, if one of the policers marks packet out of profile, the final marking will reflect that).</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **event-log** *reference*

Synopsis	Event log name
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action flow-count-limit-policer event-log reference</a>
Tree	<a href="#">event-log</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number event-log string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **policer-name** *reference*

Synopsis	Policer name
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action flow-count-limit-policer policer-name reference</a>
Tree	<a href="#">policer-name</a>
Description	This command specifies the name of the flow count limit policer for flows matching the AQP entry. The policer name is configured in the <b>configure application-assurance group policer</b> context.
Reference	<b>configure</b> <a href="#">application-assurance group number policer flow-count-limit-policer string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**flow-setup-rate-policer**

Synopsis	Enter the <b>flow-setup-rate-policer</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action flow-setup-rate-policer</a>
Tree	<a href="#">flow-setup-rate-policer</a>
Description	<p>Commands in this context assign an existing flow setup rate policer as an action on flows matching this AQP entry.</p> <p>The match criteria for the AQP entry must specify a unidirectional traffic direction before a policer action can be configured. If a policer is used in one direction in an AQP match entry, the same policer name cannot be used for another AQP entry that uses different traffic direction match criteria.</p> <p>When multiple policers are applied to a single flow, the final action on a packet is the worst case of all policer outcomes (for example, if one of the policers marks a packet out of profile, the final marking reflects that).</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**event-log** *reference*

Synopsis	Events log name for flow-setup rate policer
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action flow-setup-rate-policer event-log reference</a>
Tree	<a href="#">event-log</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number event-log string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**policer-name** *reference*

Synopsis	Policer name
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action flow-setup-rate-policer policer-name reference</a>
Tree	<a href="#">policer-name</a>
Description	This command specifies the name of the flow setup rate policer for flows matching this AQP entry.
Reference	<b>configure</b> <a href="#">application-assurance group number policer flow-setup-rate-policer string</a>
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## fragment-drop

Synopsis Enter the **fragment-drop** context

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number action fragment-drop](#)

Tree [fragment-drop](#)

Description Commands in this context specify the drop action options to apply to fragments.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## drop-scope *keyword*

Synopsis Fragment-drop scope

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number action fragment-drop drop-scope keyword](#)

Tree [drop-scope](#)

Description This command specifies which fragments to drop as an action on flows matching this AQP entry.

Options all, out-of-order

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## event-log *reference*

Synopsis Event log name

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number action fragment-drop event-log reference](#)

Tree [event-log](#)

Reference **configure** [application-assurance group number partition number event-log string](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**gtp-filter** *reference*

Synopsis	GTP filter executed for flows matching this AQP entry
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-qos-policy entry number</a> <a href="#">action gtp-filter reference</a>
Tree	<a href="#">gtp-filter</a>
Reference	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">gtp gtp-filter string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**http-enrich** *reference*

Synopsis	HTTP header enrichment action for the AQP entry
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-qos-policy entry number</a> <a href="#">action http-enrich reference</a>
Tree	<a href="#">http-enrich</a>
Description	This command configures the HTTP header enrichment template name that is applied as defined in the tmnxBsxHttpEnrichTable. An empty value specifies no HTTP header enrichment template.
Reference	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">http-enrich string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**http-error-redirect** *reference*

Synopsis	HTTP error redirect for the AQP entry
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-qos-policy entry number</a> <a href="#">action http-error-redirect reference</a>
Tree	<a href="#">http-error-redirect</a>
Description	This command specifies the HTTP error redirect that is applied as defined in the redirect table. An empty value specifies no HTTP error redirect.
Reference	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">http-error-redirect string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## http-notification *reference*

Synopsis	HTTP notification to use for flows matching AQP entry
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action http-notification reference</a>
Tree	<a href="#">http-notification</a>
Reference	<b>configure</b> <a href="#">application-assurance group number http-notification string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## http-redirect

Synopsis	Enter the <b>http-redirect</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action http-redirect</a>
Tree	<a href="#">http-redirect</a>
Description	Commands in this context assign an existing HTTP redirect policy as an action on flows matching this AQP entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## flow-type *keyword*

Synopsis	Flow type for HTTP redirect of flows matching the entry
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action http-redirect flow-type keyword</a>
Tree	<a href="#">flow-type</a>
Description	<p>This command assigns an existing HTTP redirect policy as an action on flows matching this AQP entry. The redirect only takes effect if the matching flows are HTTP and the condition specified is met.</p> <p>The condition specified by dropped flows means the flow is dropped due to an AQP action, such as flow rate, count policers, or drop actions. The admitted flows condition allows the operator to redirect HTTP traffic to a web portal while allowing non-HTTP traffic matching the same AQP rule to be forwarded.</p> <p>No HTTP redirect takes place if the HTTP redirect action and a drop/flow-police action are part of the default AQP policy. In this case, any flow drop actions take place before identification of the application/application-group.</p>
Options	dropped-flows, admitted-flows
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **name** *reference*

Synopsis HTTP redirect policy name

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-qos-policy](#) [entry](#) *number* [action](#) [http-redirect](#) *name* *reference*

Tree [name](#)

Description This command specifies the name of an existing HTTP policy redirect.

Reference **configure** [application-assurance](#) [group](#) *number* [http-redirect](#) *string*

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mirror-source**

Synopsis Enter the **mirror-source** context

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-qos-policy](#) [entry](#) *number* [action](#) [mirror-source](#)

Tree [mirror-source](#)

Description Commands in this context configure an application-based policy mirroring service that uses the AQP entry of this AA ISA as a mirror source.

When configured, the AQP entry becomes a mirror source for IP packets seen by AA. The mirrored packet is an IP packet analyzed by AA and does not include encapsulations present on the incoming interfaces.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **all-inclusive** *boolean*

Synopsis Mirror flows matching the AQP subscriber default policy

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-qos-policy](#) [entry](#) *number* [action](#) [mirror-source](#) [all-inclusive](#) *boolean*

Tree [all-inclusive](#)

Description This command specifies that all packets during the identification phase that could match a given AQP rule are mirrored in addition to packets after an application identification completes that match the AQP rule. This ensures that all packets of a flow are mirrored at a cost of sending some unidentified packets, which after the application is identified no longer match this AQP entry.



Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### mirror-service *reference*

Synopsis	Mirror source service ID for flows matching the entry
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action mirror-source mirror-service reference</a>
Tree	<a href="#">mirror-service</a>
Description	This command specifies the mirror source service ID to use for flows that match this policy.
Reference	<b>configure</b> <a href="#">mirror mirror-dest string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### overload-drop

Synopsis	Enable the <b>overload-drop</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action overload-drop</a>
Tree	<a href="#">overload-drop</a>
Description	Commands in this context configure a drop action for cases where flow records are not created (overload). This command is only applicable to ISA2 hardware.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### event-log *reference*

Synopsis	Event log name
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action overload-drop event-log reference</a>
Tree	<a href="#">event-log</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number event-log string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**remark**

Synopsis	Enter the <b>remark</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action remark</a>
Tree	<a href="#">remark</a>
Description	Commands in this context configure the remark action on flows matching this AQP entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**dscp**

Synopsis	Enter the <b>dscp</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action remark dscp</a>
Tree	<a href="#">dscp</a>
Description	<p>Commands in this context configure the DSCP remark action or actions on flows matching this AQP entry.</p> <p>All packets for all flows matching this AQP entry are remarked to the configured DSCP name.</p> <p>DSCP remark can only be applied when the entry remarks forwarding class or forwarding class and priority. In-profile and out-of-profile of a packet for DSCP remark is assessed after all AQP policing and priority remarking actions have taken place.</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**in-profile keyword**

Synopsis	DSCP name to remark matching in-profile flows
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action remark dscp in-profile keyword</a>
Tree	<a href="#">in-profile</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **out-profile** *keyword*

Synopsis DSCP name to remark matching out-of-profile flows

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-qos-policy](#) [entry](#) *number* [action](#) [remark](#) [dscp](#) **out-profile** *keyword*

Tree [out-profile](#)

Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **fc** *keyword*

Synopsis FC remark action for flows matching this entry

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-qos-policy](#) [entry](#) *number* [action](#) [remark](#) **fc** *keyword*

Tree [fc](#)

Options be, l2, af, l1, h2, ef, h1, nc

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **priority** *keyword*

Synopsis Priority to use to remark flows matching this entry

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-qos-policy](#) [entry](#) *number* [action](#) [remark](#) **priority** *keyword*

Tree [priority](#)

Options low, high, auto

Default auto

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**sctp-filter** *reference*

Synopsis	SCTP filter to use for flows matching the AQP entry
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action sctp-filter reference</a>
Tree	<a href="#">sctp-filter</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number sctp-filter string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**session-filter** *reference*

Synopsis	Session filter to use for flows matching the AQP entry
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action session-filter reference</a>
Tree	<a href="#">session-filter</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**tcp-mss-adjust** *number*

Synopsis	TCP MSS adjustment traffic action and size
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action tcp-mss-adjust number</a>
Tree	<a href="#">tcp-mss-adjust</a>
Range	160 to 10240
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**tcp-validate** *reference*

Synopsis	TCP validation policy action for entry matching flows
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action tcp-validate reference</a>
Tree	<a href="#">tcp-validate</a>

Description	This command assigns an existing TCP validation policy as an action on flows matching this AQP entry. TCP validation can only be called from AQP entries that: <ul style="list-style-type: none"> <li>• have no matching conditions that relate to information extracted from the incoming IP packets; for example, no application or IP address.</li> <li>• allow the following match conditions: none, aa-sub, characteristic, traffic-direction (both only), traffic-direction cannot be unidirectional (from or to sub). It can either be set to both or left unspecified.</li> </ul>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number tcp-validate string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tls-enrich** *reference*

Synopsis	HTTP TLS enrichment action for the AQP entry
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action tls-enrich reference</a>
Tree	<a href="#">tls-enrich</a>
Reference	<b>configure</b> <a href="#">application-assurance group number http-enrich string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **url-filter**

Synopsis	Enter the <b>url-filter</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action url-filter</a>
Tree	<a href="#">url-filter</a>
Description	Commands in this context configure a URL filter action for flows matching this entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **characteristic** *reference*

Synopsis	URL filter characteristic used for matching AQP entries
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action url-filter characteristic reference</a>

Tree	<a href="#">characteristic</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy app-service-options characteristic string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **name reference**

Synopsis	URL filter name
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action url-filter name reference</a>
Tree	<a href="#">name</a>
Reference	<b>configure</b> <a href="#">application-assurance group number url-filter string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state keyword**

Synopsis	Administrative state of the AA AQP entry
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## match

Synopsis	Enter the <b>match</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match</a>
Tree	<a href="#">match</a>
Description	Commands in this context configure flow match rules for this AQP entry. A flow matches this AQP entry only if it matches all match rules defined (logical AND of all rules). If no match rule is specified, the entry will match all flows.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## aa-sub

Synopsis	Enter the <b>aa-sub</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match aa-sub</a>
Tree	<a href="#">aa-sub</a>
Description	Commands in this context specify a Service Access Point (SAP) or an Enhanced Subscriber Management (ESM) subscriber as matching criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## esm

Synopsis	Enter the <b>esm</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match aa-sub esm</a>
Tree	<a href="#">esm</a>
Description	Commands in this context configure the ESM fields for the AA subscriber match entry.
Notes	The following elements are part of a choice: <b>esm</b> , <b>esm-mac</b> , <b>sap</b> , <b>spoke-sdp</b> , or <b>transit</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**eq string**

Synopsis	Exact match criterion used for the ESM subscriber
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match aa-sub esm eq string</a>
Tree	<a href="#">eq</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**neq string**

Synopsis	Non-match criterion used for ESM subscriber
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match aa-sub esm neq string</a>
Tree	<a href="#">neq</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**esm-mac**

Synopsis	Enter the <b>esm-mac</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match aa-sub esm-mac</a>
Tree	<a href="#">esm-mac</a>
Description	Commands in this context configure the ESM MAC fields for the AA subscriber match entry.
Notes	The following elements are part of a choice: <b>esm</b> , <b>esm-mac</b> , <b>sap</b> , <b>spoke-sdp</b> , or <b>transit</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**eq string**

Synopsis	Exact match criterion used for ESM MAC subscriber
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match aa-sub esm-mac eq string</a>
Tree	<a href="#">eq</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**neq string**

Synopsis	Non-match criterion used for AA subscriber ESM MAC
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match aa-sub esm-mac neq string</a>
Tree	<a href="#">neq</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**sap**

Synopsis	Enter the <b>sap</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match aa-sub sap</a>
Tree	<a href="#">sap</a>
Description	Commands in this context configure the SAP fields for the AA subscriber match entry.
Notes	The following elements are part of a choice: <b>esm</b> , <b>esm-mac</b> , <b>sap</b> , <b>spoke-sdp</b> , or <b>transit</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**eq string**

Synopsis	Exact match criterion used for the SAP subscriber
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy</a> <a href="#">app-qos-policy</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">aa-sub</a> <a href="#">sap</a> <a href="#">eq</a> <a href="#">string</a>
Tree	<a href="#">eq</a>
String Length	1 to 45
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**neq string**

Synopsis	Non-match criterion used for the SAP subscriber
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy</a> <a href="#">app-qos-policy</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">aa-sub</a> <a href="#">sap</a> <a href="#">neq</a> <a href="#">string</a>
Tree	<a href="#">neq</a>
String Length	1 to 45
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**spoke-sdp**

Synopsis	Enter the <b>spoke-sdp</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy</a> <a href="#">app-qos-policy</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">aa-sub</a> <a href="#">spoke-sdp</a>
Tree	<a href="#">spoke-sdp</a>
Description	Commands in this context configure the spoke SDP fields for the AA subscriber match entry.
Notes	The following elements are part of a choice: <b>esm</b> , <b>esm-mac</b> , <b>sap</b> , <b>spoke-sdp</b> , or <b>transit</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**eq string**

Synopsis	Exact match criterion used for a spoke SDP subscriber
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy</a> <a href="#">app-qos-policy</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">aa-sub</a> <a href="#">spoke-sdp</a> <a href="#">eq</a> <a href="#">string</a>
Tree	<a href="#">eq</a>
String Length	3 to 16
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **neq** *string*

Synopsis	Non-match criterion used for a spoke SDP subscriber
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy</a> <a href="#">app-qos-policy</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">aa-sub</a> <a href="#">spoke-sdp</a> <a href="#">neq</a> <a href="#">string</a>
Tree	<a href="#">neq</a>
String Length	3 to 16
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **transit**

Synopsis	Enter the <b>transit</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy</a> <a href="#">app-qos-policy</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">aa-sub</a> <a href="#">transit</a>
Tree	<a href="#">transit</a>
Description	Commands in this context configure the transit fields for the AA subscriber match entry.
Notes	The following elements are part of a choice: <b>esm</b> , <b>esm-mac</b> , <b>sap</b> , <b>spoke-sdp</b> , or <b>transit</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **eq** *string*

Synopsis	Exact match criterion used for a transit AA subscriber
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy</a> <a href="#">app-qos-policy</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">aa-sub</a> <a href="#">transit</a> <a href="#">eq</a> <a href="#">string</a>

Tree	<a href="#">eq</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**neq string**

Synopsis	Non-match criterion used for a transit AA subscriber
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match aa-sub transit neq string</a>
Tree	<a href="#">neq</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**aa-sub-tethering keyword**

Synopsis	Tethering detection status for flow match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match aa-sub-tethering keyword</a>
Tree	<a href="#">aa-sub-tethering</a>
Description	This command configures the match criteria for subscribers in a tethering state.
Options	not-applicable, detected, not-detected
Default	not-applicable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**app-group**

Synopsis	Enter the <b>app-group</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match app-group</a>
Tree	<a href="#">app-group</a>

Description	Commands in this context add an application group to the match criteria used by this AQP entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **eq reference**

Synopsis	Exact match criterion used for the application group
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match app-group eq reference</a>
Tree	<a href="#">eq</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy app-group string</a>
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **neq reference**

Synopsis	Non-match criterion used for the application group
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match app-group neq reference</a>
Tree	<a href="#">neq</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy app-group string</a>
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **application**

Synopsis	Enter the <b>application</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match application</a>
Tree	<a href="#">application</a>
Description	Commands in this context add an application to match criteria used by this AQP entry.
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **eq** *reference*

Synopsis Exact match criterion used for the application

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number match application eq reference](#)

Tree [eq](#)

Reference **configure** [application-assurance group number partition number policy application string](#)

Notes The following elements are part of a choice: **eq** or **neq**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **neq** *reference*

Synopsis Non-match criterion used for the application

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number match application neq reference](#)

Tree [neq](#)

Reference **configure** [application-assurance group number partition number policy application string](#)

Notes The following elements are part of a choice: **eq** or **neq**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **characteristic** [[characteristic-name](#)] *reference*

Synopsis Enter the **characteristic** list instance

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number match characteristic reference](#)

Tree [characteristic](#)

Description Commands in this context configure an existing characteristic and its value to the match criteria used by this AQP entry.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[characteristic-name] reference**

Synopsis	ASO characteristic name for AQP entry matching
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match characteristic reference</a>
Tree	<a href="#">characteristic</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy app-service-options characteristic string</a>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**eq reference**

Synopsis	Match criterion used for AQP match characteristic
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match characteristic reference eq reference</a>
Tree	<a href="#">eq</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy app-service-options characteristic string value string</a>
Notes	The following elements are part of a mandatory choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**neq reference**

Synopsis	Non-match criterion used for AQP match characteristic
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match characteristic reference neq reference</a>
Tree	<a href="#">neq</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy app-service-options characteristic string value string</a>
Notes	The following elements are part of a mandatory choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## charging-group

Synopsis	Enter the <b>charging-group</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match charging-group</a>
Tree	<a href="#">charging-group</a>
Description	Commands in this context add a charging group to match criteria used by this AQP entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## eq reference

Synopsis	Match criterion used for the charging group
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match charging-group eq reference</a>
Tree	<a href="#">eq</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-group string</a>
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## neq reference

Synopsis	Non-match criterion used for the charging group
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match charging-group neq reference</a>
Tree	<a href="#">neq</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-group string</a>
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**dscp**

Synopsis	Enter the <b>dscp</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-qos-policy entry number match dscp</a>
Tree	<a href="#">dscp</a>
Description	Commands in this context add a DSCP name to the match criteria used by this entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**eq keyword**

Synopsis	Exact match criterion used for the DSCP
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-qos-policy entry number match dscp eq keyword</a>
Tree	<a href="#">eq</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**neq keyword**

Synopsis	Non-match criterion used for the DSCP
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-qos-policy entry number match dscp neq keyword</a>
Tree	<a href="#">neq</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**dst-ip**

Synopsis	Enter the <b>dst-ip</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match dst-ip</a>
Tree	<a href="#">dst-ip</a>
Description	Commands in this context configure a destination IP address to use as match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**eq**

Synopsis	Enter the <b>eq</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match dst-ip eq</a>
Tree	<a href="#">eq</a>
Description	Commands in this context specify the exact match value as the match criterion. A successful match occurs when the flow matches the specified address or prefix.
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip-prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP address prefix used for match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match dst-ip eq ip-prefix (ipv4-prefix   ipv6-prefix)</a>
Tree	<a href="#">ip-prefix</a>
Notes	The following elements are part of a choice: <b>ip-prefix</b> or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip-prefix-list** *reference*

Synopsis	IP address prefix list used for match criterion
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-qos-policy</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-ip</a> <a href="#">eq</a> <a href="#">ip-prefix-list</a> <a href="#">reference</a>
Tree	<a href="#">ip-prefix-list</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">ip-prefix-list</a> <a href="#">string</a>
Notes	The following elements are part of a choice: <b>ip-prefix</b> or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## neq

Synopsis	Enter the <b>neq</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-qos-policy</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-ip</a> <a href="#">neq</a>
Tree	<a href="#">neq</a>
Description	Commands in this context specify the non-match value as the match criterion. A successful match occurs when the flow does not match the specified address or prefix.
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ip-prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP address prefix used for match criterion
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-qos-policy</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-ip</a> <a href="#">neq</a> <a href="#">ip-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">ip-prefix</a>
Notes	The following elements are part of a choice: <b>ip-prefix</b> or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ip-prefix-list *reference*

Synopsis	IP address prefix list used for match criterion
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-qos-policy</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-ip</a> <a href="#">neq</a> <a href="#">ip-prefix-list</a> <a href="#">reference</a>
Tree	<a href="#">ip-prefix-list</a>

Reference	<b>configure</b> <a href="#">application-assurance group number partition number ip-prefix-list string</a>
Notes	The following elements are part of a choice: <b>ip-prefix</b> or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dst-port

Synopsis	Enter the <b>dst-port</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match dst-port</a>
Tree	<a href="#">dst-port</a>
Description	Commands in this context configure a destination TCP/UDP port, a destination port list, or a destination range to use as match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## eq

Synopsis	Enter the <b>eq</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match dst-port eq</a>
Tree	<a href="#">eq</a>
Description	Commands in this context specify the exact match criterion. A successful match occurs when the flow matches the specified port.
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## port-list *reference*

Synopsis	IP port list used as match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match dst-port eq port-list reference</a>
Tree	<a href="#">port-list</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number port-list string</a>
Notes	The following elements are part of a choice: <b>port-list</b> , <b>port-number</b> , or <b>range</b> .

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port-number** *number*

Synopsis	Server port number used as match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match dst-port eq port-number number</a>
Tree	<a href="#">port-number</a>
Range	0   1 to 65535
Default	0
Notes	The following elements are part of a choice: <b>port-list</b> , <b>port-number</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **range**

Synopsis	Enter the <b>range</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match dst-port eq range</a>
Tree	<a href="#">range</a>
Description	Commands in this context specify the match value as the match criterion based on the starting or ending port number.
Notes	The following elements are part of a choice: <b>port-list</b> , <b>port-number</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **end** *number*

Synopsis	TCP/UDP ending port number
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match dst-port eq range end number</a>
Tree	<a href="#">end</a>
Range	0   1 to 65535
Default	1
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **start number**

Synopsis TCP/UDP starting port number

Context **configure** application-assurance group number partition number policy app-qos-policy entry number match dst-port eq range start number

Tree [start](#)

Range 0 | 1 to 65535

Default 0

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **neq**

Synopsis Enter the **neq** context

Context **configure** application-assurance group number partition number policy app-qos-policy entry number match dst-port neq

Tree [neq](#)

Description Commands in this context specify the non-match value as the match criterion. A successful match occurs when the flow does not match the specified port.

Notes The following elements are part of a choice: **eq** or **neq**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port-list reference**

Synopsis IP port list used as match criterion

Context **configure** application-assurance group number partition number policy app-qos-policy entry number match dst-port neq port-list reference

Tree [port-list](#)

Reference **configure** application-assurance group number partition number port-list string

Notes The following elements are part of a choice: **port-list**, **port-number**, or **range**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **port-number** *number*

Synopsis	Server port number used as match criterion
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy app-qos-policy entry</a> <i>number</i> <a href="#">match dst-port neq</a> <b>port-number</b> <i>number</i>
Tree	<a href="#">port-number</a>
Range	0   1 to 65535
Default	0
Notes	The following elements are part of a choice: <b>port-list</b> , <b>port-number</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **range**

Synopsis	Enter the <b>range</b> context
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy app-qos-policy entry</a> <i>number</i> <a href="#">match dst-port neq</a> <b>range</b>
Tree	<a href="#">range</a>
Description	Commands in this context specify the match value as the match criterion based on the starting or ending port number.
Notes	The following elements are part of a choice: <b>port-list</b> , <b>port-number</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **end** *number*

Synopsis	TCP/UDP ending port number
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy app-qos-policy entry</a> <i>number</i> <a href="#">match dst-port neq</a> <b>range</b> <b>end</b> <i>number</i>
Tree	<a href="#">end</a>
Range	0   1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**start number**

Synopsis	TCP/UDP starting port number
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match dst-port neq range start number</a>
Tree	<a href="#">start</a>
Range	0   1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**flow-attribute** [[flow-attribute-name](#)] *string*

Synopsis	Enter the <b>flow-attribute</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match flow-attribute string</a>
Tree	<a href="#">flow-attribute</a>
Description	Commands in this context configure a flow attribute to use as match criteria. The supported options are: <ul style="list-style-type: none"> <li>• abr_service</li> <li>• audio</li> <li>• download</li> <li>• encrypted</li> <li>• esni</li> <li>• real_time_communication</li> <li>• upload</li> <li>• video</li> </ul>
Max. Instances	10
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[flow-attribute-name]** *string*

Synopsis	Flow attribute name used as match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match flow-attribute string</a>



Tree	<a href="#">flow-attribute</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## confidence

Synopsis	Enter the <b>confidence</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match flow-attribute string confidence</a>
Tree	<a href="#">confidence</a>
Description	Commands in this context configure the confidence level of the flow attribute for use as match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## eq number

Synopsis	Exact match criterion for the flow-attribute confidence
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match flow-attribute string confidence eq number</a>
Tree	<a href="#">eq</a>
Range	0 to 100
Notes	The following elements are part of a choice: <b>eq</b> , <b>gte</b> , or <b>lt</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## gte number

Synopsis	Greater than or equal to for confidence match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match flow-attribute string confidence gte number</a>
Tree	<a href="#">gte</a>
Range	0 to 100
Notes	The following elements are part of a choice: <b>eq</b> , <b>gte</b> , or <b>lt</b> .

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**lt** *number*

Synopsis	Less than value for confidence match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match flow-attribute string confidence lt number</a>
Tree	<a href="#">lt</a>
Range	1 to 100
Notes	The following elements are part of a choice: <b>eq</b> , <b>gte</b> , or <b>lt</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip-protocol**

Synopsis	Enter the <b>ip-protocol</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match ip-protocol</a>
Tree	<a href="#">ip-protocol</a>
Description	Commands in this context configure the IP protocol to use in the application definition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**eq** (*number* | *keyword*)

Synopsis	Exact match criterion used for the IP protocol
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match ip-protocol eq (number   keyword)</a>
Tree	<a href="#">eq</a>
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **neq** (*number* | *keyword*)

Synopsis Non-match criterion used for the IP protocol

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [policy app-qos-policy entry](#) *number* [match ip-protocol neq](#) (*number* | *keyword*)

Tree [neq](#)

Range 0 to 255

Options tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp

Notes The following elements are part of a choice: **eq** or **neq**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **src-ip**

Synopsis Enter the **src-ip** context

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [policy app-qos-policy entry](#) *number* [match src-ip](#)

Tree [src-ip](#)

Description Commands in this context configure a source IP address to use as match criteria.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **eq**

Synopsis Enter the **eq** context

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [policy app-qos-policy entry](#) *number* [match src-ip eq](#)

Tree [eq](#)

Description Commands in this context specify the exact match value as the match criterion. A successful match occurs when the flow matches the specified address or prefix.

Notes The following elements are part of a choice: **eq** or **neq**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis IP address prefix used for match criterion

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number match src-ip eq ip-prefix](#) (*ipv4-prefix* | *ipv6-prefix*)

Tree [ip-prefix](#)

Notes The following elements are part of a choice: **ip-prefix** or **ip-prefix-list**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-prefix-list** *reference*

Synopsis IP address prefix list used for match criterion

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number match src-ip eq ip-prefix-list reference](#)

Tree [ip-prefix-list](#)

Reference **configure** [application-assurance group number partition number ip-prefix-list string](#)

Notes The following elements are part of a choice: **ip-prefix** or **ip-prefix-list**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **neq**

Synopsis Enter the **neq** context

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number match src-ip neq](#)

Tree [neq](#)

Description Commands in this context specify the non-match value as the match criterion. A successful match occurs when the flow does not match the specified address or prefix.

Notes The following elements are part of a choice: **eq** or **neq**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip-prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP address prefix used for match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match src-ip neq ip-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">ip-prefix</a>
Notes	The following elements are part of a choice: <b>ip-prefix</b> or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip-prefix-list** *reference*

Synopsis	IP address prefix list used for match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match src-ip neq ip-prefix-list reference</a>
Tree	<a href="#">ip-prefix-list</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number ip-prefix-list string</a>
Notes	The following elements are part of a choice: <b>ip-prefix</b> or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**src-port**

Synopsis	Enter the <b>src-port</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match src-port</a>
Tree	<a href="#">src-port</a>
Description	Commands in this context specify a source IP port, a source port list, or a source range to use as match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**eq**

Synopsis	Enter the <b>eq</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match src-port eq</a>

Tree	<a href="#">eq</a>
Description	Commands in this context specify the exact match criterion. A successful match occurs when the flow matches the specified port.
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port-list** *reference*

Synopsis	IP port list used as match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match src-port eq port-list reference</a>
Tree	<a href="#">port-list</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number port-list string</a>
Notes	The following elements are part of a choice: <b>port-list</b> , <b>port-number</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port-number** *number*

Synopsis	Server port number used as match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match src-port eq port-number number</a>
Tree	<a href="#">port-number</a>
Range	0   1 to 65535
Default	0
Notes	The following elements are part of a choice: <b>port-list</b> , <b>port-number</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **range**

Synopsis	Enter the <b>range</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match src-port eq range</a>
Tree	<a href="#">range</a>

Description	Commands in this context specify the match value as the match criterion based on the starting or ending port number.
Notes	The following elements are part of a choice: <b>port-list</b> , <b>port-number</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **end number**

Synopsis	TCP/UDP ending port number
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match src-port eq range end number</a>
Tree	<a href="#">end</a>
Range	0   1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **start number**

Synopsis	TCP/UDP starting port number
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match src-port eq range start number</a>
Tree	<a href="#">start</a>
Range	0   1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **neq**

Synopsis	Enter the <b>neq</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match src-port neq</a>
Tree	<a href="#">neq</a>
Description	Commands in this context specify the non-match value as the match criterion. A successful match occurs when the flow does not match the specified port.

Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port-list** *reference*

Synopsis	IP port list used as match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match src-port neq port-list reference</a>
Tree	<a href="#">port-list</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number port-list string</a>
Notes	The following elements are part of a choice: <b>port-list</b> , <b>port-number</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port-number** *number*

Synopsis	Server port number used as match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match src-port neq port-number number</a>
Tree	<a href="#">port-number</a>
Range	0   1 to 65535
Default	0
Notes	The following elements are part of a choice: <b>port-list</b> , <b>port-number</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **range**

Synopsis	Enter the <b>range</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match src-port neq range</a>
Tree	<a href="#">range</a>
Description	Commands in this context specify the match value as the match criterion based on the starting or ending port number.
Notes	The following elements are part of a choice: <b>port-list</b> , <b>port-number</b> , or <b>range</b> .



Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end number**

Synopsis	TCP/UDP ending port number
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match src-port neq range end number</a>
Tree	<a href="#">end</a>
Range	0   1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**start number**

Synopsis	TCP/UDP starting port number
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match src-port neq range start number</a>
Tree	<a href="#">start</a>
Range	0   1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**traffic-direction keyword**

Synopsis	Traffic direction to which AQP match entry is applied
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match traffic-direction keyword</a>
Tree	<a href="#">traffic-direction</a>
Options	subscriber-to-network, network-to-subscriber, both
Default	both
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## app-service-options

Synopsis	Enter the <b>app-service-options</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-service-options</a>
Tree	<a href="#">app-service-options</a>
Description	Commands in this context configure application service option characteristics.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## characteristic [[characteristic-name](#)] *string*

Synopsis	Enter the <b>characteristic</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-service-options characteristic string</a>
Tree	<a href="#">characteristic</a>
Description	Commands in this context create the characteristic of the application service options.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## [[characteristic-name](#)] *string*

Synopsis	ASO characteristic name
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-service-options characteristic string</a>
Tree	<a href="#">characteristic</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## default-value *string*

Synopsis	ASO characteristic default value
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-service-options characteristic string default-value string</a>

Tree	<a href="#">default-value</a>
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **value** [[value-name](#)] *string*

Synopsis	Add a list entry for <b>value</b>
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-service-options characteristic string value string</a>
Tree	<a href="#">value</a>
Description	Commands in this context configure a characteristic value.
Max. Instances	64
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[value-name]** *string*

Synopsis	ASO characteristic value name
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-service-options characteristic string value string</a>
Tree	<a href="#">value</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **application** [[application-name](#)] *string*

Synopsis	Enter the <b>application</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy application string</a>
Tree	<a href="#">application</a>
Description	Commands in this context configure the policy application of the Application Assurance group partition.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[application-name]** *string*

Synopsis	Application name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">application</a> <i>string</i>
Tree	<a href="#">application</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **app-group** *reference*

Synopsis	Application group associated with the application
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">application</a> <i>string</i> <a href="#">app-group</a> <i>reference</i>
Tree	<a href="#">app-group</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-group</a> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **charging-group** *reference*

Synopsis	Charging group associated with the application
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">application</a> <i>string</i> <a href="#">charging-group</a> <i>reference</i>
Tree	<a href="#">charging-group</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">charging-group</a> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description *string***

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy application string</a> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**export-id *number***

Synopsis	Application export ID used for RADIUS accounting
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy application string</a> <a href="#">export-id number</a>
Tree	<a href="#">export-id</a>
Range	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**charging-filter**

Synopsis	Enter the <b>charging-filter</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy charging-filter</a>
Tree	<a href="#">charging-filter</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**entry [*entry-id*] *number***

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy charging-filter</a> <a href="#">entry number</a>
Tree	<a href="#">entry</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[entry-id] number**

Synopsis	Charging filter entry ID in the AA partition policy
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy charging-filter entry number</a>
Tree	<a href="#">entry</a>
Description	This command defines a charging filter entry ID. Charging filter entries are an ordered list; the lowest numerical entry that matches the flow, defines the charging filter for this flow.
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of the AA charging filter entry
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy charging-filter entry number</a> <a href="#">admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**charging-group reference**

Synopsis	Charging group to associate to flows matching the entry
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy charging-filter entry number</a> <a href="#">charging-group reference</a>
Tree	<a href="#">charging-group</a>
Description	This command associates a charging group to the flows that match the charging filter entry.
Reference	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy charging-group string</a>
Introduced	22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### description *string*

Synopsis Text description

Context **configure** [application-assurance group number](#) [partition number](#) [policy charging-filter entry number](#) *description string*

Tree [description](#)

String Length 1 to 80

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### match

Synopsis Enter the **match** context

Context **configure** [application-assurance group number](#) [partition number](#) [policy charging-filter entry number](#) *match*

Tree [match](#)

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### app-group

Synopsis Enter the **app-group** context

Context **configure** [application-assurance group number](#) [partition number](#) [policy charging-filter entry number](#) *match app-group*

Tree [app-group](#)

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### eq *reference*

Synopsis Exact value as the match criterion

Context **configure** [application-assurance group number](#) [partition number](#) [policy charging-filter entry number](#) *match app-group eq reference*

Tree [eq](#)

Description	This command specifies that the value configured and the value in the flow must be equal for a match to occur.
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy app-group string</a>
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **neq reference**

Synopsis	Non-matching application to resolve to a charging group
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-filter entry number match app-group neq reference</a>
Tree	<a href="#">neq</a>
Description	This command specifies that the value configured and the value in the flow must differ for a match to occur.
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy app-group string</a>
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **application**

Synopsis	Enter the <b>application</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-filter entry number match application</a>
Tree	<a href="#">application</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **eq reference**

Synopsis	Exact value as the match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-filter entry number match application eq reference</a>
Tree	<a href="#">eq</a>



Description	This command specifies that the value configured and the value in the flow must be equal for a match to occur.
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy application string</a>
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **neq** *reference*

Synopsis	Non-matching application to resolve to a charging group
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-filter entry number match application neq reference</a>
Tree	<a href="#">neq</a>
Description	This command specifies that the value configured and the value in the flow must differ for a match to occur.
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy application string</a>
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **flow-attribute** [[flow-attribute-name](#)] *string*

Synopsis	Enter the <b>flow-attribute</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-filter entry number match flow-attribute string</a>
Tree	<a href="#">flow-attribute</a>
Max. Instances	10
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[flow-attribute-name]** *string*

Synopsis	Flow attribute name match criteria
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Context	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-filter entry number match flow-attribute string</a>
Tree	<a href="#">flow-attribute</a>
Description	This command adds a flow attribute to the match criteria used by this charging filter entry.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## confidence

Synopsis	Enter the <b>confidence</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-filter entry number match flow-attribute string confidence</a>
Tree	<a href="#">confidence</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## eq number

Synopsis	Exact value as the match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-filter entry number match flow-attribute string confidence eq number</a>
Tree	<a href="#">eq</a>
Description	This command specifies that a successful match occurs when the flow attribute confidence level is equal to the specified value.
Range	0 to 100
Notes	The following elements are part of a choice: <b>eq</b> , <b>gte</b> , or <b>lt</b> .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## gte number

Synopsis	Confidence value to resolve to a charging group
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Context	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-filter entry number match flow-attribute string confidence gte number</a>
Tree	<a href="#">gte</a>
Description	This command specifies that a successful match occurs when the flow attribute confidence level is greater than or equal to the specified value.
Range	0 to 100
Notes	The following elements are part of a choice: <b>eq</b> , <b>gte</b> , or <b>lt</b> .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **lt number**

Synopsis	Less than value as the match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-filter entry number match flow-attribute string confidence lt number</a>
Tree	<a href="#">lt</a>
Description	This command specifies that a successful match occurs when the flow attribute confidence level is less than the specified value.
Range	1 to 100
Notes	The following elements are part of a choice: <b>eq</b> , <b>gte</b> , or <b>lt</b> .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tethered-flow**

Synopsis	Enable the <b>tethered-flow</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-filter entry number match tethered-flow</a>
Tree	<a href="#">tethered-flow</a>
Description	Commands in this context add the tethering status to the match criteria used by this charging filter entry.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**charging-group** [**charging-group-name**] *string*

Synopsis	Enter the <b>charging-group</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-group string</a>
Tree	<a href="#">charging-group</a>
Description	Commands in this context create a charging group for an Application Assurance policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[charging-group-name]** *string*

Synopsis	Charging group name
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-group string</a>
Tree	<a href="#">charging-group</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-group string description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**export-id** *number*

Synopsis	Charging group export ID used for RADIUS accounting
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-group string export-id number</a>
Tree	<a href="#">export-id</a>

Description	This command assigns an export ID value to a charging group, an app application group, or an application to be used for accounting export identification in RADIUS accounting. This ID is encoded in the top 2 bytes of the RADIUS accounting VSA to identify which charging group the counter value represents.
Range	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **notify-start-stop** *keyword*

Synopsis	Start and stop notification for the charging group
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">charging-group</a> <i>string</i> <b>notify-start-stop</b> <i>keyword</i>
Tree	<a href="#">notify-start-stop</a>
Options	none, flow, charging-group
Default	none
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **custom-protocol** [[custom-protocol-id](#)] *string*

Synopsis	Enter the <b>custom-protocol</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">custom-protocol</a> <i>string</i>
Tree	<a href="#">custom-protocol</a>
Description	<p>Commands in this context configure custom protocols.</p> <p>Custom protocols allow the creation of TCP and UDP-based custom protocols that employ pattern-match at offset in the protocol signature definition.</p> <p>Operator-configurable custom protocols are evaluated ahead of any Nokia-provided protocol signature in order of custom protocol ID within the context the protocol is defined. The lower ID is matched first in case of flow matching multiple custom protocols.</p> <p>Custom protocols must be created before they can be used in an application definition but do not have to be enabled. To reference a custom protocol in an application definition, or any other CLI configuration one must use the protocol name that is a concatenation of “custom_” and, (for example, custom_01, custom_02 ... custom_10, and so on). This concatenation is also used when reporting custom protocol statistics.</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[custom-protocol-id] string**

Synopsis	Custom protocol ID for the AA policy custom protocol
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy custom-protocol string</a>
Tree	<a href="#">custom-protocol</a>
Description	This command configures the index into the protocol list that defines a custom protocol for Application Assurance.
String Length	9
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of the custom protocol
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy custom-protocol string admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy custom-protocol string description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**expression** [[expr-index](#)] *number*

Synopsis	Enter the <b>expression</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">custom-protocol</a> <a href="#">string</a> <a href="#">expression</a> <i>number</i>
Tree	<a href="#">expression</a>
Description	Commands in this context configure an expression string value for pattern-based custom protocols match.  A flow matches a custom protocol if the specified string is found at an offset of a TCP/UDP of the first payload packet.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[[expr-index](#)]** *number*

Synopsis	Expression substring index for custom protocol matching
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">custom-protocol</a> <a href="#">string</a> <a href="#">expression</a> <i>number</i>
Tree	<a href="#">expression</a>
Range	1
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**direction** *keyword*

Synopsis	Flow direction for custom-protocol expression matching
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">custom-protocol</a> <a href="#">string</a> <a href="#">expression</a> <i>number</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">direction</a>
Description	This command configures the protocol direction to match against for a custom protocol.
Options	client-to-server, server-to-client, any
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**eq string**

Synopsis	Exact match criterion for custom protocol expression
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy custom-protocol string expression number</a> <b>eq string</b>
Tree	<a href="#">eq</a>
String Length	1 to 255
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**offset number**

Synopsis	Offset in protocol flow to start custom-protocol match
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy custom-protocol string expression number</a> <b>offset number</b>
Tree	<a href="#">offset</a>
Description	This command configures the offset into the protocol payload where the expr-string match criteria starts.
Range	0 to 127
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip-protocol keyword****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP protocol number for custom-protocol match criterion
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy custom-protocol string ip-protocol</a> <b>keyword</b>
Tree	<a href="#">ip-protocol</a>
Description	This command configures the IP protocol number of the TCP and UDP-based custom protocols.
Options	tcp, udp
Notes	This element is mandatory.



Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **default-charging-group** *reference*

Synopsis	Default charging group
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy default-charging-group reference</a>
Tree	<a href="#">default-charging-group</a>
Description	This command associates a charging group with any applications or application groups that do not have an explicitly assigned charging group for the Application Assurance policy.
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-group string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **default-tethered-charging-group** *reference*

Synopsis	Default charging group for tethered traffic
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy default-tethered-charging-group reference</a>
Tree	<a href="#">default-tethered-charging-group</a>
Description	This command configures the default charging group to be assigned to all flows which are classified as tethered.  For flows that have been identified as tethered, the AA will replace the charging group configured at the application level with the charging group configured for tethered traffic (that is, configured with <b>default-tethered-charging-group</b> ).
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-group string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **policy-override**

Synopsis	Enter the <b>policy-override</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy-override</a>
Tree	<a href="#">policy-override</a>

Description	Commands in this context configure policy override parameters.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## aa-sub

Synopsis	Enter the <b>aa-sub</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy-override aa-sub</a>
Tree	<a href="#">aa-sub</a>
Description	Commands in this context configure the AA policy override subscriber fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## sap [[sap-id](#)] *string*

Synopsis	Enter the <b>sap</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy-override aa-sub</a> <a href="#">sap string</a>
Tree	<a href="#">sap</a>
Description	Commands in this context configure the Service Access Point (SAP) within the partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## [[sap-id](#)] *string*

Synopsis	AA subscriber SAP ID
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy-override aa-sub</a> <a href="#">sap string</a>
Tree	<a href="#">sap</a>
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**characteristic** [[characteristic-name](#)] *reference*

Synopsis	Enter the <b>characteristic</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy-override aa-sub sap string characteristic reference</a>
Tree	<a href="#">characteristic</a>
Description	Commands in this context configure an override characteristic and value.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[characteristic-name]** *reference*

Synopsis	ASO characteristic name
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy-override aa-sub sap string characteristic reference</a>
Tree	<a href="#">characteristic</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy app-service-options characteristic string</a>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**value** *reference*

Synopsis	Characteristic value used in subscriber policy override
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy-override aa-sub sap string characteristic reference value reference</a>
Tree	<a href="#">value</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy app-service-options characteristic string value string</a>
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**spoke-sdp** [[sdp-bind-id](#)] *string*

Synopsis	Enter the <b>spoke-sdp</b> list instance
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy-override</a> <a href="#">aa-sub</a> <a href="#">spoke-sdp</a> <a href="#">string</a>
Tree	<a href="#">spoke-sdp</a>
Description	Commands in this context configure the Service Distribution Point (SDP) for the policy override.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[sdp-bind-id]** [string](#)

Synopsis	Spoke SDP ID for an AA subscriber
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy-override</a> <a href="#">aa-sub</a> <a href="#">spoke-sdp</a> <a href="#">string</a>
Tree	<a href="#">spoke-sdp</a>
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**characteristic** [[characteristic-name](#)] [reference](#)

Synopsis	Enter the <b>characteristic</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy-override</a> <a href="#">aa-sub</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">characteristic</a> <a href="#">reference</a>
Tree	<a href="#">characteristic</a>
Description	Commands in this context configure an override characteristic and value.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[characteristic-name]** [reference](#)

Synopsis	ASO characteristic name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy-override</a> <a href="#">aa-sub</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">characteristic</a> <a href="#">reference</a>
Tree	<a href="#">characteristic</a>

Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy app-service-options characteristic string</a>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### value reference

Synopsis	Characteristic value used in subscriber policy override
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy-override aa-sub spoke-sdp string characteristic reference value reference</a>
Tree	<a href="#">value</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy app-service-options characteristic string value string</a>
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### transit [[transit-sub-name](#)] string

Synopsis	Enter the <b>transit</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy-override aa-sub transit string</a>
Tree	<a href="#">transit</a>
Description	Commands in this context configure the AA transit subscriber fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### [[transit-sub-name](#)] string

Synopsis	Transit subscriber name
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy-override aa-sub transit string</a>
Tree	<a href="#">transit</a>
String Length	1 to 32
Notes	This element is part of a list key.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **characteristic** [[characteristic-name](#)] *reference*

Synopsis	Enter the <b>characteristic</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy-override aa-sub transit string characteristic reference</a>
Tree	<a href="#">characteristic</a>
Description	Commands in this context configure an override characteristic and value.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[characteristic-name]** *reference*

Synopsis	ASO characteristic name
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy-override aa-sub transit string characteristic reference</a>
Tree	<a href="#">characteristic</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy app-service-options characteristic string</a>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **value** *reference*

Synopsis	Characteristic value used in subscriber policy override
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy-override aa-sub transit string characteristic reference value reference</a>
Tree	<a href="#">value</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy app-service-options characteristic string value string</a>
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port-list** [[port-list-name](#)] *string*

Synopsis	Enter the <b>port-list</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number port-list string</a>
Tree	<a href="#">port-list</a>
Description	<p>Commands in this context define an AA group or partition named port list, which contains a list of port numbers or port ranges.</p> <p>The port list is then referenced in AA policy application filters, allowing increased flexibility in the use of server ports or HTTP proxy ports for application definition.</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[port-list-name]** *string*

Synopsis	Port list name
Context	<b>configure</b> <a href="#">application-assurance group number partition number port-list string</a>
Tree	<a href="#">port-list</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number partition number port-list string description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port** [[port-number](#)] *number*

Synopsis	Add a list entry for <b>port</b>
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">port-list</a> <a href="#">string</a> <a href="#">port</a> <a href="#">number</a>
Tree	<a href="#">port</a>
Description	Commands in this context specify the server TCP or UDP port number to use in the port list definition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[port-number]** *number*

Synopsis	Port number
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">port-list</a> <a href="#">string</a> <a href="#">port</a> <a href="#">number</a>
Tree	<a href="#">port</a>
Range	0 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **range** [start](#) *number* [end](#) *number*

Synopsis	Add a list entry for <b>range</b>
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">port-list</a> <a href="#">string</a> <a href="#">range</a> <a href="#">start</a> <a href="#">number</a> <a href="#">end</a> <a href="#">number</a>
Tree	<a href="#">range</a>
Description	Commands in this context configure the AA group or partition named port-list range.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **start** *number*

Synopsis	Start value for the port range in the AA port list
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">port-list</a> <a href="#">string</a> <a href="#">range</a> <a href="#">start</a> <a href="#">number</a> <a href="#">end</a> <a href="#">number</a>
Tree	<a href="#">range</a>
Range	0 to 65534



Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end number**

Synopsis	End value for the port range in the AA port list
Context	<b>configure</b> <a href="#">application-assurance group number partition number port-list string range</a> <a href="#">start number end number</a>
Tree	<a href="#">range</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**sctp-filter** [[sctp-filter-name](#)] *string*

Synopsis	Enter the <b>sctp-filter</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number sctp-filter string</a>
Tree	<a href="#">sctp-filter</a>
Description	Commands in this context configure the Stream Control Transmission Protocol (SCTP) fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[sctp-filter-name]** *string*

Synopsis	SCTP filter name
Context	<b>configure</b> <a href="#">application-assurance group number partition number sctp-filter string</a>
Tree	<a href="#">sctp-filter</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number partition number sctp-filter string description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**event-log** *reference*

Synopsis	Event log for packets dropped by the SCTP filter
Context	<b>configure</b> <a href="#">application-assurance group number partition number sctp-filter string event-log reference</a>
Tree	<a href="#">event-log</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number event-log string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ppid**

Synopsis	Enter the <b>ppid</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number sctp-filter string ppid</a>
Tree	<a href="#">ppid</a>
Description	Commands in this context configure actions for specific or default Payload Protocol Identifiers (PPIDs).
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**default-action** *keyword*

Synopsis	Default action for all SCTP PPIDs
Context	<b>configure</b> <a href="#">application-assurance group number partition number sctp-filter string ppid default-action keyword</a>
Tree	<a href="#">default-action</a>
Options	deny, permit

Default	permit
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **entry** [*entry-id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">sctp-filter</a> <i>string</i> <a href="#">ppid</a> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Description	Commands in this context specify SCTP PPID values and the corresponding action to apply.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[entry-id]** *number*

Synopsis	SCTP filter PPID entry ID
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">sctp-filter</a> <i>string</i> <a href="#">ppid</a> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **action** *keyword*

Synopsis	SCTP filter PPID entry action
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">sctp-filter</a> <i>string</i> <a href="#">ppid</a> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <i>keyword</i>
Tree	<a href="#">action</a>
Options	deny, permit
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**value** (*number* | *keyword*)**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	PPID entry value
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">sctp-filter</a> <i>string</i> <a href="#">ppid</a> <a href="#">entry</a> <i>number</i> <b>value</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">value</a>
Range	0 to 4294967295
Options	iaa, m2ua, m3ua, sua, m2pa, v5ua, h.248, bicc/q.2150.3, tali, dua, asap, enr, h.323, q.ipc/q.2150.3, simco, ddp-segment-chunk, ddp-stream-session-control, s1-application-protocol, rua, hnbap, forces-hp, forces-mp, forces-lp, sbc-ap, nbap, x2ap, ircp, lcs-ap, mpich2, service-area-broadcast-protocol, fractal-generator-protocol, ping-pong-protocol, calcapp-protocol, scripting-service-protocol, netperformer-protocol-control-channel, netperformer-protocol-data-channel, echo, discard, daytime, character-generator, 3gpp-rna, 3gpp-m2ap, 3gpp-m3ap, ssh-over-sctp, diameter-in-a-sctp-data-chunk, diameter-in-a-dtls/sctp-data-chunk, r14p.-ber-encoded-asn.1-over-sctp, webrtc-control, domstring-last, binary-data-partial, binary-data-last, domstring-partial, 3gpp-pua, webrtc-string-empty, webrtc-binary-empty, 3gpp-xwap, 3gpp-xw-control-plane, 3gpp-ng-application-protocol, 3gpp-xn-application-protocol, 3gpp-f1-application-protocol, http-sctp, 3gpp-e1-application-protocol, ele2-lawful-interception, 3gpp-ngap-over-dtls-over-sctp, 3gpp-xnap-over-dtls-over-sctp, 3gpp-f1ap-over-dtls-over-sctp, 3gpp-e1ap-over-dtls-over-sctp, e2-cp, e2-up, e2-du, 3gpp-w1ap
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ppid-range**

Synopsis	Enter the <b>ppid-range</b> context
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">sctp-filter</a> <i>string</i> <a href="#">ppid-range</a>
Tree	<a href="#">ppid-range</a>
Description	Commands in this context specify the range of PPID values that are allowed by the AA SCTP filter firewall.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**max number**

Synopsis	Maximum PPID value
Context	<b>configure</b> <a href="#">application-assurance group number partition number sctp-filter string ppid-range max number</a>
Tree	<a href="#">max</a>
Description	This command configures the maximum SCTP Payload Protocol Identifier (PPID) to be permitted by the SCTP filter. The value must be greater or equal to the minimum PPID value.
Range	0 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**min number**

Synopsis	Minimum PPID value
Context	<b>configure</b> <a href="#">application-assurance group number partition number sctp-filter string ppid-range min number</a>
Tree	<a href="#">min</a>
Description	This command configures the minimum SCTP Payload Protocol Identifier (PPID) to be permitted by the SCTP filter. The value must be less than or equal to the maximum PPID value.
Range	0 to 4294967295
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**session-filter** [[session-filter-name](#)] *string*

Synopsis	Enter the <b>session-filter</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string</a>
Tree	<a href="#">session-filter</a>
Description	Commands in this context create a session filter.
Max. Instances	300
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[session-filter-name]** *string*

Synopsis Session filter name

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [session-filter](#) *string*

Tree [session-filter](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **default-action**

Synopsis Enter the **default-action** context

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [session-filter](#) *string*  
[default-action](#)

Tree [default-action](#)

Description Commands in this context specify the default action to take for packets that do not match any filter entries.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **action** *keyword*

Synopsis Default action for packets not matching filter entries

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [session-filter](#) *string*  
[default-action](#) [action](#) *keyword*

Tree [action](#)

Options deny, permit

Default deny

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**event-log** *reference*

Synopsis	Event logging of default action
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string default-action event-log reference</a>
Tree	<a href="#">event-log</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number event-log string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**entry** [[entry-id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string entry number</a>
Tree	<a href="#">entry</a>
Description	Commands in this context configure an AA session filter match entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[entry-id]** *number*

Synopsis	Entry ID for the session filter entry
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string entry number</a>
Tree	<a href="#">entry</a>
Range	1 to 65535

Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## action

Synopsis	Enter the <b>action</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">session-filter string</a> <a href="#">entry number</a> <b>action</b>
Tree	<a href="#">action</a>
Description	Commands in this context configure the action for this entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## deny

Synopsis	Deny sessions matching the criteria
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">session-filter string</a> <a href="#">entry number</a> <b>action</b> <b>deny</b>
Tree	<a href="#">deny</a>
Notes	The following elements are part of a choice: <b>deny</b> , <b>http-redirect</b> , <b>permit</b> , or <b>tcp-optimizer</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## event-log reference

Synopsis	Event log name used to log the action
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">session-filter string</a> <a href="#">entry number</a> <b>action</b> <a href="#">event-log reference</a>
Tree	<a href="#">event-log</a>
Reference	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">event-log string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**http-redirect** *reference*

Synopsis	HTTP redirect for matching sessions
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">session-filter string</a> <a href="#">entry number action http-redirect reference</a>
Tree	<a href="#">http-redirect</a>
Reference	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">http-redirect string</a>
Notes	The following elements are part of a choice: <b>deny</b> , <b>http-redirect</b> , <b>permit</b> , or <b>tcp-optimizer</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**permit**

Synopsis	Permit sessions that match the criteria
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">session-filter string</a> <a href="#">entry number action permit</a>
Tree	<a href="#">permit</a>
Notes	The following elements are part of a choice: <b>deny</b> , <b>http-redirect</b> , <b>permit</b> , or <b>tcp-optimizer</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**tcp-optimizer** *reference*

Synopsis	TCP optimizer to handle sessions matching the criteria
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">session-filter string</a> <a href="#">entry number action tcp-optimizer reference</a>
Tree	<a href="#">tcp-optimizer</a>
Reference	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">tcp-optimizer string</a>
Notes	The following elements are part of a choice: <b>deny</b> , <b>http-redirect</b> , <b>permit</b> , or <b>tcp-optimizer</b> .
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**match**

Synopsis	Enter the <b>match</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string entry number match</a>
Tree	<a href="#">match</a>
Description	Commands in this context configure session conditions for this entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**dst-ip**

Synopsis	Enter the <b>dst-ip</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string entry number match dst-ip</a>
Tree	<a href="#">dst-ip</a>
Description	Commands in this context configure the destination IP address to match.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**dns-ip-cache** *reference*

Synopsis	Destination IPs in specified DNS IP Cache
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string entry number match dst-ip dns-ip-cache reference</a>
Tree	<a href="#">dns-ip-cache</a>
Reference	<b>configure</b> <a href="#">application-assurance group number dns-ip-cache string</a>

Notes	The following elements are part of a choice: <b>dns-ip-cache</b> , <b>ip-prefix</b> , or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Destination IP address prefix as match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string entry number match dst-ip ip-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">ip-prefix</a>
Notes	The following elements are part of a choice: <b>dns-ip-cache</b> , <b>ip-prefix</b> , or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-prefix-list** *reference*

Synopsis	IP address prefix list as match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string entry number match dst-ip ip-prefix-list reference</a>
Tree	<a href="#">ip-prefix-list</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number ip-prefix-list string</a>
Notes	The following elements are part of a choice: <b>dns-ip-cache</b> , <b>ip-prefix</b> , or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dst-port**

Synopsis	Enter the <b>dst-port</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string entry number match dst-port</a>
Tree	<a href="#">dst-port</a>
Description	Commands in this context specify a destination TCP/UDP port, a destination port list, or a destination range to use as match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**eq number**

Synopsis	Match criterion used for destination or source port
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">session-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <a href="#">eq</a> <i>number</i>
Tree	<a href="#">eq</a>
Range	0   1 to 65535
Default	0
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**gt number**

Synopsis	Greater than match criterion for the port number
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">session-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <a href="#">gt</a> <i>number</i>
Tree	<a href="#">gt</a>
Range	0   1 to 65535
Default	0
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**lt number**

Synopsis	Less than match criterion for the port
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">session-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <a href="#">lt</a> <i>number</i>
Tree	<a href="#">lt</a>
Range	0   1 to 65535
Default	0
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port-list reference**

Synopsis	Destination or source port list
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">session-filter string</a> <a href="#">entry number match dst-port port-list reference</a>
Tree	<a href="#">port-list</a>
Reference	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">port-list string</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">session-filter string</a> <a href="#">entry number match dst-port range</a>
Tree	<a href="#">range</a>
Description	Commands in this context specify a destination IP port, a destination port list, or a destination range to use as match criteria.
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end number**

Synopsis	Upper bound of the port range as match criterion
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">session-filter string</a> <a href="#">entry number match dst-port range end number</a>
Tree	<a href="#">end</a>
Range	0   1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**start number**

Synopsis	Lower bound of the port range as match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string entry number match dst-port range start number</a>
Tree	<a href="#">start</a>
Range	0   1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip-protocol** (*number* | *keyword*)

Synopsis	IP protocol as a match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string entry number match ip-protocol (number   keyword)</a>
Tree	<a href="#">ip-protocol</a>
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**src-ip**

Synopsis	Enter the <b>src-ip</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string entry number match src-ip</a>
Tree	<a href="#">src-ip</a>
Description	Commands in this context specify a source IP address to use as match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip-prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Source IP address prefix as match criterion
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">session-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-ip</a> <a href="#">ip-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">ip-prefix</a>
Notes	The following elements are part of a choice: <b>ip-prefix</b> or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-prefix-list** *reference*

Synopsis	Source IP address prefix list as match criterion
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">session-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-ip</a> <a href="#">ip-prefix-list</a> <i>reference</i>
Tree	<a href="#">ip-prefix-list</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">ip-prefix-list</a> <i>string</i>
Notes	The following elements are part of a choice: <b>ip-prefix</b> or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **src-port**

Synopsis	Enter the <b>src-port</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">session-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a>
Tree	<a href="#">src-port</a>
Description	Commands in this context specify a source IP port, a source port list, or a source range to use as match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **eq** *number*

Synopsis	Match criterion used for destination or source port
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">session-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">eq</a> <i>number</i>
Tree	<a href="#">eq</a>
Range	0   1 to 65535

Default	0
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**gt number**

Synopsis	Greater than match criterion for the port number
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">session-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <b>gt</b> <i>number</i>
Tree	<a href="#">gt</a>
Range	0   1 to 65535
Default	0
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**lt number**

Synopsis	Less than match criterion for the port
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">session-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <b>lt</b> <i>number</i>
Tree	<a href="#">lt</a>
Range	0   1 to 65535
Default	0
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port-list reference**

Synopsis	Destination or source port list
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">session-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <b>port-list</b> <i>reference</i>
Tree	<a href="#">port-list</a>



Reference	<b>configure</b> <a href="#">application-assurance group number partition number port-list string</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## range

Synopsis	Enable the <b>range</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string entry number match src-port range</a>
Tree	<a href="#">range</a>
Description	Commands in this context specify a destination IP port, a destination port list, or a destination range to use as match criteria.
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## end number

Synopsis	Upper bound of the port range as match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string entry number match src-port range end number</a>
Tree	<a href="#">end</a>
Range	0   1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## start number

Synopsis	Lower bound of the port range as match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string entry number match src-port range start number</a>
Tree	<a href="#">start</a>
Range	0   1 to 65535
Default	0

Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **shallow-inspection** *boolean*

Synopsis Enable shallow inspection  
 Context **configure** [application-assurance group number partition number shallow-inspection boolean](#)  
 Tree [shallow-inspection](#)  
 Default false  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **statistics**

Synopsis Enter the **statistics** context  
 Context **configure** [application-assurance group number partition number statistics](#)  
 Tree [statistics](#)  
 Description Commands in this context configure accounting and billing statistics for this AA group.  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **aa-admit-deny**

Synopsis Enter the **aa-admit-deny** context  
 Context **configure** [application-assurance group number partition number statistics aa-admit-deny](#)  
 Tree [aa-admit-deny](#)  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **accounting-policy** *reference*

Synopsis Accounting policy  
 Context **configure** [application-assurance group number partition number statistics aa-admit-deny accounting-policy reference](#)

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Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **collect-stats** *boolean*

Synopsis	Collect statistics
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">statistics</a> <a href="#">aa-admit-deny</a> <a href="#">collect-stats</a> <i>boolean</i>
Tree	<a href="#">collect-stats</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **gtp-filter-stats** *boolean*

Synopsis	Include GTP filter admit-deny statistics in records
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">statistics</a> <a href="#">aa-admit-deny</a> <a href="#">gtp-filter-stats</a> <i>boolean</i>
Tree	<a href="#">gtp-filter-stats</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **policer-stats** *boolean*

Synopsis	Include admit-deny policer statistics in records
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">statistics</a> <a href="#">aa-admit-deny</a> <a href="#">policer-stats</a> <i>boolean</i>
Tree	<a href="#">policer-stats</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**policer-stats-resources** *boolean*

Synopsis	Allocate resources for policer admit-deny statistics
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-admit-deny policer-stats-resources</a> <i>boolean</i>
Tree	<a href="#">policer-stats-resources</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**sctp-filter-stats** *boolean*

Synopsis	Include SCTP filter admit-deny statistics in accounting
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-admit-deny sctp-filter-stats</a> <i>boolean</i>
Tree	<a href="#">sctp-filter-stats</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**session-filter-stats** *boolean*

Synopsis	Include session filter admit-deny statistics in records
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-admit-deny session-filter-stats</a> <i>boolean</i>
Tree	<a href="#">session-filter-stats</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**tcp-validate-stats** *boolean*

Synopsis	Include TCP validate admit-deny statistics in records
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-admit-deny tcp-validate-stats</a> <i>boolean</i>
Tree	<a href="#">tcp-validate-stats</a>
Default	false

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Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **aa-app-group**

Synopsis	Enter the <b>aa-app-group</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-app-group</a>
Tree	<a href="#">aa-app-group</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **accounting-policy** *reference*

Synopsis	Accounting policy ID
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-app-group accounting-policy reference</a>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log accounting-policy number</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **collect-stats** *boolean*

Synopsis	Collect statistics
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-app-group collect-stats boolean</a>
Tree	<a href="#">collect-stats</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **aa-application**

Synopsis	Enter the <b>aa-application</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-application</a>

Tree	<a href="#">aa-application</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **accounting-policy** *reference*

Synopsis	Accounting policy ID
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-application accounting-policy reference</a>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log accounting-policy number</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **collect-stats** *boolean*

Synopsis	Collect statistics
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-application collect-stats boolean</a>
Tree	<a href="#">collect-stats</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **aa-partition**

Synopsis	Enter the <b>aa-partition</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-partition</a>
Tree	<a href="#">aa-partition</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **accounting-policy** *reference*

Synopsis	Accounting policy
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Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-partition accounting-policy reference</a>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log accounting-policy number</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**collect-stats** *boolean*

Synopsis	Collect statistics
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-partition collect-stats boolean</a>
Tree	<a href="#">collect-stats</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**tethering-stats** *boolean*

Synopsis	Collect tethering statistics
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-partition tethering-stats boolean</a>
Tree	<a href="#">tethering-stats</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**traffic-type-stats** *boolean*

Synopsis	Collect traffic type statistics
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-partition traffic-type-stats boolean</a>
Tree	<a href="#">traffic-type-stats</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**aa-protocol**

Synopsis	Enter the <b>aa-protocol</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-protocol</a>
Tree	<a href="#">aa-protocol</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**accounting-policy** *reference*

Synopsis	Accounting policy ID
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-protocol accounting-policy reference</a>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log accounting-policy number</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of protocol statistics
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-protocol admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**collect-stats** *boolean*

Synopsis	Collect statistics
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-protocol collect-stats boolean</a>
Tree	<a href="#">collect-stats</a>
Default	false



Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## aa-sub

Synopsis	Enter the <b>aa-sub</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-sub</a>
Tree	<a href="#">aa-sub</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## accounting-policy *reference*

Synopsis	Accounting policy ID
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-sub accounting-policy reference</a>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log accounting-policy number</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## aggregate-stats-export-using *keyword*

Synopsis	Method of statistics export to be used
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-sub aggregate-stats-export-using keyword</a>
Tree	<a href="#">aggregate-stats-export-using</a>
Options	accounting-policy, radius-accounting-policy
Max. Instances	2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## app-group [[app-group-name](#)] *reference*

Synopsis	Enter the <b>app-group</b> list instance
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Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-sub app-group reference</a>
Tree	<a href="#">app-group</a>
Description	Commands in this context configure accounting and statistics collection parameters for AA application groups for a specific AA group/partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[app-group-name]** *reference*

Synopsis	Application group name
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-sub app-group reference</a>
Tree	<a href="#">app-group</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy app-group string</a>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **export-using** *keyword*

Synopsis	Method used to export statistics
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-sub app-group reference export-using keyword</a>
Tree	<a href="#">export-using</a>
Options	accounting-policy, radius-accounting-policy
Max. Instances	2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **application** [[application-name](#)] *reference*

Synopsis	Enter the <b>application</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-sub application reference</a>
Tree	<a href="#">application</a>

Description	Commands in this context configure the AA subscriber accounting statistics for the export of AA applications for an AA group/partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[application-name] *reference***

Synopsis	Application name
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-sub application reference</a>
Tree	<a href="#">application</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy application string</a>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **export-using *keyword***

Synopsis	Method used to export statistics
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-sub application reference export-using keyword</a>
Tree	<a href="#">export-using</a>
Options	accounting-policy, radius-accounting-policy
Max. Instances	2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **charging-group [[charging-group-name](#)] *reference***

Synopsis	Enter the <b>charging-group</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-sub charging-group reference</a>
Tree	<a href="#">charging-group</a>
Description	Commands in this context configure AA subscriber accounting statistics for the export of AA charging groups of an AA group/partition.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[charging-group-name] reference**

Synopsis	Charging group name
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-sub charging-group reference</a>
Tree	<a href="#">charging-group</a>
Description	This command specifies the AA charging group to be included in the exported accounting records.
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-group string</a>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **export-using keyword**

Synopsis	Method used to export statistics
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-sub charging-group reference export-using keyword</a>
Tree	<a href="#">export-using</a>
Options	accounting-policy, radius-accounting-policy
Max. Instances	2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **collect-stats boolean**

Synopsis	Collect statistics
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-sub collect-stats boolean</a>
Tree	<a href="#">collect-stats</a>
Default	false
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **exclude-tcp-retrans** *boolean*

Synopsis Exclude TCP retransmission and error statistics

Context **configure** [application-assurance group number partition number statistics aa-sub](#)  
[exclude-tcp-retrans boolean](#)

Tree [exclude-tcp-retrans](#)

Description When configured to **true**, TCP errors and retransmission packets are not counted for the purpose of content-based billing. **Note:** This command is only applicable to EPC. This setting has no impact on app/app-group aggregate AA stats.

Default false

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **max-throughput-stats** *boolean*

Synopsis Collect maximum throughput statistics

Context **configure** [application-assurance group number partition number statistics aa-sub](#)  
[max-throughput-stats boolean](#)

Tree [max-throughput-stats](#)

Default false

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **protocol** [[protocol-name](#)] *string*

Synopsis Enter the **protocol** list instance

Context **configure** [application-assurance group number partition number statistics aa-sub](#)  
[protocol string](#)

Tree [protocol](#)

Description Commands in this context configure AA subscriber accounting statistics for the export of aa-sub protocols of an AA group/partition.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[protocol-name] string**

Synopsis	AA protocol name
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-sub protocol string</a>
Tree	<a href="#">protocol</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**export-using keyword**

Synopsis	Method used to export statistics
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-sub protocol string export-using keyword</a>
Tree	<a href="#">export-using</a>
Options	accounting-policy, radius-accounting-policy
Max. Instances	2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**radius-accounting-policy reference**

Synopsis	RADIUS accounting policy name
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-sub radius-accounting-policy reference</a>
Tree	<a href="#">radius-accounting-policy</a>
Reference	<b>configure</b> <a href="#">application-assurance radius-accounting-policy string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**usage-monitoring boolean**

Synopsis	Collect usage monitoring statistics
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Context	<b>configure application-assurance group number partition number statistics aa-sub usage-monitoring boolean</b>
Tree	<b>usage-monitoring</b>
Description	When configured to <b>true</b> , this command allows the system to activate Gx usage monitoring at AA group/partition level, if enough usage monitoring resources exist for all existing subs.  When configured to <b>false</b> , this command silently removes all monitoring instances (no PCRF notifications) for AA subscribers and all subsequent AA Gx usage monitoring messages are ignored.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **aa-sub-study [study-type] keyword**

Synopsis	Enter the <b>aa-sub-study</b> list instance
Context	<b>configure application-assurance group number partition number statistics aa-sub-study keyword</b>
Tree	<b>aa-sub-study</b>
Description	Commands in this context configure accounting and statistics collection parameters per AA special study subscribers.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[study-type] keyword**

Synopsis	Statistic type that the study is using
Context	<b>configure application-assurance group number partition number statistics aa-sub-study keyword</b>
Tree	<b>aa-sub-study</b>
Options	protocol, application
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**aa-sub**

Synopsis	Enter the <b>aa-sub</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-sub-study</a> <i>keyword</i> <a href="#">aa-sub</a>
Tree	<a href="#">aa-sub</a>
Description	<p>Commands in this context add an existing subscriber identification to a group of special study subscribers.</p> <p>Identifying a group of special study subscribers allows statistics and accounting records for those subscribers to be collected for protocols and applications through Application Assurance. When adding a subscriber to the special study group, accounting records and statistics generation commence immediately. When removing a subscriber from the group, special study statistics and accounting records for that subscriber in the current interval are lost.</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**esm** [[esm-sub-name](#)] *string*

Synopsis	Add a list entry for <b>esm</b>
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-sub-study</a> <i>keyword</i> <a href="#">aa-sub esm string</a>
Tree	<a href="#">esm</a>
Description	Commands in this context configure the ESM fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[esm-sub-name]** *string*

Synopsis	ESM subscriber name
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-sub-study</a> <i>keyword</i> <a href="#">aa-sub esm string</a>
Tree	<a href="#">esm</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**esm-mac** [**esm-mac-sub-name**] *string*

Synopsis	Add a list entry for <b>esm-mac</b>
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">statistics</a> <a href="#">aa-sub-study</a> <i>keyword</i> <a href="#">aa-sub</a> <a href="#">esm-mac</a> <i>string</i>
Tree	<a href="#">esm-mac</a>
Description	Commands in this context configure the ESM MAC fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[esm-mac-sub-name]** *string*

Synopsis	ESM MAC subscriber name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">statistics</a> <a href="#">aa-sub-study</a> <i>keyword</i> <a href="#">aa-sub</a> <a href="#">esm-mac</a> <i>string</i>
Tree	<a href="#">esm-mac</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**sap** [**sap-id**] *string*

Synopsis	Add a list entry for <b>sap</b>
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">statistics</a> <a href="#">aa-sub-study</a> <i>keyword</i> <a href="#">aa-sub</a> <a href="#">sap</a> <i>string</i>
Tree	<a href="#">sap</a>
Description	Commands in this context configure the Service Access Point (SAP) for the purpose of enabling special study statistics.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[sap-id]** *string*

Synopsis	AA subscriber SAP ID
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">statistics</a> <a href="#">aa-sub-study</a> <i>keyword</i> <a href="#">aa-sub</a> <a href="#">sap</a> <i>string</i>

Tree	<a href="#">sap</a>
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **spoke-sdp** [[sdp-bind-id](#)] *string*

Synopsis	Add a list entry for <b>spoke-sdp</b>
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">statistics</a> <a href="#">aa-sub-study</a> <i>keyword</i> <a href="#">aa-sub</a> <a href="#">spoke-sdp</a> <i>string</i>
Tree	<a href="#">spoke-sdp</a>
Description	Commands in this context specify the spoke SDP ID and VC ID for the purpose of including the subscriber into AA special study statistics.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[sdp-bind-id]** *string*

Synopsis	Spoke SDP ID for an AA subscriber
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">statistics</a> <a href="#">aa-sub-study</a> <i>keyword</i> <a href="#">aa-sub</a> <a href="#">spoke-sdp</a> <i>string</i>
Tree	<a href="#">spoke-sdp</a>
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **transit** [[transit-sub-name](#)] *string*

Synopsis	Add a list entry for <b>transit</b>
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">statistics</a> <a href="#">aa-sub-study</a> <i>keyword</i> <a href="#">aa-sub</a> <a href="#">transit</a> <i>string</i>
Tree	<a href="#">transit</a>
Description	Commands in the context specify an existing transit subscriber to be included in AA sub special study statistics.

Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[transit-sub-name]** *string*

Synopsis Transit subscriber name  
 Context **configure** [application-assurance group number partition number statistics aa-sub-study](#)  
*keyword aa-sub transit string*  
 Tree [transit](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **accounting-policy** *reference*

Synopsis Accounting policy ID  
 Context **configure** [application-assurance group number partition number statistics aa-sub-study](#)  
*keyword accounting-policy reference*  
 Tree [accounting-policy](#)  
 Reference **configure** [log accounting-policy number](#)  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **collect-stats** *boolean*

Synopsis Collect statistics  
 Context **configure** [application-assurance group number partition number statistics aa-sub-study](#)  
*keyword collect-stats boolean*  
 Tree [collect-stats](#)  
 Default false  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**tcp-validate** [[tcp-validate-name](#)] *string*

Synopsis	Enter the <b>tcp-validate</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number tcp-validate string</a>
Tree	<a href="#">tcp-validate</a>
Description	Commands in this context configure a TCP validation policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[tcp-validate-name]** *string*

Synopsis	TCP validation policy name
Context	<b>configure</b> <a href="#">application-assurance group number partition number tcp-validate string</a>
Tree	<a href="#">tcp-validate</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number partition number tcp-validate string description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**log**

Synopsis	Enter the <b>log</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number tcp-validate string log</a>
Tree	<a href="#">log</a>
Description	Commands in this context enable event logging of traffic dropped by TCP validation.
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **all** *boolean*

Synopsis Enable logging of all dropped TCP packets

Context **configure** [application-assurance group number partition number tcp-validate string log](#)  
[all boolean](#)

Tree [all](#)

Description When configured to **true**, all dropped TCP packets are logged, including the following:

- packets received after an RST and discarded
- packets received before TCP session establishment (before SYN) and discarded

An event log must also be configured to enable logging of all dropped packets.

When configured to **false**, discards related to the described cases are not captured in any event log.

Default false

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **event-log** *reference*

Synopsis Event log name

Context **configure** [application-assurance group number partition number tcp-validate string log](#)  
[event-log reference](#)

Tree [event-log](#)

Reference **configure** [application-assurance group number partition number event-log string](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **strict** *boolean*

Synopsis Enable strict checking of TCP traffic

Context **configure** [application-assurance group number partition number tcp-validate string strict](#)  
[boolean](#)

Tree [strict](#)

Description When configured to **true**, the command specifies whether enforcement of TCP sequence and acknowledgment numbers are applied. If a packet does not meet the

expected sequence or acknowledgment number, it is dropped. This command should only be enabled if the expected bit error rate or packet loss is low.

For example, if acknowledgments are lost before being detected by AA, the server timeouts are triggered and retransmissions occur. If strict is enabled, these retransmissions resemble a reply attack and are dropped by AA.

When configured to **false**, the command removes the TCP sequence and acknowledgment number enforcement.

Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## tethering-detection

Synopsis	Enter the <b>tethering-detection</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number tethering-detection</a>
Tree	<a href="#">tethering-detection</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of tethering detection
Context	<b>configure</b> <a href="#">application-assurance group number partition number tethering-detection admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## single-device

Synopsis	Enter the <b>single-device</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number tethering-detection single-device</a>
Tree	<a href="#">single-device</a>

Description	Commands in this context configure the single-device fields and expected TTL values for flow-level tethering detection.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **expected-ttl** *[ttl] number*

Synopsis	Add a list entry for <b>expected-ttl</b>
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">tethering-detection single-device expected-ttl number</a>
Tree	<a href="#">expected-ttl</a>
Description	Commands in this context configure the TTL values for single-device tethering detection.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[ttl]** *number*

Synopsis	Expected TTL traffic value from host devices
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">tethering-detection single-device expected-ttl number</a>
Tree	<a href="#">expected-ttl</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **threshold-crossing-alert**

Synopsis	Enter the <b>threshold-crossing-alert</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">threshold-crossing-alert</a>
Tree	<a href="#">threshold-crossing-alert</a>
Description	Commands in this context configure the generation of threshold crossing alerts (TCAs).
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**criteria** [*criteria-id*] *keyword direction keyword*

Synopsis	Enter the <b>criteria</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert criteria</a> <i>keyword direction keyword</i>
Tree	<a href="#">criteria</a>
Description	Commands in this context configure the TCA criteria for the partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[criteria-id]** *keyword*

Synopsis	Statistics TCA criteria ID
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert criteria</a> <i>keyword direction keyword</i>
Tree	<a href="#">criteria</a>
Options	error-drop, fragment-drop-out-of-order, fragment-drop-all, overload-drop, gtp-sanity-drop
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**direction** *keyword*

Synopsis	Direction of traffic for the criteria statistics TCA
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert criteria</a> <i>keyword direction keyword</i>
Tree	<a href="#">criteria</a>
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**high-watermark** *number*

Synopsis	High watermark threshold
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert</a> <a href="#">criteria</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i> <a href="#">high-watermark</a> <i>number</i>
Tree	<a href="#">high-watermark</a>
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **low-watermark** *number*

Synopsis	Low watermark threshold
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert</a> <a href="#">criteria</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i> <a href="#">low-watermark</a> <i>number</i>
Tree	<a href="#">low-watermark</a>
Range	0 to 4294967294
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **gtp-filter** [[gtp-filter-name](#)] *reference* [criteria](#) *keyword* [direction](#) *keyword*

Synopsis	Enter the <b>gtp-filter</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert</a> <a href="#">gtp-filter</a> <i>reference</i> <a href="#">criteria</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">gtp-filter</a>
Description	Commands in this context configure TCA generation for a GTP filter.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[gtp-filter-name]** *reference*

Synopsis	GTP filter name for TCA generation
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert</a> <a href="#">gtp-filter</a> <i>reference</i> <a href="#">criteria</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">gtp-filter</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">gtp</a> <a href="#">gtp-filter</a> <i>string</i>

Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **criteria** *keyword*

Synopsis	Criteria ID for GTP filter TCA
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert gtp-filter reference criteria keyword direction keyword</a>
Tree	<a href="#">gtp-filter</a>
Options	max-payload-length, message-type-default-action, header-sanity, message-type-gtpv2-default-action, imsi-apn-filter-default-action, validate-gtp-tunnels, validate-sequence-number, validate-src-ip-addr, missing-mandatory-ie, gtp-in-gtp, gtp-tunnel-database-full, gtp-tunnel-endpoint-limit
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **direction** *keyword*

Synopsis	Direction of traffic for the GTP filter TCA
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert gtp-filter reference criteria keyword direction keyword</a>
Tree	<a href="#">gtp-filter</a>
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **high-watermark** *number*

Synopsis	High watermark threshold
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert gtp-filter reference criteria keyword direction keyword high-watermark number</a>
Tree	<a href="#">high-watermark</a>
Range	1 to 4294967295
Default	4294967295

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **low-watermark** *number*

Synopsis	Low watermark threshold
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert gtp-filter reference criteria keyword direction keyword low-watermark number</a>
Tree	<a href="#">low-watermark</a>
Range	0 to 4294967294
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **gtp-filter-entry** [[gtp-filter-name](#)] *reference entry-id number direction keyword*

Synopsis	Enter the <b>gtp-filter-entry</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert gtp-filter-entry reference entry-id number direction keyword</a>
Tree	<a href="#">gtp-filter-entry</a>
Description	Commands in this context configure the AA GTP filter entry TCA fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[gtp-filter-name]** *reference*

Synopsis	AA GTP filter name for TCA configuration
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert gtp-filter-entry reference entry-id number direction keyword</a>
Tree	<a href="#">gtp-filter-entry</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string</a>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**entry-id** *number*

Synopsis	Entry ID
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert</a> <a href="#">gtp-filter-entry</a> <i>reference</i> <a href="#">entry-id</a> <i>number</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">gtp-filter-entry</a>
Description	This command configures the identifier for the statistics TCA GTP filter V1 message type entry, V2 message type entry, or imsi-apn filter entry.
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**direction** *keyword*

Synopsis	Traffic direction for GTP filter entry TCA
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert</a> <a href="#">gtp-filter-entry</a> <i>reference</i> <a href="#">entry-id</a> <i>number</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">gtp-filter-entry</a>
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**high-watermark** *number*

Synopsis	High watermark threshold
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert</a> <a href="#">gtp-filter-entry</a> <i>reference</i> <a href="#">entry-id</a> <i>number</i> <a href="#">direction</a> <i>keyword</i> <a href="#">high-watermark</a> <i>number</i>
Tree	<a href="#">high-watermark</a>
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**low-watermark** *number*

Synopsis	Low watermark threshold
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert gtp-filter-entry reference entry-id number direction keyword low-watermark number</a>
Tree	<a href="#">low-watermark</a>
Range	0 to 4294967294
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**policer** [[policer-name](#)] *string direction keyword*

Synopsis	Enter the <b>policer</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert policer string direction keyword</a>
Tree	<a href="#">policer</a>
Description	Commands in this context configure a TCA for the counter capturing drops or admit events.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[policer-name]** *string*

Synopsis	Policer name for TCA generation
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert policer string direction keyword</a>
Tree	<a href="#">policer</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**direction** *keyword*

Synopsis	Direction of traffic for the policer TCA
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Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert policer string direction keyword</a>
Tree	<a href="#">policer</a>
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### high-watermark *number*

Synopsis	High watermark threshold
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert policer string direction keyword high-watermark number</a>
Tree	<a href="#">high-watermark</a>
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### low-watermark *number*

Synopsis	Low watermark threshold
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert policer string direction keyword low-watermark number</a>
Tree	<a href="#">low-watermark</a>
Range	0 to 4294967294
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### sctp-filter [[sctp-filter-name](#)] *reference criteria keyword direction keyword*

Synopsis	Enter the <b>sctp-filter</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert sctp-filter reference criteria keyword direction keyword</a>
Tree	<a href="#">sctp-filter</a>

Description	Commands in this context configure TCA generation for an SCTP filter.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### [sctp-filter-name] *reference*

Synopsis	SCTP filter name for TCA generation
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert sctp-filter reference criteria keyword direction keyword</a>
Tree	<a href="#">sctp-filter</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number sctp-filter string</a>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **criteria** *keyword*

Synopsis	Criteria ID for SCTP filter TCA
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert sctp-filter reference criteria keyword direction keyword</a>
Tree	<a href="#">sctp-filter</a>
Options	ppid-default-action, packet-sanity, ppid-range
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **direction** *keyword*

Synopsis	Direction of traffic for SCTP filter TCA
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert sctp-filter reference criteria keyword direction keyword</a>
Tree	<a href="#">sctp-filter</a>
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **high-watermark** *number*

Synopsis High watermark threshold

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [threshold-crossing-alert sctp-filter](#) *reference* [criteria](#) *keyword* [direction](#) *keyword* **high-watermark** *number*

Tree [high-watermark](#)

Range 1 to 4294967295

Default 4294967295

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **low-watermark** *number*

Synopsis Low watermark threshold

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [threshold-crossing-alert sctp-filter](#) *reference* [criteria](#) *keyword* [direction](#) *keyword* **low-watermark** *number*

Tree [low-watermark](#)

Range 0 to 4294967294

Default 0

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **sctp-filter-entry** [[sctp-filter-name](#)] *reference* [entry-id](#) *reference* [direction](#) *keyword*

Synopsis Enter the **sctp-filter-entry** list instance

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [threshold-crossing-alert sctp-filter-entry](#) *reference* [entry-id](#) *reference* [direction](#) *keyword*

Tree [sctp-filter-entry](#)

Description Commands in this context configure the AA SCTP filter PPID entry TCA fields.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**[sctp-filter-name] reference**

Synopsis	AA SCTP filter name for TCA configuration
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert sctp-filter-entry reference entry-id reference direction keyword</a>
Tree	<a href="#">sctp-filter-entry</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number sctp-filter string</a>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**entry-id reference**

Synopsis	ID for SCTP filter entry TCA
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert sctp-filter-entry reference entry-id reference direction keyword</a>
Tree	<a href="#">sctp-filter-entry</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number sctp-filter string ppid entry number</a>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**direction keyword**

Synopsis	Direction of traffic for TCA configuration
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert sctp-filter-entry reference entry-id reference direction keyword</a>
Tree	<a href="#">sctp-filter-entry</a>
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**high-watermark number**

Synopsis	High watermark threshold
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Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert sctp-filter-entry reference entry-id reference direction keyword high-watermark number</a>
Tree	<a href="#">high-watermark</a>
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **low-watermark** *number*

Synopsis	Low watermark threshold
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert sctp-filter-entry reference entry-id reference direction keyword low-watermark number</a>
Tree	<a href="#">low-watermark</a>
Range	0 to 4294967294
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **session-filter** [[session-filter-name](#)] *reference criteria keyword direction keyword*

Synopsis	Enter the <b>session-filter</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert session-filter reference criteria keyword direction keyword</a>
Tree	<a href="#">session-filter</a>
Description	Commands in this context configure TCA generation for a session filter.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[session-filter-name]** *reference*

Synopsis	AA session filter name for TCA configuration
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert session-filter reference criteria keyword direction keyword</a>
Tree	<a href="#">session-filter</a>

Reference	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string</a>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **criteria** *keyword*

Synopsis	ID for session filter entry TCA
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert session-filter reference criteria keyword direction keyword</a>
Tree	<a href="#">session-filter</a>
Options	default-action
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **direction** *keyword*

Synopsis	Direction of traffic for TCA configuration
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert session-filter reference criteria keyword direction keyword</a>
Tree	<a href="#">session-filter</a>
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **high-watermark** *number*

Synopsis	High watermark threshold
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert session-filter reference criteria keyword direction keyword high-watermark number</a>
Tree	<a href="#">high-watermark</a>
Range	1 to 4294967295
Default	4294967295

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **low-watermark** *number*

Synopsis	Low watermark threshold
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert session-filter</a> <i>reference</i> <a href="#">criteria</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i> <b>low-watermark</b> <i>number</i>
Tree	<a href="#">low-watermark</a>
Range	0 to 4294967294
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **session-filter-entry** [[session-filter-name](#)] *reference* [entry-id](#) *reference* [direction](#) *keyword*

Synopsis	Enter the <b>session-filter-entry</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert session-filter-entry</a> <i>reference</i> <a href="#">entry-id</a> <i>reference</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">session-filter-entry</a>
Description	Commands in this context configure the AA session filter entry TCA fields for the partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[session-filter-name]** *reference*

Synopsis	AA session filter name for TCA configuration
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert session-filter-entry</a> <i>reference</i> <a href="#">entry-id</a> <i>reference</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">session-filter-entry</a>
Reference	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">session-filter</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**entry-id reference**

Synopsis	ID for session filter entry TCA
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert session-filter-entry reference entry-id reference direction keyword</a>
Tree	<a href="#">session-filter-entry</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string entry number</a>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**direction keyword**

Synopsis	Direction of traffic for TCA configuration
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert session-filter-entry reference entry-id reference direction keyword</a>
Tree	<a href="#">session-filter-entry</a>
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**high-watermark number**

Synopsis	High watermark threshold
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert session-filter-entry reference entry-id reference direction keyword high-watermark number</a>
Tree	<a href="#">high-watermark</a>
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**low-watermark** *number*

Synopsis	Low watermark threshold
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert session-filter-entry</a> <i>reference</i> <a href="#">entry-id</a> <i>reference</i> <a href="#">direction</a> <i>keyword</i> <b>low-watermark</b> <i>number</i>
Tree	<a href="#">low-watermark</a>
Range	0 to 4294967294
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**tcp-validate** [[tcp-validate-name](#)] *reference* [direction](#) *keyword*

Synopsis	Enter the <b>tcp-validate</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert tcp-validate</a> <i>reference</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">tcp-validate</a>
Description	Commands in this context configure TCP validation policy TCA fields for the partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[tcp-validate-name]** *reference*

Synopsis	AA TCP validate name for configuration
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert tcp-validate</a> <i>reference</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">tcp-validate</a>
Reference	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">tcp-validate</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**direction** *keyword*

Synopsis	Direction of traffic for TCA configuration
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Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert</a> <a href="#">tcp-validate</a> <i>reference</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">tcp-validate</a>
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **high-watermark** *number*

Synopsis	High watermark threshold
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert</a> <a href="#">tcp-validate</a> <i>reference</i> <a href="#">direction</a> <i>keyword</i> <a href="#">high-watermark</a> <i>number</i>
Tree	<a href="#">high-watermark</a>
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **low-watermark** *number*

Synopsis	Low watermark threshold
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert</a> <a href="#">tcp-validate</a> <i>reference</i> <a href="#">direction</a> <i>keyword</i> <a href="#">low-watermark</a> <i>number</i>
Tree	<a href="#">low-watermark</a>
Range	0 to 4294967294
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **transit-ip-policy** [[ip-policy-id](#)] *number*

Synopsis	Enter the <b>transit-ip-policy</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-ip-policy</a> <i>number</i>
Tree	<a href="#">transit-ip-policy</a>

Description	Commands in this context define a transit AA subscriber IP policy. Transit AA subscribers are managed by the system through the use of this policy assigned to services, which determines how transit subs are created and removed for that service.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[ip-policy-id] number**

Synopsis	IP transit policy ID
Context	<b>configure</b> <a href="#">application-assurance group number partition number transit-ip-policy number</a>
Tree	<a href="#">transit-ip-policy</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **default-app-profile reference**

Synopsis	Default AA application profile
Context	<b>configure</b> <a href="#">application-assurance group number partition number transit-ip-policy number default-app-profile reference</a>
Tree	<a href="#">default-app-profile</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy app-profile string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number partition number transit-ip-policy number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**detect-seen-ip** *boolean*

Synopsis	Detect transit subscribers based on IP address
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">transit-ip-policy number</a> <b>detect-seen-ip</b> <i>boolean</i>
Tree	<a href="#">detect-seen-ip</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**dhcp**

Synopsis	Enter the <b>dhcp</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">transit-ip-policy number</a> <b>dhcp</b>
Tree	<a href="#">dhcp</a>
Description	Commands in this context enable dynamic DHCP-based management of transit aa-subs for the transit IP policy. Dynamic DHCP-based management and other types of management of transit subs for a transit IP policy are mutually exclusive.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state for learning DHCP dynamic transits
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">transit-ip-policy number</a> <b>dhcp</b> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**diameter**

Synopsis	Enter the <b>diameter</b> context
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-ip-policy</a> <i>number</i> <a href="#">diameter</a>
Tree	<a href="#">diameter</a>
Description	Commands in this context configure dynamic Diameter-based management of transit AA subs for the transit IP policy. This is mutually exclusive to other types of management of transit subs for a given transit IP policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state for Diameter dynamic transits
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-ip-policy</a> <i>number</i> <a href="#">diameter</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **application-policy** *reference*

Synopsis	Diameter application policy name for IP transit policy
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-ip-policy</a> <i>number</i> <a href="#">diameter</a> <a href="#">application-policy</a> <i>reference</i>
Tree	<a href="#">application-policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipv6-address-prefix-length** *number*

Synopsis	Length of the AA transit IP policy IPv6 address prefix
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-ip-policy</a> <i>number</i> <a href="#">ipv6-address-prefix-length</a> <i>number</i>
Tree	<a href="#">ipv6-address-prefix-length</a>
Range	32 to 64

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## radius

Synopsis	Enter the <b>radius</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">transit-ip-policy number</a> <b>radius</b>
Tree	<a href="#">radius</a>
Description	Commands in this context enable dynamic RADIUS-based management of transit aa-subs for the transit IP policy. This is mutually exclusive to other types of management of transit subs for a given transit IP policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of learning RADIUS dynamic transit
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">transit-ip-policy number</a> <a href="#">radius admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## authentication-policy *reference*

Synopsis	RADIUS authentication policy
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">transit-ip-policy number</a> <a href="#">radius authentication-policy</a> <i>reference</i>
Tree	<a href="#">authentication-policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt radius-authentication-policy</a> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**seen-ip-radius-acct-policy** *reference*

Synopsis	RADIUS accounting policy to enable seen-IP notification
Context	<b>configure</b> <a href="#">application-assurance group number partition number transit-ip-policy number radius seen-ip-radius-acct-policy reference</a>
Tree	<a href="#">seen-ip-radius-acct-policy</a>
Reference	<b>configure</b> <a href="#">application-assurance radius-accounting-policy string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**static-aa-sub** [[transit-aa-sub-name](#)] *string*

Synopsis	Enter the <b>static-aa-sub</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number transit-ip-policy number static-aa-sub string</a>
Tree	<a href="#">static-aa-sub</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[transit-aa-sub-name]** *string*

Synopsis	Static transit subscriber name
Context	<b>configure</b> <a href="#">application-assurance group number partition number transit-ip-policy number static-aa-sub string</a>
Tree	<a href="#">static-aa-sub</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**app-profile** *reference*

Synopsis	Application profile name
Context	<b>configure</b> <a href="#">application-assurance group number partition number transit-ip-policy number static-aa-sub string app-profile reference</a>
Tree	<a href="#">app-profile</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy app-profile string</a>

Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip** [address] (*ipv4-unicast-address* | *ipv6-prefix*)

Synopsis	Add a list entry for <b>ip</b>
Context	<b>configure</b> <a href="#">application-assurance group number partition number transit-ip-policy number static-aa-sub string ip</a> ( <i>ipv4-unicast-address</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">ip</a>
Description	Commands in this context configure the IP address for a static transit aa-sub.
Max. Instances	32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[address]** (*ipv4-unicast-address* | *ipv6-prefix*)

Synopsis	IP address for an AA static transit subscriber
Context	<b>configure</b> <a href="#">application-assurance group number partition number transit-ip-policy number static-aa-sub string ip</a> ( <i>ipv4-unicast-address</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">ip</a>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **sub-ident-policy** *reference*

Synopsis	Subscriber identification policy
Context	<b>configure</b> <a href="#">application-assurance group number partition number transit-ip-policy number sub-ident-policy reference</a>
Tree	<a href="#">sub-ident-policy</a>
Description	This command defines the subscriber identification policy for the transit IP policy that will be associated with a SAP. The subscriber identification policy must be defined prior to associating the profile with a SAP in the <b>configure subscriber-mgmt sub-ident-policy</b> context. Subscribers are managed by the system through the use of subscriber identification strings. A subscriber identification string uniquely identifies a subscriber.

For static hosts, the subscriber identification string is explicitly defined with each static subscriber host.

For dynamic hosts, the subscriber identification string must be derived from the DHCP ACK message sent to the subscriber host. The default value for the string is the content of Option 82 CIRCUIT-ID and REMOTE-ID fields interpreted as an octet string. As an option, the DHCP ACK message may be processed by a subscriber identification policy which has the capability to parse the message into an alternative ASCII or octet string value.

When multiple hosts on the same port are associated with the same subscriber identification string, they are considered to be host members of the same subscriber. A subscriber identification policy can also be used for identifying dynamic transit subscriber names.

Reference	<b>configure</b> <a href="#">subscriber-mgmt sub-ident-policy string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### transit-auto-create

Synopsis	Enter the <b>transit-auto-create</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number transit-ip-policy number transit-auto-create</a>
Tree	<a href="#">transit-auto-create</a>
Description	Commands in this context enable the seen-IP auto creation of transit subscribers using the transit IP policy name and subscriber IP address as the aa-sub name. The default app-profile configured against the transit IP policy is applied to these subscribers.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### admin-state *keyword*

Synopsis	Administrative state of the automatic dynamic transits
Context	<b>configure</b> <a href="#">application-assurance group number partition number transit-ip-policy number transit-auto-create admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**inactivity-monitor** *boolean*

Synopsis	Monitor inactivity on auto-created transit subscribers
Context	<b>configure</b> <a href="#">application-assurance group number partition number transit-ip-policy number transit-auto-create inactivity-monitor boolean</a>
Tree	<a href="#">inactivity-monitor</a>
Description	When configured to <b>true</b> , this command enables the auto-removal of inactive transit subscribers. Periodically, AA removes any inactive auto-created subscribers. An inactive subscriber is defined as having no active flows in the last period.  When configured to <b>false</b> , this command disables the auto-removal of inactive transit subscribers.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**transit-prefix-policy** [[prefix-policy-id](#)] *number*

Synopsis	Enter the <b>transit-prefix-policy</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number transit-prefix-policy number</a>
Tree	<a href="#">transit-prefix-policy</a>
Description	Commands in this context define a transit AA subscriber prefix policy. Transit AA subscribers are managed by the system through the use of this policy assigned to services, which determines how transit subscribers are created and removed for that service.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[prefix-policy-id]** *number*

Synopsis	Transit prefix policy ID
Context	<b>configure</b> <a href="#">application-assurance group number partition number transit-prefix-policy number</a>
Tree	<a href="#">transit-prefix-policy</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description

Context **configure** [application-assurance group number](#) [partition number](#) [transit-prefix-policy number](#) [description string](#)

Tree [description](#)

String Length 1 to 80

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **entry** [[entry-id](#)] *number*

Synopsis Enter the **entry** list instance

Context **configure** [application-assurance group number](#) [partition number](#) [transit-prefix-policy number](#) [entry number](#)

Tree [entry](#)

Description Commands in this context configure the index to a specific entry of a transit prefix policy.

Max. Instances 4095

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[entry-id]** *number*

Synopsis ID for a transit prefix policy entry

Context **configure** [application-assurance group number](#) [partition number](#) [transit-prefix-policy number](#) [entry number](#)

Tree [entry](#)

Range 1 to 4294967295

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**aa-sub** *reference*

Synopsis	Name of the transit prefix AA subscriber
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-prefix-policy</a> <i>number</i> <a href="#">entry</a> <i>number</i> <b>aa-sub</b> <i>reference</i>
Tree	<a href="#">aa-sub</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-prefix-policy</a> <i>number</i> <a href="#">static-aa-sub</a> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**match**

Synopsis	Enter the <b>match</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-prefix-policy</a> <i>number</i> <a href="#">entry</a> <i>number</i> <b>match</b>
Tree	<a href="#">match</a>
Description	Commands in this context configure transit prefix policy entry match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**aa-sub-ip** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	AA subscriber IP address prefix
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-prefix-policy</a> <i>number</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <b>aa-sub-ip</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">aa-sub-ip</a>
Description	This command configures a transit prefix subscriber IP address prefix. It is used when the site is on the local side, the same side of the system as the parent SAP. The local aa-sub-ip addresses represent the source IP in the from-SAP direction and destination IP in the to-SAP direction.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**network-ip** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Network IP address prefix
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-prefix-policy</a> <i>number</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">network-ip</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">network-ip</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **static-aa-sub** [[transit-aa-sub-name](#)] *string*

Synopsis	Enter the <b>static-aa-sub</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-prefix-policy</a> <i>number</i> <a href="#">static-aa-sub</a> <i>string</i>
Tree	<a href="#">static-aa-sub</a>
Max. Instances	4095
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[transit-aa-sub-name]** *string*

Synopsis	Static transit subscriber name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-prefix-policy</a> <i>number</i> <a href="#">static-aa-sub</a> <i>string</i>
Tree	<a href="#">static-aa-sub</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **app-profile** *reference*

Synopsis	Application profile name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-prefix-policy</a> <i>number</i> <a href="#">static-aa-sub</a> <i>string</i> <a href="#">app-profile</a> <i>reference</i>
Tree	<a href="#">app-profile</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i>
Notes	This element is mandatory.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **is-remote** *boolean*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Set transit subscriber as remote
Context	<b>configure</b> <a href="#">application-assurance group number partition number transit-prefix-policy number static-aa-sub string is-remote boolean</a>
Tree	<a href="#">is-remote</a>
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **wap1x**

Synopsis	Enter the <b>wap1x</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number wap1x</a>
Tree	<a href="#">wap1x</a>
Description	Commands in this context configure the Wireless Application Protocol (WAP) 1.X.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of WAP1x detection
Context	<b>configure</b> <a href="#">application-assurance group number partition number wap1x admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**policer**

Synopsis	Enter the <b>policer</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <b>policer</b>
Tree	<a href="#">policer</a>
Description	<p>Commands in this context create application assurance policer profiles of a specified type. Policers can be bandwidth or flow-limiting and can have a granularity of system scope (limits traffic entering AA ISA for all or a subset of AA subscribers) or a subscriber scope (limits apply to each AA subscriber traffic).</p> <p>The policer type and granularity can only be configured during creation. They cannot be modified. The policer profile must be removed from all AQPs to be removed. Changes to policer profile parameters take effect immediately for policers instantiated as a result of AQP actions using this profile.</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**anl-bandwidth-policer** [\[policer-name\]](#) *string*

Synopsis	Enter the <b>anl-bandwidth-policer</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number</a> <b>policer anl-bandwidth-policer</b> <i>string</i>
Tree	<a href="#">anl-bandwidth-policer</a>
Description	Commands in this context configure the AA ANL policer.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[policer-name]** *string*

Synopsis	Policer name
Context	<b>configure</b> <a href="#">application-assurance group number</a> <b>policer anl-bandwidth-policer</b> <i>string</i>
Tree	<a href="#">anl-bandwidth-policer</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**action** *keyword*

Synopsis	Action for packets violating configured policer rate
Context	<b>configure</b> <a href="#">application-assurance group number policer anl-bandwidth-policer string</a> <a href="#">action keyword</a>
Tree	<a href="#">action</a>
Description	This command configures the action to be performed by single-bucket bandwidth policers for non-conformant traffic.  Dual bucket bandwidth policers cannot have their action configured and always mark traffic below CIR as in-profile, between CIR and PIR as out-of-profile, and drop traffic above PIR. Flow policers always discard non-conformant traffic.  When multiple application assurance policers are configured against a single flow (including policers at both subscriber and system), the flow/packet is dropped if one of the policers requires the packet to be discarded. This occurs regardless of the action of the other policers.
Options	permit-deny, priority-mark
Default	permit-deny
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**adaptation-rule**

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure</b> <a href="#">application-assurance group number policer anl-bandwidth-policer string</a> <a href="#">adaptation-rule</a>
Tree	<a href="#">adaptation-rule</a>
Description	Commands in this context configure the AA policer adaptation rule fields and define the method used by the system to derive the operational CIR and PIR values when the queue is provisioned. For the CIR and PIR values individually, the system attempts to find the best operational rate depending on the defined option. To change the CIR adaptation rule only, the current PIR rule must be part of the command executed.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**pir** *keyword*

Synopsis	Peak information rate value for the adaptation rule
Context	<b>configure</b> <a href="#">application-assurance group number policer anl-bandwidth-policer string</a> <a href="#">adaptation-rule pir keyword</a>
Tree	<a href="#">pir</a>

Description	This command configures the adaptation rule to be used while computing the operational PIR value. The adaptation rule specifies the rules to compute the operational values while maintaining minimum offset.
Options	max, min, closest
Default	closest
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer anl-bandwidth-policer</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mbs** *number*

Synopsis	ANL bandwidth policer maximum burst size
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer anl-bandwidth-policer</a> <i>string</i> <b>mbs</b> <i>number</i>
Tree	<a href="#">mbs</a>
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rate-percentage** *number*

Synopsis	Rate used by Access-Network-Location policers
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">policer</a> <a href="#">anl-bandwidth-policer</a> <i>string</i> <a href="#">rate-percentage</a> <i>number</i>
Tree	<a href="#">rate-percentage</a>
Description	This command configures the stage 1 congestion percentage used by Access-Network-Location (ANL) policers. Because ANL total bandwidth is dynamically measured and estimated by AA, this command allows the operator to configure the ratio of that measured bandwidth to be used by the ANL policer as the policer rate.  No limiting is performed if not specified.
Range	0 to 200
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rate-percentage-stage-2** *number*

Synopsis	Rate used by Access-Network-Location policers
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">policer</a> <a href="#">anl-bandwidth-policer</a> <i>string</i> <a href="#">rate-percentage-stage-2</a> <i>number</i>
Tree	<a href="#">rate-percentage-stage-2</a>
Description	This command configures the stage 2 congestion percentage rate used by Access-Network-Location (ANL) policers. Because ANL stage2 total bandwidth is dynamically measured and estimated by AA, this command allows the operator to configure the ratio of that measured bandwidth to be used by the ANL stage2 policer as the policer rate.  When unconfigured, limiting is not performed.
Range	0 to 200
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dual-bucket-bandwidth-policer** [[policer-name](#)] *string*

Synopsis	Enter the <b>dual-bucket-bandwidth-policer</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">policer</a> <a href="#">dual-bucket-bandwidth-policer</a> <i>string</i>
Tree	<a href="#">dual-bucket-bandwidth-policer</a>
Description	Commands in this context configure the dual-bucket bandwidth policer.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[policer-name] string**

Synopsis	Policer name
Context	<b>configure</b> <a href="#">application-assurance group number policer dual-bucket-bandwidth-policer string</a>
Tree	<a href="#">dual-bucket-bandwidth-policer</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**adaptation-rule**

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure</b> <a href="#">application-assurance group number policer dual-bucket-bandwidth-policer string adaptation-rule</a>
Tree	<a href="#">adaptation-rule</a>
Description	Commands in this context configure the AA policer adaptation rule fields and define the method used by the system to derive the operational CIR and PIR values when the queue is provisioned. For the CIR and PIR values individually, the system attempts to find the best operational rate depending on the defined option. To change the CIR adaptation rule only, the current PIR rule must be part of the command executed.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**cir keyword**

Synopsis	Committed information rate value for adaptation rule
Context	<b>configure</b> <a href="#">application-assurance group number policer dual-bucket-bandwidth-policer string adaptation-rule cir keyword</a>
Tree	<a href="#">cir</a>
Description	This command configures the CIR for the dual-bucket-bandwidth-policer adaptation rule policer. Nokia recommends configuring CIR larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. The CIR is configurable for dual-bucket bandwidth policers only.
Options	max, min, closest
Default	closest
Introduced	21.10.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **pir** keyword

Synopsis Peak information rate value for the adaptation rule

Context **configure** application-assurance group number policer dual-bucket-bandwidth-policer string adaptation-rule pir keyword

Tree pir

Description This command configures the adaptation rule to be used while computing the operational PIR value. The adaptation rule specifies the rules to compute the operational values while maintaining minimum offset.

Options max, min, closest

Default closest

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **cbs** number

Synopsis Committed burst size when in congested state

Context **configure** application-assurance group number policer dual-bucket-bandwidth-policer string cbs number

Tree cbs

Description This command configures the committed burst size (CBS) for a policer. Nokia recommends that CBS is configured larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. CBS is configurable for dual-bucket bandwidth policers only.

Range 0 to 131071

Units kilobytes

Default 0

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **cir** (number | keyword)

Synopsis Committed information rate value for the policer

Context **configure** application-assurance group number policer dual-bucket-bandwidth-policer string cir (number | keyword)

Tree	<a href="#">cir</a>
Description	This command configures the CIR for the dual-bucket-bandwidth-policer policer. Nokia recommends that the CIR is configured larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. The CIR is configurable for dual-bucket bandwidth policers only.
Range	0 to 100000000
Units	kilobps
Options	max
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### congestion-override

Synopsis	Enter the <b>congestion-override</b> context
Context	<b>configure</b> <a href="#">application-assurance group number policer dual-bucket-bandwidth-policer string congestion-override</a>
Tree	<a href="#">congestion-override</a>
Description	Commands in this context configure the congestion bandwidth policer override rates.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **cbs** *number*

Synopsis	Committed burst size in a congested stage 2 state
Context	<b>configure</b> <a href="#">application-assurance group number policer dual-bucket-bandwidth-policer string congestion-override cbs number</a>
Tree	<a href="#">cbs</a>
Description	This command configures the committed burst size for a policer. The configured CBS should be larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. CBS is configurable for dual-bucket bandwidth policers only.
Range	0 to 131071
Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**cir** (*number* | *keyword*)

Synopsis	Committed information rate value for policer override
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer dual-bucket-bandwidth-policer string congestion-override</a> <i>cir</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Description	This command configures the CIR for the dual-bucket bandwidth policer congestion override. Nokia recommends that the CIR is configured larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. The CIR is configurable for dual-bucket bandwidth policers only.
Range	0 to 100000000
Units	kilobps
Options	max
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mbs** *number*

Synopsis	Maximum burst size when in a congested state
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer dual-bucket-bandwidth-policer string congestion-override</a> <i>mbs</i> <i>number</i>
Tree	<a href="#">mbs</a>
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**pir** (*number* | *keyword*)

Synopsis	Peak information rate value for the congestion override
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Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer dual-bucket-bandwidth-policer string congestion-override pir</a> ( <i>number   keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 100000000
Units	kilobps
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### congestion-override-stage-2

Synopsis	Enter the <b>congestion-override-stage-2</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer dual-bucket-bandwidth-policer string congestion-override-stage-2</a>
Tree	<a href="#">congestion-override-stage-2</a>
Description	This command enables the context to configure per-subscriber stage 2 congestion bandwidth policer override rates.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **cbs** *number*

Synopsis	Committed burst size in a congested stage 2 state
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer dual-bucket-bandwidth-policer string congestion-override-stage-2 cbs</a> <i>number</i>
Tree	<a href="#">cbs</a>
Description	This command configures the committed burst size for a policer. The configured CBS should be larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. CBS is configurable for dual-bucket bandwidth policers only.
Range	0 to 131071
Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**cir** (*number* | *keyword*)

Synopsis	Committed information rate value for policer override
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer dual-bucket-bandwidth-policer string congestion-override-stage-2</a> <b>cir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Description	This command configures the CIR for the dual-bucket bandwidth policer congestion override. Nokia recommends that the CIR is configured larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. The CIR is configurable for dual-bucket bandwidth policers only.
Range	0 to 100000000
Units	kilobps
Options	max
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mbs** *number*

Synopsis	Maximum burst size when in a congested state
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer dual-bucket-bandwidth-policer string congestion-override-stage-2</a> <b>mbs</b> <i>number</i>
Tree	<a href="#">mbs</a>
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**pir** (*number* | *keyword*)

Synopsis	Peak information rate value for the congestion override
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Context	<b>configure</b> <a href="#">application-assurance group number policer dual-bucket-bandwidth-policer string congestion-override-stage-2 pir</a> ( <i>number   keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 100000000
Units	kilobps
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number policer dual-bucket-bandwidth-policer string description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mbs** *number*

Synopsis	Bandwidth policer maximum burst size
Context	<b>configure</b> <a href="#">application-assurance group number policer dual-bucket-bandwidth-policer string mbs number</a>
Tree	<a href="#">mbs</a>
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**pir** (*number* | *keyword*)

Synopsis	Peak information rate value for the bandwidth policer
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer dual-bucket-bandwidth-policer</a> <i>string</i> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 100000000
Units	kilobps
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**time-of-day-override** [[tod-override-id](#)] *number*

Synopsis	Enter the <b>time-of-day-override</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer dual-bucket-bandwidth-policer</a> <i>string</i> <a href="#">time-of-day-override</a> <i>number</i>
Tree	<a href="#">time-of-day-override</a>
Description	Commands in this context configure the time of day override policy for a given policer. Rate/mbs/cbs/flow-rate/flow-count configured in each override-id will override the default policer values at the specified time of day configured in the override.
Max. Instances	8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[tod-override-id]** *number*

Synopsis	ID for time of day override
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer dual-bucket-bandwidth-policer</a> <i>string</i> <a href="#">time-of-day-override</a> <i>number</i>
Tree	<a href="#">time-of-day-override</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of this time of day policer
Context	<b>configure</b> <a href="#">application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**cbs** *number*

Synopsis	Committed burst size for time of day override policer
Context	<b>configure</b> <a href="#">application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number cbs number</a>
Tree	<a href="#">cbs</a>
Description	This command configures the committed burst size (CBS) for a policer. Nokia recommends configuring CBS larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. CBS is configurable for dual-bucket bandwidth policers only.
Range	0 to 131071
Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**cir** (*number* | *keyword*)

Synopsis	Committed information rate for time of day override
Context	<b>configure</b> <a href="#">application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number cir (number   keyword)</a>
Tree	<a href="#">cir</a>
Description	This command configures the committed information rate (CIR) for the dual-bucket-bandwidth-policer policer time of day override. Nokia recommends that the CIR is configured larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. The CIR is configurable for dual-bucket bandwidth policers only.



Range	0 to 100000000
Units	kilobps
Options	max
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer dual-bucket-bandwidth-policer string</a> <a href="#">time-of-day-override number</a> <b>description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mbs** *number*

Synopsis	Maximum burst size for the policer time of day override
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer dual-bucket-bandwidth-policer string</a> <a href="#">time-of-day-override number</a> <b>mbs number</b>
Tree	<a href="#">mbs</a>
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends that MBS is configured larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **pir** (*number* | *keyword*)

Synopsis	Peak information rate value for time of day override
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Context	<b>configure</b> <a href="#">application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number pir</a> ( <i>number   keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 100000000
Units	kilobps
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## time-range

Synopsis	Enter the <b>time-range</b> context
Context	<b>configure</b> <a href="#">application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number time-range</a>
Tree	<a href="#">time-range</a>
Description	Commands in this context configure the days of the week policer override is enabled as well as the time policer override starts and ends. When using a daily override the operator can select which days during the week from Sunday to Saturday it is applicable along with the start/end hour/min time range repeated over these days. When using a weekly override the operator can select between which days in the week the policy start up to the hours/min for both start day and end day.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## daily

Synopsis	Enable the <b>daily</b> context
Context	<b>configure</b> <a href="#">application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number time-range daily</a>
Tree	<a href="#">daily</a>
Description	Commands in this context configure the daily start and end times for policer override.
Notes	The following elements are part of a choice: <b>daily</b> or <b>weekly</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**all-days**

Synopsis	Enable policer override on every day
Context	<b>configure</b> <a href="#">application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number time-range daily all-days</a>
Tree	<a href="#">all-days</a>
Notes	The following elements are part of a choice: <b>all-days</b> or <b>on</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end string**

Synopsis	Daily end time
Context	<b>configure</b> <a href="#">application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number time-range daily end string</a>
Tree	<a href="#">end</a>
Description	This command configures the daily end time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**on keyword**

Synopsis	Policer override on selected days
Context	<b>configure</b> <a href="#">application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number time-range daily on keyword</a>
Tree	<a href="#">on</a>
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Max. Instances	6
Notes	The following elements are part of a choice: <b>all-days</b> or <b>on</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**start string**

Synopsis	Daily start time
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer dual-bucket-bandwidth-policer string time-of-day-override number time-range daily start string</a>
Tree	<a href="#">start</a>
Description	This command configures the daily start time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**weekly**

Synopsis	Enable the <b>weekly</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer dual-bucket-bandwidth-policer string time-of-day-override number time-range weekly</a>
Tree	<a href="#">weekly</a>
Description	Commands in this context configure the weekly start and end times for policer override.
Notes	The following elements are part of a choice: <b>daily</b> or <b>weekly</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end**

Synopsis	Enable the <b>end</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer dual-bucket-bandwidth-policer string time-of-day-override number time-range weekly end</a>
Tree	<a href="#">end</a>
Description	Commands in this context configure the weekly end time for policer override. When using a weekly override, the operator can select between which days in the week the policy ends up to the hours or minutes for both start of the day and end of the day.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**day** *keyword*

Synopsis	Weekly end day
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer dual-bucket-bandwidth-policer string</a> <a href="#">time-of-day-override</a> <i>number</i> <a href="#">time-range</a> <a href="#">weekly end day</a> <i>keyword</i>
Tree	<a href="#">day</a>
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**time** *string*

Synopsis	Weekly end time
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer dual-bucket-bandwidth-policer string</a> <a href="#">time-of-day-override</a> <i>number</i> <a href="#">time-range</a> <a href="#">weekly end time</a> <i>string</i>
Tree	<a href="#">time</a>
Description	This command configures the weekly end time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**start**

Synopsis	Enable the <b>start</b> context
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer dual-bucket-bandwidth-policer string</a> <a href="#">time-of-day-override</a> <i>number</i> <a href="#">time-range</a> <a href="#">weekly start</a>
Tree	<a href="#">start</a>
Description	Commands in this context configure the weekly start time for policer override.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**day** *keyword*

Synopsis	Weekly start day
Context	<b>configure</b> <a href="#">application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number time-range weekly start day keyword</a>
Tree	<a href="#">day</a>
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**time** *string*

Synopsis	Weekly start time
Context	<b>configure</b> <a href="#">application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number time-range weekly start time string</a>
Tree	<a href="#">time</a>
Description	This command configures the weekly start time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**flow-count-limit-policer** [[policer-name](#)] *string*

Synopsis	Enter the <b>flow-count-limit-policer</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-count-limit-policer string</a>
Tree	<a href="#">flow-count-limit-policer</a>
Description	Commands in this context configure the AA flow count limit policer.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[policer-name]** *string*

Synopsis	Policer name
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-count-limit-policer</a> <i>string</i>
Tree	<a href="#">flow-count-limit-policer</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**action** *keyword*

Synopsis	Action for packets violating configured policer rate
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-count-limit-policer</a> <i>string</i> <a href="#">action</a> <i>keyword</i>
Tree	<a href="#">action</a>
Description	This command configures the action to be performed by single-bucket bandwidth policers for non-conformant traffic.  Dual bucket bandwidth policers cannot have their action configured and always mark traffic below CIR as in-profile, between CIR and PIR as out-of-profile, and drop traffic above PIR. Flow policers always discard non-conformant traffic.  When multiple application assurance policers are configured against a single flow (including policers at both subscriber and system), the flow/packet is dropped if one of the policers requires the packet to be discarded. This occurs regardless of the action of the other policers.
Options	permit-deny, priority-mark
Default	permit-deny
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-count-limit-policer</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **granularity** *keyword*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Policer granularity

Context **configure** [application-assurance group number policer flow-count-limit-policer string granularity keyword](#)

Tree [granularity](#)

Options system, subscriber

Notes This element is mandatory.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **limit-gtp-flows** *boolean*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Limit concurrent GTP flows

Context **configure** [application-assurance group number policer flow-count-limit-policer string limit-gtp-flows boolean](#)

Tree [limit-gtp-flows](#)

Default false

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **peak-flow-count** (*number | keyword*)

Synopsis Peak flow count limit

Context **configure** [application-assurance group number policer flow-count-limit-policer string peak-flow-count \(number | keyword\)](#)

Tree [peak-flow-count](#)

Range 0 to 100000000



Units	flows
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **time-of-day-override** [[tod-override-id](#)] *number*

Synopsis	Enter the <b>time-of-day-override</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-count-limit-policer string</a> <a href="#">time-of-day-override number</a>
Tree	<a href="#">time-of-day-override</a>
Description	Commands in this context configure the time of day override policy for a specific policer. Rate/mbs/cbs/flow-rate/flow-count configured in each override ID overrides the default policer values at the specified time of day configured in the override.
Max. Instances	8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[tod-override-id]** *number*

Synopsis	ID for time of day override
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-count-limit-policer string</a> <a href="#">time-of-day-override number</a>
Tree	<a href="#">time-of-day-override</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of this time of day policer
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-count-limit-policer string</a> <a href="#">time-of-day-override number admin-state keyword</a>
Tree	<a href="#">admin-state</a>

Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer flow-count-limit-policer</a> <i>string</i> <a href="#">time-of-day-override</a> <i>number</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **peak-flow-count** (*number* | *keyword*)

Synopsis	Peak flow count limit
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer flow-count-limit-policer</a> <i>string</i> <a href="#">time-of-day-override</a> <i>number</i> <b>peak-flow-count</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">peak-flow-count</a>
Range	0 to 100000000
Units	flows
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **time-range**

Synopsis	Enter the <b>time-range</b> context
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer flow-count-limit-policer</a> <i>string</i> <a href="#">time-of-day-override</a> <i>number</i> <b>time-range</b>
Tree	<a href="#">time-range</a>
Description	Commands in this context configure the days of the week policer override is enabled as well as the time policer override starts and ends. When using a daily override the operator can select which days during the week from Sunday to Saturday it is applicable

along with the start/end hour/min time range repeated over these days. When using a weekly override the operator can select between which days in the week the policy start up to the hours/min for both start day and end day.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## daily

Synopsis	Enable the <b>daily</b> context
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-count-limit-policer string time-of-day-override number time-range daily</a>
Tree	<a href="#">daily</a>
Description	Commands in this context configure the daily start and end times for policer override.
Notes	The following elements are part of a choice: <b>daily</b> or <b>weekly</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## all-days

Synopsis	Enable policer override on every day
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-count-limit-policer string time-of-day-override number time-range daily all-days</a>
Tree	<a href="#">all-days</a>
Notes	The following elements are part of a choice: <b>all-days</b> or <b>on</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## end string

Synopsis	Daily end time
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-count-limit-policer string time-of-day-override number time-range daily end string</a>
Tree	<a href="#">end</a>
Description	This command configures the daily end time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5

Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**on keyword**

Synopsis	Policer override on selected days
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer flow-count-limit-policer</a> <i>string</i> <a href="#">time-of-day-override</a> <i>number</i> <a href="#">time-range</a> <a href="#">daily on</a> <i>keyword</i>
Tree	<a href="#">on</a>
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Max. Instances	6
Notes	The following elements are part of a choice: <b>all-days</b> or <b>on</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**start string**

Synopsis	Daily start time
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer flow-count-limit-policer</a> <i>string</i> <a href="#">time-of-day-override</a> <i>number</i> <a href="#">time-range</a> <a href="#">daily start</a> <i>string</i>
Tree	<a href="#">start</a>
Description	This command configures the daily start time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**weekly**

Synopsis	Enable the <b>weekly</b> context
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer flow-count-limit-policer</a> <i>string</i> <a href="#">time-of-day-override</a> <i>number</i> <a href="#">time-range</a> <a href="#">weekly</a>

Tree	<a href="#">weekly</a>
Description	Commands in this context configure the weekly start and end times for policer override.
Notes	The following elements are part of a choice: <b>daily</b> or <b>weekly</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## end

Synopsis	Enable the <b>end</b> context
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-count-limit-policer string time-of-day-override number time-range weekly end</a>
Tree	<a href="#">end</a>
Description	Commands in this context configure the weekly end time for policer override. When using a weekly override, the operator can select between which days in the week the policy ends up to the hours or minutes for both start of the day and end of the day.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## day keyword

Synopsis	Weekly end day
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-count-limit-policer string time-of-day-override number time-range weekly end day keyword</a>
Tree	<a href="#">day</a>
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## time string

Synopsis	Weekly end time
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-count-limit-policer string time-of-day-override number time-range weekly end time string</a>
Tree	<a href="#">time</a>
Description	This command configures the weekly end time of the policer override.

The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.

String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## start

Synopsis	Enable the <b>start</b> context
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-count-limit-policer string time-of-day-override number time-range weekly start</a>
Tree	<a href="#">start</a>
Description	Commands in this context configure the weekly start time for policer override.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## day keyword

Synopsis	Weekly start day
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-count-limit-policer string time-of-day-override number time-range weekly start day keyword</a>
Tree	<a href="#">day</a>
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## time string

Synopsis	Weekly start time
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-count-limit-policer string time-of-day-override number time-range weekly start time string</a>
Tree	<a href="#">time</a>
Description	This command configures the weekly start time of the policer override.

The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.

String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **flow-setup-rate-policer** [*policer-name*] *string*

Synopsis	Enter the <b>flow-setup-rate-policer</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-setup-rate-policer string</a>
Tree	<a href="#">flow-setup-rate-policer</a>
Description	Commands in this context configure the flow setup rate policer.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[policer-name]** *string*

Synopsis	Policer name
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-setup-rate-policer string</a>
Tree	<a href="#">flow-setup-rate-policer</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **action** *keyword*

Synopsis	Action for packets violating configured policer rate
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-setup-rate-policer string action keyword</a>
Tree	<a href="#">action</a>
Description	This command configures the action to be performed by single-bucket bandwidth policers for non-conformant traffic.  Dual bucket bandwidth policers cannot have their action configured and always mark traffic below CIR as in-profile, between CIR and PIR as out-of-profile, and drop traffic above PIR. Flow policers always discard non-conformant traffic.

When multiple application assurance policers are configured against a single flow (including policers at both subscriber and system), the flow/packet is dropped if one of the policers requires the packet to be discarded. This occurs regardless of the action of the other policers.

Options	permit-deny, priority-mark
Default	permit-deny
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## adaptation-rule

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-setup-rate-policer string adaptation-rule</a>
Tree	<a href="#">adaptation-rule</a>
Description	Commands in this context configure the AA policer adaptation rule fields and define the method used by the system to derive the operational CIR and PIR values when the queue is provisioned. For the CIR and PIR values individually, the system attempts to find the best operational rate depending on the defined option. To change the CIR adaptation rule only, the current PIR rule must be part of the command executed.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## peak-flow-setup-rate *keyword*

Synopsis	Peak flow setup rate adaptation rule
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-setup-rate-policer string adaptation-rule peak-flow-setup-rate keyword</a>
Tree	<a href="#">peak-flow-setup-rate</a>
Options	max, min, closest
Default	closest
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## description *string*

Synopsis	Text description
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">policer</a> <a href="#">flow-setup-rate-policer</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **flow-setup-rate-burst-size** *number*

Synopsis	Maximum flow setup rate burst size
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">policer</a> <a href="#">flow-setup-rate-policer</a> <i>string</i> <a href="#">flow-setup-rate-burst-size</a> <i>number</i>
Tree	<a href="#">flow-setup-rate-burst-size</a>
Range	0 to 131071
Units	flows
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **granularity** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Policer granularity
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">policer</a> <a href="#">flow-setup-rate-policer</a> <i>string</i> <a href="#">granularity</a> <i>keyword</i>
Tree	<a href="#">granularity</a>
Options	system, subscriber
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **peak-flow-setup-rate** (*number* | *keyword*)

Synopsis	Peak flow setup rate
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Context	<b>configure</b> <a href="#">application-assurance group number policer flow-setup-rate-policer string peak-flow-setup-rate</a> ( <i>number   keyword</i> )
Tree	<a href="#">peak-flow-setup-rate</a>
Range	1 to 100000000
Units	flows per second
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **time-of-day-override** [[tod-override-id](#)] *number*

Synopsis	Enter the <b>time-of-day-override</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-setup-rate-policer string time-of-day-override number</a>
Tree	<a href="#">time-of-day-override</a>
Description	Commands in this context configure the time of day override policy for a given policer. Rate/mbs/cbs/flow-rate/flow-count configured in each override-id will override the default policer values at the specified time of day configured in the override.
Max. Instances	8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[tod-override-id]** *number*

Synopsis	ID for time of day override
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-setup-rate-policer string time-of-day-override number</a>
Tree	<a href="#">time-of-day-override</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of this time of day policer
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer flow-setup-rate-policer</a> <i>string</i> <a href="#">time-of-day-override</a> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer flow-setup-rate-policer</a> <i>string</i> <a href="#">time-of-day-override</a> <i>number</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**flow-setup-rate-burst-size** *number*

Synopsis	Maximum flow setup rate burst size
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer flow-setup-rate-policer</a> <i>string</i> <a href="#">time-of-day-override</a> <i>number</i> <b>flow-setup-rate-burst-size</b> <i>number</i>
Tree	<a href="#">flow-setup-rate-burst-size</a>
Range	0 to 131071
Units	flows
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**peak-flow-setup-rate** (*number* | *keyword*)

Synopsis	Peak flow setup rate
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Context	<b>configure</b> <a href="#">application-assurance group number policer flow-setup-rate-policer string time-of-day-override number peak-flow-setup-rate</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">peak-flow-setup-rate</a>
Range	1 to 100000000
Units	flows per second
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## time-range

Synopsis	Enter the <b>time-range</b> context
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range</a>
Tree	<a href="#">time-range</a>
Description	Commands in this context configure the days of the week policer override is enabled as well as the time policer override starts and ends. When using a daily override the operator can select which days during the week from Sunday to Saturday it is applicable along with the start/end hour/min time range repeated over these days. When using a weekly override the operator can select between which days in the week the policy start up to the hours/min for both start day and end day.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## daily

Synopsis	Enable the <b>daily</b> context
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range daily</a>
Tree	<a href="#">daily</a>
Description	Commands in this context configure the daily start and end times for policer override.
Notes	The following elements are part of a choice: <b>daily</b> or <b>weekly</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**all-days**

Synopsis	Enable policer override on every day
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer flow-setup-rate-policer</a> <i>string</i> <a href="#">time-of-day-override</a> <i>number</i> <a href="#">time-range</a> <a href="#">daily</a> <b>all-days</b>
Tree	<a href="#">all-days</a>
Notes	The following elements are part of a choice: <b>all-days</b> or <b>on</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end string**

Synopsis	Daily end time
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer flow-setup-rate-policer</a> <i>string</i> <a href="#">time-of-day-override</a> <i>number</i> <a href="#">time-range</a> <a href="#">daily</a> <b>end string</b>
Tree	<a href="#">end</a>
Description	This command configures the daily end time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**on keyword**

Synopsis	Policer override on selected days
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer flow-setup-rate-policer</a> <i>string</i> <a href="#">time-of-day-override</a> <i>number</i> <a href="#">time-range</a> <a href="#">daily</a> <b>on</b> <i>keyword</i>
Tree	<a href="#">on</a>
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Max. Instances	6
Notes	The following elements are part of a choice: <b>all-days</b> or <b>on</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**start string**

Synopsis	Daily start time
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer flow-setup-rate-policer</a> <i>string</i> <a href="#">time-of-day-override</a> <i>number</i> <a href="#">time-range</a> <a href="#">daily start</a> <i>string</i>
Tree	<a href="#">start</a>
Description	This command configures the daily start time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**weekly**

Synopsis	Enable the <b>weekly</b> context
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer flow-setup-rate-policer</a> <i>string</i> <a href="#">time-of-day-override</a> <i>number</i> <a href="#">time-range</a> <a href="#">weekly</a>
Tree	<a href="#">weekly</a>
Description	Commands in this context configure the weekly start and end times for policer override.
Notes	The following elements are part of a choice: <b>daily</b> or <b>weekly</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end**

Synopsis	Enable the <b>end</b> context
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer flow-setup-rate-policer</a> <i>string</i> <a href="#">time-of-day-override</a> <i>number</i> <a href="#">time-range</a> <a href="#">weekly</a> <a href="#">end</a>
Tree	<a href="#">end</a>
Description	Commands in this context configure the weekly end time for policer override. When using a weekly override, the operator can select between which days in the week the policy ends up to the hours or minutes for both start of the day and end of the day.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**day** *keyword*

Synopsis	Weekly end day
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer flow-setup-rate-policer</a> <i>string</i> <a href="#">time-of-day-override</a> <i>number</i> <a href="#">time-range</a> <a href="#">weekly</a> <i>end day</i> <i>keyword</i>
Tree	<a href="#">day</a>
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**time** *string*

Synopsis	Weekly end time
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer flow-setup-rate-policer</a> <i>string</i> <a href="#">time-of-day-override</a> <i>number</i> <a href="#">time-range</a> <a href="#">weekly</a> <i>end time</i> <i>string</i>
Tree	<a href="#">time</a>
Description	This command configures the weekly end time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**start**

Synopsis	Enable the <b>start</b> context
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer flow-setup-rate-policer</a> <i>string</i> <a href="#">time-of-day-override</a> <i>number</i> <a href="#">time-range</a> <a href="#">weekly</a> <i>start</i>
Tree	<a href="#">start</a>
Description	Commands in this context configure the weekly start time for policer override.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**day** *keyword*

Synopsis	Weekly start day
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range weekly start day keyword</a>
Tree	<a href="#">day</a>
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**time** *string*

Synopsis	Weekly start time
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range weekly start time string</a>
Tree	<a href="#">time</a>
Description	This command configures the weekly start time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**single-bucket-bandwidth-policer** [[policer-name](#)] *string*

Synopsis	Enter the <b>single-bucket-bandwidth-policer</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number policer single-bucket-bandwidth-policer string</a>
Tree	<a href="#">single-bucket-bandwidth-policer</a>
Description	Commands in this context configure the single-bucket bandwidth policer.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**[policer-name]** *string*

Synopsis	Policer name
Context	<b>configure</b> <a href="#">application-assurance group number policer single-bucket-bandwidth-policer</a> <i>string</i>
Tree	<a href="#">single-bucket-bandwidth-policer</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**action** *keyword*

Synopsis	Action for packets violating configured policer rate
Context	<b>configure</b> <a href="#">application-assurance group number policer single-bucket-bandwidth-policer</a> <i>string</i> <b>action</b> <i>keyword</i>
Tree	<a href="#">action</a>
Description	<p>This command configures the action to be performed by single-bucket bandwidth policers for non-conformant traffic.</p> <p>Dual bucket bandwidth policers cannot have their action configured and always mark traffic below CIR as in-profile, between CIR and PIR as out-of-profile, and drop traffic above PIR. Flow policers always discard non-conformant traffic.</p> <p>When multiple application assurance policers are configured against a single flow (including policers at both subscriber and system), the flow/packet is dropped if one of the policers requires the packet to be discarded. This occurs regardless of the action of the other policers.</p>
Options	permit-deny, priority-mark
Default	permit-deny
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**adaptation-rule**

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure</b> <a href="#">application-assurance group number policer single-bucket-bandwidth-policer</a> <i>string</i> <b>adaptation-rule</b>
Tree	<a href="#">adaptation-rule</a>
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **pir** keyword

Synopsis Peak information rate value for the adaptation rule

Context **configure** [application-assurance group number](#) [policer single-bucket-bandwidth-policer string](#) [adaptation-rule](#) **pir** keyword

Tree [pir](#)

Description This command configures the adaptation rule to be used while computing the operational PIR value. The adaptation rule specifies the rules to compute the operational values while maintaining minimum offset.

Options max, min, closest

Default closest

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **congestion-override**

Synopsis Enter the **congestion-override** context

Context **configure** [application-assurance group number](#) [policer single-bucket-bandwidth-policer string](#) [congestion-override](#)

Tree [congestion-override](#)

Description Commands in this context configure the congestion bandwidth policer override rates.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mbs** number

Synopsis Maximum burst size when in a congested state

Context **configure** [application-assurance group number](#) [policer single-bucket-bandwidth-policer string](#) [congestion-override](#) **mbs** number

Tree [mbs](#)

Description This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.

Range 0 to 131071

Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **pir** (*number* | *keyword*)

Synopsis	Peak information rate value for the congestion override
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer</a> <a href="#">single-bucket-bandwidth-policer</a> <i>string</i> <a href="#">congestion-override</a> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 100000000
Units	kilobps
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **congestion-override-stage-2**

Synopsis	Enter the <b>congestion-override-stage-2</b> context
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer</a> <a href="#">single-bucket-bandwidth-policer</a> <i>string</i> <a href="#">congestion-override-stage-2</a>
Tree	<a href="#">congestion-override-stage-2</a>
Description	Commands in this context configure per-subscriber stage 2 congestion bandwidth policer override rates.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mbs** *number*

Synopsis	Maximum burst size when in a congested state
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer</a> <a href="#">single-bucket-bandwidth-policer</a> <i>string</i> <a href="#">congestion-override-stage-2</a> <b>mbs</b> <i>number</i>
Tree	<a href="#">mbs</a>
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the

policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.

Range	0 to 131071
Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **pir** (*number* | *keyword*)

Synopsis	Peak information rate value for the congestion override
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer</a> <a href="#">single-bucket-bandwidth-policer</a> <i>string</i> <a href="#">congestion-override-stage-2</a> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 100000000
Units	kilobps
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer</a> <a href="#">single-bucket-bandwidth-policer</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **granularity** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Policer granularity
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer single-bucket-bandwidth-policer string</a> <a href="#">granularity keyword</a>
Tree	<a href="#">granularity</a>
Options	system, subscriber
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mbs number**

Synopsis	Bandwidth policer maximum burst size
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer single-bucket-bandwidth-policer string</a> <a href="#">mbs number</a>
Tree	<a href="#">mbs</a>
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **pir (number | keyword)**

Synopsis	Peak information rate value for the bandwidth policer
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer single-bucket-bandwidth-policer string</a> <a href="#">pir (number   keyword)</a>
Tree	<a href="#">pir</a>
Range	1 to 100000000
Units	kilobps
Options	max
Default	max
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **time-of-day-override** [*tod-override-id*] *number*

Synopsis Enter the **time-of-day-override** list instance

Context **configure** *application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number*

Tree [time-of-day-override](#)

Description Commands in this context configure the time of day override policy for a given policer. Rate/mbs/cbs/flow-rate/flow-count configured in each override-id will override the default policer values at the specified time of day configured in the override.

Max. Instances 8

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[tod-override-id]** *number*

Synopsis ID for time of day override

Context **configure** *application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number*

Tree [time-of-day-override](#)

Range 1 to 255

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of this time of day policer

Context **configure** *application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number admin-state keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer single-bucket-bandwidth-policer string time-of-day-override number</a> <b>description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mbs number**

Synopsis	Bandwidth policer MBS for time of day override
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer single-bucket-bandwidth-policer string time-of-day-override number</a> <b>mbs number</b>
Tree	<a href="#">mbs</a>
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**pir (number | keyword)**

Synopsis	Peak information rate value for time of day override
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer single-bucket-bandwidth-policer string time-of-day-override number</a> <b>pir (number   keyword)</b>
Tree	<a href="#">pir</a>
Range	1 to 100000000
Units	kilobps
Options	max
Default	max
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## time-range

Synopsis Enter the **time-range** context

Context **configure** [application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number time-range](#)

Tree [time-range](#)

Description Commands in this context configure the days of the week policer override is enabled as well as the time policer override starts and ends. When using a daily override the operator can select which days during the week from Sunday to Saturday it is applicable along with the start/end hour/min time range repeated over these days. When using a weekly override the operator can select between which days in the week the policy start up to the hours/min for both start day and end day.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## daily

Synopsis Enable the **daily** context

Context **configure** [application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number time-range daily](#)

Tree [daily](#)

Description Commands in this context configure the daily start and end times for policer override.

Notes The following elements are part of a choice: **daily** or **weekly**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## all-days

Synopsis Enable policer override on every day

Context **configure** [application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number time-range daily all-days](#)

Tree [all-days](#)

Notes The following elements are part of a choice: **all-days** or **on**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**end string**

Synopsis	Daily end time
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer single-bucket-bandwidth-policer string</a> <a href="#">time-of-day-override number</a> <a href="#">time-range daily end string</a>
Tree	<a href="#">end</a>
Description	This command configures the daily end time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**on keyword**

Synopsis	Policer override on selected days
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer single-bucket-bandwidth-policer string</a> <a href="#">time-of-day-override number</a> <a href="#">time-range daily on keyword</a>
Tree	<a href="#">on</a>
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Max. Instances	6
Notes	The following elements are part of a choice: <b>all-days</b> or <b>on</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**start string**

Synopsis	Daily start time
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer single-bucket-bandwidth-policer string</a> <a href="#">time-of-day-override number</a> <a href="#">time-range daily start string</a>
Tree	<a href="#">start</a>
Description	This command configures the daily start time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.

String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## weekly

Synopsis	Enable the <b>weekly</b> context
Context	<b>configure</b> <a href="#">application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number time-range weekly</a>
Tree	<a href="#">weekly</a>
Description	Commands in this context configure the weekly start and end times for policer override.
Notes	The following elements are part of a choice: <b>daily</b> or <b>weekly</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## end

Synopsis	Enable the <b>end</b> context
Context	<b>configure</b> <a href="#">application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number time-range weekly end</a>
Tree	<a href="#">end</a>
Description	Commands in this context configure the weekly end time for policer override. When using a weekly override, the operator can select between which days in the week the policy ends up to the hours or minutes for both start of the day and end of the day.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## day keyword

Synopsis	Weekly end day
Context	<b>configure</b> <a href="#">application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number time-range weekly end day keyword</a>
Tree	<a href="#">day</a>
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**time string**

Synopsis	Weekly end time
Context	<b>configure</b> <a href="#">application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number time-range weekly end time string</a>
Tree	<a href="#">time</a>
Description	This command configures the weekly end time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**start**

Synopsis	Enable the <b>start</b> context
Context	<b>configure</b> <a href="#">application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number time-range weekly start</a>
Tree	<a href="#">start</a>
Description	Commands in this context configure the weekly start time for policer override.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**day keyword**

Synopsis	Weekly start day
Context	<b>configure</b> <a href="#">application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number time-range weekly start day keyword</a>
Tree	<a href="#">day</a>
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **time string**

Synopsis Weekly start time

Context **configure** [application-assurance group number](#) [policer single-bucket-bandwidth-policer string](#) [time-of-day-override number](#) [time-range](#) [weekly start time string](#)

Tree [time](#)

Description This command configures the weekly start time of the policer override.

The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.

String Length 3 to 5

Notes This element is mandatory.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tcp-optimizer** [\[tcp-optimizer-name\]](#) *string*

Synopsis Enter the **tcp-optimizer** list instance

Context **configure** [application-assurance group number](#) [tcp-optimizer string](#)

Tree [tcp-optimizer](#)

Description Commands in this context configure the TCP optimizer policy. When a TCP optimizer policy is removed or deleted, the existing flows using this policy are abandoned, and optimization is stopped.

Introduced 22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[tcp-optimizer-name]** *string*

Synopsis TCP optimizer name

Context **configure** [application-assurance group number](#) [tcp-optimizer string](#)

Tree [tcp-optimizer](#)

Description This command configures the name of the TCP optimizer policy.

String Length 1 to 32

Notes This element is part of a list key.

Introduced 22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dack-timeout** *number*

Synopsis Delayed acknowledgment timeout for client and server

Context **configure** [application-assurance group number tcp-optimizer string dack-timeout number](#)

Tree [dack-timeout](#)

Description This command configures a delay ACK (DACK) timeout for the TCP optimizer. By entering this command a default of 200 ms timeout is enabled for delayed acknowledgment. This value is not configurable.

Range 200

Units milliseconds

Introduced 22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description

Context **configure** [application-assurance group number tcp-optimizer string description string](#)

Tree [description](#)

String Length 1 to 80

Introduced 22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **initial-cwnd** *number*

Synopsis Initial congestion window of the TCP optimizer

Context **configure** [application-assurance group number tcp-optimizer string initial-cwnd number](#)

Tree [initial-cwnd](#)

Description This command configures the initial TCP congestion window (cwnd) used during the TCP Slow Start (SS) period.

Range 1 to 256

Default 8

Introduced 22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**initial-ss-threshold** (*number* | *keyword*)

Synopsis	Initial TCP Slow Start threshold for client and server
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">tcp-optimizer string</a> <a href="#">initial-ss-threshold</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">initial-ss-threshold</a>
Description	This command configures the initial Slow Start (SS) threshold for a specific TCP optimizer policy. Nokia recommends setting the threshold close to the access network Bandwidth Delay Product (BDP).
Range	0 to 1000000
Units	kilobytes
Options	auto
Default	1000000
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**network-rtt-threshold** *number*

Synopsis	Network round trip time threshold
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">tcp-optimizer string</a> <a href="#">network-rtt-threshold</a> <i>number</i>
Tree	<a href="#">network-rtt-threshold</a>
Description	This command configures the threshold of the Round Trip Time (RTT) delay of the network side (between AA and the content provider) above which TCP Optimization (TCPO) is performed. This enables the operator to disable optimization for content that is served from a location close to the TCP optimizer.
Range	1 to 100
Units	milliseconds
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**tcp-stack** *keyword*

Synopsis	TCP stack congestion control algorithm
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">tcp-optimizer string</a> <a href="#">tcp-stack</a> <i>keyword</i>
Tree	<a href="#">tcp-stack</a>
Description	This command configures the TCP stack used toward the subscriber.

**Note:** The TCP stack used toward the core network is new-reno, and it is not configurable. TCP BBR, TCP Illinois, and TCP Westwood implement a sender-side modification of the TCP congestion window algorithm that improves the performance of TCP Reno in wireless networks with lossy links.

Options	westwood, illinois, new-reno, bbr
Default	westwood
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **url-filter** [[url-filter-name](#)] *string*

Synopsis	Enter the <b>url-filter</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string</a>
Tree	<a href="#">url-filter</a>
Description	Commands in this context configure a URL filter action for flows of a specific type matching this entry. If no URL filters are specified, then no URL filters are evaluated.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[url-filter-name]** *string*

Synopsis	URL filter name
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string</a>
Tree	<a href="#">url-filter</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the AA URL filter
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **apply-function-specific-behaviour** *boolean*

Synopsis	Use function-specific behavior for action or redirect
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string apply-function-specific-behaviour boolean</a>
Tree	<a href="#">apply-function-specific-behaviour</a>
Description	<p>When configured to <b>true</b>, the function-specific configurations for URL list, ICAP, and web service (<b>url-list</b>, <b>icap</b>, and <b>web-service</b>) are used for default action (<b>default-action</b>) and HTTP redirect (<b>http-redirect</b>).</p> <p>When configured to <b>false</b>, the configuration at the URL filter level (<b>url-filter</b>) is used for default action and HTTP redirect.</p>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **default-action**

Synopsis	Enter the <b>default-action</b> context
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string default-action</a>
Tree	<a href="#">default-action</a>
Description	<p>Commands in this context configure the default action to take effect when the URL filter cannot be used. This may occur in the following cases:</p> <ul style="list-style-type: none"> <li>• for the local URL list when the URL list is shut down or the file is not loaded due to an error.</li> <li>• in the case of ICAP or web filtering when all TCP connections are busy or down.</li> </ul>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **allow**

Synopsis	Allow all requests as the default URL filter action
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string default-action allow</a>
Tree	<a href="#">allow</a>



Description	When configured, this command allows all requests as the default URL filter action when the URL filter cannot be used.
Notes	The following elements are part of a choice: <b>allow</b> , <b>block-all</b> , or <b>block-http-redirect</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## block-all

Synopsis	Block all requests as the default URL filter action
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string default-action block-all</a>
Tree	<a href="#">block-all</a>
Description	When configured, this command blocks all requests as the default URL filter action when the URL filter cannot be used.
Notes	The following elements are part of a choice: <b>allow</b> , <b>block-all</b> , or <b>block-http-redirect</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## block-http-redirect *reference*

Synopsis	HTTP URL name for block and redirect request action
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string default-action block-http-redirect reference</a>
Tree	<a href="#">block-http-redirect</a>
Description	This command blocks traffic and redirects the user to an information page that can be different from the page the user is redirected to when the site that the user tried to access is found in the URL filter. This page is configured using the <b>configure AA group url-filter http-redirect</b> command
Reference	<b>configure</b> <a href="#">application-assurance group number http-redirect string</a>
Notes	The following elements are part of a choice: <b>allow</b> , <b>block-all</b> , or <b>block-http-redirect</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## description *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string description string</a>

Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **http-redirect** *reference*

Synopsis	HTTP redirect for a blocked HTTP request
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string http-redirect reference</a>
Tree	<a href="#">http-redirect</a>
Reference	<b>configure</b> <a href="#">application-assurance group number http-redirect string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **http-request-filtering** *keyword*

Synopsis	HTTP filtering for all HTTP requests
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string http-request-filtering keyword</a>
Tree	<a href="#">http-request-filtering</a>
Description	This command selects between HTTP filtering for all HTTP requests in a flow or only the first HTTP request.
Options	all, first
Default	all
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **icap**

Synopsis	Enter the <b>icap</b> context
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string icap</a>
Tree	<a href="#">icap</a>
Description	Commands in this context configure the URL filter ICAP policy fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**custom-x-header** *string*

Synopsis	Custom x-header field name to include in ICAP requests
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string icap custom-x-header string</a>
Tree	<a href="#">custom-x-header</a>
Description	This command configures the URL filter ICAP policy to include a new x-header field; the content of the x-header is populated based on the AQP URL filter action which can optionally specify the ASO characteristic value to include in the x-header.
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**default-action**

Synopsis	Enter the <b>default-action</b> context
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string icap default-action</a>
Tree	<a href="#">default-action</a>
Description	Commands in this context configure a default action for the URL filter. The default action takes effect when the URL filter cannot be used. This may happen when all TCP connections are busy or down.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**allow**

Synopsis	Allow all requests as the default action
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string icap default-action allow</a>
Tree	<a href="#">allow</a>
Description	When configured, this command allows all traffic when the URL filter cannot be used.
Notes	The following elements are part of a choice: <b>allow</b> , <b>block-all</b> , or <b>block-http-redirect</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**block-all**

Synopsis	Block all requests as the default action
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string icap default-action block-all</a>
Tree	<a href="#">block-all</a>
Description	When configured, this command blocks all traffic when the URL filter cannot be used.
Notes	The following elements are part of a choice: <b>allow</b> , <b>block-all</b> , or <b>block-http-redirect</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**block-http-redirect** *reference*

Synopsis	HTTP URL for redirection when URL filter cannot be used
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string icap default-action block-http-redirect reference</a>
Tree	<a href="#">block-http-redirect</a>
Description	This command blocks traffic and redirects the user to an information page, which can be different than the page the user is redirected to when the site they attempted to access was found in the URL filter; this page is configured using the <b>configure application-assurance group url-filter http-redirect</b> command.
Reference	<b>configure</b> <a href="#">application-assurance group number http-redirect string</a>
Notes	The following elements are part of a choice: <b>allow</b> , <b>block-all</b> , or <b>block-http-redirect</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**http-redirect** *reference*

Synopsis	HTTP redirect object used when ICAP blocks HTTP request
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string icap http-redirect reference</a>
Tree	<a href="#">http-redirect</a>
Reference	<b>configure</b> <a href="#">application-assurance group number http-redirect string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**server** [ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*) port number

Synopsis	Enter the <b>server</b> list instance
Context	<b>configure</b> application-assurance group number url-filter string icap server ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) port number
Tree	server
Description	Commands in this context configure the IP address and server port of the ICAP server. In the current release, the system supports IPv4 addresses only for the ICAP server.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	ICAP server IP address
Context	<b>configure</b> application-assurance group number url-filter string icap server ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) port number
Tree	server
Description	This command configures the ICAP server address. In the current release, the system supports IPv4 addresses only for the ICAP server.
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port number**

Synopsis	ICAP server port
Context	<b>configure</b> application-assurance group number url-filter string icap server ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) port number
Tree	server
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of this URL filter ICAP server
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string icap server (ipv4-address-no-zone   ipv6-address-no-zone) port number admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string icap server (ipv4-address-no-zone   ipv6-address-no-zone) port number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**vlan-id** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	VLAN ID of the ICAP server service port
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string icap vlan-id number</a>
Tree	<a href="#">vlan-id</a>
Range	1 to 4094
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**local-filtering**

Synopsis	Enter the <b>local-filtering</b> context
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">url-filter</a> <i>string</i> <a href="#">local-filtering</a>
Tree	<a href="#">local-filtering</a>
Description	Commands in this context configure a URL filter policy for local filtering to filter traffic based on a list of URLs located on a file stored in the router compact flash.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **allow-list** *reference*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local filtering URL list for allowed URLs
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">url-filter</a> <i>string</i> <a href="#">local-filtering</a> <a href="#">allow-list</a> <i>reference</i>
Tree	<a href="#">allow-list</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">url-list</a> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **deny-list** [[url-list-name](#)] *reference*

Synopsis	Enter the <b>deny-list</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">url-filter</a> <i>string</i> <a href="#">local-filtering</a> <a href="#">deny-list</a> <i>reference</i>
Tree	<a href="#">deny-list</a>
Description	Commands in this context configure a list of denied URLs to be added to the local URL filter policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[url-list-name]** *reference*

Synopsis	URL list name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">url-filter</a> <i>string</i> <a href="#">local-filtering</a> <a href="#">deny-list</a> <i>reference</i>

Tree	<a href="#">deny-list</a>
Description	This command adds a deny-list URL list to the local URL filter policy.
Reference	<b>configure</b> <a href="#">application-assurance group number url-list string</a>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## default-action

Synopsis	Enter the <b>default-action</b> context
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string local-filtering deny-list reference default-action</a>
Tree	<a href="#">default-action</a>
Description	Commands in this context configure a default action for the URL filter. The default action takes effect when the URL filter cannot be used. This may happen in the case of a local URL list when the URL list is disabled or the file is not loaded due to an error.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## allow

Synopsis	Allow all requests as the default action
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string local-filtering deny-list reference default-action allow</a>
Tree	<a href="#">allow</a>
Description	This command allows all traffic when the URL filter cannot be used.
Notes	The following elements are part of a choice: <b>allow</b> , <b>block-all</b> , or <b>block-http-redirect</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## block-all

Synopsis	Block all requests as the default action
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string local-filtering deny-list reference default-action block-all</a>
Tree	<a href="#">block-all</a>



Description	This command blocks all traffic when the URL filter cannot be used.
Notes	The following elements are part of a choice: <b>allow</b> , <b>block-all</b> , or <b>block-http-redirect</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **block-http-redirect** *reference*

Synopsis	HTTP URL for redirection when URL filter cannot be used
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string local-filtering deny-list reference default-action block-http-redirect reference</a>
Tree	<a href="#">block-http-redirect</a>
Description	This command blocks traffic and redirects the user to an information page, which can be different than the page the user is redirected to when the site they attempted to access was found in the URL filter; this page is configured using the <b>configure application-assurance group url-filter http-redirect</b> command.
Reference	<b>configure</b> <a href="#">application-assurance group number http-redirect string</a>
Notes	The following elements are part of a choice: <b>allow</b> , <b>block-all</b> , or <b>block-http-redirect</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **http-redirect** *reference*

Synopsis	HTTP redirect object applied to blocked HTTP requests
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string local-filtering deny-list reference http-redirect reference</a>
Tree	<a href="#">http-redirect</a>
Reference	<b>configure</b> <a href="#">application-assurance group number http-redirect string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **web-service**

Synopsis	Enter the <b>web-service</b> context
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string web-service</a>
Tree	<a href="#">web-service</a>

Description	Commands in this context configure the URL filter policy using web-service filtering. The operator must configure the web service, hostname, DNS server to use, the AA interface VLAN ID, and provision the category profiles.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **category-set** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Web service category ID
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">url-filter</a> <i>string</i> <a href="#">web-service</a> <b>category-set</b> <i>number</i>
Tree	<a href="#">category-set</a>
Range	1 to 65535
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **classification-overrides**

Synopsis	Enter the <b>classification-overrides</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">url-filter</a> <i>string</i> <a href="#">web-service</a> <b>classification-overrides</b>
Tree	<a href="#">classification-overrides</a>
Description	Commands in this context create a classification override and allow the operator to manually set the category of a hostname.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **entry** [[entry-id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">url-filter</a> <i>string</i> <a href="#">web-service</a> <a href="#">classification-overrides</a> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>

Description	Commands in this context configure a classification override, manually setting the category of a hostname.
Max. Instances	200
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[entry-id] number**

Synopsis	Classification override entry ID
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string web-service classification-overrides entry number</a>
Tree	<a href="#">entry</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**category-name string**

Synopsis	Web service category name
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string web-service classification-overrides entry number category-name string</a>
Tree	<a href="#">category-name</a>
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**expression string**

Synopsis	Hostname of the configured override category
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string web-service classification-overrides entry number expression string</a>
Tree	<a href="#">expression</a>
String Length	1 to 255
Notes	This element is mandatory.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **classifier** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Web service classifier
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">url-filter</a> <a href="#">string</a> <a href="#">web-service</a> <a href="#">classifier</a> <i>keyword</i>
Tree	<a href="#">classifier</a>
Options	web-service-1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **default-action**

Synopsis	Enter the <b>default-action</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">url-filter</a> <a href="#">string</a> <a href="#">web-service</a> <a href="#">default-action</a>
Tree	<a href="#">default-action</a>
Description	Commands in this context configure a default action for the URL filter. The default action takes effect when the URL filter cannot be used. This may happen when all TCP connections are busy or down.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **allow**

Synopsis	Allow all requests as the default action
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">url-filter</a> <a href="#">string</a> <a href="#">web-service</a> <a href="#">default-action</a> <a href="#">allow</a>
Tree	<a href="#">allow</a>
Description	This command allows all traffic when the web service is unavailable.
Notes	The following elements are part of a choice: <b>allow</b> , <b>block-all</b> , or <b>block-http-redirect</b> .

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## block-all

Synopsis	Block all requests as the default action
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string web-service default-action block-all</a>
Tree	<a href="#">block-all</a>
Description	This command blocks all traffic when the web service is unavailable.
Notes	The following elements are part of a choice: <b>allow</b> , <b>block-all</b> , or <b>block-http-redirect</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## block-http-redirect *reference*

Synopsis	HTTP URL for redirection when traffic is blocked
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string web-service default-action block-http-redirect reference</a>
Tree	<a href="#">block-http-redirect</a>
Description	This command specifies the HTTP URL to be redirected to when traffic is blocked. This URL can be different than the URL the user is redirected to when the site they attempted to access was found in the URL filter (which is configured in the <b>configure application-assurance group url-filter http-redirect</b> command).
Reference	<b>configure</b> <a href="#">application-assurance group number http-redirect string</a>
Notes	The following elements are part of a choice: <b>allow</b> , <b>block-all</b> , or <b>block-http-redirect</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## default-profile *reference*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Web service default profile
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">url-filter</a> <i>string</i> <a href="#">web-service</a> <a href="#">default-profile</a> <i>reference</i>
Tree	<a href="#">default-profile</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">url-filter</a> <i>string</i> <a href="#">web-service</a> <a href="#">profile</a> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dns-server** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Web service DNS server
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">url-filter</a> <i>string</i> <a href="#">web-service</a> <a href="#">dns-server</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">dns-server</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **fqdn** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Web service fully qualified domain name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">url-filter</a> <i>string</i> <a href="#">web-service</a> <a href="#">fqdn</a> <i>string</i>
Tree	<a href="#">fqdn</a>
String Length	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **http-redirect** *reference*

Synopsis	Web service HTTP redirect
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">url-filter</a> <i>string</i> <a href="#">web-service</a> <a href="#">http-redirect</a> <i>reference</i>

Tree	<a href="#">http-redirect</a>
Reference	<b>configure</b> <a href="#">application-assurance group number http-redirect string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **profile** [[profile-name](#)] *string*

Synopsis	Enter the <b>profile</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string web-service profile string</a>
Tree	<a href="#">profile</a>
Description	Commands in this context configure the category profiles of the web service.
Max. Instances	8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[profile-name]** *string*

Synopsis	Web service profile name
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string web-service profile string</a>
Tree	<a href="#">profile</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **block**

Synopsis	Enter the <b>block</b> context
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string web-service profile string block</a>
Tree	<a href="#">block</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**category** [*category-name*] *string*

Synopsis	Add a list entry for <b>category</b>
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string</a> <a href="#">web-service profile string</a> <a href="#">block category string</a>
Tree	<a href="#">category</a>
Description	Commands in this context configure the category that is blocked in the category profile.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[category-name]** *string*

Synopsis	Web service profile category name to be blocked
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string</a> <a href="#">web-service profile string</a> <a href="#">block category string</a>
Tree	<a href="#">category</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string</a> <a href="#">web-service profile string</a> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**vlan-id** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



Synopsis	Web-service VLAN ID
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">url-filter</a> <i>string</i> <a href="#">web-service</a> <a href="#">vlan-id</a> <i>number</i>
Tree	<a href="#">vlan-id</a>
Description	This command configures the VLAN ID on which the AA ISA emits the traffic mapping to a preconfigured AA interface.
Range	1 to 4094
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **url-list** [[url-list-name](#)] *string*

Synopsis	Enter the <b>url-list</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">url-list</a> <i>string</i>
Tree	<a href="#">url-list</a>
Description	Commands in this context configure a URL list object. The URL list points to a file containing a list of URLs located on the system Compact Flash and is then referenced in a URL filter object to filter and redirect subscribers when a URL from this file is accessed.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[url-list-name]** *string*

Synopsis	URL list name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">url-list</a> <i>string</i>
Tree	<a href="#">url-list</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the URL list
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">url-list</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number url-list string description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **file** *string*

Synopsis	File name of the URL list on compact flash
Context	<b>configure</b> <a href="#">application-assurance group number url-list string file string</a>
Tree	<a href="#">file</a>
String Length	1 to 180
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **host-expressions** *boolean*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow URL list to contain hostnames with wildcards
Context	<b>configure</b> <a href="#">application-assurance group number url-list string host-expressions boolean</a>
Tree	<a href="#">host-expressions</a>
Description	When configured to <b>true</b> , this command adds hostnames with wildcards to the URL list. When configured to <b>false</b> , the URL list containing hostnames with wildcards is removed from the configuration.

Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### key string

Synopsis	URL list decryption key
Context	<b>configure</b> <a href="#">application-assurance group number url-list string key string</a>
Tree	<a href="#">key</a>
Description	This command configures the secret key for decrypting the URL list.
String Length	1 to 115
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### size keyword



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Size limit of the URL list
Context	<b>configure</b> <a href="#">application-assurance group number url-list string size keyword</a>
Tree	<a href="#">size</a>
Options	standard, extended
Default	standard
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### http-enrich

Synopsis	Enter the <b>http-enrich</b> context
Context	<b>configure</b> <a href="#">application-assurance http-enrich</a>
Tree	<a href="#">http-enrich</a>
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the <b>application-assurance group</b> context.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**field** [[field-name](#)] *string*

Synopsis	Enter the <b>field</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-enrich field</a> <i>string</i>
Tree	<a href="#">field</a>
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the <b>application-assurance group</b> context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[field-name]** *string*

Synopsis	HTTP enrich field name (void, do not use)
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-enrich field</a> <i>string</i>
Tree	<a href="#">field</a>
Description	This command should not be used by the operators. Configuring it has no effect. Operators should use the commands in the <b>application-assurance group</b> context.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**comment** *string*

Synopsis	User information comment
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-enrich field</a> <i>string</i> <b>comment</b> <i>string</i>
Tree	<a href="#">comment</a>
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## http-error-redirect

Synopsis	Enter the <b>http-error-redirect</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-error-redirect</a>
Tree	<a href="#">http-error-redirect</a>
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the <b>application-assurance group</b> context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## error-code [[error-code-number](#)] *number*

Synopsis	Enter the <b>error-code</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-error-redirect</a> <a href="#">error-code</a> <i>number</i>
Tree	<a href="#">error-code</a>
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the <b>application-assurance group</b> context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## [\[error-code-number\]](#) *number*

Synopsis	Error code for HTTP error redirection
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-error-redirect</a> <a href="#">error-code</a> <i>number</i>
Tree	<a href="#">error-code</a>
Range	400 to 999
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## comment *string*

Synopsis	User information comment
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-error-redirect</a> <a href="#">error-code</a> <i>number</i> <a href="#">comment</a> <i>string</i>
Tree	<a href="#">comment</a>

String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **template** [[template-id](#)] *number*

Synopsis	Enter the <b>template</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-error-redirect</a> <a href="#">template</a> <i>number</i>
Tree	<a href="#">template</a>
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the <b>application-assurance group</b> context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[template-id]** *number*

Synopsis	HTTP error redirect template ID
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-error-redirect</a> <a href="#">template</a> <i>number</i>
Tree	<a href="#">template</a>
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **comment** *string*

Synopsis	User information comment
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-error-redirect</a> <a href="#">template</a> <i>number</i> <a href="#">comment</a> <i>string</i>
Tree	<a href="#">comment</a>
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## http-notification

Synopsis	Enter the <b>http-notification</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-notification</a>
Tree	<a href="#">http-notification</a>
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the <b>application-assurance group</b> context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## template [[template-id](#)] *number*

Synopsis	Enter the <b>template</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-notification</a> <a href="#">template</a> <i>number</i>
Tree	<a href="#">template</a>
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the <b>application-assurance group</b> context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## [[template-id](#)] *number*

Synopsis	HTTP notification template ID
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-notification</a> <a href="#">template</a> <i>number</i>
Tree	<a href="#">template</a>
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## comment *string*

Synopsis	User information comment
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-notification</a> <a href="#">template</a> <i>number</i> <a href="#">comment</a> <i>string</i>
Tree	<a href="#">comment</a>

String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## http-redirect

Synopsis	Enter the <b>http-redirect</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-redirect</a>
Tree	<a href="#">http-redirect</a>
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the <b>application-assurance group</b> context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## template [[template-id](#)] *number*

Synopsis	Enter the <b>template</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-redirect</a> <a href="#">template</a> <i>number</i>
Tree	<a href="#">template</a>
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the <b>application-assurance group</b> context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## [\[template-id\]](#) *number*

Synopsis	HTTP redirect template ID
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-redirect</a> <a href="#">template</a> <i>number</i>
Tree	<a href="#">template</a>
Description	This command specifies the HTTP policy redirect template ID. The available options are: <b>1</b> - JavaScript based redirect embedded in HTTP 200 OK response with a predefined number of arguments automatically appended to the redirect URL <b>2</b> - HTTP 302 redirect with a predefined number of arguments automatically appended to the redirect URL



	<b>3</b> - HTTP 302 redirect with no parameters appended to the URL (empty)
	<b>4</b> - Empty redirect format using JavaScript
	<b>5</b> - Redirect supporting macro substitution using HTTP 302
	<b>6</b> - Redirect supporting macro substitution using JavaScript
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**comment string**

Synopsis	User information comment
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-redirect template</a> <i>number</i> <b>comment</b> <i>string</i>
Tree	<a href="#">comment</a>
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**protocol [protocol-name] string**

Synopsis	Enter the <b>protocol</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">protocol</a> <i>string</i>
Tree	<a href="#">protocol</a>
Description	Commands in this context configure the administrative state of system-wide protocols. Some protocols are always enabled and cannot be disabled. These are "base protocols" that were present in R1 of the release. Some protocols are disabled by default and can be enabled. There are protocols that were introduced post R1, which are all enabled by default but may be disabled if not desired.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[protocol-name] string**

Synopsis	AA protocol name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">protocol</a> <i>string</i>
Tree	<a href="#">protocol</a>

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the protocol
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">protocol</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **radius-accounting-policy** [[rad-acct-plcy-name](#)] *string*

Synopsis	Enter the <b>radius-accounting-policy</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">radius-accounting-policy</a> <i>string</i>
Tree	<a href="#">radius-accounting-policy</a>
Description	Commands in this context configure an existing subscriber RADIUS-based accounting policy to use for AA. RADIUS accounting policies are configured in the <b>configure application-assurance radius-accounting-policy</b> context.
Max. Instances	8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[rad-acct-plcy-name]** *string*

Synopsis	AA RADIUS accounting policy name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">radius-accounting-policy</a> <i>string</i>
Tree	<a href="#">radius-accounting-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description

Context **configure** [application-assurance](#) [radius-accounting-policy](#) *string* [description](#) *string*

Tree [description](#)

String Length 1 to 80

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **interim-update-interval** *number*

Synopsis AA RADIUS accounting policy interim update interval

Context **configure** [application-assurance](#) [radius-accounting-policy](#) *string* [interim-update-interval](#) *number*

Tree [interim-update-interval](#)

Range 5 to 1080

Units minutes

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **radius-accounting-server**

Synopsis Enter the **radius-accounting-server** context

Context **configure** [application-assurance](#) [radius-accounting-policy](#) *string* [radius-accounting-server](#)

Tree [radius-accounting-server](#)

Description Commands in this context configure an existing subscriber RADIUS-based accounting policy to use for AA. RADIUS accounting policies are configured in the **configure application-assurance radius-accounting-policy** context.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**access-algorithm** *keyword*

Synopsis	Access algorithm for the list of RADIUS servers
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">radius-accounting-server</a> <b>access-algorithm</b> <i>keyword</i>
Tree	<a href="#">access-algorithm</a>
Options	direct, round-robin
Default	direct
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**retry** *number*

Synopsis	Number of retries for contacting the RADIUS server
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">radius-accounting-server</a> <b>retry</b> <i>number</i>
Tree	<a href="#">retry</a>
Range	1 to 10
Default	3
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**router-instance** *string*

Synopsis	Router or VPRN service name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">radius-accounting-server</a> <b>router-instance</b> <i>string</i>
Tree	<a href="#">router-instance</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**server** [[server-index](#)] *number*

Synopsis	Enter the <b>server</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">radius-accounting-server</a> <b>server</b> <i>number</i>
Tree	<a href="#">server</a>

Description	Commands in this context configure the RADIUS server and the RADIUS server IP address, index, and key values.  RADIUS servers are accessed in order from lowest to highest index for authentication requests until a response from a server is received. A higher indexed server is only queried if no response is received from a lower indexed server (which implies that the server is not available). If a response from a server is received, no other RADIUS servers are queried.
Max. Instances	5
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[server-index] number**

Synopsis	RADIUS accounting server index
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">radius-accounting-server</a> <a href="#">server</a> <i>number</i>
Tree	<a href="#">server</a>
Description	This command configures the index for the RADIUS server. The index determines the sequence in which the servers are queried for authentication requests. Servers are queried in order from lowest to highest index.
Range	1 to 5
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **address string**

Synopsis	RADIUS server IP address
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">radius-accounting-server</a> <a href="#">server</a> <i>number</i> <a href="#">address</a> <i>string</i>
Tree	<a href="#">address</a>
Description	This command configures the IP address of the RADIUS server. Two RADIUS servers cannot have the same IP address. An error message is generated if the server address is a duplicate.
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port number**

Synopsis	RADIUS server UDP port used for authentication
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">radius-accounting-server</a> <a href="#">server</a> <i>number</i> <b>port</b> <i>number</i>
Tree	<a href="#">port</a>
Range	1 to 65535
Default	1813
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**secret string**

Synopsis	RADIUS server secret key
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">radius-accounting-server</a> <a href="#">server</a> <i>number</i> <b>secret</b> <i>string</i>
Tree	<a href="#">secret</a>
Description	This command configures the secret key to access the RADIUS server. This secret key must match the password on the RADIUS server.
String Length	1 to 54
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**source-address string**

Synopsis	Source IP address of RADIUS packets
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">radius-accounting-server</a> <a href="#">source-address</a> <i>string</i>
Tree	<a href="#">source-address</a>
Description	<p>This command configures the source IP address of the RADIUS packet.</p> <p>The system IP address must be configured for the RADIUS client to work. The system IP address must only be configured if the source address is not specified. When this command reverts to its default, the source address is determined at the moment the request is sent.</p> <p>This address is also used in the <b>nas-ip-address</b> command in the <b>configure aaa radius isa-policy accounting include-attributes</b> and <b>configure aaa radius isa-policy</b></p>

**authentication include-attributes** contexts as it is set to the system IP address if no source address was given.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **timeout** *number*

Synopsis	RADIUS accounting server response timeout
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">radius-accounting-server</a> <i>timeout</i> <i>number</i>
Tree	<a href="#">timeout</a>
Range	1 to 90
Units	seconds
Default	5
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **significant-change** *number*

Synopsis	Change delta for RADIUS accounting record updates
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">significant-change</a> <i>number</i>
Tree	<a href="#">significant-change</a>
Description	This command configures the number of changes required to generate the record.
Range	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **usage-alert-thresholds**

Synopsis	Enter the <b>usage-alert-thresholds</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">usage-alert-thresholds</a>
Tree	<a href="#">usage-alert-thresholds</a>
Description	Commands in this context configure the AA performance monitoring alerts.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**bit-rate-high-wmark** (*number* | *keyword*)

Synopsis	High watermark for bit rate alarms
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">usage-alert-thresholds</a> <a href="#">bit-rate-high-wmark</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">bit-rate-high-wmark</a>
Description	This command configures the high watermark for bit rate alarms. The value must be larger than or equal to the low watermark value.
Range	1 to 100000
Units	megabps
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**bit-rate-low-wmark** *number*

Synopsis	Low watermark for bit rate alarms
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">usage-alert-thresholds</a> <a href="#">bit-rate-low-wmark</a> <i>number</i>
Tree	<a href="#">bit-rate-low-wmark</a>
Description	This command configures the utilization of the flow records on the ISA-AA group when the full alarm is cleared by the agent.
Range	0 to 99999
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**datapath-cpu-high-wmark** (*number* | *keyword*)

Synopsis	High watermark for datapath CPU alarms
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">usage-alert-thresholds</a> <a href="#">datapath-cpu-high-wmark</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">datapath-cpu-high-wmark</a>
Description	This command configures the system-wide high watermark threshold as a percentage of the per-ISA datapath core CPU utilization, where an alarm is raised by the agent. CPU usage is the average usage across all datapath cores.



Range	0 to 100
Units	percent
Options	max
Default	95
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **datapath-cpu-low-wmark** *number*

Synopsis	Low watermark for datapath CPU alarms
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">usage-alert-thresholds</a> <a href="#">datapath-cpu-low-wmark</a> <i>number</i>
Tree	<a href="#">datapath-cpu-low-wmark</a>
Description	This command configures the system-wide low watermark threshold as a percentage of the per-ISA datapath core CPU utilization, where an alarm is raised by the agent. CPU usage is the average usage across all datapath cores.
Range	0 to 100
Units	percent
Default	90
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **flow-setup-rate-high-wmark** (*number* | *keyword*)

Synopsis	High watermark for flow setup rate
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">usage-alert-thresholds</a> <a href="#">flow-setup-rate-high-wmark</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">flow-setup-rate-high-wmark</a>
Description	This command configures the system-wide high watermark threshold for per-ISA throughput in packets/second when an alarm is raised by the agent. The value must be larger than or equal to the <b>packet-rate-low-wmark</b> value.
Range	1 to 2000000
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**flow-setup-rate-low-wmark** *number*

Synopsis	Low watermark for flow setup rate
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">usage-alert-thresholds</a> <a href="#">flow-setup-rate-low-wmark</a> <i>number</i>
Tree	<a href="#">flow-setup-rate-low-wmark</a>
Description	This command configures the flow setup rate on the ISA-AA when a flow setup alarm is raised by the agent.
Range	0 to 1999999
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**flow-table-high-wmark** *number*

Synopsis	Flow table high watermark
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">usage-alert-thresholds</a> <a href="#">flow-table-high-wmark</a> <i>number</i>
Tree	<a href="#">flow-table-high-wmark</a>
Description	This command configures the system-wide high watermark threshold as a percentage of the flow table size for the per-ISA utilization of the flow records when a full alarm is raised by the agent.
Range	0 to 100
Units	percent
Default	95
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**flow-table-low-wmark** *number*

Synopsis	Flow table low watermark
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">usage-alert-thresholds</a> <a href="#">flow-table-low-wmark</a> <i>number</i>
Tree	<a href="#">flow-table-low-wmark</a>
Description	This command configures the system-wide low watermark threshold as a percentage of the flow table size for per-ISA.
Range	0 to 100
Units	percent

Default	90
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **packet-rate-high-wmark** (*number* | *keyword*)

Synopsis	Packet rate high watermark
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">usage-alert-thresholds</a> <a href="#">packet-rate-high-wmark</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">packet-rate-high-wmark</a>
Description	This command configures the packet rate on the ISA-AA when a packet rate alarm is raised by the agent.
Range	1 to 148809524
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **packet-rate-low-wmark** *number*

Synopsis	Packet rate low watermark
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">usage-alert-thresholds</a> <a href="#">packet-rate-low-wmark</a> <i>number</i>
Tree	<a href="#">packet-rate-low-wmark</a>
Description	This command configures the packet rate on the ISA-AA when a packet rate alarm is cleared by the agent.
Range	0 to 148809523
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### 3.3 aps commands

```
configure
- aps number
- advertise-interval number
- annexb
- wait-to-restore-time number
- working-circuit reference
- apply-groups reference
- apply-groups-exclude reference
- hold-time number
- neighbor (ipv4-address-no-zone | ipv6-address-no-zone)
- protect-circuit reference
- revert
- time number
- switching-mode keyword
- working-circuit reference
```

### 3.3.1 aps command descriptions

#### **aps** [group-id] *number*

Synopsis	Enter the <b>aps</b> list instance
Context	<b>configure</b> <b>aps</b> <i>number</i>
Tree	<b>aps</b>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

#### [group-id] *number*

Synopsis	APS group ID
Context	<b>configure</b> <b>aps</b> <i>number</i>
Tree	<b>aps</b>
Range	1 to 128
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

#### **advertise-interval** *number*

Synopsis	Time between subsequent advertisement messages
Context	<b>configure</b> <b>aps</b> <i>number</i> <b>advertise-interval</b> <i>number</i>
Tree	<b>advertise-interval</b>
Range	10 to 650
Units	deciseconds
Default	10
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

#### **annexb**

Synopsis	Enable the <b>annexb</b> context
Context	<b>configure</b> <b>aps</b> <i>number</i> <b>annexb</b>

Tree	<a href="#">annexb</a>
Notes	The following elements are part of a choice: <b>annexb</b> or ( <b>neighbor</b> , <b>protect-circuit</b> , <b>revert</b> , and <b>working-circuit</b> ).
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **wait-to-restore-time** *number*

Synopsis	Annex B mode operation wait to restore time
Context	<b>configure</b> <b>aps</b> <i>number</i> <a href="#">annexb</a> <b>wait-to-restore-time</b> <i>number</i>
Tree	<a href="#">wait-to-restore-time</a>
Description	This command specifies the delay after which the newly active section becomes the primary section after a switchover from the primary section to the secondary section occurs and the switch request clears normally.
Range	0 to 3600
Units	seconds
Default	300
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **working-circuit** *reference*

Synopsis	Working circuit port for the APS group
Context	<b>configure</b> <b>aps</b> <i>number</i> <a href="#">annexb</a> <b>working-circuit</b> <i>reference</i>
Tree	<a href="#">working-circuit</a>
Reference	<b>configure</b> <b>port</b> <i>string</i>
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **hold-time** *number*

Synopsis	Time to wait for an advertisement packet
Context	<b>configure</b> <b>aps</b> <i>number</i> <b>hold-time</b> <i>number</i>

Tree	<a href="#">hold-time</a>
Range	10 to 650
Units	deciseconds
Default	30
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **neighbor** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Neighbor IP address for multi-chassis APS
Context	<b>configure</b> <a href="#">aps</a> <i>number</i> <a href="#">neighbor</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">neighbor</a>
Notes	The following elements are part of a choice: <b>annexb</b> or ( <b>neighbor</b> , <b>protect-circuit</b> , <b>revert</b> , and <b>working-circuit</b> ).
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **protect-circuit** *reference*

Synopsis	Protection circuit port for the APS group
Context	<b>configure</b> <a href="#">aps</a> <i>number</i> <a href="#">protect-circuit</a> <i>reference</i>
Tree	<a href="#">protect-circuit</a>
Reference	<b>configure</b> <a href="#">port</a> <i>string</i>
Notes	The following elements are part of a choice: <b>annexb</b> or ( <b>neighbor</b> , <b>protect-circuit</b> , <b>revert</b> , and <b>working-circuit</b> ).
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **revert**

Synopsis	Enable the <b>revert</b> context
Context	<b>configure</b> <a href="#">aps</a> <i>number</i> <a href="#">revert</a>
Tree	<a href="#">revert</a>
Notes	The following elements are part of a choice: <b>annexb</b> or ( <b>neighbor</b> , <b>protect-circuit</b> , <b>revert</b> , and <b>working-circuit</b> ).

Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **time** *number*

Synopsis	Wait time before switching back to the working circuit
Context	<b>configure</b> <a href="#">aps</a> <i>number</i> <a href="#">revert</a> <i>time</i> <i>number</i>
Tree	<a href="#">time</a>
Range	0   60 to 3600
Units	seconds
Default	300
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **switching-mode** *keyword*

Synopsis	Switching mode for the APS port
Context	<b>configure</b> <a href="#">aps</a> <i>number</i> <a href="#">switching-mode</a> <i>keyword</i>
Tree	<a href="#">switching-mode</a>
Options	uni-directional, bi-directional
Default	bi-directional
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **working-circuit** *reference*

Synopsis	Working circuit port for the APS group
Context	<b>configure</b> <a href="#">aps</a> <i>number</i> <a href="#">working-circuit</a> <i>reference</i>
Tree	<a href="#">working-circuit</a>
Reference	<b>configure</b> <a href="#">port</a> <i>string</i>
Notes	The following elements are part of a choice: <b>annexb</b> or ( <b>neighbor</b> , <b>protect-circuit</b> , <b>revert</b> , and <b>working-circuit</b> ).
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e



## 3.4 bfd commands

```
configure
- bfd
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd-template string
    - apply-groups reference
    - apply-groups-exclude reference
    - echo-receive number
    - multiplier number
    - receive-interval number
    - transmit-interval number
    - type keyword
  - seamless-bfd
    - reflector string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - discriminator number
      - local-state keyword
```

### 3.4.1 bfd command descriptions

#### **bfd**

Synopsis	Enter the <b>bfd</b> context
Context	<b>configure bfd</b>
Tree	<a href="#">bfd</a>
Introduced	16.0.R1
Platforms	All

#### **bfd-template** [[name](#)] *string*

Synopsis	Enter the <b>bfd-template</b> list instance
Context	<b>configure bfd bfd-template</b> <i>string</i>
Tree	<a href="#">bfd-template</a>
Introduced	16.0.R1
Platforms	All

#### **[name]** *string*

Synopsis	BFD template name
Context	<b>configure bfd bfd-template</b> <i>string</i>
Tree	<a href="#">bfd-template</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

#### **echo-receive** *number*

Synopsis	Echo receive interval
Context	<b>configure bfd bfd-template</b> <i>string</i> <b>echo-receive</b> <i>number</i>
Tree	<a href="#">echo-receive</a>
Range	100 to 100000
Units	milliseconds

---

Default	100
Introduced	16.0.R1
Platforms	All

### **multiplier** *number*

Synopsis	Detection multiplier
Context	<b>configure</b> <b>bfd bfd-template</b> <i>string multiplier number</i>
Tree	<a href="#">multiplier</a>
Range	1 to 20
Default	3
Introduced	16.0.R1
Platforms	All

### **receive-interval** *number*

Synopsis	Receive interval
Context	<b>configure</b> <b>bfd bfd-template</b> <i>string receive-interval number</i>
Tree	<a href="#">receive-interval</a>
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

### **transmit-interval** *number*

Synopsis	Transmit interval
Context	<b>configure</b> <b>bfd bfd-template</b> <i>string transmit-interval number</i>
Tree	<a href="#">transmit-interval</a>
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

**type keyword**

Synopsis	Local termination point for the BFD session
Context	<b>configure bfd bfd-template</b> <i>string type keyword</i>
Tree	<a href="#">type</a>
Options	cpm-np, fp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**seamless-bfd**

Synopsis	Enter the <b>seamless-bfd</b> context
Context	<b>configure bfd seamless-bfd</b>
Tree	<a href="#">seamless-bfd</a>
Introduced	19.7.R1
Platforms	All

**reflector [name] string**

Synopsis	Enter the <b>reflector</b> list instance
Context	<b>configure bfd seamless-bfd reflector</b> <i>string</i>
Tree	<a href="#">reflector</a>
Max. Instances	1
Introduced	19.7.R1
Platforms	All

**[name] string**

Synopsis	S-BFD reflector name
Context	<b>configure bfd seamless-bfd reflector</b> <i>string</i>
Tree	<a href="#">reflector</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the seamless BFD reflector  
 Context **configure** [bfd seamless-bfd reflector](#) *string* **admin-state** *keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 19.7.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [bfd seamless-bfd reflector](#) *string* **description** *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 19.7.R1  
 Platforms All

### **discriminator** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Discriminator of the seamless BFD reflector  
 Context **configure** [bfd seamless-bfd reflector](#) *string* **discriminator** *number*  
 Tree [discriminator](#)  
 Range 524288 to 526335  
 Introduced 19.7.R1  
 Platforms All

**local-state** *keyword*

Synopsis	Local state of the seamless BFD reflector
Context	<b>configure</b> <b>bfd seamless-bfd reflector</b> <i>string</i> <b>local-state</b> <i>keyword</i>
Tree	<b>local-state</b>
Options	admin-down, up
Default	up
Introduced	19.7.R1
Platforms	All

## 3.5 bmp commands

```

configure
-  bmp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - collector
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - connection
      - ipv4
        - address string
        - port number
      - ipv6
        - address string
        - port number
  - station string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - connection
      - connect-retry number
      - local-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - router-instance string
      - station-address
        - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - port number
      - tcp-keepalive
        - admin-state keyword
        - keep-count number
        - keep-idle number
        - keep-interval number
    - description string
  - family
    - evpn boolean
    - ipv4 boolean
    - ipv6 boolean
    - l2-vpn boolean
    - label-ipv4 boolean
    - label-ipv6 boolean
    - mcast-ipv4 boolean
    - mcast-ipv6 boolean
    - mcast-vpn-ipv4 boolean
    - mcast-vpn-ipv6 boolean
    - sr-policy-ipv4 boolean
    - sr-policy-ipv6 boolean
    - vpn-ipv4 boolean
    - vpn-ipv6 boolean
  - initiation-message string
  - report-local-routes boolean
  - stats-report-interval number

```

### 3.5.1 bmp command descriptions

#### **bmp**

Synopsis	Enter the <b>bmp</b> context
Context	<b>configure bmp</b>
Tree	<a href="#">bmp</a>
Introduced	16.0.R1
Platforms	All

#### **admin-state** *keyword*

Synopsis	Administrative state of the BMP operation
Context	<b>configure bmp admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

#### **collector**

Synopsis	Enter the <b>collector</b> context
Context	<b>configure bmp collector</b>
Tree	<a href="#">collector</a>
Introduced	19.10.R1
Platforms	VSR-NRC

#### **admin-state** *keyword*

Synopsis	Administrative state of the BMP collector
Context	<b>configure bmp collector admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable



Introduced 19.10.R1  
 Platforms VSR-NRC

## connection



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **connection** context  
 Context **configure** [bmp collector connection](#)  
 Tree [connection](#)  
 Introduced 19.10.R1  
 Platforms VSR-NRC

## ipv4



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **ipv4** context  
 Context **configure** [bmp collector connection ipv4](#)  
 Tree [ipv4](#)  
 Introduced 19.10.R1  
 Platforms VSR-NRC

## address *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis IPv4 address  
 Context **configure** [bmp collector connection ipv4 address](#) *string*  
 Tree [address](#)  
 Introduced 19.10.R1

Platforms VSR-NRC

### port number



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis IPv4 TCP destination port number  
 Context **configure** bmp collector connection ipv4 port number  
 Tree port  
 Range 1 to 65535  
 Default 4210  
 Introduced 19.10.R1  
 Platforms VSR-NRC

### ipv6



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **ipv6** context  
 Context **configure** bmp collector connection ipv6  
 Tree ipv6  
 Introduced 19.10.R1  
 Platforms VSR-NRC

### address string



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis IPv6 address  
 Context **configure** bmp collector connection ipv6 address string  
 Tree address  
 Introduced 19.10.R1

Platforms VSR-NRC

### **port number**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis IPv6 TCP destination port  
 Context **configure bmp collector connection ipv6 port number**  
 Tree [port](#)  
 Range 1 to 65535  
 Default 4210  
 Introduced 19.10.R1  
 Platforms VSR-NRC

### **station [name] string**

Synopsis Enter the **station** list instance  
 Context **configure bmp station string**  
 Tree [station](#)  
 Max. Instances 8  
 Introduced 16.0.R1  
 Platforms All

### **[name] string**

Synopsis BMP monitoring station name  
 Context **configure bmp station string**  
 Tree [station](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

**admin-state** *keyword*

Synopsis	Administrative state of the BMP monitoring station
Context	<b>configure</b> <b>bmp station</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**connection**

Synopsis	Enter the <b>connection</b> context
Context	<b>configure</b> <b>bmp station</b> <i>string</i> <b>connection</b>
Tree	<b>connection</b>
Introduced	16.0.R1
Platforms	All

**connect-retry** *number*

Synopsis	Maximum time between connection attempts
Context	<b>configure</b> <b>bmp station</b> <i>string</i> <b>connection</b> <b>connect-retry</b> <i>number</i>
Tree	<b>connect-retry</b>
Range	1 to 65535
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	All

**local-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Local IP address to communicate with monitoring station
Context	<b>configure</b> <b>bmp station</b> <i>string</i> <b>connection</b> <b>local-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>local-address</b>

Introduced	16.0.R1
Platforms	All

### **router-instance** *string*

Synopsis	Router instance used to reach the BMP station
Context	<b>configure</b> <a href="#">bmp station string connection router-instance string</a>
Tree	<a href="#">router-instance</a>
Default	Base
Introduced	16.0.R4
Platforms	All

### **station-address**

Synopsis	Enter the <b>station-address</b> context
Context	<b>configure</b> <a href="#">bmp station string connection station-address</a>
Tree	<a href="#">station-address</a>
Introduced	16.0.R1
Platforms	All

### **ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the remote BMP monitoring station
Context	<b>configure</b> <a href="#">bmp station string connection station-address ip-address (ipv4-address-no-zone   ipv6-address-no-zone)</a>
Tree	<a href="#">ip-address</a>
Introduced	16.0.R1
Platforms	All

### **port** *number*

Synopsis	BMP monitoring station port
Context	<b>configure</b> <a href="#">bmp station string connection station-address port number</a>
Tree	<a href="#">port</a>
Range	1 to 65535
Introduced	16.0.R1

Platforms All

### **tcp-keepalive**

Synopsis Enter the **tcp-keepalive** context  
Context **configure** **bmp station** *string* **connection tcp-keepalive**  
Tree **tcp-keepalive**  
Introduced 16.0.R1  
Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the TCP keepalive  
Context **configure** **bmp station** *string* **connection tcp-keepalive admin-state** *keyword*  
Tree **admin-state**  
Options enable, disable  
Default disable  
Introduced 16.0.R1  
Platforms All

### **keep-count** *number*

Synopsis Keepalive threshold before connection is declared down  
Context **configure** **bmp station** *string* **connection tcp-keepalive keep-count** *number*  
Tree **keep-count**  
Range 3 to 100  
Default 4  
Introduced 16.0.R1  
Platforms All

### **keep-idle** *number*

Synopsis Time until the first TCP keepalive probe is sent  
Context **configure** **bmp station** *string* **connection tcp-keepalive keep-idle** *number*  
Tree **keep-idle**

Range	1 to 100000
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	All

### **keep-interval** *number*

Synopsis	Time between two TCP keepalive probes
Context	<b>configure</b> <b>bmp station</b> <i>string</i> <b>connection tcp-keepalive keep-interval</b> <i>number</i>
Tree	<b>keep-interval</b>
Range	1 to 100000
Units	seconds
Default	15
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>bmp station</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **family**

Synopsis	Enter the <b>family</b> context
Context	<b>configure</b> <b>bmp station</b> <i>string</i> <b>family</b>
Tree	<b>family</b>
Description	Commands in this context specify the address families that are reported to a BMP monitoring station.
Introduced	16.0.R1
Platforms	All

### **evpn boolean**

Synopsis	Support EVPN address family
Context	<b>configure bmp station string family evpn boolean</b>
Tree	<a href="#">evpn</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **ipv4 boolean**

Synopsis	Support IPv4 address family
Context	<b>configure bmp station string family ipv4 boolean</b>
Tree	<a href="#">ipv4</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **ipv6 boolean**

Synopsis	Support IPv6 address family
Context	<b>configure bmp station string family ipv6 boolean</b>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **l2-vpn boolean**

Synopsis	Support L2 VPN address family
Context	<b>configure bmp station string family l2-vpn boolean</b>
Tree	<a href="#">l2-vpn</a>
Default	false
Introduced	16.0.R4
Platforms	All



**label-ipv4** *boolean*

Synopsis	Support labeled IPv4 address family
Context	<b>configure</b> <b>bmp station</b> <i>string</i> <b>family label-ipv4</b> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**label-ipv6** *boolean*

Synopsis	Support labeled IPv6 address family
Context	<b>configure</b> <b>bmp station</b> <i>string</i> <b>family label-ipv6</b> <i>boolean</i>
Tree	<a href="#">label-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mcast-ipv4** *boolean*

Synopsis	Support IPv4 multicast address family
Context	<b>configure</b> <b>bmp station</b> <i>string</i> <b>family mcast-ipv4</b> <i>boolean</i>
Tree	<a href="#">mcast-ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	All

**mcast-ipv6** *boolean*

Synopsis	Support IPv6 multicast address family
Context	<b>configure</b> <b>bmp station</b> <i>string</i> <b>family mcast-ipv6</b> <i>boolean</i>
Tree	<a href="#">mcast-ipv6</a>
Default	false
Introduced	16.0.R4
Platforms	All

**mcast-vpn-ipv4** *boolean*

Synopsis	Support IPv4 VPN multicast address family
Context	<b>configure</b> <a href="#">bmp station</a> <i>string</i> <a href="#">family mcast-vpn-ipv4</a> <i>boolean</i>
Tree	<a href="#">mcast-vpn-ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	All

**mcast-vpn-ipv6** *boolean*

Synopsis	Support IPv6 VPN multicast address family
Context	<b>configure</b> <a href="#">bmp station</a> <i>string</i> <a href="#">family mcast-vpn-ipv6</a> <i>boolean</i>
Tree	<a href="#">mcast-vpn-ipv6</a>
Default	false
Introduced	16.0.R4
Platforms	All

**sr-policy-ipv4** *boolean*

Synopsis	Support SR policy IPv4 address family
Context	<b>configure</b> <a href="#">bmp station</a> <i>string</i> <a href="#">family sr-policy-ipv4</a> <i>boolean</i>
Tree	<a href="#">sr-policy-ipv4</a>
Default	false
Introduced	22.5.R1
Platforms	All

**sr-policy-ipv6** *boolean*

Synopsis	Support SR policy IPv6 address family
Context	<b>configure</b> <a href="#">bmp station</a> <i>string</i> <a href="#">family sr-policy-ipv6</a> <i>boolean</i>
Tree	<a href="#">sr-policy-ipv6</a>
Default	false
Introduced	22.5.R1
Platforms	All

**vpn-ipv4** *boolean*

Synopsis	Support VPN IPv4 address family
Context	<b>configure</b> <a href="#">bmp station</a> <i>string</i> <a href="#">family vpn-ipv4</a> <i>boolean</i>
Tree	<a href="#">vpn-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**vpn-ipv6** *boolean*

Synopsis	Support VPN IPv6 address family
Context	<b>configure</b> <a href="#">bmp station</a> <i>string</i> <a href="#">family vpn-ipv6</a> <i>boolean</i>
Tree	<a href="#">vpn-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**initiation-message** *string*

Synopsis	Free form initiation message sent to monitoring station
Context	<b>configure</b> <a href="#">bmp station</a> <i>string</i> <a href="#">initiation-message</a> <i>string</i>
Tree	<a href="#">initiation-message</a>
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

**report-local-routes** *boolean*

Synopsis	Allow local route reporting to BMP monitoring station
Context	<b>configure</b> <a href="#">bmp station</a> <i>string</i> <a href="#">report-local-routes</a> <i>boolean</i>
Tree	<a href="#">report-local-routes</a>
Default	false
Introduced	16.0.R1
Platforms	All

**stats-report-interval** *number*

Synopsis	Frequency of reports sent to the BMP monitoring station
Context	<b>configure</b> <b>bmp station</b> <i>string</i> <b>stats-report-interval</b> <i>number</i>
Tree	<b>stats-report-interval</b>
Range	15 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

## 3.6 bof commands

```

bof
- auto-boot
- dhcp
  - client-id (keyword | hex-string | string)
  - inband
    - disabled boolean
    - null-encapsulation boolean
    - vlan number
    - vlan-discovery boolean
  - include-user-class boolean
  - ipv4 boolean
  - ipv6 boolean
  - management-port boolean
- ospf
  - mtu number
  - neid string
  - neip-ipv4 string
  - neip-ipv6 string
  - vendor-id number
- port-mtu number
- timeout number
- auto-configure
- ipv4
  - dhcp
    - client-id (hex-string | string)
    - include-user-class boolean
    - timeout number
  - ipv6
    - dhcp
      - client-id (hex-string | string)
      - client-type keyword
      - include-user-class boolean
      - timeout number
- configuration
  - encrypt boolean
  - encryption-key string
  - password string
  - primary-location string
  - secondary-location string
  - tertiary-location string
- console
  - speed number
  - wait-time number
- dns
  - domain string
  - primary-server (ipv4-address-no-zone | ipv6-address-no-zone)
  - secondary-server (ipv4-address-no-zone | ipv6-address-no-zone)
  - tertiary-server (ipv4-address-no-zone | ipv6-address-no-zone)
- image
  - primary-location string
  - secondary-location string
  - tertiary-location string
- li
  - local-save boolean
  - separate boolean
- license
  - primary-location string
- port string
  - autonegotiate keyword

```

## bof port duplex

- **duplex** *keyword*
- **speed** *number*
- **router** *string*
- **interface** *string*
  - **cpm** *keyword*
  - **ipv4**
    - **ip-address** *string*
    - **prefix-length** *number*
  - **ipv6**
    - **ipv6-address** *string*
    - **prefix-length** *number*
  - **ip-mtu** *number*
- **static-routes**
  - **route** (*ipv4-prefix | ipv6-prefix*)
    - **next-hop** (*ipv4-address-no-zone | ipv6-address-no-zone*)
- **system**
  - **base-mac-address** *string*
  - **fips-140-2** *boolean*
  - **persistent-indices** *boolean*
  - **profile** *keyword*

### 3.6.1 bof command descriptions

#### bof

Synopsis	Configure system boot options
Context	<a href="#">bof</a>
Tree	<a href="#">bof</a>
Description	<p>This command creates or edits the boot option file (BOF) for the specified local storage device.</p> <p>A BOF file specifies where the system searches for runtime images, configuration files, and other operational parameters during system initialization.</p> <p>BOF parameters can be modified. Changes can be saved to a specified compact flash. The BOF must be located in the root directory of either an internal or external compact flash local to the system and have the mandatory filename of bof.cfg.</p> <p>When modifications are made to in-memory parameters that are currently in use or operating, the changes are effective immediately. For example, if the IP address of the management port is changed, the change takes place immediately.</p> <p>Only one entry of the BOF configuration command statement can be saved once the statement has been found to be syntactically correct.</p> <p>When opening an existing BOF that is not the BOF used in the most recent boot, a message is issued notifying the user that the parameters will not affect the operation of the node.</p> <p>No default boot option file exists. The router boots with the factory default boot sequence and options.</p>
Introduced	20.10.R1
Platforms	All

#### auto-boot



**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Enable the <b>auto-boot</b> context
Context	<a href="#">bof auto-boot</a>
Tree	<a href="#">auto-boot</a>
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

## dhcp



**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Enable the <b>dhcp</b> context
Context	<a href="#">bof auto-boot dhcp</a>
Tree	<a href="#">dhcp</a>
Notes	The following elements are part of a choice: <b>dhcp</b> or <b>ospf</b> .
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

## client-id (*keyword | hex-string | string*)



**Note:**

The new value of this element takes effect when the router boots.

Synopsis	DHCP client ID
Context	<a href="#">bof auto-boot dhcp client-id</a> ( <i>keyword   hex-string   string</i> )
Tree	<a href="#">client-id</a>
String Length	3 to 118
Options	use-chassis-mac-address
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

## inband



**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Enable the <b>inband</b> context
Context	<a href="#">bof auto-boot dhcp inband</a>
Tree	<a href="#">inband</a>
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s



**disabled** *boolean***Note:**

The new value of this element takes effect when the router boots.

Synopsis	Do not use in-band ports
Context	<a href="#">bof auto-boot dhcp inband disabled</a> <i>boolean</i>
Tree	<a href="#">disabled</a>
Default	true
Notes	The following elements are part of a choice: <b>disabled</b> , <b>null-encapsulation</b> , <b>vlan</b> , or <b>vlan-discovery</b> .
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

**null-encapsulation** *boolean***Note:**

The new value of this element takes effect when the router boots.

Synopsis	Use null encapsulation
Context	<a href="#">bof auto-boot dhcp inband null-encapsulation</a> <i>boolean</i>
Tree	<a href="#">null-encapsulation</a>
Default	true
Notes	The following elements are part of a choice: <b>disabled</b> , <b>null-encapsulation</b> , <b>vlan</b> , or <b>vlan-discovery</b> .
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

**vlan** *number***Note:**

The new value of this element takes effect when the router boots.

Synopsis	In-band VLAN ID
Context	<a href="#">bof auto-boot dhcp inband vlan</a> <i>number</i>
Tree	<a href="#">vlan</a>
Range	1 to 4094

Notes	The following elements are part of a choice: <b>disabled</b> , <b>null-encapsulation</b> , <b>vlan</b> , or <b>vlan-discovery</b> .
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

### **vlan-discovery** *boolean*



**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Use VLAN discovery
Context	<a href="#">bof auto-boot dhcp inband vlan-discovery</a> <i>boolean</i>
Tree	<a href="#">vlan-discovery</a>
Default	true
Notes	The following elements are part of a choice: <b>disabled</b> , <b>null-encapsulation</b> , <b>vlan</b> , or <b>vlan-discovery</b> .
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

### **include-user-class** *boolean*



**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Include user class in auto boot provisioning
Context	<a href="#">bof auto-boot dhcp include-user-class</a> <i>boolean</i>
Tree	<a href="#">include-user-class</a>
Default	true
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

### **ipv4** *boolean*



**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Use auto boot with IPv4
----------	-------------------------

Context	<a href="#">bof auto-boot dhcp ipv4</a> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	true
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

## ipv6 *boolean*



### Note:

The new value of this element takes effect when the router boots.

Synopsis	Use auto boot with IPv6
Context	<a href="#">bof auto-boot dhcp ipv6</a> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	true
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

## management-port *boolean*



### Note:

The new value of this element takes effect when the router boots.

Synopsis	Use auto boot on the management port
Context	<a href="#">bof auto-boot dhcp management-port</a> <i>boolean</i>
Tree	<a href="#">management-port</a>
Default	true
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

## ospf



### Note:

The new value of this element takes effect when the router boots.

Synopsis	Enable the <b>ospf</b> context
Context	<a href="#">bof auto-boot ospf</a>

Tree	<a href="#">ospf</a>
Notes	The following elements are part of a choice: <b>dhcp</b> or <b>ospf</b> .
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

### **mtu number**



**Note:**

The new value of this element takes effect when the router boots.

Synopsis	OSPF MTU
Context	<a href="#">bof auto-boot ospf mtu number</a>
Tree	<a href="#">mtu</a>
Range	512 to 9786
Units	bytes
Default	1500
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

### **neid string**



**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Network element ID
Context	<a href="#">bof auto-boot ospf neid string</a>
Tree	<a href="#">neid</a>
String Length	3
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

### **neip-ipv4 string**



**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Network element IPv4 address
Context	<a href="#">bof auto-boot ospf neip-ipv4 string</a>
Tree	<a href="#">neip-ipv4</a>
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

### **neip-ipv6 string**



**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Network element IPv6 address
Context	<a href="#">bof auto-boot ospf neip-ipv6 string</a>
Tree	<a href="#">neip-ipv6</a>
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

### **vendor-id number**



**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Vendor ID
Context	<a href="#">bof auto-boot ospf vendor-id number</a>
Tree	<a href="#">vendor-id</a>
Range	1 to 254
Default	140
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

### **port-mtu number**



**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Port MTU setting
Context	<a href="#">bof auto-boot port-mtu number</a>

Tree	<a href="#">port-mtu</a>
Range	512 to 9800
Units	bytes
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

## timeout *number*



### Note:

The new value of this element takes effect when the router boots.

Synopsis	ZTP timeout
Context	<a href="#">bof auto-boot timeout <i>number</i></a>
Tree	<a href="#">timeout</a>
Description	This command configures the Zero Touch Provisioning timeout, which is the total time allowed for the ZTP process to execute successfully. If the ZTP process is unsuccessful (in the case of auto-boot using OSPF, if no OSPF adjacency is found), the node is first rebooted, then the ZTP process is retried.
Range	30 to 1440
Units	minutes
Introduced	22.7.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

## auto-configure

Synopsis	Enter the <b>auto-configure</b> context
Context	<a href="#">bof auto-configure</a>
Tree	<a href="#">auto-configure</a>
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<a href="#">bof auto-configure ipv4</a>
Tree	<a href="#">ipv4</a>

Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

## dhcp



### Note:

The new value of this element takes effect when the router boots.

Synopsis	Enable the <b>dhcp</b> context
Context	<a href="#">bof auto-configure ipv4 dhcp</a>
Tree	<a href="#">dhcp</a>
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

## client-id (*hex-string* | *string*)



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.



### Note:

The new value of this element takes effect when the router boots.

Synopsis	DHCP client ID
Context	<a href="#">bof auto-configure ipv4 dhcp client-id</a> ( <i>hex-string</i>   <i>string</i> )
Tree	<a href="#">client-id</a>
String Length	3 to 256
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

## include-user-class *boolean*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Include user class information
Context	<a href="#">bof auto-configure ipv4 dhcp include-user-class</a> <i>boolean</i>
Tree	<a href="#">include-user-class</a>
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

**timeout** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

**Note:**

The new value of this element takes effect when the router boots.

Synopsis	DHCP timeout
Context	<a href="#">bof auto-configure ipv4 dhcp timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	1 to 65535
Default	30
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

**ipv6**

Synopsis	Enter the <b>ipv6</b> context
Context	<a href="#">bof auto-configure ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s



## dhcp



**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Enable the <b>dhcp</b> context
Context	<a href="#">bof auto-configure ipv6 dhcp</a>
Tree	<a href="#">dhcp</a>
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

### client-id (*hex-string* | *string*)



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.



**Note:**

The new value of this element takes effect when the router boots.

Synopsis	DHCP client ID
Context	<a href="#">bof auto-configure ipv6 dhcp client-id</a> ( <i>hex-string</i>   <i>string</i> )
Tree	<a href="#">client-id</a>
String Length	3 to 250
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

### client-type *keyword*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.



**Note:**

The new value of this element takes effect when the router boots.

Synopsis	DHCP client type
Context	<a href="#">bof auto-configure ipv6 dhcp client-type</a> <i>keyword</i>
Tree	<a href="#">client-type</a>

Options	duid-enterprise, duid-link-local
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

### **include-user-class** *boolean*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.



**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Include user class information
Context	<a href="#">bof auto-configure ipv6 dhcp include-user-class</a> <i>boolean</i>
Tree	<a href="#">include-user-class</a>
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

### **timeout** *number*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.



**Note:**

The new value of this element takes effect when the router boots.

Synopsis	DHCP timeout
Context	<a href="#">bof auto-configure ipv6 dhcp timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	1 to 65535
Default	30
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

## configuration

Synopsis	Enter the <b>configuration</b> context
Context	<a href="#">bof configuration</a>
Tree	<a href="#">configuration</a>
Introduced	20.10.R1
Platforms	All

## encrypt *boolean*



### Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Enable encryption of BOF configuration files
Context	<a href="#">bof configuration encrypt <i>boolean</i></a>
Tree	<a href="#">encrypt</a>
Description	<p>When configured to <b>true</b>, this command enables encryption of the BOF using AES256 and SHA256.</p> <p>When the BOF is encrypted on the compact flash, it is still reachable using the BOF interactive menu during node startup, and fields can be modified using the BOF interactive menu.</p>
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## encryption-key *string*



### Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Secret key for encryption of configuration files
Context	<a href="#">bof configuration encryption-key <i>string</i></a>
Tree	<a href="#">encryption-key</a>
Description	<p>This command creates a key to be used by AES256 and SHA256 for configuration file encryption and hashing. This key is used for all configuration files (primary, secondary, and tertiary).</p> <p>After creating or deleting a key, save the configuration file with the current encryption key state.</p>

String Length 1 to 71  
 Introduced 21.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### password *string*



**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis Password for boot-time modification of boot options  
 Context [bof configuration password \*string\*](#)  
 Tree [password](#)  
 String Length 1 to 71  
 Introduced 21.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### primary-location *string*



**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis Primary configuration location  
 Context [bof configuration primary-location \*string\*](#)  
 Tree [primary-location](#)  
 String Length 1 to 180  
 Introduced 20.10.R1  
 Platforms All

### secondary-location *string*



**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis Secondary configuration location  
 Context [bof configuration secondary-location \*string\*](#)  
 Tree [secondary-location](#)  
 String Length 1 to 180

Introduced	20.10.R1
Platforms	All

### **tertiary-location** *string*



**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Tertiary configuration location
Context	<a href="#">bof configuration tertiary-location</a> <i>string</i>
Tree	<a href="#">tertiary-location</a>
String Length	1 to 180
Introduced	20.10.R1
Platforms	All

### **console**

Synopsis	Enter the <b>console</b> context
Context	<a href="#">bof console</a>
Tree	<a href="#">console</a>
Introduced	20.10.R1
Platforms	All

### **speed** *number*



**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Console port speed
Context	<a href="#">bof console speed</a> <i>number</i>
Tree	<a href="#">speed</a>
Range	9600   19200   38400   57600   115200
Units	bps
Default	19200
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s, 7950 XRS, VSR

### **wait-time** *number*



**Note:**

The new value of this element takes effect when the router boots.

Synopsis Wait time for interrupt to change boot parameters  
 Context [bof console wait-time number](#)  
 Tree [wait-time](#)  
 Range 1 to 10  
 Units seconds  
 Default 3  
 Introduced 20.10.R1  
 Platforms All

### **dns**

Synopsis Enter the **dns** context  
 Context [bof dns](#)  
 Tree [dns](#)  
 Introduced 20.10.R1  
 Platforms All

### **domain** *string*



**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis System DNS domain name for DNS address resolution  
 Context [bof dns domain string](#)  
 Tree [domain](#)  
 String Length 1 to 178  
 Introduced 20.10.R1  
 Platforms All

## primary-server (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Primary DNS server
Context	<a href="#">bof dns primary-server</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">primary-server</a>
Introduced	20.10.R1
Platforms	All

## secondary-server (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Secondary DNS server
Context	<a href="#">bof dns secondary-server</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">secondary-server</a>
Introduced	20.10.R1
Platforms	All

## tertiary-server (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Tertiary DNS server
Context	<a href="#">bof dns tertiary-server</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">tertiary-server</a>
Introduced	20.10.R1
Platforms	All

## image

Synopsis	Enter the <b>image</b> context
Context	<a href="#">bof image</a>

Tree	<a href="#">image</a>
Introduced	20.10.R1
Platforms	All

### **primary-location** *string*

**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Primary image location
Context	<a href="#">bof image primary-location</a> <i>string</i>
Tree	<a href="#">primary-location</a>
String Length	1 to 180
Introduced	20.10.R1
Platforms	All

### **secondary-location** *string*

**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Secondary image location
Context	<a href="#">bof image secondary-location</a> <i>string</i>
Tree	<a href="#">secondary-location</a>
String Length	1 to 180
Introduced	20.10.R1
Platforms	All

### **tertiary-location** *string*

**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Tertiary image location
Context	<a href="#">bof image tertiary-location</a> <i>string</i>
Tree	<a href="#">tertiary-location</a>
String Length	1 to 180



Introduced 20.10.R1  
Platforms All

## li

Synopsis Enter the **li** context  
Context [bof li](#)  
Tree [li](#)  
Introduced 20.10.R1  
Platforms All

## local-save *boolean*

**Note:**

The new value of this element takes effect when the router boots.

Synopsis Save the LI configuration locally  
Context [bof li local-save \*boolean\*](#)  
Tree [local-save](#)  
Introduced 20.10.R1  
Platforms All

## separate *boolean*

**Note:**

The new value of this element takes effect when the router boots.

Synopsis Separate access to the LI information  
Context [bof li separate \*boolean\*](#)  
Tree [separate](#)  
Introduced 20.10.R1  
Platforms All

## license

Synopsis Enter the **license** context

Context	<a href="#">bof license</a>
Tree	<a href="#">license</a>
Introduced	20.10.R1
Platforms	All

### **primary-location** *string*

**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Primary license file location
Context	<a href="#">bof license primary-location</a> <i>string</i>
Tree	<a href="#">primary-location</a>
String Length	1 to 180
Introduced	20.10.R1
Platforms	All

### **port** [[router-name](#)] *string*

**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Enter the <b>port</b> list instance
Context	<a href="#">bof port</a> <i>string</i>
Tree	<a href="#">port</a>
Max. Instances	1
Introduced	20.10.R1
Platforms	All

### **[router-name]** *string*

Synopsis	Administrative router name
Context	<a href="#">bof port</a> <i>string</i>
Tree	<a href="#">port</a>
String Length	1 to 64

Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

### **autonegotiate** *keyword*

**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Auto-negotiate speed and duplex type on Ethernet port
Context	<a href="#">bof port string autonegotiate keyword</a>
Tree	<a href="#">autonegotiate</a>
Options	false, true
Default	true
Introduced	20.10.R1
Platforms	All

### **duplex** *keyword*

**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Duplex type for the Ethernet port
Context	<a href="#">bof port string duplex keyword</a>
Tree	<a href="#">duplex</a>
Options	full, half
Default	full
Introduced	20.10.R1
Platforms	All

### **speed** *number*

**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Speed of the Ethernet port
----------	----------------------------

Context	<code>bof port string speed number</code>
Tree	<code>speed</code>
Range	10   100   1000
Units	megabps
Default	100
Introduced	20.10.R1
Platforms	All

### **router** [`router-name`] *string*



**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Enter the <b>router</b> list instance
Context	<code>bof router string</code>
Tree	<code>router</code>
Max. Instances	1
Introduced	20.10.R1
Platforms	All

### **[router-name]** *string*

Synopsis	Administrative router name
Context	<code>bof router string</code>
Tree	<code>router</code>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

### **interface** [`interface-name`] *string*



**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Enter the <b>interface</b> list instance
Context	<code>bof router string interface string</code>
Tree	<code>interface</code>
Max. Instances	1
Introduced	20.10.R1
Platforms	All

### **[interface-name]** *string*

Synopsis	Router interface name
Context	<code>bof router string interface string</code>
Tree	<code>interface</code>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

### **cpm** [*cpm-type*] *keyword*



**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Enter the <b>cpm</b> list instance
Context	<code>bof router string interface string cpm keyword</code>
Tree	<code>cpm</code>
Introduced	20.10.R1
Platforms	All

### **[cpm-type]** *keyword*

Synopsis	CPM type
Context	<code>bof router string interface string cpm keyword</code>
Tree	<code>cpm</code>
Options	active, standby, a, b, c, d
Notes	This element is part of a list key.

Introduced	20.10.R1
Platforms	All

## ipv4



**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Enable the <b>ipv4</b> context
Context	<a href="#">bof router string interface string cpm keyword ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	20.10.R1
Platforms	All

## ip-address *string*



**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	IPv4 address assigned to the interface
Context	<a href="#">bof router string interface string cpm keyword ipv4 ip-address string</a>
Tree	<a href="#">ip-address</a>
Description	This command assigns an IP address to the management Ethernet port on a CPM. The active and standby IP addresses must be on the same subnet.
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	All

## prefix-length *number*



**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	IPv4 address prefix length
Context	<a href="#">bof router string interface string cpm keyword ipv4 prefix-length number</a>
Tree	<a href="#">prefix-length</a>
Range	0 to 32

Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	All

## ipv6



**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Enable the <b>ipv6</b> context
Context	<a href="#">bof router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">cpm</a> <i>keyword</i> <a href="#">ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	20.10.R1
Platforms	All

## ipv6-address *string*



**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	IPv6 address assigned to the interface
Context	<a href="#">bof router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">cpm</a> <i>keyword</i> <a href="#">ipv6</a> <a href="#">ipv6-address</a> <i>string</i>
Tree	<a href="#">ipv6-address</a>
Description	This command assigns an IP address to the management Ethernet port on a CPM. The active and standby IP addresses must be on the same subnet.
Introduced	20.10.R1
Platforms	All

## prefix-length *number*



**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	IPv6 address prefix length
Context	<a href="#">bof router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">cpm</a> <i>keyword</i> <a href="#">ipv6</a> <a href="#">prefix-length</a> <i>number</i>
Tree	<a href="#">prefix-length</a>
Range	0 to 128

Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	All

## ip-mtu *number*



### Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Interface IP MTU
Context	<a href="#">bof router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ip-mtu</a> <i>number</i>
Tree	<a href="#">ip-mtu</a>
Description	<p>This command configures the MTU for IP packets transmitted out the interface of the management router instance associated to the management port.</p> <p>The operational MTU for the port is set to the lesser of the values configured with this command and the management port MTU.</p> <p>If the interface supports IPv6 packets, the command value must be set to 1280 or higher.</p>
Range	512 to 9786
Units	bytes
Introduced	20.10.R1
Platforms	All

## static-routes

Synopsis	Enter the <b>static-routes</b> context
Context	<a href="#">bof router</a> <i>string</i> <a href="#">static-routes</a>
Tree	<a href="#">static-routes</a>
Introduced	20.10.R1
Platforms	All

## route [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)



### Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Enter the <b>route</b> list instance
----------	--------------------------------------



Context	<code>bof router string static-routes route (ipv4-prefix   ipv6-prefix)</code>
Tree	<code>route</code>
Introduced	20.10.R1
Platforms	All

### **[ip-prefix]** (*ipv4-prefix | ipv6-prefix*)

Synopsis	IP prefix for the static route
Context	<code>bof router string static-routes route (ipv4-prefix   ipv6-prefix)</code>
Tree	<code>route</code>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

### **next-hop** (*ipv4-address-no-zone | ipv6-address-no-zone*)



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.



#### **Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Next-hop IP address
Context	<code>bof router string static-routes route (ipv4-prefix   ipv6-prefix) next-hop (ipv4-address-no-zone   ipv6-address-no-zone)</code>
Tree	<code>next-hop</code>
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	All

### **system**

Synopsis	Enter the <b>system</b> context
Context	<code>bof system</code>
Tree	<code>system</code>

Introduced	20.10.R1
Platforms	All

### **base-mac-address** *string*



**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Base system MAC address
Context	<a href="#">bof system base-mac-address</a> <i>string</i>
Tree	<a href="#">base-mac-address</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS-20, 7950 XRS-20e, VSR

### **fips-140-2** *boolean*



**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Operate in FIPS 140-2 mode
Context	<a href="#">bof system fips-140-2</a> <i>boolean</i>
Tree	<a href="#">fips-140-2</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **persistent-indices** *boolean*



**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Classic and mixed management mode persistent indices
Context	<a href="#">bof system persistent-indices</a> <i>boolean</i>
Tree	<a href="#">persistent-indices</a>
Introduced	20.10.R1
Platforms	All

## **profile** *keyword*

**Note:**

The new value of this element takes effect when the router boots.

Synopsis	System capabilities profile
Context	<a href="#">bof system profile</a> <i>keyword</i>
Tree	<a href="#">profile</a>
Options	profile-a, profile-b
Introduced	20.10.R1
Platforms	All

## 3.7 call-trace commands

```
configure
- call-trace
  - apply-groups reference
  - apply-groups-exclude reference
  - buffering boolean
  - location keyword
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - size-limit (number | keyword)
  - max-files-number number
  - primary-cf keyword
  - trace-profile string
    - applications
      - connectivity-management boolean
      - gx boolean
      - gy boolean
      - ladb boolean
      - msap boolean
      - nasreq boolean
      - ppp-event boolean
      - python boolean
      - radius-acct boolean
      - radius-auth boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - events keyword
    - output
      - debug
      - live
        - fqdn string
        - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - port number
        - router-instance string
      - local-storage
    - size-limit number
    - time-limit number
```

### 3.7.1 call-trace command descriptions

#### call-trace

Synopsis	Enter the <b>call-trace</b> context
Context	<b>configure</b> <a href="#">call-trace</a>
Tree	<a href="#">call-trace</a>
Description	Commands in this context configure the attributes of the call trace debugging functionality.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

#### buffering *boolean*

Synopsis	Buffer messages until the trace key is known
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">buffering</a> <i>boolean</i>
Tree	<a href="#">buffering</a>
Description	<p>When configured to <b>true</b>, the router buffers initial messages for sessions where the trace key is not yet known, for example, a username for a PPP session.</p> <p>When the trace key, for example, a username, indicates a match for a traced session, the router sends the buffered messages immediately. If the key does not match a trace, the router discards the buffered messages.</p> <p>When configured to <b>false</b>, the router does not buffer any messages and therefore initial messages may not be traced.</p>
Default	false
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

#### location [[location-type](#)] *keyword*

Synopsis	Enter the <b>location</b> list instance
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">location</a> <i>keyword</i>
Tree	<a href="#">location</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[location-type] keyword**

Synopsis	Compact flash card to be used
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">location</a> <i>keyword</i>
Tree	<a href="#">location</a>
Options	cf1, cf2
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of compact flash for log storage
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">location</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**size-limit (number | keyword)**

Synopsis	Maximum cumulative size of call trace files on the card
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">location</a> <i>keyword</i> <a href="#">size-limit</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">size-limit</a>
Range	1 to 65536
Options	unlimited
Default	1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**max-files-number number**

Synopsis	Maximum number of files call trace can create
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">max-files-number</a> <i>number</i>

Tree	<a href="#">max-files-number</a>
Range	1 to 1024
Default	200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **primary-cf** *keyword*

Synopsis	Primary CF card as local storage location
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">primary-cf</a> <i>keyword</i>
Tree	<a href="#">primary-cf</a>
Options	cf1, cf2
Default	cf1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **trace-profile** [[name](#)] *string*

Synopsis	Enter the <b>trace-profile</b> list instance
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i>
Tree	<a href="#">trace-profile</a>
Description	Commands in this context configure the attributes of the call-trace profile list.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis	Call trace profile name
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i>
Tree	<a href="#">trace-profile</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## applications

Synopsis	Enter the <b>applications</b> context
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <a href="#">applications</a>
Tree	<a href="#">applications</a>
Description	Commands in this context configure call trace attributes for the specified application.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## connectivity-management *boolean*

Synopsis	Trace messages used for connectivity protocols
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <a href="#">applications</a> <a href="#">connectivity-management</a> <i>boolean</i>
Tree	<a href="#">connectivity-management</a>
Description	When configured to <b>true</b> , this command enables call trace for connectivity protocols, such as DHCP, ARP, and DHCPv6, and events related to connectivity management; for example, migrant or data-triggered host creation, idling, or session timeout. When configured to <b>false</b> , connectivity protocols are not traced.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## gx *boolean*

Synopsis	Trace Diameter messages used for the Gx application
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <a href="#">applications</a> <a href="#">gx</a> <i>boolean</i>
Tree	<a href="#">gx</a>
Description	When configured to <b>true</b> , this command enables call trace for Diameter messages used for the Gx application. When configured to <b>false</b> , Diameter Gx messages are not traced.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## gy *boolean*

Synopsis	Trace Diameter messages used for the Gy application
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Context	<b>configure call-trace trace-profile</b> <i>string applications gy boolean</i>
Tree	<b>gy</b>
Description	When configured to <b>true</b> , this command enables call trace for Diameter messages used for the Gy application. When configured to <b>false</b> , Diameter Gy messages are not traced.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ludb boolean**

Synopsis	Trace local user database lookups
Context	<b>configure call-trace trace-profile</b> <i>string applications ludb boolean</i>
Tree	<b>ludb</b>
Description	When configured to <b>true</b> , this command enables call trace for Local User Data Base (LUDB) lookups. When configured to <b>false</b> , LUDB lookups are not traced.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**msap boolean**

Synopsis	Trace MSAP creation events
Context	<b>configure call-trace trace-profile</b> <i>string applications msap boolean</i>
Tree	<b>msap</b>
Description	When configured to <b>true</b> , this command enables tracing of Managed Service Access Point (MSAP) creation events. When configured to <b>false</b> , MSAP create events are not traced.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**nasreq boolean**

Synopsis	Trace Diameter messages used for NASREQ application
Context	<b>configure call-trace trace-profile</b> <i>string applications nasreq boolean</i>

Tree	<a href="#">nasreq</a>
Description	When configured to <b>true</b> , this command enables call trace for Diameter messages used for the Diameter Network Access Server Requirements (NASREQ) application. When configured to <b>false</b> , Diameter NASREQ messages are not traced.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ppp-event** *boolean*

Synopsis	Allow tracing for PPP state machine related events
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <a href="#">applications</a> <a href="#">ppp-event</a> <i>boolean</i>
Tree	<a href="#">ppp-event</a>
Description	When configured to <b>true</b> , events related to the PPP state machine are traced. This configuration may result in a large amount of event messages. When configured to <b>false</b> , tracing is not activated for PPP state machine events.
Default	false
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **python** *boolean*

Synopsis	Trace Python script execution
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <a href="#">applications</a> <a href="#">python</a> <i>boolean</i>
Tree	<a href="#">python</a>
Description	When configured to <b>true</b> , this command enables tracing of Python script execution. When configured to <b>false</b> , Python script execution is not traced.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-acct** *boolean*

Synopsis	Trace messages and events for RADIUS-based accounting
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <a href="#">applications</a> <a href="#">radius-acct</a> <i>boolean</i>
Tree	<a href="#">radius-acct</a>

Description	When configured to <b>true</b> , this command enables tracing of messages and events related to RADIUS-based accounting. When configured to <b>false</b> , RADIUS-based accounting messages and events are not traced.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-auth** *boolean*

Synopsis	Trace RADIUS authentication messages and events
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <a href="#">applications</a> <a href="#">radius-auth</a> <i>boolean</i>
Tree	<a href="#">radius-auth</a>
Description	When configured to <b>true</b> , this command enables tracing of messages and events related to RADIUS authentication, including CoA and Disconnect. When configured to <b>false</b> , messages and events related to RADIUS authentication are not traced.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **events** *keyword*

Synopsis	Events to include in the captured trace
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <a href="#">events</a> <i>keyword</i>
Tree	<a href="#">events</a>
Options	public-only, all

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## output

Synopsis	Enter the <b>output</b> context
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <b>output</b>
Tree	<a href="#">output</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## debug

Synopsis	Enable output to the debug log
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <b>output</b> <b>debug</b>
Tree	<a href="#">debug</a>
Notes	The following elements are part of a choice: <b>debug</b> , <b>live</b> , or <b>local-storage</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## live

Synopsis	Enable the <b>live</b> context
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <b>output</b> <b>live</b>
Tree	<a href="#">live</a>
Notes	The following elements are part of a choice: <b>debug</b> , <b>live</b> , or <b>local-storage</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## fqdn *string*

Synopsis	Fully qualified domain name of live output destination
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <b>output</b> <b>live</b> <b>fqdn</b> <i>string</i>
Tree	<a href="#">fqdn</a>
String Length	1 to 255

Notes	The following elements are part of a mandatory choice: <b>fqdn</b> or <b>ip-address</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the live output destination server
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <a href="#">output</a> <a href="#">live</a> <b>ip-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">ip-address</a>
Notes	The following elements are part of a mandatory choice: <b>fqdn</b> or <b>ip-address</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **port number**

Synopsis	TCP IP port
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <a href="#">output</a> <a href="#">live</a> <b>port number</b>
Tree	<a href="#">port</a>
Range	1 to 65536
Default	29770
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **router-instance** *string*

Synopsis	Router instance or VPRN service name
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <a href="#">output</a> <a href="#">live</a> <b>router-instance</b> <i>string</i>
Tree	<a href="#">router-instance</a>
Default	Base
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## local-storage

Synopsis	Destination for output
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <a href="#">output</a> <a href="#">local-storage</a>
Tree	<a href="#">local-storage</a>
Notes	The following elements are part of a choice: <b>debug</b> , <b>live</b> , or <b>local-storage</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## size-limit *number*

Synopsis	Maximum data output for a single call trace operation
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <a href="#">size-limit</a> <i>number</i>
Tree	<a href="#">size-limit</a>
Range	1 to 1000
Units	megabytes
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## time-limit *number*

Synopsis	Maximum time for a single call trace job
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <a href="#">time-limit</a> <i>number</i>
Tree	<a href="#">time-limit</a>
Range	1 to 604800
Units	seconds
Default	86400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## 3.8 card commands

```

configure
- card number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- card-type keyword
- fail-on-error boolean
- filter-profile keyword
- fp number
- apply-groups reference
- apply-groups-exclude reference
- egress
- hs-fixed-high-thresh-delta number
- hs-pool-policy reference
- wred-queue-control
- admin-state keyword
- buffer-allocation decimal-number
- reserved-cbs decimal-number
- slope-policy reference
- fp-resource-policy reference
- hi-bw-mcast-src
- alarm boolean
- default-paths-only boolean
- group number
- ingress
- access
- queue-group reference instance-id number
- accounting-policy reference
- apply-groups reference
- apply-groups-exclude reference
- collect-stats boolean
- description string
- policer-control-policy
- overrides
- apply-groups reference
- apply-groups-exclude reference
- max-rate (number | keyword)
- priority-mbs-thresholds
- min-threshold-separation (number | keyword)
- priority number
- apply-groups reference
- apply-groups-exclude reference
- mbs-contribution (number | keyword)
- policy-name reference
- policer-overrides
- policer reference
- apply-groups reference
- apply-groups-exclude reference
- cbs (number | keyword)
- mbs (number | keyword)
- packet-byte-offset number
- rate
- cir (number | keyword)
- pir (number | keyword)
- stat-mode keyword
- dist-cpu-protection
- dynamic-enforcement-policer-pool number
- mcast-path-management
- admin-state keyword

```

configure card fp ingress mcast-path-management bandwidth-policy

```

- bandwidth-policy reference
- network
- pool string
  - amber-alarm-threshold number
  - apply-groups reference
  - apply-groups-exclude reference
  - red-alarm-threshold number
  - resv-cbs
    - amber-alarm-action
      - max number
      - step number
    - cbs number
  - slope-policy reference
- queue-group reference instance-id number
  - accounting-policy reference
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-stats boolean
  - description string
  - policer-control-policy
    - overrides
      - apply-groups reference
      - apply-groups-exclude reference
      - max-rate (number | keyword)
      - priority-mbs-thresholds
        - min-threshold-separation (number | keyword)
        - priority number
          - apply-groups reference
          - apply-groups-exclude reference
        - mbs-contribution (number | keyword)
    - policy-name reference
  - policer-overrides
  - policer reference
    - apply-groups reference
    - apply-groups-exclude reference
    - cbs (number | keyword)
    - mbs (number | keyword)
    - packet-byte-offset number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - stat-mode keyword
  - queue-policy reference
- policy-accounting
  - classes number
  - policers number
- ingress-buffer-allocation decimal-number
- init-extract-prio-mode keyword
- stable-pool-sizing boolean
- level keyword
- mda number
- access
  - apply-groups reference
  - apply-groups-exclude reference
- egress
  - apply-groups reference
  - apply-groups-exclude reference
- ingress
  - apply-groups reference
  - apply-groups-exclude reference
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- clock-mode

```



## configure card mda clock-mode mode

- **mode** *keyword*
- **timestamp-freq** *number*
- **egress-xpl**
  - **threshold** *number*
  - **window** *number*
- **event** *keyword*
  - **action** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **fail-on-error** *boolean*
- **ingress-xpl**
  - **threshold** *number*
  - **window** *number*
- **level** *keyword*
- **mda-type** *keyword*
- **network**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **egress**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **ingress**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
- **power-priority-level** *number*
- **reset-on-recoverable-error** *boolean*
- **sync-e** *keyword*
- **upgrade** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **path** *keyword*
- **xconnect**
  - **mac** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **loopback** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **bandwidth** *number*
      - **description** *string*
- **power-save** *boolean*
- **reset-on-recoverable-error** *boolean*
- **upgrade** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **path** *keyword*
- **virtual-scheduler-adjustment**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **internal-scheduler-weight-mode** *keyword*
  - **interval**
    - **rate-calculation-minimum**
      - **fast-queue** *decimal-number*
      - **slow-queue** *decimal-number*
    - **scheduler-run-minimum** *decimal-number*
    - **task-scheduling** *decimal-number*
    - **slow-queue-threshold-rate** *number*
- **xiom** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **fail-on-error** *boolean*
  - **level** *keyword*

## configure card xiom mda

- **mda** *number*
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **mda-type** *keyword*
- **power-priority-level** *number*
- **sync-e** *keyword*
- **xconnect**
  - **mac** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **loopback** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **bandwidth** *number*
      - **description** *string*
- **reset-on-recoverable-error** *boolean*
- **upgrade** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **path** *keyword*
- **xiom-type** *keyword*

### 3.8.1 card command descriptions

#### **card** [*slot-number*] *number*

Synopsis	Enter the <b>card</b> list instance
Context	<b>configure card</b> <i>number</i>
Tree	<a href="#">card</a>
Description	Commands in this context cover attributes for specific chassis slots for physical cards. Cards include IOM, IMM, and XCM. In SR OS, cards cover IOM, IMM, and XCM.
Introduced	16.0.R1
Platforms	All

#### **[slot-number]** *number*

Synopsis	Slot number within the chassis
Context	<b>configure card</b> <i>number</i>
Tree	<a href="#">card</a>
Description	This command configures a unique value that identifies the card slot within a chassis in the system.
Range	1 to 20
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

#### **admin-state** *keyword*

Synopsis	Administrative state of the card
Context	<b>configure card</b> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**card-type** keyword**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis      Card type

Context      **configure** *card number* **card-type** *keyword*

Tree          **card-type**

Description    This command adds an IOM, IMM, XCM to the device configuration for the slot.

The card type can be pre-provisioned, meaning that the card does not need to be installed in the chassis.

A card must be provisioned before any contained object can be configured: MDA, XIOM, XMA, MDA-s, connector, or port. A card can only be provisioned in a slot if the card type is allowed in the slot. An error message is generated if an attempt is made to provision a card type that is not allowed.

If a card is inserted that does not match the configured card type for the slot, a log event and facility alarm is raised. The alarm is cleared when the correct card type is installed or the configuration is modified. A log event and facility alarm are raised if an administratively enabled card is removed from the chassis. The alarm is cleared when the correct card type is installed or the configuration is modified. A log event is issued when a card is removed that is administratively disabled.

Because IMM's do not have the capability to install separate MDAs, the configuration of the MDAs is automatic. This configuration only includes the default options such as default buffer policies. Commands to manage the MDA remain in the MDA configuration context.

Some card hardware can support two different firmware loads. One load includes the base Ethernet functionality, including 10G WAN mode, but does not include 1588 port-based timestamping. The second load includes the base Ethernet functionality and 1588 port-based timestamping, but does not include 10G WAN mode. These are identified as two card types that are the same, except for a "-ptp" suffix to indicate the second loadset. A hard reset of the card occurs when switching between the two provisioned types.

An appropriate alarm is raised if a partial or complete card failure is detected. The alarm is cleared when the error condition ceases.

Options      xcm-x20, imm40-10gb-sfp, imm4-100gb-cxp, iom4-e, iom-a, imm-1pac-fp3, imm-2pac-fp3, iom4-e-hs, imm4-100gb-cfp4, iom-e, iom-v, iom4-e-b, iom-sar-hm, xcm2-x20, iom-1, xcm-14s, imm40-10gb-sfp-tp, iom-ixr-r6, imm36-100g-qsfp28, imm48-sfp+2-qsfp28, iom5-e, xcm-7s, imm48-sfp++6-qsfp28, xcm-1s, xcm-2s, imm24-sfp++8-sfp28+2-qsfp28, iom-sar-hmc, imm14-10g-sfp++4-1g-tx, iom-ixr-r4, imm6-qsfpdd+48-sfp56, imm32-qsfp28+4-qsfpdd, i48-800g-qsfpdd-1x, imm36-qsfpdd, imm4-1g-tx+20-1g-sfp+6-10g-sfp+, iom-ixr-r6d, xcm2-7s, i24-800g-qsfpdd-1, imm36-800g-qsfpdd, xcm2-14s, i48-400g-qsfpdd-1, i80-200g-sfpdd+12-400g-qsfpdd-1, i40-200g-sfpdd+6-800g-qsfpdd-1, i80-200g-sfpdd+12-800g-qsfpdd-1x, xcm-2se, xcm-14s-b, xcm-7s-b

Introduced	16.0.R1
Platforms	All

### **fail-on-error** *boolean*

Synopsis	Set operational state of the card to Failed upon error
Context	<b>configure</b> <b>card</b> <i>number</i> <b>fail-on-error</b> <i>boolean</i>
Tree	<b>fail-on-error</b>
Description	<p>When configured to <b>true</b>, this command controls the behavior of the card when any one of a specific set of card level errors is encountered in the system.</p> <p>When the this command is set to <b>true</b>, and any one (or more) of the specific errors is detected, the operational state of the card is set to failed. This failed state persists until the <b>clear card</b> command is issued (reset) or the card is removed and reinserted (reseated). If the condition persists after reseating the card, contact Nokia support to investigate more.</p> <p>Nokia only recommends configuring this command to <b>true</b> when the network is designed to be able to route traffic around a failed card (redundant cards, nodes, or other paths exist).</p> <p>The list of specific errors includes the following:</p> <p>CHASSIS event ID# 2063 - tmnxEqCardPChipMemoryEvent          CHASSIS event ID# 2076 - tmnxEqCardPChipCamEvent          CHASSIS event ID# 2059 - tmnxEqCardPChipError (for ingress Ethernet only)          CHASSIS event ID# 2098 - tmnxEqCardQChipBufMemoryEvent          CHASSIS event ID# 2099 - tmnxEqCardQChipStatsMemoryEvent          CHASSIS event ID# 2101 - tmnxEqCardQChipIntMemoryEvent          CHASSIS event ID# 2103 - tmnxEqCardChipIfCellEvent</p> <p>On platforms with integrated CPM and IOM, IMM, or XCM, the node is rebooted if this command is set to <b>true</b> and one of the card level errors is encountered. The tmnxEqCardPChipError is only considered as a trigger for this command for ingress FCS errors (not egress FCS errors).</p> <p><b>Note:</b> On the detection of the event or error in the system, the reporting of the event (logs) and the fail-on-error behavior of the card are independent. Log event control configuration determines whether the events are reported in logs (or SNMP traps, and so on) and the fail-on-error configuration determines the behavior of the card. This implies that the card can be configured to fail-on-error even if the events are suppressed (some may be suppressed in the system by default). To facilitate post-failure analysis, Nokia recommends reporting the specific events or errors and that <b>configure log log-events</b> be enabled when this command is set to <b>true</b>.</p>
Default	false
Introduced	16.0.R1

Platforms All

### **filter-profile** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Filter profile for the card
Context	<b>configure</b> <i>card number filter-profile keyword</i>
Tree	<a href="#">filter-profile</a>
Description	This command controls the resources allocated to ingress and egress IPv4 and IPv6 filters on a per-line card basis on the SR-a platform.
Options	none, profile-a
Default	none
Introduced	19.10.R1
Platforms	7750 SR-a

### **fp** [[fp-number](#)] *number*

Synopsis	Enter the <b>fp</b> list instance
Context	<b>configure</b> <i>card number fp number</i>
Tree	<a href="#">fp</a>
Description	Commands in this context configure forwarding plane (FP) specific options on the card.
Introduced	16.0.R1
Platforms	All

### **[fp-number]** *number*

Synopsis	Forwarding plane within the card
Context	<b>configure</b> <i>card number fp number</i>
Tree	<a href="#">fp</a>
Range	1 to 12
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <i>card number fp number egress</i>
Tree	<a href="#">egress</a>
Introduced	16.0.R1
Platforms	All

**hs-fixed-high-thresh-delta** *number*

Synopsis	High threshold delta on the forwarding plane
Context	<b>configure</b> <i>card number fp number egress hs-fixed-high-thresh-delta number</i>
Tree	<a href="#">hs-fixed-high-thresh-delta</a>
Description	<p>This command specifies the egress aggregate shaper high burst limit threshold delta for this HSQ IOM FP.</p> <p>An aggregate rate can be applied to each egress HSQ queue group, HS secondary shaper, and (for subscribers configured with HS SLA expanded mode) primary shaper that manages the maximum burst limit over a specified shaping rate. Each aggregate shaper supports two thresholds that are used in conjunction with the low burst class setting. The system uses the lowest value attainable for each low threshold aggregate burst limit without causing shaper under run conditions.</p> <p>The high burst limit threshold is determined by adding the configured value of this command to the aggregate low burst limit threshold value. An operator must set this configured value to at least two times the maximum frame size to prevent lower threshold class forwarding from also affecting the higher threshold classes when forwarding larger packet sizes. An insufficiently high threshold delta defeats the intended purpose of mapping classes to the higher threshold.</p>
Range	0 to 65536
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**hs-pool-policy** *reference*

Synopsis	HS pool policy
Context	<b>configure</b> <i>card number fp number egress hs-pool-policy reference</i>
Tree	<a href="#">hs-pool-policy</a>
Description	This command specifies the HS pool policy for the FP.

An HS pool policy contains the required parameters to create and size root and mid-tier buffer pools on an HSQ IOM, and applies a slope policy to each. A single HS pool policy is supported per port FP.

This command is only applicable to the HSQ IOM (iom4-e-hs) and fails if configured on other card types.

Reference	<b>configure qos hs-pool-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### wred-queue-control

Synopsis	Enter the <b>wred-queue-control</b> context
Context	<b>configure card number fp number egress wred-queue-control</b>
Tree	<b>wred-queue-control</b>
Description	Commands in this context configure the aggregate Weighted Random Early Detection (WRED) queue options for all WRED queues on an egress forwarding plane.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### admin-state *keyword*

Synopsis	Administrative state of the WRED queue control function
Context	<b>configure card number fp number egress wred-queue-control admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### buffer-allocation *decimal-number*

Synopsis	Buffer allocation for WRED queue buffer pools
Context	<b>configure card number fp number egress wred-queue-control buffer-allocation</b> <i>decimal-number</i>
Tree	<b>buffer-allocation</b>
Description	This command defines the percentage of buffers to set aside for WRED queue buffer pools.



Range	0.01 to 99.99
Units	percent
Default	25.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **reserved-cbs** *decimal-number*

Synopsis	Buffers for queues operating within CBS thresholds
Context	<b>configure</b> <b>card</b> <i>number</i> <b>fp</b> <i>number</i> <b>egress</b> <b>wred-queue-control</b> <b>reserved-cbs</b> <i>decimal-number</i>
Tree	<a href="#">reserved-cbs</a>
Description	<p>This command specifies the percentage of buffers within the WRED mega-pool to set aside for WRED queues operating within the configured CBS thresholds. The forwarding plane protects against WRED queue buffer starvation by setting aside a portion of the buffers within the WRED mega-pool.</p> <p>This threshold defines when a WRED queue requests buffers from the reserved portion of the WRED mega-pool and when it starts requesting buffers from the shared portion of the mega-pool. With proper oversubscription provisioning, a seldom active queue is not denied a buffer from the mega-pool when the shared portion of the mega-pool is congested.</p>
Range	0.01 to 99.99
Units	percent
Default	25.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **slope-policy** *reference*

Synopsis	Slope policy for the forwarding plane
Context	<b>configure</b> <b>card</b> <i>number</i> <b>fp</b> <i>number</i> <b>egress</b> <b>wred-queue-control</b> <b>slope-policy</b> <i>reference</i>
Tree	<a href="#">slope-policy</a>
Reference	<b>configure</b> <b>qos</b> <b>slope-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**fp-resource-policy** *reference***WARNING:**

Modifying this element resets the associated cards/XIOMs/MDAs for the new value to take effect. On the 7750 SR-1, the configuration must be saved and the router must be rebooted for the new value to take effect.

Synopsis	Resource policy to manage resources on the FP
Context	<b>configure</b> <i>card number fp number fp-resource-policy reference</i>
Tree	<a href="#">fp-resource-policy</a>
Description	<p>This command configures an FP resource policy used to manage resources on a forwarding plane that is FP4-based and later.</p> <p>The system creates a default policy that applies to all FP4 and later FPs. If an FP resource policy is removed from an FP, the system automatically applies the default policy to that FP. The system prevents the modification or deletion of the default policy, and the deletion of any user-created policy that is applied to an FP.</p>
Reference	<b>configure</b> <a href="#">qos fp-resource-policy string</a>
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**hi-bw-mcast-src**

Synopsis	Enable the <b>hi-bw-mcast-src</b> context
Context	<b>configure</b> <i>card number fp number hi-bw-mcast-src</i>
Tree	<a href="#">hi-bw-mcast-src</a>
Description	<p>Commands in this context configure the attributes to designate the FP as a high-bandwidth IP multicast source, expecting the ingress traffic to include high-bandwidth IP multicast traffic.</p> <p>When configured, the system attempts to allocate a dedicated multicast switch fabric plane (MSFP) to the forwarding plane. When a group is specified, all FPs in the group share the same MSFP.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS

**alarm** *boolean*

Synopsis	Raise an alarm when multiple traffic taps share a plane
Context	<b>configure</b> <i>card number fp number hi-bw-mcast-src alarm boolean</i>

Tree	<a href="#">alarm</a>
Description	When configured to <b>true</b> , the router generates an event if the MDA must share an MSFP with another MDA in a different group. MDAs within the same group that share an MSFP do not generate an event. Additionally, if a failure occurs during normal operation or resources are removed, the system generates an event if it cannot maintain separation of MSFPs for the MDAs.  When configured to <b>false</b> , the router does not generate events.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS

### **default-paths-only** *boolean*

Synopsis	Allocate the default paths to dedicated MSFPs
Context	<b>configure</b> <a href="#">card number</a> <a href="#">fp number</a> <a href="#">hi-bw-mcast-src</a> <a href="#">default-paths-only</a> <i>boolean</i>
Tree	<a href="#">default-paths-only</a>
Description	When configured to <b>true</b> , the system only attempts to allocate the two default paths (one high priority and one low priority) to dedicated MSFPs.  When configured to <b>false</b> , the default path allocation is disabled.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS

### **group** *number*

Synopsis	Logical MSFP group for the MDA
Context	<b>configure</b> <a href="#">card number</a> <a href="#">fp number</a> <a href="#">hi-bw-mcast-src</a> <a href="#">group</a> <i>number</i>
Tree	<a href="#">group</a>
Description	This command specifies the logical MSFP group for the MDA.  If a group is specified, all FPs in the group share the same MSFP.
Range	0 to 32
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS

## ingress

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">card</a> <a href="#">number</a> <a href="#">fp</a> <a href="#">number</a> <a href="#">ingress</a>
Tree	<a href="#">ingress</a>
Introduced	16.0.R1
Platforms	All

## access

Synopsis	Enter the <b>access</b> context
Context	<b>configure</b> <a href="#">card</a> <a href="#">number</a> <a href="#">fp</a> <a href="#">number</a> <a href="#">ingress</a> <a href="#">access</a>
Tree	<a href="#">access</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## queue-group [[queue-group-name](#)] *reference* [instance-id](#) *number*

Synopsis	Enter the <b>queue-group</b> list instance
Context	<b>configure</b> <a href="#">card</a> <a href="#">number</a> <a href="#">fp</a> <a href="#">number</a> <a href="#">ingress</a> <a href="#">access</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i>
Tree	<a href="#">queue-group</a>
Description	Commands in this context create a named queue group template on the ingress forwarding plane of an IOM or IMM.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## [[queue-group-name](#)] *reference*

Synopsis	Queue group name
Context	<b>configure</b> <a href="#">card</a> <a href="#">number</a> <a href="#">fp</a> <a href="#">number</a> <a href="#">ingress</a> <a href="#">access</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i>
Tree	<a href="#">queue-group</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">ingress</a> <a href="#">queue-group</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **instance-id** *number*

Synopsis Instance ID

Context **configure** *card number* *fp number* *ingress access queue-group reference* *instance-id number*

Tree [queue-group](#)

Range 1 to 65535

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **accounting-policy** *reference*

Synopsis Accounting policy for the FP ingress queue group

Context **configure** *card number* *fp number* *ingress access queue-group reference* *instance-id number* *accounting-policy reference*

Tree [accounting-policy](#)

Description This command configures an accounting policy for the FP ingress queue group. You can only apply accounting policies associated with service billing to SAPs. Only associate the accounting policy with one interface at a time.

Reference **configure** [log accounting-policy](#) *number*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **collect-stats** *boolean*

Synopsis Collect statistics on FP ingress queue group

Context **configure** *card number* *fp number* *ingress access queue-group reference* *instance-id number* *collect-stats* *boolean*

Tree [collect-stats](#)

Description When configured to **true**, the system collects accounting and statistical data for the queue group on the FP.

When configured to **false**, the system still accumulates the statistics; however, the CPU does not obtain the results and write them to the billing file.

If this command is set to **true** (after it had previously been set to **false**), the counters written to the billing file include the traffic collected when the command was set to **false**.

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">card number</a> <a href="#">fp number</a> <a href="#">ingress access queue-group reference</a> <a href="#">instance-id number</a> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **policer-control-policy**

Synopsis	Enter the <b>policer-control-policy</b> context
Context	<b>configure</b> <a href="#">card number</a> <a href="#">fp number</a> <a href="#">ingress access queue-group reference</a> <a href="#">instance-id number</a> <a href="#">policer-control-policy</a>
Tree	<a href="#">policer-control-policy</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **overrides**

Synopsis	Enable the <b>overrides</b> context
Context	<b>configure</b> <a href="#">card number</a> <a href="#">fp number</a> <a href="#">ingress access queue-group reference</a> <a href="#">instance-id number</a> <a href="#">policer-control-policy overrides</a>
Tree	<a href="#">overrides</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **max-rate (number | keyword)**

Synopsis	Maximum rate override
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Context	<b>configure</b> <i>card number fp number ingress access queue-group reference instance-id number policer-control-policy overrides max-rate (number   keyword)</i>
Tree	<a href="#">max-rate</a>
Description	<p>This command defines the PIR leaky bucket decrement rate of the parent policer. Each time you apply the policer control policy to a SAP or subscriber instance a parent policer is created. Packets not discarded by the child policer associated with the SAP or subscriber instance are evaluated against the leaky bucket of the parent policer.</p> <p>For each packet, the system first decrements the bucket by the correct amount based on the decrement rate to derive the current bucket depth. The system compares the current depth to one of two discard thresholds associated with the packet. The first discard threshold is applied if the Fair Information Rate (FIR) leaky bucket of the child policer is in the confirming state. The second discard threshold is applied if the FIR leaky bucket of the child policer is in the exceed state.</p> <p>Only one of the two thresholds is applied per packet. If the current depth of the parent policer PIR bucket is less than the threshold value, the parent PIR bucket is in the conform state for that particular packet. If the depth is equal to or greater than the applied threshold, the bucket is in the violate state for the packet.</p> <p>If the result is conform, the bucket depth is increased by the size of the packet (plus or minus the per-packet offset setting in the child policer) and the parent policer does not discard the packet. If the result is violate, the bucket depth is not increased and the parent policer discards the packet. When the parent policer discards a packet, the bucket depth increases (PIR, CIR, and FIR) in the parent policer are canceled. This prevents packets that the parent policer discards from consuming the PIR, CIR, and FIR bandwidth of the child policers.</p>
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## priority-mbs-thresholds

Synopsis	Enter the <b>priority-mbs-thresholds</b> context
Context	<b>configure</b> <i>card number fp number ingress access queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds</i>
Tree	<a href="#">priority-mbs-thresholds</a>
Description	<p>Commands in this context configure the derivative for the shared portion and fair portion for each priority level.</p> <p>The system uses the shared portion and fair portion values to calculate the discard-unfair and discard-all MBS thresholds that enforce priority-sensitive rate-based discards within the root arbiter parent policer.</p>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **min-threshold-separation** (*number* | *keyword*)

Synopsis Minimum separation between any two active thresholds

Context **configure** *card number fp number ingress access queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds min-threshold-separation (number | keyword)*

Tree [min-threshold-separation](#)

Description This command configures the minimum separation between any two active thresholds in the parent policer.

Range 0 to 16777216

Units bytes

Options auto

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **priority** [*level*] *number*

Synopsis Enter the **priority** list instance

Context **configure** *card number fp number ingress access queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds priority number*

Tree [priority](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **[level]** *number*

Synopsis Priority level, higher number is stricter

Context **configure** *card number fp number ingress access queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds priority number*

Tree [priority](#)

Range 1 to 8

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR



**mbs-contribution** (*number* | *keyword*)

Synopsis	MBS contribution size override
Context	<b>configure</b> <i>card number fp number ingress access queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds priority number mbs-contribution</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs-contribution</a>
Description	This command specifies the packet burst capacity required at the parent policer for a specified priority level with at least one child, and where the total capacity also includes the capacity of all lower thresholds.
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**policy-name** *reference*

Synopsis	Policer control policy name
Context	<b>configure</b> <i>card number fp number ingress access queue-group reference instance-id number policer-control-policy policy-name reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos policer-control-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**policer-overrides**

Synopsis	Enter the <b>policer-overrides</b> context
Context	<b>configure</b> <i>card number fp number ingress access queue-group reference instance-id number policer-overrides</i>
Tree	<a href="#">policer-overrides</a>
Description	Commands in this context configure specific overrides to one or more policers created on the SAP through SAP ingress QoS policies.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**policer** [*policer-id*] *reference*

Synopsis	Enter the <b>policer</b> list instance
Context	<b>configure</b> <i>card number fp number ingress access queue-group reference instance-id number policer-overrides policer reference</i>
Tree	<i>policer</i>
Description	<p>Commands in this context create, modify, or delete a policer. Policers are created and used in a similar manner to queues. Unlike queues that have dedicated counters, policers allow various stat-mode settings that define the counters to be associated with the policer. Packet byte offset provides a policer with the ability to modify the size of each packet based on a defined number of bytes. All policers must be created within the QoS policies.</p> <p>After a policer is created, it cannot be deleted from the QoS policy unless all forwarding classes mapped to the policer are first moved to other policers or queues.</p> <p>The system allows a policer to be created on a SAP QoS policy regardless of the ability to support policers on objects where the policy is currently applied. The system only scans the current objects for policer support and sufficient resources to create the policer when a forwarding class is first mapped to the policer ID. If the policer cannot be created because one or more instances of the policy do not support policing or have insufficient resources to create the policer, the forwarding class mapping fails.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**[*policer-id*]** *reference*

Synopsis	Policer ID
Context	<b>configure</b> <i>card number fp number ingress access queue-group reference instance-id number policer-overrides policer reference</i>
Tree	<i>policer</i>
Reference	<b>configure</b> <i>qos queue-group-templates ingress queue-group string policer number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**cbs** (*number* | *keyword*)

Synopsis	CBS tolerance allowed by the policer
Context	<b>configure</b> <i>card number fp number ingress access queue-group reference instance-id number policer-overrides policer reference cbs (number   keyword)</i>

Tree	<a href="#">cbs</a>
Description	This command configures the CIR leaky bucket exceed threshold of the policer. If the forwarding rate of the policer is equal to or less than the defined CIR, the CIR bucket depth hovers around the 0 depth, with spikes up to the maximum packet size in the offered load. If the forwarding rate increases beyond the profiling rate, the threshold caps the amount of data allowed to be in-profile above the rate.
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **mbs** (*number* | *keyword*)

Synopsis	Maximum burst tolerance allowed by the policer
Context	<b>configure</b> <a href="#">card</a> <a href="#">number</a> <a href="#">fp</a> <a href="#">number</a> <a href="#">ingress</a> <a href="#">access</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">instance-id</a> <a href="#">number</a> <a href="#">policer-overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>mbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs</a>
Description	This command configures the PIR leaky bucket violate threshold of the policer. Ingress, trusted in-profile packets and untrusted high priority packets use the high priority violate threshold and trusted out-of-profile. Untrusted low priority packets use the low priority violate threshold. If the offered rate of the policer is equal to or less than the defined rate, the PIR bucket depth hovers around the 0 depth, with spikes up to the maximum packet size in the offered load. If the offered rate increases beyond the metering rate, the threshold caps the amount of data allowed above the rate. The low priority violate threshold provides a smaller burst size for the lower priority traffic associated with the policer. Because all lower priority traffic is discarded at the lower burst tolerance size, the remaining burst tolerance is available for higher priority traffic.
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **packet-byte-offset** *number*

Synopsis	Packet size adjustment
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Context	<b>configure</b> <i>card number fp number ingress access queue-group reference instance-id number policer-overrides policer reference packet-byte-offset number</i>
Tree	<a href="#">packet-byte-offset</a>
Description	<p>This command modifies the size of each packet handled by the policer by adding or subtracting a number of bytes. The actual packet size is not modified; only the size used to determine the bucket depth impact is changed.</p> <p>Use this command to add downstream frame encapsulation or remove portions of packet headers.</p> <p>When child policers add to or subtract from the packet size, the minimum threshold separation value of the parent policer must be modified by the same amount.</p>
Range	-32 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## rate

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <i>card number fp number ingress access queue-group reference instance-id number policer-overrides policer reference rate</i>
Tree	<a href="#">rate</a>
Description	<p>Commands in this context configure the metering and optional profiling rates of the policer.</p> <p>The metering rate is used by the system to configure the PIR leaky bucket decrement rate and the profiling rate configures the CIR leaky bucket decrement rate. The decrement function empties the bucket; packets applied to the bucket attempt to fill it based on its packet size. If the bucket fills faster than the rate that it empties, the bucket depth eventually reaches its exceeded (CIR) or violate (PIR) threshold.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## cir (*number* | *keyword*)

Synopsis	CIR for the policer
Context	<b>configure</b> <i>card number fp number ingress access queue-group reference instance-id number policer-overrides policer reference rate cir (number   keyword)</i>
Tree	<a href="#">cir</a>
Description	<p>This command overrides the default CIR rate of the policer.</p> <p>When the policer is first created, the profiling rate defaults to 0 kb/s.</p>

When **max** is configured, the maximum policer rate used is equal to the maximum capacity of the card that the policer is configured for. If the policer rate is set to a value larger than the maximum rate possible for the card, the CIR used is equivalent to maximum.

Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **pir** (*number* | *keyword*)

Synopsis	PIR for the policer
Context	<b>configure</b> <i>card number fp number ingress access queue-group reference instance-id number policer-overrides policer reference rate pir</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Description	This command configures the metering rate of the policer for the PIR leaky bucket. When the policer is first created, the metering rate defaults to max.  When <b>max</b> is configured, the maximum policer rate used is equal to the maximum capacity of the card that the policer is configured for. If the policer rate is set to a value larger than the maximum rate possible for the card, the PIR used is equivalent to maximum.
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **stat-mode** *keyword*

Synopsis	Stat mode for the policer
Context	<b>configure</b> <i>card number fp number ingress access queue-group reference instance-id number policer-overrides policer reference stat-mode keyword</i>
Tree	<a href="#">stat-mode</a>
Description	This command specifies the forwarding plane counters that allow offered, output, and discard accounting to occur for the policer.

Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## dist-cpu-protection

Synopsis	Enter the <b>dist-cpu-protection</b> context
Context	<b>configure</b> <i>card number</i> <i>fp number</i> <i>ingress</i> <b>dist-cpu-protection</b>
Tree	<a href="#">dist-cpu-protection</a>
Description	Commands in this context configure the distributed CPU protection forwarding plane settings.
Introduced	21.2.R1
Platforms	All

## dynamic-enforcement-policer-pool *number*

Synopsis	Number of policers reserved as enforcement policers use
Context	<b>configure</b> <i>card number</i> <i>fp number</i> <i>ingress</i> <b>dist-cpu-protection</b> <b>dynamic-enforcement-policer-pool</b> <i>number</i>
Tree	<a href="#">dynamic-enforcement-policer-pool</a>
Description	<p>This command reserves a set of policers for use as dynamic enforcement policers for the Distributed CPU Protection (DCP) feature. Policers are allocated from this pool and instantiated as per-object per-protocol dynamic enforcement policers after a local monitor is triggered for an object, such as a SAP or network interface.</p> <p>A change to this configured value automatically clears the high water mark, timestamp, and failed allocation count.</p> <p>If the command is configured to a value below the currently used or allocated number, all dynamic policers are returned to the free pool (and traffic returns to the local monitors).</p>
Range	1000 to 32000
Introduced	21.2.R1
Platforms	All

## mcast-path-management

Synopsis	Enter the <b>mcast-path-management</b> context
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Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">fp</a> <i>number</i> <a href="#">ingress</a> <a href="#">mcast-path-management</a>
Tree	<a href="#">mcast-path-management</a>
Description	Commands in this context configure the IOM ingress multicast path management forwarding plane settings.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of multicast path management
Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">fp</a> <i>number</i> <a href="#">ingress</a> <a href="#">mcast-path-management</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### **bandwidth-policy** *reference*

Synopsis	Bandwidth policy for ingress multicast path management
Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">fp</a> <i>number</i> <a href="#">ingress</a> <a href="#">mcast-path-management</a> <b>bandwidth-policy</b> <i>reference</i>
Tree	<a href="#">bandwidth-policy</a>
Description	<p>This command specifies the bandwidth policy associated with the forwarding plane.</p> <p>The bandwidth policy defines the dynamic rate table and the multicast paths bandwidth and queuing parameters.</p> <p>If a bandwidth policy is not explicitly associated with a forwarding plane, the default bandwidth policy is used with ingress multicast path management.</p>
Reference	<b>configure</b> <a href="#">multicast-management</a> <b>bandwidth-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

**network**

Synopsis	Enter the <b>network</b> context
Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">fp</a> <i>number</i> <a href="#">ingress</a> <a href="#">network</a>
Tree	<a href="#">network</a>
Description	Commands in this context configure the IOM ingress network forwarding plane settings.
Introduced	16.0.R1
Platforms	All

**pool** [[name](#)] *string*

Synopsis	Enter the <b>pool</b> list instance
Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">fp</a> <i>number</i> <a href="#">ingress</a> <a href="#">network</a> <a href="#">pool</a> <i>string</i>
Tree	<a href="#">pool</a>
Description	Commands in this context configure the list of forwarding plane ingress network pool settings.
Introduced	19.5.R1
Platforms	All

**[name]** *string*

Synopsis	Network ingress pool name for the FP
Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">fp</a> <i>number</i> <a href="#">ingress</a> <a href="#">network</a> <a href="#">pool</a> <i>string</i>
Tree	<a href="#">pool</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

**amber-alarm-threshold** *number*

Synopsis	Amber alarm threshold allowed on oversubscription
Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">fp</a> <i>number</i> <a href="#">ingress</a> <a href="#">network</a> <a href="#">pool</a> <i>string</i> <a href="#">amber-alarm-threshold</a> <i>number</i>
Tree	<a href="#">amber-alarm-threshold</a>
Description	This command configures the threshold for the amber alarm on oversubscription.



If both amber and red alarm thresholds are configured, the amber alarm threshold must be equal to or less than the red alarm threshold.

Range	1 to 1000
Units	percent
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **red-alarm-threshold** *number*

Synopsis	Red alarm threshold allowed on oversubscription
Context	<b>configure</b> <i>card number fp number ingress network pool string red-alarm-threshold number</i>
Tree	<a href="#">red-alarm-threshold</a>
Description	This command configures the threshold for the red alarm on oversubscription. If both amber and red alarm thresholds are configured, the red alarm threshold must be equal to or exceed the amber alarm threshold.
Range	1 to 1000
Units	percent
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **resv-cbs**

Synopsis	Enter the <b>resv-cbs</b> context
Context	<b>configure</b> <i>card number fp number ingress network pool string resv-cbs</i>
Tree	<a href="#">resv-cbs</a>
Description	Commands in this context specify the pool buffer settings. The commands do not set aside buffers within the buffer pool for CBS reservation. The CBS value per queue only determines the point at which enqueueing packets are subject to a RED slope. CBS oversubscription can result in a queue operating within its CBS configuration and still being unable to enqueue a packet due to unavailable buffers.
Introduced	19.5.R1
Platforms	All

### **amber-alarm-action**

Synopsis	Enter the <b>amber-alarm-action</b> context
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Context	<b>configure card number fp number ingress network pool string resv-cbs amber-alarm-action</b>
Tree	<b>amber-alarm-action</b>
Description	<p>Commands in this context specify settings for the reserved Committed Burst Size (CBS) and step change when the amber alert threshold is exceeded.</p> <p>The reserved CBS defines the amount of buffer space within the pool that is not considered shared.</p>
Introduced	19.5.R1
Platforms	All

### **max number**

Synopsis	Maximum reserved CBS size of the pool
Context	<b>configure card number fp number ingress network pool string resv-cbs amber-alarm-action max number</b>
Tree	<b>max</b>
Description	<p>This command configures the maximum reserved CBS size of the pool.</p> <p>To enable adaptive CBS sizing, this command and the <b>step</b> command must be configured.</p> <p>The value for this command must not be more than the <b>configure card fp ingress network pool resv-cbs cbs</b> command.</p> <p>When the <b>configure card fp ingress network pool resv-cbs cbs</b> command is set to a value of zero (0), adaptive CBS sizing is disabled.</p>
Range	1 to 100
Units	percent
Introduced	19.5.R1
Platforms	All

### **step number**

Synopsis	Step-size percentage for reserved CBS size of the pool
Context	<b>configure card number fp number ingress network pool string resv-cbs amber-alarm-action step number</b>
Tree	<b>step</b>
Description	<p>This command configures the step-size percentage for the reserved CBS size of the pool.</p> <p>To enable adaptive CBS sizing, this command and the <b>max</b> command must be configured.</p>

When the **configure card fp ingress network pool resv-cbs cbs** command is set to a value of zero (0), adaptive CBS sizing is disabled.

Range	1 to 100
Units	percent
Introduced	19.5.R1
Platforms	All

### **cbs** *number*

Synopsis	Pool size reserved for CBS
Context	<b>configure card number fp number ingress network pool string resv-cbs cbs number</b>
Tree	<a href="#">cbs</a>
Description	This command configures the percentage of pool size reserved for CBS. For network, the default value is computed as the sum of the CBS request by the entities using the pool. For access, the default value is 30%.
Range	0 to 100
Units	percent
Introduced	19.5.R1
Platforms	All

### **slope-policy** *reference*

Synopsis	Slope policy
Context	<b>configure card number fp number ingress network pool string slope-policy reference</b>
Tree	<a href="#">slope-policy</a>
Description	This command specifies the slope policy that defines the high and low priority RED slope parameters and the time average factor.
Reference	<b>configure qos slope-policy string</b>
Introduced	19.5.R1
Platforms	All

### **queue-group** [[queue-group-name](#)] *reference instance-id number*

Synopsis	Enter the <b>queue-group</b> list instance
Context	<b>configure card number fp number ingress network queue-group reference instance-id number</b>

Tree	<a href="#">queue-group</a>
Description	Commands in this context configure IOM ingress network forwarding plane queue-group settings.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **[queue-group-name] reference**

Synopsis	Queue group name
Context	<b>configure</b> <a href="#">card number</a> <a href="#">fp number</a> <a href="#">ingress network</a> <a href="#">queue-group reference</a> <a href="#">instance-id number</a>
Tree	<a href="#">queue-group</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">ingress</a> <a href="#">queue-group string</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **instance-id number**

Synopsis	Instance ID
Context	<b>configure</b> <a href="#">card number</a> <a href="#">fp number</a> <a href="#">ingress network</a> <a href="#">queue-group reference</a> <a href="#">instance-id number</a>
Tree	<a href="#">queue-group</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **accounting-policy reference**

Synopsis	Accounting policy for the FP ingress queue group
Context	<b>configure</b> <a href="#">card number</a> <a href="#">fp number</a> <a href="#">ingress network</a> <a href="#">queue-group reference</a> <a href="#">instance-id number</a> <a href="#">accounting-policy reference</a>
Tree	<a href="#">accounting-policy</a>

Description	This command configures an accounting policy for the FP ingress queue group. You can only apply accounting policies associated with service billing to SAPs. Only associate the accounting policy with one interface at a time.
Reference	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **collect-stats** *boolean*

Synopsis	Collect statistics on FP ingress queue group
Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">fp</a> <i>number</i> <a href="#">ingress network queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i> <b>collect-stats</b> <i>boolean</i>
Tree	<a href="#">collect-stats</a>
Description	<p>When configured to <b>true</b>, the system collects accounting and statistical data for the queue group on the FP.</p> <p>When configured to <b>false</b>, the system still accumulates the statistics; however, the CPU does not obtain the results and write them to the billing file.</p> <p>If this command is set to <b>true</b> (after it had previously been set to <b>false</b>), the counters written to the billing file include the traffic collected when the command was set to <b>false</b>.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">fp</a> <i>number</i> <a href="#">ingress network queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **policer-control-policy**

Synopsis	Enter the <b>policer-control-policy</b> context
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Context	<b>configure</b> <i>card number fp number ingress network queue-group reference instance-id number policer-control-policy</i>
Tree	<a href="#">policer-control-policy</a>
Description	Commands in this context configure the IOM ingress network forwarding plane queue-group policer control policy settings.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## overrides

Synopsis	Enable the <b>overrides</b> context
Context	<b>configure</b> <i>card number fp number ingress network queue-group reference instance-id number policer-control-policy overrides</i>
Tree	<a href="#">overrides</a>
Description	Commands in this context configure the IOM ingress network forwarding plane queue-group policer control policy override settings.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## max-rate (*number* | *keyword*)

Synopsis	Maximum rate override
Context	<b>configure</b> <i>card number fp number ingress network queue-group reference instance-id number policer-control-policy overrides max-rate (number   keyword)</i>
Tree	<a href="#">max-rate</a>
Description	<p>This command defines the PIR leaky bucket decrement rate of the parent policer. Each time you apply the policer control policy to a SAP or subscriber instance a parent policer is created. Packets not discarded by the child policer associated with the SAP or subscriber instance are evaluated against the leaky bucket of the parent policer.</p> <p>For each packet, the system first decrements the bucket by the correct amount based on the decrement rate to derive the current bucket depth. The system compares the current depth to one of two discard thresholds associated with the packet. The first discard threshold is applied if the Fair Information Rate (FIR) leaky bucket of the child policer is in the confirming state. The second discard threshold is applied if the FIR leaky bucket of the child policer is in the exceed state.</p> <p>Only one of the two thresholds is applied per packet. If the current depth of the parent policer PIR bucket is less than the threshold value, the parent PIR bucket is in the conform state for that particular packet. If the depth is equal to or greater than the applied threshold, the bucket is in the violate state for the packet.</p>

If the result is conform, the bucket depth is increased by the size of the packet (plus or minus the per-packet offset setting in the child policer) and the parent policer does not discard the packet. If the result is violate, the bucket depth is not increased and the parent policer discards the packet. When the parent policer discards a packet, the bucket depth increases (PIR, CIR, and FIR) in the parent policer are canceled. This prevents packets that the parent policer discards from consuming the PIR, CIR, and FIR bandwidth of the child policers.

Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### priority-mbs-thresholds

Synopsis	Enter the <b>priority-mbs-thresholds</b> context
Context	<b>configure</b> <a href="#">card</a> <a href="#">number</a> <a href="#">fp</a> <a href="#">number</a> <a href="#">ingress</a> <a href="#">network</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">instance-id</a> <a href="#">number</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">priority-mbs-thresholds</a>
Tree	<a href="#">priority-mbs-thresholds</a>
Description	Commands in this context configure settings to derive the shared portion and fair portion for each priority level.  The system uses the shared portion and fair portion values to calculate the discard-unfair and discard-all MBS thresholds that enforce priority-sensitive rate-based discards within the root arbiter parent policer.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### min-threshold-separation (*number* | *keyword*)

Synopsis	Minimum separation between any two active thresholds
Context	<b>configure</b> <a href="#">card</a> <a href="#">number</a> <a href="#">fp</a> <a href="#">number</a> <a href="#">ingress</a> <a href="#">network</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">instance-id</a> <a href="#">number</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">priority-mbs-thresholds</a> <a href="#">min-threshold-separation</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">min-threshold-separation</a>
Description	This command configures the minimum separation between any two active thresholds in the parent policer.
Range	0 to 16777216
Units	bytes
Options	auto

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **priority** [[level](#)] *number*

Synopsis	Enter the <b>priority</b> list instance
Context	<b>configure</b> <a href="#">card number</a> <a href="#">fp number</a> <a href="#">ingress network queue-group reference</a> <a href="#">instance-id number</a> <a href="#">policer-control-policy overrides</a> <a href="#">priority-mbs-thresholds</a> <b>priority</b> <i>number</i>
Tree	<a href="#">priority</a>
Description	Commands in this context configure the list of priority MBS threshold priority settings for IOM ingress network forwarding plane queue-group policer control policy overrides.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **[level]** *number*

Synopsis	Priority level, higher number is stricter
Context	<b>configure</b> <a href="#">card number</a> <a href="#">fp number</a> <a href="#">ingress network queue-group reference</a> <a href="#">instance-id number</a> <a href="#">policer-control-policy overrides</a> <a href="#">priority-mbs-thresholds</a> <b>priority</b> <i>number</i>
Tree	<a href="#">priority</a>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **mbs-contribution** (*number* | *keyword*)

Synopsis	MBS contribution size override
Context	<b>configure</b> <a href="#">card number</a> <a href="#">fp number</a> <a href="#">ingress network queue-group reference</a> <a href="#">instance-id number</a> <a href="#">policer-control-policy overrides</a> <a href="#">priority-mbs-thresholds</a> <b>priority</b> <i>number</i> <b>mbs-contribution</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs-contribution</a>
Description	This command specifies the packet burst capacity required at the parent policer for a specified priority level with at least one child, and where the total capacity also includes the capacity of all lower thresholds.
Range	0 to 16777216
Units	bytes



Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **policy-name** *reference*

Synopsis	Policer control policy name
Context	<b>configure</b> <i>card number fp number ingress network queue-group reference instance-id number policer-control-policy policy-name reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos policer-control-policy string</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **policer-overrides**

Synopsis	Enter the <b>policer-overrides</b> context
Context	<b>configure</b> <i>card number fp number ingress network queue-group reference instance-id number policer-overrides</i>
Tree	<a href="#">policer-overrides</a>
Description	Commands in this context configure the policer overrides for the IOM ingress network forwarding plane queue-groups.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **policer** [[policer-id](#)] *reference*

Synopsis	Enter the <b>policer</b> list instance
Context	<b>configure</b> <i>card number fp number ingress network queue-group reference instance-id number policer-overrides policer reference</i>
Tree	<a href="#">policer</a>
Description	Commands in this context configure the list of policer override parameters for IOM ingress network forwarding plane queue-groups.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**[policer-id] reference**

Synopsis	Policer ID
Context	<b>configure</b> <a href="#">card</a> <a href="#">number</a> <a href="#">fp</a> <a href="#">number</a> <a href="#">ingress</a> <a href="#">network</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">instance-id</a> <a href="#">number</a> <a href="#">policer-overrides</a> <a href="#">policer</a> <a href="#">reference</a>
Tree	<a href="#">policer</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">ingress</a> <a href="#">queue-group</a> <a href="#">string</a> <a href="#">policer</a> <a href="#">number</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**cbs (number | keyword)**

Synopsis	CBS tolerance allowed by the policer
Context	<b>configure</b> <a href="#">card</a> <a href="#">number</a> <a href="#">fp</a> <a href="#">number</a> <a href="#">ingress</a> <a href="#">network</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">instance-id</a> <a href="#">number</a> <a href="#">policer-overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">cbs</a> ( <a href="#">number</a>   <a href="#">keyword</a> )
Tree	<a href="#">cbs</a>
Description	This command configures the CIR leaky bucket exceed threshold of the policer.  If the forwarding rate of the policer is equal to or less than the defined CIR, the CIR bucket depth hovers around the 0 depth, with spikes up to the maximum packet size in the offered load. If the forwarding rate increases beyond the profiling rate, the threshold caps the amount of data allowed to be in-profile above the rate.
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**mbs (number | keyword)**

Synopsis	Maximum burst tolerance allowed by the policer
Context	<b>configure</b> <a href="#">card</a> <a href="#">number</a> <a href="#">fp</a> <a href="#">number</a> <a href="#">ingress</a> <a href="#">network</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">instance-id</a> <a href="#">number</a> <a href="#">policer-overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">mbs</a> ( <a href="#">number</a>   <a href="#">keyword</a> )
Tree	<a href="#">mbs</a>
Description	This command configures the PIR leaky bucket violate threshold of the policer.  Ingress, trusted in-profile packets and untrusted high priority packets use the high priority violate threshold and trusted out-of-profile. Untrusted low priority packets use the low priority violate threshold.

If the offered rate of the policer is equal to or less than the defined rate, the PIR bucket depth hovers around the 0 depth, with spikes up to the maximum packet size in the offered load. If the offered rate increases beyond the metering rate, the threshold caps the amount of data allowed above the rate.

The low priority violate threshold provides a smaller burst size for the lower priority traffic associated with the policer. Because all lower priority traffic is discarded at the lower burst tolerance size, the remaining burst tolerance is available for higher priority traffic.

Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **packet-byte-offset** *number*

Synopsis	Packet size adjustment
Context	<b>configure</b> <i>card number fp number ingress network queue-group reference instance-id number policer-overrides policer reference packet-byte-offset number</i>
Tree	<a href="#">packet-byte-offset</a>
Description	<p>This command modifies the size of each packet handled by the policer by adding or subtracting a number of bytes. The actual packet size is not modified; only the size used to determine the bucket depth impact is changed.</p> <p>Use this command to add downstream frame encapsulation or remove portions of packet headers.</p> <p>When child policers add to or subtract from the packet size, the minimum threshold separation value of the parent policer must be modified by the same amount.</p>
Range	-32 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <i>card number fp number ingress network queue-group reference instance-id number policer-overrides policer reference rate</i>
Tree	<a href="#">rate</a>
Description	Commands in this context configure the metering and optional profiling rates of the policer.

The metering rate is used by the system to configure the PIR leaky bucket decrement rate and the profiling rate configures the CIR leaky bucket decrement rate. The decrement function empties the bucket; packets applied to the bucket attempt to fill it based on its packet size. If the bucket fills faster than the rate that it empties, the bucket depth eventually reaches its exceeded (CIR) or violate (PIR) threshold.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **cir** (*number* | *keyword*)

Synopsis	CIR for the policer
Context	<b>configure</b> <i>card number fp number ingress network queue-group reference instance-id number policer-overrides policer reference rate cir (number   keyword)</i>
Tree	<a href="#">cir</a>
Description	This command overrides the default CIR rate of the policer. When the policer is first created, the profiling rate defaults to 0 kb/s. When <b>max</b> is configured, the maximum policer rate used is equal to the maximum capacity of the card that the policer is configured for. If the policer rate is set to a value larger than the maximum rate possible for the card, the CIR used is equivalent to maximum.
Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **pir** (*number* | *keyword*)

Synopsis	PIR for the policer
Context	<b>configure</b> <i>card number fp number ingress network queue-group reference instance-id number policer-overrides policer reference rate pir (number   keyword)</i>
Tree	<a href="#">pir</a>
Description	This command configures the metering rate of the policer for the PIR leaky bucket. When the policer is first created, the metering rate defaults to max. When <b>max</b> is configured, the maximum policer rate used is equal to the maximum capacity of the card that the policer is configured for. If the policer rate is set to a value larger than the maximum rate possible for the card, the PIR used is equivalent to maximum.
Range	1 to 2000000000

Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **stat-mode** *keyword*

Synopsis	Stat mode for the policer
Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">fp</a> <i>number</i> <a href="#">ingress network queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i> <a href="#">policer-overrides policer</a> <i>reference</i> <b>stat-mode</b> <i>keyword</i>
Tree	<a href="#">stat-mode</a>
Description	This command specifies the forwarding plane counters that allow offered, output, and discard accounting to occur for the policer.
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **queue-policy** *reference*

Synopsis	Network queue policy
Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">fp</a> <i>number</i> <a href="#">ingress network queue-policy</a> <i>reference</i>
Tree	<a href="#">queue-policy</a>
Reference	<b>configure</b> <a href="#">qos network-queue</a> <i>string</i>
Introduced	19.5.R1
Platforms	All

### **policy-accounting**

Synopsis	Enter the <b>policy-accounting</b> context
Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">fp</a> <i>number</i> <a href="#">ingress policy-accounting</a>
Tree	<a href="#">policy-accounting</a>
Description	Commands in this context configure policy accounting. Use policy accounting to collect statistics about the amount of traffic matching particular routes or to police traffic associated with certain routes as destinations of the traffic.

Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **classes** *number*

Synopsis	Number of accounting classes for the forwarding plane
Context	<b>configure</b> <i>card number fp number ingress policy-accounting classes number</i>
Tree	<a href="#">classes</a>
Description	This command specifies the maximum number of source and destination classes that can be instantiated for accounting purposes on the interfaces of a specific card or FP. When unconfigured, resources are not reserved for source or destination classes.
Range	1000 to 128000
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **policers** *number*

Synopsis	Number of policer resources for policy accounting
Context	<b>configure</b> <i>card number fp number ingress policy-accounting policers number</i>
Tree	<a href="#">policers</a>
Range	1 to 64000
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **ingress-buffer-allocation** *decimal-number*

Synopsis	Ingress buffer pool allocation for the forwarding plane
Context	<b>configure</b> <i>card number fp number ingress-buffer-allocation decimal-number</i>
Tree	<a href="#">ingress-buffer-allocation</a>
Description	This command configures an ingress buffer allocation for the FP. Ingress buffer allocation applies to user-accessible buffers (total buffers less those reserved for system use). The ingress buffer allocation determines how much of the user-accessible buffers are available for ingress purposes. The remaining buffers are available for egress purposes.
Range	20.00 to 80.00
Units	percent

Default	50.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

### **init-extract-prio-mode** *keyword*

Synopsis	Initial drop priority mode of extracted traffic
Context	<b>configure</b> <i>card number fp number</i> <b>init-extract-prio-mode</b> <i>keyword</i>
Tree	<a href="#">init-extract-prio-mode</a>
Description	This command specifies the scheme to select the initial drop priority of extracted control plane traffic.  The initial drop priority of extracted packets can be either low or high priority. The drop priority can be altered subsequently by mechanisms such as CPU protection.  High priority traffic receives preferential treatment in control plane congestion situations over low priority traffic.
Options	uniform, l3-classify
Default	uniform
Introduced	16.0.R1
Platforms	All

### **stable-pool-sizing** *boolean*

Synopsis	Enable stable pool sizing for the forwarding plane
Context	<b>configure</b> <i>card number fp number</i> <b>stable-pool-sizing</b> <i>boolean</i>
Tree	<a href="#">stable-pool-sizing</a>
Description	When configured to <b>true</b> , the router provides a stable buffer pool allocation environment for all default port buffer pools on the forwarding plane. This stable environment is provided at the expense of optimal buffer allocation between the various port buffer pools.  When configured to <b>false</b> , the router disables stable pool sizing on the forwarding plane. Existing buffer pools are resized according to normal pool sizing behavior.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**level** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	License level of the card
Context	<b>configure card</b> <i>number level keyword</i>
Tree	<a href="#">level</a>
Description	<p>This command configures the license level of the card.</p> <p>New generations of cards include variants controlled by hardware and software licensing. For these cards, the license level must be provisioned in addition to the card type. A card cannot become operational unless the provisioned license level matches the license level of the card installed into the slot. The set of license levels varies by card type.</p> <p>The provisioned level controls aspects related to connector provisioning and the consumption of hardware egress user queues and egress policers. Changes to the provisioned license level may be blocked if configuration exists that would not be permitted with the new target license level.</p> <p>If the license level is not specified, the level is set to the highest license level for that card.</p>
Options	unrestricted, he, er, cr, he1200g+, er1200g+, cr1200g+, he400g, er400g, cr400g, he400g+, er400g+, cr400g+, he800g+, er800g+, cr800g+, he4800g+, er4800g+, cr4800g+, he4800g, er4800g, cr4800g, he2400g+, er2400g+, cr2400g+, he2400g, er2400g, cr2400g, he9600g, er9600g, cr9600g, he14400g, er14400g, cr14400g, he14400g+, er14400g+, cr14400g+, he2800g+, er2800g+, cr2800g+, he6000g+, er6000g+, cr6000g+, he18000g+, er18000g+, cr18000g+, he19200g, er19200g, cr19200g
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1se

**mda** [[mda-slot](#)] *number*

Synopsis	Enter the <b>mda</b> list instance
Context	<b>configure card</b> <i>number mda number</i>
Tree	<a href="#">mda</a>
Description	Commands in this context cover attributes for specific MDA and XMA.
Introduced	16.0.R1
Platforms	All



**[mda-slot] number**

Synopsis	MDA or XMA slot
Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">mda</a> <i>number</i>
Tree	<a href="#">mda</a>
Range	1 to 6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**access**

Synopsis	Enter the <b>access</b> context
Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">mda</a> <i>number</i> <a href="#">access</a>
Tree	<a href="#">access</a>
Description	Commands in this context configure egress and ingress pool policy parameters. Access egress and ingress pools are only allocated on channelized MDAs.
Introduced	16.0.R1
Platforms	All

**egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">mda</a> <i>number</i> <a href="#">access</a> <a href="#">egress</a>
Tree	<a href="#">egress</a>
Introduced	16.0.R1
Platforms	All

**ingress**

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">mda</a> <i>number</i> <a href="#">access</a> <a href="#">ingress</a>
Tree	<a href="#">ingress</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the MDA
Context	<b>configure</b> <i>card number mda number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**clock-mode**

Synopsis	Enter the <b>clock-mode</b> context
Context	<b>configure</b> <i>card number mda number clock-mode</i>
Tree	<a href="#">clock-mode</a>
Description	Commands in this context define the clock mode on the MDA. This context is supported only on CES MDAs.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**mode** *keyword*

Synopsis	Clock mode
Context	<b>configure</b> <i>card number mda number clock-mode mode keyword</i>
Tree	<a href="#">mode</a>
Options	adaptive, differential
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**timestamp-freq** *number*

Synopsis	Differential timestamp frequency
Context	<b>configure</b> <i>card number mda number clock-mode timestamp-freq number</i>
Tree	<a href="#">timestamp-freq</a>
Range	19440   77760   103680

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## **egress-xpl**

Synopsis	Enter the <b>egress-xpl</b> context
Context	<b>configure</b> <i>card number mda number</i> <b>egress-xpl</b>
Tree	<b>egress-xpl</b>
Description	Commands in this context specify settings for the fail-on-error feature.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## **threshold** *number*

Synopsis	Threshold value for XPL errors
Context	<b>configure</b> <i>card number mda number</i> <b>egress-xpl</b> <b>threshold</b> <i>number</i>
Tree	<b>threshold</b>
Description	This command configures the threshold for XPL errors. If the number of XPL errors exceeds the threshold value defined by the <b>window</b> <i>value</i> command, the MDA is placed in the failed state.
Range	1 to 1000000
Units	xpl errors
Default	1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## **window** *number*

Synopsis	Time interval to measure XPL error frequency
Context	<b>configure</b> <i>card number mda number</i> <b>egress-xpl</b> <b>window</b> <i>number</i>
Tree	<b>window</b>
Description	This command configures the time interval used to measure the frequency of XPL errors for the fail-on-error feature. If the number of XPL errors exceeds the threshold value in defined by this command, the MDA is placed in the Failed state.
Range	1 to 1440
Units	minutes

Default	60
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **event** [*type*] *keyword*

Synopsis	Enter the <b>event</b> list instance
Context	<b>configure</b> <i>card number</i> <i>mda number</i> <b>event</b> <i>keyword</i>
Tree	<b>event</b>
Description	Commands in this context allow the user to control the action taken when a specific hardware error event is raised against the target MDA. If no event action has been created for a specific event type, the management plane of the router ignores the hardware errors related to that event type.
Introduced	19.7.R1
Platforms	All

### **[type]** *keyword*

Synopsis	MDA event type being monitored
Context	<b>configure</b> <i>card number</i> <i>mda number</i> <b>event</b> <i>keyword</i>
Tree	<b>event</b>
Description	This command configures the type of event to be acted upon. <ul style="list-style-type: none"> <li>• <b>soft-error</b> — Defines the action to take when soft errors are detected on the MDA.</li> <li>• <b>internal-frame-loss</b> — Provides system detected frame loss in the traffic transiting the MDA.</li> <li>• <b>memory-error</b> — Provides the user options to handle MDA memory error events on MDAs. This feature is supported on FP2- and FP3-based Ethernet MDAs and IMMs.</li> <li>• <b>data-link-error</b> — Provides the user options to handle datapath link errors on an MDA.</li> </ul>
Options	<b>soft-error</b> , <b>internal-frame-loss</b> , <b>memory-error</b> , <b>datapath-link-error</b>
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	All

### **action** *keyword*

Synopsis	Action when a specific hardware error event is raised
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Context	<b>configure card number mda number event keyword action keyword</b>
Tree	<b>action</b>
Description	<p>This command defines the action taken when a specific hardware error event is detected on the target MDA.</p> <p>When no event action is specified for an event type, the hardware errors related to the event type are ignored by the management plane of the router.</p> <p>Actions include the following:</p> <ul style="list-style-type: none"> <li>• <b>log-only</b> — Pass the log event to log management. No other action is taken.</li> <li>• <b>reset-md</b> — Reset the MDA.</li> <li>• <b>fail-md</b> — Set the operational state of the MDA to Failed. This Failed state persists until the <b>clear mda</b> command is issued (reset) or the MDA is removed and reinserted (re-seated).</li> </ul>
Options	none, log-only, reset, fail
Introduced	19.7.R1
Platforms	All

### **fail-on-error** *boolean*

Synopsis	Set operational state to Failed if an error is detected
Context	<b>configure card number mda number fail-on-error boolean</b>
Tree	<b>fail-on-error</b>
Description	<p>When configured to <b>true</b>, the fail-on-error feature is enabled on the MDA. When a defined rate of egress or ingress XPL errors occur on an MDA within a specified time interval, the MDA is placed in the Failed state. This can force an APS switchover or traffic to be rerouted.</p> <p>The purpose of this feature is to avoid situations where traffic is forced to use a physical link that suffers from errors but is still technically operational. The feature uses values configured in the <b>configure card mda egress-xpl</b> and <b>configure card mda ingress-xpl</b> contexts.</p> <p>See "Fail-on-error overview" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Troubleshooting Guide</i> for more information.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **ingress-xpl**

Synopsis	Enter the <b>ingress-xpl</b> context
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Context	<b>configure</b> <a href="#">card number</a> <a href="#">mda number</a> <a href="#">ingress-xpl</a>
Tree	<a href="#">ingress-xpl</a>
Description	Commands in this context specify settings for ingress XPL error occurrences.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **threshold** *number*

Synopsis	Threshold value for XPL errors
Context	<b>configure</b> <a href="#">card number</a> <a href="#">mda number</a> <a href="#">ingress-xpl</a> <b>threshold</b> <i>number</i>
Tree	<a href="#">threshold</a>
Description	This command configures the threshold for XPL errors. If the number of XPL errors exceeds the threshold value defined by the <b>window</b> <i>value</i> command, the MDA is placed in the failed state.
Range	1 to 1000000
Units	xpl errors
Default	1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **window** *number*

Synopsis	Time interval to measure XPL error frequency
Context	<b>configure</b> <a href="#">card number</a> <a href="#">mda number</a> <a href="#">ingress-xpl</a> <b>window</b> <i>number</i>
Tree	<a href="#">window</a>
Description	This command configures the time interval used to measure the frequency of XPL errors for the fail-on-error feature. If the number of XPL errors exceeds the threshold value in defined by this command, the MDA is placed in the Failed state.
Range	1 to 1440
Units	minutes
Default	60
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**level keyword****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MDA card level
Context	<b>configure card number mda number level keyword</b>
Tree	<b>level</b>
Options	unrestricted, he2400g, he1600g, he1200g, er2400g, er1600g, er1200g, cr2400g, cr1600g, cr1200g, he2400g+, er2400g+, cr2400g+, he3600g, er3600g, cr3600g, he3600gdd, er3600gdd, cr3600gdd, he4800g, er4800g, cr4800g, he4800g+, er4800g+, cr4800g+, he600g, er600g, cr600g, he1200g+, er1200g+, cr1200g+, he2400g+4t, er2400g+4t, cr2400g+4t, he9600g, er9600g, cr9600g, he9600g+, er9600g+, cr9600g+, he14400g, er14400g, cr14400g, he14400g+, er14400g+, cr14400g+, he12000g+, er12000g+, cr12000g+, he18000g+, er18000g+, cr18000g+
Introduced	16.0.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**mda-type keyword****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MDA type for the slot
Context	<b>configure card number mda number mda-type keyword</b>
Tree	<b>mda-type</b>
Description	<p>This command provisions a specific MDA type to the device configuration for the slot. The MDA can be pre-provisioned and an MDA must be provisioned before connectors or ports can be configured.</p> <p>A maximum of two MDAs can be provisioned on an IOM or XCM. XMAs are provisioned using MDA commands.</p> <p>A medium severity alarm is generated if an MDA is inserted that does not match the MDA type configured for the slot. This alarm is cleared when the correct MDA is inserted or the configuration is modified. A high severity alarm is raised when an administratively enabled MDA is removed from the chassis. This alarm is cleared if either the correct MDA type is inserted or the configuration is modified. A low severity alarm is issued if an MDA is removed that is administratively disabled.</p> <p>An MDA can only be provisioned in a slot if the MDA type is allowed in the MDA slot. An error message is generated when an MDA is provisioned in a slot where it is not allowed</p> <p>Some MDA hardware can support two different firmware loads. One load includes the base Ethernet functionality, including 10G WAN mode, but does not include 1588 port-</p>

based timestamping. The second load includes the base Ethernet functionality and 1588 port-based timestamping, but does not include 10G WAN mode. These are identified as two MDA types that are the same, except for a “-ptp” suffix to indicate the second loadset. A hard reset of the MDA occurs when switching between the two provisioned types.

An alarm is raised if partial or complete MDA failure is detected. The alarm is cleared when the error condition ceases.

New generations of XMAs include variants controlled through hardware and software licensing. For these XMA, the license level must be provisioned in addition to the MDA type. An XMA cannot become operational unless the provisioned license level matches the license level of the XMA installed into the slot.

The set of license levels varies by MDA type. The provisioned level controls aspects related to connector provisioning and the consumption of hardware egress queues and egress policers. Changes to the provisioned license level may be blocked if configuration that would not be permitted with the new target license level exists. If the license level is not specified, the level is set to the highest license level for that XMA.

Options	x12-400g-qsfdd, x6-200g-cfp2-dco, cx20-10g-sfp, cx2-100g-cfp, p10-10g-sfp, p1-100g-cfp, p3-40g-qsf, p6-10g-sfp, x40-10g-sfp, m40-10g-sfp, x4-100g-cxp, cx6-40g-qsf, m4-100g-cxp, p20-1gb-sfp, s36-100gb-qsf28-3.6t, p-isa2-ms, p-isa2-ms-e, isa2-aa, isa2-tunnel, isa2-bb, x4-100g-cfp2, cx72-1g-csf, maxp1-100gb-cfp, ma4-10gb-sfp+, maxp10-10gb-sfp+, me10-10gb-sfp+, ma2-10gb-sfp+12-1gb-sfp, maxp6-10gb-sfp+1-40gb-qsf+, ma44-1gb-csf, ma20-1gb-tx, m20-10g-sfp+, me1-100gb-cfp2, m4-100g-cfp4, p1-100g-tun-b, maxp1-100gb-cfp2, maxp1-100gb-cfp4, isa-ms-v, isa-aa-v, isa-tunnel-v, isa-bb-v, m20-v, me-isa2-ms, me-isa2-ms-e, me40-1gb-csf, m4-1g-tx+20-1g-sfp+6-10g-sfp+, me2-100gb-cfp4, me6-10gb-sfp+, isa2-video, me2-100gb-qsf28, i6-10/100eth-tx, x2-100g-tun, i2-sdi, i2-cellular, me12-10/1gb-sfp+, me16-25gb-sfp28+2-100gb-qsf28, me6-100gb-qsf28, x6-400g-cfp8, me2-100gb-ms-qsf28, s18-100gb-qsf28, x40-10g-sfp-ptp, m40-10g-sfp-ptp, m36-100g-qsf28, m48-sfp+2-qsf28, m10-10g-sfp+, m20-1g-csf, m6-10g-sfp++1-100g-qsf28, me3-200gb-cfp2-dco, x24-100g-qsf28, me12-100gb-qsf28, i1-wlan, s36-400gb-qsfdd, m24-sfp++8-sfp28+2-qsf28, s36-100gb-qsf28, a32-chds1v2, m48-sfp++6-qsf28, maxp10-10/1gb-msec-sfp+, m4-10g-sfp++1-100g-cfp2, i3-10/100eth-tx, me3-400gb-qsfdd, m18-25g-sfp28, m14-10g-sfp++4-1g-tx, m6-10g-sfp++4-25g-sfp28, me6-400gb-qsfdd, me8-10/25gb-sfp28, m10-1g-sfp+2-10g-sfp+, m6-qsfdd+48-sfp56, m32-qsf28+4-qsfdd, m36-qsfdd, m1-400g-qsfdd+1-100g-qsf28, m5-100g-qsf28, m48-800g-qsfdd-1x, m24-800g-qsfdd-1, ms36-800g-qsfdd, x2-s36-800g-qsfdd-18.0t, m48-400g-qsfdd-1, m80-200g-sfpdd+12-800g-qsfdd-1x, m40-200g-sfpdd+6-800g-qsfdd-1, m80-200g-sfpdd+12-400g-qsfdd-1, m2-cfp2, x2-s36-800g-qsfdd-12.0t, me16-25gb-sfp28+2-100gb-qsf-b, m10-50g-sfp56
Introduced	16.0.R1
Platforms	All

## network

Synopsis Enter the **network** context



Context	<b>configure</b> <a href="#">card number</a> <a href="#">mda number</a> <a href="#">network</a>
Tree	<a href="#">network</a>
Description	Commands in this context configure egress and ingress pool policy parameters for the network. Network egress pools are only allocated on channelized MDAs.
Introduced	16.0.R1
Platforms	All

## egress

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">card number</a> <a href="#">mda number</a> <a href="#">network</a> <a href="#">egress</a>
Tree	<a href="#">egress</a>
Introduced	16.0.R1
Platforms	All

## ingress

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">card number</a> <a href="#">mda number</a> <a href="#">network</a> <a href="#">ingress</a>
Tree	<a href="#">ingress</a>
Introduced	16.0.R1
Platforms	All

## power-priority-level *number*

Synopsis	Power priority level for the MDA
Context	<b>configure</b> <a href="#">card number</a> <a href="#">mda number</a> <a href="#">power-priority-level</a> <i>number</i>
Tree	<a href="#">power-priority-level</a>
Range	1 to 200
Default	150
Introduced	16.0.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**reset-on-recoverable-error** *boolean*

Synopsis	Reset MDA for fatal memory parity error on a Q-chip
Context	<b>configure</b> <i>card number</i> <i>mda number</i> <b>reset-on-recoverable-error</b> <i>boolean</i>
Tree	<b>reset-on-recoverable-error</b>
Description	When configured to <b>true</b> , the MDA resets when a fatal memory parity error is detected on a Q-chip of the MDA, regardless of the setting of the <b>fail-on-error</b> configuration for the MDA.  When configured to <b>false</b> , the recovery action is taken instead of resetting the MDA.
Default	false
Introduced	16.0.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**sync-e** *keyword*

Synopsis	Synchronous Ethernet capability
Context	<b>configure</b> <i>card number</i> <i>mda number</i> <b>sync-e</b> <i>keyword</i>
Tree	<b>sync-e</b>
Description	This command enables synchronous Ethernet on the MDA. When enabled, any port on the MDA can be used as a source port in the central frequency clock configuration, under the <b>configure system central-frequency-clock</b> context.
Options	true, false
Introduced	16.0.R1
Platforms	All

**upgrade** [*upgrade-index*] *number*

Synopsis	Enter the <b>upgrade</b> list instance
Context	<b>configure</b> <i>card number</i> <i>mda number</i> <b>upgrade</b> <i>number</i>
Tree	<b>upgrade</b>
Description	Commands in this context configure the license level upgrade for the MDA. You can apply multiple upgrades to an MDA. The first upgrade must use index 1, then index 2, and so on. When removing upgrades, remove the largest index first, followed by the next largest, and so on.  Some upgrades require a hard reset of the MDA to take effect. In general, this is required when the full duplex bandwidth changes as a result of the upgrade.
Introduced	16.0.R4
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**[upgrade-index] number**

Synopsis	Order of the upgrade instance
Context	<b>configure card number mda number upgrade number</b>
Tree	<b>upgrade</b>
Range	1 to 6
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**path keyword****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upgrade path of the MDA for the slot
Context	<b>configure card number mda number upgrade number path keyword</b>
Tree	<b>path</b>
Description	This command configures the upgrade path for the MDA in the slot. The path indicates the starting level and the new level that is applied due to the upgrade.
Options	cr1200g-cr1600g, cr1600g-cr2400g, er1200g-er1600g, er1600g-er2400g, he1200g-he1600g, he1600g-he2400g, cr1200g-er1200g, er1200g-he1200g, cr1600g-er1600g, er1600g-he1600g, cr2400g-er2400g, er2400g-he2400g, any2400g-2400g+, cr3600g-cr4800g, er3600g-er4800g, he3600g-he4800g, cr3600g-er3600g, er3600g-he3600g, cr4800g-er4800g, er4800g-he4800g, any3600g-3600gdd, any4800g-4800g+, cr600g-cr1200g, er600g-er1200g, he600g-he1200g, cr600g-er600g, er600g-he600g, any1200g-1200g+, any2400g-2400g+4t, cr-er9600g, er-he9600g, any9600g-9600g+, cr-er14400g, er-he14400g, any14400g-14400g+, he9600g-he12000g+, er9600g-er12000g+, cr9600g-cr12000g+, he14400g-he18000g+, er14400g-er18000g+, cr14400g-cr18000g+, cr-er12000g+, er-he12000g+, cr-er18000g+, er-he18000g+
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**xconnect**

Synopsis	Enter the <b>xconnect</b> context
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Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">mda</a> <i>number</i> <a href="#">xconnect</a>
Tree	<a href="#">xconnect</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **mac** [[mac-id](#)] *number*

Synopsis	Enter the <b>mac</b> list instance
Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">mda</a> <i>number</i> <a href="#">xconnect</a> <a href="#">mac</a> <i>number</i>
Tree	<a href="#">mac</a>
Description	Commands in this context configure the attributes of the MDA loopback (cross-connect) in the MAC chip.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **[mac-id]** *number*

Synopsis	MAC ID for the MDA cross-connect
Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">mda</a> <i>number</i> <a href="#">xconnect</a> <a href="#">mac</a> <i>number</i>
Tree	<a href="#">mac</a>
Range	1 to 12
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">mda</a> <i>number</i> <a href="#">xconnect</a> <a href="#">mac</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	0 to 255
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**loopback** [**loopback-id**] *number*

Synopsis	Enter the <b>loopback</b> list instance
Context	<b>configure</b> <b>card</b> <i>number</i> <b>mda</b> <i>number</i> <b>xconnect</b> <b>mac</b> <i>number</i> <b>loopback</b> <i>number</i>
Tree	<b>loopback</b>
Description	Commands in this context configure the attributes of the loopback on a MAC chip. The system and services can start using the loopback only when a port is associated with it (for example, port 1/1/m1/1, where m1 represents the MAC ID).
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**[loopback-id]** *number*

Synopsis	Loopback ID for the MDA cross-connect
Context	<b>configure</b> <b>card</b> <i>number</i> <b>mda</b> <i>number</i> <b>xconnect</b> <b>mac</b> <i>number</i> <b>loopback</b> <i>number</i>
Tree	<b>loopback</b>
Range	1 to 2
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**bandwidth** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maximum bandwidth for a Layer 2 rate for MAC loopback
Context	<b>configure</b> <b>card</b> <i>number</i> <b>mda</b> <i>number</i> <b>xconnect</b> <b>mac</b> <i>number</i> <b>loopback</b> <i>number</i> <b>bandwidth</b> <i>number</i>
Tree	<b>bandwidth</b>
Range	10   25   40   100   400
Units	gigabps
Default	100
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**description string**

Synopsis	Text description
Context	<b>configure</b> <i>card number</i> <i>mda number</i> <i>xconnect mac number</i> <i>loopback number</i> <i>description string</i>
Tree	<i>description</i>
String Length	0 to 255
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**power-save boolean**

Synopsis	Place card in power-save mode when not in use
Context	<b>configure</b> <i>card number</i> <i>power-save boolean</i>
Tree	<i>power-save</i>
Description	<p>When configured to <b>true</b>, this command enables the power-save mode on the card when it is not in use. The power-save mode allows the card to be installed and configured in a platform for future use, while having minimal impact on the overall power consumption.</p> <p>A card placed in the power-save mode is reset, forced into an idle state, and consumes minimal power. In power save mode, the download of a software image to the card is not allowed. The card must be administratively disabled before it is placed in the power-save mode.</p> <p>Cards in the power save mode do not count in the intelligent power management budget and they also do not pass traffic.</p> <p>When configured to <b>false</b>, this command removes the card from power-save mode.</p>
Default	false
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a8, 7750 SR-2e, 7750 SR-3e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**reset-on-recoverable-error boolean**

Synopsis	Reset card for fatal memory parity error on a Q-chip
Context	<b>configure</b> <i>card number</i> <i>reset-on-recoverable-error boolean</i>
Tree	<i>reset-on-recoverable-error</i>
Description	When configured to <b>true</b> , the card is reset when a fatal memory parity error is detected on a Q-chip of the card, regardless of the setting of the <b>fail-on-error</b> configuration for the card.

	When configured to <b>false</b> , the recovery action is taken instead of resetting the card.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

### **upgrade** [**upgrade-index**] *number*

Synopsis	Enter the <b>upgrade</b> list instance
Context	<b>configure</b> <i>card number upgrade number</i>
Tree	<b>upgrade</b>
Description	<p>Commands in this context assign a license level upgrade to the card, XIOM, or XMA. There can be multiple upgrades applied to a card, XIOM, or XMA. The first upgrade must use index 1, and then next index 2, and so on. Also, when removing upgrades, the largest index must be removed first, and then the next largest removed, and so on.</p> <p>The path indicates the starting level and the new level that will apply due to the upgrade. For example, "cr1200g-cr1600g" can be applied to an XMA that is currently at the cr1200g level and after application of the upgrade, the operational level of the XMA will be cr1600g.</p> <p>There must be an upgrade license available for the path specified. Available upgrades can be checked using the <b>show licensing entitlements</b> command.</p> <p>Some upgrades require a hard reset of the card or MDA to take effect. In general, this is required when the Full Duplex bandwidth is being changed.</p>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-1se

### **[upgrade-index]** *number*

Synopsis	Order of the upgrade value
Context	<b>configure</b> <i>card number upgrade number</i>
Tree	<b>upgrade</b>
Range	1 to 6
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-1se

## path keyword

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upgrade path of the target module for the slot
Context	<b>configure</b> <i>card number</i> <i>upgrade number</i> <i>path</i> <i>keyword</i>
Tree	<a href="#">path</a>
Description	This command configures the upgrade path associated with the upgrade instance for the target module in the slot. The path indicates the starting level and the new level that applies during the upgrade.
Options	cr-er, er-he, cr400g-cr1200g+, er400g-er1200g+, he400g-he1200g+, cr-er1200g+, er-he1200g+, cr-er400g+, er-he400g+, cr-er800g+, er-he800g+, cr400g-cr800g+, er400g-er800g+, he400g-he800g+, cr800g-cr1200g+, er800g-er1200g+, he800g-he1200g+, cr-er2400g, er-he2400g, any2400g-2400g+, cr-er4800g, er-he4800g, any4800g-4800g+, cr-er9600g, er-he9600g, cr-er14400g, er-he14400g, he9600g-he14400g, er9600g-er14400g, cr9600g-cr14400g, any14400g-14400g+, any2400g-2800g+, any4800g-6000g+, any14400g-18000g+, he2400g-he2800g+, er2400g-er2800g+, cr2400g-cr2800g+, he4800g-he6000g+, er4800g-er6000g+, cr4800g-cr6000g+, he14400g-he19200g, er14400g-er19200g, cr14400g-cr19200g, cr-er2800g+, er-he2800g+, cr-er6000g+, er-he6000g+, cr-er19200g, er-he19200g
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-1se

## virtual-scheduler-adjustment

Synopsis	Enter the <b>virtual-scheduler-adjustment</b> context
Context	<b>configure</b> <i>card number</i> <a href="#">virtual-scheduler-adjustment</a>
Tree	<a href="#">virtual-scheduler-adjustment</a>
Description	Commands in this context configure virtual scheduler parameters. This is only applicable to queues and policers associated to a scheduler.
Introduced	16.0.R1
Platforms	All

## internal-scheduler-weight-mode keyword

Synopsis	Internal scheduler weight mode
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Context	<b>configure</b> <i>card number</i> <a href="#">virtual-scheduler-adjustment</a> <a href="#">internal-scheduler-weight-mode</a> <i>keyword</i>
Tree	<a href="#">internal-scheduler-weight-mode</a>
Description	This command specifies the internal scheduler (tier 0) weight mode for all ingress queues on a LAG on the card on which it is applied.
Options	auto, force-equal, offered-load, capped-offered-load
Default	auto
Introduced	16.0.R1
Platforms	All

## interval

Synopsis	Enter the <b>interval</b> context
Context	<b>configure</b> <i>card number</i> <a href="#">virtual-scheduler-adjustment</a> <a href="#">interval</a>
Tree	<a href="#">interval</a>
Introduced	16.0.R1
Platforms	All

## rate-calculation-minimum

Synopsis	Enter the <b>rate-calculation-minimum</b> context
Context	<b>configure</b> <i>card number</i> <a href="#">virtual-scheduler-adjustment</a> <a href="#">interval</a> <a href="#">rate-calculation-minimum</a>
Tree	<a href="#">rate-calculation-minimum</a>
Description	<p>Commands in this context override the default minimum time that must elapse before a policer or queue's offered rate can be recalculated. A minimum time between offered rate calculations is enforced to both prevent inaccurate estimation of the offered rate and excessive input to the virtual scheduler process.</p> <p>To smooth out rapidly fluctuating offered rates, the system averages the measured offered rate with a window of previously measured offered traffic statistics and knowledge of the time between the samples.</p>
Introduced	16.0.R1
Platforms	All

## fast-queue *decimal-number*

Synopsis	Minimum rate calculation time for fast queues
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Context	<b>configure</b> <i>card number</i> <a href="#">virtual-scheduler-adjustment interval rate-calculation-minimum fast-queue</a> <i>decimal-number</i>
Tree	<a href="#">fast-queue</a>
Range	0.01 to 1000.00
Units	percent
Default	100.00
Introduced	16.0.R1
Platforms	All

### **slow-queue** *decimal-number*

Synopsis	Minimum rate calculation time for slow queues
Context	<b>configure</b> <i>card number</i> <a href="#">virtual-scheduler-adjustment interval rate-calculation-minimum slow-queue</a> <i>decimal-number</i>
Tree	<a href="#">slow-queue</a>
Range	0.01 to 1000.00
Units	percent
Default	100.00
Introduced	16.0.R1
Platforms	All

### **scheduler-run-minimum** *decimal-number*

Synopsis	Minimum time of the scheduler run
Context	<b>configure</b> <i>card number</i> <a href="#">virtual-scheduler-adjustment interval scheduler-run-minimum</a> <i>decimal-number</i>
Tree	<a href="#">scheduler-run-minimum</a>
Description	<p>This command overrides the default minimum time that must elapse before a virtual scheduler can redistribute bandwidth based on changes to the offered rates of member policers or queues.</p> <p>A minimum run interval is enforced to manage the number of batched queue changes before reacting to the changed rates. Because the periodic function of determining policer or queue offered rates is performed sequentially, the interval allows the policer and queue rates to be determined before the bandwidth distribution to the policers and queues.</p>
Range	0.01 to 1000.00
Units	percent
Default	100.00

Introduced	16.0.R1
Platforms	All

### **task-scheduling** *decimal-number*

Synopsis	Task scheduling interval
Context	<b>configure</b> <i>card number</i> <a href="#">virtual-scheduler-adjustment interval</a> <b>task-scheduling</b> <i>decimal-number</i>
Tree	<a href="#">task-scheduling</a>
Description	This command overrides the system default time interval for scheduling the hierarchical virtual scheduler task.  By default, the system wakes the virtual scheduler task every 50 ms which is equivalent to five 10 ms timer ticks.
Range	0.01 to 1000.00
Units	percent
Default	100.00
Introduced	16.0.R1
Platforms	All

### **slow-queue-threshold-rate** *number*

Synopsis	Slow queue threshold rate
Context	<b>configure</b> <i>card number</i> <a href="#">virtual-scheduler-adjustment</a> <b>slow-queue-threshold-rate</b> <i>number</i>
Tree	<a href="#">slow-queue-threshold-rate</a>
Description	This command overrides the system default threshold rate used to place policers and queues in the slow queue category. Slow rate policers and queues use a different minimum rate calculation interval time than fast rate queues.  The fast rate threshold is derived by multiplying the adjusted slow rate threshold by a factor of 1.5.  Configuring a value of zero (0) forces all policers and queues to be treated as fast rate queues.
Range	0 to 1000000
Units	kilobps
Default	1000
Introduced	16.0.R1
Platforms	All

**xiom** [*xiom-slot*] *string*

Synopsis	Enter the <b>xiom</b> list instance
Context	<b>configure card number xiom string</b>
Tree	<a href="#">xiom</a>
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**[xiom-slot]** *string*

Synopsis	XIOM slot ID
Context	<b>configure card number xiom string</b>
Tree	<a href="#">xiom</a>
String Length	2
Notes	This element is part of a list key.
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**admin-state** *keyword*

Synopsis	Administrative state of the XIOM
Context	<b>configure card number xiom string admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**fail-on-error** *boolean*

Synopsis	Set operational state of the card to failed on error
Context	<b>configure card number xiom string fail-on-error boolean</b>
Tree	<a href="#">fail-on-error</a>

Description	When configured to <b>true</b> , the operational state of the card is set to failed when at least one of a specific set of card-level errors is detected. The failed state persists until the operator reseats the card or resets it using the <b>clear</b> command.
Default	false
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### level keyword



#### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	License level of the XIOM
Context	<b>configure card number xiom string level keyword</b>
Tree	<b>level</b>
Description	<p>This command provisions the license level of the XIOM, which controls aspects related to connector provisioning and consumption of hardware egress queues and policers.</p> <p>An XIOM only becomes operational if the provisioned license level matches the license level of the card installed into the slot.</p> <p>The set of license levels varies by XIOM type. Changes to the provisioned license level may be blocked if a configuration exists that is not permitted with the new target license level.</p> <p>If the license level is not specified, the level is set to the highest license level for the XIOM.</p>
Options	unrestricted, he800g+, er800g+, cr800g+, he1500g+, er1500g+, cr1500g+, he1600g+, er1600g+, cr1600g+, he2400g+, er2400g+, cr2400g+, he3000g+, er3000g+, cr3000g+
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### mda [mda-slot] number

Synopsis	Enter the <b>mda</b> list instance
Context	<b>configure card number xiom string mda number</b>
Tree	<b>mda</b>
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**[mda-slot] number**

Synopsis	MDA slot number
Context	<b>configure</b> <i>card number xiom string mda number</i>
Tree	<i>mda</i>
Range	1 to 2
Notes	This element is part of a list key.
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**admin-state keyword**

Synopsis	Administrative state of the MDA
Context	<b>configure</b> <i>card number xiom string mda number admin-state keyword</i>
Tree	<i>admin-state</i>
Options	enable, disable
Default	enable
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**mda-type keyword****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MDA-s type provisioned for the XIOM slot
Context	<b>configure</b> <i>card number xiom string mda number mda-type keyword</i>
Tree	<i>mda-type</i>
Description	<p>This command provisions the MDA-s type for the XIOM slot.</p> <p>The MDA-s type can be preprovisioned, which means that the MDA-s does not have to be installed in the chassis.</p> <p>You can preprovision the MDA type before you install the MDA in the chassis. An MDA-s can only be provisioned in a slot that is vacant. No other MDA-s can be provisioned (configured) for that particular slot. An error message or log event is generated if the wrong MDA type is provisioned or inserted.</p>
Options	ms6-200gb-cfp2-dco, ms3-200gb-cfp2-dco, ms16-100gb-sfpdd+4-100gb-qsfp28, ms18-100gb-qsfp28, ms4-400gb-qsfpdd+4-100gb-qsfp28, ms24-10/100gb-sfpdd,

	ms2-400gb-qsfpdd+2-100gb-qsfp28, ms8-100gb-sfpdd+2-100gb-qsfp28, ms16-sdd+4-qsfp28-b, ms8-sdd+2-qsfp28-b
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **power-priority-level** *number*

Synopsis	Power priority level for the XIOM MDA-s
Context	<b>configure</b> <b>card</b> <i>number</i> <b>xiom</b> <i>string</i> <b>mda</b> <i>number</i> <b>power-priority-level</b> <i>number</i>
Tree	<a href="#">power-priority-level</a>
Description	This command configures the power-priority level for the XIOM MDA-s. Consider the following suggestions when configuring the power-priority level: <ul style="list-style-type: none"> <li>• The lowest number has the highest priority.</li> <li>• Use the priority numbers from 1 to 100 for modules that are essential for system operation.</li> <li>• Use the priority numbers from 101 to 200 for non-essential modules.</li> </ul>
Range	1 to 200
Default	150
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **sync-e** *keyword*

Synopsis	Synchronous Ethernet capability
Context	<b>configure</b> <b>card</b> <i>number</i> <b>xiom</b> <i>string</i> <b>mda</b> <i>number</i> <b>sync-e</b> <i>keyword</i>
Tree	<a href="#">sync-e</a>
Options	true, false
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **xconnect**

Synopsis	Enter the <b>xconnect</b> context
Context	<b>configure</b> <b>card</b> <i>number</i> <b>xiom</b> <i>string</i> <b>mda</b> <i>number</i> <b>xconnect</b>
Tree	<a href="#">xconnect</a>
Introduced	21.5.R1

Platforms 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **mac** [*mac-id*] *number*

Synopsis Enter the **mac** list instance

Context **configure** *card number xiom string mda number xconnect mac number*

Tree [mac](#)

Introduced 21.5.R1

Platforms 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **[mac-id]** *number*

Synopsis MAC ID for the MDA cross-connect

Context **configure** *card number xiom string mda number xconnect mac number*

Tree [mac](#)

Range 1 to 12

Notes This element is part of a list key.

Introduced 21.5.R1

Platforms 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **description** *string*

Synopsis Text description

Context **configure** *card number xiom string mda number xconnect mac number description string*

Tree [description](#)

String Length 0 to 255

Introduced 21.5.R1

Platforms 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **loopback** [*loopback-id*] *number*

Synopsis Enter the **loopback** list instance

Context **configure** *card number xiom string mda number xconnect mac number loopback number*

Tree [loopback](#)



Description	Commands in this context configure a MAC loopback on a MAC chip. The system and services only start using the loopback when a port is associated with it. For example, port 1/1/m1/1, where m1 represents the MAC ID.
Introduced	21.5.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **[loopback-id]** *number*

Synopsis	Loopback ID for the MDA cross-connect
Context	<b>configure</b> <b>card</b> <i>number</i> <b>xiom</b> <i>string</i> <b>mda</b> <i>number</i> <b>xconnect</b> <b>mac</b> <i>number</i> <b>loopback</b> <i>number</i>
Tree	<b>loopback</b>
Range	1 to 2
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **bandwidth** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maximum bandwidth for a Layer 2 rate for MAC loopback
Context	<b>configure</b> <b>card</b> <i>number</i> <b>xiom</b> <i>string</i> <b>mda</b> <i>number</i> <b>xconnect</b> <b>mac</b> <i>number</i> <b>loopback</b> <i>number</i> <b>bandwidth</b> <i>number</i>
Tree	<b>bandwidth</b>
Range	10   25   40   100   400
Units	gigabps
Default	100
Introduced	21.5.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **description** *string*

Synopsis	Text description
----------	------------------

Context	<b>configure</b> <i>card number xiom string mda number xconnect mac number loopback number description string</i>
Tree	<a href="#">description</a>
String Length	0 to 255
Introduced	21.5.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **reset-on-recoverable-error** *boolean*

Synopsis	Reset XIOM for fatal memory parity error on a Q-chip
Context	<b>configure</b> <i>card number xiom string reset-on-recoverable-error boolean</i>
Tree	<a href="#">reset-on-recoverable-error</a>
Description	<p>When configured to <b>true</b>, the XIOM is reset when a fatal memory parity error is detected on a Q-chip of the XIOM, regardless of the setting of the <b>fail-on-error</b> configuration for the XIOM.</p> <p>When configured to <b>false</b>, the recovery action is taken instead of resetting the XIOM.</p>
Default	false
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **upgrade** [[upgrade-index](#)] *number*

Synopsis	Enter the <b>upgrade</b> list instance
Context	<b>configure</b> <i>card number xiom string upgrade number</i>
Tree	<a href="#">upgrade</a>
Description	<p>Commands in this context assign a license level upgrade to the XIOM. Multiple upgrades can be applied to an XIOM. The first upgrade must use index 1, then index 2, and so on. When removing upgrades, the largest index must be removed first, followed by the next largest, and so on.</p> <p>Some upgrades require a hard reset of the XIOM to take effect. In general, this is required when the Full Duplex bandwidth is changed as a result of the upgrade.</p>
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **[upgrade-index]** *number*

Synopsis	Order of the upgrade value
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Context	<b>configure card number xiom string upgrade number</b>
Tree	<b>upgrade</b>
Range	1 to 6
Notes	This element is part of a list key.
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **path** keyword



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upgrade name
Context	<b>configure card number xiom string upgrade number path keyword</b>
Tree	<b>path</b>
Description	This command specifies the upgrade name. An upgrade license must be available for the specified path.  Available upgrades can be checked using the <b>show licensing entitlements</b> command.
Options	cr800g-cr1500g+, er800g-er1500g+, he800g-he1500g+, cr1600g-cr2400g+, er1600g-er2400g+, he1600g-he2400g+, cr2400g-cr3000g+, er2400g-er3000g+, he2400g-he3000g+, cr-er800g+, er-he800g+, cr-er1500g+, er-he1500g+, cr-er1600g+, er-he1600g+, cr-er2400g+, er-he2400g+, cr-er3000g+, er-he3000g+
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **xiom-type** keyword



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	XIOM type
Context	<b>configure card number xiom string xiom-type keyword</b>
Tree	<b>xiom-type</b>
Description	This command associates the XIOM type with the slot.

The XIOM type can be preprovisioned, which means that the XIOM does not have to be installed in the chassis.

An XIOM must be provisioned before an MDA-s, a connector, or a port can be configured. An XIOM can only be provisioned in a slot that is vacant. After an XIOM is provisioned in the slot, no other XIOM can be provisioned (configured) for the slot.

An XIOM can only be provisioned in a slot if the XIOM type is allowed in the slot. An error message is generated if an attempt is made to provision an XIOM type that is not allowed.

If an XIOM is inserted that does not match the configured XIOM type for the slot, then a log event and a facility alarm are raised. The alarm is cleared when the correct XIOM type is installed or the configuration is modified.

A log event and a facility alarm are raised if an administratively enabled XIOM is removed from the chassis. The alarm is cleared when the correct XIOM type is installed or the configuration is modified. A log event is issued when an XIOM is removed that is administratively disabled.

XIOMs are controlled by hardware and software licensing. In addition to the XIOM type, the license level must be provisioned using the **level** command.

Options	iom-s-3.0t, iom-s-1.5t
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### 3.9 cflowd commands

```

configure
- cflowd
- active-flow-timeout number
- admin-state keyword
- analyze-gre-payload boolean
- analyze-l2tp-traffic boolean
- analyze-v4overv6-traffic boolean
- apply-groups reference
- apply-groups-exclude reference
- cache-size number
- collector (ipv4-address-no-zone | ipv6-address-no-zone) port number
- admin-state keyword
- aggregation
- as-matrix boolean
- destination-prefix boolean
- protocol-port boolean
- raw boolean
- source-destination-prefix boolean
- source-prefix boolean
- apply-groups reference
- apply-groups-exclude reference
- autonomous-system-type keyword
- description string
- export-filter
- family
- ipv4 boolean
- ipv6 boolean
- l2-ip boolean
- mcast-ipv4 boolean
- mcast-ipv6 boolean
- mpls boolean
- interface-list
- router reference interface-name reference
- service
- ies-group-interface service-name reference subscriber-interface-
name reference group-interface-name reference
- ies-interface service-name reference interface-name reference
- vprn-group-interface service-name reference subscriber-interface-
name reference group-interface-name reference
- vprn-interface service-name reference interface-name reference
- vprn-network-interface service-name reference network-interface-
name reference
- router string
- router-instance string
- template-set keyword
- version number
- enhanced-distribution boolean
- export-mode keyword
- inactive-flow-timeout number
- inband-collector-export-only boolean
- overflow number
- sample-profile number
- apply-groups reference
- apply-groups-exclude reference
- metering-process keyword
- sample-rate number
- template-retransmit number
- use-vrtr-if-index boolean

```

### 3.9.1 cflowd command descriptions

#### **cflowd**

Synopsis	Enable the <b>cflowd</b> context
Context	<b>configure cflowd</b>
Tree	<a href="#">cflowd</a>
Introduced	16.0.R1
Platforms	All

#### **active-flow-timeout** *number*

Synopsis	Maximum time before an active flow is exported
Context	<b>configure cflowd active-flow-timeout</b> <i>number</i>
Tree	<a href="#">active-flow-timeout</a>
Description	<p>This command configures the maximum time before an active flow is aged out of the active cache. If an individual flow is active for the configured time, the flow is exported and a new flow is created on the next packet sampled for the flow.</p> <p>This value is set for a flow when the flow is initially created in the active cache table and does not change dynamically.</p>
Range	30 to 36000
Units	seconds
Default	1800
Introduced	20.2.R1
Platforms	All

#### **admin-state** *keyword*

Synopsis	Administrative state of cflowd
Context	<b>configure cflowd admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**analyze-gre-payload** *boolean*

Synopsis	Perform cflowd analysis on the inner IP packet
Context	<b>configure</b> <a href="#">cflowd analyze-gre-payload</a> <i>boolean</i>
Tree	<a href="#">analyze-gre-payload</a>
Default	false
Introduced	16.0.R1
Platforms	All

**analyze-l2tp-traffic** *boolean*

Synopsis	Analyze the inner IP header of an L2TP packet
Context	<b>configure</b> <a href="#">cflowd analyze-l2tp-traffic</a> <i>boolean</i>
Tree	<a href="#">analyze-l2tp-traffic</a>
Description	When configured to <b>true</b> , cflowd looks for and analyzes the inner IP header of an L2TPv2 frame.  L2TPv2 traffic is identified by either the source or destination UDP port numbering that is set to 1701.  When configured to <b>false</b> , the analysis is not performed.
Default	false
Introduced	19.10.R1
Platforms	All

**analyze-v4overv6-traffic** *boolean*

Synopsis	Analyze the inner IPv4 packet within an IPv6 packet
Context	<b>configure</b> <a href="#">cflowd analyze-v4overv6-traffic</a> <i>boolean</i>
Tree	<a href="#">analyze-v4overv6-traffic</a>
Description	When configured to <b>true</b> , cflowd looks for and analyzes the inner IPv4 header of IPv4overIPv6 frames that include MAP-E as well as DSLite and SAM traffic.  When configured to <b>false</b> , the analysis is not performed.
Default	false
Introduced	19.10.R1
Platforms	All

**cache-size** *number*

Synopsis	Maximum number of active flows in the flow cache table
Context	<b>configure</b> <b>cflowd</b> <b>cache-size</b> <i>number</i>
Tree	<b>cache-size</b>
Range	1000 to 2000000
Units	flows
Introduced	16.0.R1
Platforms	All

**collector** [**ip-address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **port number**

Synopsis	Enter the <b>collector</b> list instance
Context	<b>configure</b> <b>cflowd</b> <b>collector</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>port number</b>
Tree	<b>collector</b>
Max. Instances	8
Introduced	16.0.R1
Platforms	All

**[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the remote cflowd collector host
Context	<b>configure</b> <b>cflowd</b> <b>collector</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>port number</b>
Tree	<b>collector</b>
Description	This command specifies the IP address of the remote cflowd collector host to receive the exported cflowd data.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**port number**

Synopsis	UDP port number of the remote cflowd collector host
Context	<b>configure</b> <b>cflowd</b> <b>collector</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>port number</b>
Tree	<b>collector</b>



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Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the cflowd collector
Context	<b>configure</b> <b>cflowd collector</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>port number</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **aggregation**

Synopsis	Enter the <b>aggregation</b> context
Context	<b>configure</b> <b>cflowd collector</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>port number</b> <b>aggregation</b>
Tree	<b>aggregation</b>
Introduced	16.0.R1
Platforms	All

### **as-matrix** *boolean*

Synopsis	Base aggregation data based on AS information
Context	<b>configure</b> <b>cflowd collector</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>port number</b> <b>aggregation as-matrix</b> <i>boolean</i>
Tree	<b>as-matrix</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **destination-prefix** *boolean*

Synopsis	Aggregate data based on destination prefix information
Context	<b>configure cflowd collector</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>port number</b> <b>aggregation destination-prefix</b> <i>boolean</i>
Tree	<a href="#">destination-prefix</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **protocol-port** *boolean*

Synopsis	Aggregate flows based on the IP protocol and ports
Context	<b>configure cflowd collector</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>port number</b> <b>aggregation protocol-port</b> <i>boolean</i>
Tree	<a href="#">protocol-port</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **raw** *boolean*

Synopsis	Export flow data without aggregation
Context	<b>configure cflowd collector</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>port number</b> <b>aggregation raw</b> <i>boolean</i>
Tree	<a href="#">raw</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **source-destination-prefix** *boolean*

Synopsis	Aggregate data based on prefix information
Context	<b>configure cflowd collector</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>port number</b> <b>aggregation source-destination-prefix</b> <i>boolean</i>
Tree	<a href="#">source-destination-prefix</a>
Default	false

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Introduced	16.0.R1
Platforms	All

**source-prefix** *boolean*

Synopsis	Aggregate flows based on the source prefix information
Context	<b>configure</b> <b>cflowd collector</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>port number</b> <b>aggregation source-prefix</b> <i>boolean</i>
Tree	<a href="#">source-prefix</a>
Default	false
Introduced	16.0.R1
Platforms	All

**autonomous-system-type** *keyword*

Synopsis	Basis of the AS information included in flow data
Context	<b>configure</b> <b>cflowd collector</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>port number</b> <b>autonomous-system-type</b> <i>keyword</i>
Tree	<a href="#">autonomous-system-type</a>
Options	origin, peer
Default	origin
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>cflowd collector</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>port number</b> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

## export-filter

Synopsis	Enter the <b>export-filter</b> context
Context	<b>configure</b> <b>cflowd collector</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>port number</b> <b>export-filter</b>
Tree	<b>export-filter</b>
Introduced	16.0.R1
Platforms	All

## family

Synopsis	Enter the <b>family</b> context
Context	<b>configure</b> <b>cflowd collector</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>port number</b> <b>export-filter family</b>
Tree	<b>family</b>
Introduced	16.0.R1
Platforms	All

## ipv4 boolean

Synopsis	Filter IPv4 flow data from being sent to the collector
Context	<b>configure</b> <b>cflowd collector</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>port number</b> <b>export-filter family ipv4 boolean</b>
Tree	<b>ipv4</b>
Default	false
Introduced	16.0.R1
Platforms	All

## ipv6 boolean

Synopsis	Filter IPv6 flow data from being sent to the collector
Context	<b>configure</b> <b>cflowd collector</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>port number</b> <b>export-filter family ipv6 boolean</b>
Tree	<b>ipv6</b>
Default	false
Introduced	16.0.R1
Platforms	All

## **l2-ip** *boolean*

Synopsis	Filter L2 IP flow data from being sent to the collector
Context	<b>configure</b> <b>cflowd collector</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>port number</b> <b>export-filter family l2-ip boolean</b>
Tree	<b>l2-ip</b>
Default	false
Introduced	16.0.R1
Platforms	All

## **mcast-ipv4** *boolean*

Synopsis	Filter multicast IPv4 data from going to the collector
Context	<b>configure</b> <b>cflowd collector</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>port number</b> <b>export-filter family mcast-ipv4 boolean</b>
Tree	<b>mcast-ipv4</b>
Default	false
Introduced	16.0.R1
Platforms	All

## **mcast-ipv6** *boolean*

Synopsis	Filter multicast IPv6 data from going to the collector
Context	<b>configure</b> <b>cflowd collector</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>port number</b> <b>export-filter family mcast-ipv6 boolean</b>
Tree	<b>mcast-ipv6</b>
Default	false
Introduced	16.0.R1
Platforms	All

## **mpls** *boolean*

Synopsis	Filter MPLS flow data from being sent to the collector
Context	<b>configure</b> <b>cflowd collector</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>port number</b> <b>export-filter family mpls boolean</b>
Tree	<b>mpls</b>

Default	false
Introduced	16.0.R1
Platforms	All

### **interface-list**

Synopsis	Enter the <b>interface-list</b> context
Context	<b>configure</b> <a href="#">cflowd collector</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">port number</a> <a href="#">export-filter interface-list</a>
Tree	<a href="#">interface-list</a>
Introduced	16.0.R4
Platforms	All

### **router** [[router-name](#)] *reference* [interface-name](#) *reference*

Synopsis	Add a list entry for <b>router</b>
Context	<b>configure</b> <a href="#">cflowd collector</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">port number</a> <a href="#">export-filter interface-list router</a> <i>reference</i> <a href="#">interface-name</a> <i>reference</i>
Tree	<a href="#">router</a>
Introduced	16.0.R4
Platforms	All

### **[router-name]** *reference*

Synopsis	Administrative router name
Context	<b>configure</b> <a href="#">cflowd collector</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">port number</a> <a href="#">export-filter interface-list router</a> <i>reference</i> <a href="#">interface-name</a> <i>reference</i>
Tree	<a href="#">router</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **interface-name** *reference*

Synopsis	Name for the router to the service interface or SAP
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Context	<b>configure</b> <a href="#">cflowd collector</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">port number</a> <a href="#">export-filter</a> <a href="#">interface-list</a> <a href="#">router</a> <a href="#">reference</a> <a href="#">interface-name</a> <a href="#">reference</a>
Tree	<a href="#">router</a>
Reference	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

## service

Synopsis	Enter the <b>service</b> context
Context	<b>configure</b> <a href="#">cflowd collector</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">port number</a> <a href="#">export-filter</a> <a href="#">interface-list</a> <a href="#">service</a>
Tree	<a href="#">service</a>
Introduced	16.0.R4
Platforms	All

## ies-group-interface [service-name](#) [reference](#) [subscriber-interface-name](#) [reference](#) [group-interface-name](#) [reference](#)

Synopsis	Add a list entry for <b>ies-group-interface</b>
Context	<b>configure</b> <a href="#">cflowd collector</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">port number</a> <a href="#">export-filter</a> <a href="#">interface-list</a> <a href="#">service</a> <a href="#">ies-group-interface</a> <a href="#">service-name</a> <a href="#">reference</a> <a href="#">subscriber-interface-name</a> <a href="#">reference</a> <a href="#">group-interface-name</a> <a href="#">reference</a>
Tree	<a href="#">ies-group-interface</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## service-name [reference](#)

Synopsis	Administrative service name
Context	<b>configure</b> <a href="#">cflowd collector</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">port number</a> <a href="#">export-filter</a> <a href="#">interface-list</a> <a href="#">service</a> <a href="#">ies-group-interface</a> <a href="#">service-name</a> <a href="#">reference</a> <a href="#">subscriber-interface-name</a> <a href="#">reference</a> <a href="#">group-interface-name</a> <a href="#">reference</a>
Tree	<a href="#">ies-group-interface</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a>
Notes	This element is part of a list key.

Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **subscriber-interface-name** *reference*

Synopsis	Subscriber interface name
Context	<b>configure</b> <b>cflowd collector</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>port number</b> <b>export-filter interface-list service ies-group-interface service-name</b> <i>reference</i> <b>subscriber-interface-name</b> <i>reference</i> <b>group-interface-name</b> <i>reference</i>
Tree	<a href="#">ies-group-interface</a>
Reference	<b>configure</b> <b>service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **group-interface-name** *reference*

Synopsis	Group interface name
Context	<b>configure</b> <b>cflowd collector</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>port number</b> <b>export-filter interface-list service ies-group-interface service-name</b> <i>reference</i> <b>subscriber-interface-name</b> <i>reference</i> <b>group-interface-name</b> <i>reference</i>
Tree	<a href="#">ies-group-interface</a>
Reference	<b>configure</b> <b>service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ies-interface** [service-name](#) *reference* [interface-name](#) *reference*

Synopsis	Add a list entry for <b>ies-interface</b>
Context	<b>configure</b> <b>cflowd collector</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>port number</b> <b>export-filter interface-list service ies-interface service-name</b> <i>reference</i> <b>interface-name</b> <i>reference</i>
Tree	<a href="#">ies-interface</a>
Introduced	16.0.R4
Platforms	All



**service-name reference**

Synopsis	Administrative service name
Context	<b>configure</b> <b>cflowd collector</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>port number</b> <b>export-filter interface-list service ies-interface service-name reference interface-name reference</b>
Tree	<a href="#">ies-interface</a>
Reference	<b>configure service ies string</b>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**interface-name reference**

Synopsis	IP interface name
Context	<b>configure</b> <b>cflowd collector</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>port number</b> <b>export-filter interface-list service ies-interface service-name reference interface-name reference</b>
Tree	<a href="#">ies-interface</a>
Reference	<b>configure service ies string interface string</b>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**vprn-group-interface service-name reference subscriber-interface-name reference group-interface-name reference**

Synopsis	Add a list entry for <b>vprn-group-interface</b>
Context	<b>configure</b> <b>cflowd collector</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>port number</b> <b>export-filter interface-list service vprn-group-interface service-name reference subscriber-interface-name reference group-interface-name reference</b>
Tree	<a href="#">vprn-group-interface</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**service-name reference**

Synopsis	Administrative service name
Context	<b>configure</b> <a href="#">cflowd collector</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">port number</a> <a href="#">export-filter</a> <a href="#">interface-list</a> <a href="#">service vprn-group-interface</a> <a href="#">service-name reference</a> <a href="#">subscriber-interface-name reference</a> <a href="#">group-interface-name reference</a>
Tree	<a href="#">vprn-group-interface</a>
Reference	<b>configure</b> <a href="#">service vprn</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**subscriber-interface-name reference**

Synopsis	Subscriber interface name
Context	<b>configure</b> <a href="#">cflowd collector</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">port number</a> <a href="#">export-filter</a> <a href="#">interface-list</a> <a href="#">service vprn-group-interface</a> <a href="#">service-name reference</a> <a href="#">subscriber-interface-name reference</a> <a href="#">group-interface-name reference</a>
Tree	<a href="#">vprn-group-interface</a>
Reference	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**group-interface-name reference**

Synopsis	Group interface name
Context	<b>configure</b> <a href="#">cflowd collector</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">port number</a> <a href="#">export-filter</a> <a href="#">interface-list</a> <a href="#">service vprn-group-interface</a> <a href="#">service-name reference</a> <a href="#">subscriber-interface-name reference</a> <a href="#">group-interface-name reference</a>
Tree	<a href="#">vprn-group-interface</a>
Reference	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**vprn-interface** [service-name reference](#) [interface-name reference](#)

Synopsis	Add a list entry for <b>vprn-interface</b>
Context	<b>configure</b> <a href="#">cflowd collector</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">port number</a> <a href="#">export-filter</a> <a href="#">interface-list</a> <a href="#">service vprn-interface</a> <a href="#">service-name reference</a> <a href="#">interface-name reference</a>
Tree	<a href="#">vprn-interface</a>
Introduced	16.0.R4
Platforms	All

**service-name reference**

Synopsis	Administrative service name
Context	<b>configure</b> <a href="#">cflowd collector</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">port number</a> <a href="#">export-filter</a> <a href="#">interface-list</a> <a href="#">service vprn-interface</a> <a href="#">service-name reference</a> <a href="#">interface-name reference</a>
Tree	<a href="#">vprn-interface</a>
Reference	<b>configure</b> <a href="#">service vprn</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**interface-name reference**

Synopsis	IP interface name
Context	<b>configure</b> <a href="#">cflowd collector</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">port number</a> <a href="#">export-filter</a> <a href="#">interface-list</a> <a href="#">service vprn-interface</a> <a href="#">service-name reference</a> <a href="#">interface-name reference</a>
Tree	<a href="#">vprn-interface</a>
Reference	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**vprn-network-interface** [service-name reference](#) [network-interface-name reference](#)

Synopsis	Add a list entry for <b>vprn-network-interface</b>
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Context	<b>configure cflowd collector</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>port number</b> <b>export-filter interface-list service vprn-network-interface service-name reference</b> <b>network-interface-name reference</b>
Tree	<a href="#">vprn-network-interface</a>
Introduced	16.0.R4
Platforms	All

### **service-name** *reference*

Synopsis	Administrative service name
Context	<b>configure cflowd collector</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>port number</b> <b>export-filter interface-list service vprn-network-interface service-name reference</b> <b>network-interface-name reference</b>
Tree	<a href="#">vprn-network-interface</a>
Reference	<b>configure service vprn</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **network-interface-name** *reference*

Synopsis	Network interface name
Context	<b>configure cflowd collector</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>port number</b> <b>export-filter interface-list service vprn-network-interface service-name reference</b> <b>network-interface-name reference</b>
Tree	<a href="#">vprn-network-interface</a>
Description	This command specifies the network interface name. Interface names must be unique within the group of defined IP interfaces for the <b>configure router interface</b> and <b>configure service ies interface</b> commands. An interface name cannot be in the form of an IP address. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes and must start with a letter.
Reference	<b>configure service vprn</b> <i>string</i> <b>network-interface</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**router** [**router-instance**] *string*

Synopsis	Add a list entry for <b>router</b>
Context	<b>configure</b> <b>cflowd collector</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>port number</b> <b>export-filter router</b> <i>string</i>
Tree	<b>router</b>
Introduced	16.0.R1
Platforms	All

**[router-instance]** *string*

Synopsis	Router instance name
Context	<b>configure</b> <b>cflowd collector</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>port number</b> <b>export-filter router</b> <i>string</i>
Tree	<b>router</b>
Description	This command specifies the router instance name. Only "Base" is supported.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**router-instance** *string*

Synopsis	Router or service name
Context	<b>configure</b> <b>cflowd collector</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>port number</b> <b>router-instance</b> <i>string</i>
Tree	<b>router-instance</b>
Description	This command specifies the routing instance used to route traffic to the associated collector IP address.  The "Base" routing instance is the fallback if no route is found. No fallback mechanism is supported for "Base" and "VPRN".
Default	management
Introduced	16.0.R1
Platforms	All

**template-set** *keyword*

Synopsis	Templates sent to the collector
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Context	<b>configure cflowd collector</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>port number</b> <b>template-set keyword</b>
Tree	<b>template-set</b>
Description	This command specifies the set of templates sent to the collector when using cflowd Version 9 or Version 10.
Options	not-applicable, basic, mpls-ip, l2-ip, mpls-transport, compact, fastpath
Introduced	16.0.R1
Platforms	All

### **version number**



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Flow data collector version
Context	<b>configure cflowd collector</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>port number</b> <b>version number</b>
Tree	<b>version</b>
Range	5   8 to 10
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **enhanced-distribution boolean**

Synopsis	Include ingress port ID in hashing algorithm for cflowd
Context	<b>configure cflowd enhanced-distribution</b> <b>boolean</b>
Tree	<b>enhanced-distribution</b>
Default	false
Introduced	16.0.R1
Platforms	7750 SR-7s, 7750 SR-14s, 7950 XRS

### **export-mode keyword**

Synopsis	Export mode for flow data
Context	<b>configure cflowd export-mode</b> <b>keyword</b>

Tree	<a href="#">export-mode</a>
Options	automatic, manual
Default	automatic
Introduced	16.0.R1
Platforms	All

### **inactive-flow-timeout** *number*

Synopsis	Time without matching packet before flow is inactive
Context	<b>configure</b> <a href="#">cflowd</a> <a href="#">inactive-flow-timeout</a> <i>number</i>
Tree	<a href="#">inactive-flow-timeout</a>
Description	This command configures the time interval that must elapse without a packet matching a flow before the flow is considered inactive.  This value is set for a flow when the flow is initially created in the active cache table and does not change dynamically.
Range	10 to 600
Units	seconds
Default	15
Introduced	20.2.R1
Platforms	All

### **inband-collector-export-only** *boolean*

Synopsis	Export the traffic to all collectors only via in-band interfaces
Context	<b>configure</b> <a href="#">cflowd</a> <a href="#">inband-collector-export-only</a> <i>boolean</i>
Tree	<a href="#">inband-collector-export-only</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **overflow** *number*

Synopsis	Percentage of entries to remove from Cflowd cache when the maximum number of entries is exceeded
Context	<b>configure</b> <a href="#">cflowd</a> <a href="#">overflow</a> <i>number</i>
Tree	<a href="#">overflow</a>

Range	1 to 50
Units	percent
Default	1
Introduced	16.0.R1
Platforms	All

### **sample-profile** [\[profile-id\]](#) *number*

Synopsis	Enter the <b>sample-profile</b> list instance
Context	<b>configure</b> <a href="#">cflowd</a> <a href="#">sample-profile</a> <i>number</i>
Tree	<a href="#">sample-profile</a>
Max. Instances	5
Introduced	19.5.R1
Platforms	All

### [\[profile-id\]](#) *number*

Synopsis	The unique specifier of this sample-profile
Context	<b>configure</b> <a href="#">cflowd</a> <a href="#">sample-profile</a> <i>number</i>
Tree	<a href="#">sample-profile</a>
Range	1 to 5
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

### **metering-process** *keyword*

Synopsis	Metering process for samples taken
Context	<b>configure</b> <a href="#">cflowd</a> <a href="#">sample-profile</a> <i>number</i> <a href="#">metering-process</a> <i>keyword</i>
Tree	<a href="#">metering-process</a>
Description	This command specifies the type of metering process to use for the samples taken from the associated interfaces.
Options	standard, fp-accelerated
Default	standard



Introduced	21.10.R1
Platforms	7750 SR-7s, 7750 SR-14s, 7950 XRS-20e

### **sample-rate** *number*

Synopsis	Cflowd sampling rate for sample profile ID
Context	<b>configure</b> <a href="#">cflowd</a> <a href="#">sample-profile</a> <i>number</i> <a href="#">sample-rate</a> <i>number</i>
Tree	<a href="#">sample-rate</a>
Description	This command defines the cflowd sampling rate for the sample profile ID.  The sample rate indicates that the associated interface samples 1 in N packets for cflowd analysis. You can only associate one rate profile below 1:256 with a specific IOM, IMM, or XMA.
Range	1 to 60000
Default	1000
Introduced	19.5.R1
Platforms	All

### **template-retransmit** *number*

Synopsis	Time to resend template information
Context	<b>configure</b> <a href="#">cflowd</a> <a href="#">template-retransmit</a> <i>number</i>
Tree	<a href="#">template-retransmit</a>
Range	10 to 600
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	All

### **use-vrtr-if-index** *boolean*

Synopsis	Export flow data using virtual router interface indexes
Context	<b>configure</b> <a href="#">cflowd</a> <a href="#">use-vrtr-if-index</a> <i>boolean</i>
Tree	<a href="#">use-vrtr-if-index</a>
Default	false
Introduced	16.0.R1

Platforms    All

## 3.10 chassis commands

```
configure
- chassis keyword chassis-number number
- apply-groups reference
- apply-groups-exclude reference
- monitor-filter-door boolean
- peq number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - input-power-mode number
  - peq-type keyword
- power-connection-module number
  - apply-groups reference
  - apply-groups-exclude reference
  - pcm-type keyword
- power-shelf number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - power-module number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - power-module-type keyword
  - power-shelf-type keyword
- power-supply number
  - apply-groups reference
  - apply-groups-exclude reference
  - power-supply-type keyword
```

### 3.10.1 chassis command descriptions

#### **chassis** [**chassis-class**] *keyword chassis-number number*

Synopsis	Enter the <b>chassis</b> list instance
Context	<b>configure chassis</b> <i>keyword chassis-number number</i>
Tree	<b>chassis</b>
Introduced	16.0.R1
Platforms	All

#### **[chassis-class]** *keyword*

Synopsis	Functional use of the physical chassis
Context	<b>configure chassis</b> <i>keyword chassis-number number</i>
Tree	<b>chassis</b>
Options	router
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

#### **chassis-number** *number*

Synopsis	Unique index to identify this physical chassis
Context	<b>configure chassis</b> <i>keyword chassis-number number</i>
Tree	<b>chassis</b>
Range	1 to 100
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

#### **monitor-filter-door** *boolean*

Synopsis	Allow filter door monitoring
Context	<b>configure chassis</b> <i>keyword chassis-number number monitor-filter-door boolean</i>

Tree	<a href="#">monitor-filter-door</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR-7s, 7750 SR-14s

### **peq** [[peq-slot](#)] *number*

Synopsis	Enter the <b>peq</b> list instance
Context	<b>configure</b> <a href="#">chassis</a> <i>keyword</i> <a href="#">chassis-number</a> <i>number</i> <a href="#">peq</a> <i>number</i>
Tree	<a href="#">peq</a>
Introduced	16.0.R1
Platforms	7750 SR-12e, 7950 XRS

### **[peq-slot]** *number*

Synopsis	Unique identifier index for a power supply tray in the chassis
Context	<b>configure</b> <a href="#">chassis</a> <i>keyword</i> <a href="#">chassis-number</a> <i>number</i> <a href="#">peq</a> <i>number</i>
Tree	<a href="#">peq</a>
Range	1 to 31
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-12e, 7950 XRS

### **admin-state** *keyword*

Synopsis	Administrative state of the PEQ
Context	<b>configure</b> <a href="#">chassis</a> <i>keyword</i> <a href="#">chassis-number</a> <i>number</i> <a href="#">peq</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7750 SR-12e, 7950 XRS

**input-power-mode** *number*

Synopsis	Input power mode of the PEQ
Context	<b>configure</b> <a href="#">chassis</a> <i>keyword</i> <a href="#">chassis-number</a> <i>number</i> <a href="#">peq</a> <i>number</i> <a href="#">input-power-mode</a> <i>number</i>
Tree	<a href="#">input-power-mode</a>
Range	60   80
Units	amperes
Introduced	16.0.R1
Platforms	7750 SR-12e, 7950 XRS

**peq-type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	APEQ type
Context	<b>configure</b> <a href="#">chassis</a> <i>keyword</i> <a href="#">chassis-number</a> <i>number</i> <a href="#">peq</a> <i>number</i> <a href="#">peq-type</a> <i>keyword</i>
Tree	<a href="#">peq-type</a>
Options	apeq-dc-2000, apeq-dc-2200-2800, apeq-ac-3000, apeq-hvdc-3000, apeq-dc-4275, ixr-ac-hvdc-3000, ixr-dc-3000, apeq-ac-4400
Introduced	16.0.R1
Platforms	7750 SR-12e, 7950 XRS

**power-connection-module** [[pcm-slot](#)] *number*

Synopsis	Enter the <b>power-connection-module</b> list instance
Context	<b>configure</b> <a href="#">chassis</a> <i>keyword</i> <a href="#">chassis-number</a> <i>number</i> <a href="#">power-connection-module</a> <i>number</i>
Tree	<a href="#">power-connection-module</a>
Introduced	16.0.R1
Platforms	7950 XRS-20e

**[pcm-slot]** *number*

Synopsis	Unique identifier index for a power control module in the chassis
Context	<b>configure</b> <a href="#">chassis</a> <i>keyword</i> <a href="#">chassis-number</a> <i>number</i> <a href="#">power-connection-module</a> <i>number</i>

Tree	<a href="#">power-connection-module</a>
Range	1 to 12
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7950 XRS-20e

### **pcm-type** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	PCM type
Context	<b>configure</b> <a href="#">chassis</a> <i>keyword</i> <a href="#">chassis-number</a> <i>number</i> <a href="#">power-connection-module</a> <i>number</i> <a href="#">pcm-type</a> <i>keyword</i>
Tree	<a href="#">pcm-type</a>
Options	dual, quad
Introduced	16.0.R1
Platforms	7950 XRS-20e

### **power-shelf** [[power-shelf-id](#)] *number*

Synopsis	Enter the <b>power-shelf</b> list instance
Context	<b>configure</b> <a href="#">chassis</a> <i>keyword</i> <a href="#">chassis-number</a> <i>number</i> <a href="#">power-shelf</a> <i>number</i>
Tree	<a href="#">power-shelf</a>
Introduced	16.0.R1
Platforms	7750 SR-s

### **[power-shelf-id]** *number*

Synopsis	Unique identifier index for a power shelf in chassis
Context	<b>configure</b> <a href="#">chassis</a> <i>keyword</i> <a href="#">chassis-number</a> <i>number</i> <a href="#">power-shelf</a> <i>number</i>
Tree	<a href="#">power-shelf</a>
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7750 SR-s

### **admin-state** *keyword*

Synopsis Administrative state of the power shelf

Context **configure chassis** *keyword chassis-number number power-shelf number admin-state keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 16.0.R1

Platforms 7750 SR-s

### **description** *string*

Synopsis Text description

Context **configure chassis** *keyword chassis-number number power-shelf number description string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms 7750 SR-s

### **power-module** [[power-module-id](#)] *number*

Synopsis Enter the **power-module** list instance

Context **configure chassis** *keyword chassis-number number power-shelf number power-module number*

Tree [power-module](#)

Introduced 16.0.R1

Platforms 7750 SR-s

### **[power-module-id]** *number*

Synopsis Unique identifier for a power module in chassis

Context **configure chassis** *keyword chassis-number number power-shelf number power-module number*



Tree	<a href="#">power-module</a>
Range	1 to 12
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-s

### **admin-state** *keyword*

Synopsis	Administrative state of the power module
Context	<b>configure</b> <a href="#">chassis</a> <i>keyword</i> <a href="#">chassis-number</a> <i>number</i> <a href="#">power-shelf</a> <i>number</i> <a href="#">power-module</a> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7750 SR-s

### **power-module-type** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Power module type
Context	<b>configure</b> <a href="#">chassis</a> <i>keyword</i> <a href="#">chassis-number</a> <i>number</i> <a href="#">power-shelf</a> <i>number</i> <a href="#">power-module</a> <i>number</i> <b>power-module-type</b> <i>keyword</i>
Tree	<a href="#">power-module-type</a>
Options	ps-b-ac/hv-6000, ps-a-dc-4400, ps-a-dc-6000, ixr-ac-hvdc-3000, ixr-dc-3000
Introduced	16.0.R1
Platforms	7750 SR-s

### **power-shelf-type** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Power shelf type
Context	<b>configure chassis</b> <i>keyword chassis-number number power-shelf number power-shelf-type keyword</i>
Tree	<a href="#">power-shelf-type</a>
Options	ps-a10-shelf-dc, ps-b10-shelf-ac/hv, ps-a4-shelf-dc, ps-b3-shelf-ac/hv
Introduced	16.0.R1
Platforms	7750 SR-s

### **power-supply** [[power-supply-id](#)] *number*

Synopsis	Enter the <b>power-supply</b> list instance
Context	<b>configure chassis</b> <i>keyword chassis-number number power-supply number</i>
Tree	<a href="#">power-supply</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[power-supply-id]** *number*

Synopsis	Unique identifier index for a power supply tray in the chassis
Context	<b>configure chassis</b> <i>keyword chassis-number number power-supply number</i>
Tree	<a href="#">power-supply</a>
Range	1 to 31
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **power-supply-type** *keyword*

Synopsis	Power supply type
Context	<b>configure chassis</b> <i>keyword chassis-number number power-supply number power-supply-type keyword</i>
Tree	<a href="#">power-supply-type</a>
Options	none, dc-single, ac-single, ac-multiple, auto, dc-multiple
Default	auto
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-7/12

## 3.11 connection-profile commands

```
configure
- connection-profile
- apply-groups reference
- apply-groups-exclude reference
- vlan number
- apply-groups reference
- apply-groups-exclude reference
- description string
- qtag-range number
- apply-groups reference
- apply-groups-exclude reference
- end number
```

### 3.11.1 connection-profile command descriptions

#### connection-profile

Synopsis	Enter the <b>connection-profile</b> context
Context	<b>configure</b> <a href="#">connection-profile</a>
Tree	<a href="#">connection-profile</a>
Introduced	16.0.R1
Platforms	All

#### vlan [[connection-profile-id](#)] *number*

Synopsis	Enter the <b>vlan</b> list instance
Context	<b>configure</b> <a href="#">connection-profile</a> <a href="#">vlan</a> <i>number</i>
Tree	<a href="#">vlan</a>
Introduced	16.0.R7
Platforms	All

#### [[connection-profile-id](#)] *number*

Synopsis	Identifier of this connection profile
Context	<b>configure</b> <a href="#">connection-profile</a> <a href="#">vlan</a> <i>number</i>
Tree	<a href="#">vlan</a>
Range	1 to 8000
Notes	This element is part of a list key.
Introduced	16.0.R7
Platforms	All

#### description *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">connection-profile</a> <a href="#">vlan</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R7

Platforms All

### **qtag-range** [**start**] *number*

Synopsis Enter the **qtag-range** list instance  
 Context **configure connection-profile vlan number qtag-range number**  
 Tree **qtag-range**  
 Introduced 16.0.R7  
 Platforms All

### **[start]** *number*

Synopsis Lower bound of VLAN range for connection profile  
 Context **configure connection-profile vlan number qtag-range number**  
 Tree **qtag-range**  
 Range 1 to 4094  
 Notes This element is part of a list key.  
 Introduced 16.0.R7  
 Platforms All

### **end** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Upper bound of VLAN range for connection profile  
 Context **configure connection-profile vlan number qtag-range number end number**  
 Tree **end**  
 Range 1 to 4094  
 Introduced 16.0.R7  
 Platforms All

## 3.12 debug commands

```

debug
- call-trace
- ipoe
  - trace string
    - circuit-id string
    - mac string
    - max-jobs number
    - profile string
    - remote-id string
    - sap string
    - trace-existing-sessions boolean
- pppoe
  - trace string
    - circuit-id string
    - mac string
    - max-jobs number
    - profile string
    - remote-id string
    - sap string
    - trace-existing-sessions boolean
    - user-name string
- wlan-gw
  - ue string
  - mac string
  - profile string
- lag string
  - bfd boolean
  - config boolean
  - iom-updates boolean
  - lacp-packets boolean
  - multi-chassis boolean
  - multi-chassis-packets boolean
  - port string
    - bfd boolean
    - config boolean
    - lacp-packets boolean
    - multi-chassis boolean
    - port-states boolean
    - redundancy boolean
    - selection-logic boolean
    - state-machine boolean
    - timers boolean
  - port-states boolean
  - redundancy boolean
  - selection-logic boolean
  - state-machine boolean
  - timers boolean
- nat
  - l2-aware
  - subscriber string
  - upnp
    - subscriber string
      - events boolean
      - packets
        - detail boolean
  - large-scale
  - dual-stack-lite
    - subscriber inside-router string b4-address string
  - nat44

```

debug nat large-scale nat44 subscriber

```

- subscriber inside-router string ip-address string
- nat64
- subscriber inside-router string ipv6-prefix string
- nat-import
- route (ipv4-unicast-address | keyword) inside-router string
- pcp
- router string
  - server string
    - packets
      - detail boolean
      - direction keyword
- router string
- dhcp
- all-packets
  - detail-level keyword
  - mode keyword
- interface string
  - detail-level keyword
  - mode keyword
- mac string
  - detail-level keyword
  - mode keyword
- sap string
  - detail-level keyword
  - mode keyword
- igmp
- group-interface
  - all-group-interfaces
  - forwarding-service string
  - group-interface-name string
- host
  - group-interface
    - forwarding-service string
    - group-interface-name string
  - ip-address string
- interface
  - all-interfaces
  - interface-name string
- mcs
  - all-interfaces
  - interface-name string
- miscellaneous boolean
- packet
  - all-origins
  - dropped boolean
  - egress boolean
  - group-interface-name string
  - host-ip-address string
  - ingress boolean
  - interface-ip-address string
  - interface-name string
  - type keyword
- mld
- group-interface
  - all-group-interfaces
  - forwarding-service string
  - group-interface-name string
- host
  - group-interface
    - forwarding-service string
    - group-interface-name string
  - ip-address string
- interface
  - all-interfaces

```



debug router mld interface interface-name

```

- interface-name string
- mcs
- all-interfaces
- interface-name string
- miscellaneous boolean
- packet
- all-origins
- dropped boolean
- egress boolean
- group-interface-name string
- host-ip-address string
- ingress boolean
- interface-ip-address string
- interface-name string
- type keyword
- msdp
- packet
- all-packet-types
- packet-types
- keep-alive
- peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
- sa-request
- peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
- sa-response
- peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
- source-active
- peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
- pim
- group-address string
- rtm
- rp-address string
- sa-db
- group-address string
- rp-address string
- source-address string
- mtrace
- miscellaneous
- packet
- all-packet-types
- packet-types
- query boolean
- request boolean
- response boolean
- mtrace2
- miscellaneous
- packet
- all-packet-types
- packet-types
- query boolean
- request boolean
- response boolean
- pim
- events
- adjacency
- all
- detail boolean
- group-address (ipv4-address-no-zone | ipv6-address-no-zone)
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- assert
- detail boolean
- group-address (ipv4-address-no-zone | ipv6-address-no-zone)
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- auto-rp
- bgp

```

## debug router pim events bgp group-address

```

- group-address (ipv4-address-no-zone | ipv6-address-no-zone)
- peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- bier-inband
  - detail boolean
- bsr
  - detail boolean
- data
  - detail boolean
  - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- db
  - detail boolean
  - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- dynmlpd
  - detail boolean
- extranet
  - detail boolean
- graft
  - detail boolean
  - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- interface
  - interface-name string
- jp
  - detail boolean
  - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- mofrr
- mrrib
  - detail boolean
  - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- msg
- mvpn-rtcach
  - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
- red
  - detail boolean
- register
  - detail boolean
  - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- rpfv
  - detail boolean
- rtm
  - detail boolean
- s-pmsi
  - detail boolean
  - vpn-source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- tunnel-interface
  - ldp-p2mp-id number
  - rsvp-p2mp string
  - sender-address string
- packet
  - all-origins
  - all-packet-types
  - egress boolean
  - ingress boolean
  - interface-name string
  - ipv4 boolean
  - ipv6 boolean
  - packet-types

```

debug router pim packet packet-types assert

- **assert**
  - **all-origins**
  - **interface-name** *string*
- **auto-rp-announcement**
  - **all-origins**
  - **interface-name** *string*
- **auto-rp-mapping**
  - **all-origins**
  - **interface-name** *string*
- **bsr**
  - **all-origins**
  - **interface-name** *string*
- **crp**
  - **all-origins**
  - **interface-name** *string*
- **graft**
  - **all-origins**
  - **interface-name** *string*
- **graft-ack**
  - **all-origins**
  - **interface-name** *string*
- **hello**
  - **all-origins**
  - **interface-name** *string*
- **jp**
  - **all-origins**
  - **interface-name** *string*
- **mdt-tlv**
  - **all-origins**
  - **interface-name** *string*
- **register**
  - **all-origins**
  - **interface-name** *string*
- **register-stop**
  - **all-origins**
  - **interface-name** *string*
- **radius**
  - **proxy** *string*
  - **all-packet-types**
  - **client-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **detail-level** *keyword*
  - **direction** *keyword*
  - **dropped-only** *boolean*
  - **packet-types**
    - **access-accept** *boolean*
    - **access-challenge** *boolean*
    - **access-reject** *boolean*
    - **access-request** *boolean*
    - **accounting-request** *boolean*
    - **accounting-response** *boolean*
    - **other** *boolean*
- **servers**
  - **attribute** *string*
  - **extended-type** *number*
  - **transaction** *boolean*
  - **type** *number*
  - **value**
    - **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
    - **hex** *string*
    - **integer** *number*
    - **prefix** (*ipv4-prefix* | *ipv6-prefix*)
    - **string** *string*
  - **vendor-specific**
    - **encoding**

debug router radius servers attribute vendor-specific encoding length-size

```

    - length-size number
    - type-size number
    - vendor (number | keyword)
    - vendor-type number
  - detail-level keyword
  - packet-types
    - accounting boolean
    - authentication boolean
    - coa boolean
  - server-address (ipv4-address-no-zone | ipv6-address-no-zone)
- vrrp
  - events
    - all-events
    - interface string
      - all-vrids
      - ipv4
        - vrid number
      - ipv6
        - vrid number
  - packet
    - all-packets
    - interface string
      - all-vrids
      - ipv4
        - vrid number
      - ipv6
        - vrid number
- wpp
  - packets
    - detail-level keyword
  - portal string
    - packets
      - detail-level keyword
- service
  - vpls string
    - igmp-snooping
      - packet
        - detail keyword
        - dropped boolean
        - egress boolean
        - evpn-mpls boolean
        - evpn-vxlan (ipv4-address-no-zone | ipv6-address-no-zone) vni number
        - ingress boolean
        - mac string
        - sap string
        - sdp-bind string
    - mld-snooping
      - packet
        - detail keyword
        - dropped boolean
        - egress boolean
        - evpn-mpls boolean
        - evpn-vxlan (ipv4-address-no-zone | ipv6-address-no-zone) vni number
        - ingress boolean
        - mac string
        - sap string
        - sdp-bind string
    - pim-snooping
      - events
        - adjacency
        - all
          - detail boolean
          - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
          - source-address (ipv4-address-no-zone | ipv6-address-no-zone)

```

## debug service vpls pim-snooping events db

```

- db
  - detail boolean
  - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- jp
  - detail boolean
  - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- mcs
  - detail boolean
- port
  - detail boolean
  - evpn-mpls
  - sap-id string
  - sdp-bind-id string
  - vni number
  - vtep (ipv4-address-no-zone | ipv6-address-no-zone)
- red
  - detail boolean
- packet
  - all-origins
  - all-packet-types
  - packet-types
    - hello boolean
    - jp boolean
  - port
    - evpn-mpls
    - sap-id string
    - sdp-bind-id string
    - vni number
    - vtep (ipv4-address-no-zone | ipv6-address-no-zone)
- subscriber-mgmt
- gtp
  - events boolean
  - imsi string
  - packets
    - detail-level keyword
    - mode keyword
  - peer (ipv4-address-no-zone | ipv6-address-no-zone) router string
  - udp-port number
- system
- grpc
  - client
    - all
    - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - type keyword
- grpc-tunnel
  - tunnel
    - all
    - name string
- http-connections
  - client-ip-prefix (ipv4-prefix | ipv6-prefix | keyword)
- management-interface
  - netconf keyword
  - remote-management
    - manager
      - all
      - manager-name string
    - service boolean
- wlan-gw
  - group number
  - learn-ap-mac
  - tunnel-remote-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - statistic keyword name string

```

---

debug wlan-gw group statistic capture-packet

- **capture-packet** *boolean*
- **ue**
- **bridge-domain** *number*
- **mac-address** *string*
- **protocols**
  - **arp** *boolean*
  - **dhcp4** *boolean*
  - **dhcp6** *boolean*
  - **icmp4** *boolean*
  - **icmp6** *boolean*
  - **radius** *boolean*

### 3.12.1 debug command descriptions

#### debug

Synopsis	Configure application or protocol tracing
Context	<a href="#">debug</a>
Tree	<a href="#">debug</a>
Description	Commands in this context enable detailed debugging information for various protocols and router functions.
Introduced	21.5.R1
Platforms	All

#### call-trace

Synopsis	Enter the <b>call-trace</b> context
Context	<a href="#">debug call-trace</a>
Tree	<a href="#">call-trace</a>
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

#### ipoe

Synopsis	Enter the <b>ipoe</b> context
Context	<a href="#">debug call-trace ipoe</a>
Tree	<a href="#">ipoe</a>
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

#### trace [\[name\]](#) *string*

Synopsis	Enter the <b>trace</b> list instance
Context	<a href="#">debug call-trace ipoe trace <i>string</i></a>
Tree	<a href="#">trace</a>
Max. Instances	50

Introduced 22.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis Unique trace name  
 Context [debug call-trace ipoe trace string](#)  
 Tree [trace](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 22.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**circuit-id** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Circuit ID of the sessions to trace  
 Context [debug call-trace ipoe trace string circuit-id string](#)  
 Tree [circuit-id](#)  
 Description This command configures the circuit ID of the sessions to trace.  
 The circuit ID filter is ignored if it is not part of the IPoE session key.  
 String Length 1 to 255  
 Notes The following elements are part of a choice: **circuit-id** or **remote-id**.  
 Introduced 22.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mac** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis MAC address of the sessions to trace



Context	<code>debug call-trace ipoe trace string mac string</code>
Tree	<code>mac</code>
String Length	1 to 17
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max-jobs** *number*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maximum number of trace jobs
Context	<code>debug call-trace ipoe trace string max-jobs number</code>
Tree	<code>max-jobs</code>
Range	1 to 50
Default	1
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **profile** *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Call trace profile applied for the trace
Context	<code>debug call-trace ipoe trace string profile string</code>
Tree	<code>profile</code>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**remote-id** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Remote ID of the sessions to trace
Context	<code>debug call-trace ipoe trace string remote-id string</code>
Tree	<code>remote-id</code>
Description	This command configures the remote ID of the sessions to trace. The remote ID filter is ignored if it is not part of the IPoE session key.
String Length	1 to 255
Notes	The following elements are part of a choice: <b>circuit-id</b> or <b>remote-id</b> .
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sap** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SAP ID of the sessions to trace
Context	<code>debug call-trace ipoe trace string sap string</code>
Tree	<code>sap</code>
String Length	1 to 45
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**trace-existing-sessions** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable call trace for existing sessions
Context	<code>debug call-trace ipoe trace string trace-existing-sessions boolean</code>
Tree	<code>trace-existing-sessions</code>

Description	When configured to <b>true</b> , the system traces existing sessions. When configured to <b>false</b> , only new sessions are traced.
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## pppoe

Synopsis	Enter the <b>pppoe</b> context
Context	<a href="#">debug call-trace pppoe</a>
Tree	<a href="#">pppoe</a>
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## trace [[name](#)] *string*

Synopsis	Enter the <b>trace</b> list instance
Context	<a href="#">debug call-trace pppoe trace <i>string</i></a>
Tree	<a href="#">trace</a>
Max. Instances	50
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [\[name\]](#) *string*

Synopsis	Unique trace name
Context	<a href="#">debug call-trace pppoe trace <i>string</i></a>
Tree	<a href="#">trace</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**circuit-id** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Circuit ID of the sessions to trace
Context	<a href="#">debug call-trace pppoe trace</a> <i>string circuit-id string</i>
Tree	<a href="#">circuit-id</a>
String Length	1 to 255
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mac** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MAC address of the sessions to trace
Context	<a href="#">debug call-trace pppoe trace</a> <i>string mac string</i>
Tree	<a href="#">mac</a>
String Length	1 to 17
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**max-jobs** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maximum number of trace jobs
Context	<a href="#">debug call-trace pppoe trace</a> <i>string max-jobs number</i>
Tree	<a href="#">max-jobs</a>
Range	1 to 50
Default	1
Introduced	22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### profile string



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Call trace profile applied for the trace

Context [debug call-trace pppoe trace string profile string](#)

Tree [profile](#)

String Length 1 to 32

Notes This element is mandatory.

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### remote-id string



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Remote ID of the sessions to trace

Context [debug call-trace pppoe trace string remote-id string](#)

Tree [remote-id](#)

String Length 1 to 255

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### sap string



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis SAP ID of the sessions to trace

Context [debug call-trace pppoe trace string sap string](#)

Tree	<a href="#">sap</a>
String Length	1 to 45
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **trace-existing-sessions** *boolean*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable call trace for existing sessions
Context	<a href="#">debug call-trace pppoe trace string trace-existing-sessions boolean</a>
Tree	<a href="#">trace-existing-sessions</a>
Description	When configured to <b>true</b> , the system traces existing sessions. When configured to <b>false</b> , only new sessions are traced.
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **user-name** *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	PPPoE username of the sessions to trace
Context	<a href="#">debug call-trace pppoe trace string user-name string</a>
Tree	<a href="#">user-name</a>
String Length	1 to 253
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **wlan-gw**

Synopsis	Enter the <b>wlan-gw</b> context
Context	<a href="#">debug call-trace wlan-gw</a>

Tree	<a href="#">wlan-gw</a>
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ue** [[name](#)] *string*

Synopsis	Enter the <b>ue</b> list instance
Context	<a href="#">debug call-trace wlan-gw ue string</a>
Tree	<a href="#">ue</a>
Max. Instances	50
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	Unique trace name
Context	<a href="#">debug call-trace wlan-gw ue string</a>
Tree	<a href="#">ue</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mac** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MAC address of the sessions to trace
Context	<a href="#">debug call-trace wlan-gw ue string mac string</a>
Tree	<a href="#">mac</a>
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**profile *string*****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Call trace profile applied for the trace
Context	<code>debug call-trace wlan-gw ue string profile string</code>
Tree	<code>profile</code>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**lag [*lag-name*] *string***

Synopsis	Enter the <b>lag</b> list instance
Context	<code>debug lag string</code>
Tree	<code>lag</code>
Description	Commands in this context configure debugging for Link Aggregation Group (LAG).
Introduced	22.7.R1
Platforms	All

**[*lag-name*] *string***

Synopsis	LAG name
Context	<code>debug lag string</code>
Tree	<code>lag</code>
Description	<p>This command specifies the LAG name.</p> <p>In model-driven interfaces, the LAG name is used for configuration references and <b>show</b> commands. A service provider or administrator can use the defined LAG name to identify and manage LAGs within the SR OS platforms.</p> <p>The LAG name must always start with "lag-".</p>
String Length	1 to 27
Notes	This element is part of a list key.
Introduced	22.7.R1



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Platforms All

### **bfd** *boolean*

Synopsis Enable debugging for BFD  
Context [debug lag string bfd boolean](#)  
Tree [bfd](#)  
Default false  
Introduced 22.7.R1  
Platforms All

### **config** *boolean*

Synopsis Enable debugging for configuration changes  
Context [debug lag string config boolean](#)  
Tree [config](#)  
Default false  
Introduced 22.7.R1  
Platforms All

### **iom-updates** *boolean*

Synopsis Enable debugging for IOM updates  
Context [debug lag string iom-updates boolean](#)  
Tree [iom-updates](#)  
Default false  
Introduced 22.7.R1  
Platforms All

### **lACP-packets** *boolean*

Synopsis Enable debugging for LACP packets  
Context [debug lag string lACP-packets boolean](#)  
Tree [lACP-packets](#)  
Default false

Introduced 22.7.R1  
Platforms All

### **multi-chassis** *boolean*

Synopsis Enable debugging for multi-chassis LAG  
Context [debug lag string multi-chassis boolean](#)  
Tree [multi-chassis](#)  
Default false  
Introduced 22.7.R1  
Platforms All

### **multi-chassis-packets** *boolean*

Synopsis Enable debugging for multi-chassis packets  
Context [debug lag string multi-chassis-packets boolean](#)  
Tree [multi-chassis-packets](#)  
Default false  
Introduced 22.7.R1  
Platforms All

### **port** [[port-id](#)] *string*

Synopsis Enter the **port** list instance  
Context [debug lag string port string](#)  
Tree [port](#)  
Introduced 22.7.R1  
Platforms All

### **[port-id]** *string*

Synopsis Unique identifier for the port in the LAG  
Context [debug lag string port string](#)  
Tree [port](#)  
Notes This element is part of a list key.

Introduced 22.7.R1  
Platforms All

### **bfd** *boolean*

Synopsis Enable debugging for BFD  
Context [debug lag string port string bfd boolean](#)  
Tree [bfd](#)  
Default false  
Introduced 22.7.R1  
Platforms All

### **config** *boolean*

Synopsis Enable debugging for configuration changes  
Context [debug lag string port string config boolean](#)  
Tree [config](#)  
Default false  
Introduced 22.7.R1  
Platforms All

### **lACP-packets** *boolean*

Synopsis Enable debugging for LACP packets  
Context [debug lag string port string lACP-packets boolean](#)  
Tree [lACP-packets](#)  
Default false  
Introduced 22.7.R1  
Platforms All

### **multi-chassis** *boolean*

Synopsis Enable debugging for multi-chassis LAG  
Context [debug lag string port string multi-chassis boolean](#)  
Tree [multi-chassis](#)

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Default	false
Introduced	22.7.R1
Platforms	All

**port-states** *boolean*

Synopsis	Enable debugging for port-state changes
Context	<a href="#">debug lag</a> <i>string</i> <a href="#">port</a> <i>string</i> <a href="#">port-states</a> <i>boolean</i>
Tree	<a href="#">port-states</a>
Default	false
Introduced	22.7.R1
Platforms	All

**redundancy** *boolean*

Synopsis	Enable debugging for redundancy
Context	<a href="#">debug lag</a> <i>string</i> <a href="#">port</a> <i>string</i> <a href="#">redundancy</a> <i>boolean</i>
Tree	<a href="#">redundancy</a>
Default	false
Introduced	22.7.R1
Platforms	All

**selection-logic** *boolean*

Synopsis	Enable debugging for selection logic
Context	<a href="#">debug lag</a> <i>string</i> <a href="#">port</a> <i>string</i> <a href="#">selection-logic</a> <i>boolean</i>
Tree	<a href="#">selection-logic</a>
Default	false
Introduced	22.7.R1
Platforms	All

**state-machine** *boolean*

Synopsis	Enable debugging for state-machine changes
Context	<a href="#">debug lag</a> <i>string</i> <a href="#">port</a> <i>string</i> <a href="#">state-machine</a> <i>boolean</i>

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Tree	<a href="#">state-machine</a>
Default	false
Introduced	22.7.R1
Platforms	All

### **timers** *boolean*

Synopsis	Enable debugging for timers
Context	<a href="#">debug lag string port string timers</a> <i>boolean</i>
Tree	<a href="#">timers</a>
Default	false
Introduced	22.7.R1
Platforms	All

### **port-states** *boolean*

Synopsis	Enable debugging for port-state changes
Context	<a href="#">debug lag string port-states</a> <i>boolean</i>
Tree	<a href="#">port-states</a>
Default	false
Introduced	22.7.R1
Platforms	All

### **redundancy** *boolean*

Synopsis	Enable debugging for redundancy
Context	<a href="#">debug lag string redundancy</a> <i>boolean</i>
Tree	<a href="#">redundancy</a>
Default	false
Introduced	22.7.R1
Platforms	All

### **selection-logic** *boolean*

Synopsis	Enable debugging for selection logic
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Context	<a href="#">debug lag</a> <i>string</i> <a href="#">selection-logic</a> <i>boolean</i>
Tree	<a href="#">selection-logic</a>
Default	false
Introduced	22.7.R1
Platforms	All

### **state-machine** *boolean*

Synopsis	Enable debugging for state-machine changes
Context	<a href="#">debug lag</a> <i>string</i> <a href="#">state-machine</a> <i>boolean</i>
Tree	<a href="#">state-machine</a>
Default	false
Introduced	22.7.R1
Platforms	All

### **timers** *boolean*

Synopsis	Enable debugging for timers
Context	<a href="#">debug lag</a> <i>string</i> <a href="#">timers</a> <i>boolean</i>
Tree	<a href="#">timers</a>
Default	false
Introduced	22.7.R1
Platforms	All

### **nat**

Synopsis	Enter the <b>nat</b> context
Context	<a href="#">debug nat</a>
Tree	<a href="#">nat</a>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **I2-aware**

Synopsis	Enter the <b>I2-aware</b> context
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Context	<a href="#">debug nat l2-aware</a>
Tree	<a href="#">l2-aware</a>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **subscriber** [[subscriber-id](#)] *string*

Synopsis	Add a list entry for <b>subscriber</b>
Context	<a href="#">debug nat l2-aware subscriber string</a>
Tree	<a href="#">subscriber</a>
Max. Instances	16
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[subscriber-id]** *string*

Synopsis	L2-aware subscriber ID
Context	<a href="#">debug nat l2-aware subscriber string</a>
Tree	<a href="#">subscriber</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **upnp**

Synopsis	Enter the <b>upnp</b> context
Context	<a href="#">debug nat l2-aware upnp</a>
Tree	<a href="#">upnp</a>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**subscriber** [**subscriber-id**] *string*

Synopsis	Enter the <b>subscriber</b> list instance
Context	<a href="#">debug nat l2-aware upnp subscriber string</a>
Tree	<a href="#">subscriber</a>
Max. Instances	10
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[subscriber-id]** *string*

Synopsis	L2-aware subscriber ID
Context	<a href="#">debug nat l2-aware upnp subscriber string</a>
Tree	<a href="#">subscriber</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**events** *boolean*

Synopsis	Enable UPnP event debugging
Context	<a href="#">debug nat l2-aware upnp subscriber string events boolean</a>
Tree	<a href="#">events</a>
Default	true
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**packets**

Synopsis	Enable the <b>packets</b> context
Context	<a href="#">debug nat l2-aware upnp subscriber string packets</a>
Tree	<a href="#">packets</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**detail** *boolean*

Synopsis	Include IP, UDP, and TCP headers in UPnP packet debug
Context	<a href="#">debug nat l2-aware upnp subscriber</a> <i>string</i> <a href="#">packets detail</a> <i>boolean</i>
Tree	<a href="#">detail</a>
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**large-scale**

Synopsis	Enter the <b>large-scale</b> context
Context	<a href="#">debug nat large-scale</a>
Tree	<a href="#">large-scale</a>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**dual-stack-lite**

Synopsis	Enter the <b>dual-stack-lite</b> context
Context	<a href="#">debug nat large-scale dual-stack-lite</a>
Tree	<a href="#">dual-stack-lite</a>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**subscriber** [inside-router](#) *string* [b4-address](#) *string*

Synopsis	Add a list entry for <b>subscriber</b>
Context	<a href="#">debug nat large-scale dual-stack-lite subscriber inside-router</a> <i>string</i> <a href="#">b4-address</a> <i>string</i>
Tree	<a href="#">subscriber</a>
Max. Instances	16
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**inside-router** *string*

Synopsis	Inside router instance name
Context	<a href="#">debug nat large-scale dual-stack-lite subscriber inside-router</a> <i>string</i> <a href="#">b4-address</a> <i>string</i>
Tree	<a href="#">subscriber</a>
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**b4-address** *string*

Synopsis	IPv6 B4 address of the DS-Lite subscriber
Context	<a href="#">debug nat large-scale dual-stack-lite subscriber inside-router</a> <i>string</i> <a href="#">b4-address</a> <i>string</i>
Tree	<a href="#">subscriber</a>
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nat44**

Synopsis	Enter the <b>nat44</b> context
Context	<a href="#">debug nat large-scale nat44</a>
Tree	<a href="#">nat44</a>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**subscriber** [inside-router](#) *string* [ip-address](#) *string*

Synopsis	Add a list entry for <b>subscriber</b>
Context	<a href="#">debug nat large-scale nat44 subscriber inside-router</a> <i>string</i> <a href="#">ip-address</a> <i>string</i>
Tree	<a href="#">subscriber</a>
Max. Instances	16
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **inside-router** *string*

Synopsis	Inside router instance name
Context	<a href="#">debug nat large-scale nat44 subscriber inside-router</a> <i>string ip-address string</i>
Tree	<a href="#">subscriber</a>
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-address** *string*

Synopsis	Inside IPv4 address of the NAT44 subscriber
Context	<a href="#">debug nat large-scale nat44 subscriber inside-router</a> <i>string ip-address string</i>
Tree	<a href="#">subscriber</a>
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nat64**

Synopsis	Enter the <b>nat64</b> context
Context	<a href="#">debug nat large-scale nat64</a>
Tree	<a href="#">nat64</a>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **subscriber** [inside-router](#) *string ipv6-prefix string*

Synopsis	Add a list entry for <b>subscriber</b>
Context	<a href="#">debug nat large-scale nat64 subscriber inside-router</a> <i>string ipv6-prefix string</i>
Tree	<a href="#">subscriber</a>
Max. Instances	16
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **inside-router** *string*

Synopsis	Inside router instance name
Context	<a href="#">debug nat large-scale nat64 subscriber inside-router</a> <i>string</i> <a href="#">ipv6-prefix</a> <i>string</i>
Tree	<a href="#">subscriber</a>
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipv6-prefix** *string*

Synopsis	NAT64 IPv6 prefix of the subscriber
Context	<a href="#">debug nat large-scale nat64 subscriber inside-router</a> <i>string</i> <a href="#">ipv6-prefix</a> <i>string</i>
Tree	<a href="#">subscriber</a>
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nat-import**

Synopsis	Enter the <b>nat-import</b> context
Context	<a href="#">debug nat nat-import</a>
Tree	<a href="#">nat-import</a>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **route** [[ip-address](#)] (*ipv4-unicast-address* | *keyword*) [inside-router](#) *string*

Synopsis	Add a list entry for <b>route</b>
Context	<a href="#">debug nat nat-import route</a> ( <i>ipv4-unicast-address</i>   <i>keyword</i> ) <a href="#">inside-router</a> <i>string</i>
Tree	<a href="#">route</a>
Max. Instances	32
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[ip-address]** (*ipv4-unicast-address* | *keyword*)

Synopsis	IPv4 address of imported route, or any
Context	<a href="#">debug nat nat-import route</a> ( <i>ipv4-unicast-address</i>   <i>keyword</i> ) <a href="#">inside-router string</a>
Tree	<a href="#">route</a>
Options	any
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**inside-router** *string*

Synopsis	Router name or VPRN service name, or any
Context	<a href="#">debug nat nat-import route</a> ( <i>ipv4-unicast-address</i>   <i>keyword</i> ) <a href="#">inside-router string</a>
Tree	<a href="#">route</a>
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**pcp**

Synopsis	Enter the <b>pcp</b> context
Context	<a href="#">debug nat pcp</a>
Tree	<a href="#">pcp</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**router** [[router-instance](#)] *string*

Synopsis	Enter the <b>router</b> list instance
Context	<a href="#">debug nat pcp router string</a>
Tree	<a href="#">router</a>
Max. Instances	8
Introduced	22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[router-instance]** *string*

Synopsis Inside router instance name  
 Context [debug nat pcp router](#) *string*  
 Tree [router](#)  
 Notes This element is part of a list key.  
 Introduced 22.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **server** [[name](#)] *string*

Synopsis Enter the **server** list instance  
 Context [debug nat pcp router](#) *string* [server](#) *string*  
 Tree [server](#)  
 Max. Instances 8  
 Introduced 22.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis PCP server name  
 Context [debug nat pcp router](#) *string* [server](#) *string*  
 Tree [server](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 22.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **packets**

Synopsis Enter the **packets** context  
 Context [debug nat pcp router](#) *string* [server](#) *string* [packets](#)

Tree	<a href="#">packets</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**detail** *boolean*

Synopsis	Enable the detailed PCP packet debug output
Context	<a href="#">debug nat pcp router</a> <i>string</i> <a href="#">server</a> <i>string</i> <a href="#">packets detail</a> <i>boolean</i>
Tree	<a href="#">detail</a>
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**direction** *keyword*

Synopsis	Direction of the PCP packet debugging
Context	<a href="#">debug nat pcp router</a> <i>string</i> <a href="#">server</a> <i>string</i> <a href="#">packets direction</a> <i>keyword</i>
Tree	<a href="#">direction</a>
Options	ingress, egress, both
Default	ingress
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**router** [[router-instance](#)] *string*

Synopsis	Enter the <b>router</b> list instance
Context	<a href="#">debug router</a> <i>string</i>
Tree	<a href="#">router</a>
Introduced	22.5.R1
Platforms	All

**[router-instance]** *string*

Synopsis	Router name or VPRN service name
Context	<a href="#">debug router</a> <i>string</i>

Tree	<a href="#">router</a>
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

## dhcp

Synopsis	Enter the <b>dhcp</b> context
Context	<a href="#">debug router string dhcp</a>
Tree	<a href="#">dhcp</a>
Description	<p>Commands in this context enable DHCP debug for all packets in the specified routing instance or VPRN service, or for specific packets matching the specific MAC addresses, SAP identifiers, or interface names.</p> <p>When a DHCP packet matches a specified filter and is conforming the configured debug mode for that filter, the packet debug is available in the specified detail level. DHCP debug filter criteria are applied in the following order:</p> <ol style="list-style-type: none"> <li>1. MAC address</li> <li>2. SAP identifier</li> <li>3. interface names</li> <li>4. all packets</li> </ol> <p>Up to 8 MAC address filters, 8 SAP identifier filters, 4 interface name filters, and 4 all-packet filters can be specified simultaneously across all routing instances and VPRN services.</p>
Introduced	22.10.R1
Platforms	All

## all-packets

Synopsis	Enable the <b>all-packets</b> context
Context	<a href="#">debug router string dhcp all-packets</a>
Tree	<a href="#">all-packets</a>
Introduced	22.10.R1
Platforms	All

## detail-level *keyword*

Synopsis	Detail level of the DHCP debug output
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Context	<code>debug router string dhcp all-packets detail-level keyword</code>
Tree	<code>detail-level</code>
Options	high, medium, low
Default	high
Introduced	22.10.R1
Platforms	All

### **mode** *keyword*

Synopsis	DHCP packets present in the debug output
Context	<code>debug router string dhcp all-packets mode keyword</code>
Tree	<code>mode</code>
Options	egress-ingress-and-dropped, dropped-only, ingress-and-dropped
Default	egress-ingress-and-dropped
Introduced	22.10.R1
Platforms	All

### **interface** [`interface-name`] *string*

Synopsis	Enter the <b>interface</b> list instance
Context	<code>debug router string dhcp interface string</code>
Tree	<code>interface</code>
Introduced	22.10.R1
Platforms	All

### **[interface-name]** *string*

Synopsis	Interface name
Context	<code>debug router string dhcp interface string</code>
Tree	<code>interface</code>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

**detail-level** *keyword*

Synopsis	Detail level of the DHCP debug output
Context	<code>debug router string dhcp interface string detail-level keyword</code>
Tree	<code>detail-level</code>
Options	high, medium, low
Default	high
Introduced	22.10.R1
Platforms	All

**mode** *keyword*

Synopsis	DHCP packets present in the debug output
Context	<code>debug router string dhcp interface string mode keyword</code>
Tree	<code>mode</code>
Options	egress-ingress-and-dropped, dropped-only, ingress-and-dropped
Default	egress-ingress-and-dropped
Introduced	22.10.R1
Platforms	All

**mac** [*address*] *string*

Synopsis	Enter the <b>mac</b> list instance
Context	<code>debug router string dhcp mac string</code>
Tree	<code>mac</code>
Introduced	22.10.R1
Platforms	All

**[address]** *string*

Synopsis	MAC address matching the client hardware address field
Context	<code>debug router string dhcp mac string</code>
Tree	<code>mac</code>
Notes	This element is part of a list key.
Introduced	22.10.R1

Platforms All

### **detail-level** *keyword*

Synopsis Detail level of the DHCP debug output  
 Context [debug router](#) *string* [dhcp mac](#) *string* **detail-level** *keyword*  
 Tree [detail-level](#)  
 Options high, medium, low  
 Default high  
 Introduced 22.10.R1  
 Platforms All

### **mode** *keyword*

Synopsis DHCP packets present in the debug output  
 Context [debug router](#) *string* [dhcp mac](#) *string* **mode** *keyword*  
 Tree [mode](#)  
 Options egress-ingress-and-dropped, dropped-only, ingress-and-dropped  
 Default egress-ingress-and-dropped  
 Introduced 22.10.R1  
 Platforms All

### **sap** [[sap-id](#)] *string*

Synopsis Enter the **sap** list instance  
 Context [debug router](#) *string* [dhcp sap](#) *string*  
 Tree [sap](#)  
 Introduced 22.10.R1  
 Platforms All

### [[sap-id](#)] *string*

Synopsis SAP ID  
 Context [debug router](#) *string* [dhcp sap](#) *string*  
 Tree [sap](#)

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String Length	1 to 45
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

### **detail-level** *keyword*

Synopsis	Detail level of the DHCP debug output
Context	<a href="#">debug router</a> <i>string</i> <a href="#">dhcp sap</a> <i>string</i> <b>detail-level</b> <i>keyword</i>
Tree	<a href="#">detail-level</a>
Options	high, medium, low
Default	high
Introduced	22.10.R1
Platforms	All

### **mode** *keyword*

Synopsis	DHCP packets present in the debug output
Context	<a href="#">debug router</a> <i>string</i> <a href="#">dhcp sap</a> <i>string</i> <b>mode</b> <i>keyword</i>
Tree	<a href="#">mode</a>
Options	egress-ingress-and-dropped, dropped-only, ingress-and-dropped
Default	egress-ingress-and-dropped
Introduced	22.10.R1
Platforms	All

### **igmp**

Synopsis	Enter the <b>igmp</b> context
Context	<a href="#">debug router</a> <i>string</i> <b>igmp</b>
Tree	<a href="#">igmp</a>
Introduced	22.10.R1
Platforms	All

## group-interface

Synopsis	Enable the <b>group-interface</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">igmp group-interface</a>
Tree	<a href="#">group-interface</a>
Introduced	22.10.R1
Platforms	All

## all-group-interfaces

Synopsis	Trace all interfaces
Context	<a href="#">debug router</a> <i>string</i> <a href="#">igmp group-interface all-group-interfaces</a>
Tree	<a href="#">all-group-interfaces</a>
Notes	The following elements are part of a mandatory choice: <b>all-group-interfaces</b> or ( <b>forwarding-service</b> and <b>group-interface-name</b> ).
Introduced	22.10.R1
Platforms	All

## forwarding-service *string*

Synopsis	ID of the forwarding service to trace
Context	<a href="#">debug router</a> <i>string</i> <a href="#">igmp group-interface forwarding-service</a> <i>string</i>
Tree	<a href="#">forwarding-service</a>
String Length	1 to 64
Default	<code>.././router-instance</code>
Notes	The following elements are part of a mandatory choice: <b>all-group-interfaces</b> or ( <b>forwarding-service</b> and <b>group-interface-name</b> ).
Introduced	22.10.R1
Platforms	All

## group-interface-name *string*

Synopsis	Interface name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">igmp group-interface group-interface-name</a> <i>string</i>
Tree	<a href="#">group-interface-name</a>
String Length	1 to 32

Notes	The following elements are part of a mandatory choice: <b>all-group-interfaces</b> or ( <b>forwarding-service</b> and <b>group-interface-name</b> ).
Introduced	22.10.R1
Platforms	All

## host

Synopsis	Enable the <b>host</b> context
Context	<a href="#">debug router string igmp host</a>
Tree	<a href="#">host</a>
Introduced	22.10.R1
Platforms	All

## group-interface

Synopsis	Enter the <b>group-interface</b> context
Context	<a href="#">debug router string igmp host group-interface</a>
Tree	<a href="#">group-interface</a>
Introduced	22.10.R1
Platforms	All

## forwarding-service *string*

Synopsis	ID of the forwarding service to trace
Context	<a href="#">debug router string igmp host group-interface forwarding-service string</a>
Tree	<a href="#">forwarding-service</a>
String Length	1 to 64
Default	<code>.././router-instance</code>
Introduced	22.10.R1
Platforms	All

## group-interface-name *string*

Synopsis	Interface name
Context	<a href="#">debug router string igmp host group-interface group-interface-name string</a>

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Tree	<a href="#">group-interface-name</a>
String Length	1 to 32
Introduced	22.10.R1
Platforms	All

### **ip-address** *string*

Synopsis	IP address of the host to trace
Context	<a href="#">debug router</a> <i>string</i> <a href="#">igmp host ip-address</a> <i>string</i>
Tree	<a href="#">ip-address</a>
Introduced	22.10.R1
Platforms	All

### **interface**

Synopsis	Enable the <b>interface</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">igmp interface</a>
Tree	<a href="#">interface</a>
Introduced	22.10.R1
Platforms	All

### **all-interfaces**

Synopsis	Trace all interfaces
Context	<a href="#">debug router</a> <i>string</i> <a href="#">igmp interface all-interfaces</a>
Tree	<a href="#">all-interfaces</a>
Notes	The following elements are part of a mandatory choice: <b>all-interfaces</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

### **interface-name** *string*

Synopsis	Interface name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">igmp interface interface-name</a> <i>string</i>

Tree	<a href="#">interface-name</a>
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: <b>all-interfaces</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

## mcs

Synopsis	Enable the <b>mcs</b> context
Context	<a href="#">debug router string igmp mcs</a>
Tree	<a href="#">mcs</a>
Description	Commands in this context enable debugging for IGMP multicast servers.
Introduced	22.10.R1
Platforms	All

## all-interfaces

Synopsis	Trace all interfaces
Context	<a href="#">debug router string igmp mcs all-interfaces</a>
Tree	<a href="#">all-interfaces</a>
Notes	The following elements are part of a mandatory choice: <b>all-interfaces</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

## interface-name *string*

Synopsis	Interface name
Context	<a href="#">debug router string igmp mcs interface-name string</a>
Tree	<a href="#">interface-name</a>
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: <b>all-interfaces</b> or <b>interface-name</b> .
Introduced	22.10.R1



Platforms All

### **miscellaneous** *boolean*

Synopsis Enable tracing of miscellaneous events  
Context [debug router string igmp miscellaneous boolean](#)  
Tree [miscellaneous](#)  
Default false  
Introduced 22.10.R1  
Platforms All

### **packet**

Synopsis Enable the **packet** context  
Context [debug router string igmp packet](#)  
Tree [packet](#)  
Introduced 22.10.R1  
Platforms All

### **all-origins**

Synopsis Trace all origins  
Context [debug router string igmp packet all-origins](#)  
Tree [all-origins](#)  
Notes The following elements are part of a choice: **all-origins**, **group-interface-name**, **host-ip-address**, **interface-ip-address**, or **interface-name**.  
Introduced 22.10.R1  
Platforms All

### **dropped** *boolean*

Synopsis Enable tracing for dropped packets  
Context [debug router string igmp packet dropped boolean](#)  
Tree [dropped](#)  
Default true

Introduced 22.10.R1  
Platforms All

### **egress** *boolean*

Synopsis Enable tracing for transmitted packets  
Context [debug router](#) *string* [igmp packet egress](#) *boolean*  
Tree [egress](#)  
Default true  
Introduced 22.10.R1  
Platforms All

### **group-interface-name** *string*

Synopsis Interface name  
Context [debug router](#) *string* [igmp packet group-interface-name](#) *string*  
Tree [group-interface-name](#)  
String Length 1 to 32  
Notes The following elements are part of a choice: **all-origins**, **group-interface-name**, **host-ip-address**, **interface-ip-address**, or **interface-name**.  
Introduced 22.10.R1  
Platforms All

### **host-ip-address** *string*

Synopsis Address of the host to trace  
Context [debug router](#) *string* [igmp packet host-ip-address](#) *string*  
Tree [host-ip-address](#)  
Notes The following elements are part of a choice: **all-origins**, **group-interface-name**, **host-ip-address**, **interface-ip-address**, or **interface-name**.  
Introduced 22.10.R2  
Platforms All

### **ingress** *boolean*

Synopsis Enable tracing for received packets

Context	<code>debug router string igmp packet ingress boolean</code>
Tree	<code>ingress</code>
Default	true
Introduced	22.10.R1
Platforms	All

### **interface-ip-address** *string*

Synopsis	Source address of the packet to trace
Context	<code>debug router string igmp packet interface-ip-address string</code>
Tree	<code>interface-ip-address</code>
Notes	The following elements are part of a choice: <b>all-origins</b> , <b>group-interface-name</b> , <b>host-ip-address</b> , <b>interface-ip-address</b> , or <b>interface-name</b> .
Introduced	22.10.R2
Platforms	All

### **interface-name** *string*

Synopsis	Interface name
Context	<code>debug router string igmp packet interface-name string</code>
Tree	<code>interface-name</code>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>all-origins</b> , <b>group-interface-name</b> , <b>host-ip-address</b> , <b>interface-ip-address</b> , or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

### **type** *keyword*

Synopsis	Packet type to trace
Context	<code>debug router string igmp packet type keyword</code>
Tree	<code>type</code>
Options	all, query, v1-report, v2-report, v2-leave, v3-report
Default	all
Introduced	22.10.R1

Platforms All

## mld

Synopsis Enter the **mld** context  
 Context [debug router string mld](#)  
 Tree [mld](#)  
 Introduced 22.10.R1  
 Platforms All

## group-interface

Synopsis Enable the **group-interface** context  
 Context [debug router string mld group-interface](#)  
 Tree [group-interface](#)  
 Introduced 22.10.R1  
 Platforms All

## all-group-interfaces

Synopsis Trace all interfaces  
 Context [debug router string mld group-interface all-group-interfaces](#)  
 Tree [all-group-interfaces](#)  
 Notes The following elements are part of a mandatory choice: **all-group-interfaces** or **(forwarding-service and group-interface-name)**.  
 Introduced 22.10.R1  
 Platforms All

## forwarding-service *string*

Synopsis ID of the forwarding service to trace  
 Context [debug router string mld group-interface forwarding-service string](#)  
 Tree [forwarding-service](#)  
 String Length 1 to 64  
 Default [.././router-instance](#)

Notes	The following elements are part of a mandatory choice: <b>all-group-interfaces</b> or ( <b>forwarding-service</b> and <b>group-interface-name</b> ).
Introduced	22.10.R1
Platforms	All

### **group-interface-name** *string*

Synopsis	Interface name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mld group-interface</a> <a href="#">group-interface-name</a> <i>string</i>
Tree	<a href="#">group-interface-name</a>
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: <b>all-group-interfaces</b> or ( <b>forwarding-service</b> and <b>group-interface-name</b> ).
Introduced	22.10.R1
Platforms	All

### **host**

Synopsis	Enable the <b>host</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mld host</a>
Tree	<a href="#">host</a>
Introduced	22.10.R1
Platforms	All

### **group-interface**

Synopsis	Enter the <b>group-interface</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mld host</a> <a href="#">group-interface</a>
Tree	<a href="#">group-interface</a>
Introduced	22.10.R1
Platforms	All

### **forwarding-service** *string*

Synopsis	ID of the forwarding service to trace
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mld host</a> <a href="#">group-interface</a> <a href="#">forwarding-service</a> <i>string</i>

Tree	<a href="#">forwarding-service</a>
String Length	1 to 64
Default	<code>.././router-instance</code>
Introduced	22.10.R1
Platforms	All

### **group-interface-name** *string*

Synopsis	Interface name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mld host group-interface group-interface-name</a> <i>string</i>
Tree	<a href="#">group-interface-name</a>
String Length	1 to 32
Introduced	22.10.R1
Platforms	All

### **ip-address** *string*

Synopsis	IP address of the host to trace
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mld host ip-address</a> <i>string</i>
Tree	<a href="#">ip-address</a>
Introduced	22.10.R1
Platforms	All

### **interface**

Synopsis	Enable the <b>interface</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mld interface</a>
Tree	<a href="#">interface</a>
Introduced	22.10.R1
Platforms	All

### **all-interfaces**

Synopsis	Trace all interfaces
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mld interface all-interfaces</a>

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Tree	<a href="#">all-interfaces</a>
Notes	The following elements are part of a mandatory choice: <b>all-interfaces</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

### **interface-name** *string*

Synopsis	Interface name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mld interface interface-name</a> <i>string</i>
Tree	<a href="#">interface-name</a>
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: <b>all-interfaces</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

### **mcs**

Synopsis	Enable the <b>mcs</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mld mcs</a>
Tree	<a href="#">mcs</a>
Introduced	22.10.R1
Platforms	All

### **all-interfaces**

Synopsis	Trace all interfaces
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mld mcs all-interfaces</a>
Tree	<a href="#">all-interfaces</a>
Notes	The following elements are part of a mandatory choice: <b>all-interfaces</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

### **interface-name** *string*

Synopsis	Interface name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mld mcs</a> <a href="#">interface-name</a> <i>string</i>
Tree	<a href="#">interface-name</a>
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: <b>all-interfaces</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

### **miscellaneous** *boolean*

Synopsis	Enable the tracing of miscellaneous events
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mld miscellaneous</a> <i>boolean</i>
Tree	<a href="#">miscellaneous</a>
Default	false
Introduced	22.10.R1
Platforms	All

### **packet**

Synopsis	Enable the <b>packet</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mld packet</a>
Tree	<a href="#">packet</a>
Introduced	22.10.R1
Platforms	All

### **all-origins**

Synopsis	Allow trace for all origins
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mld packet</a> <a href="#">all-origins</a>
Tree	<a href="#">all-origins</a>
Notes	The following elements are part of a choice: <b>all-origins</b> , <b>group-interface-name</b> , <b>host-ip-address</b> , <b>interface-ip-address</b> , or <b>interface-name</b> .
Introduced	22.10.R1



Platforms All

### **dropped** *boolean*

Synopsis Enable tracing for dropped packets  
Context [debug router](#) *string* [mld packet](#) [dropped](#) *boolean*  
Tree [dropped](#)  
Default true  
Introduced 22.10.R1  
Platforms All

### **egress** *boolean*

Synopsis Enable tracing for transmitted packets  
Context [debug router](#) *string* [mld packet](#) [egress](#) *boolean*  
Tree [egress](#)  
Default true  
Introduced 22.10.R1  
Platforms All

### **group-interface-name** *string*

Synopsis Interface name  
Context [debug router](#) *string* [mld packet](#) [group-interface-name](#) *string*  
Tree [group-interface-name](#)  
String Length 1 to 32  
Notes The following elements are part of a choice: **all-origins**, **group-interface-name**, **host-ip-address**, **interface-ip-address**, or **interface-name**.  
Introduced 22.10.R1  
Platforms All

### **host-ip-address** *string*

Synopsis Address of the host to trace  
Context [debug router](#) *string* [mld packet](#) [host-ip-address](#) *string*

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Tree	<a href="#">host-ip-address</a>
Notes	The following elements are part of a choice: <b>all-origins</b> , <b>group-interface-name</b> , <b>host-ip-address</b> , <b>interface-ip-address</b> , or <b>interface-name</b> .
Introduced	22.10.R2
Platforms	All

### **ingress** *boolean*

Synopsis	Enable tracing for received packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mld packet ingress</a> <i>boolean</i>
Tree	<a href="#">ingress</a>
Default	true
Introduced	22.10.R1
Platforms	All

### **interface-ip-address** *string*

Synopsis	Source address of the packet to trace
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mld packet interface-ip-address</a> <i>string</i>
Tree	<a href="#">interface-ip-address</a>
Notes	The following elements are part of a choice: <b>all-origins</b> , <b>group-interface-name</b> , <b>host-ip-address</b> , <b>interface-ip-address</b> , or <b>interface-name</b> .
Introduced	22.10.R2
Platforms	All

### **interface-name** *string*

Synopsis	Interface name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mld packet interface-name</a> <i>string</i>
Tree	<a href="#">interface-name</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>all-origins</b> , <b>group-interface-name</b> , <b>host-ip-address</b> , <b>interface-ip-address</b> , or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

## **type keyword**

Synopsis	Packet type
Context	<a href="#">debug router string mld packet type keyword</a>
Tree	<a href="#">type</a>
Options	all, query, v1-report, v2-report
Default	all
Introduced	22.10.R1
Platforms	All

## **msdp**

Synopsis	Enter the <b>msdp</b> context
Context	<a href="#">debug router string msdp</a>
Tree	<a href="#">msdp</a>
Description	Commands in this context configure debugging for the Multicast Source Discovery Protocol (MSDP).
Introduced	22.10.R1
Platforms	All

## **packet**

Synopsis	Enable the <b>packet</b> context
Context	<a href="#">debug router string msdp packet</a>
Tree	<a href="#">packet</a>
Introduced	22.10.R1
Platforms	All

## **all-packet-types**

Synopsis	Enable MSDP debugging for all packets
Context	<a href="#">debug router string msdp packet all-packet-types</a>
Tree	<a href="#">all-packet-types</a>
Notes	The following elements are part of a choice: <b>all-packet-types</b> or <b>packet-types</b> .
Introduced	22.10.R1

Platforms All

## packet-types

Synopsis Enter the **packet-types** context

Context [debug router string msdp packet packet-types](#)

Tree [packet-types](#)

Notes The following elements are part of a choice: **all-packet-types** or **packet-types**.

Introduced 22.10.R1

Platforms All

## keep-alive

Synopsis Enable the **keep-alive** context

Context [debug router string msdp packet packet-types keep-alive](#)

Tree [keep-alive](#)

Introduced 22.10.R1

Platforms All

## peer-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Peer address used to trace packets

Context [debug router string msdp packet packet-types keep-alive peer-address \(\*ipv4-address-no-zone\* | \*ipv6-address-no-zone\*\)](#)

Tree [peer-address](#)

Introduced 22.10.R1

Platforms All

## sa-request

Synopsis Enable the **sa-request** context

Context [debug router string msdp packet packet-types sa-request](#)

Tree [sa-request](#)

Introduced 22.10.R1

Platforms All

**peer-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Peer address used to trace packets
Context	<a href="#">debug router string msdp packet packet-types sa-request peer-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">peer-address</a>
Introduced	22.10.R1
Platforms	All

**sa-response**

Synopsis	Enable the <b>sa-response</b> context
Context	<a href="#">debug router string msdp packet packet-types sa-response</a>
Tree	<a href="#">sa-response</a>
Introduced	22.10.R1
Platforms	All

**peer-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Peer address used to trace packets
Context	<a href="#">debug router string msdp packet packet-types sa-response peer-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">peer-address</a>
Introduced	22.10.R1
Platforms	All

**source-active**

Synopsis	Enable the <b>source-active</b> context
Context	<a href="#">debug router string msdp packet packet-types source-active</a>
Tree	<a href="#">source-active</a>
Introduced	22.10.R1
Platforms	All

**peer-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Peer address used to trace packets
Context	<a href="#">debug router string msdp packet packet-types source-active peer-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">peer-address</a>
Introduced	22.10.R1
Platforms	All

**pim**

Synopsis	Enable the <b>pim</b> context
Context	<a href="#">debug router string msdp pim</a>
Tree	<a href="#">pim</a>
Description	Commands in this context enable MSDP PIM debugging.
Introduced	22.10.R1
Platforms	All

**group-address** *string*

Synopsis	IP multicast group address used to trace events
Context	<a href="#">debug router string msdp pim group-address string</a>
Tree	<a href="#">group-address</a>
Introduced	22.10.R1
Platforms	All

**rtm**

Synopsis	Enable the <b>rtm</b> context
Context	<a href="#">debug router string msdp rtm</a>
Tree	<a href="#">rtm</a>
Description	Commands in this context enable MSDP route table manager (RTM) debugging.
Introduced	22.10.R1
Platforms	All

**rp-address string**

Synopsis	IP multicast RP address used to trace events
Context	<a href="#">debug router string msdp rtm rp-address string</a>
Tree	<a href="#">rp-address</a>
Introduced	22.10.R1
Platforms	All

**sa-db**

Synopsis	Enable the <b>sa-db</b> context
Context	<a href="#">debug router string msdp sa-db</a>
Tree	<a href="#">sa-db</a>
Description	Commands in this context enable MSDP source-active database debugging.
Introduced	22.10.R1
Platforms	All

**group-address string**

Synopsis	IP multicast group address used to trace events
Context	<a href="#">debug router string msdp sa-db group-address string</a>
Tree	<a href="#">group-address</a>
Introduced	22.10.R1
Platforms	All

**rp-address string**

Synopsis	IP multicast RP address used to trace events
Context	<a href="#">debug router string msdp sa-db rp-address string</a>
Tree	<a href="#">rp-address</a>
Introduced	22.10.R1
Platforms	All

**source-address string**

Synopsis	Source address used to trace events
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Context	<code>debug router <i>string</i> msdp sa-db source-address <i>string</i></code>
Tree	<code>source-address</code>
Introduced	22.10.R1
Platforms	All

## mtrace

Synopsis	Enter the <b>mtrace</b> context
Context	<code>debug router <i>string</i> mtrace</code>
Tree	<code>mtrace</code>
Introduced	22.10.R1
Platforms	All

## miscellaneous

Synopsis	Enable the <b>miscellaneous</b> context
Context	<code>debug router <i>string</i> mtrace miscellaneous</code>
Tree	<code>miscellaneous</code>
Introduced	22.10.R1
Platforms	All

## packet

Synopsis	Enable the <b>packet</b> context
Context	<code>debug router <i>string</i> mtrace packet</code>
Tree	<code>packet</code>
Introduced	22.10.R1
Platforms	All

## all-packet-types

Synopsis	Enable debugging for all packets
Context	<code>debug router <i>string</i> mtrace packet all-packet-types</code>
Tree	<code>all-packet-types</code>
Notes	The following elements are part of a choice: <b>all-packet-types</b> or <b>packet-types</b> .



Introduced 22.10.R1  
Platforms All

## **packet-types**

Synopsis Enter the **packet-types** context  
Context [debug router string mtrace packet packet-types](#)  
Tree [packet-types](#)  
Notes The following elements are part of a choice: **all-packet-types** or **packet-types**.  
Introduced 22.10.R1  
Platforms All

## **query boolean**

Synopsis Debug query packets  
Context [debug router string mtrace packet packet-types query boolean](#)  
Tree [query](#)  
Default false  
Introduced 22.10.R1  
Platforms All

## **request boolean**

Synopsis Debug request packets  
Context [debug router string mtrace packet packet-types request boolean](#)  
Tree [request](#)  
Default false  
Introduced 22.10.R1  
Platforms All

## **response boolean**

Synopsis Debug response packets  
Context [debug router string mtrace packet packet-types response boolean](#)  
Tree [response](#)

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Default	false
Introduced	22.10.R1
Platforms	All

## mtrace2

Synopsis	Enter the <b>mtrace2</b> context
Context	<a href="#">debug router</a> <i>string</i> <b>mtrace2</b>
Tree	<a href="#">mtrace2</a>
Introduced	22.10.R1
Platforms	All

## miscellaneous

Synopsis	Enable the <b>miscellaneous</b> context
Context	<a href="#">debug router</a> <i>string</i> <b>mtrace2</b> <b>miscellaneous</b>
Tree	<a href="#">miscellaneous</a>
Introduced	22.10.R1
Platforms	All

## packet

Synopsis	Enable the <b>packet</b> context
Context	<a href="#">debug router</a> <i>string</i> <b>mtrace2</b> <b>packet</b>
Tree	<a href="#">packet</a>
Introduced	22.10.R1
Platforms	All

## all-packet-types

Synopsis	Enable debugging for all packets
Context	<a href="#">debug router</a> <i>string</i> <b>mtrace2</b> <b>packet</b> <b>all-packet-types</b>
Tree	<a href="#">all-packet-types</a>
Notes	The following elements are part of a choice: <b>all-packet-types</b> or <b>packet-types</b> .
Introduced	22.10.R1

Platforms All

## packet-types

Synopsis Enter the **packet-types** context

Context [debug router string mtrace2 packet packet-types](#)

Tree [packet-types](#)

Notes The following elements are part of a choice: **all-packet-types** or **packet-types**.

Introduced 22.10.R1

Platforms All

## query *boolean*

Synopsis Debug query packets

Context [debug router string mtrace2 packet packet-types query boolean](#)

Tree [query](#)

Default false

Introduced 22.10.R1

Platforms All

## request *boolean*

Synopsis Debug request packets

Context [debug router string mtrace2 packet packet-types request boolean](#)

Tree [request](#)

Default false

Introduced 22.10.R1

Platforms All

## response *boolean*

Synopsis Debug response packets

Context [debug router string mtrace2 packet packet-types response boolean](#)

Tree [response](#)

Default false

Introduced	22.10.R1
Platforms	All

## pim

Synopsis	Enter the <b>pim</b> context
Context	<a href="#">debug router string pim</a>
Tree	<a href="#">pim</a>
Introduced	22.10.R1
Platforms	All

## events

Synopsis	Enable the <b>events</b> context
Context	<a href="#">debug router string pim events</a>
Tree	<a href="#">events</a>
Introduced	22.10.R1
Platforms	All

## adjacency

Synopsis	Enable the <b>adjacency</b> context
Context	<a href="#">debug router string pim events adjacency</a>
Tree	<a href="#">adjacency</a>
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynmldp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcach</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

## all

Synopsis	Enable the <b>all</b> context
Context	<a href="#">debug router string pim events all</a>
Tree	<a href="#">all</a>

Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynmldp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcache</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

### **detail** *boolean*

Synopsis	Enable detail tracing
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events all</a> <a href="#">detail</a> <i>boolean</i>
Tree	<a href="#">detail</a>
Default	false
Introduced	22.10.R1
Platforms	All

### **group-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP multicast group address used to trace events
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events all</a> <a href="#">group-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">group-address</a>
Introduced	22.10.R1
Platforms	All

### **source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source address used to trace events
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events all</a> <a href="#">source-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">source-address</a>
Introduced	22.10.R1
Platforms	All

### **assert**

Synopsis	Enable the <b>assert</b> context
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Context	<a href="#">debug router string pim events assert</a>
Tree	<a href="#">assert</a>
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynmldp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcache</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

### **detail** *boolean*

Synopsis	Enable detail tracing
Context	<a href="#">debug router string pim events assert detail boolean</a>
Tree	<a href="#">detail</a>
Default	false
Introduced	22.10.R1
Platforms	All

### **group-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP multicast group address used to trace events
Context	<a href="#">debug router string pim events assert group-address (ipv4-address-no-zone   ipv6-address-no-zone)</a>
Tree	<a href="#">group-address</a>
Introduced	22.10.R1
Platforms	All

### **source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source address used to trace events
Context	<a href="#">debug router string pim events assert source-address (ipv4-address-no-zone   ipv6-address-no-zone)</a>
Tree	<a href="#">source-address</a>
Introduced	22.10.R1
Platforms	All

## auto-rp

Synopsis	Enable the <b>auto-rp</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events auto-rp</a>
Tree	<a href="#">auto-rp</a>
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynml dp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcach e</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

## bgp

Synopsis	Enable the <b>bgp</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events bgp</a>
Tree	<a href="#">bgp</a>
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynml dp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcach e</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

## group-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP multicast group address used to trace events
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events bgp group-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">group-address</a>
Introduced	22.10.R1
Platforms	All

## peer-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	BGP peer address used to trace events
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events bgp peer-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">peer-address</a>
Introduced	22.10.R1

Platforms All

### **source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Source address used to trace events

Context [debug router string pim events bgp source-address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [source-address](#)

Introduced 22.10.R1

Platforms All

### **bier-inband**

Synopsis Enable the **bier-inband** context

Context [debug router string pim events bier-inband](#)

Tree [bier-inband](#)

Notes The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmlp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrrib**, **msg**, **mvpn-rtcache**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.

Introduced 22.10.R1

Platforms All

### **detail** *boolean*

Synopsis Enable detail tracing

Context [debug router string pim events bier-inband detail boolean](#)

Tree [detail](#)

Default false

Introduced 22.10.R1

Platforms All

### **bsr**

Synopsis Enable the **bsr** context

Context [debug router string pim events bsr](#)

Tree [bsr](#)



Description	Commands in this context enable debugging for the PIM bootstrap mechanism.
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynmldp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcache</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

### **detail** *boolean*

Synopsis	Enable detail tracing
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events</a> <a href="#">bsr</a> <b>detail</b> <i>boolean</i>
Tree	<a href="#">detail</a>
Default	false
Introduced	22.10.R1
Platforms	All

### **data**

Synopsis	Enable the <b>data</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events</a> <b>data</b>
Tree	<a href="#">data</a>
Description	Commands in this context enable PIM data exception debugging.
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynmldp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcache</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

### **detail** *boolean*

Synopsis	Enable detail tracing
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events</a> <a href="#">data</a> <b>detail</b> <i>boolean</i>
Tree	<a href="#">detail</a>
Default	false
Introduced	22.10.R1
Platforms	All

**group-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP multicast group address used to trace events
Context	<code>debug router string pim events data group-address</code> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<code>group-address</code>
Introduced	22.10.R1
Platforms	All

**source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source address used to trace events
Context	<code>debug router string pim events data source-address</code> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<code>source-address</code>
Introduced	22.10.R1
Platforms	All

**db**

Synopsis	Enable the <b>db</b> context
Context	<code>debug router string pim events db</code>
Tree	<code>db</code>
Description	Commands in this context enable PIM database debugging.
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynmldp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcach</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

**detail** *boolean*

Synopsis	Enable detail tracing
Context	<code>debug router string pim events db detail boolean</code>
Tree	<code>detail</code>
Default	false

Introduced	22.10.R1
Platforms	All

### **group-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP multicast group address used to trace events
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events db group-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">group-address</a>
Introduced	22.10.R1
Platforms	All

### **source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source address used to trace events
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events db source-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">source-address</a>
Introduced	22.10.R1
Platforms	All

### **dynmldp**

Synopsis	Enable the <b>dynmldp</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events dynmldp</a>
Tree	<a href="#">dynmldp</a>
Description	Commands in this context enable dynamic MLDP debugging.
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynmldp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcache</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

### **detail** *boolean*

Synopsis	Enable detail tracing
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Context	<code>debug router string pim events dynmldp detail boolean</code>
Tree	<code>detail</code>
Default	false
Introduced	22.10.R1
Platforms	All

## extranet

Synopsis	Enable the <b>extranet</b> context
Context	<code>debug router string pim events extranet</code>
Tree	<code>extranet</code>
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynmldp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcach</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

## detail *boolean*

Synopsis	Enable detail tracing
Context	<code>debug router string pim events extranet detail boolean</code>
Tree	<code>detail</code>
Default	false
Introduced	22.10.R1
Platforms	All

## graft

Synopsis	Enable the <b>graft</b> context
Context	<code>debug router string pim events graft</code>
Tree	<code>graft</code>
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynmldp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcach</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

**detail** *boolean*

Synopsis	Enable detail tracing
Context	<a href="#">debug router string pim events graft detail boolean</a>
Tree	<a href="#">detail</a>
Default	false
Introduced	22.10.R1
Platforms	All

**group-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP multicast group address used to trace events
Context	<a href="#">debug router string pim events graft group-address (ipv4-address-no-zone   ipv6-address-no-zone)</a>
Tree	<a href="#">group-address</a>
Introduced	22.10.R1
Platforms	All

**source-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Source address used to trace events
Context	<a href="#">debug router string pim events graft source-address (ipv4-address-no-zone   ipv6-address-no-zone)</a>
Tree	<a href="#">source-address</a>
Introduced	22.10.R1
Platforms	All

**interface**

Synopsis	Enable the <b>interface</b> context
Context	<a href="#">debug router string pim events interface</a>
Tree	<a href="#">interface</a>
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynmldp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcache</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1

Platforms All

### **interface-name** *string*

Synopsis Interface name  
 Context [debug router string pim events interface interface-name string](#)  
 Tree [interface-name](#)  
 String Length 1 to 32  
 Introduced 22.10.R1  
 Platforms All

### **jp**

Synopsis Enable the **jp** context  
 Context [debug router string pim events jp](#)  
 Tree [jp](#)  
 Description Commands in this context enable debugging for PIM join and prune mechanisms.  
 Notes The following elements are part of a choice: (**adjacency, assert, auto-rp, bgp, bier-inband, bsr, data, db, dynmldp, extranet, graft, interface, jp, mofrr, mrrib, msg, mvpn-rtcache, red, register, rpfv, rtm, s-pmsi, and tunnel-interface**) or **all**.  
 Introduced 22.10.R1  
 Platforms All

### **detail** *boolean*

Synopsis Enable detail tracing  
 Context [debug router string pim events jp detail boolean](#)  
 Tree [detail](#)  
 Default false  
 Introduced 22.10.R1  
 Platforms All

### **group-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis IP multicast group address used to trace events

Context	<code>debug router string pim events jp group-address</code> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<code>group-address</code>
Introduced	22.10.R1
Platforms	All

### **source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source address used to trace events
Context	<code>debug router string pim events jp source-address</code> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<code>source-address</code>
Introduced	22.10.R1
Platforms	All

### **mofrr**

Synopsis	Enable the <b>mofrr</b> context
Context	<code>debug router string pim events mofrr</code>
Tree	<code>mofrr</code>
Description	Commands in this context enable debugging for PIM Multicast-only Fast Reroute (MoFRR).
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynmldp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcache</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

### **mrrib**

Synopsis	Enable the <b>mrrib</b> context
Context	<code>debug router string pim events mrrib</code>
Tree	<code>mrrib</code>
Description	Commands in this context enable Multicast Routing Information Base (MRIB) debugging.

Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynmldp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcache</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

### **detail** *boolean*

Synopsis	Enable detail tracing
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events</a> <a href="#">mrrib</a> <b>detail</b> <i>boolean</i>
Tree	<a href="#">detail</a>
Default	false
Introduced	22.10.R1
Platforms	All

### **group-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP multicast group address used to trace events
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events</a> <a href="#">mrrib</a> <b>group-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">group-address</a>
Introduced	22.10.R1
Platforms	All

### **source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source address used to trace events
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events</a> <a href="#">mrrib</a> <b>source-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">source-address</a>
Introduced	22.10.R1
Platforms	All

### **msg**

Synopsis	Enable the <b>msg</b> context
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Context	<a href="#">debug router string pim events msg</a>
Tree	<a href="#">msg</a>
Notes	The following elements are part of a choice: ( <b>adjacency, assert, auto-rp, bgp, bier-inband, bsr, data, db, dynmldp, extranet, graft, interface, jp, mofrr, mrrib, msg, mvpn-rtcache, red, register, rpfv, rtm, s-pmsi, and tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

## mvpn-rtcache

Synopsis	Enable the <b>mvpn-rtcache</b> context
Context	<a href="#">debug router string pim events mvpn-rtcache</a>
Tree	<a href="#">mvpn-rtcache</a>
Description	Commands in this context enable debugging for the PIM MVPN route cache.
Notes	The following elements are part of a choice: ( <b>adjacency, assert, auto-rp, bgp, bier-inband, bsr, data, db, dynmldp, extranet, graft, interface, jp, mofrr, mrrib, msg, mvpn-rtcache, red, register, rpfv, rtm, s-pmsi, and tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

## group-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Group address used to trace events
Context	<a href="#">debug router string pim events mvpn-rtcache group-address (<i>ipv4-address-no-zone   ipv6-address-no-zone</i>)</a>
Tree	<a href="#">group-address</a>
Introduced	22.10.R1
Platforms	All

## peer-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Peer address used to trace events
Context	<a href="#">debug router string pim events mvpn-rtcache peer-address (<i>ipv4-address-no-zone   ipv6-address-no-zone</i>)</a>
Tree	<a href="#">peer-address</a>
Introduced	22.10.R1

Platforms All

## red

Synopsis Enable the **red** context

Context [debug router string pim events red](#)

Tree [red](#)

Description Commands in this context enable debugging for PIM redundancy messages to the standby CPM.

Notes The following elements are part of a choice: (**adjacency, assert, auto-rp, bgp, bier-inband, bsr, data, db, dynmldp, extranet, graft, interface, jp, mofrr, mrrib, msg, mvpn-rtcache, red, register, rpfv, rtm, s-pmsi, and tunnel-interface**) or **all**.

Introduced 22.10.R1

Platforms All

## detail *boolean*

Synopsis Enable detail tracing

Context [debug router string pim events red detail boolean](#)

Tree [detail](#)

Default false

Introduced 22.10.R1

Platforms All

## register

Synopsis Enable the **register** context

Context [debug router string pim events register](#)

Tree [register](#)

Notes The following elements are part of a choice: (**adjacency, assert, auto-rp, bgp, bier-inband, bsr, data, db, dynmldp, extranet, graft, interface, jp, mofrr, mrrib, msg, mvpn-rtcache, red, register, rpfv, rtm, s-pmsi, and tunnel-interface**) or **all**.

Introduced 22.10.R1

Platforms All

**detail** *boolean*

Synopsis	Enable detail tracing
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events register detail</a> <i>boolean</i>
Tree	<a href="#">detail</a>
Default	false
Introduced	22.10.R1
Platforms	All

**group-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP multicast group address used to trace events
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events register group-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">group-address</a>
Introduced	22.10.R1
Platforms	All

**source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source address used to trace events
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events register source-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">source-address</a>
Introduced	22.10.R1
Platforms	All

**rpfv**

Synopsis	Enable the <b>rpfv</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events rpfv</a>
Tree	<a href="#">rpfv</a>
Description	Commands in this context enable PIM RPF vector debugging.
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynmldp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcach</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1

Platforms All

### **detail** *boolean*

Synopsis Enable detail tracing  
 Context [debug router string pim events rpfv detail boolean](#)  
 Tree [detail](#)  
 Default false  
 Introduced 22.10.R1  
 Platforms All

### **rtm**

Synopsis Enable the **rtm** context  
 Context [debug router string pim events rtm](#)  
 Tree [rtm](#)  
 Notes The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmldp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrrib**, **msg**, **mvpn-rtcach**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.  
 Introduced 22.10.R1  
 Platforms All

### **detail** *boolean*

Synopsis Enable detail tracing  
 Context [debug router string pim events rtm detail boolean](#)  
 Tree [detail](#)  
 Default false  
 Introduced 22.10.R1  
 Platforms All

### **s-pmsi**

Synopsis Enable the **s-pmsi** context  
 Context [debug router string pim events s-pmsi](#)  
 Tree [s-pmsi](#)

Description	Commands in this context enable debugging for the PIM selective provider multicast service interface.
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynmldp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcache</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

### detail *boolean*

Synopsis	Enable detail tracing
Context	<a href="#">debug router string pim events s-pmsi detail boolean</a>
Tree	<a href="#">detail</a>
Default	false
Introduced	22.10.R1
Platforms	All

### vpn-source-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	VPN source address used to trace events
Context	<a href="#">debug router string pim events s-pmsi vpn-source-address (ipv4-address-no-zone   ipv6-address-no-zone)</a>
Tree	<a href="#">vpn-source-address</a>
Introduced	22.10.R1
Platforms	All

### tunnel-interface

Synopsis	Enable the <b>tunnel-interface</b> context
Context	<a href="#">debug router string pim events tunnel-interface</a>
Tree	<a href="#">tunnel-interface</a>
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynmldp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcache</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

**ldp-p2mp-id** *number*

Synopsis	LDP P2MP ID
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events tunnel-interface</a> <a href="#">ldp-p2mp-id</a> <i>number</i>
Tree	<a href="#">ldp-p2mp-id</a>
Range	1 to 8192
Introduced	22.10.R1
Platforms	All

**rsvp-p2mp** *string*

Synopsis	RSVP P2MP LSP name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events tunnel-interface</a> <a href="#">rsvp-p2mp</a> <i>string</i>
Tree	<a href="#">rsvp-p2mp</a>
String Length	1 to 32
Introduced	22.10.R1
Platforms	All

**sender-address** *string*

Synopsis	IP address of the sender
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events tunnel-interface</a> <a href="#">sender-address</a> <i>string</i>
Tree	<a href="#">sender-address</a>
Introduced	22.10.R1
Platforms	All

**packet**

Synopsis	Enable the <b>packet</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim</a> <a href="#">packet</a>
Tree	<a href="#">packet</a>
Introduced	22.10.R1
Platforms	All

## all-origins

Synopsis	Enable trace for all origins
Context	<code>debug router string pim packet all-origins</code>
Tree	<code>all-origins</code>
Notes	The following elements are part of a choice: <b>all-origins</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

## all-packet-types

Synopsis	Enable PIM debugging for all packets
Context	<code>debug router string pim packet all-packet-types</code>
Tree	<code>all-packet-types</code>
Notes	The following elements are part of a choice: <b>all-packet-types</b> or <b>packet-types</b> .
Introduced	22.10.R1
Platforms	All

## egress *boolean*

Synopsis	Enable tracing for transmitted packets
Context	<code>debug router string pim packet egress boolean</code>
Tree	<code>egress</code>
Default	true
Introduced	22.10.R1
Platforms	All

## ingress *boolean*

Synopsis	Enable tracing for received packets
Context	<code>debug router string pim packet ingress boolean</code>
Tree	<code>ingress</code>
Default	true
Introduced	22.10.R1
Platforms	All

### **interface-name** *string*

Synopsis	Interface name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet</a> <a href="#">interface-name</a> <i>string</i>
Tree	<a href="#">interface-name</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>all-origins</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

### **ipv4** *boolean*

Synopsis	Enable tracing for PIM IPv4 packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet</a> <a href="#">ipv4</a> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	true
Introduced	22.10.R1
Platforms	All

### **ipv6** *boolean*

Synopsis	Enable tracing for PIM IPv6 packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet</a> <a href="#">ipv6</a> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	true
Introduced	22.10.R1
Platforms	All

### **packet-types**

Synopsis	Enter the <b>packet-types</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet</a> <a href="#">packet-types</a>
Tree	<a href="#">packet-types</a>
Notes	The following elements are part of a choice: <b>all-packet-types</b> or <b>packet-types</b> .
Introduced	22.10.R1



Platforms All

## assert

Synopsis Enable the **assert** context  
Context [debug router string pim packet packet-types assert](#)  
Tree [assert](#)  
Introduced 22.10.R1  
Platforms All

## all-origins

Synopsis Enable trace for all origins  
Context [debug router string pim packet packet-types assert all-origins](#)  
Tree [all-origins](#)  
Notes The following elements are part of a choice: **all-origins** or **interface-name**.  
Introduced 22.10.R1  
Platforms All

## interface-name *string*

Synopsis Interface name  
Context [debug router string pim packet packet-types assert interface-name string](#)  
Tree [interface-name](#)  
String Length 1 to 32  
Notes The following elements are part of a choice: **all-origins** or **interface-name**.  
Introduced 22.10.R1  
Platforms All

## auto-rp-announcement

Synopsis Enable the **auto-rp-announcement** context  
Context [debug router string pim packet packet-types auto-rp-announcement](#)  
Tree [auto-rp-announcement](#)  
Introduced 22.10.R1

Platforms All

### all-origins

Synopsis Enable trace for all origins  
 Context [debug router string pim packet packet-types auto-rp-announcement all-origins](#)  
 Tree [all-origins](#)  
 Notes The following elements are part of a choice: **all-origins** or **interface-name**.  
 Introduced 22.10.R1  
 Platforms All

### interface-name *string*

Synopsis Interface name  
 Context [debug router string pim packet packet-types auto-rp-announcement interface-name string](#)  
 Tree [interface-name](#)  
 String Length 1 to 32  
 Notes The following elements are part of a choice: **all-origins** or **interface-name**.  
 Introduced 22.10.R1  
 Platforms All

### auto-rp-mapping

Synopsis Enable the **auto-rp-mapping** context  
 Context [debug router string pim packet packet-types auto-rp-mapping](#)  
 Tree [auto-rp-mapping](#)  
 Introduced 22.10.R1  
 Platforms All

### all-origins

Synopsis Enable trace for all origins  
 Context [debug router string pim packet packet-types auto-rp-mapping all-origins](#)  
 Tree [all-origins](#)

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Notes	The following elements are part of a choice: <b>all-origins</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

### **interface-name** *string*

Synopsis	Interface name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types auto-rp-mapping interface-name</a> <i>string</i>
Tree	<a href="#">interface-name</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>all-origins</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

### **bsr**

Synopsis	Enable the <b>bsr</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types bsr</a>
Tree	<a href="#">bsr</a>
Introduced	22.10.R1
Platforms	All

### **all-origins**

Synopsis	Enable trace for all origins
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types bsr all-origins</a>
Tree	<a href="#">all-origins</a>
Notes	The following elements are part of a choice: <b>all-origins</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

### **interface-name** *string*

Synopsis	Interface name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types bsr interface-name</a> <i>string</i>

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Tree	<a href="#">interface-name</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>all-origins</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

## crp

Synopsis	Enable the <b>crp</b> context
Context	<a href="#">debug router string pim packet packet-types crp</a>
Tree	<a href="#">crp</a>
Introduced	22.10.R1
Platforms	All

## all-origins

Synopsis	Enable trace for all origins
Context	<a href="#">debug router string pim packet packet-types crp all-origins</a>
Tree	<a href="#">all-origins</a>
Notes	The following elements are part of a choice: <b>all-origins</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

## interface-name *string*

Synopsis	Interface name
Context	<a href="#">debug router string pim packet packet-types crp interface-name string</a>
Tree	<a href="#">interface-name</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>all-origins</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

## graft

Synopsis	Enable the <b>graft</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types</a> <a href="#">graft</a>
Tree	<a href="#">graft</a>
Introduced	22.10.R1
Platforms	All

## all-origins

Synopsis	Enable trace for all origins
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types</a> <a href="#">graft all-origins</a>
Tree	<a href="#">all-origins</a>
Notes	The following elements are part of a choice: <b>all-origins</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

## interface-name *string*

Synopsis	Interface name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types</a> <a href="#">graft interface-name</a> <i>string</i>
Tree	<a href="#">interface-name</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>all-origins</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

## graft-ack

Synopsis	Enable the <b>graft-ack</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types</a> <a href="#">graft-ack</a>
Tree	<a href="#">graft-ack</a>
Introduced	22.10.R1
Platforms	All

## all-origins

Synopsis	Enable trace for all origins
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types graft-ack all-origins</a>
Tree	<a href="#">all-origins</a>
Notes	The following elements are part of a choice: <b>all-origins</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

## interface-name *string*

Synopsis	Interface name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types graft-ack interface-name</a> <i>string</i>
Tree	<a href="#">interface-name</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>all-origins</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

## hello

Synopsis	Enable the <b>hello</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types hello</a>
Tree	<a href="#">hello</a>
Introduced	22.10.R1
Platforms	All

## all-origins

Synopsis	Enable trace for all origins
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types hello all-origins</a>
Tree	<a href="#">all-origins</a>
Notes	The following elements are part of a choice: <b>all-origins</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

**interface-name** *string*

Synopsis	Interface name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types</a> <a href="#">hello interface-name</a> <i>string</i>
Tree	<a href="#">interface-name</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>all-origins</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

**jp**

Synopsis	Enable the <b>jp</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types</a> <a href="#">jp</a>
Tree	<a href="#">jp</a>
Introduced	22.10.R1
Platforms	All

**all-origins**

Synopsis	Enable trace for all origins
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types</a> <a href="#">jp all-origins</a>
Tree	<a href="#">all-origins</a>
Notes	The following elements are part of a choice: <b>all-origins</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

**interface-name** *string*

Synopsis	Interface name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types</a> <a href="#">jp interface-name</a> <i>string</i>
Tree	<a href="#">interface-name</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>all-origins</b> or <b>interface-name</b> .
Introduced	22.10.R1

Platforms All

## mdt-tlv

Synopsis Enable the **mdt-tlv** context  
 Context [debug router string pim packet packet-types mdt-tlv](#)  
 Tree [mdt-tlv](#)  
 Introduced 22.10.R1  
 Platforms All

## all-origins

Synopsis Enable trace for all origins  
 Context [debug router string pim packet packet-types mdt-tlv all-origins](#)  
 Tree [all-origins](#)  
 Notes The following elements are part of a choice: **all-origins** or **interface-name**.  
 Introduced 22.10.R1  
 Platforms All

## interface-name *string*

Synopsis Interface name  
 Context [debug router string pim packet packet-types mdt-tlv interface-name string](#)  
 Tree [interface-name](#)  
 String Length 1 to 32  
 Notes The following elements are part of a choice: **all-origins** or **interface-name**.  
 Introduced 22.10.R1  
 Platforms All

## register

Synopsis Enable the **register** context  
 Context [debug router string pim packet packet-types register](#)  
 Tree [register](#)  
 Introduced 22.10.R1



Platforms All

### all-origins

Synopsis Enable trace for all origins  
 Context [debug router string pim packet packet-types register all-origins](#)  
 Tree [all-origins](#)  
 Notes The following elements are part of a choice: **all-origins** or **interface-name**.  
 Introduced 22.10.R1  
 Platforms All

### interface-name *string*

Synopsis Interface name  
 Context [debug router string pim packet packet-types register interface-name string](#)  
 Tree [interface-name](#)  
 String Length 1 to 32  
 Notes The following elements are part of a choice: **all-origins** or **interface-name**.  
 Introduced 22.10.R1  
 Platforms All

### register-stop

Synopsis Enable the **register-stop** context  
 Context [debug router string pim packet packet-types register-stop](#)  
 Tree [register-stop](#)  
 Introduced 22.10.R1  
 Platforms All

### all-origins

Synopsis Enable trace for all origins  
 Context [debug router string pim packet packet-types register-stop all-origins](#)  
 Tree [all-origins](#)  
 Notes The following elements are part of a choice: **all-origins** or **interface-name**.

Introduced 22.10.R1  
 Platforms All

### **interface-name** *string*

Synopsis Interface name  
 Context [debug router](#) *string* [pim packet packet-types register-stop interface-name](#) *string*  
 Tree [interface-name](#)  
 String Length 1 to 32  
 Notes The following elements are part of a choice: **all-origins** or **interface-name**.  
 Introduced 22.10.R1  
 Platforms All

### **radius**

Synopsis Enter the **radius** context  
 Context [debug router](#) *string* [radius](#)  
 Tree [radius](#)  
 Introduced 22.5.R1  
 Platforms All

### **proxy** [[name](#)] *string*

Synopsis Enter the **proxy** list instance  
 Context [debug router](#) *string* [radius proxy](#) *string*  
 Tree [proxy](#)  
 Max. Instances 8  
 Introduced 22.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis RADIUS proxy server name  
 Context [debug router](#) *string* [radius proxy](#) *string*

Tree	<a href="#">proxy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## all-packet-types

Synopsis	Enable RADIUS proxy debugging for all packets
Context	<a href="#">debug router string radius proxy string all-packet-types</a>
Tree	<a href="#">all-packet-types</a>
Notes	The following elements are part of a mandatory choice: <b>all-packet-types</b> or <b>packet-types</b> .
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## client-address [[address](#)] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Add a list entry for <b>client-address</b>
Context	<a href="#">debug router string radius proxy string client-address (ipv4-address-no-zone   ipv6-address-no-zone)</a>
Tree	<a href="#">client-address</a>
Max. Instances	10
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [[address](#)] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the RADIUS client
Context	<a href="#">debug router string radius proxy string client-address (ipv4-address-no-zone   ipv6-address-no-zone)</a>
Tree	<a href="#">client-address</a>
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**detail-level** *keyword*

Synopsis	Detail level of the RADIUS proxy debug output
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <b>detail-level</b> <i>keyword</i>
Tree	<a href="#">detail-level</a>
Options	low, high
Default	low
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**direction** *keyword*

Synopsis	Direction of the RADIUS proxy packet debugging
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <b>direction</b> <i>keyword</i>
Tree	<a href="#">direction</a>
Options	ingress, egress, both
Default	both
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**dropped-only** *boolean*

Synopsis	Show dropped packets only
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <b>dropped-only</b> <i>boolean</i>
Tree	<a href="#">dropped-only</a>
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**packet-types**

Synopsis	Enter the <b>packet-types</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <b>packet-types</b>
Tree	<a href="#">packet-types</a>

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Notes	The following elements are part of a mandatory choice: <b>all-packet-types</b> or <b>packet-types</b> .
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **access-accept** *boolean*

Synopsis	Debug Access-Accept packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">packet-types</a> <a href="#">access-accept</a> <i>boolean</i>
Tree	<a href="#">access-accept</a>
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **access-challenge** *boolean*

Synopsis	Debug Access-Challenge packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">packet-types</a> <a href="#">access-challenge</a> <i>boolean</i>
Tree	<a href="#">access-challenge</a>
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **access-reject** *boolean*

Synopsis	Debug Access-Reject packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">packet-types</a> <a href="#">access-reject</a> <i>boolean</i>
Tree	<a href="#">access-reject</a>
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **access-request** *boolean*

Synopsis	Debug Access-Request packets
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Context	<a href="#">debug router string radius proxy string packet-types access-request boolean</a>
Tree	<a href="#">access-request</a>
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **accounting-request *boolean***

Synopsis	Debug Accounting-Request packets
Context	<a href="#">debug router string radius proxy string packet-types accounting-request boolean</a>
Tree	<a href="#">accounting-request</a>
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **accounting-response *boolean***

Synopsis	Debug Accounting-Response packets
Context	<a href="#">debug router string radius proxy string packet-types accounting-response boolean</a>
Tree	<a href="#">accounting-response</a>
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **other *boolean***

Synopsis	Debug other packet types
Context	<a href="#">debug router string radius proxy string packet-types other boolean</a>
Tree	<a href="#">other</a>
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## servers

Synopsis	Enable the <b>servers</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius servers</a>
Tree	<a href="#">servers</a>
Introduced	22.5.R1
Platforms	All

## attribute [name] *string*

Synopsis	Enter the <b>attribute</b> list instance
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius servers attribute</a> <i>string</i>
Tree	<a href="#">attribute</a>
Max. Instances	10
Introduced	22.5.R1
Platforms	All

## [name] *string*

Synopsis	Attribute filter name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius servers attribute</a> <i>string</i>
Tree	<a href="#">attribute</a>
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

## extended-type *number*

Synopsis	RADIUS attribute extended type
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius servers attribute</a> <i>string</i> <a href="#">extended-type</a> <i>number</i>
Tree	<a href="#">extended-type</a>
Range	1 to 255
Introduced	22.5.R1
Platforms	All

**transaction** *boolean*

Synopsis	Debug request and response transaction
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius servers attribute</a> <i>string</i> <a href="#">transaction</a> <i>boolean</i>
Tree	<a href="#">transaction</a>
Default	false
Introduced	22.5.R1
Platforms	All

**type** *number*

Synopsis	RADIUS attribute type
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius servers attribute</a> <i>string</i> <a href="#">type</a> <i>number</i>
Tree	<a href="#">type</a>
Range	1 to 255
Notes	This element is mandatory.
Introduced	22.5.R1
Platforms	All

**value**

Synopsis	Enter the <b>value</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius servers attribute</a> <i>string</i> <a href="#">value</a>
Tree	<a href="#">value</a>
Introduced	22.5.R1
Platforms	All

**address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Attribute value specified as an IP address
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius servers attribute</a> <i>string</i> <a href="#">value</a> <a href="#">address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: <b>address</b> , <b>hex</b> , <b>integer</b> , <b>prefix</b> , or <b>string</b> .
Introduced	22.5.R1



Platforms All

### hex string

Synopsis Attribute value specified as a hexadecimal string

Context [debug router string radius servers attribute string value hex string](#)

Tree [hex](#)

String Length 1 to 253

Notes The following elements are part of a choice: **address**, **hex**, **integer**, **prefix**, or **string**.

Introduced 22.5.R1

Platforms All

### integer number

Synopsis Attribute value specified as an integer

Context [debug router string radius servers attribute string value integer number](#)

Tree [integer](#)

Max. Range 0 to 4294967295

Notes The following elements are part of a choice: **address**, **hex**, **integer**, **prefix**, or **string**.

Introduced 22.5.R1

Platforms All

### prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Attribute value specified as an IP prefix

Context [debug router string radius servers attribute string value prefix \(ipv4-prefix | ipv6-prefix\)](#)

Tree [prefix](#)

Notes The following elements are part of a choice: **address**, **hex**, **integer**, **prefix**, or **string**.

Introduced 22.5.R1

Platforms All

### string string

Synopsis Attribute value specified as a string

Context [debug router string radius servers attribute string value string string](#)

Tree	<a href="#">string</a>
String Length	1 to 253
Notes	The following elements are part of a choice: <b>address</b> , <b>hex</b> , <b>integer</b> , <b>prefix</b> , or <b>string</b> .
Introduced	22.5.R1
Platforms	All

## vendor-specific

Synopsis	Enter the <b>vendor-specific</b> context
Context	<a href="#">debug router string radius servers attribute string vendor-specific</a>
Tree	<a href="#">vendor-specific</a>
Introduced	22.5.R1
Platforms	All

## encoding

Synopsis	Enter the <b>encoding</b> context
Context	<a href="#">debug router string radius servers attribute string vendor-specific encoding</a>
Tree	<a href="#">encoding</a>
Introduced	22.5.R1
Platforms	All

## length-size *number*

Synopsis	Size of the vendor-length field
Context	<a href="#">debug router string radius servers attribute string vendor-specific encoding length-size number</a>
Tree	<a href="#">length-size</a>
Range	0 to 2
Default	1
Introduced	22.5.R1
Platforms	All

**type-size** *number*

Synopsis	Size of the vendor-type field
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius servers attribute</a> <i>string</i> <a href="#">vendor-specific encoding</a> <i>type-size number</i>
Tree	<a href="#">type-size</a>
Range	1 to 4
Default	1
Introduced	22.5.R1
Platforms	All

**vendor** (*number* | *keyword*)

Synopsis	RADIUS vendor ID
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius servers attribute</a> <i>string</i> <a href="#">vendor-specific</a> <a href="#">vendor</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">vendor</a>
Range	1 to 16777215
Options	nokia
Introduced	22.5.R1
Platforms	All

**vendor-type** *number*

Synopsis	RADIUS vendor specific type
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius servers attribute</a> <i>string</i> <a href="#">vendor-specific</a> <a href="#">vendor-type</a> <i>number</i>
Tree	<a href="#">vendor-type</a>
Max. Range	0 to 4294967295
Introduced	22.5.R1
Platforms	All

**detail-level** *keyword*

Synopsis	Detail level of the RADIUS debug output
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius servers</a> <a href="#">detail-level</a> <i>keyword</i>
Tree	<a href="#">detail-level</a>

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Options	low, medium, high
Default	medium
Introduced	22.5.R1
Platforms	All

## **packet-types**

Synopsis	Enter the <b>packet-types</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius servers</a> <a href="#">packet-types</a>
Tree	<a href="#">packet-types</a>
Introduced	22.7.R1
Platforms	All

## **accounting** *boolean*

Synopsis	Debug accounting packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius servers</a> <a href="#">packet-types</a> <a href="#">accounting</a> <i>boolean</i>
Tree	<a href="#">accounting</a>
Default	true
Introduced	22.7.R1
Platforms	All

## **authentication** *boolean*

Synopsis	Debug authentication packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius servers</a> <a href="#">packet-types</a> <a href="#">authentication</a> <i>boolean</i>
Tree	<a href="#">authentication</a>
Default	true
Introduced	22.7.R1
Platforms	All

## **coa** *boolean*

Synopsis	Debug CoA and DM packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius servers</a> <a href="#">packet-types</a> <a href="#">coa</a> <i>boolean</i>

Tree	<a href="#">coa</a>
Default	true
Introduced	22.7.R1
Platforms	All

### **server-address** [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Add a list entry for <b>server-address</b>
Context	<a href="#">debug router string radius servers server-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">server-address</a>
Max. Instances	10
Introduced	22.5.R1
Platforms	All

### **[address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the RADIUS server
Context	<a href="#">debug router string radius servers server-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">server-address</a>
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

### **vrrp**

Synopsis	Enter the <b>vrrp</b> context
Context	<a href="#">debug router string vrrp</a>
Tree	<a href="#">vrrp</a>
Introduced	22.10.R1
Platforms	All

## events

Synopsis	Enter the <b>events</b> context
Context	<a href="#">debug router string vrrp events</a>
Tree	<a href="#">events</a>
Description	Commands in this context enable debugging for VRRP events and state changes.
Introduced	22.10.R1
Platforms	All

## all-events

Synopsis	Enable the <b>all-events</b> context
Context	<a href="#">debug router string vrrp events all-events</a>
Tree	<a href="#">all-events</a>
Introduced	22.10.R1
Platforms	All

## interface [[interface-name](#)] *string*

Synopsis	Enter the <b>interface</b> list instance
Context	<a href="#">debug router string vrrp events interface string</a>
Tree	<a href="#">interface</a>
Introduced	22.10.R1
Platforms	All

## [[interface-name](#)] *string*

Synopsis	Interface name
Context	<a href="#">debug router string vrrp events interface string</a>
Tree	<a href="#">interface</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

## all-vrids

Synopsis	Enable the <b>all-vrids</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">vrrp events interface</a> <i>string</i> <b>all-vrids</b>
Tree	<a href="#">all-vrids</a>
Introduced	22.10.R5
Platforms	All

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">vrrp events interface</a> <i>string</i> <b>ipv4</b>
Tree	<a href="#">ipv4</a>
Introduced	22.10.R1
Platforms	All

## vrid [[virtual-router-id](#)] *number*

Synopsis	Add a list entry for <b>vrid</b>
Context	<a href="#">debug router</a> <i>string</i> <a href="#">vrrp events interface</a> <i>string</i> <b>ipv4 vrid</b> <i>number</i>
Tree	<a href="#">vrid</a>
Max. Instances	4
Introduced	22.10.R1
Platforms	All

## [[virtual-router-id](#)] *number*

Synopsis	Virtual router ID to debug
Context	<a href="#">debug router</a> <i>string</i> <a href="#">vrrp events interface</a> <i>string</i> <b>ipv4 vrid</b> <i>number</i>
Tree	<a href="#">vrid</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

## ipv6

Synopsis	Enter the <b>ipv6</b> context
Context	<a href="#">debug router string vrrp events interface string ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	22.10.R1
Platforms	All

## vrid [[virtual-router-id](#)] *number*

Synopsis	Add a list entry for <b>vrid</b>
Context	<a href="#">debug router string vrrp events interface string ipv6 vrid number</a>
Tree	<a href="#">vrid</a>
Max. Instances	4
Introduced	22.10.R1
Platforms	All

## [\[virtual-router-id\]](#) *number*

Synopsis	Virtual router ID to debug
Context	<a href="#">debug router string vrrp events interface string ipv6 vrid number</a>
Tree	<a href="#">vrid</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

## packet

Synopsis	Enter the <b>packet</b> context
Context	<a href="#">debug router string vrrp packet</a>
Tree	<a href="#">packet</a>
Description	Commands in this context enable debugging for VRRP packet exchanges.
Introduced	22.10.R1



Platforms All

### all-packets

Synopsis Enable the **all-packets** context  
 Context [debug router string vrrp packet all-packets](#)  
 Tree [all-packets](#)  
 Introduced 22.10.R1  
 Platforms All

### interface [[interface-name](#)] *string*

Synopsis Enter the **interface** list instance  
 Context [debug router string vrrp packet interface string](#)  
 Tree [interface](#)  
 Introduced 22.10.R1  
 Platforms All

### [\[interface-name\]](#) *string*

Synopsis Interface name  
 Context [debug router string vrrp packet interface string](#)  
 Tree [interface](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 22.10.R1  
 Platforms All

### all-vrids

Synopsis Enable the **all-vrids** context  
 Context [debug router string vrrp packet interface string all-vrids](#)  
 Tree [all-vrids](#)  
 Introduced 22.10.R5  
 Platforms All

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<a href="#">debug router string vrrp packet interface string ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	22.10.R1
Platforms	All

## vrid [[virtual-router-id](#)] *number*

Synopsis	Add a list entry for <b>vrid</b>
Context	<a href="#">debug router string vrrp packet interface string ipv4 vrid number</a>
Tree	<a href="#">vrid</a>
Max. Instances	4
Introduced	22.10.R1
Platforms	All

## [\[virtual-router-id\]](#) *number*

Synopsis	Virtual router ID to debug
Context	<a href="#">debug router string vrrp packet interface string ipv4 vrid number</a>
Tree	<a href="#">vrid</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

## ipv6

Synopsis	Enter the <b>ipv6</b> context
Context	<a href="#">debug router string vrrp packet interface string ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	22.10.R1
Platforms	All

**vrid** [*virtual-router-id*] *number*

Synopsis	Add a list entry for <b>vrid</b>
Context	<a href="#">debug router string vrrp packet interface string ipv6 vrid number</a>
Tree	<a href="#">vrid</a>
Max. Instances	4
Introduced	22.10.R1
Platforms	All

**[virtual-router-id]** *number*

Synopsis	Virtual router ID to debug
Context	<a href="#">debug router string vrrp packet interface string ipv6 vrid number</a>
Tree	<a href="#">vrid</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

**wpp**

Synopsis	Enter the <b>wpp</b> context
Context	<a href="#">debug router string wpp</a>
Tree	<a href="#">wpp</a>
Introduced	22.7.R1
Platforms	All

**packets**

Synopsis	Enable the <b>packets</b> context
Context	<a href="#">debug router string wpp packets</a>
Tree	<a href="#">packets</a>
Introduced	22.7.R1
Platforms	All

**detail-level** *keyword*

Synopsis	Detail level of the WPP packet debug output
Context	<a href="#">debug router</a> <i>string</i> <a href="#">wpp packets</a> <a href="#">detail-level</a> <i>keyword</i>
Tree	<a href="#">detail-level</a>
Options	low, high
Default	low
Introduced	22.7.R1
Platforms	All

**portal** [[name](#)] *string*

Synopsis	Enter the <b>portal</b> list instance
Context	<a href="#">debug router</a> <i>string</i> <a href="#">wpp portal</a> <i>string</i>
Tree	<a href="#">portal</a>
Introduced	22.7.R1
Platforms	All

**[name]** *string*

Synopsis	WPP portal name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">wpp portal</a> <i>string</i>
Tree	<a href="#">portal</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

**packets**

Synopsis	Enter the <b>packets</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">wpp portal</a> <i>string</i> <a href="#">packets</a>
Tree	<a href="#">packets</a>
Introduced	22.7.R1
Platforms	All

**detail-level** *keyword*

Synopsis	Detail level of the WPP packet debug output
Context	<code>debug router string wpp portal string packets detail-level keyword</code>
Tree	<code>detail-level</code>
Options	low, high
Default	low
Introduced	22.7.R1
Platforms	All

**service**

Synopsis	Enter the <b>service</b> context
Context	<code>debug service</code>
Tree	<code>service</code>
Introduced	22.10.R1
Platforms	All

**vpls** [*service-name*] *string*

Synopsis	Enter the <b>vpls</b> list instance
Context	<code>debug service vpls string</code>
Tree	<code>vpls</code>
Introduced	22.10.R1
Platforms	All

**[service-name]** *string*

Synopsis	Administrative service name
Context	<code>debug service vpls string</code>
Tree	<code>vpls</code>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

## igmp-snooping

Synopsis	Enter the <b>igmp-snooping</b> context
Context	<a href="#">debug service vpls string igmp-snooping</a>
Tree	<a href="#">igmp-snooping</a>
Introduced	22.10.R1
Platforms	All

## packet

Synopsis	Enable the <b>packet</b> context
Context	<a href="#">debug service vpls string igmp-snooping packet</a>
Tree	<a href="#">packet</a>
Introduced	22.10.R1
Platforms	All

## detail *keyword*

Synopsis	Detail level of the debug output
Context	<a href="#">debug service vpls string igmp-snooping packet detail keyword</a>
Tree	<a href="#">detail</a>
Options	low, medium, high
Default	medium
Introduced	22.10.R1
Platforms	All

## dropped *boolean*

Synopsis	Enable tracing for dropped packets
Context	<a href="#">debug service vpls string igmp-snooping packet dropped boolean</a>
Tree	<a href="#">dropped</a>
Default	true
Introduced	22.10.R1
Platforms	All

**egress** *boolean*

Synopsis	Enable tracing for transmitted packets
Context	<a href="#">debug service vpls string igmp-snooping packet egress boolean</a>
Tree	<a href="#">egress</a>
Default	true
Introduced	22.10.R1
Platforms	All

**evpn-mpls** *boolean*

Synopsis	Allow debugging for EVPN-MPLS destinations
Context	<a href="#">debug service vpls string igmp-snooping packet evpn-mpls boolean</a>
Tree	<a href="#">evpn-mpls</a>
Default	false
Introduced	22.10.R1
Platforms	All

**evpn-vxlan** [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [vni number](#)

Synopsis	Add a list entry for <b>evpn-vxlan</b>
Context	<a href="#">debug service vpls string igmp-snooping packet evpn-vxlan (ipv4-address-no-zone   ipv6-address-no-zone) vni number</a>
Tree	<a href="#">evpn-vxlan</a>
Max. Instances	8
Introduced	22.10.R1
Platforms	All

**[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the VXLAN Tunnel Endpoint
Context	<a href="#">debug service vpls string igmp-snooping packet evpn-vxlan (ipv4-address-no-zone   ipv6-address-no-zone) vni number</a>
Tree	<a href="#">evpn-vxlan</a>
Notes	This element is part of a list key.

Introduced	22.10.R1
Platforms	All

**vni number**

Synopsis	VXLAN Network Identifier of the VXLAN binding
Context	<a href="#">debug service vpls string igmp-snooping packet evpn-vxlan</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <b>vni number</b>
Tree	<a href="#">evpn-vxlan</a>
Range	1 to 16777215
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

**ingress boolean**

Synopsis	Enable tracing for received packets
Context	<a href="#">debug service vpls string igmp-snooping packet ingress boolean</a>
Tree	<a href="#">ingress</a>
Default	true
Introduced	22.10.R1
Platforms	All

**mac [mac-address] string**

Synopsis	Add a list entry for <b>mac</b>
Context	<a href="#">debug service vpls string igmp-snooping packet mac string</a>
Tree	<a href="#">mac</a>
Max. Instances	8
Introduced	22.10.R1
Platforms	All

**[mac-address] string**

Synopsis	MAC address
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Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">igmp-snooping packet mac</a> <i>string</i>
Tree	<a href="#">mac</a>
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

**sap** [[sap-id](#)] *string*

Synopsis	Add a list entry for <b>sap</b>
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">igmp-snooping packet sap</a> <i>string</i>
Tree	<a href="#">sap</a>
Max. Instances	8
Introduced	22.10.R1
Platforms	All

**[sap-id]** *string*

Synopsis	SAP ID
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">igmp-snooping packet sap</a> <i>string</i>
Tree	<a href="#">sap</a>
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

**sdp-bind** [[sdp-bind-id](#)] *string*

Synopsis	Add a list entry for <b>sdp-bind</b>
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">igmp-snooping packet sdp-bind</a> <i>string</i>
Tree	<a href="#">sdp-bind</a>
Max. Instances	8
Introduced	22.10.R1
Platforms	All

**[sdp-bind-id]** *string*

Synopsis	SDP bind ID
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">igmp-snooping packet sdp-bind</a> <i>string</i>
Tree	<a href="#">sdp-bind</a>
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

**mld-snooping**

Synopsis	Enter the <b>mld-snooping</b> context
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">mld-snooping</a>
Tree	<a href="#">mld-snooping</a>
Introduced	22.10.R1
Platforms	All

**packet**

Synopsis	Enable the <b>packet</b> context
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">mld-snooping packet</a>
Tree	<a href="#">packet</a>
Introduced	22.10.R1
Platforms	All

**detail** *keyword*

Synopsis	Detail level of the debug output
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">mld-snooping packet detail</a> <i>keyword</i>
Tree	<a href="#">detail</a>
Options	low, medium, high
Default	medium
Introduced	22.10.R1
Platforms	All

**dropped** *boolean*

Synopsis	Enable tracing for dropped packets
Context	<a href="#">debug service vpls string mld-snooping packet dropped boolean</a>
Tree	<a href="#">dropped</a>
Default	true
Introduced	22.10.R1
Platforms	All

**egress** *boolean*

Synopsis	Enable tracing for transmitted packets
Context	<a href="#">debug service vpls string mld-snooping packet egress boolean</a>
Tree	<a href="#">egress</a>
Default	true
Introduced	22.10.R1
Platforms	All

**evpn-mpls** *boolean*

Synopsis	Allow debugging for EVPN-MPLS destinations
Context	<a href="#">debug service vpls string mld-snooping packet evpn-mpls boolean</a>
Tree	<a href="#">evpn-mpls</a>
Default	false
Introduced	22.10.R1
Platforms	All

**evpn-vxlan** [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [vni number](#)

Synopsis	Add a list entry for <b>evpn-vxlan</b>
Context	<a href="#">debug service vpls string mld-snooping packet evpn-vxlan (ipv4-address-no-zone   ipv6-address-no-zone) vni number</a>
Tree	<a href="#">evpn-vxlan</a>
Max. Instances	8
Introduced	22.10.R1

Platforms All

### **[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP address of the VXLAN Tunnel Endpoint

Context [debug service vpls string mld-snooping packet evpn-vxlan](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [vni number](#)

Tree [evpn-vxlan](#)

Notes This element is part of a list key.

Introduced 22.10.R1

Platforms All

### **vni number**

Synopsis VXLAN Network Identifier of the VXLAN binding

Context [debug service vpls string mld-snooping packet evpn-vxlan](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [vni number](#)

Tree [evpn-vxlan](#)

Range 1 to 16777215

Notes This element is part of a list key.

Introduced 22.10.R1

Platforms All

### **ingress boolean**

Synopsis Enable tracing for received packets

Context [debug service vpls string mld-snooping packet ingress boolean](#)

Tree [ingress](#)

Default true

Introduced 22.10.R1

Platforms All

### **mac** [[mac-address](#)] *string*

Synopsis Add a list entry for **mac**

Context [debug service vpls string mld-snooping packet mac string](#)

Tree	<a href="#">mac</a>
Max. Instances	8
Introduced	22.10.R1
Platforms	All

**[mac-address]** *string*

Synopsis	MAC address
Context	<a href="#">debug service vpls string mld-snooping packet mac string</a>
Tree	<a href="#">mac</a>
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

**sap** [[sap-id](#)] *string*

Synopsis	Add a list entry for <b>sap</b>
Context	<a href="#">debug service vpls string mld-snooping packet sap string</a>
Tree	<a href="#">sap</a>
Max. Instances	8
Introduced	22.10.R1
Platforms	All

**[sap-id]** *string*

Synopsis	SAP ID
Context	<a href="#">debug service vpls string mld-snooping packet sap string</a>
Tree	<a href="#">sap</a>
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

**sdp-bind** [**sdp-bind-id**] *string*

Synopsis	Add a list entry for <b>sdp-bind</b>
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">mld-snooping packet sdp-bind</a> <i>string</i>
Tree	<a href="#">sdp-bind</a>
Max. Instances	8
Introduced	22.10.R1
Platforms	All

**[sdp-bind-id]** *string*

Synopsis	SDP bind ID
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">mld-snooping packet sdp-bind</a> <i>string</i>
Tree	<a href="#">sdp-bind</a>
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

**pim-snooping**

Synopsis	Enter the <b>pim-snooping</b> context
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">pim-snooping</a>
Tree	<a href="#">pim-snooping</a>
Introduced	22.10.R1
Platforms	All

**events**

Synopsis	Enable the <b>events</b> context
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">pim-snooping events</a>
Tree	<a href="#">events</a>
Introduced	22.10.R1
Platforms	All

## adjacency

Synopsis	Enable the <b>adjacency</b> context
Context	<code>debug service vpls string pim-snooping events adjacency</code>
Tree	<code>adjacency</code>
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>db</b> , <b>jp</b> , <b>mcs</b> , <b>port</b> , and <b>red</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

## all

Synopsis	Enable the <b>all</b> context
Context	<code>debug service vpls string pim-snooping events all</code>
Tree	<code>all</code>
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>db</b> , <b>jp</b> , <b>mcs</b> , <b>port</b> , and <b>red</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

## detail *boolean*

Synopsis	Enable detail tracing
Context	<code>debug service vpls string pim-snooping events all detail boolean</code>
Tree	<code>detail</code>
Default	false
Introduced	22.10.R1
Platforms	All

## group-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP multicast group address used to trace events
Context	<code>debug service vpls string pim-snooping events all group-address (<i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>)</code>
Tree	<code>group-address</code>
Introduced	22.10.R1

Platforms All

### **source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Source address used to trace events

Context [debug service vpls string pim-snooping events all source-address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [source-address](#)

Introduced 22.10.R1

Platforms All

### **db**

Synopsis Enable the **db** context

Context [debug service vpls string pim-snooping events db](#)

Tree [db](#)

Notes The following elements are part of a choice: (**adjacency**, **db**, **jp**, **mcs**, **port**, and **red**) or **all**.

Introduced 22.10.R1

Platforms All

### **detail** *boolean*

Synopsis Enable detail tracing

Context [debug service vpls string pim-snooping events db detail boolean](#)

Tree [detail](#)

Default false

Introduced 22.10.R1

Platforms All

### **group-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP multicast group address used to trace events

Context [debug service vpls string pim-snooping events db group-address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [group-address](#)



Introduced 22.10.R1  
 Platforms All

### **source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Source address used to trace events  
 Context [debug service vpls string pim-snooping events db source-address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)  
 Tree [source-address](#)  
 Introduced 22.10.R1  
 Platforms All

### **jp**

Synopsis Enable the **jp** context  
 Context [debug service vpls string pim-snooping events jp](#)  
 Tree [jp](#)  
 Description Commands in this context enable debugging for PIM join and prune mechanisms.  
 Notes The following elements are part of a choice: (**adjacency**, **db**, **jp**, **mcs**, **port**, and **red**) or **all**.  
 Introduced 22.10.R1  
 Platforms All

### **detail** *boolean*

Synopsis Enable detail tracing  
 Context [debug service vpls string pim-snooping events jp detail boolean](#)  
 Tree [detail](#)  
 Default false  
 Introduced 22.10.R1  
 Platforms All

### **group-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP multicast group address used to trace events

Context	<code>debug service vpls string pim-snooping events jp group-address (ipv4-address-no-zone   ipv6-address-no-zone)</code>
Tree	<code>group-address</code>
Introduced	22.10.R1
Platforms	All

### **source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source address used to trace events
Context	<code>debug service vpls string pim-snooping events jp source-address (ipv4-address-no-zone   ipv6-address-no-zone)</code>
Tree	<code>source-address</code>
Introduced	22.10.R1
Platforms	All

### **mcs**

Synopsis	Enable the <b>mcs</b> context
Context	<code>debug service vpls string pim-snooping events mcs</code>
Tree	<code>mcs</code>
Description	Commands in this context enable debugging for PIM snooping multi-chassis synchronization.
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>db</b> , <b>jp</b> , <b>mcs</b> , <b>port</b> , and <b>red</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

### **detail** *boolean*

Synopsis	Enable detail tracing
Context	<code>debug service vpls string pim-snooping events mcs detail boolean</code>
Tree	<code>detail</code>
Default	false
Introduced	22.10.R1
Platforms	All

## port

Synopsis	Enable the <b>port</b> context
Context	<a href="#">debug service vpls string pim-snooping events port</a>
Tree	<a href="#">port</a>
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>db</b> , <b>jp</b> , <b>mcs</b> , <b>port</b> , and <b>red</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

## detail *boolean*

Synopsis	Enable detail tracing
Context	<a href="#">debug service vpls string pim-snooping events port detail boolean</a>
Tree	<a href="#">detail</a>
Default	false
Introduced	22.10.R1
Platforms	All

## evpn-mpls

Synopsis	Enable tracing for EVPN-MPLS ports
Context	<a href="#">debug service vpls string pim-snooping events port evpn-mpls</a>
Tree	<a href="#">evpn-mpls</a>
Notes	The following elements are part of a mandatory choice: <b>evpn-mpls</b> , <b>sap-id</b> , <b>sdp-bind-id</b> , or ( <b>vni</b> and <b>vtep</b> ).
Introduced	22.10.R1
Platforms	All

## sap-id *string*

Synopsis	SAP ID
Context	<a href="#">debug service vpls string pim-snooping events port sap-id string</a>
Tree	<a href="#">sap-id</a>
String Length	1 to 45

Notes	The following elements are part of a mandatory choice: <b>evpn-mpls</b> , <b>sap-id</b> , <b>sdp-bind-id</b> , or ( <b>vni</b> and <b>vtep</b> ).
Introduced	22.10.R1
Platforms	All

### **sdp-bind-id** *string*

Synopsis	SDP bind ID
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">pim-snooping events port</a> <b>sdp-bind-id</b> <i>string</i>
Tree	<a href="#">sdp-bind-id</a>
String Length	3 to 16
Notes	The following elements are part of a mandatory choice: <b>evpn-mpls</b> , <b>sap-id</b> , <b>sdp-bind-id</b> , or ( <b>vni</b> and <b>vtep</b> ).
Introduced	22.10.R1
Platforms	All

### **vni** *number*

Synopsis	VXLAN Network Identifier of the VXLAN binding
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">pim-snooping events port</a> <b>vni</b> <i>number</i>
Tree	<a href="#">vni</a>
Range	1 to 16777215
Notes	The following elements are part of a mandatory choice: <b>evpn-mpls</b> , <b>sap-id</b> , <b>sdp-bind-id</b> , or ( <b>vni</b> and <b>vtep</b> ).
Introduced	22.10.R1
Platforms	All

### **vtep** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the tunnel endpoint
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">pim-snooping events port</a> <b>vtep</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">vtep</a>
Notes	The following elements are part of a mandatory choice: <b>evpn-mpls</b> , <b>sap-id</b> , <b>sdp-bind-id</b> , or ( <b>vni</b> and <b>vtep</b> ).
Introduced	22.10.R1

Platforms All

## red

Synopsis Enable the **red** context

Context [debug service vpls string pim-snooping events red](#)

Tree [red](#)

Description Commands in this context enable debugging for PIM messages sent to the standby CPM.

Notes The following elements are part of a choice: (**adjacency**, **db**, **jp**, **mcs**, **port**, and **red**) or **all**.

Introduced 22.10.R1

Platforms All

## detail *boolean*

Synopsis Enable detail tracing

Context [debug service vpls string pim-snooping events red detail boolean](#)

Tree [detail](#)

Default false

Introduced 22.10.R1

Platforms All

## packet

Synopsis Enable the **packet** context

Context [debug service vpls string pim-snooping packet](#)

Tree [packet](#)

Introduced 22.10.R1

Platforms All

## all-origins

Synopsis Allow tracing on all ports

Context [debug service vpls string pim-snooping packet all-origins](#)

Tree [all-origins](#)

Notes	The following elements are part of a choice: <b>all-origins</b> or <b>port</b> .
Introduced	22.10.R1
Platforms	All

### **all-packet-types**

Synopsis	Enable PIM debugging for all packets
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">pim-snooping packet all-packet-types</a>
Tree	<a href="#">all-packet-types</a>
Notes	The following elements are part of a choice: <b>all-packet-types</b> or <b>packet-types</b> .
Introduced	22.10.R1
Platforms	All

### **packet-types**

Synopsis	Enter the <b>packet-types</b> context
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">pim-snooping packet packet-types</a>
Tree	<a href="#">packet-types</a>
Notes	The following elements are part of a choice: <b>all-packet-types</b> or <b>packet-types</b> .
Introduced	22.10.R1
Platforms	All

### **hello *boolean***

Synopsis	Debug Hello packets
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">pim-snooping packet packet-types hello</a> <i>boolean</i>
Tree	<a href="#">hello</a>
Default	false
Introduced	22.10.R1
Platforms	All

### **jp *boolean***

Synopsis	Debug join and prune packets
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">pim-snooping packet packet-types jp</a> <i>boolean</i>

Tree	<a href="#">jp</a>
Default	false
Introduced	22.10.R1
Platforms	All

## port

Synopsis	Enable the <b>port</b> context
Context	<a href="#">debug service vpls string pim-snooping packet port</a>
Tree	<a href="#">port</a>
Notes	The following elements are part of a choice: <b>all-origins</b> or <b>port</b> .
Introduced	22.10.R1
Platforms	All

## evpn-mpls

Synopsis	Enable tracing for EVPN-MPLS ports
Context	<a href="#">debug service vpls string pim-snooping packet port evpn-mpls</a>
Tree	<a href="#">evpn-mpls</a>
Notes	The following elements are part of a mandatory choice: <b>evpn-mpls</b> , <b>sap-id</b> , <b>sdp-bind-id</b> , or ( <b>vni</b> and <b>vtep</b> ).
Introduced	22.10.R1
Platforms	All

## sap-id *string*

Synopsis	SAP ID
Context	<a href="#">debug service vpls string pim-snooping packet port sap-id string</a>
Tree	<a href="#">sap-id</a>
String Length	1 to 45
Notes	The following elements are part of a mandatory choice: <b>evpn-mpls</b> , <b>sap-id</b> , <b>sdp-bind-id</b> , or ( <b>vni</b> and <b>vtep</b> ).
Introduced	22.10.R1
Platforms	All

**sdp-bind-id** *string*

Synopsis	SDP bind ID
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">pim-snooping packet port</a> <a href="#">sdp-bind-id</a> <i>string</i>
Tree	<a href="#">sdp-bind-id</a>
String Length	3 to 16
Notes	The following elements are part of a mandatory choice: <b>evpn-mpls</b> , <b>sap-id</b> , <b>sdp-bind-id</b> , or ( <b>vni</b> and <b>vtep</b> ).
Introduced	22.10.R1
Platforms	All

**vni** *number*

Synopsis	VXLAN Network Identifier of the VXLAN binding
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">pim-snooping packet port</a> <a href="#">vni</a> <i>number</i>
Tree	<a href="#">vni</a>
Range	1 to 16777215
Notes	The following elements are part of a mandatory choice: <b>evpn-mpls</b> , <b>sap-id</b> , <b>sdp-bind-id</b> , or ( <b>vni</b> and <b>vtep</b> ).
Introduced	22.10.R1
Platforms	All

**vtep** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the tunnel endpoint
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">pim-snooping packet port</a> <a href="#">vtep</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">vtep</a>
Notes	The following elements are part of a mandatory choice: <b>evpn-mpls</b> , <b>sap-id</b> , <b>sdp-bind-id</b> , or ( <b>vni</b> and <b>vtep</b> ).
Introduced	22.10.R1
Platforms	All

**subscriber-mgmt**

Synopsis	Enter the <b>subscriber-mgmt</b> context
Context	<a href="#">debug subscriber-mgmt</a>



Tree	<a href="#">subscriber-mgmt</a>
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **gtp**

Synopsis	Enter the <b>gtp</b> context
Context	<a href="#">debug subscriber-mgmt gtp</a>
Tree	<a href="#">gtp</a>
Description	This command enables the context to configure box-wide GTP parameters and profiles.
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **events *boolean***

Synopsis	Enable GTP event debugging
Context	<a href="#">debug subscriber-mgmt gtp events <i>boolean</i></a>
Tree	<a href="#">events</a>
Default	false
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **imsi [[imsi-instance](#)] *string***

Synopsis	Add a list entry for <b>imsi</b>
Context	<a href="#">debug subscriber-mgmt gtp imsi <i>string</i></a>
Tree	<a href="#">imsi</a>
Max. Instances	8
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **[[imsi-instance](#)] *string***

Synopsis	IMSI of GTP sessions to debug
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Context	<a href="#">debug subscriber-mgmt gtp imsi</a> <i>string</i>
Tree	<a href="#">imsi</a>
String Length	0 to 15
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## packets

Synopsis	Enable the <b>packets</b> context
Context	<a href="#">debug subscriber-mgmt gtp packets</a>
Tree	<a href="#">packets</a>
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## detail-level *keyword*

Synopsis	Detail level of the GTP packet debug output
Context	<a href="#">debug subscriber-mgmt gtp packets detail-level</a> <i>keyword</i>
Tree	<a href="#">detail-level</a>
Options	high, low
Default	low
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## mode *keyword*

Synopsis	GTP packets to include in the debug output
Context	<a href="#">debug subscriber-mgmt gtp packets mode</a> <i>keyword</i>
Tree	<a href="#">mode</a>
Options	all, dropped
Default	dropped
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**peer** [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **router string**

Synopsis	Enter the <b>peer</b> list instance
Context	<a href="#">debug subscriber-mgmt gtp peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>router string</b>
Tree	<a href="#">peer</a>
Max. Instances	8
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Remote IP address of the GTP peer
Context	<a href="#">debug subscriber-mgmt gtp peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>router string</b>
Tree	<a href="#">peer</a>
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**router string**

Synopsis	Router instance where GTP peer packets are expected
Context	<a href="#">debug subscriber-mgmt gtp peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>router string</b>
Tree	<a href="#">peer</a>
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**udp-port number**

Synopsis	UDP source (Rx packets) / destination (Tx packets) port
Context	<a href="#">debug subscriber-mgmt gtp peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>router string</b> <a href="#">udp-port number</a>

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Tree	<a href="#">udp-port</a>
Description	This command configures the UDP source port of received packets or the UDP destination port of transmitted packets.
Range	0   1 to 65535
Default	2123
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## system

Synopsis	Enter the <b>system</b> context
Context	<a href="#">debug system</a>
Tree	<a href="#">system</a>
Introduced	21.5.R1
Platforms	All

## grpc

Synopsis	Enter the <b>grpc</b> context
Context	<a href="#">debug system grpc</a>
Tree	<a href="#">grpc</a>
Introduced	21.5.R1
Platforms	All

## client

Synopsis	Enter the <b>client</b> context
Context	<a href="#">debug system grpc client</a>
Tree	<a href="#">client</a>
Introduced	21.5.R1
Platforms	All

## all

Synopsis	Enable debugging for all clients
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Context	<a href="#">debug system grpc client all</a>
Tree	<a href="#">all</a>
Notes	The following elements are part of a choice: <b>all</b> or <b>ip-address</b> .
Introduced	21.5.R1
Platforms	All

### **ip-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address for debugging
Context	<a href="#">debug system grpc client ip-address</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">ip-address</a>
Notes	The following elements are part of a choice: <b>all</b> or <b>ip-address</b> .
Introduced	21.5.R1
Platforms	All

### **type** *keyword*

Synopsis	RPCs or service types to debug
Context	<a href="#">debug system grpc type keyword</a>
Tree	<a href="#">type</a>
Options	gnmi-capabilities, gnmi-get, gnmi-set, gnmi-subscribe, rib-api-modify, rib-api-getversion, gnoi-cert-mgmt-rpcs, gnoi-file-rpcs, gnoi-system-rpcs
Max. Instances	10
Introduced	21.5.R1
Platforms	All

### **grpc-tunnel**

Synopsis	Enter the <b>grpc-tunnel</b> context
Context	<a href="#">debug system grpc-tunnel</a>
Tree	<a href="#">grpc-tunnel</a>
Introduced	22.10.R1
Platforms	All

## tunnel

Synopsis	Enter the <b>tunnel</b> context
Context	<a href="#">debug system grpc-tunnel tunnel</a>
Tree	<a href="#">tunnel</a>
Introduced	22.10.R1
Platforms	All

## all

Synopsis	Set debug output for all tunnels
Context	<a href="#">debug system grpc-tunnel tunnel all</a>
Tree	<a href="#">all</a>
Notes	The following elements are part of a choice: <b>all</b> or <b>name</b> .
Introduced	22.10.R1
Platforms	All

## name *string*

Synopsis	Name of the tunnel to restrict the debug output
Context	<a href="#">debug system grpc-tunnel tunnel name <i>string</i></a>
Tree	<a href="#">name</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>all</b> or <b>name</b> .
Introduced	22.10.R1
Platforms	All

## http-connections

Synopsis	Enable the <b>http-connections</b> context
Context	<a href="#">debug system http-connections</a>
Tree	<a href="#">http-connections</a>
Introduced	22.10.R1
Platforms	All

**client-ip-prefix** (*ipv4-prefix | ipv6-prefix | keyword*)

Synopsis	HTTP client IP prefix
Context	<a href="#">debug system http-connections client-ip-prefix</a> ( <i>ipv4-prefix   ipv6-prefix   keyword</i> )
Tree	<a href="#">client-ip-prefix</a>
Options	any
Default	any
Introduced	22.10.R1
Platforms	All

**management-interface**

Synopsis	Enter the <b>management-interface</b> context
Context	<a href="#">debug system management-interface</a>
Tree	<a href="#">management-interface</a>
Introduced	21.5.R1
Platforms	All

**netconf** *keyword*

Synopsis	Debugging verbosity for NETCONF
Context	<a href="#">debug system management-interface netconf</a> <i>keyword</i>
Tree	<a href="#">netconf</a>
Options	error, warning, info
Introduced	21.5.R1
Platforms	All

**remote-management**

Synopsis	Enter the <b>remote-management</b> context
Context	<a href="#">debug system management-interface remote-management</a>
Tree	<a href="#">remote-management</a>
Introduced	21.7.R1
Platforms	All

## manager

Synopsis	Enter the <b>manager</b> context
Context	<a href="#">debug system management-interface remote-management manager</a>
Tree	<a href="#">manager</a>
Introduced	21.7.R1
Platforms	All

## all

Synopsis	Enable debug of all managers
Context	<a href="#">debug system management-interface remote-management manager all</a>
Tree	<a href="#">all</a>
Notes	The following elements are part of a choice: <b>all</b> or <b>manager-name</b> .
Introduced	21.7.R1
Platforms	All

## manager-name [[name](#)] *string*

Synopsis	Add a list entry for <b>manager-name</b>
Context	<a href="#">debug system management-interface remote-management manager manager-name</a> <i>string</i>
Tree	<a href="#">manager-name</a>
Notes	The following elements are part of a choice: <b>all</b> or <b>manager-name</b> .
Introduced	21.7.R1
Platforms	All

## [\[name\]](#) *string*

Synopsis	Manager name
Context	<a href="#">debug system management-interface remote-management manager manager-name</a> <i>string</i>
Tree	<a href="#">manager-name</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.7.R1



Platforms All

### **service** *boolean*

Synopsis Enable service level debug  
 Context [debug system management-interface remote-management service \*boolean\*](#)  
 Tree [service](#)  
 Default false  
 Introduced 21.7.R1  
 Platforms All

### **wlan-gw**

Synopsis Enter the **wlan-gw** context  
 Context [debug wlan-gw](#)  
 Tree [wlan-gw](#)  
 Introduced 22.5.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **group** [*id*] *number*

Synopsis Enter the **group** list instance  
 Context [debug wlan-gw group \*number\*](#)  
 Tree [group](#)  
 Max. Instances 1  
 Introduced 22.5.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[id]** *number*

Synopsis WLAN-GW group ID in the system  
 Context [debug wlan-gw group \*number\*](#)  
 Tree [group](#)  
 Range 1 to 4

Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## learn-ap-mac

Synopsis	Enable the <b>learn-ap-mac</b> context
Context	<a href="#">debug wlan-gw group number learn-ap-mac</a>
Tree	<a href="#">learn-ap-mac</a>
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## tunnel-remote-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the remote tunnel endpoint
Context	<a href="#">debug wlan-gw group number learn-ap-mac tunnel-remote-address (<i>ipv4-address-no-zone   ipv6-address-no-zone</i>)</a>
Tree	<a href="#">tunnel-remote-address</a>
Notes	This element is mandatory.
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## statistic [[type](#)] *keyword name string*

Synopsis	Enter the <b>statistic</b> list instance
Context	<a href="#">debug wlan-gw group number statistic keyword name string</a>
Tree	<a href="#">statistic</a>
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## [\[type\]](#) *keyword*

Synopsis	Type of statistic to trace
Context	<a href="#">debug wlan-gw group number statistic keyword name string</a>
Tree	<a href="#">statistic</a>

Options	packet-error, host-error, bd-error, forwarding, reassembly, aa, radius, arp, dhcp4, dhcp6, icmp4, icmp6
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**name string**

Synopsis	Name of the statistic to trace
Context	<a href="#">debug wlan-gw group number statistic keyword name string</a>
Tree	<a href="#">statistic</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**capture-packet boolean**

Synopsis	Set a single packet capture trigger for the statistic
Context	<a href="#">debug wlan-gw group number statistic keyword name string capture-packet boolean</a>
Tree	<a href="#">capture-packet</a>
Default	false
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ue**

Synopsis	Enable the <b>ue</b> context
Context	<a href="#">debug wlan-gw group number ue</a>
Tree	<a href="#">ue</a>
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**bridge-domain** *number*

Synopsis	Bridge domain of the UEs to debug
Context	<a href="#">debug wlan-gw group number ue bridge-domain number</a>
Tree	<a href="#">bridge-domain</a>
Range	1 to 4294967295
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mac-address** *string*

Synopsis	MAC address of the UE to debug
Context	<a href="#">debug wlan-gw group number ue mac-address string</a>
Tree	<a href="#">mac-address</a>
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**protocols**

Synopsis	Enable the <b>protocols</b> context
Context	<a href="#">debug wlan-gw group number ue protocols</a>
Tree	<a href="#">protocols</a>
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**arp** *boolean*

Synopsis	Enable debugging for the ARP protocol
Context	<a href="#">debug wlan-gw group number ue protocols arp boolean</a>
Tree	<a href="#">arp</a>
Default	false
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**dhcp4 boolean**

Synopsis	Enable debugging for the DHCP protocol
Context	<a href="#">debug wlan-gw group number ue protocols dhcp4 boolean</a>
Tree	<a href="#">dhcp4</a>
Default	false
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**dhcp6 boolean**

Synopsis	Enable debugging for the DHCPv6 protocol
Context	<a href="#">debug wlan-gw group number ue protocols dhcp6 boolean</a>
Tree	<a href="#">dhcp6</a>
Default	false
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**icmp4 boolean**

Synopsis	Enable debugging for the ICMP protocol
Context	<a href="#">debug wlan-gw group number ue protocols icmp4 boolean</a>
Tree	<a href="#">icmp4</a>
Default	false
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**icmp6 boolean**

Synopsis	Enable debugging for the ICMPv6 protocol
Context	<a href="#">debug wlan-gw group number ue protocols icmp6 boolean</a>
Tree	<a href="#">icmp6</a>
Default	false
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**radius boolean**

Synopsis	Enable debugging for the RADIUS protocol
Context	<a href="#">debug wlan-gw group</a> <i>number</i> <a href="#">ue protocols</a> <a href="#">radius</a> <i>boolean</i>
Tree	<a href="#">radius</a>
Default	false
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### 3.13 esa commands

```
configure
- esa number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - host-port string
  - vm number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - cores number
    - description string
    - host-port reference
    - memory number
    - vm-type keyword
```

### 3.13.1 esa command descriptions

#### **esa** [[esa-id](#)] *number*

Synopsis	Enter the <b>esa</b> list instance
Context	<b>configure</b> <a href="#">esa</a> <i>number</i>
Tree	<a href="#">esa</a>
Description	Commands in this context configure the Extended Services Appliance (ESA) instance.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

#### **[esa-id]** *number*

Synopsis	ESA ID
Context	<b>configure</b> <a href="#">esa</a> <i>number</i>
Tree	<a href="#">esa</a>
Range	1 to 16
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

#### **admin-state** *keyword*

Synopsis	Administrative state of the ESA
Context	<b>configure</b> <a href="#">esa</a> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

#### **description** *string*

Synopsis	Text description
----------	------------------



Context	<b>configure</b> <i>esa number description string</i>
Tree	<i>description</i>
String Length	1 to 80
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **host-port** [*host-port*] *string*

Synopsis	Add a list entry for <b>host-port</b>
Context	<b>configure</b> <i>esa number host-port string</i>
Tree	<i>host-port</i>
Max. Instances	4
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **[host-port]** *string*

Synopsis	Ethernet port associated with the ESA
Context	<b>configure</b> <i>esa number host-port string</i>
Tree	<i>host-port</i>
Description	This command configures an Ethernet port associated with the ESA-VM instance. The port ID must be the same as the port ID associated with the ESA context on which the ESA-VM is configured.
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **vm** [*vm-id*] *number*

Synopsis	Enter the <b>vm</b> list instance
Context	<b>configure</b> <i>esa number vm number</i>
Tree	<i>vm</i>
Description	Commands in this context configure the ESA-VM instance.
Introduced	20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **[vm-id]** *number*

Synopsis VM ID  
 Context **configure** *esa number vm number*  
 Tree [vm](#)  
 Range 1 to 4  
 Notes This element is part of a list key.  
 Introduced 20.5.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **admin-state** *keyword*

Synopsis Administrative state of the ESA-VM instance  
 Context **configure** *esa number vm number admin-state keyword*  
 Tree [admin-state](#)  
 Description This command configures the administrative state of the ESA-VM instance. The state affects the operational state of the instance and all entities contained within the instance; however, configuration settings or statistics are not changed, reset, or removed.  
 Options enable, disable  
 Default disable  
 Introduced 20.5.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **cores** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Number of CPU physical cores allocated to the ESA-VM  
 Context **configure** *esa number vm number cores number*  
 Tree [cores](#)  
 Description This command specifies the number of CPU physical cores allocated to the ESA-VM instance. If an invalid value is configured for the number of cores, the VM remains in a failed state.

Range	0 to 128
Default	0
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <i>esa number vm number description string</i>
Tree	<i>description</i>
String Length	1 to 80
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **host-port** *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Ethernet port associated with the ESA-VM instance
Context	<b>configure</b> <i>esa number vm number host-port reference</i>
Tree	<i>host-port</i>
Description	This command configures an Ethernet port associated with the ESA-VM instance. The port ID must be the same as the port ID associated with the ESA context on which the ESA-VM is configured.
Reference	<b>configure</b> <i>esa number host-port string</i>
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **memory** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Amount of memory allocated to the ESA-VM
----------	--

---

Context	<b>configure</b> <i>esa number vm number memory number</i>
Tree	<i>memory</i>
Range	0 to 256
Units	gigabytes
Default	0
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **vm-type** *keyword*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	ESA-VM type
Context	<b>configure</b> <i>esa number vm number vm-type keyword</i>
Tree	<i>vm-type</i>
Options	aa, bb, tunnel, video
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

## 3.14 eth-cfm commands

```

configure
- eth-cfm
- apply-groups reference
- apply-groups-exclude reference
- default-domain
- apply-groups reference
- apply-groups-exclude reference
- bridge-identifier string vlan (number | keyword)
- apply-groups reference
- apply-groups-exclude reference
- id-permission keyword
- mhf-creation
- level (number | keyword)
- mhf-type keyword
- mip-ltr-priority (number | keyword)
- domain string
- apply-groups reference
- apply-groups-exclude reference
- association string
- apply-groups reference
- apply-groups-exclude reference
- auto-mep-discovery boolean
- bridge-identifier string
- apply-groups reference
- apply-groups-exclude reference
- id-permission keyword
- mhf-creation keyword
- mip-ltr-priority number
- vlan number
- ccm-hold-time
- down number
- ccm-interval keyword
- facility-id-permission keyword
- icc-based string
- integer number
- ma-index number
- remote-mep number
- apply-groups reference
- apply-groups-exclude reference
- remote-mac string
- string string
- vid number
- vpn-id string
- dns string
- format keyword
- level number
- mac string
- md-index number
- name string

```

### 3.14.1 eth-cfm command descriptions

#### eth-cfm

Synopsis	Enter the <b>eth-cfm</b> context
Context	<b>configure eth-cfm</b>
Tree	<a href="#">eth-cfm</a>
Description	Commands in this context configure ETH-CFM parameters.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

#### default-domain

Synopsis	Enter the <b>default-domain</b> context
Context	<b>configure eth-cfm default-domain</b>
Tree	<a href="#">default-domain</a>
Description	<p>Commands in this context configure MIP creation parameters per index (<b>bridge-identifier</b> <i>bridge-id</i> <b>vlan</b> <i>vlan-id</i>) if the MIP creation statement exists as part of the service connection.</p> <p>The MIP creation statement must be present on the connection before any configuration can occur for a MIP under this context. Whether a MIP uses the <b>default-domain</b> creation method is determined by the MIP authoritative nature of the <b>eth-cfm domain association</b>. The <b>eth-cfm default-domain</b> MIP creation is considered only if the <b>eth-cfm domain association</b> is not authoritative.</p>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

#### **bridge-identifier** [[bridge-name](#)] *string* **vlan** (*number* | *keyword*)

Synopsis	Enter the <b>bridge-identifier</b> list instance
Context	<b>configure eth-cfm default-domain bridge-identifier</b> <i>string</i> <b>vlan</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">bridge-identifier</a>
Description	<p>Commands in this context configure the references required to link the CFM function with the service context, allowing the entry of MIP-specific parameters for the index in the default domain table.</p> <p>The <b>info</b> and <b>info detail</b> commands do not display any entries for the instance unless they have previously been accessed. The possible candidates for the instance can be located using the <b>show eth-cfm default-domain</b> command.</p>

Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[bridge-name]** *string*

Synopsis	Bridge name in the default domain table
Context	<b>configure</b> <b>eth-cfm</b> <b>default-domain</b> <b>bridge-identifier</b> <i>string</i> <b>vlan</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>bridge-identifier</b>
Description	This command specifies the bridge name to enter in the default domain associated with the MIP.
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **vlan** (*number* | *keyword*)

Synopsis	VLAN ID for the default domain
Context	<b>configure</b> <b>eth-cfm</b> <b>default-domain</b> <b>bridge-identifier</b> <i>string</i> <b>vlan</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>bridge-identifier</b>
Description	This command configures a VLAN ID for the default domain.
Range	1 to 4094
Options	none
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **id-permission** *keyword*

Synopsis	Strategy for the inclusion of Sender ID TLV information
Context	<b>configure</b> <b>eth-cfm</b> <b>default-domain</b> <b>bridge-identifier</b> <i>string</i> <b>vlan</b> ( <i>number</i>   <i>keyword</i> ) <b>id-permission</b> <i>keyword</i>
Tree	<b>id-permission</b>
Description	This command specifies how the Sender ID TLV information is included for installed MEPs and MIPs. The Sender ID TLV is supported for ETH-CCM, ETH-LB, and ETH-LB PDUs.

Options	none, chassis, defer
Default	defer
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## mhf-creation

Synopsis	Enter the <b>mhf-creation</b> context
Context	<b>configure eth-cfm default-domain bridge-identifier string vlan</b> ( <i>number</i>   <i>keyword</i> ) <b>mhf-creation</b>
Tree	<b>mhf-creation</b>
Description	Commands in this context configure the MIP method of creation. MIP creation mode and other factors are part of the MIP creation authority ( <b>association</b> or <b>default-domain</b> ) logic. The MIP creation algorithm may result in multiple potential MIPs. Only the lowest-level valid MIP is instantiated.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## level (*number* | *keyword*)

Synopsis	Requested level of the MIP
Context	<b>configure eth-cfm default-domain bridge-identifier string vlan</b> ( <i>number</i>   <i>keyword</i> ) <b>mhf-creation level</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>level</b>
Description	This command configures the requested level of the MIP. This is used by the MIP creation algorithm to determine its validity in comparison to other ETH-CFM MIPs and MEPs. If the level is configured as <b>defer</b> , the level value is inherited from the global read-only system values.
Range	0 to 7
Options	defer
Default	defer
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## mhf-type *keyword*

Synopsis	MIP creation mode
----------	-------------------



Context	<b>configure eth-cfm default-domain bridge-identifier</b> <i>string</i> <b>vlan</b> ( <i>number</i>   <i>keyword</i> ) <b>mhf-creation mhf-type</b> <i>keyword</i>
Tree	<b>mhf-type</b>
Options	none, default, explicit, defer
Default	defer
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mip-ltr-priority** (*number* | *keyword*)

Synopsis	Priority of the Linktrace Response
Context	<b>configure eth-cfm default-domain bridge-identifier</b> <i>string</i> <b>vlan</b> ( <i>number</i>   <i>keyword</i> ) <b>mip-ltr-priority</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>mip-ltr-priority</b>
Description	This command allows the operator to set the priority of the Linktrace Response Message (ETH-LTR) from a MIP for this association.
Range	0 to 7
Options	defer
Default	defer
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **domain** [**md-admin-name**] *string*

Synopsis	Enter the <b>domain</b> list instance
Context	<b>configure eth-cfm domain</b> <i>string</i>
Tree	<b>domain</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[md-admin-name]** *string*

Synopsis	Unique domain name
Context	<b>configure eth-cfm domain</b> <i>string</i>
Tree	<b>domain</b>
String Length	1 to 64

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **association** [[ma-admin-name](#)] *string*

Synopsis	Enter the <b>association</b> list instance
Context	<b>configure</b> <a href="#">eth-cfm domain</a> <i>string</i> <a href="#">association</a> <i>string</i>
Tree	<a href="#">association</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[ma-admin-name]** *string*

Synopsis	Domain association name
Context	<b>configure</b> <a href="#">eth-cfm domain</a> <i>string</i> <a href="#">association</a> <i>string</i>
Tree	<a href="#">association</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **auto-mep-discovery** *boolean*

Synopsis	Allow remote MEP automatic discovery
Context	<b>configure</b> <a href="#">eth-cfm domain</a> <i>string</i> <a href="#">association</a> <i>string</i> <a href="#">auto-mep-discovery</a> <i>boolean</i>
Tree	<a href="#">auto-mep-discovery</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **bridge-identifier** [[bridge-name](#)] *string*

Synopsis	Enter the <b>bridge-identifier</b> list instance
Context	<b>configure</b> <a href="#">eth-cfm domain</a> <i>string</i> <a href="#">association</a> <i>string</i> <a href="#">bridge-identifier</a> <i>string</i>

Tree	<a href="#">bridge-identifier</a>
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[bridge-name]** *string*

Synopsis	Bridge name that links to the service
Context	<b>configure</b> <a href="#">eth-cfm domain</a> <i>string</i> <a href="#">association</a> <i>string</i> <a href="#">bridge-identifier</a> <i>string</i>
Tree	<a href="#">bridge-identifier</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**id-permission** *keyword*

Synopsis	Strategy for the inclusion of Sender ID TLV information
Context	<b>configure</b> <a href="#">eth-cfm domain</a> <i>string</i> <a href="#">association</a> <i>string</i> <a href="#">bridge-identifier</a> <i>string</i> <b>id-permission</b> <i>keyword</i>
Tree	<a href="#">id-permission</a>
Description	This command specifies how the Sender ID TLV information is included for installed MEPs and MIPs. The Sender ID TLV is supported for ETH-CCM, ETH-LB, and ETH-LB PDUs.
Options	none, chassis
Default	none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**mhf-creation** *keyword*

Synopsis	MIP method of creation
Context	<b>configure</b> <a href="#">eth-cfm domain</a> <i>string</i> <a href="#">association</a> <i>string</i> <a href="#">bridge-identifier</a> <i>string</i> <b>mhf-creation</b> <i>keyword</i>
Tree	<a href="#">mhf-creation</a>

Options	none, default, explicit, static
Default	none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mip-ltr-priority** *number*

Synopsis	Priority of the Linktrace Response Message (ETH-LTR) from a MIP
Context	<b>configure</b> <a href="#">eth-cfm domain</a> <i>string</i> <a href="#">association</a> <i>string</i> <a href="#">bridge-identifier</a> <i>string</i> <b>mip-ltr-priority</b> <i>number</i>
Tree	<a href="#">mip-ltr-priority</a>
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **vlan** *number*

Synopsis	VLAN ID for the default domain index
Context	<b>configure</b> <a href="#">eth-cfm domain</a> <i>string</i> <a href="#">association</a> <i>string</i> <a href="#">bridge-identifier</a> <i>string</i> <b>vlan</b> <i>number</i>
Tree	<a href="#">vlan</a>
Range	1 to 4094
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm-hold-time**

Synopsis	Enter the <b>ccm-hold-time</b> context
Context	<b>configure</b> <a href="#">eth-cfm domain</a> <i>string</i> <a href="#">association</a> <i>string</i> <b>ccm-hold-time</b>
Tree	<a href="#">ccm-hold-time</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **down** *number*

Synopsis	Additional time before a MEP declares a fault, in CCM timeout conditions
----------	--

Context	<b>configure eth-cfm domain string association string ccm-hold-time down number</b>
Tree	<b>down</b>
Range	1 to 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm-interval keyword**

Synopsis	CCM transmission interval for all MEPs in association
Context	<b>configure eth-cfm domain string association string ccm-interval keyword</b>
Tree	<b>ccm-interval</b>
Options	300hz, 10ms, 100ms, 1s, 10s, 60s, 600s
Default	10s
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **facility-id-permission keyword**

Synopsis	Sender ID TLV information for facility base MEPs
Context	<b>configure eth-cfm domain string association string facility-id-permission keyword</b>
Tree	<b>facility-id-permission</b>
Options	none, chassis
Default	none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **icc-based string**



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maintenance Association name in ICC-based format
Context	<b>configure eth-cfm domain string association string icc-based string</b>
Tree	<b>icc-based</b>

String Length	8 to 13
Notes	The following elements are part of a mandatory choice: <b>icc-based</b> , <b>integer</b> , <b>string</b> , <b>vid</b> , or <b>vpn-id</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **integer number**



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maintenance Association name in integer format
Context	<b>configure eth-cfm domain string association string integer number</b>
Tree	<a href="#">integer</a>
Range	0 to 65535
Notes	The following elements are part of a mandatory choice: <b>icc-based</b> , <b>integer</b> , <b>string</b> , <b>vid</b> , or <b>vpn-id</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ma-index number**



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maintenance Association (MA) table index
Context	<b>configure eth-cfm domain string association string ma-index number</b>
Tree	<a href="#">ma-index</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **remote-mep [mep-id] number**

Synopsis	Enter the <b>remote-mep</b> list instance
----------	---

Context	<b>configure eth-cfm domain string association string remote-mep number</b>
Tree	<b>remote-mep</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[mep-id] number**

Synopsis	Remote MEP ID
Context	<b>configure eth-cfm domain string association string remote-mep number</b>
Tree	<b>remote-mep</b>
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **remote-mac string**

Synopsis	Remote MAC Address for transmitting CFM packets to remote MEPs
Context	<b>configure eth-cfm domain string association string remote-mep number remote-mac string</b>
Tree	<b>remote-mac</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **string string**



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maintenance Association name in raw ASCII string format
Context	<b>configure eth-cfm domain string association string string string</b>
Tree	<b>string</b>
String Length	1 to 45
Notes	The following elements are part of a mandatory choice: <b>icc-based</b> , <b>integer</b> , <b>string</b> , <b>vid</b> , or <b>vpn-id</b> .

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**vid number****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Primary VLAN ID for the Maintenance Association name
Context	<b>configure</b> <i>eth-cfm domain string association string vid number</i>
Tree	<i>vid</i>
Range	0 to 4094
Notes	The following elements are part of a mandatory choice: <b>icc-based</b> , <b>integer</b> , <b>string</b> , <b>vid</b> , or <b>vpn-id</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**vpn-id string****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPN ID for the Maintenance Association name
Context	<b>configure</b> <i>eth-cfm domain string association string vpn-id string</i>
Tree	<i>vpn-id</i>
String Length	0 to 15
Notes	The following elements are part of a mandatory choice: <b>icc-based</b> , <b>integer</b> , <b>string</b> , <b>vid</b> , or <b>vpn-id</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS



**dns string****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Domain name like text string derived from a DNS name
Context	<b>configure</b> <i>eth-cfm domain string dns string</i>
Tree	<i>dns</i>
String Length	1 to 43
Notes	The following elements are part of a mandatory choice: <b>dns</b> , <b>format</b> , <b>mac</b> , or <b>name</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**format keyword****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maintenance domain name not to be provided
Context	<b>configure</b> <i>eth-cfm domain string format keyword</i>
Tree	<i>format</i>
Options	none
Notes	The following elements are part of a mandatory choice: <b>dns</b> , <b>format</b> , <b>mac</b> , or <b>name</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**level number****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maintenance Domain Level (MD Level)
Context	<b>configure</b> <i>eth-cfm domain string level number</i>
Tree	<i>level</i>
Range	0 to 7

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### mac string



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maintenance domain MAC name
Context	<b>configure</b> eth-cfm domain string mac string
Tree	mac
String Length	13 to 23
Notes	The following elements are part of a mandatory choice: <b>dns</b> , <b>format</b> , <b>mac</b> , or <b>name</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### md-index number



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	The index of the Maintenance Domain (MD)
Context	<b>configure</b> eth-cfm domain string md-index number
Tree	md-index
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### name string



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

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Synopsis	Maintenance Domain name
Context	<b>configure eth-cfm domain</b> <i>string name string</i>
Tree	<i>name</i>
String Length	1 to 43
Notes	The following elements are part of a mandatory choice: <b>dns</b> , <b>format</b> , <b>mac</b> , or <b>name</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### 3.15 eth-ring commands

```

configure
- eth-ring number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- ccm-hold-time
- down number
- up number
- compatible-version number
- description string
- guard-time number
- node-id string
- path string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- description string
- eth-cfm
- mep md-admin-name reference ma-admin-name reference mep-id number
- admin-state keyword
- alarm-notification
- fng-alarm-time number
- fng-reset-time number
- apply-groups reference
- apply-groups-exclude reference
- ccm boolean
- ccm-ltm-priority number
- ccm-padding-size number
- control-mep boolean
- description string
- eth-test
- bit-error-threshold number
- test-pattern
- crc-tlv boolean
- pattern keyword
- grace
- eth-ed
- max-rx-defect-window number
- priority number
- rx-eth-ed boolean
- tx-eth-ed boolean
- eth-vsm-grace
- rx-eth-vsm-grace boolean
- tx-eth-vsm-grace boolean
- low-priority-defect keyword
- mac-address string
- one-way-delay-threshold number
- port-and-raps-tag string
- rpl-end boolean
- revert-time number
- rpl-node keyword
- sub-ring
- interconnect
- propagate-topology-change boolean
- ring-id reference
- vpls
- type keyword

```

### 3.15.1 eth-ring command descriptions

#### **eth-ring** [[ring-index](#)] *number*

Synopsis	Enter the <b>eth-ring</b> list instance
Context	<b>configure eth-ring number</b>
Tree	<a href="#">eth-ring</a>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

#### **[ring-index]** *number*

Synopsis	Ring ID
Context	<b>configure eth-ring number</b>
Tree	<a href="#">eth-ring</a>
Range	1 to 128
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

#### **admin-state** *keyword*

Synopsis	Administrative state of the Ethernet ring
Context	<b>configure eth-ring number admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

#### **ccm-hold-time**

Synopsis	Enter the <b>ccm-hold-time</b> context
Context	<b>configure eth-ring number ccm-hold-time</b>
Tree	<a href="#">ccm-hold-time</a>

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Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **down** *number*

Synopsis	Hold timer for down event dampening
Context	<b>configure</b> <i>eth-ring number ccm-hold-time down number</i>
Tree	<i>down</i>
Range	1 to 5000
Units	centiseconds
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **up** *number*

Synopsis	Hold timer for recovery reporting
Context	<b>configure</b> <i>eth-ring number ccm-hold-time up number</i>
Tree	<i>up</i>
Range	0 to 5000
Units	deciseconds
Default	20
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **compatible-version** *number*

Synopsis	Compatibility version for the Ethernet ring
Context	<b>configure</b> <i>eth-ring number compatible-version number</i>
Tree	<i>compatible-version</i>
Range	1 to 2
Default	2
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**description string**

Synopsis	Text description
Context	<b>configure eth-ring number description string</b>
Tree	<a href="#">description</a>
String Length	0 to 80
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**guard-time number**

Synopsis	Ethernet ring guard time
Context	<b>configure eth-ring number guard-time number</b>
Tree	<a href="#">guard-time</a>
Range	1 to 20
Units	deciseconds
Default	5
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**node-id string**

Synopsis	MAC address of the RPL link
Context	<b>configure eth-ring number node-id string</b>
Tree	<a href="#">node-id</a>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**path [path-index] string**

Synopsis	Enter the <b>path</b> list instance
Context	<b>configure eth-ring number path string</b>
Tree	<a href="#">path</a>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[path-index]** *string*

Synopsis	Path ID
Context	<b>configure eth-ring number path string</b>
Tree	<a href="#">path</a>
String Length	1
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**admin-state** *keyword*

Synopsis	Administrative state of the Ethernet ring path
Context	<b>configure eth-ring number path string admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**description** *string*

Synopsis	Text description
Context	<b>configure eth-ring number path string description string</b>
Tree	<a href="#">description</a>
String Length	0 to 80
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**eth-cfm**

Synopsis	Enter the <b>eth-cfm</b> context
Context	<b>configure eth-ring number path string eth-cfm</b>
Tree	<a href="#">eth-cfm</a>
Introduced	21.7.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mep** *md-admin-name reference ma-admin-name reference mep-id number*

Synopsis Enter the **mep** list instance

Context **configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number**

Tree [mep](#)

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **md-admin-name reference**

Synopsis Maintenance Domain (MD) name

Context **configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number**

Tree [mep](#)

Reference **configure eth-cfm domain string**

Notes This element is part of a list key.

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ma-admin-name reference**

Synopsis Maintenance Association (MA) name

Context **configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number**

Tree [mep](#)

Reference **configure eth-cfm domain string association string**

Notes This element is part of a list key.

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mep-id number**

Synopsis Maintenance Endpoint (MEP) ID

Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i>
Tree	<a href="#">mep</a>
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **admin-state** *keyword*

Synopsis	Administrative state of the MEP
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **alarm-notification**

Synopsis	Enter the <b>alarm-notification</b> context
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">alarm-notification</a>
Tree	<a href="#">alarm-notification</a>
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fng-alarm-time** *number*

Synopsis	Time that must expire before an FNG alarm is raised
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Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">alarm-notification</a> <a href="#">fng-alarm-time</a> <i>number</i>
Tree	<a href="#">fng-alarm-time</a>
Range	250   500   1000
Units	centiseconds
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fng-reset-time** *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">alarm-notification</a> <a href="#">fng-reset-time</a> <i>number</i>
Tree	<a href="#">fng-reset-time</a>
Range	250   500   1000
Units	centiseconds
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm** *boolean*

Synopsis	Generate CCM messages
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ccm</a> <i>boolean</i>
Tree	<a href="#">ccm</a>
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm-ltm-priority** *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ccm-ltm-priority</a> <i>number</i>
Tree	<a href="#">ccm-ltm-priority</a>
Range	0 to 7

Default	7
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm-padding-size** *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	<b>configure</b> <a href="#">eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-padding-size number</a>
Tree	<a href="#">ccm-padding-size</a>
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.  This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through <b>configure eth-cfm domain association ccm-interval</b> ) is less than 1 second.
Range	3 to 1500
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **control-mep** *boolean*

Synopsis	Enable Ethernet ring control on the MEP
Context	<b>configure</b> <a href="#">eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number control-mep boolean</a>
Tree	<a href="#">control-mep</a>
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80

Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## eth-test

Synopsis	Enable the <b>eth-test</b> context
Context	<b>configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test</b>
Tree	<a href="#">eth-test</a>
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the <b>oam eth-cfm eth-test</b> command.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test bit-error-threshold number</b>
Tree	<a href="#">bit-error-threshold</a>
Range	0 to 11840
Units	bit errors
Default	1
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## test-pattern

Synopsis	Enter the <b>test-pattern</b> context
Context	<b>configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern</b>
Tree	<a href="#">test-pattern</a>
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**crc-tlv** *boolean*

Synopsis	Generate a CRC checksum
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test</a> <a href="#">test-pattern</a> <b>crc-tlv</b> <i>boolean</i>
Tree	<a href="#">crc-tlv</a>
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**pattern** *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test</a> <a href="#">test-pattern</a> <b>pattern</b> <i>keyword</i>
Tree	<a href="#">pattern</a>
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**grace**

Synopsis	Enter the <b>grace</b> context
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a>
Tree	<a href="#">grace</a>
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**eth-ed**

Synopsis	Enter the <b>eth-ed</b> context
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-ed</a>
Tree	<a href="#">eth-ed</a>
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**max-rx-defect-window** *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-ed</a> <a href="#">max-rx-defect-window</a> <i>number</i>
Tree	<a href="#">max-rx-defect-window</a>
Range	1 to 86400
Units	seconds
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**priority** *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-ed</a> <a href="#">priority</a> <i>number</i>
Tree	<a href="#">priority</a>
Range	0 to 7
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**rx-eth-ed** *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-ed</a> <a href="#">rx-eth-ed</a> <i>boolean</i>
Tree	<a href="#">rx-eth-ed</a>

Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **tx-eth-ed** *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace eth-ed tx-eth-ed</a> <i>boolean</i>
Tree	<a href="#">tx-eth-ed</a>
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **eth-vsm-grace**

Synopsis	Enter the <b>eth-vsm-grace</b> context
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace eth-vsm-grace</a>
Tree	<a href="#">eth-vsm-grace</a>
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **rx-eth-vsm-grace** *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace eth-vsm-grace rx-eth-vsm-grace</a> <i>boolean</i>
Tree	<a href="#">rx-eth-vsm-grace</a>
Description	When configured to <b>true</b> , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to <b>false</b> , the router disables the Nokia Grace function.
Default	true



Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **tx-eth-vsm-grace** *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace eth-vsm-grace tx-eth-vsm-grace</a> <i>boolean</i>
Tree	<a href="#">tx-eth-vsm-grace</a>
Description	<p>When configured to <b>true</b>, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.</p> <p>The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.</p> <p>The operator must configure the <b>configure system eth-cfm grace</b> command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).</p> <p>When configured to <b>false</b>, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.</p>
Default	true
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **low-priority-defect** *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">low-priority-defect</a> <i>keyword</i>
Tree	<a href="#">low-priority-defect</a>
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	all-def
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mac-address** *string*

Synopsis	MAC address of the MEP
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Context	<b>configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number mac-address string</b>
Tree	<a href="#">mac-address</a>
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **one-way-delay-threshold number**

Synopsis	Threshold time limit for the one-way delay test
Context	<b>configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number one-way-delay-threshold number</b>
Tree	<a href="#">one-way-delay-threshold</a>
Range	0 to 600
Units	seconds
Default	3
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **port-and-raps-tag string**



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Port ID and Ring APS tag ID
Context	<b>configure eth-ring number path string port-and-raps-tag string</b>
Tree	<a href="#">port-and-raps-tag</a>
String Length	1 to 45
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**rpl-end boolean****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable path as a Ring Protection Link (RPL) end
Context	<b>configure eth-ring number path string rpl-end boolean</b>
Tree	<a href="#">rpl-end</a>
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**revert-time number**

Synopsis	Revert time for the Ethernet ring
Context	<b>configure eth-ring number revert-time number</b>
Tree	<a href="#">revert-time</a>
Range	0   60 to 720
Units	seconds
Default	300
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**rpl-node keyword**

Synopsis	Ring Protection Link (RPL) type for the Ethernet ring
Context	<b>configure eth-ring number rpl-node keyword</b>
Tree	<a href="#">rpl-node</a>
Options	owner, neighbor
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**sub-ring**

Synopsis	Enter the <b>sub-ring</b> context
Context	<b>configure eth-ring number sub-ring</b>

Tree	<a href="#">sub-ring</a>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## interconnect

Synopsis	Enter the <b>interconnect</b> context
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">sub-ring</a> <b>interconnect</b>
Tree	<a href="#">interconnect</a>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## propagate-topology-change *boolean*

Synopsis	Propagate topology changes
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">sub-ring</a> <b>interconnect</b> <a href="#">propagate-topology-change</a> <i>boolean</i>
Tree	<a href="#">propagate-topology-change</a>
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ring-id *reference*

Synopsis	Ring instance of the connection ring for the sub-ring
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">sub-ring</a> <b>interconnect</b> <a href="#">ring-id</a> <i>reference</i>
Tree	<a href="#">ring-id</a>
Reference	<b>configure</b> <a href="#">eth-ring</a> <i>number</i>
Notes	The following elements are part of a choice: <b>ring-id</b> or <b>vpls</b> .
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## vpls

Synopsis	Connect sub-ring to VPLS ID that contains sub-ring SAP
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">sub-ring</a> <b>interconnect</b> <a href="#">vpls</a>

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Tree	<a href="#">vpls</a>
Notes	The following elements are part of a choice: <b>ring-id</b> or <b>vpls</b> .
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**type** *keyword*

Synopsis	Sub-ring type
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">sub-ring</a> <a href="#">type</a> <i>keyword</i>
Tree	<a href="#">type</a>
Options	virtual-link, non-virtual-link
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## 3.16 filter commands

```

configure
- filter
  - apply-groups reference
  - apply-groups-exclude reference
  - dhcp-filter number
    - apply-groups reference
    - apply-groups-exclude reference
    - default-action
      - bypass-host-creation
      - drop
    - description string
    - entry number
      - action
        - bypass-host-creation
        - drop
      - apply-groups reference
      - apply-groups-exclude reference
      - option
        - absent
        - match
          - exact boolean
          - hex string
          - invert boolean
          - string string
        - number number
        - present
    - dhcp6-filter number
      - apply-groups reference
      - apply-groups-exclude reference
      - default-action
        - bypass-host-creation
          - na boolean
          - pd boolean
        - drop
      - description string
      - entry number
        - action
          - bypass-host-creation
            - na boolean
            - pd boolean
          - drop
        - apply-groups reference
        - apply-groups-exclude reference
        - option
          - absent
          - match
            - exact boolean
            - hex string
            - invert boolean
            - string string
          - number number
          - present
    - gre-tunnel-template string
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - ipv4
        - destination-address string
        - gre-key (keyword | number)

```

configure filter gre-tunnel-template ipv4 skip-ttl-decrement

```

- skip-ttl-decrement boolean
- source-address string
- ipv6
- destination-address string
- gre-key keyword
- skip-hop-decrement boolean
- source-address string
- ip-exception string
- apply-groups reference
- apply-groups-exclude reference
- description string
- entry number
- apply-groups reference
- apply-groups-exclude reference
- description string
- match
- dst-ip
- address (ipv4-address | ipv4-prefix-with-host-bits)
- mask string
- dst-port
- eq number
- gt number
- lt number
- range
- end number
- start number
- icmp
- code number
- type number
- protocol (number | keyword)
- src-ip
- address (ipv4-address | ipv4-prefix-with-host-bits)
- mask string
- src-port
- eq number
- gt number
- lt number
- range
- end number
- start number
- filter-id number
- ip-filter string
- apply-groups reference
- apply-groups-exclude reference
- chain-to-system-filter boolean
- default-action keyword
- description string
- embed
- filter reference offset number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- flowspec offset number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- group number
- router-instance string
- openflow reference offset number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- grt
- sap reference

```

## configure filter ip-filter embed openflow system

```

- system
- vpls reference
- vprn reference
- entry number
  - action
    - accept
    - accept-when
      - pattern
        - expression string
        - mask string
        - offset-type keyword
        - offset-value number
    - apply-groups reference
    - apply-groups-exclude reference
    - drop
    - drop-when
      - extracted-traffic
      - packet-length
        - eq number
        - gt number
        - lt number
        - range
          - end number
          - start number
      - pattern
        - expression string
        - mask string
        - offset-type keyword
        - offset-value number
      - ttl
        - eq number
        - gt number
        - lt number
        - range
          - end number
          - start number
    - fc keyword
    - forward
      - bonding-connection number
      - esi-l2
        - esi-value string
        - vpls reference
      - esi-l3
        - esi-value string
        - sf-ip string
        - vas-interface reference
        - vprn reference
      - gre-tunnel reference
      - lsp string
      - mpls-policy
        - endpoint string
      - next-hop
        - interface-name string
        - nh-ip
          - address string
          - indirect boolean
        - nh-ip-vrf
          - address string
          - indirect boolean
          - router-instance string
      - redirect-policy reference
      - router-instance string
    - sap
      - sap-id reference

```



configure filter ip-filter entry action forward sap vpls

```

- vpls reference
- sdp
- sdp-bind-id string
- vpls reference
- srte-policy
- color number
- endpoint string
- vprn-target
- adv-prefix string
- bgp-nh string
- lsp string
- vprn reference
- gtp-local-breakout
- http-redirect
- allow-override boolean
- url (keyword | http-redirect-url)
- ignore-match
- l2-aware-nat-bypass boolean
- nat
- nat-policy reference
- rate-limit
- extracted-traffic
- packet-length
- eq number
- gt number
- lt number
- range
- end number
- start number
- pattern
- expression string
- mask string
- offset-type keyword
- offset-value number
- pir (number | keyword)
- pps-pir (number | keyword)
- ttl
- eq number
- gt number
- lt number
- range
- end number
- start number
- reassemble
- remark
- dscp keyword
- secondary
- apply-groups reference
- apply-groups-exclude reference
- forward
- next-hop
- nh-ip-vrf
- address string
- indirect boolean
- router-instance string
- sap
- sap-id reference
- vpls reference
- sdp
- sdp-bind-id string
- vpls reference
- vprn-target
- adv-prefix string
- bgp-nh string

```

configure filter ip-filter entry action secondary forward vprn-target lsp

```

    - lsp string
    - vprn reference
  - remark
    - dscp keyword
  - tcp-mss-adjust
- apply-groups reference
- apply-groups-exclude reference
- description string
- egress-pbr keyword
- filter-sample boolean
- interface-sample boolean
- log reference
- match
  - destination-class number
  - dscp keyword
  - dst-ip
    - address (ipv4-address | ipv4-prefix-with-host-bits)
    - ip-prefix-list reference
    - mask string
  - dst-port
    - eq number
    - gt number
    - lt number
    - port-list reference
    - range
      - end number
      - start number
  - fragment keyword
- icmp
  - code number
  - type number
- ip
  - address (ipv4-address | ipv4-prefix-with-host-bits)
  - ip-prefix-list reference
  - mask string
- ip-option
  - mask number
  - type number
- multiple-option boolean
- option-present boolean
- packet-length
  - eq number
  - gt number
  - lt number
  - range
    - end number
    - start number
- port
  - eq number
  - gt number
  - lt number
  - port-list reference
  - range
    - end number
    - start number
- protocol (number | keyword)
- protocol-list reference
- src-ip
  - address (ipv4-address | ipv4-prefix-with-host-bits)
  - ip-prefix-list reference
  - mask string
- src-mac
  - address string
  - mask string

```

configure filter ip-filter entry match src-port

```

- src-port
  - eq number
  - gt number
  - lt number
  - port-list reference
  - range
    - end number
    - start number
- src-route-option boolean
- tcp-established
- tcp-flags
  - ack boolean
  - cwr boolean
  - ece boolean
  - fin boolean
  - ns boolean
  - psh boolean
  - rst boolean
  - syn boolean
  - urg boolean
- ttl
  - eq number
  - gt number
  - lt number
  - range
    - end number
    - start number
- pbr-down-action-override keyword
- sample-profile reference
- sticky-dest (number | keyword)
- filter-id number
- scope keyword
- shared-policer boolean
- subscriber-mgmt
  - host-specific-entry
    - credit-control
      - range
        - end number
        - start number
    - filter-rule
      - range
        - end number
        - start number
    - watermark
      - high number
      - low number
- shared-entry
  - filter-rule
    - range
      - end number
      - start number
  - pcc-rule
    - range
      - end number
      - start number
  - watermark
    - high number
    - low number
- type keyword
- ipv6-exception string
- apply-groups reference
- apply-groups-exclude reference
- description string
- entry number

```

configure filter ipv6-exception entry apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **match**
  - **dst-ip**
    - **address** (*ipv6-address | ipv6-prefix-with-host-bits*)
    - **ipv6-prefix-list** *reference*
    - **mask** *string*
  - **dst-port**
    - **eq** *number*
    - **gt** *number*
    - **lt** *number*
    - **port-list** *reference*
    - **range**
      - **end** *number*
      - **start** *number*
  - **icmp**
    - **code** *number*
    - **type** *number*
  - **next-header** (*number | keyword*)
  - **port**
    - **eq** *number*
    - **gt** *number*
    - **lt** *number*
    - **port-list** *reference*
    - **range**
      - **end** *number*
      - **start** *number*
  - **src-ip**
    - **address** (*ipv6-address | ipv6-prefix-with-host-bits*)
    - **ipv6-prefix-list** *reference*
    - **mask** *string*
  - **src-port**
    - **eq** *number*
    - **gt** *number*
    - **lt** *number*
    - **port-list** *reference*
    - **range**
      - **end** *number*
      - **start** *number*
- **filter-id** *number*
- **ipv6-filter** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **chain-to-system-filter** *boolean*
  - **default-action** *keyword*
  - **description** *string*
  - **embed**
    - **filter** *reference* **offset** *number*
      - **admin-state** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
    - **flowspec** **offset** *number*
      - **admin-state** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **group** *number*
      - **router-instance** *string*
    - **openflow** *reference* **offset** *number*
      - **admin-state** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **grt**
      - **sap** *reference*

configure filter ipv6-filter embed openflow system

```

- system
- vpls reference
- vprn reference
- entry number
  - action
    - accept
    - accept-when
      - pattern
        - expression string
        - mask string
        - offset-type keyword
        - offset-value number
    - apply-groups reference
    - apply-groups-exclude reference
    - drop
    - drop-when
      - extracted-traffic
      - hop-limit
        - eq number
        - gt number
        - lt number
        - range
          - end number
          - start number
      - pattern
        - expression string
        - mask string
        - offset-type keyword
        - offset-value number
      - payload-length
        - eq number
        - gt number
        - lt number
        - range
          - end number
          - start number
    - fc keyword
    - forward
      - bonding-connection number
      - esi-l2
        - esi-value string
        - vpls reference
      - esi-l3
        - esi-value string
        - sf-ip string
        - vas-interface reference
        - vprn reference
      - gre-tunnel reference
      - lsp string
      - mpls-policy
        - endpoint string
      - next-hop
        - nh-ip
          - address string
          - indirect boolean
        - nh-ip-vrf
          - address string
          - indirect boolean
          - router-instance string
      - redirect-policy reference
      - router-instance string
    - sap
      - sap-id reference
      - vpls reference

```

configure filter ipv6-filter entry action forward sdp

```

- sdp
  - sdp-bind-id string
  - vpls reference
- srte-policy
  - color number
  - endpoint string
- vprn-target
  - adv-prefix string
  - bgp-nh string
  - lsp string
  - vprn reference
- http-redirect
  - allow-override boolean
  - url (keyword | http-redirect-url)
- ignore-match
- nat
  - nat-policy reference
  - nat-type keyword
- rate-limit
  - extracted-traffic
  - hop-limit
  - eq number
  - gt number
  - lt number
  - range
    - end number
    - start number
- pattern
  - expression string
  - mask string
  - offset-type keyword
  - offset-value number
- payload-length
  - eq number
  - gt number
  - lt number
  - range
    - end number
    - start number
- pir (number | keyword)
- pps-pir (number | keyword)
- remark
  - dscp keyword
- secondary
  - apply-groups reference
  - apply-groups-exclude reference
- forward
  - next-hop
    - nh-ip-vrf
      - address string
      - indirect boolean
      - router-instance string
  - sap
    - sap-id reference
    - vpls reference
  - sdp
    - sdp-bind-id string
    - vpls reference
  - vprn-target
    - adv-prefix string
    - bgp-nh string
    - lsp string
    - vprn reference
- remark

```

configure filter ipv6-filter entry action secondary remark dscp

- **dscp** *keyword*
- **tcp-mss-adjust**
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **egress-pbr** *keyword*
- **filter-sample** *boolean*
- **interface-sample** *boolean*
- **log** *reference*
- **match**
  - **destination-class** *number*
  - **dscp** *keyword*
  - **dst-ip**
    - **address** (*ipv6-address* | *ipv6-prefix-with-host-bits*)
    - **ipv6-prefix-list** *reference*
    - **mask** *string*
  - **dst-port**
    - **eq** *number*
    - **gt** *number*
    - **lt** *number*
    - **port-list** *reference*
    - **range**
      - **end** *number*
      - **start** *number*
  - **extension-header**
    - **ah** *boolean*
    - **esp** *boolean*
    - **hop-by-hop** *boolean*
    - **routing-type0** *boolean*
  - **flow-label**
    - **mask** *number*
    - **value** *number*
  - **fragment** *keyword*
  - **hop-limit**
    - **eq** *number*
    - **gt** *number*
    - **lt** *number*
    - **range**
      - **end** *number*
      - **start** *number*
  - **icmp**
    - **code** *number*
    - **type** *number*
  - **ip**
    - **address** (*ipv6-address* | *ipv6-prefix-with-host-bits*)
    - **ipv6-prefix-list** *reference*
    - **mask** *string*
    - **next-header** (*number* | *keyword*)
    - **next-header-list** *reference*
    - **packet-length**
      - **eq** *number*
      - **gt** *number*
      - **lt** *number*
      - **range**
        - **end** *number*
        - **start** *number*
    - **port**
      - **eq** *number*
      - **gt** *number*
      - **lt** *number*
      - **port-list** *reference*
      - **range**
        - **end** *number*
        - **start** *number*

configure filter ipv6-filter entry match src-ip

```

- src-ip
  - address (ipv6-address | ipv6-prefix-with-host-bits)
  - ipv6-prefix-list reference
  - mask string
- src-mac
  - address string
  - mask string
- src-port
  - eq number
  - gt number
  - lt number
  - port-list reference
  - range
    - end number
    - start number
- tcp-established
- tcp-flags
  - ack boolean
  - cwr boolean
  - ece boolean
  - fin boolean
  - ns boolean
  - psh boolean
  - rst boolean
  - syn boolean
  - urg boolean
- pbr-down-action-override keyword
- sample-profile reference
- sticky-dest (number | keyword)
- filter-id number
- scope keyword
- shared-policer boolean
- subscriber-mgmt
  - host-specific-entry
    - credit-control
      - range
        - end number
        - start number
    - filter-rule
      - range
        - end number
        - start number
    - watermark
      - high number
      - low number
  - shared-entry
    - filter-rule
      - range
        - end number
        - start number
    - pcc-rule
      - range
        - end number
        - start number
    - watermark
      - high number
      - low number
- type keyword
- log number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - destination

```



## configure filter log destination memory

- **memory**
  - **max-entries** *number*
  - **stop-on-full** *boolean*
- **syslog**
  - **name** *reference*
  - **summary**
    - **admin-state** *keyword*
    - **summary-crit** *keyword*
- **mac-filter** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **default-action** *keyword*
  - **description** *string*
  - **embed**
  - **entry** *number*
    - **action**
      - **accept**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **drop**
      - **forward**
        - **esi-l2**
          - **esi-value** *string*
          - **vpls** *reference*
        - **sap**
          - **sap-id** *reference*
          - **vpls** *reference*
        - **sdp**
          - **sdp-bind-id** *string*
          - **vpls** *reference*
      - **http-redirect**
        - **url** *string*
      - **ignore-match**
      - **rate-limit**
        - **pir** (*number* | *keyword*)
      - **secondary**
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **forward**
          - **sap**
            - **sap-id** *reference*
            - **vpls** *reference*
          - **sdp**
            - **sdp-bind-id** *string*
            - **vpls** *reference*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **description** *string*
      - **log** *reference*
      - **match**
        - **dot1p**
          - **mask** *number*
          - **priority** *number*
        - **dst-mac**
          - **address** *string*
          - **mask** *string*
        - **etype** *string*
        - **frame-type** *keyword*
        - **inner-tag**
          - **mask** *number*
          - **tag** *number*
        - **isid**
          - **range**
            - **end** *number*

configure filter mac-filter entry match isid range start

```

    - start number
    - value number
  - llc-dsap
    - dsap number
    - mask number
  - llc-ssap
    - mask number
    - ssap number
  - outer-tag
    - mask number
    - tag number
  - snap-oui keyword
  - snap-pid number
  - src-mac
    - address string
    - mask string
  - pbr-down-action-override keyword
  - sticky-dest (number | keyword)
- filter-id number
- scope keyword
- type keyword
- match-list
  - apply-groups reference
  - apply-groups-exclude reference
  - ip-prefix-list string
    - apply-groups reference
    - apply-groups-exclude reference
  - apply-path
    - bgp-peers number
      - apply-groups reference
      - apply-groups-exclude reference
      - group string
      - neighbor string
      - router-instance string
    - description string
    - prefix string
    - prefix-exclude string
  - ipv6-prefix-list string
    - apply-groups reference
    - apply-groups-exclude reference
  - apply-path
    - bgp-peers number
      - apply-groups reference
      - apply-groups-exclude reference
      - group string
      - neighbor string
      - router-instance string
    - description string
    - prefix string
    - prefix-exclude string
  - port-list string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - port number
    - range start number end number
  - protocol-list string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - protocol (number | keyword)
- md-auto-id
  - filter-id-range
    - apply-groups reference

```

## configure filter md-auto-id filter-id-range apply-groups-exclude

- **apply-groups-exclude** *reference*
- **end** *number*
- **start** *number*
- **redirect-policy** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **destination** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **ping-test**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **drop-count** *number*
      - **hold-down** *number*
      - **interval** *number*
      - **source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
      - **timeout** *number*
    - **priority** *number*
    - **unicast-rt-test**
  - **notify-dest-change** *boolean*
  - **router-instance** *string*
  - **sticky-dest** (*number* | *keyword*)
- **redirect-policy-binding** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **binding-operator** *keyword*
  - **redirect-policy** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **destination** *reference*
- **system-filter**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **ip** *reference*
  - **ipv6** *reference*

### 3.16.1 filter command descriptions

#### filter

Synopsis	Enter the <b>filter</b> context
Context	<b>configure filter</b>
Tree	<a href="#">filter</a>
Introduced	16.0.R1
Platforms	All

#### dhcp-filter [[filter-id](#)] *number*

Synopsis	Enter the <b>dhcp-filter</b> list instance
Context	<b>configure filter dhcp-filter</b> <i>number</i>
Tree	<a href="#">dhcp-filter</a>
Introduced	16.0.R1
Platforms	All

#### [\[filter-id\]](#) *number*

Synopsis	Unique DHCP filter policy ID
Context	<b>configure filter dhcp-filter</b> <i>number</i>
Tree	<a href="#">dhcp-filter</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

#### default-action

Synopsis	Enable the <b>default-action</b> context
Context	<b>configure filter dhcp-filter</b> <i>number</i> <a href="#">default-action</a>
Tree	<a href="#">default-action</a>
Introduced	16.0.R1

Platforms All

## bypass-host-creation

Synopsis Host creation options to bypass  
 Context **configure filter dhcp-filter number default-action bypass-host-creation**  
 Tree [bypass-host-creation](#)  
 Notes The following elements are part of a mandatory choice: **bypass-host-creation** or **drop**.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## drop

Synopsis DHCP host creation when the filter entry is matched  
 Context **configure filter dhcp-filter number default-action drop**  
 Tree [drop](#)  
 Notes The following elements are part of a mandatory choice: **bypass-host-creation** or **drop**.  
 Introduced 16.0.R1  
 Platforms All

## description *string*

Synopsis Text description  
 Context **configure filter dhcp-filter number description string**  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

## entry [[entry-id](#)] *number*

Synopsis Enter the **entry** list instance  
 Context **configure filter dhcp-filter number entry number**  
 Tree [entry](#)

Max. Instances	10
Introduced	16.0.R1
Platforms	All

**[entry-id] number**

Synopsis	DHCP filter entry ID
Context	<b>configure filter dhcp-filter number entry number</b>
Tree	<a href="#">entry</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**action**

Synopsis	Enable the <b>action</b> context
Context	<b>configure filter dhcp-filter number entry number action</b>
Tree	<a href="#">action</a>
Introduced	16.0.R1
Platforms	All

**bypass-host-creation**

Synopsis	Host creation options to bypass
Context	<b>configure filter dhcp-filter number entry number action bypass-host-creation</b>
Tree	<a href="#">bypass-host-creation</a>
Notes	The following elements are part of a mandatory choice: <b>bypass-host-creation</b> or <b>drop</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**drop**

Synopsis	DHCP host creation when the filter entry is matched
----------	---

Context	<b>configure filter dhcp-filter number entry number action drop</b>
Tree	<b>drop</b>
Notes	The following elements are part of a mandatory choice: <b>bypass-host-creation</b> or <b>drop</b> .
Introduced	16.0.R1
Platforms	All

## option

Synopsis	Enable the <b>option</b> context
Context	<b>configure filter dhcp-filter number entry number option</b>
Tree	<b>option</b>
Introduced	16.0.R1
Platforms	All

## absent

Synopsis	Require the absence of related option
Context	<b>configure filter dhcp-filter number entry number option absent</b>
Tree	<b>absent</b>
Notes	The following elements are part of a mandatory choice: <b>absent</b> , <b>match</b> , or <b>present</b> .
Introduced	16.0.R1
Platforms	All

## match

Synopsis	Enable the <b>match</b> context
Context	<b>configure filter dhcp-filter number entry number option match</b>
Tree	<b>match</b>
Notes	The following elements are part of a mandatory choice: <b>absent</b> , <b>match</b> , or <b>present</b> .
Introduced	16.0.R1
Platforms	All

## exact *boolean*

Synopsis	Use an exact match pattern (not partial)
----------	--

Context	<b>configure filter dhcp-filter number entry number option match exact boolean</b>
Tree	<b>exact</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **hex string**

Synopsis	Matching pattern for the filtered option
Context	<b>configure filter dhcp-filter number entry number option match hex string</b>
Tree	<b>hex</b>
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: <b>hex</b> or <b>string</b> .
Introduced	16.0.R1
Platforms	All

### **invert boolean**

Synopsis	Invert (partial) matching criteria
Context	<b>configure filter dhcp-filter number entry number option match invert boolean</b>
Tree	<b>invert</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **string string**

Synopsis	Matching pattern for the filtered option
Context	<b>configure filter dhcp-filter number entry number option match string string</b>
Tree	<b>string</b>
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: <b>hex</b> or <b>string</b> .
Introduced	16.0.R1
Platforms	All



**number** *number*

Synopsis	Number for DHCP or DHCPv6 option to filter on
Context	<b>configure</b> <b>filter</b> <b>dhcp-filter</b> <i>number</i> <b>entry</b> <i>number</i> <b>option</b> <i>number</i> <i>number</i>
Tree	<b>number</b>
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**present**

Synopsis	Require the presence of related option
Context	<b>configure</b> <b>filter</b> <b>dhcp-filter</b> <i>number</i> <b>entry</b> <i>number</i> <b>option</b> <b>present</b>
Tree	<b>present</b>
Notes	The following elements are part of a mandatory choice: <b>absent</b> , <b>match</b> , or <b>present</b> .
Introduced	16.0.R1
Platforms	All

**dhcp6-filter** [**filter-id**] *number*

Synopsis	Enter the <b>dhcp6-filter</b> list instance
Context	<b>configure</b> <b>filter</b> <b>dhcp6-filter</b> <i>number</i>
Tree	<b>dhcp6-filter</b>
Introduced	16.0.R1
Platforms	All

**[filter-id]** *number*

Synopsis	Unique DHCP filter policy ID
Context	<b>configure</b> <b>filter</b> <b>dhcp6-filter</b> <i>number</i>
Tree	<b>dhcp6-filter</b>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### default-action

Synopsis Enable the **default-action** context  
 Context **configure filter dhcp6-filter number default-action**  
 Tree [default-action](#)  
 Introduced 16.0.R1  
 Platforms All

### bypass-host-creation

Synopsis Enable the **bypass-host-creation** context  
 Context **configure filter dhcp6-filter number default-action bypass-host-creation**  
 Tree [bypass-host-creation](#)  
 Notes The following elements are part of a mandatory choice: **bypass-host-creation** or **drop**.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### na boolean

Synopsis Bypass the DHCPv6 NA host creation  
 Context **configure filter dhcp6-filter number default-action bypass-host-creation na boolean**  
 Tree [na](#)  
 Default true  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### pd boolean

Synopsis Bypass the DHCPv6 PD host creation  
 Context **configure filter dhcp6-filter number default-action bypass-host-creation pd boolean**  
 Tree [pd](#)  
 Default true  
 Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## drop

Synopsis Drop DHCPv6 message (do not process)  
 Context **configure filter dhcp6-filter number default-action drop**  
 Tree [drop](#)  
 Notes The following elements are part of a mandatory choice: **bypass-host-creation** or **drop**.  
 Introduced 16.0.R1  
 Platforms All

## description *string*

Synopsis Text description  
 Context **configure filter dhcp6-filter number description string**  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

## entry [[entry-id](#)] *number*

Synopsis Enter the **entry** list instance  
 Context **configure filter dhcp6-filter number entry number**  
 Tree [entry](#)  
 Max. Instances 10  
 Introduced 16.0.R1  
 Platforms All

## [[entry-id](#)] *number*

Synopsis DHCP filter entry ID  
 Context **configure filter dhcp6-filter number entry number**  
 Tree [entry](#)

Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## action

Synopsis	Enable the <b>action</b> context
Context	<b>configure filter dhcp6-filter number entry number action</b>
Tree	<a href="#">action</a>
Introduced	16.0.R1
Platforms	All

## bypass-host-creation

Synopsis	Enable the <b>bypass-host-creation</b> context
Context	<b>configure filter dhcp6-filter number entry number action bypass-host-creation</b>
Tree	<a href="#">bypass-host-creation</a>
Notes	The following elements are part of a mandatory choice: <b>bypass-host-creation</b> or <b>drop</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## na *boolean*

Synopsis	Bypass the DHCPv6 NA host creation
Context	<b>configure filter dhcp6-filter number entry number action bypass-host-creation na boolean</b>
Tree	<a href="#">na</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## pd *boolean*

Synopsis	Bypass the DHCPv6 PD host creation
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Context	<b>configure filter dhcp6-filter</b> <i>number</i> <b>entry</b> <i>number</i> <b>action</b> <b>bypass-host-creation</b> <b>pd</b> <i>boolean</i>
Tree	<a href="#">pd</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## drop

Synopsis	Drop DHCPv6 message (do not process)
Context	<b>configure filter dhcp6-filter</b> <i>number</i> <b>entry</b> <i>number</i> <b>action</b> <b>drop</b>
Tree	<a href="#">drop</a>
Notes	The following elements are part of a mandatory choice: <b>bypass-host-creation</b> or <b>drop</b> .
Introduced	16.0.R1
Platforms	All

## option

Synopsis	Enable the <b>option</b> context
Context	<b>configure filter dhcp6-filter</b> <i>number</i> <b>entry</b> <i>number</i> <b>option</b>
Tree	<a href="#">option</a>
Introduced	16.0.R1
Platforms	All

## absent

Synopsis	Require the absence of related option
Context	<b>configure filter dhcp6-filter</b> <i>number</i> <b>entry</b> <i>number</i> <b>option</b> <b>absent</b>
Tree	<a href="#">absent</a>
Notes	The following elements are part of a mandatory choice: <b>absent</b> , <b>match</b> , or <b>present</b> .
Introduced	16.0.R1
Platforms	All

## match

Synopsis	Enable the <b>match</b> context
Context	<b>configure filter dhcp6-filter number entry number option match</b>
Tree	<a href="#">match</a>
Notes	The following elements are part of a mandatory choice: <b>absent</b> , <b>match</b> , or <b>present</b> .
Introduced	16.0.R1
Platforms	All

## exact *boolean*

Synopsis	Use an exact match pattern (not partial)
Context	<b>configure filter dhcp6-filter number entry number option match exact boolean</b>
Tree	<a href="#">exact</a>
Default	false
Introduced	16.0.R1
Platforms	All

## hex *string*

Synopsis	Matching pattern for the filtered option
Context	<b>configure filter dhcp6-filter number entry number option match hex string</b>
Tree	<a href="#">hex</a>
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: <b>hex</b> or <b>string</b> .
Introduced	16.0.R1
Platforms	All

## invert *boolean*

Synopsis	Invert (partial) matching criteria
Context	<b>configure filter dhcp6-filter number entry number option match invert boolean</b>
Tree	<a href="#">invert</a>
Default	false
Introduced	16.0.R1

Platforms All

### **string** *string*

Synopsis Matching pattern for the filtered option  
 Context **configure** [filter](#) [dhcp6-filter](#) *number* [entry](#) *number* [option](#) [match](#) *string* *string*  
 Tree [string](#)  
 String Length 1 to 127  
 Notes The following elements are part of a mandatory choice: **hex** or **string**.  
 Introduced 16.0.R1  
 Platforms All

### **number** *number*

Synopsis Number for DHCP or DHCPv6 option to filter on  
 Context **configure** [filter](#) [dhcp6-filter](#) *number* [entry](#) *number* [option](#) *number* *number*  
 Tree [number](#)  
 Range 0 to 255  
 Notes This element is mandatory.  
 Introduced 16.0.R1  
 Platforms All

### **present**

Synopsis Require the presence of related option  
 Context **configure** [filter](#) [dhcp6-filter](#) *number* [entry](#) *number* [option](#) [present](#)  
 Tree [present](#)  
 Notes The following elements are part of a mandatory choice: **absent**, **match**, or **present**.  
 Introduced 16.0.R1  
 Platforms All

### **gre-tunnel-template** [[gre-tunnel-template-name](#)] *string*

Synopsis Enter the **gre-tunnel-template** list instance  
 Context **configure** [filter](#) [gre-tunnel-template](#) *string*

Tree	<a href="#">gre-tunnel-template</a>
Max. Instances	8191
Introduced	16.0.R1
Platforms	All

### **[gre-tunnel-template-name]** *string*

Synopsis	GRE tunnel template ID
Context	<b>configure</b> <a href="#">filter gre-tunnel-template</a> <i>string</i>
Tree	<a href="#">gre-tunnel-template</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">filter gre-tunnel-template</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R2
Platforms	All

### **ipv4**

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">filter gre-tunnel-template</a> <i>string</i> <a href="#">ipv4</a>
Tree	<a href="#">ipv4</a>
Notes	The following elements are part of a choice: <b>ipv4</b> or <b>ipv6</b> .
Introduced	16.0.R1
Platforms	All



**destination-address** [[address](#)] *string*

Synopsis	Add a list entry for <b>destination-address</b>
Context	<b>configure filter gre-tunnel-template</b> <i>string ipv4 destination-address string</i>
Tree	<a href="#">destination-address</a>
Description	This command defines a destination for the GRE IP header used to encapsulate the matching IPv4/IPv6 packet.  A single destination address can be specified for an IPv6 <b>gre-tunnel-template</b> .  Traffic matching the associated IPv4 or IPv6 filter is hashed across any available ECMP or UCMP route next hop available to the destination address. If no destination address is available, then matching traffic follows the configured <b>pbr-down-action-override</b> action, if configured. If no <b>pbr-down-action-override</b> is configured traffic is discarded.
Max. Instances	32
Introduced	16.0.R1
Platforms	All

**[address]** *string*

Synopsis	Destination IPv4 address
Context	<b>configure filter gre-tunnel-template</b> <i>string ipv4 destination-address string</i>
Tree	<a href="#">destination-address</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**gre-key** (*keyword | number*)

Synopsis	GRE key
Context	<b>configure filter gre-tunnel-template</b> <i>string ipv4 gre-key (keyword   number)</i>
Tree	<a href="#">gre-key</a>
Max. Range	0 to 4294967295
Options	if-index
Introduced	16.0.R1
Platforms	All

**skip-ttl-decrement** *boolean*

Synopsis	Decrement TTL
Context	<b>configure</b> filter gre-tunnel-template <i>string</i> ipv4 skip-ttl-decrement <i>boolean</i>
Tree	skip-ttl-decrement
Default	false
Introduced	16.0.R1
Platforms	All

**source-address** *string*

Synopsis	Source IP address of the GRE encapsulated
Context	<b>configure</b> filter gre-tunnel-template <i>string</i> ipv4 source-address <i>string</i>
Tree	source-address
Introduced	16.0.R1
Platforms	All

**ipv6**

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure</b> filter gre-tunnel-template <i>string</i> ipv6
Tree	ipv6
Notes	The following elements are part of a choice: <b>ipv4</b> or <b>ipv6</b> .
Introduced	22.7.R1
Platforms	All

**destination-address** [*address*] *string*

Synopsis	Add a list entry for <b>destination-address</b>
Context	<b>configure</b> filter gre-tunnel-template <i>string</i> ipv6 destination-address <i>string</i>
Tree	destination-address
Max. Instances	1
Introduced	22.7.R1
Platforms	All

**[address]** *string*

Synopsis	IPv6 destination address
Context	<b>configure filter gre-tunnel-template</b> <i>string ipv6 destination-address string</i>
Tree	<a href="#">destination-address</a>
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

**gre-key** *keyword*

Synopsis	Include a key value in GRE header
Context	<b>configure filter gre-tunnel-template</b> <i>string ipv6 gre-key keyword</i>
Tree	<a href="#">gre-key</a>
Description	This command includes a key value in the GRE header of ifIndex of the ingress interface.
Options	if-index
Introduced	22.7.R1
Platforms	All

**skip-hop-decrement** *boolean*

Synopsis	Decrement TTL of the received packet
Context	<b>configure filter gre-tunnel-template</b> <i>string ipv6 skip-hop-decrement boolean</i>
Tree	<a href="#">skip-hop-decrement</a>
Description	When configured to <b>true</b> , the system decrements the TTL of the IP packet matching the IPv4 or IPv6 filter when it is encapsulated into the GRE tunnel header. When configured to <b>false</b> , the system increases the TTL of the received packet.
Default	false
Introduced	22.7.R1
Platforms	All

**source-address** *string*

Synopsis	Source IPv6 address of the GRE encapsulated
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Context	<b>configure filter gre-tunnel-template</b> <i>string</i> <b>ipv6 source-address</b> <i>string</i>
Tree	<a href="#">source-address</a>
Introduced	22.7.R1
Platforms	All

### **ip-exception** [[filter-name](#)] *string*

Synopsis	Enter the <b>ip-exception</b> list instance
Context	<b>configure filter ip-exception</b> <i>string</i>
Tree	<a href="#">ip-exception</a>
Introduced	20.10.R1
Platforms	VSR

### **[filter-name]** *string*

Synopsis	Filter name
Context	<b>configure filter ip-exception</b> <i>string</i>
Tree	<a href="#">ip-exception</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure filter ip-exception</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	20.10.R1
Platforms	VSR

### **entry** [[entry-id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
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Context	<b>configure filter ip-exception string entry number</b>
Tree	<b>entry</b>
Introduced	20.10.R1
Platforms	VSR

### **[entry-id] number**

Synopsis	ID for a match criteria and the corresponding action
Context	<b>configure filter ip-exception string entry number</b>
Tree	<b>entry</b>
Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	VSR

### **description string**

Synopsis	Text description
Context	<b>configure filter ip-exception string entry number description string</b>
Tree	<b>description</b>
String Length	1 to 80
Introduced	20.10.R1
Platforms	VSR

### **match**

Synopsis	Enter the <b>match</b> context
Context	<b>configure filter ip-exception string entry number match</b>
Tree	<b>match</b>
Introduced	20.10.R1
Platforms	VSR

### **dst-ip**

Synopsis	Enter the <b>dst-ip</b> context
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Context	<b>configure</b> filter ip-exception string entry number match dst-ip
Tree	dst-ip
Introduced	20.10.R1
Platforms	VSR

### **address** (*ipv4-address* | *ipv4-prefix-with-host-bits*)

Synopsis	IP address to match
Context	<b>configure</b> filter ip-exception string entry number match dst-ip address ( <i>ipv4-address</i>   <i>ipv4-prefix-with-host-bits</i> )
Tree	address
Introduced	20.10.R1
Platforms	VSR

### **mask string**

Synopsis	Mask applied as an AND to the IP address
Context	<b>configure</b> filter ip-exception string entry number match dst-ip mask string
Tree	mask
Introduced	20.10.R1
Platforms	VSR

### **dst-port**

Synopsis	Enter the <b>dst-port</b> context
Context	<b>configure</b> filter ip-exception string entry number match dst-port
Tree	dst-port
Introduced	20.10.R1
Platforms	VSR

### **eq number**

Synopsis	Exact match criterion
Context	<b>configure</b> filter ip-exception string entry number match dst-port eq number
Tree	eq
Range	0 to 65535

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Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

### **gt number**

Synopsis	Condition on being greater than the specified value.
Context	<b>configure filter ip-exception string entry number match dst-port gt number</b>
Tree	<a href="#">gt</a>
Range	0 to 65534
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

### **lt number**

Synopsis	Condition on being less than the specified value.
Context	<b>configure filter ip-exception string entry number match dst-port lt number</b>
Tree	<a href="#">lt</a>
Range	1 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

### **range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ip-exception string entry number match dst-port range</b>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

### **end number**

Synopsis	Upper bound of the port range to match
Context	<b>configure filter ip-exception string entry number match dst-port range end number</b>
Tree	<a href="#">end</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

### **start number**

Synopsis	Lower bound of the port range to match
Context	<b>configure filter ip-exception string entry number match dst-port range start number</b>
Tree	<a href="#">start</a>
Range	0 to 65534
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

### **icmp**

Synopsis	Enter the <b>icmp</b> context
Context	<b>configure filter ip-exception string entry number match icmp</b>
Tree	<a href="#">icmp</a>
Introduced	20.10.R1
Platforms	VSR

### **code number**

Synopsis	ICMP code value to match
Context	<b>configure filter ip-exception string entry number match icmp code number</b>
Tree	<a href="#">code</a>
Range	0 to 255
Introduced	20.10.R1



Platforms VSR

### **type number**

Synopsis ICMP type value to match  
 Context **configure filter ip-exception string entry number match icmp type number**  
 Tree [type](#)  
 Range 0 to 255  
 Introduced 20.10.R1  
 Platforms VSR

### **protocol (number | keyword)**

Synopsis IP protocol to match.  
 Context **configure filter ip-exception string entry number match protocol (number | keyword)**  
 Tree [protocol](#)  
 Range 0 to 255  
 Options tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp  
 Introduced 20.10.R1  
 Platforms VSR

### **src-ip**

Synopsis Enter the **src-ip** context  
 Context **configure filter ip-exception string entry number match src-ip**  
 Tree [src-ip](#)  
 Introduced 20.10.R1  
 Platforms VSR

### **address (ipv4-address | ipv4-prefix-with-host-bits)**

Synopsis IP address to match  
 Context **configure filter ip-exception string entry number match src-ip address (ipv4-address | ipv4-prefix-with-host-bits)**

Tree	<a href="#">address</a>
Introduced	20.10.R1
Platforms	VSR

**mask string**

Synopsis	Mask applied as an AND to the IP address
Context	<b>configure</b> <a href="#">filter ip-exception string entry number match src-ip mask string</a>
Tree	<a href="#">mask</a>
Introduced	20.10.R1
Platforms	VSR

**src-port**

Synopsis	Enter the <b>src-port</b> context
Context	<b>configure</b> <a href="#">filter ip-exception string entry number match src-port</a>
Tree	<a href="#">src-port</a>
Introduced	20.10.R1
Platforms	VSR

**eq number**

Synopsis	Exact match criterion
Context	<b>configure</b> <a href="#">filter ip-exception string entry number match src-port eq number</a>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

**gt number**

Synopsis	Condition on being greater than the specified value.
Context	<b>configure</b> <a href="#">filter ip-exception string entry number match src-port gt number</a>
Tree	<a href="#">gt</a>

Range	0 to 65534
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

**lt number**

Synopsis	Condition on being less than the specified value.
Context	<b>configure filter ip-exception string entry number match src-port lt number</b>
Tree	<a href="#">lt</a>
Range	1 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

**range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ip-exception string entry number match src-port range</b>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

**end number**

Synopsis	Upper bound of the port range to match
Context	<b>configure filter ip-exception string entry number match src-port range end number</b>
Tree	<a href="#">end</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

**start number**

Synopsis	Lower bound of the port range to match
Context	<b>configure filter ip-exception string entry number match src-port range start number</b>
Tree	<a href="#">start</a>
Range	0 to 65534
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

**filter-id number****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Filter ID
Context	<b>configure filter ip-exception string filter-id number</b>
Tree	<a href="#">filter-id</a>
Range	1 to 65535
Introduced	20.10.R1
Platforms	VSR

**ip-filter [filter-name] string**

Synopsis	Enter the <b>ip-filter</b> list instance
Context	<b>configure filter ip-filter string</b>
Tree	<a href="#">ip-filter</a>
Introduced	16.0.R1
Platforms	All

**[filter-name] string**

Synopsis	Filter name
Context	<b>configure filter ip-filter string</b>
Tree	<a href="#">ip-filter</a>
String Length	1 to 64

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **chain-to-system-filter** *boolean*

Synopsis	Chain filter policy to the active IPvX system filter policy
Context	<b>configure filter ip-filter</b> <i>string</i> <b>chain-to-system-filter</b> <i>boolean</i>
Tree	<a href="#">chain-to-system-filter</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **default-action** *keyword*

Synopsis	Action for packets that do not match any entry
Context	<b>configure filter ip-filter</b> <i>string</i> <b>default-action</b> <i>keyword</i>
Tree	<a href="#">default-action</a>
Options	drop, accept
Default	drop
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure filter ip-filter</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **embed**

Synopsis	Enter the <b>embed</b> context
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Context	<b>configure filter ip-filter string embed</b>
Tree	<b>embed</b>
Description	Commands in this context embed a previously defined IPv4 embedded filter policy or Hybrid OpenFlow switch instance into an exclusive, template, or system filter policy at the specified offset value. Rules derived from the BGP FlowSpec can also be embedded into template filter policies only.
Introduced	16.0.R1
Platforms	All

### **filter [name] reference offset number**

Synopsis	Enter the <b>filter</b> list instance
Context	<b>configure filter ip-filter string embed filter reference offset number</b>
Tree	<b>filter</b>
Introduced	16.0.R1
Platforms	All

### **[name] reference**

Synopsis	IPv4 policy to be embedded in the filter
Context	<b>configure filter ip-filter string embed filter reference offset number</b>
Tree	<b>filter</b>
Reference	<b>configure filter ip-filter string</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **offset number**

Synopsis	Offset of the inserted entries
Context	<b>configure filter ip-filter string embed filter reference offset number</b>
Tree	<b>filter</b>
Range	0 to 2097150
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the embedded filter

Context **configure** filter ip-filter *string* embed filter *reference* offset *number* admin-state *keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 16.0.R1

Platforms All

### **flowspec** [offset](#) *number*

Synopsis Enter the **flowspec** list instance

Context **configure** filter ip-filter *string* embed flowspec [offset](#) *number*

Tree [flowspec](#)

Introduced 16.0.R1

Platforms All

### **offset** *number*

Synopsis Offset of the inserted entries

Context **configure** filter ip-filter *string* embed flowspec [offset](#) *number*

Tree [flowspec](#)

Range 0 to 2097151

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the embedded filter

Context **configure** filter ip-filter *string* embed flowspec [offset](#) *number* admin-state *keyword*

Tree [admin-state](#)

Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **group** *number*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Interface group ID for an external configured set of flowspec rules
Context	<b>configure</b> filter ip-filter <i>string</i> embed flowspec offset <i>number</i> group <i>number</i>
Tree	group
Range	0 to 16383
Introduced	16.0.R1
Platforms	All

### **router-instance** *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Virtual router for an external configured set of flowspec rules
Context	<b>configure</b> filter ip-filter <i>string</i> embed flowspec offset <i>number</i> router-instance <i>string</i>
Tree	router-instance
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **openflow** [*of-switch*] *reference* offset *number*

Synopsis	Enter the <b>openflow</b> list instance
Context	<b>configure</b> filter ip-filter <i>string</i> embed openflow <i>reference</i> offset <i>number</i>
Tree	openflow
Introduced	16.0.R4



Platforms All

### **[of-switch]** *reference*

Synopsis Referenced Hybrid OpenFlow Switch (OFS) name  
 Context **configure** [filter](#) [ip-filter](#) *string* [embed](#) [openflow](#) *reference* [offset](#) *number*  
 Tree [openflow](#)  
 Reference **configure** [openflow](#) [of-switch](#) *string*  
 Notes This element is part of a list key.  
 Introduced 16.0.R4  
 Platforms All

### **offset** *number*

Synopsis Offset of the inserted entries  
 Context **configure** [filter](#) [ip-filter](#) *string* [embed](#) [openflow](#) *reference* [offset](#) *number*  
 Tree [openflow](#)  
 Range 0 to 2097150  
 Notes This element is part of a list key.  
 Introduced 16.0.R4  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the embedded filter  
 Context **configure** [filter](#) [ip-filter](#) *string* [embed](#) [openflow](#) *reference* [offset](#) *number* [admin-state](#) *keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 16.0.R4  
 Platforms All

## grt

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Global routing context
Context	<b>configure filter ip-filter string embed openflow reference offset number grt</b>
Tree	<a href="#">grt</a>
Notes	The following elements are part of a choice: <b>grt, system, (sap and vpls), or vprn.</b>
Introduced	16.0.R4
Platforms	All

## sap reference

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SAP context
Context	<b>configure filter ip-filter string embed openflow reference offset number sap reference</b>
Tree	<a href="#">sap</a>
Reference	<b>configure service vpls string sap string</b>
Notes	The following elements are part of a choice: <b>grt, system, (sap and vpls), or vprn.</b>
Introduced	16.0.R4
Platforms	All

## system

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	System context
Context	<b>configure filter ip-filter string embed openflow reference offset number system</b>
Tree	<a href="#">system</a>
Notes	The following elements are part of a choice: <b>grt, system, (sap and vpls), or vprn.</b>
Introduced	16.0.R4

Platforms All

### **vpls** *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis VPLS context

Context **configure** *filter ip-filter string embed openflow reference offset number vpls reference*

Tree [vpls](#)

Reference **configure** *service vpls string*

Notes The following elements are part of a choice: **grt**, **system**, (**sap** and **vpls**), or **vprn**.

Introduced 16.0.R4

Platforms All

### **vprn** *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis VPRN context

Context **configure** *filter ip-filter string embed openflow reference offset number vprn reference*

Tree [vprn](#)

Reference **configure** *service vprn string*

Notes The following elements are part of a choice: **grt**, **system**, (**sap** and **vpls**), or **vprn**.

Introduced 16.0.R4

Platforms All

### **entry** [[entry-id](#)] *number*

Synopsis Enter the **entry** list instance

Context **configure** *filter ip-filter string entry number*

Tree [entry](#)

Introduced 16.0.R1

Platforms All

### [entry-id] *number*

Synopsis ID for a match criteria and the corresponding action  
 Context **configure filter ip-filter string entry number**  
 Tree [entry](#)  
 Range 1 to 2097151  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### action

Synopsis Enable the **action** context  
 Context **configure filter ip-filter string entry number action**  
 Tree [action](#)  
 Introduced 16.0.R1  
 Platforms All

### accept

Synopsis Accept regular routing to forward a matching packet  
 Context **configure filter ip-filter string entry number action accept**  
 Tree [accept](#)  
 Notes The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **gtp-local-breakout**, **http-redirect**, **ignore-match**, **nat**, **reassemble**, or **tcp-mss-adjust**.  
 Introduced 16.0.R1  
 Platforms All

### accept-when

Synopsis Enable the **accept-when** context  
 Context **configure filter ip-filter string entry number action accept-when**  
 Tree [accept-when](#)

Introduced	19.5.R1
Platforms	All

## **pattern**

Synopsis	Enable the <b>pattern</b> context
Context	<b>configure filter ip-filter string entry number action accept-when pattern</b>
Tree	<a href="#">pattern</a>
Introduced	19.5.R1
Platforms	All

## **expression string**

Synopsis	Pattern expression to match
Context	<b>configure filter ip-filter string entry number action accept-when pattern expression string</b>
Tree	<a href="#">expression</a>
String Length	3 to 18
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

## **mask string**

Synopsis	Mask for the pattern expression
Context	<b>configure filter ip-filter string entry number action accept-when pattern mask string</b>
Tree	<a href="#">mask</a>
String Length	3 to 18
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

## **offset-type keyword**

Synopsis	Starting point reference for offset value of pattern
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Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> action accept-when pattern offset-type <i>keyword</i>
Tree	offset-type
Options	layer-3, layer-4, data, dns-qtype
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

### offset-value *number*

Synopsis	Offset value for the pattern expression
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> action accept-when pattern offset-value <i>number</i>
Tree	offset-value
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

### drop

Synopsis	Drop a packet matching this entry
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> action drop
Tree	drop
Notes	The following elements are part of a mandatory choice: <b>accept</b> , <b>drop</b> , <b>forward</b> , <b>gtp-local-breakout</b> , <b>http-redirect</b> , <b>ignore-match</b> , <b>nat</b> , <b>reassemble</b> , or <b>tcp-mss-adjust</b> .
Introduced	16.0.R1
Platforms	All

### drop-when

Synopsis	Enable the <b>drop-when</b> context
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> action drop-when
Tree	drop-when
Introduced	16.0.R1

Platforms All

### extracted-traffic

Synopsis Drop traffic extracted to CPM  
 Context **configure filter ip-filter string entry number action drop-when extracted-traffic**  
 Tree [extracted-traffic](#)  
 Introduced 16.0.R1  
 Platforms All

### packet-length

Synopsis Enable the **packet-length** context  
 Context **configure filter ip-filter string entry number action drop-when packet-length**  
 Tree [packet-length](#)  
 Notes The following elements are part of a choice: **packet-length** or **tll**.  
 Introduced 16.0.R1  
 Platforms All

### eq number

Synopsis Exact match criterion for the length  
 Context **configure filter ip-filter string entry number action drop-when packet-length eq number**  
 Tree [eq](#)  
 Range 0 to 65535  
 Notes The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.  
 Introduced 16.0.R1  
 Platforms All

### gt number

Synopsis Greater than match criterion for the length  
 Context **configure filter ip-filter string entry number action drop-when packet-length gt number**  
 Tree [gt](#)  
 Range 0 to 65534

Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**lt number**

Synopsis	Less than match criterion for the length
Context	<b>configure filter ip-filter string entry number action drop-when packet-length lt number</b>
Tree	<b>lt</b>
Range	1 to 65535
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ip-filter string entry number action drop-when packet-length range</b>
Tree	<b>range</b>
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**end number**

Synopsis	Upper bound of the length range
Context	<b>configure filter ip-filter string entry number action drop-when packet-length range end number</b>
Tree	<b>end</b>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All



### **start number**

Synopsis	Lower bound of the length range
Context	<b>configure</b> filter ip-filter string entry number action drop-when packet-length range start number
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **pattern**

Synopsis	Enable the <b>pattern</b> context
Context	<b>configure</b> filter ip-filter string entry number action drop-when pattern
Tree	pattern
Introduced	16.0.R4
Platforms	All

### **expression string**

Synopsis	Pattern expression to match
Context	<b>configure</b> filter ip-filter string entry number action drop-when pattern expression string
Tree	expression
String Length	3 to 18
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **mask string**

Synopsis	Mask for the pattern expression
Context	<b>configure</b> filter ip-filter string entry number action drop-when pattern mask string
Tree	mask
String Length	3 to 18
Notes	This element is mandatory.

Introduced	16.0.R4
Platforms	All

### **offset-type** *keyword*

Synopsis	Starting point reference for offset value of pattern
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">drop-when</a> <a href="#">pattern</a> <b>offset-type</b> <i>keyword</i>
Tree	<a href="#">offset-type</a>
Options	layer-3, layer-4, data, dns-qtype
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **offset-value** *number*

Synopsis	Offset value for the pattern expression
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">drop-when</a> <a href="#">pattern</a> <b>offset-value</b> <i>number</i>
Tree	<a href="#">offset-value</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **ttl**

Synopsis	Enable the <b>ttl</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">drop-when</a> <b>ttl</b>
Tree	<a href="#">ttl</a>
Notes	The following elements are part of a choice: <b>packet-length</b> or <b>ttl</b> .
Introduced	16.0.R1
Platforms	All

### **eq** *number*

Synopsis	Equal to condition match value
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> action drop-when ttl eq <i>number</i>
Tree	eq
Range	0 to 255
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **gt** *number*

Synopsis	Greater than condition match value
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> action drop-when ttl gt <i>number</i>
Tree	gt
Range	0 to 254
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **lt** *number*

Synopsis	Less than condition match value
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> action drop-when ttl lt <i>number</i>
Tree	lt
Range	1 to 255
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> action drop-when ttl range
Tree	range

Description	This command in this context specify an inclusive range. When range is used, the start of the range (the first value entered) must be smaller than the end of the range (the second value entered).
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **end number**

Synopsis	Upper bound of the range
Context	<b>configure filter ip-filter string entry number action drop-when ttl range end number</b>
Tree	<b>end</b>
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **start number**

Synopsis	Lower bound of the range
Context	<b>configure filter ip-filter string entry number action drop-when ttl range start number</b>
Tree	<b>start</b>
Range	0 to 254
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **fc keyword**

Synopsis	Class name to be forwarded for matching packets
Context	<b>configure filter ip-filter string entry number action fc keyword</b>
Tree	<b>fc</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

## forward

Synopsis	Enter the <b>forward</b> context
Context	<b>configure filter ip-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action forward</b>
Tree	<b>forward</b>
Notes	The following elements are part of a mandatory choice: <b>accept</b> , <b>drop</b> , <b>forward</b> , <b>gtp-local-breakout</b> , <b>http-redirect</b> , <b>ignore-match</b> , <b>nat</b> , <b>reassemble</b> , or <b>tcp-mss-adjust</b> .
Introduced	16.0.R1
Platforms	All

## bonding-connection *number*

Synopsis	Connection ID over which packet is forwarded
Context	<b>configure filter ip-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action forward bonding-connection</b> <i>number</i>
Tree	<b>bonding-connection</b>
Range	1 to 2
Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## esi-l2

Synopsis	Enable the <b>esi-l2</b> context
Context	<b>configure filter ip-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action forward esi-l2</b>
Tree	<b>esi-l2</b>
Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

## esi-value *string*

Synopsis	ESI of the first ESI-identified appliance
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Context	<b>configure filter ip-filter string entry number action forward esi-l2 esi-value string</b>
Tree	<b>esi-value</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### vpls reference

Synopsis	VPLS service name
Context	<b>configure filter ip-filter string entry number action forward esi-l2 vpls reference</b>
Tree	<b>vpls</b>
Reference	<b>configure service vpls string</b>
Notes	This element is mandatory.
Introduced	16.0.R3
Platforms	All

### esi-l3

Synopsis	Enable the <b>esi-l3</b> context
Context	<b>configure filter ip-filter string entry number action forward esi-l3</b>
Tree	<b>esi-l3</b>
Notes	The following elements are part of a choice: <b>bonding-connection, esi-l2, esi-l3, gre-tunnel, lsp, mpls-policy, next-hop, redirect-policy, router-instance, sap, sdp, srte-policy, or vprn-target.</b>
Introduced	16.0.R1
Platforms	All

### esi-value string



#### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	ESI of the first ESI-identified appliance
Context	<b>configure filter ip-filter string entry number action forward esi-l3 esi-value string</b>
Tree	<b>esi-value</b>

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **sf-ip string**



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP address of the service function to forward traffic
Context	<b>configure filter ip-filter string entry number action forward esi-l3 sf-ip string</b>
Tree	<a href="#">sf-ip</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **vas-interface reference**



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Egress R-VPLS IP interface name
Context	<b>configure filter ip-filter string entry number action forward esi-l3 vas-interface reference</b>
Tree	<a href="#">vas-interface</a>
Reference	<b>configure service vprn string interface string</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **vprn reference**



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPRN service name
Context	<b>configure filter ip-filter</b> <i>string entry number action forward esi-l3 vprn reference</i>
Tree	<a href="#">vprn</a>
Reference	<b>configure service vprn</b> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **gre-tunnel** *reference*

Synopsis	GRE tunnel template ID that sets the location where an encapsulated matching packet is transported
Context	<b>configure filter ip-filter</b> <i>string entry number action forward gre-tunnel reference</i>
Tree	<a href="#">gre-tunnel</a>
Reference	<b>configure filter gre-tunnel-template</b> <i>string</i>
Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

### **lsp** *string*

Synopsis	LSP that is specified to forward a packet matching this entry
Context	<b>configure filter ip-filter</b> <i>string entry number action forward lsp string</i>
Tree	<a href="#">lsp</a>
String Length	1 to 64
Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

### **mpls-policy**

Synopsis	Enable the <b>mpls-policy</b> context
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Context	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i> <a href="#">entry number</a> <a href="#">action forward mpls-policy</a>
Tree	<a href="#">mpls-policy</a>
Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , or <b>vprn-target</b> .
Introduced	19.10.R1
Platforms	All

### **endpoint** *string*

Synopsis	MPLS forwarding policy endpoint IPv4 address
Context	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i> <a href="#">entry number</a> <a href="#">action forward mpls-policy</a> <a href="#">endpoint</a> <i>string</i>
Tree	<a href="#">endpoint</a>
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

### **next-hop**

Synopsis	Enable the <b>next-hop</b> context
Context	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i> <a href="#">entry number</a> <a href="#">action forward</a> <a href="#">next-hop</a>
Tree	<a href="#">next-hop</a>
Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

### **interface-name** *string*

Synopsis	IP interface name that forwards matching packets
Context	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i> <a href="#">entry number</a> <a href="#">action forward</a> <a href="#">next-hop</a> <a href="#">interface-name</a> <i>string</i>
Tree	<a href="#">interface-name</a>
String Length	1 to 32

Notes	The following elements are part of a mandatory choice: <b>interface-name</b> , <b>nh-ip</b> , or <b>nh-ip-vrf</b> .
Introduced	16.0.R1
Platforms	All

## nh-ip

Synopsis	Enable the <b>nh-ip</b> context
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> action forward next-hop nh-ip
Tree	nh-ip
Notes	The following elements are part of a mandatory choice: <b>interface-name</b> , <b>nh-ip</b> , or <b>nh-ip-vrf</b> .
Introduced	16.0.R1
Platforms	All

## address *string*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IPv4 address of next hop to forward matching packets
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> action forward next-hop nh-ip address <i>string</i>
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## indirect *boolean*

Synopsis	Allow next hop to be indirectly reachable
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> action forward next-hop nh-ip indirect <i>boolean</i>
Tree	indirect
Default	false
Introduced	16.0.R1

Platforms All

## nh-ip-vrf

Synopsis Enable the **nh-ip-vrf** context

Context **configure filter ip-filter string entry number action forward next-hop nh-ip-vrf**

Tree [nh-ip-vrf](#)

Notes The following elements are part of a mandatory choice: **interface-name**, **nh-ip**, or **nh-ip-vrf**.

Introduced 16.0.R1

Platforms All

## address string



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis IPv4 address of next hop to forward matching packets

Context **configure filter ip-filter string entry number action forward next-hop nh-ip-vrf address string**

Tree [address](#)

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

## indirect boolean

Synopsis Allow next hop to be indirectly reachable

Context **configure filter ip-filter string entry number action forward next-hop nh-ip-vrf indirect boolean**

Tree [indirect](#)

Default false

Introduced 16.0.R1

Platforms All

**router-instance** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Routing context for route lookup for forwarding packets
Context	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i> <a href="#">entry number</a> <a href="#">action forward next-hop nh-ip-vrf router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**redirect-policy** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Next hop or forward next hop router that forwards a packet that matches this entry
Context	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i> <a href="#">entry number</a> <a href="#">action forward redirect-policy</a> <i>reference</i>
Tree	<a href="#">redirect-policy</a>
Reference	<b>configure</b> <a href="#">filter redirect-policy</a> <i>string</i>
Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

**router-instance** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Router name or VPRN service name
Context	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i> <a href="#">entry number</a> <a href="#">action forward router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>

Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

## sap

Synopsis	Enable the <b>sap</b> context
Context	<b>configure filter ip-filter string entry number action forward sap</b>
Tree	<b>sap</b>
Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

## sap-id reference

Synopsis	VPLS Ethernet SAP ID used to forward matching packets
Context	<b>configure filter ip-filter string entry number action forward sap sap-id reference</b>
Tree	<b>sap-id</b>
Reference	<b>configure service vpls string sap string</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## vpls reference

Synopsis	VPLS associated with the SAP
Context	<b>configure filter ip-filter string entry number action forward sap vpls reference</b>
Tree	<b>vpls</b>
Reference	<b>configure service vpls string</b>
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

## sdp

Synopsis Enable the **sdp** context

Context **configure filter ip-filter string entry number action forward sdp**

Tree **sdp**

Notes The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, or **vprn-target**.

Introduced 16.0.R1

Platforms All

## sdp-bind-id string

Synopsis VPLS SDP bind ID used to forward matching packets

Context **configure filter ip-filter string entry number action forward sdp sdp-bind-id string**

Tree **sdp-bind-id**

String Length 3 to 16

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

## vpls reference

Synopsis VPLS associated with the SDP

Context **configure filter ip-filter string entry number action forward sdp vpls reference**

Tree **vpls**

Reference **configure service vpls string**

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

## srte-policy

Synopsis	Enable the <b>srte-policy</b> context
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> action forward srte-policy
Tree	srte-policy
Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , or <b>vprn-target</b> .
Introduced	19.10.R1
Platforms	All

## color *number*

Synopsis	SR-TE policy color ID
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> action forward srte-policy color <i>number</i>
Tree	color
Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

## endpoint *string*

Synopsis	SR-TE policy endpoint IPv4 address
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> action forward srte-policy endpoint <i>string</i>
Tree	endpoint
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

## vprn-target

Synopsis	Enable the <b>vprn-target</b> context
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> action forward vprn-target
Tree	vprn-target

Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

### **adv-prefix string**

Synopsis	Advertised IP prefix for target destination
Context	<b>configure filter ip-filter string entry number action forward vprn-target adv-prefix string</b>
Tree	<a href="#">adv-prefix</a>
Introduced	16.0.R1
Platforms	All

### **bgp-nh string**

Synopsis	Target BGP next hop IP address
Context	<b>configure filter ip-filter string entry number action forward vprn-target bgp-nh string</b>
Tree	<a href="#">bgp-nh</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **lsp string**

Synopsis	LSP that is specified to forward a packet matching this entry
Context	<b>configure filter ip-filter string entry number action forward vprn-target lsp string</b>
Tree	<a href="#">lsp</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

### **vprn reference**

Synopsis	Routing context used for route lookup
Context	<b>configure filter ip-filter string entry number action forward vprn-target vprn reference</b>



Tree	<a href="#">vprn</a>
Reference	<b>configure</b> <a href="#">service vprn</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

## **gtp-local-breakout**

Synopsis	Break out matching traffic locally from a GTP tunnel for GTP-subscriber-hosts, or forward for other entities
Context	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i> <a href="#">entry number</a> <a href="#">action gtp-local-breakout</a>
Tree	<a href="#">gtp-local-breakout</a>
Notes	The following elements are part of a mandatory choice: <b>accept</b> , <b>drop</b> , <b>forward</b> , <b>gtp-local-breakout</b> , <b>http-redirect</b> , <b>ignore-match</b> , <b>nat</b> , <b>reassemble</b> , or <b>tcp-mss-adjust</b> .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **http-redirect**

Synopsis	Enable the <b>http-redirect</b> context
Context	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i> <a href="#">entry number</a> <a href="#">action http-redirect</a>
Tree	<a href="#">http-redirect</a>
Description	Commands in this context configure the filter entry action for HTTP redirection.
Notes	The following elements are part of a mandatory choice: <b>accept</b> , <b>drop</b> , <b>forward</b> , <b>gtp-local-breakout</b> , <b>http-redirect</b> , <b>ignore-match</b> , <b>nat</b> , <b>reassemble</b> , or <b>tcp-mss-adjust</b> .
Introduced	16.0.R1
Platforms	All

## **allow-override** *boolean*

Synopsis	Override the HTTP redirect URL by a RADIUS VSA
Context	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i> <a href="#">entry number</a> <a href="#">action http-redirect</a> <a href="#">allow-override</a> <i>boolean</i>
Tree	<a href="#">allow-override</a>
Description	This command specifies whether the RADIUS VSA can override the configured HTTP redirect URL for this filter entry. When configured to <b>true</b> , the RADIUS VSA can override the HTTP redirect URL.

When configured to **false**, the HTTP redirect URL is not overridden.  
This does not apply if the CPF option is specified for the URL.

Default	false
Introduced	16.0.R1
Platforms	All

### **url** (*keyword* | *http-redirect-url*)



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	URL used for HTTP redirect action
Context	<b>configure filter ip-filter</b> <i>string entry number action http-redirect url</i> ( <i>keyword</i>   <i>http-redirect-url</i> )
Tree	<a href="#">url</a>
Description	<p>This command specifies the URL to use for HTTP redirection for this filter entry.</p> <p>A URL can be specified or the CPF option can be used for BNG CUPS ESM sessions only.</p> <p>The following macro substitutions may be used:</p> <p>\$URL — request-URI in the HTTP GET request received</p> <p>\$MAC — a string that represents the MAC address of the subscriber host</p> <p>\$IP — a string that represents the IP address of the subscriber host</p> <p>\$SUB — a string that represents the subscriber ID</p> <p>\$SAP — a string that represents a SAP ID</p> <p>\$SAPDESC — description string configured on the SAP</p> <p>\$CID — a string that represents the circuit ID or interface ID of the subscriber host (hexadecimal format)</p> <p>\$RID — a string that represents the remote ID of the subscriber host (hexadecimal format)</p>
String Length	1 to 255
Options	from-cpf
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## ignore-match

Synopsis	Ignore match criteria for the entry
Context	<b>configure filter ip-filter</b> <i>string entry number action ignore-match</i>
Tree	<a href="#">ignore-match</a>
Notes	The following elements are part of a mandatory choice: <b>accept</b> , <b>drop</b> , <b>forward</b> , <b>gtp-local-breakout</b> , <b>http-redirect</b> , <b>ignore-match</b> , <b>nat</b> , <b>reassemble</b> , or <b>tcp-mss-adjust</b> .
Introduced	16.0.R1
Platforms	All

## l2-aware-nat-bypass *boolean*

Synopsis	Divert traffic from an L2-Aware NAT subscriber
Context	<b>configure filter ip-filter</b> <i>string entry number action l2-aware-nat-bypass boolean</i>
Tree	<a href="#">l2-aware-nat-bypass</a>
Description	<p>When configured to <b>true</b>, the filter action selectively diverts traffic from a L2-Aware NAT subscriber away from NAT. This action is only applicable to L2-Aware NAT subscribers and must be configured together with action <b>accept</b>. Traffic identified in the match condition bypasses L2-Aware NAT. An example is to bypass NAT for on-net destinations (within the customer network).</p> <p>For selective NAT bypass to take effect, in addition to IP filter configuration, the L2-Aware NAT subscriber must be specifically enabled for selective bypass via the allow-bypass configuration option in the <b>configure subscriber-mgmt sub-profile nat allow-bypass</b> context.</p> <p>When configured to <b>false</b>, traffic that is not classified for bypass automatically diverts to L2-Aware NAT, unless it is explicitly configured in the IP filter action to be dropped.</p>
Default	false
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## nat

Synopsis	Enable the <b>nat</b> context
Context	<b>configure filter ip-filter</b> <i>string entry number action nat</i>
Tree	<a href="#">nat</a>
Notes	The following elements are part of a mandatory choice: <b>accept</b> , <b>drop</b> , <b>forward</b> , <b>gtp-local-breakout</b> , <b>http-redirect</b> , <b>ignore-match</b> , <b>nat</b> , <b>reassemble</b> , or <b>tcp-mss-adjust</b> .
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## nat-policy *reference*



### WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis NAT policy name when action is NAT  
 Context **configure** filter ip-filter *string* entry *number* action nat nat-policy *reference*  
 Tree [nat-policy](#)  
 Reference **configure** service nat nat-policy *string*  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## rate-limit

Synopsis Enable the **rate-limit** context  
 Context **configure** filter ip-filter *string* entry *number* action rate-limit  
 Tree [rate-limit](#)  
 Introduced 16.0.R1  
 Platforms All

## extracted-traffic

Synopsis Limit the rate of traffic extracted to the CPM  
 Context **configure** filter ip-filter *string* entry *number* action rate-limit extracted-traffic  
 Tree [extracted-traffic](#)  
 Introduced 22.2.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

## packet-length

Synopsis Enable the **packet-length** context  
 Context **configure** filter ip-filter *string* entry *number* action rate-limit packet-length  
 Tree [packet-length](#)  
 Notes The following elements are part of a choice: **packet-length** or **ttl**.

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Introduced	16.0.R1
Platforms	All

### **eq** *number*

Synopsis	Exact match criterion for the length
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">rate-limit</a> <a href="#">packet-length</a> <b>eq</b> <i>number</i>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **gt** *number*

Synopsis	Greater than match criterion for the length
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">rate-limit</a> <a href="#">packet-length</a> <b>gt</b> <i>number</i>
Tree	<a href="#">gt</a>
Range	0 to 65534
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **lt** *number*

Synopsis	Less than match criterion for the length
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">rate-limit</a> <a href="#">packet-length</a> <b>lt</b> <i>number</i>
Tree	<a href="#">lt</a>
Range	1 to 65535
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## range

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ip-filter string entry number action rate-limit packet-length range</b>
Tree	<a href="#">range</a>
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## end number

Synopsis	Upper bound of the length range
Context	<b>configure filter ip-filter string entry number action rate-limit packet-length range end number</b>
Tree	<a href="#">end</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## start number

Synopsis	Lower bound of the length range
Context	<b>configure filter ip-filter string entry number action rate-limit packet-length range start number</b>
Tree	<a href="#">start</a>
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## pattern

Synopsis	Enable the <b>pattern</b> context
Context	<b>configure filter ip-filter string entry number action rate-limit pattern</b>
Tree	<a href="#">pattern</a>

Introduced 16.0.R4  
 Platforms All

### **expression** *string*

Synopsis Pattern expression to match  
 Context **configure** [filter](#) [ip-filter](#) *string* [entry](#) *number* [action](#) [rate-limit](#) [pattern](#) [expression](#) *string*  
 Tree [expression](#)  
 String Length 3 to 18  
 Notes This element is mandatory.  
 Introduced 16.0.R4  
 Platforms All

### **mask** *string*

Synopsis Mask for the pattern expression  
 Context **configure** [filter](#) [ip-filter](#) *string* [entry](#) *number* [action](#) [rate-limit](#) [pattern](#) [mask](#) *string*  
 Tree [mask](#)  
 String Length 3 to 18  
 Notes This element is mandatory.  
 Introduced 16.0.R4  
 Platforms All

### **offset-type** *keyword*

Synopsis Starting point reference for offset value of pattern  
 Context **configure** [filter](#) [ip-filter](#) *string* [entry](#) *number* [action](#) [rate-limit](#) [pattern](#) [offset-type](#) *keyword*  
 Tree [offset-type](#)  
 Options layer-3, layer-4, data, dns-qtype  
 Notes This element is mandatory.  
 Introduced 16.0.R4  
 Platforms All

**offset-value** *number*

Synopsis	Offset value for the pattern expression
Context	<b>configure</b> <b>filter</b> <b>ip-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action</b> <b>rate-limit</b> <b>pattern</b> <b>offset-value</b> <i>number</i>
Tree	<b>offset-value</b>
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**pir** (*number* | *keyword*)

Synopsis	Peak information rate
Context	<b>configure</b> <b>filter</b> <b>ip-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action</b> <b>rate-limit</b> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>pir</b>
Range	0 to 2000000000
Units	kilobps
Options	max
Notes	The following elements are part of a mandatory choice: <b>pir</b> or <b>pps-pir</b> .
Introduced	16.0.R1
Platforms	All

**pps-pir** (*number* | *keyword*)

Synopsis	Peak information rate
Context	<b>configure</b> <b>filter</b> <b>ip-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action</b> <b>rate-limit</b> <b>pps-pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>pps-pir</b>
Range	0 to 100000000
Units	packets per second
Options	max
Notes	The following elements are part of a mandatory choice: <b>pir</b> or <b>pps-pir</b> .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS



## **tll**

Synopsis	Enable the <b>tll</b> context
Context	<b>configure filter ip-filter string entry number action rate-limit tll</b>
Tree	<b>tll</b>
Notes	The following elements are part of a choice: <b>packet-length</b> or <b>tll</b> .
Introduced	16.0.R1
Platforms	All

## **eq number**

Synopsis	Equal to condition match value
Context	<b>configure filter ip-filter string entry number action rate-limit tll eq number</b>
Tree	<b>eq</b>
Range	0 to 255
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## **gt number**

Synopsis	Greater than condition match value
Context	<b>configure filter ip-filter string entry number action rate-limit tll gt number</b>
Tree	<b>gt</b>
Range	0 to 254
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## **lt number**

Synopsis	Less than condition match value
Context	<b>configure filter ip-filter string entry number action rate-limit tll lt number</b>
Tree	<b>lt</b>
Range	1 to 255

Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## range

Synopsis	Enable the <b>range</b> context
Context	<b>configure</b> <b>filter</b> <b>ip-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action</b> <b>rate-limit</b> <b>tll</b> <b>range</b>
Tree	<b>range</b>
Description	This command in this context specify an inclusive range. When range is used, the start of the range (the first value entered) must be smaller than the end of the range (the second value entered).
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## end number

Synopsis	Upper bound of the range
Context	<b>configure</b> <b>filter</b> <b>ip-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action</b> <b>rate-limit</b> <b>tll</b> <b>range</b> <b>end</b> <i>number</i>
Tree	<b>end</b>
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## start number

Synopsis	Lower bound of the range
Context	<b>configure</b> <b>filter</b> <b>ip-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action</b> <b>rate-limit</b> <b>tll</b> <b>range</b> <b>start</b> <i>number</i>
Tree	<b>start</b>
Range	0 to 254
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## reassemble

Synopsis	Forward matching packets to reassembly function
Context	<b>configure filter ip-filter</b> <i>string entry number action reassemble</i>
Tree	<a href="#">reassemble</a>
Notes	The following elements are part of a mandatory choice: <b>accept</b> , <b>drop</b> , <b>forward</b> , <b>gtp-local-breakout</b> , <b>http-redirect</b> , <b>ignore-match</b> , <b>nat</b> , <b>reassemble</b> , or <b>tcp-mss-adjust</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## remark

Synopsis	Enable the <b>remark</b> context
Context	<b>configure filter ip-filter</b> <i>string entry number action remark</i>
Tree	<a href="#">remark</a>
Introduced	16.0.R1
Platforms	All

## dscp keyword

Synopsis	Destination SAP
Context	<b>configure filter ip-filter</b> <i>string entry number action remark dscp keyword</i>
Tree	<a href="#">dscp</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## secondary

Synopsis	Enable the <b>secondary</b> context
Context	<b>configure filter ip-filter</b> <i>string entry number action secondary</i>

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Tree	<a href="#">secondary</a>
Introduced	16.0.R1
Platforms	All

## forward

Synopsis	Enter the <b>forward</b> context
Context	<b>configure filter ip-filter <i>string</i> entry <i>number</i> action secondary forward</b>
Tree	<a href="#">forward</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## next-hop

Synopsis	Enable the <b>next-hop</b> context
Context	<b>configure filter ip-filter <i>string</i> entry <i>number</i> action secondary forward next-hop</b>
Tree	<a href="#">next-hop</a>
Notes	The following elements are part of a choice: <b>next-hop</b> , <b>sap</b> , <b>sdp</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

## nh-ip-vrf

Synopsis	Enable the <b>nh-ip-vrf</b> context
Context	<b>configure filter ip-filter <i>string</i> entry <i>number</i> action secondary forward next-hop nh-ip-vrf</b>
Tree	<a href="#">nh-ip-vrf</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**address string****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IPv4 address of next hop to forward matching packets
Context	<b>configure</b> <a href="#">filter ip-filter string entry number action secondary forward next-hop nh-ip-vrf address string</a>
Tree	<a href="#">address</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**indirect boolean**

Synopsis	Allow next hop to be indirectly reachable
Context	<b>configure</b> <a href="#">filter ip-filter string entry number action secondary forward next-hop nh-ip-vrf indirect boolean</a>
Tree	<a href="#">indirect</a>
Default	false
Introduced	16.0.R1
Platforms	All

**router-instance string****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Routing context for route lookup for forwarding packets
Context	<b>configure</b> <a href="#">filter ip-filter string entry number action secondary forward next-hop nh-ip-vrf router-instance string</a>
Tree	<a href="#">router-instance</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## sap

Synopsis	Enable the <b>sap</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">secondary</a> <a href="#">forward</a> <a href="#">sap</a>
Tree	<a href="#">sap</a>
Notes	The following elements are part of a choice: <b>next-hop</b> , <b>sap</b> , <b>sdp</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

## sap-id reference

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SAP ID used to forward packets matching the entry
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">secondary</a> <a href="#">forward</a> <a href="#">sap</a> <a href="#">sap-id</a> <i>reference</i>
Tree	<a href="#">sap-id</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## vpls reference

Synopsis	VPLS the sdp-bind-id belongs to
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">secondary</a> <a href="#">forward</a> <a href="#">sap</a> <a href="#">vpls</a> <i>reference</i>
Tree	<a href="#">vpls</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## sdp

Synopsis	Enable the <b>sdp</b> context
Context	<b>configure filter ip-filter string entry number action secondary forward sdp</b>
Tree	<a href="#">sdp</a>
Notes	The following elements are part of a choice: <b>next-hop</b> , <b>sap</b> , <b>sdp</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

## sdp-bind-id string

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPLS SDP bind ID used to forward matching packets
Context	<b>configure filter ip-filter string entry number action secondary forward sdp sdp-bind-id string</b>
Tree	<a href="#">sdp-bind-id</a>
String Length	3 to 16
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## vpls reference

Synopsis	VPLS associated with the SDP
Context	<b>configure filter ip-filter string entry number action secondary forward sdp vpls reference</b>
Tree	<a href="#">vpls</a>
Reference	<b>configure service vpls string</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## vprn-target

Synopsis	Enable the <b>vprn-target</b> context
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Context	<b>configure</b> <a href="#">filter ip-filter string entry number action secondary forward vprn-target</a>
Tree	<a href="#">vprn-target</a>
Notes	The following elements are part of a choice: <b>next-hop</b> , <b>sap</b> , <b>sdp</b> , or <b>vprn-target</b> .
Introduced	21.7.R1
Platforms	All

### **adv-prefix string**

Synopsis	Advertised IP prefix for the target destination
Context	<b>configure</b> <a href="#">filter ip-filter string entry number action secondary forward vprn-target adv-prefix string</a>
Tree	<a href="#">adv-prefix</a>
Introduced	21.7.R1
Platforms	All

### **bgp-nh string**

Synopsis	Target BGP next hop IP address
Context	<b>configure</b> <a href="#">filter ip-filter string entry number action secondary forward vprn-target bgp-nh string</a>
Tree	<a href="#">bgp-nh</a>
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	All

### **lsp string**

Synopsis	LSP that is specified to forward a packet matching this entry
Context	<b>configure</b> <a href="#">filter ip-filter string entry number action secondary forward vprn-target lsp string</a>
Tree	<a href="#">lsp</a>
String Length	1 to 64
Introduced	21.7.R1
Platforms	All



**vprn reference**

Synopsis	Routing context used for route lookup
Context	<b>configure</b> <a href="#">filter ip-filter string entry number action secondary forward vprn-target vprn reference</a>
Tree	<a href="#">vprn</a>
Reference	<b>configure</b> <a href="#">service vprn string</a>
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	All

**remark**

Synopsis	Enable the <b>remark</b> context
Context	<b>configure</b> <a href="#">filter ip-filter string entry number action secondary remark</a>
Tree	<a href="#">remark</a>
Introduced	16.0.R1
Platforms	All

**dscp keyword**

Synopsis	Destination SAP
Context	<b>configure</b> <a href="#">filter ip-filter string entry number action secondary remark dscp keyword</a>
Tree	<a href="#">dscp</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**tcp-mss-adjust**

Synopsis	Adjust MSS option of TCP matching packets to configured value of tcp-mss in router interface context
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Context	<b>configure filter ip-filter string entry number action tcp-mss-adjust</b>
Tree	<a href="#">tcp-mss-adjust</a>
Notes	The following elements are part of a mandatory choice: <b>accept</b> , <b>drop</b> , <b>forward</b> , <b>gtp-local-breakout</b> , <b>http-redirect</b> , <b>ignore-match</b> , <b>nat</b> , <b>reassemble</b> , or <b>tcp-mss-adjust</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure filter ip-filter string entry number description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **egress-pbr** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	PBR that has an effect when this filter is applied on egress
Context	<b>configure filter ip-filter string entry number egress-pbr keyword</b>
Tree	<a href="#">egress-pbr</a>
Options	true, true-with-l4lb
Introduced	16.0.R1
Platforms	All

### **filter-sample** *boolean*

Synopsis	Sample matching traffic if IP interface is set to cflowd ACL mode
Context	<b>configure filter ip-filter string entry number filter-sample boolean</b>
Tree	<a href="#">filter-sample</a>
Default	false
Introduced	16.0.R1

Platforms All

### **interface-sample** *boolean*

Synopsis Sample matching traffic if IP interface is set to cflowd interface mode  
 Context **configure filter ip-filter** *string entry number interface-sample boolean*  
 Tree [interface-sample](#)  
 Default true  
 Introduced 16.0.R1  
 Platforms All

### **log** *reference*

Synopsis Log that is used for packets matching this entry  
 Context **configure filter ip-filter** *string entry number log reference*  
 Tree [log](#)  
 Reference **configure filter log** *number*  
 Introduced 16.0.R1  
 Platforms All

### **match**

Synopsis Enter the **match** context  
 Context **configure filter ip-filter** *string entry number match*  
 Tree [match](#)  
 Description Commands in this context configure match criteria for the filter entry. When the match criteria are satisfied, the action associated with the match criteria is executed.  
 Introduced 16.0.R1  
 Platforms All

### **destination-class** *number*

Synopsis Destination class as a match criterion  
 Context **configure filter ip-filter** *string entry number match destination-class number*  
 Tree [destination-class](#)

Description	This command configures the BGP destination class value as a match criterion. Filtering egress traffic on the destination class requires the <b>destination-class-lookup</b> command (under the <b>ingress</b> context for the service interface) to be enabled (set to <b>true</b> ).
Range	1 to 255
Introduced	20.7.R1
Platforms	All

### **dscp** keyword

Synopsis	DSCP used as an IP filter match criterion
Context	<b>configure filter ip-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match dscp</b> <i>keyword</i>
Tree	<a href="#">dscp</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

### **dst-ip**

Synopsis	Enter the <b>dst-ip</b> context
Context	<b>configure filter ip-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match dst-ip</b>
Tree	<a href="#">dst-ip</a>
Notes	The following elements are part of a choice: <b>ip</b> or ( <b>dst-ip</b> and <b>src-ip</b> ).
Introduced	16.0.R1
Platforms	All

### **address** (*ipv4-address* | *ipv4-prefix-with-host-bits*)

Synopsis	IPv4 address used as the match criterion
Context	<b>configure filter ip-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match dst-ip</b> <b>address</b> ( <i>ipv4-address</i>   <i>ipv4-prefix-with-host-bits</i> )
Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1

Platforms All

### **ip-prefix-list** *reference*

Synopsis IPv4 address prefix list used as match criterion

Context **configure** filter ip-filter *string* entry *number* match dst-ip ip-prefix-list *reference*

Tree [ip-prefix-list](#)

Reference **configure** filter match-list ip-prefix-list *string*

Notes The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.

Introduced 16.0.R1

Platforms All

### **mask** *string*

Synopsis IPv4 address mask used as the match criterion

Context **configure** filter ip-filter *string* entry *number* match dst-ip mask *string*

Tree [mask](#)

Notes The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.

Introduced 16.0.R1

Platforms All

### **dst-port**

Synopsis Enter the **dst-port** context

Context **configure** filter ip-filter *string* entry *number* match dst-port

Tree [dst-port](#)

Notes The following elements are part of a choice: **port** or (**dst-port** and **src-port**).

Introduced 16.0.R1

Platforms All

### **eq** *number*

Synopsis Exact match criterion for the port number

Context **configure** filter ip-filter *string* entry *number* match dst-port eq *number*

Tree [eq](#)

Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**gt number**

Synopsis	Greater than match criterion for the port number
Context	<b>configure filter ip-filter string entry number match dst-port gt number</b>
Tree	<a href="#">gt</a>
Range	0 to 65534
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**lt number**

Synopsis	Less than match criterion for the port number
Context	<b>configure filter ip-filter string entry number match dst-port lt number</b>
Tree	<a href="#">lt</a>
Range	1 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**port-list reference**

Synopsis	Name of the port list as the match criterion
Context	<b>configure filter ip-filter string entry number match dst-port port-list reference</b>
Tree	<a href="#">port-list</a>
Reference	<b>configure filter match-list port-list string</b>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## range

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ip-filter string entry number match dst-port range</b>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## end number

Synopsis	Upper bound of the port range as port match criterion
Context	<b>configure filter ip-filter string entry number match dst-port range end number</b>
Tree	<a href="#">end</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## start number

Synopsis	Lower bound of the port range as port match criterion
Context	<b>configure filter ip-filter string entry number match dst-port range start number</b>
Tree	<a href="#">start</a>
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## fragment keyword

Synopsis	Match criterion for fragmented packets
Context	<b>configure filter ip-filter string entry number match fragment keyword</b>
Tree	<a href="#">fragment</a>
Options	false, true, first-only, non-first-only

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Introduced	16.0.R1
Platforms	All

## icmp

Synopsis	Enter the <b>icmp</b> context
Context	<b>configure filter ip-filter string entry number match icmp</b>
Tree	<a href="#">icmp</a>
Introduced	16.0.R1
Platforms	All

## code number

Synopsis	ICMP code value to match
Context	<b>configure filter ip-filter string entry number match icmp code number</b>
Tree	<a href="#">code</a>
Range	0 to 255
Introduced	16.0.R1
Platforms	All

## type number

Synopsis	ICMP type value to match
Context	<b>configure filter ip-filter string entry number match icmp type number</b>
Tree	<a href="#">type</a>
Range	0 to 255
Introduced	16.0.R1
Platforms	All

## ip

Synopsis	Enter the <b>ip</b> context
Context	<b>configure filter ip-filter string entry number match ip</b>
Tree	<a href="#">ip</a>
Notes	The following elements are part of a choice: <b>ip</b> or ( <b>dst-ip</b> and <b>src-ip</b> ).



Introduced	21.10.R1
Platforms	All

### **address** (*ipv4-address* | *ipv4-prefix-with-host-bits*)

Synopsis	IPv4 address used as the match criterion
Context	<b>configure filter ip-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match ip address</b> ( <i>ipv4-address</i>   <i>ipv4-prefix-with-host-bits</i> )
Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	All

### **ip-prefix-list** *reference*

Synopsis	IP4 address prefix list used as match criterion
Context	<b>configure filter ip-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match ip ip-prefix-list</b> <i>reference</i>
Tree	<a href="#">ip-prefix-list</a>
Reference	<b>configure filter match-list ip-prefix-list</b> <i>string</i>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	All

### **mask** *string*

Synopsis	IPv4 address mask used as the match criterion
Context	<b>configure filter ip-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match ip mask</b> <i>string</i>
Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	All

### **ip-option**

Synopsis	Enable the <b>ip-option</b> context
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Context	<b>configure filter ip-filter string entry number match ip-option</b>
Tree	<b>ip-option</b>
Introduced	16.0.R1
Platforms	All

### **mask number**

Synopsis	Mask that is ANDed with ip-option value in the packet header
Context	<b>configure filter ip-filter string entry number match ip-option mask number</b>
Tree	<b>mask</b>
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	All

### **type number**

Synopsis	Specific IP option to match
Context	<b>configure filter ip-filter string entry number match ip-option type number</b>
Tree	<b>type</b>
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **multiple-option boolean**

Synopsis	Match based on presence of multiple options in header
Context	<b>configure filter ip-filter string entry number match multiple-option boolean</b>
Tree	<b>multiple-option</b>
Introduced	16.0.R1
Platforms	All

**option-present** *boolean*

Synopsis	Match on the presence of any IP option in the packet
Context	<b>configure</b> filter ip-filter string entry number match option-present boolean
Tree	option-present
Introduced	16.0.R1
Platforms	All

**packet-length**

Synopsis	Enable the <b>packet-length</b> context
Context	<b>configure</b> filter ip-filter string entry number match packet-length
Tree	packet-length
Introduced	19.5.R1
Platforms	All

**eq** *number*

Synopsis	Exact match criterion for the length
Context	<b>configure</b> filter ip-filter string entry number match packet-length eq number
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.5.R1
Platforms	All

**gt** *number*

Synopsis	Greater than match criterion for the length
Context	<b>configure</b> filter ip-filter string entry number match packet-length gt number
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.5.R1
Platforms	All

### **lt** *number*

Synopsis	Less than match criterion for the length
Context	<b>configure filter ip-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match packet-length</b> <b>lt</b> <i>number</i>
Tree	<b>lt</b>
Range	1 to 65535
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.5.R1
Platforms	All

### **range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ip-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match packet-length</b> <b>range</b>
Tree	<b>range</b>
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.5.R1
Platforms	All

### **end** *number*

Synopsis	Upper bound of the length range
Context	<b>configure filter ip-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match packet-length</b> <b>range</b> <b>end</b> <i>number</i>
Tree	<b>end</b>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

### **start** *number*

Synopsis	Lower bound of the length range
Context	<b>configure filter ip-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match packet-length</b> <b>range</b> <b>start</b> <i>number</i>
Tree	<b>start</b>
Range	0 to 65534

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Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

## port

Synopsis	Enter the <b>port</b> context
Context	<b>configure filter ip-filter string entry number match port</b>
Tree	<a href="#">port</a>
Notes	The following elements are part of a choice: <b>port</b> or ( <b>dst-port</b> and <b>src-port</b> ).
Introduced	16.0.R1
Platforms	All

## eq number

Synopsis	Exact match criterion for the port number
Context	<b>configure filter ip-filter string entry number match port eq number</b>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## gt number

Synopsis	Greater than match criterion for the port number
Context	<b>configure filter ip-filter string entry number match port gt number</b>
Tree	<a href="#">gt</a>
Range	0 to 65534
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **lt number**

Synopsis	Less than match criterion for the port number
Context	<b>configure filter ip-filter string entry number match port lt number</b>
Tree	<b>lt</b>
Range	1 to 65535
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>
Introduced	16.0.R1
Platforms	All

### **port-list reference**

Synopsis	Name of the port list as the match criterion
Context	<b>configure filter ip-filter string entry number match port port-list reference</b>
Tree	<b>port-list</b>
Reference	<b>configure filter match-list port-list string</b>
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>
Introduced	16.0.R1
Platforms	All

### **range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ip-filter string entry number match port range</b>
Tree	<b>range</b>
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>
Introduced	16.0.R1
Platforms	All

### **end number**

Synopsis	Upper bound of the port range as port match criterion
Context	<b>configure filter ip-filter string entry number match port range end number</b>
Tree	<b>end</b>
Range	1 to 65535

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**start number**

Synopsis	Lower bound of the port range as port match criterion
Context	<b>configure filter ip-filter string entry number match port range start number</b>
Tree	<a href="#">start</a>
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**protocol (number | keyword)**

Synopsis	IP protocol identifier as a match criterion
Context	<b>configure filter ip-filter string entry number match protocol (number   keyword)</b>
Tree	<a href="#">protocol</a>
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Notes	The following elements are part of a choice: <b>protocol</b> or <b>protocol-list</b> .
Introduced	16.0.R1
Platforms	All

**protocol-list reference**

Synopsis	Name of the protocol list as a match criterion
Context	<b>configure filter ip-filter string entry number match protocol-list reference</b>
Tree	<a href="#">protocol-list</a>
Reference	<b>configure filter match-list protocol-list string</b>
Notes	The following elements are part of a choice: <b>protocol</b> or <b>protocol-list</b> .
Introduced	20.7.R1

Platforms All

## src-ip

Synopsis Enter the **src-ip** context

Context **configure filter ip-filter string entry number match src-ip**

Tree [src-ip](#)

Notes The following elements are part of a choice: **ip** or (**dst-ip** and **src-ip**).

Introduced 16.0.R1

Platforms All

## address (*ipv4-address | ipv4-prefix-with-host-bits*)

Synopsis IPv4 address used as the match criterion

Context **configure filter ip-filter string entry number match src-ip address (*ipv4-address | ipv4-prefix-with-host-bits*)**

Tree [address](#)

Notes The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.

Introduced 16.0.R1

Platforms All

## ip-prefix-list *reference*

Synopsis IP4 address prefix list used as match criterion

Context **configure filter ip-filter string entry number match src-ip ip-prefix-list *reference***

Tree [ip-prefix-list](#)

Reference **configure filter match-list ip-prefix-list string**

Notes The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.

Introduced 16.0.R1

Platforms All

## mask *string*

Synopsis IPv4 address mask used as the match criterion

Context **configure filter ip-filter string entry number match src-ip mask *string***



Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### **src-mac**

Synopsis	Enable the <b>src-mac</b> context
Context	<b>configure filter ip-filter string entry number match src-mac</b>
Tree	<a href="#">src-mac</a>
Introduced	19.5.R1
Platforms	All

### **address string**

Synopsis	MAC address used as the match criterion
Context	<b>configure filter ip-filter string entry number match src-mac address string</b>
Tree	<a href="#">address</a>
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

### **mask string**

Synopsis	MAC address mask as the match criterion
Context	<b>configure filter ip-filter string entry number match src-mac mask string</b>
Tree	<a href="#">mask</a>
Default	ff:ff:ff:ff:ff:ff
Introduced	19.5.R1
Platforms	All

### **src-port**

Synopsis	Enter the <b>src-port</b> context
Context	<b>configure filter ip-filter string entry number match src-port</b>

Tree	<a href="#">src-port</a>
Notes	The following elements are part of a choice: <b>port</b> or ( <b>dst-port</b> and <b>src-port</b> ).
Introduced	16.0.R1
Platforms	All

**eq number**

Synopsis	Exact match criterion for the port number
Context	<b>configure filter ip-filter string entry number match src-port eq number</b>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**gt number**

Synopsis	Greater than match criterion for the port number
Context	<b>configure filter ip-filter string entry number match src-port gt number</b>
Tree	<a href="#">gt</a>
Range	0 to 65534
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**lt number**

Synopsis	Less than match criterion for the port number
Context	<b>configure filter ip-filter string entry number match src-port lt number</b>
Tree	<a href="#">lt</a>
Range	1 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **port-list** *reference*

Synopsis	Name of the port list as the match criterion
Context	<b>configure filter ip-filter</b> <i>string entry number match src-port port-list reference</i>
Tree	<a href="#">port-list</a>
Reference	<b>configure filter match-list</b> <a href="#">port-list</a> <i>string</i>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ip-filter</b> <i>string entry number match src-port range</i>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **end** *number*

Synopsis	Upper bound of the port range as port match criterion
Context	<b>configure filter ip-filter</b> <i>string entry number match src-port range end number</i>
Tree	<a href="#">end</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **start** *number*

Synopsis	Lower bound of the port range as port match criterion
Context	<b>configure filter ip-filter</b> <i>string entry number match src-port range start number</i>
Tree	<a href="#">start</a>
Range	0 to 65534

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **src-route-option** *boolean*

Synopsis	Match based on presence of source route option
Context	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i> <a href="#">entry number</a> <a href="#">match src-route-option</a> <i>boolean</i>
Tree	<a href="#">src-route-option</a>
Introduced	16.0.R1
Platforms	All

### **tcp-established**

Synopsis	Match packets containing the TCP flag as ACK or RST
Context	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i> <a href="#">entry number</a> <a href="#">match tcp-established</a>
Tree	<a href="#">tcp-established</a>
Notes	The following elements are part of a choice: <b>tcp-established</b> or <b>tcp-flags</b> .
Introduced	22.10.R1
Platforms	All

### **tcp-flags**

Synopsis	Enter the <b>tcp-flags</b> context
Context	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i> <a href="#">entry number</a> <a href="#">match tcp-flags</a>
Tree	<a href="#">tcp-flags</a>
Notes	The following elements are part of a choice: <b>tcp-established</b> or <b>tcp-flags</b> .
Introduced	16.0.R1
Platforms	All

### **ack** *boolean*

Synopsis	Match TCP ACK as per value of the ACK TCP flag bit
Context	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i> <a href="#">entry number</a> <a href="#">match tcp-flags</a> <a href="#">ack</a> <i>boolean</i>
Tree	<a href="#">ack</a>

Introduced 16.0.R1  
Platforms All

### **cwr boolean**

Synopsis Match TCP CWR as per value of the CWR TCP flag bit  
Context **configure filter ip-filter string entry number match tcp-flags cwr boolean**  
Tree [cwr](#)  
Introduced 16.0.R1  
Platforms All

### **ece boolean**

Synopsis Match TCP ECE as per value of the ECE TCP flag bit  
Context **configure filter ip-filter string entry number match tcp-flags ece boolean**  
Tree [ece](#)  
Introduced 16.0.R1  
Platforms All

### **fin boolean**

Synopsis Match TCP FIN as per value of the FIN TCP flag bit  
Context **configure filter ip-filter string entry number match tcp-flags fin boolean**  
Tree [fin](#)  
Introduced 16.0.R1  
Platforms All

### **ns boolean**

Synopsis Match TCP NS as per value of the NS TCP flag bit  
Context **configure filter ip-filter string entry number match tcp-flags ns boolean**  
Tree [ns](#)  
Introduced 16.0.R1  
Platforms All

### **psh boolean**

Synopsis	Match TCP PSH as per value of the PSH TCP flag bit
Context	<b>configure filter ip-filter string entry number match tcp-flags psh boolean</b>
Tree	<a href="#">psh</a>
Introduced	16.0.R1
Platforms	All

### **rst boolean**

Synopsis	Match TCP RST as per value of the RST TCP flag bit
Context	<b>configure filter ip-filter string entry number match tcp-flags rst boolean</b>
Tree	<a href="#">rst</a>
Introduced	16.0.R1
Platforms	All

### **syn boolean**

Synopsis	Match TCP SYN as per value of the SYN TCP flag bit
Context	<b>configure filter ip-filter string entry number match tcp-flags syn boolean</b>
Tree	<a href="#">syn</a>
Introduced	16.0.R1
Platforms	All

### **urg boolean**

Synopsis	Match TCP URG as per value of the URG TCP flag bit
Context	<b>configure filter ip-filter string entry number match tcp-flags urg boolean</b>
Tree	<a href="#">urg</a>
Introduced	16.0.R1
Platforms	All

### **ttl**

Synopsis	Enable the <b>ttl</b> context
Context	<b>configure filter ip-filter string entry number match ttl</b>

Tree	<a href="#">ttl</a>
Introduced	21.10.R1
Platforms	All

**eq number**

Synopsis	Equal to condition match value
Context	<b>configure</b> <a href="#">filter ip-filter string entry number match ttl eq number</a>
Tree	<a href="#">eq</a>
Range	0 to 255
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	All

**gt number**

Synopsis	Greater than condition match value
Context	<b>configure</b> <a href="#">filter ip-filter string entry number match ttl gt number</a>
Tree	<a href="#">gt</a>
Range	0 to 254
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	All

**lt number**

Synopsis	Less than condition match value
Context	<b>configure</b> <a href="#">filter ip-filter string entry number match ttl lt number</a>
Tree	<a href="#">lt</a>
Range	1 to 255
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	All

**range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ip-filter string entry number match ttl range</b>
Tree	<b>range</b>
Description	This command in this context specify an inclusive range. When range is used, the start of the range (the first value entered) must be smaller than the end of the range (the second value entered).
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	All

**end number**

Synopsis	Upper bound of the range
Context	<b>configure filter ip-filter string entry number match ttl range end number</b>
Tree	<b>end</b>
Range	1 to 255
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	All

**start number**

Synopsis	Lower bound of the range
Context	<b>configure filter ip-filter string entry number match ttl range start number</b>
Tree	<b>start</b>
Range	0 to 254
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	All

**pbr-down-action-override keyword**

Synopsis	Action when PBR or PBF target for this entry is not available
Context	<b>configure filter ip-filter string entry number pbr-down-action-override keyword</b>



Tree	<a href="#">pbr-down-action-override</a>
Options	drop, forward, filter-default-action
Introduced	16.0.R1
Platforms	All

### **sample-profile** *reference*

Synopsis	Cflowd sample profile ID to match packets
Context	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i> <a href="#">entry number</a> <a href="#">sample-profile</a> <i>reference</i>
Tree	<a href="#">sample-profile</a>
Description	This command allows traffic matching an IPv4 or IPv6 filter to be sampled for cflowd processing using a specific sample profile ID. This option is only compatible if the associated interface is configured for interface-based sampling and is only supported for ingress sampling. An IP filter can only specify a single alternate sample profile ID for cflowd sampling, but the ID can be used in multiple entries.
Reference	<b>configure</b> <a href="#">cflowd sample-profile</a> <i>number</i>
Introduced	20.10.R1
Platforms	All

### **sticky-dest** (*number* | *keyword*)

Synopsis	Time before action with available PBR or PBF destination and highest priority
Context	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i> <a href="#">entry number</a> <a href="#">sticky-dest</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">sticky-dest</a>
Range	0 to 65535
Units	seconds
Options	no-hold-time-up
Introduced	16.0.R1
Platforms	All

### **filter-id** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP filter ID
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Context	<b>configure filter ip-filter</b> <i>string filter-id number</i>
Tree	<a href="#">filter-id</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

### **scope** *keyword*

Synopsis	Scope of this filter definition
Context	<b>configure filter ip-filter</b> <i>string scope keyword</i>
Tree	<a href="#">scope</a>
Options	exclusive, template, embedded, system
Default	template
Introduced	16.0.R1
Platforms	All

### **shared-policer** *boolean*

Synopsis	Share policer among active ports in the LAG
Context	<b>configure filter ip-filter</b> <i>string shared-policer boolean</i>
Tree	<a href="#">shared-policer</a>
Description	<p>When configured to <b>true</b>, and when the filter policy is configured on a LAG endpoint, the system programs the policer rates in the filter policy per line card FP of the LAG based on the number of active ports in the LAG for each FP.</p> <p>When configured to <b>false</b>, and when the filter policy is configured on a LAG endpoint, the system programs the same policer rate on each line card FP of the LAG.</p>
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

### **subscriber-mgmt**

Synopsis	Enter the <b>subscriber-mgmt</b> context
Context	<b>configure filter ip-filter</b> <i>string subscriber-mgmt</i>
Tree	<a href="#">subscriber-mgmt</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## host-specific-entry

Synopsis Enter the **host-specific-entry** context

Context **configure filter ip-filter string subscriber-mgmt host-specific-entry**

Tree [host-specific-entry](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## credit-control

Synopsis Enter the **credit-control** context

Context **configure filter ip-filter string subscriber-mgmt host-specific-entry credit-control**

Tree [credit-control](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## range

Synopsis Enable the **range** context

Context **configure filter ip-filter string subscriber-mgmt host-specific-entry credit-control range**

Tree [range](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## end number

Synopsis Upper bound of range for credit control filter entries

Context **configure filter ip-filter string subscriber-mgmt host-specific-entry credit-control range end number**

Tree [end](#)

Range 1 to 2097151

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **start number**

Synopsis Lower bound of range for credit control filter entries

Context **configure filter ip-filter string subscriber-mgmt host-specific-entry credit-control range start number**

Tree [start](#)

Range 1 to 2097151

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **filter-rule**

Synopsis Enter the **filter-rule** context

Context **configure filter ip-filter string subscriber-mgmt host-specific-entry filter-rule**

Tree [filter-rule](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **range**

Synopsis Enable the **range** context

Context **configure filter ip-filter string subscriber-mgmt host-specific-entry filter-rule range**

Tree [range](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **end number**

Synopsis Upper bound of range for inserting filter rule entries

Context **configure filter ip-filter string subscriber-mgmt host-specific-entry filter-rule range end number**

Tree [end](#)

Range 1 to 2097151

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**start number**

Synopsis	Lower bound of range for inserting filter rule entries
Context	<b>configure</b> <a href="#">filter ip-filter string</a> <a href="#">subscriber-mgmt host-specific-entry filter-rule range start number</a>
Tree	<a href="#">start</a>
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**watermark**

Synopsis	Enter the <b>watermark</b> context
Context	<b>configure</b> <a href="#">filter ip-filter string</a> <a href="#">subscriber-mgmt host-specific-entry watermark</a>
Tree	<a href="#">watermark</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**high number**

Synopsis	High watermark for host-specific entries, to raise a table full alarm
Context	<b>configure</b> <a href="#">filter ip-filter string</a> <a href="#">subscriber-mgmt host-specific-entry watermark high number</a>
Tree	<a href="#">high</a>
Range	0 to 100
Default	95
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## low number

Synopsis	Low watermark for host-specific entries, to clear a table full alarm
Context	<b>configure</b> filter ip-filter string subscriber-mgmt host-specific-entry watermark low number
Tree	low
Range	0 to 100
Default	90
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## shared-entry

Synopsis	Enter the <b>shared-entry</b> context
Context	<b>configure</b> filter ip-filter string subscriber-mgmt shared-entry
Tree	shared-entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## filter-rule

Synopsis	Enter the <b>filter-rule</b> context
Context	<b>configure</b> filter ip-filter string subscriber-mgmt shared-entry filter-rule
Tree	filter-rule
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## range

Synopsis	Enable the <b>range</b> context
Context	<b>configure</b> filter ip-filter string subscriber-mgmt shared-entry filter-rule range
Tree	range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **end number**

Synopsis	Upper bound of range for inserting shared host rules
Context	<b>configure filter ip-filter string subscriber-mgmt shared-entry filter-rule range end number</b>
Tree	<a href="#">end</a>
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **start number**

Synopsis	Lower bound of range for inserting shared host rules
Context	<b>configure filter ip-filter string subscriber-mgmt shared-entry filter-rule range start number</b>
Tree	<a href="#">start</a>
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **pcc-rule**

Synopsis	Enter the <b>pcc-rule</b> context
Context	<b>configure filter ip-filter string subscriber-mgmt shared-entry pcc-rule</b>
Tree	<a href="#">pcc-rule</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ip-filter string subscriber-mgmt shared-entry pcc-rule range</b>
Tree	<a href="#">range</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **end number**

Synopsis	Upper bound of the range for PCC rule filter entries
Context	<b>configure filter ip-filter string subscriber-mgmt shared-entry pcc-rule range end number</b>
Tree	<b>end</b>
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **start number**

Synopsis	Lower bound of the range for PCC rule filter entries
Context	<b>configure filter ip-filter string subscriber-mgmt shared-entry pcc-rule range start number</b>
Tree	<b>start</b>
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **watermark**

Synopsis	Enable the <b>watermark</b> context
Context	<b>configure filter ip-filter string subscriber-mgmt shared-entry watermark</b>
Tree	<b>watermark</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **high number**

Synopsis	Limit of RADIUS shared filters before generating high watermark notification
Context	<b>configure filter ip-filter string subscriber-mgmt shared-entry watermark high number</b>
Tree	<b>high</b>
Range	1 to 8000
Notes	This element is mandatory.



Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**low number**

Synopsis	Limit of RADIUS or Diameter shared filters before clearing high watermark notification
Context	<b>configure filter ip-filter</b> <i>string</i> <b>subscriber-mgmt shared-entry watermark low number</b>
Tree	<a href="#">low</a>
Range	0 to 7999
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**type keyword**

Synopsis	Set of match criteria for the filter policy
Context	<b>configure filter ip-filter</b> <i>string</i> <b>type keyword</b>
Tree	<a href="#">type</a>
Description	This command configures the filter policy type that defines the list of match criteria supported in a filter policy.
Options	normal, src-mac, packet-length, destination-class
Default	normal
Introduced	19.5.R1
Platforms	All

**ipv6-exception** [[filter-name](#)] *string*

Synopsis	Enter the <b>ipv6-exception</b> list instance
Context	<b>configure filter ipv6-exception</b> <i>string</i>
Tree	<a href="#">ipv6-exception</a>
Introduced	20.10.R1
Platforms	VSR

**[filter-name]** *string*

Synopsis	Filter name
Context	<b>configure filter ipv6-exception string</b>
Tree	<a href="#">ipv6-exception</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	VSR

**description** *string*

Synopsis	Text description
Context	<b>configure filter ipv6-exception string description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	20.10.R1
Platforms	VSR

**entry** [[entry-id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure filter ipv6-exception string entry number</b>
Tree	<a href="#">entry</a>
Introduced	20.10.R1
Platforms	VSR

**[entry-id]** *number*

Synopsis	ID for a match criteria and the corresponding action
Context	<b>configure filter ipv6-exception string entry number</b>
Tree	<a href="#">entry</a>
Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	20.10.R1

Platforms VSR

### description *string*

Synopsis Text description  
 Context **configure** filter [ipv6-exception](#) *string* [entry](#) *number* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 20.10.R1  
 Platforms VSR

### match

Synopsis Enter the **match** context  
 Context **configure** filter [ipv6-exception](#) *string* [entry](#) *number* [match](#)  
 Tree [match](#)  
 Introduced 20.10.R1  
 Platforms VSR

### dst-ip

Synopsis Enter the **dst-ip** context  
 Context **configure** filter [ipv6-exception](#) *string* [entry](#) *number* [match](#) [dst-ip](#)  
 Tree [dst-ip](#)  
 Introduced 20.10.R1  
 Platforms VSR

### address (*ipv6-address* | *ipv6-prefix-with-host-bits*)

Synopsis IPv6 address used as the match criterion  
 Context **configure** filter [ipv6-exception](#) *string* [entry](#) *number* [match](#) [dst-ip](#) [address](#) (*ipv6-address* | *ipv6-prefix-with-host-bits*)  
 Tree [address](#)  
 Notes The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.  
 Introduced 20.10.R1

Platforms VSR

### **ipv6-prefix-list** *reference*

Synopsis IPv6 address prefix list used as match criterion

Context **configure** filter [ipv6-exception](#) *string* [entry](#) *number* [match](#) [dst-ip](#) [ipv6-prefix-list](#) *reference*

Tree [ipv6-prefix-list](#)

Reference **configure** filter [match-list](#) [ipv6-prefix-list](#) *string*

Notes The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.

Introduced 20.10.R1

Platforms VSR

### **mask** *string*

Synopsis IPv6 address mask used as the match criterion

Context **configure** filter [ipv6-exception](#) *string* [entry](#) *number* [match](#) [dst-ip](#) [mask](#) *string*

Tree [mask](#)

Notes The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.

Introduced 20.10.R1

Platforms VSR

### **dst-port**

Synopsis Enter the **dst-port** context

Context **configure** filter [ipv6-exception](#) *string* [entry](#) *number* [match](#) [dst-port](#)

Tree [dst-port](#)

Notes The following elements are part of a choice: **port** or (**dst-port** and **src-port**).

Introduced 20.10.R1

Platforms VSR

### **eq** *number*

Synopsis Exact match criterion for the port number

Context **configure** filter [ipv6-exception](#) *string* [entry](#) *number* [match](#) [dst-port](#) [eq](#) *number*

Tree [eq](#)

Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

**gt number**

Synopsis	Greater than match criterion for the port number
Context	<b>configure filter ipv6-exception string entry number match dst-port gt number</b>
Tree	<a href="#">gt</a>
Range	0 to 65534
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

**lt number**

Synopsis	Less than match criterion for the port number
Context	<b>configure filter ipv6-exception string entry number match dst-port lt number</b>
Tree	<a href="#">lt</a>
Range	1 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

**port-list reference**

Synopsis	Name of the port list as the match criterion
Context	<b>configure filter ipv6-exception string entry number match dst-port port-list reference</b>
Tree	<a href="#">port-list</a>
Reference	<b>configure filter match-list port-list string</b>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

## range

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ipv6-exception</b> <i>string entry number match dst-port range</i>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

## end number

Synopsis	Upper bound of the port range as port match criterion
Context	<b>configure filter ipv6-exception</b> <i>string entry number match dst-port range end number</i>
Tree	<a href="#">end</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

## start number

Synopsis	Lower bound of the port range as port match criterion
Context	<b>configure filter ipv6-exception</b> <i>string entry number match dst-port range start number</i>
Tree	<a href="#">start</a>
Range	0 to 65534
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

## icmp

Synopsis	Enter the <b>icmp</b> context
Context	<b>configure filter ipv6-exception</b> <i>string entry number match icmp</i>
Tree	<a href="#">icmp</a>
Introduced	20.10.R1

Platforms VSR

### **code number**

Synopsis ICMPv6 code value to match  
 Context **configure filter ipv6-exception string entry number match icmp code number**  
 Tree [code](#)  
 Range 0 to 255  
 Introduced 20.10.R1  
 Platforms VSR

### **type number**

Synopsis ICMPv6 type value to match  
 Context **configure filter ipv6-exception string entry number match icmp type number**  
 Tree [type](#)  
 Range 0 to 255  
 Introduced 20.10.R1  
 Platforms VSR

### **next-header (number | keyword)**

Synopsis IP protocol to match  
 Context **configure filter ipv6-exception string entry number match next-header (number | keyword)**  
 Tree [next-header](#)  
 Range 0 to 255  
 Options tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp  
 Introduced 20.10.R1  
 Platforms VSR

### **port**

Synopsis Enter the **port** context

Context	<b>configure filter ipv6-exception</b> <i>string</i> <b>entry</b> <i>number</i> <b>match port</b>
Tree	<b>port</b>
Notes	The following elements are part of a choice: <b>port</b> or ( <b>dst-port</b> and <b>src-port</b> ).
Introduced	20.10.R1
Platforms	VSR

### **eq** *number*

Synopsis	Exact match criterion for the port number
Context	<b>configure filter ipv6-exception</b> <i>string</i> <b>entry</b> <i>number</i> <b>match port eq</b> <i>number</i>
Tree	<b>eq</b>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

### **gt** *number*

Synopsis	Greater than match criterion for the port number
Context	<b>configure filter ipv6-exception</b> <i>string</i> <b>entry</b> <i>number</i> <b>match port gt</b> <i>number</i>
Tree	<b>gt</b>
Range	0 to 65534
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

### **lt** *number*

Synopsis	Less than match criterion for the port number
Context	<b>configure filter ipv6-exception</b> <i>string</i> <b>entry</b> <i>number</i> <b>match port lt</b> <i>number</i>
Tree	<b>lt</b>
Range	1 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	20.10.R1



Platforms VSR

### **port-list** *reference*

Synopsis Name of the port list as the match criterion

Context **configure** filter [ipv6-exception](#) *string* [entry](#) *number* [match](#) [port](#) [port-list](#) *reference*

Tree [port-list](#)

Reference **configure** filter [match-list](#) [port-list](#) *string*

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.

Introduced 20.10.R1

Platforms VSR

### **range**

Synopsis Enable the **range** context

Context **configure** filter [ipv6-exception](#) *string* [entry](#) *number* [match](#) [port](#) [range](#)

Tree [range](#)

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.

Introduced 20.10.R1

Platforms VSR

### **end** *number*

Synopsis Upper bound of the port range as port match criterion

Context **configure** filter [ipv6-exception](#) *string* [entry](#) *number* [match](#) [port](#) [range](#) [end](#) *number*

Tree [end](#)

Range 1 to 65535

Notes This element is mandatory.

Introduced 20.10.R1

Platforms VSR

### **start** *number*

Synopsis Lower bound of the port range as port match criterion

Context **configure** filter [ipv6-exception](#) *string* [entry](#) *number* [match](#) [port](#) [range](#) [start](#) *number*

Tree	<a href="#">start</a>
Range	0 to 65534
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

## src-ip

Synopsis	Enter the <b>src-ip</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-exception</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-ip</a>
Tree	<a href="#">src-ip</a>
Introduced	20.10.R1
Platforms	VSR

## address (*ipv6-address* | *ipv6-prefix-with-host-bits*)

Synopsis	IPv6 address used as the match criterion
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-exception</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-ip</a> <a href="#">address</a> ( <i>ipv6-address</i>   <i>ipv6-prefix-with-host-bits</i> )
Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	20.10.R1
Platforms	VSR

## ipv6-prefix-list *reference*

Synopsis	IPv6 address prefix list used as match criterion
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-exception</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-ip</a> <a href="#">ipv6-prefix-list</a> <i>reference</i>
Tree	<a href="#">ipv6-prefix-list</a>
Reference	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">ipv6-prefix-list</a> <i>string</i>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	20.10.R1
Platforms	VSR

### **mask string**

Synopsis	IPv6 address mask used as the match criterion
Context	<b>configure filter ipv6-exception string entry number match src-ip mask string</b>
Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	20.10.R1
Platforms	VSR

### **src-port**

Synopsis	Enter the <b>src-port</b> context
Context	<b>configure filter ipv6-exception string entry number match src-port</b>
Tree	<a href="#">src-port</a>
Notes	The following elements are part of a choice: <b>port</b> or ( <b>dst-port</b> and <b>src-port</b> ).
Introduced	20.10.R1
Platforms	VSR

### **eq number**

Synopsis	Exact match criterion for the port number
Context	<b>configure filter ipv6-exception string entry number match src-port eq number</b>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

### **gt number**

Synopsis	Greater than match criterion for the port number
Context	<b>configure filter ipv6-exception string entry number match src-port gt number</b>
Tree	<a href="#">gt</a>
Range	0 to 65534
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .

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Introduced	20.10.R1
Platforms	VSR

### **lt** *number*

Synopsis	Less than match criterion for the port number
Context	<b>configure filter ipv6-exception</b> <i>string entry number match src-port lt number</i>
Tree	<b>lt</b>
Range	1 to 65535
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range</b> .
Introduced	20.10.R1
Platforms	VSR

### **port-list** *reference*

Synopsis	Name of the port list as the match criterion
Context	<b>configure filter ipv6-exception</b> <i>string entry number match src-port port-list reference</i>
Tree	<b>port-list</b>
Reference	<b>configure filter match-list port-list</b> <i>string</i>
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range</b> .
Introduced	20.10.R1
Platforms	VSR

### **range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ipv6-exception</b> <i>string entry number match src-port range</i>
Tree	<b>range</b>
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range</b> .
Introduced	20.10.R1
Platforms	VSR

### **end** *number*

Synopsis	Upper bound of the port range as port match criterion
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Context	<b>configure filter ipv6-exception</b> <i>string entry number match src-port range end number</i>
Tree	<a href="#">end</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

**start number**

Synopsis	Lower bound of the port range as port match criterion
Context	<b>configure filter ipv6-exception</b> <i>string entry number match src-port range start number</i>
Tree	<a href="#">start</a>
Range	0 to 65534
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

**filter-id number****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Filter ID
Context	<b>configure filter ipv6-exception</b> <i>string filter-id number</i>
Tree	<a href="#">filter-id</a>
Range	1 to 65535
Introduced	20.10.R1
Platforms	VSR

**ipv6-filter** [[filter-name](#)] *string*

Synopsis	Enter the <b>ipv6-filter</b> list instance
Context	<b>configure filter ipv6-filter</b> <i>string</i>
Tree	<a href="#">ipv6-filter</a>
Introduced	16.0.R1

Platforms All

### **[filter-name]** *string*

Synopsis Filter name  
 Context **configure filter ipv6-filter** *string*  
 Tree [ipv6-filter](#)  
 String Length 1 to 64  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **chain-to-system-filter** *boolean*

Synopsis Chain filter policy to the active IPvX system filter policy  
 Context **configure filter ipv6-filter** *string chain-to-system-filter* *boolean*  
 Tree [chain-to-system-filter](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **default-action** *keyword*

Synopsis Action for packets that do not match any entry  
 Context **configure filter ipv6-filter** *string default-action* *keyword*  
 Tree [default-action](#)  
 Options drop, accept  
 Default drop  
 Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure filter ipv6-filter** *string description* *string*

Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

## embed

Synopsis	Enter the <b>embed</b> context
Context	<b>configure filter ipv6-filter string embed</b>
Tree	<a href="#">embed</a>
Description	Commands in this context embed a previously defined IPv6 embedded filter policy or Hybrid OpenFlow switch instance into an exclusive, template, or system filter policy at the specified offset value. Rules derived from the BGP FlowSpec can also be embedded into template filter policies only.
Introduced	16.0.R1
Platforms	All

## filter [[name](#)] *reference offset number*

Synopsis	Enter the <b>filter</b> list instance
Context	<b>configure filter ipv6-filter string embed filter reference offset number</b>
Tree	<a href="#">filter</a>
Introduced	16.0.R1
Platforms	All

## [\[name\]](#) *reference*

Synopsis	IPv6 policy to be embedded in the filter
Context	<b>configure filter ipv6-filter string embed filter reference offset number</b>
Tree	<a href="#">filter</a>
Reference	<b>configure filter ipv6-filter string</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**offset number**

Synopsis	Offset of the inserted entries
Context	<b>configure filter ipv6-filter string embed filter reference offset number</b>
Tree	<a href="#">filter</a>
Range	0 to 2097150
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the embedded filter
Context	<b>configure filter ipv6-filter string embed filter reference offset number admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**flowspec offset number**

Synopsis	Enter the <b>flowspec</b> list instance
Context	<b>configure filter ipv6-filter string embed flowspec offset number</b>
Tree	<a href="#">flowspec</a>
Introduced	16.0.R1
Platforms	All

**offset number**

Synopsis	Offset of the inserted entries
Context	<b>configure filter ipv6-filter string embed flowspec offset number</b>
Tree	<a href="#">flowspec</a>
Range	0 to 2097151
Notes	This element is part of a list key.



Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the embedded filter
Context	<b>configure</b> filter ipv6-filter string embed flowspec offset number admin-state keyword
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **group** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Interface group ID for an external configured set of flowspec rules
Context	<b>configure</b> filter ipv6-filter string embed flowspec offset number group number
Tree	group
Range	0 to 16383
Introduced	16.0.R1
Platforms	All

### **router-instance** *string*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Virtual router for an external configured set of flowspec rules
Context	<b>configure</b> filter ipv6-filter string embed flowspec offset number router-instance string
Tree	router-instance
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

### **openflow** [of-switch] *reference offset number*

Synopsis Enter the **openflow** list instance

Context **configure filter ipv6-filter string embed openflow reference offset number**

Tree [openflow](#)

Introduced 16.0.R4

Platforms All

### **[of-switch]** *reference*

Synopsis Referenced Hybrid OpenFlow Switch (OFS) name

Context **configure filter ipv6-filter string embed openflow reference offset number**

Tree [openflow](#)

Reference **configure openflow of-switch string**

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms All

### **offset number**

Synopsis Offset of the inserted entries

Context **configure filter ipv6-filter string embed openflow reference offset number**

Tree [openflow](#)

Range 0 to 2097150

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms All

### **admin-state keyword**

Synopsis Administrative state of the embedded filter

Context **configure filter ipv6-filter string embed openflow reference offset number admin-state keyword**

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

## grt



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Global routing context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">embed</a> <a href="#">openflow</a> <i>reference</i> <i>offset</i> <i>number</i> <a href="#">grt</a>
Tree	<a href="#">grt</a>
Notes	The following elements are part of a choice: <b>grt</b> , <b>system</b> , ( <b>sap</b> and <b>vpls</b> ), or <b>vpn</b> .
Introduced	16.0.R4
Platforms	All

## sap reference



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SAP context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">embed</a> <a href="#">openflow</a> <i>reference</i> <i>offset</i> <i>number</i> <a href="#">sap</a> <i>reference</i>
Tree	<a href="#">sap</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i>
Notes	The following elements are part of a choice: <b>grt</b> , <b>system</b> , ( <b>sap</b> and <b>vpls</b> ), or <b>vpn</b> .
Introduced	16.0.R4
Platforms	All

## system



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	System context
Context	<b>configure filter ipv6-filter string embed openflow reference offset number system</b>
Tree	<a href="#">system</a>
Notes	The following elements are part of a choice: <b>grt, system, (sap and vpls), or vprn.</b>
Introduced	16.0.R4
Platforms	All

## vpls reference



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPLS context
Context	<b>configure filter ipv6-filter string embed openflow reference offset number vpls reference</b>
Tree	<a href="#">vpls</a>
Reference	<b>configure service vpls string</b>
Notes	The following elements are part of a choice: <b>grt, system, (sap and vpls), or vprn.</b>
Introduced	16.0.R4
Platforms	All

## vprn reference



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPRN context
Context	<b>configure filter ipv6-filter string embed openflow reference offset number vprn reference</b>
Tree	<a href="#">vprn</a>
Reference	<b>configure service vprn string</b>
Notes	The following elements are part of a choice: <b>grt, system, (sap and vpls), or vprn.</b>

Introduced	16.0.R4
Platforms	All

### **entry** [**entry-id**] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure filter ipv6-filter string entry number</b>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

### **[entry-id]** *number*

Synopsis	ID for a match criteria and the corresponding action
Context	<b>configure filter ipv6-filter string entry number</b>
Tree	<a href="#">entry</a>
Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **action**

Synopsis	Enable the <b>action</b> context
Context	<b>configure filter ipv6-filter string entry number action</b>
Tree	<a href="#">action</a>
Introduced	16.0.R1
Platforms	All

### **accept**

Synopsis	Accept regular routing to forward a matching packet
Context	<b>configure filter ipv6-filter string entry number action accept</b>
Tree	<a href="#">accept</a>

Notes	The following elements are part of a mandatory choice: <b>accept</b> , <b>drop</b> , <b>forward</b> , <b>http-redirect</b> , <b>ignore-match</b> , <b>nat</b> , or <b>tcp-mss-adjust</b> .
Introduced	16.0.R1
Platforms	All

## accept-when

Synopsis	Enable the <b>accept-when</b> context
Context	<b>configure filter ipv6-filter string entry number action accept-when</b>
Tree	<a href="#">accept-when</a>
Introduced	19.5.R1
Platforms	All

## pattern

Synopsis	Enable the <b>pattern</b> context
Context	<b>configure filter ipv6-filter string entry number action accept-when pattern</b>
Tree	<a href="#">pattern</a>
Introduced	19.5.R1
Platforms	All

## expression *string*

Synopsis	Pattern expression to match
Context	<b>configure filter ipv6-filter string entry number action accept-when pattern expression string</b>
Tree	<a href="#">expression</a>
String Length	3 to 18
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

## mask *string*

Synopsis	Mask for the pattern expression
Context	<b>configure filter ipv6-filter string entry number action accept-when pattern mask string</b>

Tree	<a href="#">mask</a>
String Length	3 to 18
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

### **offset-type** *keyword*

Synopsis	Starting point reference for offset value of pattern
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">accept-when</a> <a href="#">pattern</a> <a href="#">offset-type</a> <i>keyword</i>
Tree	<a href="#">offset-type</a>
Options	layer-3, layer-4, data, dns-qtype
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

### **offset-value** *number*

Synopsis	Offset value for the pattern expression
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">accept-when</a> <a href="#">pattern</a> <a href="#">offset-value</a> <i>number</i>
Tree	<a href="#">offset-value</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

### **drop**

Synopsis	Drop a packet matching this entry
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">drop</a>
Tree	<a href="#">drop</a>
Notes	The following elements are part of a mandatory choice: <b>accept</b> , <b>drop</b> , <b>forward</b> , <b>http-redirect</b> , <b>ignore-match</b> , <b>nat</b> , or <b>tcp-mss-adjust</b> .

Introduced	16.0.R1
Platforms	All

## drop-when

Synopsis	Enable the <b>drop-when</b> context
Context	<b>configure filter ipv6-filter string entry number action drop-when</b>
Tree	<a href="#">drop-when</a>
Introduced	16.0.R1
Platforms	All

## extracted-traffic

Synopsis	Drop traffic extracted to CPM
Context	<b>configure filter ipv6-filter string entry number action drop-when extracted-traffic</b>
Tree	<a href="#">extracted-traffic</a>
Introduced	16.0.R1
Platforms	All

## hop-limit

Synopsis	Enable the <b>hop-limit</b> context
Context	<b>configure filter ipv6-filter string entry number action drop-when hop-limit</b>
Tree	<a href="#">hop-limit</a>
Notes	The following elements are part of a choice: <b>hop-limit</b> or <b>payload-length</b> .
Introduced	16.0.R1
Platforms	All

## eq *number*

Synopsis	Equal to condition match value
Context	<b>configure filter ipv6-filter string entry number action drop-when hop-limit eq number</b>
Tree	<a href="#">eq</a>
Range	0 to 255
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .



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Introduced	16.0.R1
Platforms	All

### **gt** *number*

Synopsis	Greater than condition match value
Context	<b>configure filter ipv6-filter</b> <i>string entry number action drop-when hop-limit gt number</i>
Tree	<a href="#">gt</a>
Range	0 to 254
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **lt** *number*

Synopsis	Less than condition match value
Context	<b>configure filter ipv6-filter</b> <i>string entry number action drop-when hop-limit lt number</i>
Tree	<a href="#">lt</a>
Range	1 to 255
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ipv6-filter</b> <i>string entry number action drop-when hop-limit range</i>
Tree	<a href="#">range</a>
Description	This command in this context specify an inclusive range. When range is used, the start of the range (the first value entered) must be smaller than the end of the range (the second value entered).
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**end number**

Synopsis	Upper bound of the range
Context	<b>configure filter ipv6-filter string entry number action drop-when hop-limit range end number</b>
Tree	<a href="#">end</a>
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**start number**

Synopsis	Lower bound of the range
Context	<b>configure filter ipv6-filter string entry number action drop-when hop-limit range start number</b>
Tree	<a href="#">start</a>
Range	0 to 254
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**pattern**

Synopsis	Enable the <b>pattern</b> context
Context	<b>configure filter ipv6-filter string entry number action drop-when pattern</b>
Tree	<a href="#">pattern</a>
Introduced	16.0.R4
Platforms	All

**expression string**

Synopsis	Pattern expression to match
Context	<b>configure filter ipv6-filter string entry number action drop-when pattern expression string</b>
Tree	<a href="#">expression</a>
String Length	3 to 18

Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**mask string**

Synopsis	Mask for the pattern expression
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">drop-when</a> <a href="#">pattern</a> <i>mask</i> <i>string</i>
Tree	<a href="#">mask</a>
String Length	3 to 18
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**offset-type keyword**

Synopsis	Starting point reference for offset value of pattern
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">drop-when</a> <a href="#">pattern</a> <i>offset-type</i> <i>keyword</i>
Tree	<a href="#">offset-type</a>
Options	layer-3, layer-4, data, dns-qtype
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**offset-value number**

Synopsis	Offset value for the pattern expression
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">drop-when</a> <a href="#">pattern</a> <i>offset-value</i> <i>number</i>
Tree	<a href="#">offset-value</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

## payload-length

Synopsis	Enable the <b>payload-length</b> context
Context	<b>configure filter ipv6-filter string entry number action drop-when payload-length</b>
Tree	<a href="#">payload-length</a>
Notes	The following elements are part of a choice: <b>hop-limit</b> or <b>payload-length</b> .
Introduced	16.0.R1
Platforms	All

## eq number

Synopsis	Exact match criterion for the length
Context	<b>configure filter ipv6-filter string entry number action drop-when payload-length eq number</b>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## gt number

Synopsis	Greater than match criterion for the length
Context	<b>configure filter ipv6-filter string entry number action drop-when payload-length gt number</b>
Tree	<a href="#">gt</a>
Range	0 to 65534
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## lt number

Synopsis	Less than match criterion for the length
Context	<b>configure filter ipv6-filter string entry number action drop-when payload-length lt number</b>

Tree	<a href="#">lt</a>
Range	1 to 65535
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## range

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ipv6-filter</b> <i>string entry number action drop-when payload-length range</i>
Tree	<a href="#">range</a>
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## end number

Synopsis	Upper bound of the length range
Context	<b>configure filter ipv6-filter</b> <i>string entry number action drop-when payload-length range end number</i>
Tree	<a href="#">end</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## start number

Synopsis	Lower bound of the length range
Context	<b>configure filter ipv6-filter</b> <i>string entry number action drop-when payload-length range start number</i>
Tree	<a href="#">start</a>
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

### **fc** keyword

Synopsis Class name to be forwarded for matching packets  
 Context **configure** filter *ipv6-filter* *string* *entry* *number* *action* **fc** *keyword*  
 Tree **fc**  
 Options be, l2, af, l1, h2, ef, h1, nc  
 Introduced 16.0.R1  
 Platforms All

### **forward**

Synopsis Enter the **forward** context  
 Context **configure** filter *ipv6-filter* *string* *entry* *number* *action* **forward**  
 Tree **forward**  
 Notes The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **http-redirect**, **ignore-match**, **nat**, or **tcp-mss-adjust**.  
 Introduced 16.0.R1  
 Platforms All

### **bonding-connection** *number*

Synopsis Connection ID over which packet is forwarded  
 Context **configure** filter *ipv6-filter* *string* *entry* *number* *action* **forward** **bonding-connection** *number*  
 Tree **bonding-connection**  
 Range 1 to 2  
 Notes The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, or **vprn-target**.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## esi-l2

Synopsis	Enable the <b>esi-l2</b> context
Context	<b>configure filter ipv6-filter</b> <i>string</i> <i>entry number</i> <i>action forward</i> <b>esi-l2</b>
Tree	<a href="#">esi-l2</a>
Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

## esi-value *string*

Synopsis	ESI of the first ESI-identified appliance
Context	<b>configure filter ipv6-filter</b> <i>string</i> <i>entry number</i> <i>action forward</i> <b>esi-l2</b> <b>esi-value</b> <i>string</i>
Tree	<a href="#">esi-value</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## vpls *reference*

Synopsis	VPLS service name
Context	<b>configure filter ipv6-filter</b> <i>string</i> <i>entry number</i> <i>action forward</i> <b>esi-l2</b> <b>vpls</b> <i>reference</i>
Tree	<a href="#">vpls</a>
Reference	<b>configure service</b> <b>vpls</b> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R3
Platforms	All

## esi-l3

Synopsis	Enable the <b>esi-l3</b> context
Context	<b>configure filter ipv6-filter</b> <i>string</i> <i>entry number</i> <i>action forward</i> <b>esi-l3</b>
Tree	<a href="#">esi-l3</a>

Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

### **esi-value** *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	ESI of the first ESI-identified appliance
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action forward esi-l3 esi-value</b> <i>string</i>
Tree	<a href="#">esi-value</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **sf-ip** *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP address of the service function to forward traffic
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action forward esi-l3 sf-ip</b> <i>string</i>
Tree	<a href="#">sf-ip</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **vas-interface** *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.



Synopsis	Egress R-VPLS IP interface name
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action forward esi-I3</b> <i>vas-interface reference</i>
Tree	<a href="#">vas-interface</a>
Reference	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **vprn** *reference*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPRN service name
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action forward esi-I3</b> <i>vprn reference</i>
Tree	<a href="#">vprn</a>
Reference	<b>configure service vprn</b> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **gre-tunnel** *reference*

Synopsis	GRE tunnel template ID that sets the location where an encapsulated matching packet is transported
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action forward gre-tunnel</b> <i>reference</i>
Tree	<a href="#">gre-tunnel</a>
Reference	<b>configure filter gre-tunnel-template</b> <i>string</i>
Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-I2</b> , <b>esi-I3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

## **lsp string**

Synopsis	LSP that is specified to forward a packet matching this entry
Context	<b>configure filter ipv6-filter string entry number action forward lsp string</b>
Tree	<a href="#">lsp</a>
String Length	1 to 64
Notes	The following elements are part of a choice: <b>bonding-connection, esi-l2, esi-l3, gre-tunnel, lsp, mpls-policy, next-hop, redirect-policy, router-instance, sap, sdp, srte-policy</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

## **mpls-policy**

Synopsis	Enable the <b>mpls-policy</b> context
Context	<b>configure filter ipv6-filter string entry number action forward mpls-policy</b>
Tree	<a href="#">mpls-policy</a>
Notes	The following elements are part of a choice: <b>bonding-connection, esi-l2, esi-l3, gre-tunnel, lsp, mpls-policy, next-hop, redirect-policy, router-instance, sap, sdp, srte-policy</b> , or <b>vprn-target</b> .
Introduced	19.10.R1
Platforms	All

## **endpoint string**

Synopsis	MPLS forwarding policy endpoint IPv6 address
Context	<b>configure filter ipv6-filter string entry number action forward mpls-policy endpoint string</b>
Tree	<a href="#">endpoint</a>
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

## **next-hop**

Synopsis	Enable the <b>next-hop</b> context
Context	<b>configure filter ipv6-filter string entry number action forward next-hop</b>
Tree	<a href="#">next-hop</a>

Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>isp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

## nh-ip

Synopsis	Enable the <b>nh-ip</b> context
Context	<b>configure filter ipv6-filter string entry number action forward next-hop nh-ip</b>
Tree	<b>nh-ip</b>
Notes	The following elements are part of a mandatory choice: <b>nh-ip</b> or <b>nh-ip-vrf</b> .
Introduced	16.0.R1
Platforms	All

## address string

Synopsis	IPv6 address of next hop to forward matching packets
Context	<b>configure filter ipv6-filter string entry number action forward next-hop nh-ip address string</b>
Tree	<b>address</b>
Description	This command specifies the IPv6 address of a direct or indirect next hop to which matching packets are forwarded.
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## indirect boolean

Synopsis	Allow next hop to be indirectly reachable
Context	<b>configure filter ipv6-filter string entry number action forward next-hop nh-ip indirect boolean</b>
Tree	<b>indirect</b>
Default	false
Introduced	16.0.R1
Platforms	All

## nh-ip-vrf

Synopsis	Enable the <b>nh-ip-vrf</b> context
Context	<b>configure filter ipv6-filter string entry number action forward next-hop nh-ip-vrf</b>
Tree	<a href="#">nh-ip-vrf</a>
Notes	The following elements are part of a mandatory choice: <b>nh-ip</b> or <b>nh-ip-vrf</b> .
Introduced	16.0.R1
Platforms	All

## address string

Synopsis	IPv6 address of next hop to forward matching packets
Context	<b>configure filter ipv6-filter string entry number action forward next-hop nh-ip-vrf address string</b>
Tree	<a href="#">address</a>
Description	This command specifies the IPv6 address of a direct or indirect next hop to which matching packets are forwarded.
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## indirect boolean

Synopsis	Allow next hop to be indirectly reachable
Context	<b>configure filter ipv6-filter string entry number action forward next-hop nh-ip-vrf indirect boolean</b>
Tree	<a href="#">indirect</a>
Default	false
Introduced	16.0.R1
Platforms	All

## router-instance string

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Routing context for route lookup for forwarding packets
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action forward next-hop nh-ip-vrf router-instance</b> <i>string</i>
Tree	<b>router-instance</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **redirect-policy** *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Next hop or forward next hop router that forwards a packet that matches this entry
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action forward redirect-policy</b> <i>reference</i>
Tree	<b>redirect-policy</b>
Reference	<b>configure filter redirect-policy</b> <i>string</i>
Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

### **router-instance** *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Router name or VPRN service name
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action forward router-instance</b> <i>string</i>
Tree	<b>router-instance</b>
Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

## sap

Synopsis	Enable the <b>sap</b> context
Context	<b>configure filter ipv6-filter string entry number action forward sap</b>
Tree	<b>sap</b>
Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

## sap-id reference

Synopsis	VPLS Ethernet SAP ID used to forward matching packets
Context	<b>configure filter ipv6-filter string entry number action forward sap sap-id reference</b>
Tree	<b>sap-id</b>
Reference	<b>configure service vpls string sap string</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## vpls reference

Synopsis	VPLS associated with the SAP
Context	<b>configure filter ipv6-filter string entry number action forward sap vpls reference</b>
Tree	<b>vpls</b>
Reference	<b>configure service vpls string</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## sdp

Synopsis	Enable the <b>sdp</b> context
Context	<b>configure filter ipv6-filter string entry number action forward sdp</b>

Tree	<a href="#">sdp</a>
Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

### **sdp-bind-id** *string*

Synopsis	VPLS SDP bind ID used to forward matching packets
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forward</a> <a href="#">sdp</a> <a href="#">sdp-bind-id</a> <i>string</i>
Tree	<a href="#">sdp-bind-id</a>
String Length	3 to 16
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **vpls** *reference*

Synopsis	VPLS associated with the SDP
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forward</a> <a href="#">sdp</a> <a href="#">vpls</a> <i>reference</i>
Tree	<a href="#">vpls</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **srte-policy**

Synopsis	Enable the <b>srte-policy</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forward</a> <a href="#">srte-policy</a>
Tree	<a href="#">srte-policy</a>
Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , or <b>vprn-target</b> .
Introduced	19.10.R1

Platforms All

### **color number**

Synopsis SR-TE policy color ID

Context **configure filter ipv6-filter string entry number action forward srte-policy color number**

Tree [color](#)

Range 0 to 4294967295

Notes This element is mandatory.

Introduced 19.10.R1

Platforms All

### **endpoint string**

Synopsis SR-TE policy endpoint IPv6 address

Context **configure filter ipv6-filter string entry number action forward srte-policy endpoint string**

Tree [endpoint](#)

Notes This element is mandatory.

Introduced 19.10.R1

Platforms All

### **vprn-target**

Synopsis Enable the **vprn-target** context

Context **configure filter ipv6-filter string entry number action forward vprn-target**

Tree [vprn-target](#)

Notes The following elements are part of a choice: **bonding-connection, esi-l2, esi-l3, gre-tunnel, lsp, mpls-policy, next-hop, redirect-policy, router-instance, sap, sdp, srte-policy, or vprn-target.**

Introduced 16.0.R1

Platforms All

### **adv-prefix string**

Synopsis Advertised IP prefix for target destination

Context **configure filter ipv6-filter string entry number action forward vprn-target adv-prefix string**



Tree	<a href="#">adv-prefix</a>
Introduced	16.0.R1
Platforms	All

### **bgp-nh string**

Synopsis	Target BGP next hop IP address
Context	<b>configure filter ipv6-filter string entry number action forward vprn-target bgp-nh string</b>
Tree	<a href="#">bgp-nh</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **lsp string**

Synopsis	LSP that is specified to forward a packet matching this entry
Context	<b>configure filter ipv6-filter string entry number action forward vprn-target lsp string</b>
Tree	<a href="#">lsp</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

### **vprn reference**

Synopsis	Routing context used for route lookup
Context	<b>configure filter ipv6-filter string entry number action forward vprn-target vprn reference</b>
Tree	<a href="#">vprn</a>
Reference	<b>configure service vprn string</b>
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **http-redirect**

Synopsis	Enable the <b>http-redirect</b> context
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Context	<b>configure filter ipv6-filter string entry number action http-redirect</b>
Tree	<a href="#">http-redirect</a>
Description	Commands in this context configure the filter entry action for HTTP redirection.
Notes	The following elements are part of a mandatory choice: <b>accept</b> , <b>drop</b> , <b>forward</b> , <b>http-redirect</b> , <b>ignore-match</b> , <b>nat</b> , or <b>tcp-mss-adjust</b> .
Introduced	16.0.R1
Platforms	All

### **allow-override** *boolean*

Synopsis	Override the HTTP redirect URL by a RADIUS VSA
Context	<b>configure filter ipv6-filter string entry number action http-redirect allow-override boolean</b>
Tree	<a href="#">allow-override</a>
Description	This command specifies whether the RADIUS VSA can override the configured HTTP redirect URL for this filter entry.  When configured to <b>true</b> , the RADIUS VSA can override the HTTP redirect URL. When configured to <b>false</b> , the HTTP redirect URL is not overridden. This does not apply if the CPF option is specified for the URL.
Default	false
Introduced	16.0.R1
Platforms	All

### **url** (*keyword* | *http-redirect-url*)



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	URL used for HTTP redirect action
Context	<b>configure filter ipv6-filter string entry number action http-redirect url (keyword   http-redirect-url)</b>
Tree	<a href="#">url</a>
Description	This command specifies the URL to use for HTTP redirection for this filter entry.  A URL can be specified or the CPF option can be used for BNG CUPS ESM sessions only.  The following macro substitutions may be used: \$URL — request-URI in the HTTP GET request received

\$MAC — a string that represents the MAC address of the subscriber host

\$IP — a string that represents the IP address of the subscriber host

\$SUB — a string that represents the subscriber ID

\$SAP — a string that represents a SAP ID

\$SAPDESC — description string configured on the SAP

\$CID — a string that represents the circuit ID or interface ID of the subscriber host (hexadecimal format)

\$RID — a string that represents the remote ID of the subscriber host (hexadecimal format)

String Length	1 to 255
Options	from-cpf
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## ignore-match

Synopsis	Ignore match criteria for the entry
Context	<b>configure filter ipv6-filter</b> <i>string entry number action ignore-match</i>
Tree	<a href="#">ignore-match</a>
Notes	The following elements are part of a mandatory choice: <b>accept, drop, forward, http-redirect, ignore-match, nat, or tcp-mss-adjust.</b>
Introduced	16.0.R1
Platforms	All

## nat

Synopsis	Enable the <b>nat</b> context
Context	<b>configure filter ipv6-filter</b> <i>string entry number action nat</i>
Tree	<a href="#">nat</a>
Notes	The following elements are part of a mandatory choice: <b>accept, drop, forward, http-redirect, ignore-match, nat, or tcp-mss-adjust.</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## nat-policy *reference*

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	NAT policy name when action is NAT
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">nat</a> <a href="#">nat-policy</a> <i>reference</i>
Tree	<a href="#">nat-policy</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">nat</a> <a href="#">nat-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## nat-type *keyword*

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	NAT type to assign when action is NAT
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">nat</a> <a href="#">nat-type</a> <i>keyword</i>
Tree	<a href="#">nat-type</a>
Options	dslite, nat64
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## rate-limit

Synopsis	Enable the <b>rate-limit</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">rate-limit</a>
Tree	<a href="#">rate-limit</a>
Introduced	16.0.R1
Platforms	All

## extracted-traffic

Synopsis	Limit the rate of traffic extracted to the CPM
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Context	<b>configure filter ipv6-filter string entry number action rate-limit extracted-traffic</b>
Tree	<a href="#">extracted-traffic</a>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

## hop-limit

Synopsis	Enable the <b>hop-limit</b> context
Context	<b>configure filter ipv6-filter string entry number action rate-limit hop-limit</b>
Tree	<a href="#">hop-limit</a>
Notes	The following elements are part of a choice: <b>hop-limit</b> or <b>payload-length</b> .
Introduced	16.0.R1
Platforms	All

## eq number

Synopsis	Equal to condition match value
Context	<b>configure filter ipv6-filter string entry number action rate-limit hop-limit eq number</b>
Tree	<a href="#">eq</a>
Range	0 to 255
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## gt number

Synopsis	Greater than condition match value
Context	<b>configure filter ipv6-filter string entry number action rate-limit hop-limit gt number</b>
Tree	<a href="#">gt</a>
Range	0 to 254
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**lt number**

Synopsis	Less than condition match value
Context	<b>configure filter ipv6-filter string entry number action rate-limit hop-limit lt number</b>
Tree	<b>lt</b>
Range	1 to 255
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ipv6-filter string entry number action rate-limit hop-limit range</b>
Tree	<b>range</b>
Description	This command in this context specify an inclusive range. When range is used, the start of the range (the first value entered) must be smaller than the end of the range (the second value entered).
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**end number**

Synopsis	Upper bound of the range
Context	<b>configure filter ipv6-filter string entry number action rate-limit hop-limit range end number</b>
Tree	<b>end</b>
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**start number**

Synopsis	Lower bound of the range
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Context	<b>configure filter ipv6-filter string entry number action rate-limit hop-limit range start number</b>
Tree	<b>start</b>
Range	0 to 254
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## pattern

Synopsis	Enable the <b>pattern</b> context
Context	<b>configure filter ipv6-filter string entry number action rate-limit pattern</b>
Tree	<b>pattern</b>
Introduced	16.0.R4
Platforms	All

## expression *string*

Synopsis	Pattern expression to match
Context	<b>configure filter ipv6-filter string entry number action rate-limit pattern expression string</b>
Tree	<b>expression</b>
String Length	3 to 18
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

## mask *string*

Synopsis	Mask for the pattern expression
Context	<b>configure filter ipv6-filter string entry number action rate-limit pattern mask string</b>
Tree	<b>mask</b>
String Length	3 to 18
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**offset-type** *keyword*

Synopsis	Starting point reference for offset value of pattern
Context	<b>configure filter ipv6-filter string entry number action rate-limit pattern offset-type keyword</b>
Tree	<a href="#">offset-type</a>
Options	layer-3, layer-4, data, dns-qtype
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**offset-value** *number*

Synopsis	Offset value for the pattern expression
Context	<b>configure filter ipv6-filter string entry number action rate-limit pattern offset-value number</b>
Tree	<a href="#">offset-value</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**payload-length**

Synopsis	Enable the <b>payload-length</b> context
Context	<b>configure filter ipv6-filter string entry number action rate-limit payload-length</b>
Tree	<a href="#">payload-length</a>
Notes	The following elements are part of a choice: <b>hop-limit</b> or <b>payload-length</b> .
Introduced	16.0.R1
Platforms	All

**eq** *number*

Synopsis	Exact match criterion for the length
Context	<b>configure filter ipv6-filter string entry number action rate-limit payload-length eq number</b>



Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **gt number**

Synopsis	Greater than match criterion for the length
Context	<b>configure filter ipv6-filter string entry number action rate-limit payload-length gt number</b>
Tree	<a href="#">gt</a>
Range	0 to 65534
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **lt number**

Synopsis	Less than match criterion for the length
Context	<b>configure filter ipv6-filter string entry number action rate-limit payload-length lt number</b>
Tree	<a href="#">lt</a>
Range	1 to 65535
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ipv6-filter string entry number action rate-limit payload-length range</b>
Tree	<a href="#">range</a>
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**end number**

Synopsis	Upper bound of the length range
Context	<b>configure filter ipv6-filter string entry number action rate-limit payload-length range end number</b>
Tree	<b>end</b>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**start number**

Synopsis	Lower bound of the length range
Context	<b>configure filter ipv6-filter string entry number action rate-limit payload-length range start number</b>
Tree	<b>start</b>
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**pir (number | keyword)**

Synopsis	Peak information rate
Context	<b>configure filter ipv6-filter string entry number action rate-limit pir (number   keyword)</b>
Tree	<b>pir</b>
Range	0 to 2000000000
Units	kilobps
Options	max
Notes	The following elements are part of a mandatory choice: <b>pir</b> or <b>pps-pir</b> .
Introduced	16.0.R1
Platforms	All

**pps-pir** (*number | keyword*)

Synopsis	Peak information rate
Context	<b>configure filter ipv6-filter</b> <i>string entry number action rate-limit pps-pir</i> ( <i>number   keyword</i> )
Tree	<a href="#">pps-pir</a>
Range	0 to 100000000
Units	packets per second
Options	max
Notes	The following elements are part of a mandatory choice: <b>pir</b> or <b>pps-pir</b> .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

**remark**

Synopsis	Enable the <b>remark</b> context
Context	<b>configure filter ipv6-filter</b> <i>string entry number action remark</i>
Tree	<a href="#">remark</a>
Introduced	16.0.R1
Platforms	All

**dscp** *keyword*

Synopsis	Destination SAP
Context	<b>configure filter ipv6-filter</b> <i>string entry number action remark dscp keyword</i>
Tree	<a href="#">dscp</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## secondary

Synopsis	Enable the <b>secondary</b> context
Context	<b>configure filter ipv6-filter string entry number action secondary</b>
Tree	<a href="#">secondary</a>
Introduced	16.0.R1
Platforms	All

## forward

Synopsis	Enter the <b>forward</b> context
Context	<b>configure filter ipv6-filter string entry number action secondary forward</b>
Tree	<a href="#">forward</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## next-hop

Synopsis	Enable the <b>next-hop</b> context
Context	<b>configure filter ipv6-filter string entry number action secondary forward next-hop</b>
Tree	<a href="#">next-hop</a>
Notes	The following elements are part of a choice: <b>next-hop</b> , <b>sap</b> , <b>sdp</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

## nh-ip-vrf

Synopsis	Enable the <b>nh-ip-vrf</b> context
Context	<b>configure filter ipv6-filter string entry number action secondary forward next-hop nh-ip-vrf</b>
Tree	<a href="#">nh-ip-vrf</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**address string**

Synopsis	IPv6 address of next hop to forward matching packets
Context	<b>configure filter ipv6-filter string entry number action secondary forward next-hop nh-ip-vrf address string</b>
Tree	<b>address</b>
Description	This command specifies the IPv6 address of a direct or indirect next hop to which matching packets are forwarded.
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**indirect boolean**

Synopsis	Allow next hop to be indirectly reachable
Context	<b>configure filter ipv6-filter string entry number action secondary forward next-hop nh-ip-vrf indirect boolean</b>
Tree	<b>indirect</b>
Default	false
Introduced	16.0.R1
Platforms	All

**router-instance string****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Routing context for route lookup for forwarding packets
Context	<b>configure filter ipv6-filter string entry number action secondary forward next-hop nh-ip-vrf router-instance string</b>
Tree	<b>router-instance</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**sap**

Synopsis	Enable the <b>sap</b> context
Context	<b>configure filter ipv6-filter string entry number action secondary forward sap</b>
Tree	<a href="#">sap</a>
Notes	The following elements are part of a choice: <b>next-hop</b> , <b>sap</b> , <b>sdp</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

**sap-id reference****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SAP ID used to forward packets matching the entry
Context	<b>configure filter ipv6-filter string entry number action secondary forward sap sap-id reference</b>
Tree	<a href="#">sap-id</a>
Reference	<b>configure service vpls string sap string</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**vpls reference**

Synopsis	VPLS the sdp-bind-id belongs to
Context	<b>configure filter ipv6-filter string entry number action secondary forward sap vpls reference</b>
Tree	<a href="#">vpls</a>
Reference	<b>configure service vpls string</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## sdp

Synopsis	Enable the <b>sdp</b> context
Context	<b>configure filter ipv6-filter string entry number action secondary forward sdp</b>
Tree	<a href="#">sdp</a>
Notes	The following elements are part of a choice: <b>next-hop</b> , <b>sap</b> , <b>sdp</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

## sdp-bind-id *string*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPLS SDP bind ID used to forward matching packets
Context	<b>configure filter ipv6-filter string entry number action secondary forward sdp sdp-bind-id string</b>
Tree	<a href="#">sdp-bind-id</a>
String Length	3 to 16
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## vpls *reference*

Synopsis	VPLS associated with the SDP
Context	<b>configure filter ipv6-filter string entry number action secondary forward sdp vpls reference</b>
Tree	<a href="#">vpls</a>
Reference	<b>configure service vpls string</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**vprn-target**

Synopsis	Enable the <b>vprn-target</b> context
Context	<b>configure filter ipv6-filter string entry number action secondary forward vprn-target</b>
Tree	<b>vprn-target</b>
Notes	The following elements are part of a choice: <b>next-hop</b> , <b>sap</b> , <b>sdp</b> , or <b>vprn-target</b> .
Introduced	21.7.R1
Platforms	All

**adv-prefix string**

Synopsis	Advertised IP prefix for the target destination
Context	<b>configure filter ipv6-filter string entry number action secondary forward vprn-target adv-prefix string</b>
Tree	<b>adv-prefix</b>
Introduced	21.7.R1
Platforms	All

**bgp-nh string**

Synopsis	Target BGP next hop IP address
Context	<b>configure filter ipv6-filter string entry number action secondary forward vprn-target bgp-nh string</b>
Tree	<b>bgp-nh</b>
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	All

**lsp string**

Synopsis	LSP that is specified to forward a packet matching this entry
Context	<b>configure filter ipv6-filter string entry number action secondary forward vprn-target lsp string</b>
Tree	<b>lsp</b>
String Length	1 to 64
Introduced	21.7.R1



Platforms All

### **vprn** *reference*

Synopsis Routing context used for route lookup

Context **configure** [filter](#) [ipv6-filter](#) *string* [entry](#) *number* [action](#) [secondary](#) [forward](#) [vprn-target](#) [vprn](#) *reference*

Tree [vprn](#)

Reference **configure** [service](#) [vprn](#) *string*

Notes This element is mandatory.

Introduced 21.7.R1

Platforms All

### **remark**

Synopsis Enable the **remark** context

Context **configure** [filter](#) [ipv6-filter](#) *string* [entry](#) *number* [action](#) [secondary](#) [remark](#)

Tree [remark](#)

Introduced 16.0.R1

Platforms All

### **dscp** *keyword*

Synopsis Destination SAP

Context **configure** [filter](#) [ipv6-filter](#) *string* [entry](#) *number* [action](#) [secondary](#) [remark](#) [dscp](#) *keyword*

Tree [dscp](#)

Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

## tcp-mss-adjust

Synopsis	Adjust MSS option of TCP matching packets to configured value of tcp-mss in router interface context
Context	<b>configure</b> filter ipv6-filter string entry number action tcp-mss-adjust
Tree	tcp-mss-adjust
Notes	The following elements are part of a mandatory choice: <b>accept</b> , <b>drop</b> , <b>forward</b> , <b>http-redirect</b> , <b>ignore-match</b> , <b>nat</b> , or <b>tcp-mss-adjust</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## description string

Synopsis	Text description
Context	<b>configure</b> filter ipv6-filter string entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

## egress-pbr keyword

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	PBR that has an effect when this filter is applied on egress
Context	<b>configure</b> filter ipv6-filter string entry number egress-pbr keyword
Tree	egress-pbr
Options	true, true-with-l4lb
Introduced	16.0.R1
Platforms	All

## filter-sample boolean

Synopsis	Sample matching traffic if IP interface is set to cflowd ACL mode
Context	<b>configure</b> filter ipv6-filter string entry number filter-sample boolean

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Tree	<a href="#">filter-sample</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **interface-sample** *boolean*

Synopsis	Sample matching traffic if IP interface is set to cflowd interface mode
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">interface-sample</a> <i>boolean</i>
Tree	<a href="#">interface-sample</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **log** *reference*

Synopsis	Log that is used for packets matching this entry
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">log</a> <i>reference</i>
Tree	<a href="#">log</a>
Reference	<b>configure</b> <a href="#">filter</a> <a href="#">log</a> <i>number</i>
Introduced	16.0.R1
Platforms	All

### **match**

Synopsis	Enter the <b>match</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a>
Tree	<a href="#">match</a>
Description	Commands in this context provide match criteria for the filter entry. When the match criteria are satisfied, the action associated with the match criteria is executed.
Introduced	16.0.R1
Platforms	All

**destination-class** *number*

Synopsis	Destination class as a match criterion
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match destination-class</b> <i>number</i>
Tree	<a href="#">destination-class</a>
Description	This command configures the BGP destination class value as a match criterion. Filtering egress traffic on the destination class requires the <b>destination-class-lookup</b> command (under the <b>ingress</b> context for the service interface) to be enabled (set to <b>true</b> ).
Range	1 to 255
Introduced	20.7.R1
Platforms	All

**dscp** *keyword*

Synopsis	DSCP used as an IP filter match criterion
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match dscp</b> <i>keyword</i>
Tree	<a href="#">dscp</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

**dst-ip**

Synopsis	Enter the <b>dst-ip</b> context
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match dst-ip</b>
Tree	<a href="#">dst-ip</a>
Notes	The following elements are part of a choice: <b>ip</b> or ( <b>dst-ip</b> and <b>src-ip</b> ).
Introduced	16.0.R1
Platforms	All

**address** (*ipv6-address* | *ipv6-prefix-with-host-bits*)

Synopsis	IPv6 address used as the match criterion
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Context	<b>configure filter ipv6-filter string entry number match dst-ip address</b> ( <i>ipv6-address   ipv6-prefix-with-host-bits</i> )
Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### ipv6-prefix-list reference

Synopsis	IPv6 address prefix list used as match criterion
Context	<b>configure filter ipv6-filter string entry number match dst-ip ipv6-prefix-list reference</b>
Tree	<a href="#">ipv6-prefix-list</a>
Reference	<b>configure filter match-list ipv6-prefix-list string</b>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### mask string

Synopsis	IPv6 address mask used as the match criterion
Context	<b>configure filter ipv6-filter string entry number match dst-ip mask string</b>
Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### dst-port

Synopsis	Enter the <b>dst-port</b> context
Context	<b>configure filter ipv6-filter string entry number match dst-port</b>
Tree	<a href="#">dst-port</a>
Notes	The following elements are part of a choice: <b>port</b> or ( <b>dst-port</b> and <b>src-port</b> ).
Introduced	16.0.R1
Platforms	All

### **eq** *number*

Synopsis	Exact match criterion for the port number
Context	<b>configure filter ipv6-filter</b> <i>string entry number match dst-port eq number</i>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **gt** *number*

Synopsis	Greater than match criterion for the port number
Context	<b>configure filter ipv6-filter</b> <i>string entry number match dst-port gt number</i>
Tree	<a href="#">gt</a>
Range	0 to 65534
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **lt** *number*

Synopsis	Less than match criterion for the port number
Context	<b>configure filter ipv6-filter</b> <i>string entry number match dst-port lt number</i>
Tree	<a href="#">lt</a>
Range	1 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **port-list** *reference*

Synopsis	Name of the port list as the match criterion
Context	<b>configure filter ipv6-filter</b> <i>string entry number match dst-port port-list reference</i>
Tree	<a href="#">port-list</a>

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Reference	<b>configure filter match-list port-list string</b>
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range</b> .
Introduced	16.0.R1
Platforms	All

## **range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ipv6-filter string entry number match dst-port range</b>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range</b> .
Introduced	16.0.R1
Platforms	All

## **end number**

Synopsis	Upper bound of the port range as port match criterion
Context	<b>configure filter ipv6-filter string entry number match dst-port range end number</b>
Tree	<a href="#">end</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## **start number**

Synopsis	Lower bound of the port range as port match criterion
Context	<b>configure filter ipv6-filter string entry number match dst-port range start number</b>
Tree	<a href="#">start</a>
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**extension-header**

Synopsis	Enter the <b>extension-header</b> context
Context	<b>configure filter ipv6-filter string entry number match extension-header</b>
Tree	<a href="#">extension-header</a>
Introduced	16.0.R1
Platforms	All

**ah boolean**

Synopsis	Match a packet as per the existence of an AH Extension Header
Context	<b>configure filter ipv6-filter string entry number match extension-header ah boolean</b>
Tree	<a href="#">ah</a>
Introduced	16.0.R1
Platforms	All

**esp boolean**

Synopsis	Match a packet as per the existence of an Encapsulation security payload extension header
Context	<b>configure filter ipv6-filter string entry number match extension-header esp boolean</b>
Tree	<a href="#">esp</a>
Introduced	16.0.R1
Platforms	All

**hop-by-hop boolean**

Synopsis	Match on Hop-by-Hop Options Extension Header existence
Context	<b>configure filter ipv6-filter string entry number match extension-header hop-by-hop boolean</b>
Tree	<a href="#">hop-by-hop</a>
Introduced	16.0.R2
Platforms	All

**routing-type0 boolean**

Synopsis	Match a packet as per the existence of a routing Extension Header
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Context	<b>configure filter ipv6-filter string entry number match extension-header routing-type0 boolean</b>
Tree	<b>routing-type0</b>
Introduced	16.0.R1
Platforms	All

### flow-label

Synopsis	Enable the <b>flow-label</b> context
Context	<b>configure filter ipv6-filter string entry number match flow-label</b>
Tree	<b>flow-label</b>
Introduced	16.0.R1
Platforms	All

### mask number

Synopsis	Flow label mask for the IPv6 filter entry
Context	<b>configure filter ipv6-filter string entry number match flow-label mask number</b>
Tree	<b>mask</b>
Description	This command specifies the IPv6 address mask for the flow label filter entry. This value can be expressed in decimal, hexadecimal, or binary format.
Range	1 to 1048575
Default	1048575
Introduced	16.0.R1
Platforms	All

### value number

Synopsis	Flow label as a match criterion
Context	<b>configure filter ipv6-filter string entry number match flow-label value number</b>
Tree	<b>value</b>
Description	This command specifies the flow label to use as a match criterion. This value can be expressed in decimal, hexadecimal, or binary format.
Range	0 to 1048575
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

### **fragment** *keyword*

Synopsis Match criterion for fragmented packages  
 Context **configure** [filter](#) [ipv6-filter](#) *string* [entry](#) *number* [match](#) [fragment](#) *keyword*  
 Tree [fragment](#)  
 Options false, true, first-only, non-first-only  
 Introduced 16.0.R1  
 Platforms All

### **hop-limit**

Synopsis Enable the **hop-limit** context  
 Context **configure** [filter](#) [ipv6-filter](#) *string* [entry](#) *number* [match](#) [hop-limit](#)  
 Tree [hop-limit](#)  
 Introduced 21.10.R1  
 Platforms All

### **eq** *number*

Synopsis Equal to condition match value  
 Context **configure** [filter](#) [ipv6-filter](#) *string* [entry](#) *number* [match](#) [hop-limit](#) [eq](#) *number*  
 Tree [eq](#)  
 Range 0 to 255  
 Notes The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.  
 Introduced 21.10.R1  
 Platforms All

### **gt** *number*

Synopsis Greater than condition match value  
 Context **configure** [filter](#) [ipv6-filter](#) *string* [entry](#) *number* [match](#) [hop-limit](#) [gt](#) *number*  
 Tree [gt](#)  
 Range 0 to 254

Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	All

**lt number**

Synopsis	Less than condition match value
Context	<b>configure filter ipv6-filter string entry number match hop-limit lt number</b>
Tree	<b>lt</b>
Range	1 to 255
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	All

**range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ipv6-filter string entry number match hop-limit range</b>
Tree	<b>range</b>
Description	This command in this context specify an inclusive range. When range is used, the start of the range (the first value entered) must be smaller than the end of the range (the second value entered).
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	All

**end number**

Synopsis	Upper bound of the range
Context	<b>configure filter ipv6-filter string entry number match hop-limit range end number</b>
Tree	<b>end</b>
Range	1 to 255
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	All

### **start number**

Synopsis	Lower bound of the range
Context	<b>configure filter ipv6-filter string entry number match hop-limit range start number</b>
Tree	<a href="#">start</a>
Range	0 to 254
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	All

### **icmp**

Synopsis	Enter the <b>icmp</b> context
Context	<b>configure filter ipv6-filter string entry number match icmp</b>
Tree	<a href="#">icmp</a>
Introduced	16.0.R1
Platforms	All

### **code number**

Synopsis	ICMPv6 code value to match
Context	<b>configure filter ipv6-filter string entry number match icmp code number</b>
Tree	<a href="#">code</a>
Range	0 to 255
Introduced	16.0.R1
Platforms	All

### **type number**

Synopsis	ICMPv6 type value to match
Context	<b>configure filter ipv6-filter string entry number match icmp type number</b>
Tree	<a href="#">type</a>
Range	0 to 255
Introduced	16.0.R1
Platforms	All

**ip**

Synopsis	Enter the <b>ip</b> context
Context	<b>configure filter ipv6-filter string entry number match ip</b>
Tree	<a href="#">ip</a>
Notes	The following elements are part of a choice: <b>ip</b> or ( <b>dst-ip</b> and <b>src-ip</b> ).
Introduced	21.10.R1
Platforms	All

**address** (*ipv6-address* | *ipv6-prefix-with-host-bits*)

Synopsis	IPv6 address used as the match criterion
Context	<b>configure filter ipv6-filter string entry number match ip address</b> ( <i>ipv6-address</i>   <i>ipv6-prefix-with-host-bits</i> )
Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	21.10.R1
Platforms	All

**ipv6-prefix-list** *reference*

Synopsis	IPv6 address prefix list used as match criterion
Context	<b>configure filter ipv6-filter string entry number match ip ipv6-prefix-list reference</b>
Tree	<a href="#">ipv6-prefix-list</a>
Reference	<b>configure filter match-list ipv6-prefix-list string</b>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	21.10.R1
Platforms	All

**mask** *string*

Synopsis	IPv6 address mask used as the match criterion
Context	<b>configure filter ipv6-filter string entry number match ip mask string</b>
Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .

Introduced	21.10.R1
Platforms	All

### **next-header** (*number* | *keyword*)

Synopsis	IP protocol to match
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match next-header</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">next-header</a>
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Notes	The following elements are part of a choice: <b>next-header</b> or <b>next-header-list</b> .
Introduced	16.0.R1
Platforms	All

### **next-header-list** *reference*

Synopsis	Name of the protocol list as a match criterion
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match next-header-list</b> <i>reference</i>
Tree	<a href="#">next-header-list</a>
Reference	<b>configure filter match-list protocol-list</b> <i>string</i>
Notes	The following elements are part of a choice: <b>next-header</b> or <b>next-header-list</b> .
Introduced	20.7.R1
Platforms	All

### **packet-length**

Synopsis	Enable the <b>packet-length</b> context
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match packet-length</b>
Tree	<a href="#">packet-length</a>
Introduced	19.5.R1
Platforms	All

### **eq** *number*

Synopsis	Exact match criterion for the length
Context	<b>configure filter ipv6-filter</b> <i>string entry number match packet-length eq number</i>
Tree	<a href="#">eq</a>
Range	40 to 65575
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.5.R1
Platforms	All

### **gt** *number*

Synopsis	Greater than match criterion for the length
Context	<b>configure filter ipv6-filter</b> <i>string entry number match packet-length gt number</i>
Tree	<a href="#">gt</a>
Range	40 to 65574
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.5.R1
Platforms	All

### **lt** *number*

Synopsis	Less than match criterion for the length
Context	<b>configure filter ipv6-filter</b> <i>string entry number match packet-length lt number</i>
Tree	<a href="#">lt</a>
Range	41 to 65575
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.5.R1
Platforms	All

### **range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ipv6-filter</b> <i>string entry number match packet-length range</i>
Tree	<a href="#">range</a>

Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.5.R1
Platforms	All

### **end number**

Synopsis	Upper bound of packet length range as match criterion
Context	<b>configure filter ipv6-filter string entry number match packet-length range end number</b>
Tree	<b>end</b>
Range	41 to 65575
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

### **start number**

Synopsis	Lower bound of packet length range as match criterion
Context	<b>configure filter ipv6-filter string entry number match packet-length range start number</b>
Tree	<b>start</b>
Range	40 to 65574
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

### **port**

Synopsis	Enter the <b>port</b> context
Context	<b>configure filter ipv6-filter string entry number match port</b>
Tree	<b>port</b>
Notes	The following elements are part of a choice: <b>port</b> or ( <b>dst-port</b> and <b>src-port</b> ).
Introduced	16.0.R1
Platforms	All



### **eq** *number*

Synopsis	Exact match criterion for the port number
Context	<b>configure filter ipv6-filter</b> <i>string entry number match port eq number</i>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **gt** *number*

Synopsis	Greater than match criterion for the port number
Context	<b>configure filter ipv6-filter</b> <i>string entry number match port gt number</i>
Tree	<a href="#">gt</a>
Range	0 to 65534
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **lt** *number*

Synopsis	Less than match criterion for the port number
Context	<b>configure filter ipv6-filter</b> <i>string entry number match port lt number</i>
Tree	<a href="#">lt</a>
Range	1 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **port-list** *reference*

Synopsis	Name of the port list as the match criterion
Context	<b>configure filter ipv6-filter</b> <i>string entry number match port port-list reference</i>
Tree	<a href="#">port-list</a>

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Reference	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">port-list</a> <i>string</i>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## **range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">port</a> <a href="#">range</a>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## **end number**

Synopsis	Upper bound of the port range as port match criterion
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">port</a> <a href="#">range</a> <a href="#">end</a> <i>number</i>
Tree	<a href="#">end</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## **start number**

Synopsis	Lower bound of the port range as port match criterion
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">port</a> <a href="#">range</a> <a href="#">start</a> <i>number</i>
Tree	<a href="#">start</a>
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**src-ip**

Synopsis	Enter the <b>src-ip</b> context
Context	<b>configure filter ipv6-filter string entry number match src-ip</b>
Tree	<a href="#">src-ip</a>
Notes	The following elements are part of a choice: <b>ip</b> or ( <b>dst-ip</b> and <b>src-ip</b> ).
Introduced	16.0.R1
Platforms	All

**address** (*ipv6-address | ipv6-prefix-with-host-bits*)

Synopsis	IPv6 address used as the match criterion
Context	<b>configure filter ipv6-filter string entry number match src-ip address</b> ( <i>ipv6-address   ipv6-prefix-with-host-bits</i> )
Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

**ipv6-prefix-list reference**

Synopsis	IPv6 address prefix list used as match criterion
Context	<b>configure filter ipv6-filter string entry number match src-ip ipv6-prefix-list reference</b>
Tree	<a href="#">ipv6-prefix-list</a>
Reference	<b>configure filter match-list ipv6-prefix-list string</b>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

**mask string**

Synopsis	IPv6 address mask used as the match criterion
Context	<b>configure filter ipv6-filter string entry number match src-ip mask string</b>
Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1

Platforms All

### src-mac

Synopsis Enable the **src-mac** context  
 Context **configure filter ipv6-filter string entry number match src-mac**  
 Tree [src-mac](#)  
 Introduced 19.5.R1  
 Platforms All

### address string

Synopsis MAC address used as the match criterion  
 Context **configure filter ipv6-filter string entry number match src-mac address string**  
 Tree [address](#)  
 Notes This element is mandatory.  
 Introduced 19.5.R1  
 Platforms All

### mask string

Synopsis MAC address mask as the match criterion  
 Context **configure filter ipv6-filter string entry number match src-mac mask string**  
 Tree [mask](#)  
 Default ff:ff:ff:ff:ff:ff  
 Introduced 19.5.R1  
 Platforms All

### src-port

Synopsis Enter the **src-port** context  
 Context **configure filter ipv6-filter string entry number match src-port**  
 Tree [src-port](#)  
 Notes The following elements are part of a choice: **port** or (**dst-port** and **src-port**).  
 Introduced 16.0.R1

Platforms All

### **eq** *number*

Synopsis Exact match criterion for the port number

Context **configure** [filter](#) [ipv6-filter](#) *string* [entry](#) *number* [match](#) [src-port](#) **eq** *number*

Tree [eq](#)

Range 0 to 65535

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.

Introduced 16.0.R1

Platforms All

### **gt** *number*

Synopsis Greater than match criterion for the port number

Context **configure** [filter](#) [ipv6-filter](#) *string* [entry](#) *number* [match](#) [src-port](#) **gt** *number*

Tree [gt](#)

Range 0 to 65534

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.

Introduced 16.0.R1

Platforms All

### **lt** *number*

Synopsis Less than match criterion for the port number

Context **configure** [filter](#) [ipv6-filter](#) *string* [entry](#) *number* [match](#) [src-port](#) **lt** *number*

Tree [lt](#)

Range 1 to 65535

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.

Introduced 16.0.R1

Platforms All

### **port-list** *reference*

Synopsis Name of the port list as the match criterion

Context	<b>configure filter ipv6-filter</b> <i>string entry number match src-port port-list reference</i>
Tree	<a href="#">port-list</a>
Reference	<b>configure filter match-list port-list</b> <i>string</i>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## range

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ipv6-filter</b> <i>string entry number match src-port range</i>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## end number

Synopsis	Upper bound of the port range as port match criterion
Context	<b>configure filter ipv6-filter</b> <i>string entry number match src-port range end number</i>
Tree	<a href="#">end</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## start number

Synopsis	Lower bound of the port range as port match criterion
Context	<b>configure filter ipv6-filter</b> <i>string entry number match src-port range start number</i>
Tree	<a href="#">start</a>
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

### **tcp-established**

Synopsis Match packets containing the TCP flag as ACK or RST  
Context **configure filter ipv6-filter string entry number match tcp-established**  
Tree [tcp-established](#)  
Notes The following elements are part of a choice: **tcp-established** or **tcp-flags**.  
Introduced 22.10.R1  
Platforms All

### **tcp-flags**

Synopsis Enter the **tcp-flags** context  
Context **configure filter ipv6-filter string entry number match tcp-flags**  
Tree [tcp-flags](#)  
Notes The following elements are part of a choice: **tcp-established** or **tcp-flags**.  
Introduced 16.0.R1  
Platforms All

### **ack boolean**

Synopsis Match TCP ACK as per value of the ACK TCP flag bit  
Context **configure filter ipv6-filter string entry number match tcp-flags ack boolean**  
Tree [ack](#)  
Introduced 16.0.R1  
Platforms All

### **cwr boolean**

Synopsis Match TCP CWR as per value of the CWR TCP flag bit  
Context **configure filter ipv6-filter string entry number match tcp-flags cwr boolean**  
Tree [cwr](#)  
Introduced 16.0.R1  
Platforms All

**ece boolean**

Synopsis	Match TCP ECE as per value of the ECE TCP flag bit
Context	<b>configure filter ipv6-filter string entry number match tcp-flags ece boolean</b>
Tree	<a href="#">ece</a>
Introduced	16.0.R1
Platforms	All

**fin boolean**

Synopsis	Match TCP FIN as per value of the FIN TCP flag bit
Context	<b>configure filter ipv6-filter string entry number match tcp-flags fin boolean</b>
Tree	<a href="#">fin</a>
Introduced	16.0.R1
Platforms	All

**ns boolean**

Synopsis	Match TCP NS as per value of the NS TCP flag bit
Context	<b>configure filter ipv6-filter string entry number match tcp-flags ns boolean</b>
Tree	<a href="#">ns</a>
Introduced	16.0.R1
Platforms	All

**psh boolean**

Synopsis	Match TCP PSH as per value of the PSH TCP flag bit
Context	<b>configure filter ipv6-filter string entry number match tcp-flags psh boolean</b>
Tree	<a href="#">psh</a>
Introduced	16.0.R1
Platforms	All

**rst boolean**

Synopsis	Match TCP RST as per value of the RST TCP flag bit
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Context	<b>configure filter ipv6-filter string entry number match tcp-flags rst boolean</b>
Tree	<a href="#">rst</a>
Introduced	16.0.R1
Platforms	All

**syn boolean**

Synopsis	Match TCP SYN as per value of the SYN TCP flag bit
Context	<b>configure filter ipv6-filter string entry number match tcp-flags syn boolean</b>
Tree	<a href="#">syn</a>
Introduced	16.0.R1
Platforms	All

**urg boolean**

Synopsis	Match TCP URG as per value of the URG TCP flag bit
Context	<b>configure filter ipv6-filter string entry number match tcp-flags urg boolean</b>
Tree	<a href="#">urg</a>
Introduced	16.0.R1
Platforms	All

**pbr-down-action-override keyword**

Synopsis	Action when PBR or PBF target for this entry is not available
Context	<b>configure filter ipv6-filter string entry number pbr-down-action-override keyword</b>
Tree	<a href="#">pbr-down-action-override</a>
Options	drop, forward, filter-default-action
Introduced	16.0.R1
Platforms	All

**sample-profile reference**

Synopsis	Cflowd sample profile ID to match packets
Context	<b>configure filter ipv6-filter string entry number sample-profile reference</b>
Tree	<a href="#">sample-profile</a>

Description	This command allows traffic matching an IPv4 or IPv6 filter to be sampled for cflowd processing using a specific sample profile ID. This option is only compatible if the associated interface is configured for interface-based sampling and is only supported for ingress sampling. An IP filter can only specify a single alternate sample profile ID for cflowd sampling, but the ID can be used in multiple entries.
Reference	<b>configure</b> <a href="#">cflowd sample-profile</a> <i>number</i>
Introduced	20.10.R1
Platforms	All

### **sticky-dest** (*number* | *keyword*)

Synopsis	Time before action with available PBR or PBF destination and highest priority
Context	<b>configure</b> <a href="#">filter ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <b>sticky-dest</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">sticky-dest</a>
Range	0 to 65535
Units	seconds
Options	no-hold-time-up
Introduced	16.0.R1
Platforms	All

### **filter-id** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IPv6 filter identifier
Context	<b>configure</b> <a href="#">filter ipv6-filter</a> <i>string</i> <a href="#">filter-id</a> <i>number</i>
Tree	<a href="#">filter-id</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

### **scope** *keyword*

Synopsis	Scope of this filter definition
Context	<b>configure</b> <a href="#">filter ipv6-filter</a> <i>string</i> <a href="#">scope</a> <i>keyword</i>

Tree	<a href="#">scope</a>
Options	exclusive, template, embedded, system
Default	template
Introduced	16.0.R1
Platforms	All

### **shared-policer** *boolean*

Synopsis	Share policer among active ports in the LAG
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">shared-policer</a> <i>boolean</i>
Tree	<a href="#">shared-policer</a>
Description	When configured to <b>true</b> , and when the filter policy is configured on a LAG endpoint, the system programs the policer rates in the filter policy per line card FP of the LAG based on the number of active ports in the LAG for each FP.  When configured to <b>false</b> , and when the filter policy is configured on a LAG endpoint, the system programs the same policer rate on each line card FP of the LAG.
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

### **subscriber-mgmt**

Synopsis	Enter the <b>subscriber-mgmt</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">subscriber-mgmt</a>
Tree	<a href="#">subscriber-mgmt</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **host-specific-entry**

Synopsis	Enter the <b>host-specific-entry</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">subscriber-mgmt</a> <a href="#">host-specific-entry</a>
Tree	<a href="#">host-specific-entry</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## credit-control

Synopsis	Enter the <b>credit-control</b> context
Context	<b>configure filter ipv6-filter string subscriber-mgmt host-specific-entry credit-control</b>
Tree	<a href="#">credit-control</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## range

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ipv6-filter string subscriber-mgmt host-specific-entry credit-control range</b>
Tree	<a href="#">range</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## end number

Synopsis	Upper bound of range for credit control filter entries
Context	<b>configure filter ipv6-filter string subscriber-mgmt host-specific-entry credit-control range end number</b>
Tree	<a href="#">end</a>
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## start number

Synopsis	Lower bound of range for credit control filter entries
Context	<b>configure filter ipv6-filter string subscriber-mgmt host-specific-entry credit-control range start number</b>
Tree	<a href="#">start</a>
Range	1 to 2097151
Notes	This element is mandatory.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## filter-rule

Synopsis	Enter the <b>filter-rule</b> context
Context	<b>configure filter ipv6-filter string subscriber-mgmt host-specific-entry filter-rule</b>
Tree	<a href="#">filter-rule</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## range

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ipv6-filter string subscriber-mgmt host-specific-entry filter-rule range</b>
Tree	<a href="#">range</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## end number

Synopsis	Upper bound of range for inserting filter rule entries
Context	<b>configure filter ipv6-filter string subscriber-mgmt host-specific-entry filter-rule range end number</b>
Tree	<a href="#">end</a>
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## start number

Synopsis	Lower bound of range for inserting filter rule entries
Context	<b>configure filter ipv6-filter string subscriber-mgmt host-specific-entry filter-rule range start number</b>
Tree	<a href="#">start</a>

Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## watermark

Synopsis	Enter the <b>watermark</b> context
Context	<b>configure filter ipv6-filter string subscriber-mgmt host-specific-entry watermark</b>
Tree	<a href="#">watermark</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## high number

Synopsis	High watermark for host-specific entries, to raise a table full alarm
Context	<b>configure filter ipv6-filter string subscriber-mgmt host-specific-entry watermark high number</b>
Tree	<a href="#">high</a>
Range	0 to 100
Default	95
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## low number

Synopsis	Low watermark for host-specific entries, to clear a table full alarm
Context	<b>configure filter ipv6-filter string subscriber-mgmt host-specific-entry watermark low number</b>
Tree	<a href="#">low</a>
Range	0 to 100
Default	90
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## shared-entry

Synopsis	Enter the <b>shared-entry</b> context
Context	<b>configure filter ipv6-filter string subscriber-mgmt shared-entry</b>
Tree	<a href="#">shared-entry</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## filter-rule

Synopsis	Enter the <b>filter-rule</b> context
Context	<b>configure filter ipv6-filter string subscriber-mgmt shared-entry filter-rule</b>
Tree	<a href="#">filter-rule</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## range

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ipv6-filter string subscriber-mgmt shared-entry filter-rule range</b>
Tree	<a href="#">range</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## end number

Synopsis	Upper bound of range for inserting shared host rules
Context	<b>configure filter ipv6-filter string subscriber-mgmt shared-entry filter-rule range end number</b>
Tree	<a href="#">end</a>
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **start number**

Synopsis	Lower bound of range for inserting shared host rules
Context	<b>configure filter ipv6-filter string subscriber-mgmt shared-entry filter-rule range start number</b>
Tree	<a href="#">start</a>
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pcc-rule**

Synopsis	Enter the <b>pcc-rule</b> context
Context	<b>configure filter ipv6-filter string subscriber-mgmt shared-entry pcc-rule</b>
Tree	<a href="#">pcc-rule</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ipv6-filter string subscriber-mgmt shared-entry pcc-rule range</b>
Tree	<a href="#">range</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **end number**

Synopsis	Upper bound of the range for PCC rule filter entries
Context	<b>configure filter ipv6-filter string subscriber-mgmt shared-entry pcc-rule range end number</b>
Tree	<a href="#">end</a>
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **start number**

Synopsis Lower bound of the range for PCC rule filter entries

Context **configure filter ipv6-filter string subscriber-mgmt shared-entry pcc-rule range start number**

Tree [start](#)

Range 1 to 2097151

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **watermark**

Synopsis Enable the **watermark** context

Context **configure filter ipv6-filter string subscriber-mgmt shared-entry watermark**

Tree [watermark](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **high number**

Synopsis Limit of RADIUS shared filters before generating high watermark notification

Context **configure filter ipv6-filter string subscriber-mgmt shared-entry watermark high number**

Tree [high](#)

Range 1 to 8000

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **low number**

Synopsis Limit of RADIUS or Diameter shared filters before clearing high watermark notification

Context **configure filter ipv6-filter string subscriber-mgmt shared-entry watermark low number**

Tree	<a href="#">low</a>
Range	0 to 7999
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **type** *keyword*

Synopsis	Set of match criteria for the filter policy
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">type</a> <i>keyword</i>
Tree	<a href="#">type</a>
Description	This command configures the filter policy type that defines the list of match criteria supported in a filter policy.
Options	normal, src-mac, packet-length, destination-class
Default	normal
Introduced	19.5.R1
Platforms	All

### **log** [[log-id](#)] *number*

Synopsis	Enter the <b>log</b> list instance
Context	<b>configure</b> <a href="#">filter</a> <a href="#">log</a> <i>number</i>
Tree	<a href="#">log</a>
Introduced	16.0.R1
Platforms	All

### **[log-id]** *number*

Synopsis	Filter log identifier
Context	<b>configure</b> <a href="#">filter</a> <a href="#">log</a> <i>number</i>
Tree	<a href="#">log</a>
Range	101 to 199
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of filter logging
Context	<b>configure filter log number admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure filter log number description string</b>
Tree	<a href="#">description</a>
String Length	0 to 80
Introduced	16.0.R1
Platforms	All

**destination**

Synopsis	Enter the <b>destination</b> context
Context	<b>configure filter log number destination</b>
Tree	<a href="#">destination</a>
Introduced	16.0.R1
Platforms	All

**memory**

Synopsis	Enter the <b>memory</b> context
Context	<b>configure filter log number destination memory</b>
Tree	<a href="#">memory</a>
Notes	The following elements are part of a choice: <b>memory</b> or <b>syslog</b> .
Introduced	16.0.R1
Platforms	All

**max-entries** *number*

Synopsis	Maximum number of memory entries that the log can store
Context	<b>configure filter log number destination memory max-entries number</b>
Tree	<a href="#">max-entries</a>
Range	1 to 50000
Default	1000
Introduced	16.0.R1
Platforms	All

**stop-on-full** *boolean*

Synopsis	Stop logging when maximum number of memory entries is reached or wrap-around is used
Context	<b>configure filter log number destination memory stop-on-full boolean</b>
Tree	<a href="#">stop-on-full</a>
Default	false
Introduced	16.0.R1
Platforms	All

**syslog**

Synopsis	Enter the <b>syslog</b> context
Context	<b>configure filter log number destination syslog</b>
Tree	<a href="#">syslog</a>
Notes	The following elements are part of a choice: <b>memory</b> or <b>syslog</b> .
Introduced	16.0.R1
Platforms	All

**name** *reference*

Synopsis	Syslog server definition ID
Context	<b>configure filter log number destination syslog name reference</b>
Tree	<a href="#">name</a>
Reference	<b>configure log syslog string</b>

Introduced 21.2.R1  
 Platforms All

### summary

Synopsis Enter the **summary** context  
 Context **configure filter log number destination syslog summary**  
 Tree [summary](#)  
 Introduced 16.0.R1  
 Platforms All

### admin-state *keyword*

Synopsis Administrative state of filter log summarization  
 Context **configure filter log number destination syslog summary admin-state keyword**  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 16.0.R1  
 Platforms All

### summary-crit *keyword*

Synopsis Summary for filter log entries  
 Context **configure filter log number destination syslog summary summary-crit keyword**  
 Tree [summary-crit](#)  
 Options src-addr, dst-addr  
 Default src-addr  
 Introduced 16.0.R1  
 Platforms All

### mac-filter [[filter-name](#)] *string*

Synopsis Enter the **mac-filter** list instance  
 Context **configure filter mac-filter string**

---

Tree	<a href="#">mac-filter</a>
Introduced	16.0.R1
Platforms	All

**[filter-name]** *string*

Synopsis	Filter name
Context	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <i>string</i>
Tree	<a href="#">mac-filter</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**default-action** *keyword*

Synopsis	Action for packets that do not match any entry
Context	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <i>string</i> <b>default-action</b> <i>keyword</i>
Tree	<a href="#">default-action</a>
Options	drop, accept
Default	drop
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

## embed

Synopsis	Enter the <b>embed</b> context
Context	<b>configure filter mac-filter string embed</b>
Tree	<b>embed</b>
Description	Commands in this context embed a previously defined MAC embedded filter policy or Hybrid OpenFlow switch instance into an exclusive, template, or system filter policy at the specified offset value. Rules derived from the BGP FlowSpec can also be embedded into template filter policies only.  For MAC filters, embedding is supported for VSD filters or filter entries only.
Introduced	16.0.R1
Platforms	All

## entry [entry-id] number

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure filter mac-filter string entry number</b>
Tree	<b>entry</b>
Introduced	16.0.R1
Platforms	All

## [entry-id] number

Synopsis	ID for a match criteria and the corresponding action
Context	<b>configure filter mac-filter string entry number</b>
Tree	<b>entry</b>
Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## action

Synopsis	Enable the <b>action</b> context
Context	<b>configure filter mac-filter string entry number action</b>
Tree	<b>action</b>
Introduced	16.0.R1

Platforms All

## accept

Synopsis Accept regular routing to forward a matching packet

Context **configure filter mac-filter string entry number action accept**

Tree [accept](#)

Notes The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **http-redirect**, or **ignore-match**.

Introduced 16.0.R1

Platforms All

## drop

Synopsis Drop a packet matching this entry

Context **configure filter mac-filter string entry number action drop**

Tree [drop](#)

Notes The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **http-redirect**, or **ignore-match**.

Introduced 16.0.R1

Platforms All

## forward

Synopsis Enter the **forward** context

Context **configure filter mac-filter string entry number action forward**

Tree [forward](#)

Notes The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **http-redirect**, or **ignore-match**.

Introduced 16.0.R1

Platforms All

## esi-l2

Synopsis Enable the **esi-l2** context

Context **configure filter mac-filter string entry number action forward esi-l2**



Tree	<a href="#">esi-l2</a>
Notes	The following elements are part of a choice: <b>esi-l2</b> , <b>sap</b> , or <b>sdp</b> .
Introduced	16.0.R1
Platforms	All

### **esi-value string**

Synopsis	ESI of the first ESI-identified appliance
Context	<b>configure filter mac-filter string entry number action forward esi-l2 esi-value string</b>
Tree	<a href="#">esi-value</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **vpls reference**

Synopsis	VPLS service name
Context	<b>configure filter mac-filter string entry number action forward esi-l2 vpls reference</b>
Tree	<a href="#">vpls</a>
Reference	<b>configure service vpls string</b>
Notes	This element is mandatory.
Introduced	16.0.R3
Platforms	All

### **sap**

Synopsis	Enable the <b>sap</b> context
Context	<b>configure filter mac-filter string entry number action forward sap</b>
Tree	<a href="#">sap</a>
Notes	The following elements are part of a choice: <b>esi-l2</b> , <b>sap</b> , or <b>sdp</b> .
Introduced	16.0.R1
Platforms	All

**sap-id reference**

Synopsis	VPLS Ethernet SAP ID used to forward matching packets
Context	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forward</a> <a href="#">sap</a> <a href="#">sap-id</a> <i>reference</i>
Tree	<a href="#">sap-id</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**vpls reference**

Synopsis	VPLS associated with the SAP
Context	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forward</a> <a href="#">sap</a> <a href="#">vpls</a> <i>reference</i>
Tree	<a href="#">vpls</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**sdp**

Synopsis	Enable the <b>sdp</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forward</a> <a href="#">sdp</a>
Tree	<a href="#">sdp</a>
Notes	The following elements are part of a choice: <b>esi-l2</b> , <b>sap</b> , or <b>sdp</b> .
Introduced	16.0.R1
Platforms	All

**sdp-bind-id string**

Synopsis	VPLS SDP bind ID used to forward matching packets
Context	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forward</a> <a href="#">sdp</a> <a href="#">sdp-bind-id</a> <i>string</i>
Tree	<a href="#">sdp-bind-id</a>
String Length	3 to 16

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **vpls reference**

Synopsis	VPLS associated with the SDP
Context	<b>configure</b> <a href="#">filter mac-filter string entry number action forward sdp vpls reference</a>
Tree	<a href="#">vpls</a>
Reference	<b>configure</b> <a href="#">service vpls string</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **http-redirect**

Synopsis	Enable the <b>http-redirect</b> context
Context	<b>configure</b> <a href="#">filter mac-filter string entry number action http-redirect</a>
Tree	<a href="#">http-redirect</a>
Notes	The following elements are part of a mandatory choice: <b>accept</b> , <b>drop</b> , <b>forward</b> , <b>http-redirect</b> , or <b>ignore-match</b> .
Introduced	16.0.R1
Platforms	All

### **url string**



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	URL that is used for redirecting
Context	<b>configure</b> <a href="#">filter mac-filter string entry number action http-redirect url string</a>
Tree	<a href="#">url</a>
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

## ignore-match

Synopsis Ignore match criteria for the entry

Context **configure** filter mac-filter string entry number action ignore-match

Tree [ignore-match](#)

Notes The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **http-redirect**, or **ignore-match**.

Introduced 16.0.R1

Platforms All

## rate-limit

Synopsis Enable the **rate-limit** context

Context **configure** filter mac-filter string entry number action rate-limit

Tree [rate-limit](#)

Introduced 16.0.R1

Platforms All

## pir (*number* | *keyword*)

Synopsis Peak information rate

Context **configure** filter mac-filter string entry number action rate-limit pir (*number* | *keyword*)

Tree [pir](#)

Range 0 to 2000000000

Units kilobps

Options max

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

## secondary

Synopsis Enable the **secondary** context

Context	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">secondary</a>
Tree	<a href="#">secondary</a>
Introduced	16.0.R1
Platforms	All

## forward

Synopsis	Enter the <b>forward</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">secondary</a> <a href="#">forward</a>
Tree	<a href="#">forward</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## sap

Synopsis	Enable the <b>sap</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">secondary</a> <a href="#">forward</a> <a href="#">sap</a>
Tree	<a href="#">sap</a>
Notes	The following elements are part of a choice: <b>sap</b> or <b>sdp</b> .
Introduced	16.0.R1
Platforms	All

## sap-id reference



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SAP ID used to forward packets matching the entry
Context	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">secondary</a> <a href="#">forward</a> <a href="#">sap</a> <a href="#">sap-id</a> <i>reference</i>
Tree	<a href="#">sap-id</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

### **vpls** *reference*

Synopsis VPLS the sdp-bind-id belongs to

Context **configure** [filter](#) [mac-filter](#) *string* [entry](#) *number* [action](#) [secondary](#) [forward](#) [sap](#) [vpls](#) *reference*

Tree [vpls](#)

Reference **configure** [service](#) [vpls](#) *string*

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

### **sdp**

Synopsis Enable the **sdp** context

Context **configure** [filter](#) [mac-filter](#) *string* [entry](#) *number* [action](#) [secondary](#) [forward](#) [sdp](#)

Tree [sdp](#)

Notes The following elements are part of a choice: **sap** or **sdp**.

Introduced 16.0.R1

Platforms All

### **sdp-bind-id** *string*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis VPLS SDP bind ID used to forward matching packets

Context **configure** [filter](#) [mac-filter](#) *string* [entry](#) *number* [action](#) [secondary](#) [forward](#) [sdp](#) [sdp-bind-id](#) *string*

Tree [sdp-bind-id](#)

String Length 3 to 16

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

**vpls reference**

Synopsis	VPLS associated with the SDP
Context	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">secondary</a> <a href="#">forward</a> <a href="#">sdp</a> <a href="#">vpls</a> <i>reference</i>
Tree	<a href="#">vpls</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**log reference**

Synopsis	Log that is used for packets matching this entry
Context	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">log</a> <i>reference</i>
Tree	<a href="#">log</a>
Reference	<b>configure</b> <a href="#">filter</a> <a href="#">log</a> <i>number</i>
Introduced	16.0.R1
Platforms	All

**match**

Synopsis	Enter the <b>match</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a>
Tree	<a href="#">match</a>
Introduced	16.0.R1

Platforms All

## dot1p

Synopsis Enable the **dot1p** context  
 Context **configure filter mac-filter string entry number match dot1p**  
 Tree [dot1p](#)  
 Introduced 16.0.R1  
 Platforms All

## mask number

Synopsis 802.1p mask value used as a MAC filter match criterion  
 Context **configure filter mac-filter string entry number match dot1p mask number**  
 Tree [mask](#)  
 Range 1 to 7  
 Default 7  
 Introduced 16.0.R1  
 Platforms All

## priority number

Synopsis IEEE 802.1p value used as a MAC filter match criterion  
 Context **configure filter mac-filter string entry number match dot1p priority number**  
 Tree [priority](#)  
 Range 0 to 7  
 Notes This element is mandatory.  
 Introduced 16.0.R1  
 Platforms All

## dst-mac

Synopsis Enable the **dst-mac** context  
 Context **configure filter mac-filter string entry number match dst-mac**  
 Tree [dst-mac](#)



Introduced 16.0.R1  
Platforms All

### **address string**

Synopsis MAC address used as the match criterion  
Context **configure filter mac-filter string entry number match dst-mac address string**  
Tree [address](#)  
Notes This element is mandatory.  
Introduced 16.0.R1  
Platforms All

### **mask string**

Synopsis MAC address mask as the match criterion  
Context **configure filter mac-filter string entry number match dst-mac mask string**  
Tree [mask](#)  
Default ff:ff:ff:ff:ff:ff  
Introduced 16.0.R1  
Platforms All

### **etype string**

Synopsis Ethernet type  
Context **configure filter mac-filter string entry number match etype string**  
Tree [etype](#)  
String Length 5 to 6  
Introduced 16.0.R1  
Platforms All

### **frame-type keyword**

Synopsis MAC frame as match criteria  
Context **configure filter mac-filter string entry number match frame-type keyword**  
Tree [frame-type](#)

Options	802dot3, 802dot2-llc, 802dot2-snap, ethernet-ii
Introduced	16.0.R1
Platforms	All

### inner-tag

Synopsis	Enable the <b>inner-tag</b> context
Context	<b>configure</b> filter mac-filter string entry number match inner-tag
Tree	inner-tag
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### mask number

Synopsis	Mask to VID of the inner VLAN tag before comparing it with the inner-tag or outer-tag value
Context	<b>configure</b> filter mac-filter string entry number match inner-tag mask number
Tree	mask
Range	1 to 4095
Default	4095
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### tag number

Synopsis	Matching value against VID of the second or first VLAN tag in the packet carried transparently
Context	<b>configure</b> filter mac-filter string entry number match inner-tag tag number
Tree	tag
Range	0 to 4095
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## isid

Synopsis	Enter the <b>isid</b> context
Context	<b>configure filter mac-filter string entry number match isid</b>
Tree	<b>isid</b>
Introduced	16.0.R1
Platforms	All

## range

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter mac-filter string entry number match isid range</b>
Tree	<b>range</b>
Notes	The following elements are part of a choice: <b>range</b> or <b>value</b> .
Introduced	16.0.R1
Platforms	All

## end number

Synopsis	Upper bound of the ISID range
Context	<b>configure filter mac-filter string entry number match isid range end number</b>
Tree	<b>end</b>
Range	0 to 16777215
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## start number

Synopsis	Lower bound of the ISID range
Context	<b>configure filter mac-filter string entry number match isid range start number</b>
Tree	<b>start</b>
Range	0 to 16777215
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

### **value number**

Synopsis Lowest value of 24-bit service instance identifier for the service matching this entry

Context **configure filter mac-filter string entry number match isid value number**

Tree [value](#)

Range 0 to 16777215

Notes The following elements are part of a choice: **range** or **value**.

Introduced 16.0.R1

Platforms All

### **llc-dsap**

Synopsis Enable the **llc-dsap** context

Context **configure filter mac-filter string entry number match llc-dsap**

Tree [llc-dsap](#)

Introduced 16.0.R1

Platforms All

### **dsap number**

Synopsis DSAP value

Context **configure filter mac-filter string entry number match llc-dsap dsap number**

Tree [dsap](#)

Range 0 to 255

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

### **mask number**

Synopsis Destination SAP mask

Context **configure filter mac-filter string entry number match llc-dsap mask number**

Tree [mask](#)

Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	All

## llc-ssap

Synopsis	Enable the <b>llc-ssap</b> context
Context	<b>configure filter mac-filter string entry number match llc-ssap</b>
Tree	<a href="#">llc-ssap</a>
Introduced	16.0.R1
Platforms	All

## mask number

Synopsis	Source SAP mask
Context	<b>configure filter mac-filter string entry number match llc-ssap mask number</b>
Tree	<a href="#">mask</a>
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	All

## ssap number

Synopsis	Source or destination SAP value
Context	<b>configure filter mac-filter string entry number match llc-ssap ssap number</b>
Tree	<a href="#">ssap</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**outer-tag**

Synopsis	Enable the <b>outer-tag</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">outer-tag</a>
Tree	<a href="#">outer-tag</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**mask number**

Synopsis	Mask to VID of the inner VLAN tag before comparing it with the inner-tag or outer-tag value
Context	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">outer-tag</a> <a href="#">mask</a> <i>number</i>
Tree	<a href="#">mask</a>
Range	1 to 4095
Default	4095
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**tag number**

Synopsis	Matching value against VID of the second or first VLAN tag in the packet carried transparently
Context	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">outer-tag</a> <a href="#">tag</a> <i>number</i>
Tree	<a href="#">tag</a>
Range	0 to 4095
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**snap-oui keyword**

Synopsis	Parameter snap-oui as a MAC filter match criteria
Context	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">snap-oui</a> <i>keyword</i>
Tree	<a href="#">snap-oui</a>
Options	zero, non-zero

---

Introduced	16.0.R1
Platforms	All

### **snap-pid** *number*

Synopsis	Parameter snap-pid as a MAC filter match criteria
Context	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <a href="#">string</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">snap-pid</a> <a href="#">number</a>
Tree	<a href="#">snap-pid</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

### **src-mac**

Synopsis	Enable the <b>src-mac</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <a href="#">string</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">src-mac</a>
Tree	<a href="#">src-mac</a>
Introduced	16.0.R1
Platforms	All

### **address** *string*

Synopsis	MAC address used as the match criterion
Context	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <a href="#">string</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">src-mac</a> <a href="#">address</a> <a href="#">string</a>
Tree	<a href="#">address</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **mask** *string*

Synopsis	MAC address mask as the match criterion
Context	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <a href="#">string</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">src-mac</a> <a href="#">mask</a> <a href="#">string</a>
Tree	<a href="#">mask</a>
Default	ff:ff:ff:ff:ff:ff

Introduced 16.0.R1  
 Platforms All

### **pbr-down-action-override** *keyword*

Synopsis Action when PBR or PBF target for this entry is not available  
 Context **configure** filter mac-filter string entry number pbr-down-action-override keyword  
 Tree pbr-down-action-override  
 Options drop, forward, filter-default-action  
 Introduced 16.0.R1  
 Platforms All

### **sticky-dest** (*number* | *keyword*)

Synopsis Time before action with available PBR or PBF destination and highest priority  
 Context **configure** filter mac-filter string entry number sticky-dest (*number* | *keyword*)  
 Tree sticky-dest  
 Range 0 to 65535  
 Units seconds  
 Options no-hold-time-up  
 Introduced 16.0.R1  
 Platforms All

### **filter-id** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis MAC filter ID  
 Context **configure** filter mac-filter string filter-id number  
 Tree filter-id  
 Range 1 to 65535  
 Introduced 16.0.R1  
 Platforms All



**scope keyword**

Synopsis	Scope of this filter definition
Context	<b>configure filter mac-filter</b> <i>string scope keyword</i>
Tree	<a href="#">scope</a>
Options	exclusive, template, embedded, system
Default	template
Introduced	16.0.R1
Platforms	All

**type keyword****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MAC filter policy
Context	<b>configure filter mac-filter</b> <i>string type keyword</i>
Tree	<a href="#">type</a>
Options	normal, isid, vid
Default	normal
Introduced	16.0.R1
Platforms	All

**match-list**

Synopsis	Enter the <b>match-list</b> context
Context	<b>configure filter match-list</b>
Tree	<a href="#">match-list</a>
Introduced	16.0.R1
Platforms	All

**ip-prefix-list** [[prefix-list-name](#)] *string*

Synopsis	Enter the <b>ip-prefix-list</b> list instance
Context	<b>configure filter match-list ip-prefix-list</b> <i>string</i>

Tree	<a href="#">ip-prefix-list</a>
Introduced	16.0.R1
Platforms	All

**[prefix-list-name]** *string*

Synopsis	IP prefix list name
Context	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">ip-prefix-list</a> <i>string</i>
Tree	<a href="#">ip-prefix-list</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**apply-path**

Synopsis	Enter the <b>apply-path</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">ip-prefix-list</a> <i>string</i> <a href="#">apply-path</a>
Tree	<a href="#">apply-path</a>
Introduced	16.0.R1
Platforms	All

**bgp-peers** [[criterion-index](#)] *number*

Synopsis	Enter the <b>bgp-peers</b> list instance
Context	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">ip-prefix-list</a> <i>string</i> <a href="#">apply-path</a> <a href="#">bgp-peers</a> <i>number</i>
Tree	<a href="#">bgp-peers</a>
Introduced	16.0.R1
Platforms	All

**[criterion-index]** *number*

Synopsis	BGP peers auto-generation configuration index
Context	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">ip-prefix-list</a> <i>string</i> <a href="#">apply-path</a> <a href="#">bgp-peers</a> <i>number</i>
Tree	<a href="#">bgp-peers</a>

Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### group *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Regular expression to match against the base router BGP instance group configuration
Context	<b>configure</b> filter match-list ip-prefix-list <i>string</i> apply-path bgp-peers <i>number</i> group <i>string</i>
Tree	group
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### neighbor *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Regular expression to match against the base router BGP instance neighbor configuration
Context	<b>configure</b> filter match-list ip-prefix-list <i>string</i> apply-path bgp-peers <i>number</i> neighbor <i>string</i>
Tree	neighbor
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**router-instance** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Target routing instance
Context	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">ip-prefix-list</a> <i>string</i> <a href="#">apply-path</a> <a href="#">bgp-peers</a> <i>number</i> <a href="#">router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>
Default	Base
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">ip-prefix-list</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**prefix** [[ip-prefix](#)] *string*

Synopsis	Add a list entry for <b>prefix</b>
Context	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">ip-prefix-list</a> <i>string</i> <a href="#">prefix</a> <i>string</i>
Tree	<a href="#">prefix</a>
Description	<p>Commands in this context add IPv4 prefixes to the prefix match list. Prefixes can overlap IPv4 address space.</p> <p>An IPv4 prefix addition is blocked if resource exhaustion is detected anywhere in the system due to filter policies that use the prefix list.</p>
Max. Instances	8192
Introduced	16.0.R1
Platforms	All

**[ip-prefix] string**

Synopsis	IPv4 prefix to be added to the prefix list
Context	<b>configure</b> <b>filter</b> <b>match-list</b> <b>ip-prefix-list</b> <i>string</i> <b>prefix</b> <i>string</i>
Tree	<a href="#">prefix</a>
Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

**prefix-exclude [ip-prefix] string**

Synopsis	Add a list entry for <b>prefix-exclude</b>
Context	<b>configure</b> <b>filter</b> <b>match-list</b> <b>ip-prefix-list</b> <i>string</i> <b>prefix-exclude</b> <i>string</i>
Tree	<a href="#">prefix-exclude</a>
Description	Commands in this context exclude IPv4 prefixes from the prefix match list. This command is mutually exclusive with the <b>apply-path</b> command.
Max. Instances	512
Introduced	16.0.R4
Platforms	All

**[ip-prefix] string**

Synopsis	IPv4 prefix to be added to the prefix list
Context	<b>configure</b> <b>filter</b> <b>match-list</b> <b>ip-prefix-list</b> <i>string</i> <b>prefix-exclude</b> <i>string</i>
Tree	<a href="#">prefix-exclude</a>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**ipv6-prefix-list [prefix-list-name] string**

Synopsis	Enter the <b>ipv6-prefix-list</b> list instance
Context	<b>configure</b> <b>filter</b> <b>match-list</b> <b>ipv6-prefix-list</b> <i>string</i>
Tree	<a href="#">ipv6-prefix-list</a>
Introduced	16.0.R1

Platforms All

### **[prefix-list-name]** *string*

Synopsis IP prefix list name  
 Context **configure** filter match-list ipv6-prefix-list *string*  
 Tree [ipv6-prefix-list](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **apply-path**

Synopsis Enter the **apply-path** context  
 Context **configure** filter match-list ipv6-prefix-list *string* **apply-path**  
 Tree [apply-path](#)  
 Introduced 16.0.R1  
 Platforms All

### **bgp-peers** [[criterion-index](#)] *number*

Synopsis Enter the **bgp-peers** list instance  
 Context **configure** filter match-list ipv6-prefix-list *string* **apply-path** **bgp-peers** *number*  
 Tree [bgp-peers](#)  
 Introduced 16.0.R1  
 Platforms All

### **[criterion-index]** *number*

Synopsis BGP peers auto-generation configuration index  
 Context **configure** filter match-list ipv6-prefix-list *string* **apply-path** **bgp-peers** *number*  
 Tree [bgp-peers](#)  
 Range 1 to 255  
 Notes This element is part of a list key.

Introduced	16.0.R1
Platforms	All

### group *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Regular expression to match against the base router BGP instance group configuration
Context	<b>configure</b> filter match-list ipv6-prefix-list <i>string</i> apply-path bgp-peers number group <i>string</i>
Tree	group
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### neighbor *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Regular expression to match against the base router BGP instance neighbor configuration
Context	<b>configure</b> filter match-list ipv6-prefix-list <i>string</i> apply-path bgp-peers number neighbor <i>string</i>
Tree	neighbor
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**router-instance** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Target routing instance
Context	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">ipv6-prefix-list</a> <i>string</i> <a href="#">apply-path</a> <a href="#">bgp-peers</a> <i>number</i> <a href="#">router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>
Default	Base
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">ipv6-prefix-list</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**prefix** [[ipv6-prefix](#)] *string*

Synopsis	Add a list entry for <b>prefix</b>
Context	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">ipv6-prefix-list</a> <i>string</i> <a href="#">prefix</a> <i>string</i>
Tree	<a href="#">prefix</a>
Max. Instances	8192
Introduced	16.0.R1
Platforms	All

**[[ipv6-prefix](#)]** *string*

Synopsis	IPv6 prefix to be added to the prefix list
Context	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">ipv6-prefix-list</a> <i>string</i> <a href="#">prefix</a> <i>string</i>



Tree	<a href="#">prefix</a>
Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

### **prefix-exclude** [[ipv6-prefix](#)] *string*

Synopsis	Add a list entry for <b>prefix-exclude</b>
Context	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">ipv6-prefix-list</a> <i>string</i> <a href="#">prefix-exclude</a> <i>string</i>
Tree	<a href="#">prefix-exclude</a>
Description	Commands in this context exclude IPv6 prefixes from the prefix match list. This command is mutually exclusive with the <b>apply-path</b> command.
Max. Instances	512
Introduced	16.0.R4
Platforms	All

### **[ipv6-prefix]** *string*

Synopsis	IPv6 prefix to be added to the prefix list
Context	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">ipv6-prefix-list</a> <i>string</i> <a href="#">prefix-exclude</a> <i>string</i>
Tree	<a href="#">prefix-exclude</a>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **port-list** [[port-list-name](#)] *string*

Synopsis	Enter the <b>port-list</b> list instance
Context	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">port-list</a> <i>string</i>
Tree	<a href="#">port-list</a>
Max. Instances	5120
Introduced	16.0.R1
Platforms	All

**[port-list-name]** *string*

Synopsis	Port list name
Context	<b>configure filter match-list port-list</b> <i>string</i>
Tree	<a href="#">port-list</a>
Description	This command specifies the port list name. If special characters are used (#, \$, spaces, and so on), the string must be enclosed within double quotes.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure filter match-list port-list</b> <i>string description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**port** [[value](#)] *number*

Synopsis	Add a list entry for <b>port</b>
Context	<b>configure filter match-list port-list</b> <i>string port number</i>
Tree	<a href="#">port</a>
Introduced	16.0.R1
Platforms	All

**[value]** *number*

Synopsis	Port value
Context	<b>configure filter match-list port-list</b> <i>string port number</i>
Tree	<a href="#">port</a>
Range	0 to 65535

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **range** *start number end number*

Synopsis	Add a list entry for <b>range</b>
Context	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">port-list</a> <i>string range start number end number</i>
Tree	<a href="#">range</a>
Introduced	16.0.R1
Platforms	All

### **start** *number*

Synopsis	Lower bound of the port list range
Context	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">port-list</a> <i>string range start number end number</i>
Tree	<a href="#">range</a>
Range	0 to 65534
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **end** *number*

Synopsis	Upper bound of the port list range
Context	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">port-list</a> <i>string range start number end number</i>
Tree	<a href="#">range</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **protocol-list** [[protocol-list-name](#)] *string*

Synopsis	Enter the <b>protocol-list</b> list instance
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Context	<b>configure</b> filter match-list protocol-list string
Tree	protocol-list
Max. Instances	512
Introduced	20.7.R1
Platforms	All

### [protocol-list-name] string

Synopsis	Protocol list name
Context	<b>configure</b> filter match-list protocol-list string
Tree	protocol-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

### description string

Synopsis	Text description
Context	<b>configure</b> filter match-list protocol-list string description string
Tree	description
String Length	1 to 80
Introduced	20.7.R1
Platforms	All

### protocol [protocol-id] (number | keyword)

Synopsis	Add a list entry for <b>protocol</b>
Context	<b>configure</b> filter match-list protocol-list string protocol (number   keyword)
Tree	protocol
Max. Instances	32
Introduced	20.7.R1
Platforms	All

**[protocol-id]** (*number* | *keyword*)

Synopsis	IP protocol identifier
Context	<b>configure filter match-list protocol-list string protocol</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">protocol</a>
Range	0 to 255
Options	icmp, igmp, ip, tcp, egg, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

**md-auto-id**

Synopsis	Enter the <b>md-auto-id</b> context
Context	<b>configure filter md-auto-id</b>
Tree	<a href="#">md-auto-id</a>
Introduced	16.0.R1
Platforms	All

**filter-id-range**

Synopsis	Enable the <b>filter-id-range</b> context
Context	<b>configure filter md-auto-id filter-id-range</b>
Tree	<a href="#">filter-id-range</a>
Introduced	16.0.R1
Platforms	All

**end number****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the ID range
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Context	<b>configure filter md-auto-id filter-id-range end</b> <i>number</i>
Tree	<a href="#">end</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**start** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the ID range
Context	<b>configure filter md-auto-id filter-id-range start</b> <i>number</i>
Tree	<a href="#">start</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**redirect-policy** [[redirect-policy-name](#)] *string*

Synopsis	Enter the <b>redirect-policy</b> list instance
Context	<b>configure filter redirect-policy</b> <i>string</i>
Tree	<a href="#">redirect-policy</a>
Introduced	16.0.R1
Platforms	All

**[redirect-policy-name]** *string*

Synopsis	Redirect policy name
Context	<b>configure filter redirect-policy</b> <i>string</i>
Tree	<a href="#">redirect-policy</a>

Description	This command specifies the redirect policy name. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the redirect policy
Context	<b>configure filter redirect-policy</b> <i>string admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure filter redirect-policy</b> <i>string description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **destination** [[destination-address](#)] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Enter the <b>destination</b> list instance
Context	<b>configure filter redirect-policy</b> <i>string destination (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<a href="#">destination</a>
Introduced	16.0.R1
Platforms	All

**[destination-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address and type of destination
Context	<b>configure filter redirect-policy</b> <i>string destination</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">destination</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the destination
Context	<b>configure filter redirect-policy</b> <i>string destination</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure filter redirect-policy</b> <i>string destination</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**ping-test**

Synopsis	Enable the <b>ping-test</b> context
Context	<b>configure filter redirect-policy</b> <i>string destination</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>ping-test</b>



Tree	<a href="#">ping-test</a>
Introduced	16.0.R1
Platforms	All

### **drop-count** *number*

Synopsis	Number of consecutive requests that fail before destination is declared unreachable
Context	<b>configure</b> <a href="#">filter redirect-policy</a> <i>string destination</i> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">ping-test drop-count</a> <i>number</i>
Tree	<a href="#">drop-count</a>
Range	1 to 60
Default	3
Introduced	16.0.R1
Platforms	All

### **hold-down** *number*

Synopsis	Time for the system to be held down if this test has marked it unreachable
Context	<b>configure</b> <a href="#">filter redirect-policy</a> <i>string destination</i> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">ping-test hold-down</a> <i>number</i>
Tree	<a href="#">hold-down</a>
Range	0 to 86400
Units	seconds
Default	0
Introduced	16.0.R1
Platforms	All

### **interval** *number*

Synopsis	Time between consecutive requests which are sent to the far end host
Context	<b>configure</b> <a href="#">filter redirect-policy</a> <i>string destination</i> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">ping-test interval</a> <i>number</i>
Tree	<a href="#">interval</a>
Range	1 to 60
Units	seconds
Default	1

Introduced 16.0.R1  
Platforms All

### **source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Source address to use in the IP packet of the ping test  
Context **configure filter redirect-policy** *string destination* (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **ping-test source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)  
Tree [source-address](#)  
Introduced 16.0.R4  
Platforms All

### **timeout** *number*

Synopsis Time required to receive a response from the far end host  
Context **configure filter redirect-policy** *string destination* (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **ping-test timeout** *number*  
Tree [timeout](#)  
Range 1 to 60  
Units seconds  
Default 1  
Introduced 16.0.R1  
Platforms All

### **priority** *number*

Synopsis Priority for this destination  
Context **configure filter redirect-policy** *string destination* (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **priority** *number*  
Tree [priority](#)  
Range 1 to 255  
Default 100  
Introduced 16.0.R1  
Platforms All

**unicast-rt-test**

Synopsis	Enable the <b>unicast-rt-test</b> context
Context	<b>configure filter redirect-policy</b> <i>string destination</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>unicast-rt-test</b>
Tree	<b>unicast-rt-test</b>
Introduced	16.0.R1
Platforms	All

**notify-dest-change** *boolean*

Synopsis	Send notifications when the active destination changes
Context	<b>configure filter redirect-policy</b> <i>string notify-dest-change</i> <i>boolean</i>
Tree	<b>notify-dest-change</b>
Description	When configured to <b>true</b> , notifications (such as Log and SNMP) are sent when the active destination of a redirect policy changes. No notification is sent when there are no more active destinations (as this scenario is covered by another notification).  When configured to <b>false</b> , the notification generation is disabled.
Default	false
Introduced	16.0.R4
Platforms	All

**router-instance** *string*

Synopsis	Routing context to use for route lookup
Context	<b>configure filter redirect-policy</b> <i>string router-instance</i> <i>string</i>
Tree	<b>router-instance</b>
Introduced	16.0.R1
Platforms	All

**sticky-dest** (*number* | *keyword*)

Synopsis	Time required by system before applying the current best destination as active destination
Context	<b>configure filter redirect-policy</b> <i>string sticky-dest</i> ( <i>number</i>   <i>keyword</i> )
Tree	<b>sticky-dest</b>
Range	0 to 65535

Units	seconds
Options	no-hold-time-up
Introduced	16.0.R1
Platforms	All

### **redirect-policy-binding** [[binding-name](#)] *string*

Synopsis	Enter the <b>redirect-policy-binding</b> list instance
Context	<b>configure</b> <a href="#">filter</a> <a href="#">redirect-policy-binding</a> <i>string</i>
Tree	<a href="#">redirect-policy-binding</a>
Max. Instances	16
Introduced	16.0.R4
Platforms	All

### **[binding-name]** *string*

Synopsis	Binding name
Context	<b>configure</b> <a href="#">filter</a> <a href="#">redirect-policy-binding</a> <i>string</i>
Tree	<a href="#">redirect-policy-binding</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **binding-operator** *keyword*

Synopsis	Logical operator used to obtain the master test result
Context	<b>configure</b> <a href="#">filter</a> <a href="#">redirect-policy-binding</a> <i>string</i> <a href="#">binding-operator</a> <i>keyword</i>
Tree	<a href="#">binding-operator</a>
Description	This command configures the logical operator to use with the destinations' test results to obtain the master test result (the redirect policy binding test result).
Options	and, or
Default	and
Introduced	16.0.R4

Platforms All

### **redirect-policy** [[redirect-policy-name](#)] *reference*

Synopsis Enter the **redirect-policy** list instance  
 Context **configure** **filter** [redirect-policy-binding](#) *string* [redirect-policy](#) *reference*  
 Tree [redirect-policy](#)  
 Introduced 16.0.R4  
 Platforms All

### **[redirect-policy-name]** *reference*

Synopsis Redirect policy name  
 Context **configure** **filter** [redirect-policy-binding](#) *string* [redirect-policy](#) *reference*  
 Tree [redirect-policy](#)  
 Reference **configure** **filter** [redirect-policy](#) *string*  
 Notes This element is part of a list key.  
 Introduced 16.0.R4  
 Platforms All

### **destination** [[destination-address](#)] *reference*

Synopsis Add a list entry for **destination**  
 Context **configure** **filter** [redirect-policy-binding](#) *string* [redirect-policy](#) *reference* [destination](#) *reference*  
 Tree [destination](#)  
 Min. 1  
 Instances  
 Introduced 16.0.R4  
 Platforms All

### **[destination-address]** *reference*

Synopsis IP address of redirect policy destination to binding  
 Context **configure** **filter** [redirect-policy-binding](#) *string* [redirect-policy](#) *reference* [destination](#) *reference*

Tree	<a href="#">destination</a>
Reference	<b>configure filter redirect-policy</b> <i>string destination (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

## system-filter

Synopsis	Enter the <b>system-filter</b> context
Context	<b>configure filter system-filter</b>
Tree	<a href="#">system-filter</a>
Introduced	16.0.R1
Platforms	All

## ip [[ip-filter](#)] *reference*

Synopsis	Add a list entry for <b>ip</b>
Context	<b>configure filter system-filter ip</b> <i>reference</i>
Tree	<a href="#">ip</a>
Max. Instances	1
Introduced	16.0.R1
Platforms	All

## [[ip-filter](#)] *reference*

Synopsis	Active IPv4 system filter policy
Context	<b>configure filter system-filter ip</b> <i>reference</i>
Tree	<a href="#">ip</a>
Reference	<b>configure filter ip-filter</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

**ipv6 [ipv6-filter] reference**

Synopsis	Add a list entry for <b>ipv6</b>
Context	<b>configure filter system-filter ipv6 reference</b>
Tree	<a href="#">ipv6</a>
Max. Instances	1
Introduced	16.0.R1
Platforms	All

**[ipv6-filter] reference**

Synopsis	Active IPv6 system filter policy
Context	<b>configure filter system-filter ipv6 reference</b>
Tree	<a href="#">ipv6</a>
Reference	<b>configure filter ipv6-filter string</b>
Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

### 3.17 fwd-path-ext commands

```

configure
- fwd-path-ext
- apply-groups reference
- apply-groups-exclude reference
- fpe number
- application
- pw-port-extension
- interface-a
- qos
- network-policy reference
- interface-b
- qos
- network-policy reference
- srv6
- interface-a
- qos
- network-policy reference
- interface-b
- mtu number
- qos
- network-policy reference
- type keyword
- sub-mgmt-extension boolean
- vxlan
- router-instance string
- apply-groups reference
- apply-groups-exclude reference
- description string
- multi-path
- path number
- apply-groups reference
- apply-groups-exclude reference
- pxc reference
- xc-lag-a reference
- xc-lag-b reference
- path
- pxc reference
- xc-lag-a reference
- xc-lag-b reference
- sdp-id-range
- apply-groups reference
- apply-groups-exclude reference
- end number
- start number

```



### 3.17.1 fwd-path-ext command descriptions

#### fwd-path-ext

Synopsis	Enter the <b>fwd-path-ext</b> context
Context	<b>configure fwd-path-ext</b>
Tree	<b>fwd-path-ext</b>
Description	Commands in this context configure a Forwarding Path Extension (FPE). Some applications that rely on PXC functionality utilize FPE to simplify the configuration of these applications.
Introduced	16.0.R1
Platforms	All

#### fpe [fpe-id] number

Synopsis	Enter the <b>fpe</b> list instance
Context	<b>configure fwd-path-ext fpe number</b>
Tree	<b>fpe</b>
Description	Commands in this context configure the Forwarding Path Extension (FPE), which associates an application with a PXC (a paired set of PXC sub-ports or a paired set of PXC-based LAGs).
Introduced	16.0.R1
Platforms	All

#### [fpe-id] number

Synopsis	FPE ID
Context	<b>configure fwd-path-ext fpe number</b>
Tree	<b>fpe</b>
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## application

Synopsis	Enter the <b>application</b> context
Context	<b>configure fwd-path-ext fpe number application</b>
Tree	<a href="#">application</a>
Description	Commands in this context configure the attributes of the FPE application.
Introduced	16.0.R1
Platforms	All

## pw-port-extension

Synopsis	Enable the <b>pw-port-extension</b> context
Context	<b>configure fwd-path-ext fpe number application pw-port-extension</b>
Tree	<a href="#">pw-port-extension</a>
Description	Commands in this context configure the type of the cross-connect required to terminate an external tunnel to an anchored PW port. The system automatically builds the internal infrastructure required to perform the tunnel termination on a PW port.  PW ports support the following types of tunnels: <ul style="list-style-type: none"><li>• GRE/MPLS PW with SDP of type MPLS or GRE</li><li>• L2oGRE bridged Ethernet over GRE, where GRE protocol number is 0x6558</li></ul>
Introduced	22.2.R1
Platforms	All

## interface-a

Synopsis	Enter the <b>interface-a</b> context
Context	<b>configure fwd-path-ext fpe number application pw-port-extension interface-a</b>
Tree	<a href="#">interface-a</a>
Description	Commands in this context configure the command options for network interface-a of the PW port extension FPE.
Introduced	22.10.R1
Platforms	All

## qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure fwd-path-ext fpe number application pw-port-extension interface-a qos</b>

Tree	<a href="#">qos</a>
Introduced	22.10.R1
Platforms	All

### **network-policy** *reference*

Synopsis	Network QoS policy applied to the FPE interface
Context	<b>configure</b> <a href="#">fwd-path-ext fpe number application pw-port-extension interface-a qos network-policy reference</a>
Tree	<a href="#">network-policy</a>
Reference	<b>configure</b> <a href="#">qos network string</a>
Introduced	22.10.R1
Platforms	All

### **interface-b**

Synopsis	Enter the <b>interface-b</b> context
Context	<b>configure</b> <a href="#">fwd-path-ext fpe number application pw-port-extension interface-b</a>
Tree	<a href="#">interface-b</a>
Description	Commands in this context configure command options for network interface-b of the PW port extension FPE.
Introduced	22.10.R1
Platforms	All

### **qos**

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">fwd-path-ext fpe number application pw-port-extension interface-b qos</a>
Tree	<a href="#">qos</a>
Introduced	22.10.R1
Platforms	All

### **network-policy** *reference*

Synopsis	Network QoS policy applied to the FPE interface
----------	---

Context	<b>configure fwd-path-ext fpe number application pw-port-extension interface-b qos network-policy reference</b>
Tree	<a href="#">network-policy</a>
Reference	<b>configure qos network string</b>
Introduced	22.10.R1
Platforms	All

## srv6

Synopsis	Enable the <b>srv6</b> context
Context	<b>configure fwd-path-ext fpe number application srv6</b>
Tree	<a href="#">srv6</a>
Description	Commands in this context configure the SRv6 FPE application used for origination or termination of SRv6 tunnels.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## interface-a

Synopsis	Enter the <b>interface-a</b> context
Context	<b>configure fwd-path-ext fpe number application srv6 interface-a</b>
Tree	<a href="#">interface-a</a>
Description	Commands in this context configure the parameters of network interface-a of the SRv6 FPE.
Introduced	21.5.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure fwd-path-ext fpe number application srv6 interface-a qos</b>
Tree	<a href="#">qos</a>
Introduced	21.5.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**network-policy** *reference*

Synopsis	Network QoS policy applied to the FPE interface
Context	<b>configure fwd-path-ext fpe number application srv6 interface-a qos network-policy reference</b>
Tree	<a href="#">network-policy</a>
Reference	<b>configure qos network string</b>
Introduced	21.5.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**interface-b**

Synopsis	Enter the <b>interface-b</b> context
Context	<b>configure fwd-path-ext fpe number application srv6 interface-b</b>
Tree	<a href="#">interface-b</a>
Description	Commands in this context configure the parameters of network interface-b of the SRv6 FPE.
Introduced	21.5.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**mtu** *number*

Synopsis	MTU size of SRv6 origination FPE interface-b
Context	<b>configure fwd-path-ext fpe number application srv6 interface-b mtu number</b>
Tree	<a href="#">mtu</a>
Description	<p>This command configures the Maximum Transfer Unit (MTU) of interface-b of the SRv6 origination FPE.</p> <p>The MTU is used to check if an IPv4 service packet should be fragmented and if an IPv6 service packet should be dropped when tunneled over SRv6.</p> <p>The minimum value is the IPv6 minimum MTU value. The maximum value is set to the maximum Ethernet port MTU (9800) minus 14 bytes for Null Ethernet encapsulation.</p>
Range	0   1280 to 9786
Introduced	21.5.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**qos**

Synopsis	Enter the <b>qos</b> context
Context	<b>configure fwd-path-ext fpe number application srv6 interface-b qos</b>
Tree	<a href="#">qos</a>
Introduced	21.5.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**network-policy reference**

Synopsis	Network QoS policy applied to the FPE interface
Context	<b>configure fwd-path-ext fpe number application srv6 interface-b qos network-policy reference</b>
Tree	<a href="#">network-policy</a>
Reference	<b>configure qos network string</b>
Introduced	21.5.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**type keyword**

Synopsis	SRv6 FPE application type
Context	<b>configure fwd-path-ext fpe number application srv6 type keyword</b>
Tree	<a href="#">type</a>
Description	<p>This command specifies if the SRv6 FPE application is used for origination or termination of SRv6 tunnels.</p> <p>A dedicated SRv6 FPE is required for origination and termination of SRv6 tunnels on services and they cannot share the same FPE.</p> <p>A single FPE can be configured for SRv6 origination. One or more FPEs can be configured for SRv6 termination, where a termination SRv6 FPE is assigned one or more configured locators.</p> <p>Transit SRv6 routers do not require SRv6 FPEs.</p>
Options	origination, termination
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**sub-mgmt-extension** *boolean*

Synopsis	Enable FPE for subscriber management extensions
Context	<b>configure fwd-path-ext fpe number application sub-mgmt-extension boolean</b>
Tree	<a href="#">sub-mgmt-extension</a>
Description	When configured to <b>true</b> , the FPE is used for subscriber management extensions. The FPE can be used for multiple subscriber management applications, but it cannot be used for other applications.  When configured to <b>false</b> , the FPE is not used for subscriber management extensions.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**vxlan**

Synopsis	Enable the <b>vxlan</b> context
Context	<b>configure fwd-path-ext fpe number application vxlan</b>
Tree	<a href="#">vxlan</a>
Introduced	22.2.R1
Platforms	All

**router-instance** *string*

Synopsis	Router instance for VXLAN termination
Context	<b>configure fwd-path-ext fpe number application vxlan router-instance string</b>
Tree	<a href="#">router-instance</a>
Default	Base
Introduced	22.2.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure fwd-path-ext fpe number description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80

Introduced	16.0.R1
Platforms	All

## multi-path

Synopsis	Enable the <b>multi-path</b> context
Context	<b>configure fwd-path-ext fpe number multi-path</b>
Tree	<a href="#">multi-path</a>
Description	Commands in this context configure a multipath FPE that can contain multiple PXC ports or LAGs of PXC ports.
Notes	The following elements are part of a choice: <b>multi-path</b> or <b>path</b> .
Introduced	21.10.R1
Platforms	All

## path [path-id] number

Synopsis	Enter the <b>path</b> list instance
Context	<b>configure fwd-path-ext fpe number multi-path path number</b>
Tree	<a href="#">path</a>
Description	Commands in this context configure a multipath FPE forwarding path. A single path in a multipath FPE can contain a single PXC port or a LAG of PXC ports.
Introduced	21.10.R1
Platforms	All

## [path-id] number

Synopsis	Multipath FPE forwarding path ID
Context	<b>configure fwd-path-ext fpe number multi-path path number</b>
Tree	<a href="#">path</a>
Range	1 to 64
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All



**pxc reference**

Synopsis	Dedicated PXC ID used by the FPE path
Context	<b>configure fwd-path-ext fpe number multi-path path number pxc reference</b>
Tree	<a href="#">pxc</a>
Reference	<b>configure port-xc pxc number</b>
Notes	The following elements are part of a choice: <b>pxc</b> or ( <b>xc-lag-a</b> and <b>xc-lag-b</b> ).
Introduced	21.10.R1
Platforms	All

**xc-lag-a reference**

Synopsis	PXC LAG identifier dedicated to the FPE path
Context	<b>configure fwd-path-ext fpe number multi-path path number xc-lag-a reference</b>
Tree	<a href="#">xc-lag-a</a>
Description	This command specifies the LAG identifier associated with one side of the PXC. The operator can associate <b>xc-lag-a</b> with the LAG containing either supports.a or supports.b. The system does not enforce a match between <b>xc-lag-a</b> and the LAG ID containing supports.a.
Reference	<b>configure lag string</b>
Notes	The following elements are part of a choice: <b>pxc</b> or ( <b>xc-lag-a</b> and <b>xc-lag-b</b> ).
Introduced	21.10.R1
Platforms	All

**xc-lag-b reference**

Synopsis	PXC LAG identifier dedicated to the FPE path
Context	<b>configure fwd-path-ext fpe number multi-path path number xc-lag-b reference</b>
Tree	<a href="#">xc-lag-b</a>
Description	This command specifies the LAG identifier associated with one side of the PXC. The operator can associate <b>xc-lag-b</b> with the LAG containing either supports.a or supports.b. The system does not enforce a match between <b>xc-lag-b</b> and the LAG ID containing supports.b.
Reference	<b>configure lag string</b>
Notes	The following elements are part of a choice: <b>pxc</b> or ( <b>xc-lag-a</b> and <b>xc-lag-b</b> ).
Introduced	21.10.R1

Platforms All

## path

Synopsis Enter the **path** context

Context **configure fwd-path-ext fpe number path**

Tree [path](#)

Notes The following elements are part of a choice: **multi-path** or **path**.

Introduced 16.0.R1

Platforms All

## pxc reference

Synopsis Dedicated PXC ID used by the FPE path

Context **configure fwd-path-ext fpe number path pxc reference**

Tree [pxc](#)

Reference **configure port-xc pxc number**

Notes The following elements are part of a choice: **pxc** or (**xc-lag-a** and **xc-lag-b**).

Introduced 16.0.R1

Platforms All

## xc-lag-a reference

Synopsis PXC LAG identifier dedicated to the FPE path

Context **configure fwd-path-ext fpe number path xc-lag-a reference**

Tree [xc-lag-a](#)

Description This command specifies the LAG identifier associated with one side of the PXC. The operator can associate **xc-lag-a** with the LAG containing either supports.a or supports.b. The system does not enforce a match between **xc-lag-a** and the LAG ID containing supports.a.

Reference **configure lag string**

Notes The following elements are part of a choice: **pxc** or (**xc-lag-a** and **xc-lag-b**).

Introduced 16.0.R4

Platforms All

## **xc-lag-b** reference

Synopsis	PXC LAG identifier dedicated to the FPE path
Context	<b>configure fwd-path-ext fpe number path xc-lag-b reference</b>
Tree	<a href="#">xc-lag-b</a>
Description	This command specifies the LAG identifier associated with one side of the PXC. The operator can associate <b>xc-lag-b</b> with the LAG containing either supports.a or supports.b. The system does not enforce a match between <b>xc-lag-b</b> and the LAG ID containing supports.b.
Reference	<b>configure lag string</b>
Notes	The following elements are part of a choice: <b>pxc</b> or ( <b>xc-lag-a</b> and <b>xc-lag-b</b> ).
Introduced	16.0.R4
Platforms	All

## **sdp-id-range**

Synopsis	Enable the <b>sdp-id-range</b> context
Context	<b>configure fwd-path-ext sdp-id-range</b>
Tree	<a href="#">sdp-id-range</a>
Description	<p>Commands in this context configure the SDP ID range used by the FPE based PW port and VXLAN termination applications.</p> <p>Each configured FPE-based PW port is associated with two internal SDPs (one in each direction) whose IDs are allocated from the configured SDP ID range. When the FPE is associated with VXLAN termination, an internal SDP is allocated from the configured SDP ID range and is used for R-VPLS services that terminate VXLAN IPv6. A spoke SDP per VXLAN IPv6 R-VPLS service is created on that SDP for egress processing of the packets. The SDP ID range cannot be modified if any of its IDs are currently in use.</p>
Introduced	16.0.R1
Platforms	All

## **end number**

Synopsis	Upper bound of the SDP ID range
Context	<b>configure fwd-path-ext sdp-id-range end number</b>
Tree	<a href="#">end</a>
Range	1 to 32767
Notes	This element is mandatory.
Introduced	16.0.R1

---

Platforms All

### **start number**

Synopsis Lower bound of the SDP ID range

Context **configure fwd-path-ext sdp-id-range start number**

Tree [start](#)

Range 1 to 32767

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

## 3.18 group-encryption commands

```
configure
- group-encryption
- apply-groups reference
- apply-groups-exclude reference
- encryption-keygroup number
- active-outbound-security-association reference
- apply-groups reference
- apply-groups-exclude reference
- authentication-algorithm keyword
- description string
- encryption-algorithm keyword
- keygroup-name string
- security-association number
- apply-groups reference
- apply-groups-exclude reference
- authentication-key string
- encryption-key string
- group-encryption-label number
```

### 3.18.1 group-encryption command descriptions

#### group-encryption

Synopsis	Enter the <b>group-encryption</b> context
Context	<b>configure</b> <a href="#">group-encryption</a>
Tree	<a href="#">group-encryption</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

#### encryption-keygroup [id] *number*

Synopsis	Enter the <b>encryption-keygroup</b> list instance
Context	<b>configure</b> <a href="#">group-encryption</a> <a href="#">encryption-keygroup</a> <i>number</i>
Tree	<a href="#">encryption-keygroup</a>
Max. Instances	127
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

#### [id] *number*

Synopsis	Encryption key group ID
Context	<b>configure</b> <a href="#">group-encryption</a> <a href="#">encryption-keygroup</a> <i>number</i>
Tree	<a href="#">encryption-keygroup</a>
Range	1 to 127
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

#### active-outbound-security-association *reference*

Synopsis	SPI to use for egressing packets for the key group
Context	<b>configure</b> <a href="#">group-encryption</a> <a href="#">encryption-keygroup</a> <i>number</i> <a href="#">active-outbound-security-association</a> <i>reference</i>

Tree	<a href="#">active-outbound-security-association</a>
Reference	<b>configure</b> <a href="#">group-encryption</a> <a href="#">encryption-keygroup</a> <i>number</i> <a href="#">security-association</a> <i>number</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **authentication-algorithm** *keyword*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Hashing algorithm used for the authentication function
Context	<b>configure</b> <a href="#">group-encryption</a> <a href="#">encryption-keygroup</a> <i>number</i> <a href="#">authentication-algorithm</a> <i>keyword</i>
Tree	<a href="#">authentication-algorithm</a>
Options	sha256, sha512
Default	sha256
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">group-encryption</a> <a href="#">encryption-keygroup</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **encryption-algorithm** *keyword*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Encryption algorithm for encryption on ESP
Context	<b>configure</b> <a href="#">group-encryption</a> <a href="#">encryption-keygroup</a> <i>number</i> <a href="#">encryption-algorithm</a> <i>keyword</i>

Tree	<a href="#">encryption-algorithm</a>
Options	aes128, aes256
Default	aes128
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **keygroup-name** *string*

Synopsis	Key group name
Context	<b>configure</b> <a href="#">group-encryption</a> <a href="#">encryption-keygroup</a> <i>number</i> <a href="#">keygroup-name</a> <i>string</i>
Tree	<a href="#">keygroup-name</a>
String Length	0 to 64
Default	
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **security-association** [[security-parameter-index](#)] *number*

Synopsis	Enter the <b>security-association</b> list instance
Context	<b>configure</b> <a href="#">group-encryption</a> <a href="#">encryption-keygroup</a> <i>number</i> <a href="#">security-association</a> <i>number</i>
Tree	<a href="#">security-association</a>
Max. Instances	4
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[security-parameter-index]** *number*

Synopsis	Security Parameter Index (SPI)
Context	<b>configure</b> <a href="#">group-encryption</a> <a href="#">encryption-keygroup</a> <i>number</i> <a href="#">security-association</a> <i>number</i>
Tree	<a href="#">security-association</a>
Range	1 to 1023
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



## authentication-key *string*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key used for the authentication algorithm
Context	<b>configure</b> <a href="#">group-encryption encryption-keygroup number security-association number authentication-key string</a>
Tree	<a href="#">authentication-key</a>
String Length	1 to 115
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## encryption-key *string*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key used for the encryption algorithm
Context	<b>configure</b> <a href="#">group-encryption encryption-keygroup number security-association number encryption-key string</a>
Tree	<a href="#">encryption-key</a>
String Length	1 to 71
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## group-encryption-label *number*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Network-wide unique MPLS label for group encryption
Context	<b>configure</b> <a href="#">group-encryption group-encryption-label number</a>

---

Tree	<a href="#">group-encryption-label</a>
Range	32 to 2047
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## 3.19 ipsec commands

```

configure
- ipsec
  - apply-groups reference
  - apply-groups-exclude reference
  - cert-profile string
    - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - entry number
    - apply-groups reference
    - apply-groups-exclude reference
    - cert string
    - key string
    - rsa-signature keyword
    - send-chain
      - ca-profile reference
  - client-db string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - client number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - client-name string
      - credential
      - pre-shared-key string
    - identification
      - idi
        - any boolean
        - fqdn string
        - fqdn-suffix string
        - ipv4-prefix string
        - ipv4-prefix-any boolean
        - ipv6-prefix string
        - ipv6-prefix-any boolean
        - rfc822 string
        - rfc822-suffix string
      - peer-ip-prefix
        - ip-prefix (ipv4-prefix | ipv6-prefix)
        - ipv4-only boolean
        - ipv6-only boolean
    - private-interface string
    - private-service-name string
    - ts-list string
    - tunnel-template number
  - description string
  - match-list
    - idi boolean
    - peer-ip-prefix boolean
  - ike-policy number
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
  - dpd
    - interval number
    - max-retries number
    - reply-only boolean
  - ike-transform reference

```

## configure ipsec ike-policy ike-version-1

- **ike-version-1**
  - **auth-method** *keyword*
  - **ike-mode** *keyword*
  - **own-auth-method** *keyword*
  - **ph1-responder-delete-notify** *boolean*
- **ike-version-2**
  - **auth-method** *keyword*
  - **auto-eap-method** *keyword*
  - **ikev2-fragment**
    - **mtu** *number*
    - **reassembly-timeout** *number*
  - **own-auth-method** *keyword*
  - **own-auto-eap-method** *keyword*
  - **send-idr-after-eap-success** *boolean*
- **ipsec-lifetime** *number*
- **limit-init-exchange**
  - **admin-state** *keyword*
  - **reduced-max-exchange-timeout** (*number* | *keyword*)
- **lockout**
  - **block** (*number* | *keyword*)
  - **duration** *number*
  - **failed-attempts** *number*
  - **max-port-per-ip** *number*
- **match-peer-id-to-cert** *boolean*
- **nat-traversal**
  - **force** *boolean*
  - **force-keep-alive** *boolean*
  - **keep-alive-interval** *number*
- **pfs**
  - **dh-group** *keyword*
- **relay-unsolicited-cfg-attribute**
  - **internal-ip4-address** *boolean*
  - **internal-ip4-dns** *boolean*
  - **internal-ip4-netmask** *boolean*
  - **internal-ip6-address** *boolean*
  - **internal-ip6-dns** *boolean*
- **ike-transform** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **dh-group** *keyword*
  - **ike-auth-algorithm** *keyword*
  - **ike-encryption-algorithm** *keyword*
  - **ike-prf-algorithm** *keyword*
  - **isakmp-lifetime** *number*
- **ipsec-transform** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **esp-auth-algorithm** *keyword*
  - **esp-encryption-algorithm** *keyword*
  - **extended-sequence-number** *boolean*
  - **ipsec-lifetime** *number*
  - **pfs-dh-group** *keyword*
- **ipsec-transport-mode-profile** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **key-exchange**
    - **dynamic**
      - **auto-establish** *boolean*
      - **cert**
        - **cert-profile** *reference*
        - **status-verify**
          - **default-result** *keyword*
          - **primary** *keyword*

configure ipsec ipsec-transport-mode-profile key-exchange dynamic cert status-verify secondary

```

    - secondary keyword
      - trust-anchor-profile reference
    - id
      - fqdn string
      - ipv4 string
      - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
      - ike-policy reference
      - ipsec-transform reference
      - pre-shared-key string
    - max-history-key-records
      - esp number
      - ike number
    - replay-window number
  - radius
    - accounting-policy string
      - apply-groups reference
      - apply-groups-exclude reference
      - include-radius-attribute
        - acct-stats boolean
        - called-station-id boolean
        - calling-station-id boolean
        - framed-ip-addr boolean
        - framed-ipv6-prefix boolean
        - nas-identifier boolean
        - nas-ip-addr boolean
        - nas-port-id boolean
      - radius-server-policy reference
      - update-interval
        - jitter number
        - value number
    - authentication-policy string
      - apply-groups reference
      - apply-groups-exclude reference
      - include-radius-attribute
        - called-station-id boolean
        - calling-station-id boolean
        - client-cert-subject-key-id boolean
        - nas-identifier boolean
        - nas-ip-addr boolean
        - nas-port-id boolean
      - password string
      - radius-server-policy reference
    - show-ipsec-keys boolean
  - static-sa string
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication
      - algorithm keyword
      - key string
    - description string
    - direction keyword
    - protocol keyword
    - spi number
  - trust-anchor-profile string
    - apply-groups reference
    - apply-groups-exclude reference
    - trust-anchor reference
  - ts-list string
    - apply-groups reference
    - apply-groups-exclude reference
    - local
      - entry number
      - address
        - prefix (ipv4-prefix | ipv6-prefix)

```

configure ipsec ts-list local entry address range

```

- range
  - begin (ipv4-address-no-zone | ipv6-address-no-zone)
  - end (ipv4-address-no-zone | ipv6-address-no-zone)
- apply-groups reference
- apply-groups-exclude reference
- protocol
  - any
  - id
    - icmp
      - opaque
      - port-range
        - begin-icmp-code number
        - begin-icmp-type number
        - end-icmp-code number
        - end-icmp-type number
    - icmp6
      - opaque
      - port-range
        - begin-icmp-code number
        - begin-icmp-type number
        - end-icmp-code number
        - end-icmp-type number
    - mipv6
      - opaque
      - port-range
        - begin number
        - end number
    - protocol-id-with-any-port (keyword | number)
  - sctp
    - opaque
    - port-range
      - begin number
      - end number
  - tcp
    - opaque
    - port-range
      - begin number
      - end number
  - udp
    - opaque
    - port-range
      - begin number
      - end number
- remote
  - entry number
    - address
      - prefix (ipv4-prefix | ipv6-prefix)
      - range
        - begin (ipv4-address-no-zone | ipv6-address-no-zone)
        - end (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - protocol
      - any
      - id
        - icmp
          - opaque
          - port-range
            - begin-icmp-code number
            - begin-icmp-type number
            - end-icmp-code number
            - end-icmp-type number
        - icmp6
          - opaque

```

configure ipsec ts-list remote entry protocol id icmp6 port-range

- **port-range**
  - **begin-icmp-code** *number*
  - **begin-icmp-type** *number*
  - **end-icmp-code** *number*
  - **end-icmp-type** *number*
- **mipv6**
  - **opaque**
  - **port-range**
    - **begin** *number*
    - **end** *number*
- **protocol-id-with-any-port** (*keyword* | *number*)
- **sctp**
  - **opaque**
  - **port-range**
    - **begin** *number*
    - **end** *number*
- **tcp**
  - **opaque**
  - **port-range**
    - **begin** *number*
    - **end** *number*
- **udp**
  - **opaque**
  - **port-range**
    - **begin** *number*
    - **end** *number*
- **tunnel-template** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **clear-df-bit** *boolean*
  - **copy-traffic-class-upon-decapsulation** *boolean*
  - **description** *string*
  - **encapsulated-ip-mtu** *number*
  - **icmp-generation**
    - **frag-required**
      - **admin-state** *keyword*
      - **interval** *number*
      - **message-count** *number*
  - **icmp6-generation**
    - **pkt-too-big**
      - **admin-state** *keyword*
      - **interval** *number*
      - **message-count** *number*
  - **ignore-default-route** *boolean*
  - **ip-mtu** *number*
  - **ipsec-transform** *reference*
  - **pmtu-discovery-aging** *number*
  - **private-tcp-mss-adjust** *number*
  - **propagate-pmtu-v4** *boolean*
  - **propagate-pmtu-v6** *boolean*
  - **public-tcp-mss-adjust** (*number* | *keyword*)
  - **replay-window** *number*
  - **sp-reverse-route** *keyword*

### 3.19.1 ipsec command descriptions

#### ipsec

Synopsis	Enter the <b>ipsec</b> context
Context	<b>configure ipsec</b>
Tree	<a href="#">ipsec</a>
Description	Commands in this context configure Internet Protocol Security (IPsec) commands.
Introduced	16.0.R4
Platforms	All

#### cert-profile [[name](#)] *string*

Synopsis	Enter the <b>cert-profile</b> list instance
Context	<b>configure ipsec cert-profile <i>string</i></b>
Tree	<a href="#">cert-profile</a>
Description	Commands in this context configure the certificate profile.
Max. Instances	10200
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

#### [\[name\]](#) *string*

Synopsis	Certificate profile name
Context	<b>configure ipsec cert-profile <i>string</i></b>
Tree	<a href="#">cert-profile</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

#### admin-state *keyword*

Synopsis	Administrative state of the certificate profile
----------	---



Context	<b>configure ipsec cert-profile</b> <i>string admin-state keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure ipsec cert-profile</b> <i>string entry number</i>
Tree	<b>entry</b>
Description	Commands in this context configure the certificate profile entry.
Max. Instances	8
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[id]** *number*

Synopsis	Certificate profile entry ID
Context	<b>configure ipsec cert-profile</b> <i>string entry number</i>
Tree	<b>entry</b>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **cert** *string*

Synopsis	File name of the imported certificate for the entry
Context	<b>configure ipsec cert-profile</b> <i>string entry number cert string</i>
Tree	<b>cert</b>
String Length	1 to 95
Introduced	19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **key string**

Synopsis File name of the imported key used for authentication  
 Context **configure ipsec cert-profile string entry number key string**  
 Tree [key](#)  
 String Length 1 to 95  
 Introduced 19.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rsa-signature keyword**

Synopsis Signature scheme for the RSA key  
 Context **configure ipsec cert-profile string entry number rsa-signature keyword**  
 Tree [rsa-signature](#)  
 Options pkcs1, pss  
 Default pkcs1  
 Introduced 19.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **send-chain**

Synopsis Enter the **send-chain** context  
 Context **configure ipsec cert-profile string entry number send-chain**  
 Tree [send-chain](#)  
 Description Commands in this context allow the system to send additional CA certificates to the peer. These additional CA certificates must be in the certificate chain of the certificate specified by the **cert** command in the same entry.  
 Introduced 19.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ca-profile reference**

Synopsis CA certificate to send to the peer  
 Context **configure ipsec cert-profile string entry number send-chain ca-profile reference**

Tree	<a href="#">ca-profile</a>
Reference	<b>configure</b> <a href="#">system security pki ca-profile</a> <i>string</i>
Max. Instances	7
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **client-db** [[name](#)] *string*

Synopsis	Enter the <b>client-db</b> list instance
Context	<b>configure</b> <a href="#">ipsec client-db</a> <i>string</i>
Tree	<a href="#">client-db</a>
Max. Instances	1000
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis	IPsec client database name
Context	<b>configure</b> <a href="#">ipsec client-db</a> <i>string</i>
Tree	<a href="#">client-db</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the client database
Context	<b>configure</b> <a href="#">ipsec client-db</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **client** [id] *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **client** list instance

Context **configure ipsec client-db** *string client number*

Tree [client](#)

Description Commands in this context configure the IPsec client entry in the client database.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### [id] *number*

Synopsis Client ID

Context **configure ipsec client-db** *string client number*

Tree [client](#)

Range 1 to 8000

Notes This element is part of a list key.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Administrative state of the database client

Context **configure ipsec client-db** *string client number admin-state keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 19.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### client-name *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Client name  
 Context **configure ipsec client-db** *string client number client-name string*  
 Tree [client-name](#)  
 String Length 1 to 32  
 Introduced 19.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### credential



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **credential** context  
 Context **configure ipsec client-db** *string client number credential*  
 Tree [credential](#)  
 Description Commands in this context authenticate peers.  
 Introduced 19.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### pre-shared-key *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Pre-shared key used to authenticate peers  
 Context **configure ipsec client-db** *string client number credential pre-shared-key string*

Tree	<a href="#">pre-shared-key</a>
String Length	1 to 115
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## identification



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>identification</b> context
Context	<b>configure</b> <a href="#">ipsec client-db</a> <i>string</i> <a href="#">client</a> <i>number</i> <a href="#">identification</a>
Tree	<a href="#">identification</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## idi



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>idi</b> context
Context	<b>configure</b> <a href="#">ipsec client-db</a> <i>string</i> <a href="#">client</a> <i>number</i> <a href="#">identification</a> <a href="#">idi</a>
Tree	<a href="#">idi</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## any *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accept any IDi value as a match
Context	<b>configure</b> <a href="#">ipsec client-db</a> <i>string</i> <a href="#">client</a> <i>number</i> <a href="#">identification</a> <a href="#">idi</a> <a href="#">any</a> <i>boolean</i>
Tree	<a href="#">any</a>

Notes	The following elements are part of a mandatory choice: <b>any</b> , <b>fqdn</b> , <b>fqdn-suffix</b> , <b>ipv4-prefix</b> , <b>ipv4-prefix-any</b> , <b>ipv6-prefix</b> , <b>ipv6-prefix-any</b> , <b>rfc822</b> , or <b>rfc822-suffix</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **fqdn string**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FQDN used as the match criteria for the IDi
Context	<b>configure ipsec client-db string client number identification idi fqdn string</b>
Tree	<a href="#">fqdn</a>
String Length	0 to 255
Notes	The following elements are part of a mandatory choice: <b>any</b> , <b>fqdn</b> , <b>fqdn-suffix</b> , <b>ipv4-prefix</b> , <b>ipv4-prefix-any</b> , <b>ipv6-prefix</b> , <b>ipv6-prefix-any</b> , <b>rfc822</b> , or <b>rfc822-suffix</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **fqdn-suffix string**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FQDN suffix used as the match criteria for the IDi
Context	<b>configure ipsec client-db string client number identification idi fqdn-suffix string</b>
Tree	<a href="#">fqdn-suffix</a>
String Length	0 to 255
Notes	The following elements are part of a mandatory choice: <b>any</b> , <b>fqdn</b> , <b>fqdn-suffix</b> , <b>ipv4-prefix</b> , <b>ipv4-prefix-any</b> , <b>ipv6-prefix</b> , <b>ipv6-prefix-any</b> , <b>rfc822</b> , or <b>rfc822-suffix</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ipv4-prefix *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv4 prefix used as the match criteria for the IDi
Context	<b>configure</b> <a href="#">ipsec client-db</a> <i>string</i> <a href="#">client</a> <i>number</i> <a href="#">identification</a> <a href="#">idi</a> <a href="#">ipv4-prefix</a> <i>string</i>
Tree	<a href="#">ipv4-prefix</a>
Notes	The following elements are part of a mandatory choice: <b>any</b> , <b>fqdn</b> , <b>fqdn-suffix</b> , <b>ipv4-prefix</b> , <b>ipv4-prefix-any</b> , <b>ipv6-prefix</b> , <b>ipv6-prefix-any</b> , <b>rfc822</b> , or <b>rfc822-suffix</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ipv4-prefix-any *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accept any valid IPv4 prefix as a match for the IDi
Context	<b>configure</b> <a href="#">ipsec client-db</a> <i>string</i> <a href="#">client</a> <i>number</i> <a href="#">identification</a> <a href="#">idi</a> <a href="#">ipv4-prefix-any</a> <i>boolean</i>
Tree	<a href="#">ipv4-prefix-any</a>
Notes	The following elements are part of a mandatory choice: <b>any</b> , <b>fqdn</b> , <b>fqdn-suffix</b> , <b>ipv4-prefix</b> , <b>ipv4-prefix-any</b> , <b>ipv6-prefix</b> , <b>ipv6-prefix-any</b> , <b>rfc822</b> , or <b>rfc822-suffix</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ipv6-prefix *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 prefix used as the match criteria for the IDi
Context	<b>configure</b> <a href="#">ipsec client-db</a> <i>string</i> <a href="#">client</a> <i>number</i> <a href="#">identification</a> <a href="#">idi</a> <a href="#">ipv6-prefix</a> <i>string</i>
Tree	<a href="#">ipv6-prefix</a>
Notes	The following elements are part of a mandatory choice: <b>any</b> , <b>fqdn</b> , <b>fqdn-suffix</b> , <b>ipv4-prefix</b> , <b>ipv4-prefix-any</b> , <b>ipv6-prefix</b> , <b>ipv6-prefix-any</b> , <b>rfc822</b> , or <b>rfc822-suffix</b> .



Introduced 19.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipv6-prefix-any** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Accept any valid IPv6 prefix as a match for the IDi  
 Context **configure** [ipsec client-db](#) *string* [client](#) *number* [identification](#) [idi](#) **ipv6-prefix-any** *boolean*  
 Tree [ipv6-prefix-any](#)  
 Notes The following elements are part of a mandatory choice: **any**, **fqdn**, **fqdn-suffix**, **ipv4-prefix**, **ipv4-prefix-any**, **ipv6-prefix**, **ipv6-prefix-any**, **rfc822**, or **rfc822-suffix**.  
 Introduced 19.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rfc822** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Email address (RFC 822) used as match criteria for IDi  
 Context **configure** [ipsec client-db](#) *string* [client](#) *number* [identification](#) [idi](#) **rfc822** *string*  
 Tree [rfc822](#)  
 String Length 0 to 255  
 Notes The following elements are part of a mandatory choice: **any**, **fqdn**, **fqdn-suffix**, **ipv4-prefix**, **ipv4-prefix-any**, **ipv6-prefix**, **ipv6-prefix-any**, **rfc822**, or **rfc822-suffix**.  
 Introduced 19.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rfc822-suffix** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Email address domain (RFC 822) as IDi match criteria
Context	<b>configure ipsec client-db</b> <i>string client number identification idi rfc822-suffix string</i>
Tree	<a href="#">rfc822-suffix</a>
String Length	0 to 255
Notes	The following elements are part of a mandatory choice: <b>any</b> , <b>fqdn</b> , <b>fqdn-suffix</b> , <b>ipv4-prefix</b> , <b>ipv4-prefix-any</b> , <b>ipv6-prefix</b> , <b>ipv6-prefix-any</b> , <b>rfc822</b> , or <b>rfc822-suffix</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## peer-ip-prefix



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>peer-ip-prefix</b> context
Context	<b>configure ipsec client-db</b> <i>string client number identification peer-ip-prefix</i>
Tree	<a href="#">peer-ip-prefix</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ip-prefix (*ipv4-prefix* | *ipv6-prefix*)



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP prefix used as the match criteria
Context	<b>configure ipsec client-db</b> <i>string client number identification peer-ip-prefix ip-prefix (ipv4-prefix   ipv6-prefix)</i>
Tree	<a href="#">ip-prefix</a>
Notes	The following elements are part of a mandatory choice: <b>ip-prefix</b> , <b>ipv4-only</b> , or <b>ipv6-only</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ipv4-only *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accept any valid IPv4 address as a match
Context	<b>configure</b> <a href="#">ipsec client-db</a> <i>string</i> <a href="#">client</a> <i>number</i> <a href="#">identification</a> <a href="#">peer-ip-prefix</a> <a href="#">ipv4-only</a> <i>boolean</i>
Tree	<a href="#">ipv4-only</a>
Notes	The following elements are part of a mandatory choice: <b>ip-prefix</b> , <b>ipv4-only</b> , or <b>ipv6-only</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ipv6-only *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accept any valid IPv6 address as a match
Context	<b>configure</b> <a href="#">ipsec client-db</a> <i>string</i> <a href="#">client</a> <i>number</i> <a href="#">identification</a> <a href="#">peer-ip-prefix</a> <a href="#">ipv6-only</a> <i>boolean</i>
Tree	<a href="#">ipv6-only</a>
Notes	The following elements are part of a mandatory choice: <b>ip-prefix</b> , <b>ipv4-only</b> , or <b>ipv6-only</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## private-interface *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Private interface name used for tunnel setup
Context	<b>configure</b> <a href="#">ipsec client-db</a> <i>string</i> <a href="#">client</a> <i>number</i> <a href="#">private-interface</a> <i>string</i>
Tree	<a href="#">private-interface</a>

String Length 1 to 32  
Introduced 19.7.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **private-service-name** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Name of the private service used for tunnel setup  
Context **configure** [ipsec client-db](#) *string* [client](#) *number* **private-service-name** *string*  
Tree [private-service-name](#)  
String Length 1 to 64  
Introduced 19.7.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ts-list** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Traffic selector list used by the tunnel  
Context **configure** [ipsec client-db](#) *string* [client](#) *number* **ts-list** *string*  
Tree [ts-list](#)  
String Length 1 to 32  
Introduced 19.7.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tunnel-template** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Tunnel template ID  
Context **configure** [ipsec client-db](#) *string* [client](#) *number* **tunnel-template** *number*

Tree	<a href="#">tunnel-template</a>
Range	1 to 2048
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">ipsec client-db</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **match-list**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>match-list</b> context
Context	<b>configure</b> <a href="#">ipsec client-db</a> <i>string</i> <a href="#">match-list</a>
Tree	<a href="#">match-list</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **idi** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use IDi type in the IPsec client matching process
Context	<b>configure</b> <a href="#">ipsec client-db</a> <i>string</i> <a href="#">match-list</a> <a href="#">idi</a> <i>boolean</i>
Tree	<a href="#">idi</a>
Default	false
Introduced	19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **peer-ip-prefix** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Use the peer tunnel IP address in the matching process

Context **configure ipsec client-db string match-list peer-ip-prefix** *boolean*

Tree [peer-ip-prefix](#)

Default false

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ike-policy** [*id*] *number*

Synopsis Enter the **ike-policy** list instance

Context **configure ipsec ike-policy** *number*

Tree [ike-policy](#)

Description Commands in this context configure an Internet Key Exchange (IKE) policy.

Max. Instances 2048

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[id]** *number*

Synopsis IKE policy ID

Context **configure ipsec ike-policy** *number*

Tree [ike-policy](#)

Range 1 to 2048

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure ipsec ike-policy</b> <i>number description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dpd**

Synopsis	Enable the <b>dpd</b> context
Context	<b>configure ipsec ike-policy</b> <i>number dpd</i>
Tree	<a href="#">dpd</a>
Description	Commands in this context configure the dead peer detection mechanism.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **interval** *number*

Synopsis	DPD interval
Context	<b>configure ipsec ike-policy</b> <i>number dpd interval number</i>
Tree	<a href="#">interval</a>
Description	This command specifies the DPD interval.  Because more time is necessary to determine if there is incoming traffic, the actual time needed to bring down the tunnel is larger than the DPD interval multiplied by the value configured for maximum retry attempts.
Range	10 to 300
Units	seconds
Default	30
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**max-retries** *number*

Synopsis	Maximum number of retries before the tunnel is removed
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">dpd max-retries</a> <i>number</i>
Tree	<a href="#">max-retries</a>
Range	2 to 5
Default	3
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**reply-only** *boolean*

Synopsis	Initiate DPD request for incoming ESP or IKE packets
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">dpd reply-only</a> <i>boolean</i>
Tree	<a href="#">reply-only</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ike-transform** *reference*

Synopsis	IKE transform instance associated with the IKE policy
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">ike-transform</a> <i>reference</i>
Tree	<a href="#">ike-transform</a>
Description	This command specifies the IKE transform instance associated with the IKE policy. If multiple IDs are specified, the system selects an IKE transform based on the proposal of the peer. If the system is a tunnel initiator, it uses the configured IKE transform to generate the SA payload.
Reference	<b>configure</b> <a href="#">ipsec ike-transform</a> <i>number</i>
Max. Instances	4
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ike-version-1**

Synopsis	Enter the <b>ike-version-1</b> context
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Context	<b>configure ipsec ike-policy</b> <i>number ike-version-1</i>
Tree	<a href="#">ike-version-1</a>
Description	Commands in this context configure the IKE version 1 mode of operation that the IKE policy uses.
Notes	The following elements are part of a choice: <b>ike-version-1</b> or <b>ike-version-2</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **auth-method** *keyword*

Synopsis	Authentication method used with the IKE policy
Context	<b>configure ipsec ike-policy</b> <i>number ike-version-1 auth-method keyword</i>
Tree	<a href="#">auth-method</a>
Options	psk, plain-psk-xauth
Default	psk
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ike-mode** *keyword*

Synopsis	Mode of operation
Context	<b>configure ipsec ike-policy</b> <i>number ike-version-1 ike-mode keyword</i>
Tree	<a href="#">ike-mode</a>
Options	main, aggressive
Default	main
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **own-auth-method** *keyword*

Synopsis	Authentication method used with policy on its own side
Context	<b>configure ipsec ike-policy</b> <i>number ike-version-1 own-auth-method keyword</i>
Tree	<a href="#">own-auth-method</a>
Options	symmetric
Default	symmetric

Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ph1-responder-delete-notify** *boolean*

Synopsis	Send delete notification for IKEv1 phase 1 removal
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">ike-version-1</a> <a href="#">ph1-responder-delete-notify</a> <i>boolean</i>
Tree	<a href="#">ph1-responder-delete-notify</a>
Description	When configured to <b>true</b> , a delete notification is sent to the peer when deleting an IKEv1 phase 1 SA for which it was the responder. When configured to <b>false</b> , no notification is sent.
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ike-version-2**

Synopsis	Enable the <b>ike-version-2</b> context
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">ike-version-2</a>
Tree	<a href="#">ike-version-2</a>
Description	Commands in this context configure the IKE version 2 mode of operation that the IKE policy uses.
Notes	The following elements are part of a choice: <b>ike-version-1</b> or <b>ike-version-2</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **auth-method** *keyword*

Synopsis	Authentication method used with the IKE policy
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">ike-version-2</a> <a href="#">auth-method</a> <i>keyword</i>
Tree	<a href="#">auth-method</a>
Options	psk, cert, psk-radius, cert-radius, eap, auto-eap-radius, auto-eap
Default	psk
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**auto-eap-method** *keyword*

Synopsis	Authentication method used for the remote peer
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">ike-version-2</a> <a href="#">auto-eap-method</a> <i>keyword</i>
Tree	<a href="#">auto-eap-method</a>
Description	This command specifies the behavior for the IKEv2 remote-access tunnel when the authentication method uses EAP or potentially another method to authenticate the remote peer.
Options	psk, cert, psk-or-cert
Default	cert
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ikev2-fragment**

Synopsis	Enable the <b>ikev2-fragment</b> context
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">ike-version-2</a> <a href="#">ikev2-fragment</a>
Tree	<a href="#">ikev2-fragment</a>
Description	Commands in this context configure IKEv2 protocol level fragmentation (RFC 7383).
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mtu** *number*

Synopsis	Maximum size of the IKEv2 packet
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">ike-version-2</a> <a href="#">ikev2-fragment</a> <a href="#">mtu</a> <i>number</i>
Tree	<a href="#">mtu</a>
Range	512 to 9000
Units	octets
Default	1500
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**reassemble-timeout** *number*

Synopsis	Timeout for reassembly of IKEv2 message fragments
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">ike-version-2</a> <a href="#">ikev2-fragment</a> <a href="#">reassemble-timeout</a> <i>number</i>
Tree	<a href="#">reassemble-timeout</a>
Range	1 to 5
Units	seconds
Default	2
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**own-auth-method** *keyword*

Synopsis	Authentication method used with IKE policy on own side
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">ike-version-2</a> <a href="#">own-auth-method</a> <i>keyword</i>
Tree	<a href="#">own-auth-method</a>
Options	symmetric, psk, cert, eap-only
Default	symmetric
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**own-auto-eap-method** *keyword*

Synopsis	Authentication method used on its own side
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">ike-version-2</a> <a href="#">own-auto-eap-method</a> <i>keyword</i>
Tree	<a href="#">own-auto-eap-method</a>
Description	This command specifies the behavior for the IKEv2 remote-access tunnel when the authentication method uses EAP or potentially another method to authenticate the peer.
Options	psk, cert
Default	cert
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**send-idr-after-eap-success** *boolean*

Synopsis	Send IDr payload in last IKE authentication response
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">ike-version-2</a> <a href="#">send-idr-after-eap-success</a> <i>boolean</i>
Tree	<a href="#">send-idr-after-eap-success</a>
Description	When configured to <b>true</b> , the Identification Responder (IDr) payload is added in the last IKE authentication response after an Extensible Authentication Protocol (EAP) Success packet is received. When configured to <b>false</b> , the IDr payload is not included in the last IKE.
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ipsec-lifetime** *number*

Synopsis	Lifetime of the Phase 2 IKE key
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">ipsec-lifetime</a> <i>number</i>
Tree	<a href="#">ipsec-lifetime</a>
Range	1200 to 31536000
Units	seconds
Default	3600
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**limit-init-exchange**

Synopsis	Enter the <b>limit-init-exchange</b> context
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">limit-init-exchange</a>
Tree	<a href="#">limit-init-exchange</a>
Description	Commands in this context limit the number of ongoing IKEv2 initial exchanges per tunnel.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of limiting initial IKE exchanges
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Context	<b>configure ipsec ike-policy number limit-init-exchange admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **reduced-max-exchange-timeout** (*number* | *keyword*)

Synopsis	Maximum timeout for in-progress initial IKE exchange
Context	<b>configure ipsec ike-policy number limit-init-exchange reduced-max-exchange-timeout (<i>number</i>   <i>keyword</i>)</b>
Tree	<a href="#">reduced-max-exchange-timeout</a>
Description	This command configures the maximum timeout for the in-progress initial IKE exchange. If a new IKEv2 IKE_SA_INIT request is received when there is an ongoing IKEv2 initial exchange from the same peer, the timeout value of the existing exchange is set to this specified value. If the <b>none</b> option is configured for this command, the timeout value remains unchanged.
Range	2 to 60
Units	seconds
Options	none
Default	2
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **lockout**

Synopsis	Enable the <b>lockout</b> context
Context	<b>configure ipsec ike-policy number lockout</b>
Tree	<a href="#">lockout</a>
Description	Commands in this context specify the lockout mechanism for the IPsec tunnel. These commands apply only when the system acts as a tunnel responder.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**block** (*number* | *keyword*)

Synopsis	Time a client is blocked for failed authentications
Context	<b>configure ipsec ike-policy</b> <i>number</i> <b>lockout block</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">block</a>
Description	This command configures the time the client is blocked if the number of failed authentications exceeds the configured value within the specified duration.
Range	1 to 1440
Units	minutes
Options	infinite
Default	10
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**duration** *number*

Synopsis	Time interval for failed attempts threshold
Context	<b>configure ipsec ike-policy</b> <i>number</i> <b>lockout duration</b> <i>number</i>
Tree	<a href="#">duration</a>
Description	This command specifies the time interval in which the configured failed authentication count must be exceeded to trigger a lockout.
Range	1 to 60
Units	minutes
Default	5
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**failed-attempts** *number*

Synopsis	Maximum failed authentications allowed in the duration
Context	<b>configure ipsec ike-policy</b> <i>number</i> <b>lockout failed-attempts</b> <i>number</i>
Tree	<a href="#">failed-attempts</a>
Range	1 to 64
Default	3
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**max-port-per-ip** *number*

Synopsis	Maximum number of ports allowed under same IP address
Context	<b>configure ipsec ike-policy</b> <i>number</i> <b>lockout max-port-per-ip</b> <i>number</i>
Tree	<a href="#">max-port-per-ip</a>
Description	This command configures the maximum number of ports allowed under the same IP address. When the threshold is exceeded and the client is locked out, all ports behind the IP address are blocked.
Range	1 to 32000
Default	16
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**match-peer-id-to-cert** *boolean*

Synopsis	Check IKE peer ID during certificate authentication
Context	<b>configure ipsec ike-policy</b> <i>number</i> <b>match-peer-id-to-cert</b> <i>boolean</i>
Tree	<a href="#">match-peer-id-to-cert</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nat-traversal**

Synopsis	Enable the <b>nat-traversal</b> context
Context	<b>configure ipsec ike-policy</b> <i>number</i> <b>nat-traversal</b>
Tree	<a href="#">nat-traversal</a>
Description	Commands in this context configure the Network Address Translation Traversal (NAT-T) functionality.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**force** *boolean*

Synopsis	Enable NAT-T in forced mode
Context	<b>configure ipsec ike-policy</b> <i>number</i> <b>nat-traversal force</b> <i>boolean</i>



Tree	<a href="#">force</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **force-keep-alive** *boolean*

Synopsis	Continue sending keepalive packets (no expiry)
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">nat-traversal</a> <a href="#">force-keep-alive</a> <i>boolean</i>
Tree	<a href="#">force-keep-alive</a>
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **keep-alive-interval** *number*

Synopsis	Keepalive interval for NAT-T
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">nat-traversal</a> <a href="#">keep-alive-interval</a> <i>number</i>
Tree	<a href="#">keep-alive-interval</a>
Range	120 to 600
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **pfs**

Synopsis	Enable the <b>pfs</b> context
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">pfs</a>
Tree	<a href="#">pfs</a>
Description	Commands in this context configure perfect forward secrecy on the IPsec tunnel using the policy. PFS provides for a new Diffie-Hellman (DH) key exchange each time the Security Association (SA) key is renegotiated. When the SA key expires, another key is generated (if the SA remains up).
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dh-group** *keyword*

Synopsis	Diffie-Helman group used to calculate session keys
Context	<b>configure ipsec ike-policy number pfs dh-group keyword</b>
Tree	<a href="#">dh-group</a>
Description	This command specifies which DH group to use for calculating session keys. More bits provide a higher level of security, but require more processing.
Options	group-1, group-2, group-5, group-14, group-15, group-19, group-20, group-21
Default	group-2
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **relay-unsolicited-cfg-attribute**

Synopsis	Enter the <b>relay-unsolicited-cfg-attribute</b> context
Context	<b>configure ipsec ike-policy number relay-unsolicited-cfg-attribute</b>
Tree	<a href="#">relay-unsolicited-cfg-attribute</a>
Description	Commands in this context configure attributes returned from the source (such as a RADIUS server) that are returned to the IKEv2 remote-access tunnel client regardless if the client has requested the attribute in the CFG_REQUEST payload.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **internal-ip4-address** *boolean*

Synopsis	Return the IPv4 address from the source to the client
Context	<b>configure ipsec ike-policy number relay-unsolicited-cfg-attribute internal-ip4-address boolean</b>
Tree	<a href="#">internal-ip4-address</a>
Description	When configured to <b>true</b> , the system returns the IPv4 address from the source (such as a RADIUS server) to the IKEv2 remote-access tunnel client regardless if the client has requested the address in the CFG_REQUEST payload.
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### internal-ip4-dns *boolean*

Synopsis	Return IPv4 DNS server address from source to client
Context	<b>configure</b> <a href="#">ipsec ike-policy number relay-unsolicited-cfg-attribute internal-ip4-dns</a> <i>boolean</i>
Tree	<a href="#">internal-ip4-dns</a>
Description	When configured to <b>true</b> , the system returns the IPv4 DNS server address from the source (such as a RADIUS server) to the IKEv2 remote-access tunnel client regardless if the client has requested the address in the CFG_REQUEST payload.
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### internal-ip4-netmask *boolean*

Synopsis	Return the IPv4 netmask from the source to the client
Context	<b>configure</b> <a href="#">ipsec ike-policy number relay-unsolicited-cfg-attribute internal-ip4-netmask</a> <i>boolean</i>
Tree	<a href="#">internal-ip4-netmask</a>
Description	When configured to <b>true</b> , the system returns the IPv4 netmask from the source (such as a RADIUS server) to the IKEv2 remote-access tunnel client regardless if the client has requested the netmask in the CFG_REQUEST payload.
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### internal-ip6-address *boolean*

Synopsis	Return the IPv6 address from the source to the client
Context	<b>configure</b> <a href="#">ipsec ike-policy number relay-unsolicited-cfg-attribute internal-ip6-address</a> <i>boolean</i>
Tree	<a href="#">internal-ip6-address</a>
Description	When configured to <b>true</b> , the system returns the IPv6 address from the source (such as a RADIUS server) to the IKEv2 remote-access tunnel client regardless if the client has requested the address in the CFG_REQUEST payload.
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**internal-ip6-dns** *boolean*

Synopsis	Return IPv6 DNS server address from source to client
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">relay-unsolicited-cfg-attribute</a> <a href="#">internal-ip6-dns</a> <i>boolean</i>
Tree	<a href="#">internal-ip6-dns</a>
Description	When configured to <b>true</b> , the system returns the IPv6 DNS server address from the source (such as a RADIUS server) to the IKEv2 remote-access tunnel client regardless if the client has requested the address in the CFG_REQUEST payload.
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ike-transform** [*id*] *number*

Synopsis	Enter the <b>ike-transform</b> list instance
Context	<b>configure</b> <a href="#">ipsec ike-transform</a> <i>number</i>
Tree	<a href="#">ike-transform</a>
Max. Instances	4096
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[id]** *number*

Synopsis	IKE transform instance ID
Context	<b>configure</b> <a href="#">ipsec ike-transform</a> <i>number</i>
Tree	<a href="#">ike-transform</a>
Range	1 to 4096
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**dh-group** *keyword*

Synopsis	Diffie-Helman group used to calculate session keys
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Context	<b>configure ipsec ike-transform</b> <i>number dh-group keyword</i>
Tree	<a href="#">dh-group</a>
Options	group-1, group-2, group-5, group-14, group-15, group-19, group-20, group-21
Default	group-2
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ike-auth-algorithm** *keyword*

Synopsis	IKE authentication algorithm for IKE transform instance
Context	<b>configure ipsec ike-transform</b> <i>number ike-auth-algorithm keyword</i>
Tree	<a href="#">ike-auth-algorithm</a>
Options	md-5, sha-1, sha-256, sha-384, sha-512, aes-xcbc, auth-encryption
Default	sha-1
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ike-encryption-algorithm** *keyword*

Synopsis	IKE encryption algorithm for the IKE transform instance
Context	<b>configure ipsec ike-transform</b> <i>number ike-encryption-algorithm keyword</i>
Tree	<a href="#">ike-encryption-algorithm</a>
Options	des, des-3, aes-128, aes-192, aes-256, aes128-gcm8, aes128-gcm16, aes256-gcm8, aes256-gcm16
Default	aes-128
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ike-prf-algorithm** *keyword*

Synopsis	PRF algorithm for the IKE transform instance
Context	<b>configure ipsec ike-transform</b> <i>number ike-prf-algorithm keyword</i>
Tree	<a href="#">ike-prf-algorithm</a>
Description	This command specifies the pseudo-random function algorithm used for IKE security association.

If an encrypted algorithm such as AES-GCM is used for the IKE encryption algorithm, **same-as-auth** cannot be used for the IKE PRF algorithm.

Options	md-5, sha-1, sha-256, sha-384, sha-512, aes-xcbc, same-as-auth
Default	same-as-auth
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **isakmp-lifetime** *number*

Synopsis	Phase 1 lifetime for the IKE transform instance
Context	<b>configure</b> <a href="#">ipsec ike-transform</a> <i>number</i> <a href="#">isakmp-lifetime</a> <i>number</i>
Tree	<a href="#">isakmp-lifetime</a>
Range	1200 to 31536000
Units	seconds
Default	86400
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipsec-transform** [*id*] *number*

Synopsis	Enter the <b>ipsec-transform</b> list instance
Context	<b>configure</b> <a href="#">ipsec ipsec-transform</a> <i>number</i>
Tree	<a href="#">ipsec-transform</a>
Description	<p>Commands in this context create an IPsec transform policy. IPsec transform policies can be shared. A change to the IPsec transform is allowed at any time. The change does not impact tunnels that have been established until they are renegotiated. If the change is required immediately, the tunnel must be cleared (reset) for force renegotiation.</p> <p>IPsec transform policy assignments to a tunnel require the tunnel to be shut down.</p>
Max. Instances	2048
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[id]** *number*

Synopsis	IPsec transform policy ID
Context	<b>configure</b> <a href="#">ipsec ipsec-transform</a> <i>number</i>

Tree	<a href="#">ipsec-transform</a>
Range	1 to 2048
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **esp-auth-algorithm** *keyword*

Synopsis	Encapsulating Security Payload (ESP) authentication
Context	<b>configure</b> <a href="#">ipsec</a> <a href="#">ipsec-transform</a> <i>number</i> <a href="#">esp-auth-algorithm</a> <i>keyword</i>
Tree	<a href="#">esp-auth-algorithm</a>
Description	This command specifies the hashing algorithm used for the authentication function. Both ends of a manually configured tunnel must share the same configuration for the IPsec tunnel to enter the operational state.
Options	null, md-5, sha-1, sha-256, sha-384, sha-512, aes-xcbc, auth-encryption
Default	sha-1
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **esp-encryption-algorithm** *keyword*

Synopsis	Encryption algorithm for the IPsec transform session
Context	<b>configure</b> <a href="#">ipsec</a> <a href="#">ipsec-transform</a> <i>number</i> <a href="#">esp-encryption-algorithm</a> <i>keyword</i>
Tree	<a href="#">esp-encryption-algorithm</a>
Description	<p>This command specifies the encryption algorithm used for the IPsec session. Encryption applies only to ESP configurations. If encryption is not defined, ESP is not used.</p> <p>Both ends of a manually configured tunnel must share the same encryption algorithm for the IPsec tunnel to enter the operational state.</p> <p>When AES-GCM or AES-GMAC is configured:</p> <ul style="list-style-type: none"> <li>• the authentication encryption must be set to <b>auth-encryption</b></li> <li>• the system does not include the authentication algorithm in the ESP proposal of the SA payload</li> <li>• IPsec transform cannot be used for manual keying</li> </ul>
Options	null, des, des-3, aes-128, aes-192, aes-256, aes128-gcm8, aes128-gcm12, aes128-gcm16, aes192-gcm8, aes192-gcm12, aes192-gcm16, aes256-gcm8, aes256-gcm12, aes256-gcm16, null-aes128-gmac, null-aes192-gmac, null-aes256-gmac

Default	aes-128
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **extended-sequence-number** *boolean*

Synopsis	Enable extended sequence numbering support
Context	<b>configure</b> <a href="#">ipsec ipsec-transform</a> <i>number</i> <a href="#">extended-sequence-number</a> <i>boolean</i>
Tree	<a href="#">extended-sequence-number</a>
Description	When configured to <b>true</b> , this command enables 64-bit extended sequence numbering support. This numbering is used for high throughput CHILD_SA to avoid frequent re-keying caused by sequence numbering wrap around. When configured to <b>false</b> , only 32-bit sequence numbering is supported.
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipsec-lifetime** *number*

Synopsis	Phase 2 lifetime for the IPsec transform session
Context	<b>configure</b> <a href="#">ipsec ipsec-transform</a> <i>number</i> <a href="#">ipsec-lifetime</a> <i>number</i>
Tree	<a href="#">ipsec-lifetime</a>
Description	This command configures the lifetime of the Phase 2 IKE key. When unconfigured, the value is inherited from the IPsec lifetime configured in the corresponding IKE policy configured for the same IPsec gateway or IPsec tunnel.
Range	1200 to 31536000
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **pfs-dh-group** *keyword*

Synopsis	Diffie-Hellman group used for PFS compilation
Context	<b>configure</b> <a href="#">ipsec ipsec-transform</a> <i>number</i> <a href="#">pfs-dh-group</a> <i>keyword</i>
Tree	<a href="#">pfs-dh-group</a>



Description	This command specifies the DH group used for Perfect Forward Secrecy (PFS) compilation during CHILD_SA rekeying. When unconfigured, the value is inherited from the DH group value from the IPsec gateway or IPsec tunnel.
Options	none, group-1, group-2, group-5, group-14, group-15, group-19, group-20, group-21
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipsec-transport-mode-profile** [*name*] *string*

Synopsis	Enter the <b>ipsec-transport-mode-profile</b> list instance
Context	<b>configure ipsec ipsec-transport-mode-profile</b> <i>string</i>
Tree	<a href="#">ipsec-transport-mode-profile</a>
Description	Commands in this context configure IPsec-specific attributes that allow an IP tunnel (for example, GRE) to be protected by using IPsec transport mode.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis	IPsec transport mode profile name string
Context	<b>configure ipsec ipsec-transport-mode-profile</b> <i>string</i>
Tree	<a href="#">ipsec-transport-mode-profile</a>
Description	This command specifies the name of the IPsec transport mode profile.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure ipsec ipsec-transport-mode-profile</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## key-exchange

Synopsis Enter the **key-exchange** context

Context **configure ipsec ipsec-transport-mode-profile** *string* **key-exchange**

Tree [key-exchange](#)

Description Commands in this context configure the key exchange used each time the Security Association (SA) key is renegotiated.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dynamic

Synopsis Enter the **dynamic** context

Context **configure ipsec ipsec-transport-mode-profile** *string* **key-exchange dynamic**

Tree [dynamic](#)

Description Commands in this context configure dynamic keying for the transport mode profile.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## auto-establish *boolean*

Synopsis Attempt to establish a phase 1 exchange automatically

Context **configure ipsec ipsec-transport-mode-profile** *string* **key-exchange dynamic auto-establish** *boolean*

Tree [auto-establish](#)

Default false

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## cert

Synopsis Enter the **cert** context

Context **configure ipsec ipsec-transport-mode-profile** *string* **key-exchange dynamic cert**

Tree [cert](#)

Description	Commands in this context configure the attributes of the dynamic keying certificate.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **cert-profile** *reference*

Synopsis	Certificate profile name
Context	<b>configure ipsec ipsec-transport-mode-profile</b> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic cert</a> <a href="#">cert-profile</a> <i>reference</i>
Tree	<a href="#">cert-profile</a>
Reference	<b>configure ipsec cert-profile</b> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **status-verify**

Synopsis	Enter the <b>status-verify</b> context
Context	<b>configure ipsec ipsec-transport-mode-profile</b> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic cert</a> <a href="#">status-verify</a>
Tree	<a href="#">status-verify</a>
Description	Commands in this context configure attributes of Certificate Status Verification (CSV).
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **default-result** *keyword*

Synopsis	Default result for Certificate Status Verification
Context	<b>configure ipsec ipsec-transport-mode-profile</b> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic cert</a> <a href="#">status-verify</a> <b>default-result</b> <i>keyword</i>
Tree	<a href="#">default-result</a>
Description	This command specifies the default certificate revocation status result to use when all configured CSV methods fail to return a result.
Options	revoked, good
Default	revoked
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**primary keyword**

Synopsis	Primary method of CSV to verify the revocation status
Context	<b>configure ipsec ipsec-transport-mode-profile</b> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic cert status-verify</a> <b>primary</b> <i>keyword</i>
Tree	<a href="#">primary</a>
Description	This command configures the primary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the certificate of the peer.
Options	crl, ocsp
Default	crl
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**secondary keyword**

Synopsis	Secondary method used to verify certificate revocation
Context	<b>configure ipsec ipsec-transport-mode-profile</b> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic cert status-verify</a> <b>secondary</b> <i>keyword</i>
Tree	<a href="#">secondary</a>
Description	This command specifies the secondary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the peer certificate.
Options	none, crl, ocsp
Default	none
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**trust-anchor-profile reference**

Synopsis	Trust anchor profile name
Context	<b>configure ipsec ipsec-transport-mode-profile</b> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic cert trust-anchor-profile</a> <i>reference</i>
Tree	<a href="#">trust-anchor-profile</a>
Reference	<b>configure ipsec trust-anchor-profile</b> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**id**

Synopsis	Enter the <b>id</b> context
Context	<b>configure ipsec ipsec-transport-mode-profile</b> <i>string</i> <b>key-exchange dynamic id</b>
Tree	<b>id</b>
Description	Commands in this context specify the local ID used for IDi or IDr for IKEv2 negotiation. The default behavior depends on the local authentication method as follows: <ul style="list-style-type: none"> <li>• Psk: local tunnel IP address</li> <li>• Cert-auth: subject of the local certificate</li> </ul>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**fqdn string**

Synopsis	FQDN used as the local ID IKE type
Context	<b>configure ipsec ipsec-transport-mode-profile</b> <i>string</i> <b>key-exchange dynamic id fqdn</b> <i>string</i>
Tree	<b>fqdn</b>
String Length	1 to 255
Notes	The following elements are part of a choice: <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ipv4 string**

Synopsis	IPv4 as the local ID type
Context	<b>configure ipsec ipsec-transport-mode-profile</b> <i>string</i> <b>key-exchange dynamic id ipv4</b> <i>string</i>
Tree	<b>ipv4</b>
Notes	The following elements are part of a choice: <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ipv6** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IPv6 used as the local IKE ID type
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Context	<b>configure ipsec ipsec-transport-mode-profile</b> <i>string</i> <b>key-exchange</b> <b>dynamic id ipv6</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">ipv6</a>
Notes	The following elements are part of a choice: <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ike-policy** *reference*

Synopsis	IKE policy ID
Context	<b>configure ipsec ipsec-transport-mode-profile</b> <i>string</i> <b>key-exchange</b> <b>dynamic ike-policy</b> <i>reference</i>
Tree	<a href="#">ike-policy</a>
Description	This command specifies the ID of the IKE policy used for IKE negotiation. The <b>ipsec-transport-mode-profile</b> configuration only supports IKEv2.
Reference	<b>configure ipsec ike-policy</b> <i>number</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipsec-transform** *reference*

Synopsis	IPsec transform IDs used by the dynamic key
Context	<b>configure ipsec ipsec-transport-mode-profile</b> <i>string</i> <b>key-exchange</b> <b>dynamic ipsec-transform</b> <i>reference</i>
Tree	<a href="#">ipsec-transform</a>
Description	This command specifies IPsec transform IDs used for CHILD_SA negotiation.
Reference	<b>configure ipsec ipsec-transform</b> <i>number</i>
Max. Instances	4
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **pre-shared-key** *string*

Synopsis	Pre-shared key for IKE authentication
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Context	<b>configure ipsec ipsec-transport-mode-profile</b> <i>string</i> <b>key-exchange dynamic pre-shared-key</b> <i>string</i>
Tree	<a href="#">pre-shared-key</a>
String Length	1 to 115
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### max-history-key-records

Synopsis	Enter the <b>max-history-key-records</b> context
Context	<b>configure ipsec ipsec-transport-mode-profile</b> <i>string</i> <b>max-history-key-records</b>
Tree	<a href="#">max-history-key-records</a>
Description	Commands in this context configure the settings for recording historical IPsec keys.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### esp number

Synopsis	Maximum number of recent records
Context	<b>configure ipsec ipsec-transport-mode-profile</b> <i>string</i> <b>max-history-key-records esp</b> <i>number</i>
Tree	<a href="#">esp</a>
Range	1 to 48
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### ike number

Synopsis	Maximum number of historical IKE key records
Context	<b>configure ipsec ipsec-transport-mode-profile</b> <i>string</i> <b>max-history-key-records ike</b> <i>number</i>
Tree	<a href="#">ike</a>
Range	1 to 3
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**replay-window** *number*

Synopsis	Anti-replay window size
Context	<b>configure ipsec ipsec-transport-mode-profile</b> <i>string replay-window number</i>
Tree	<a href="#">replay-window</a>
Description	This command specifies the size of an IPsec anti-replay window. If unconfigured, IPsec anti-replay is disabled.
Range	32   64   128   256   512
Units	packets
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**radius**

Synopsis	Enter the <b>radius</b> context
Context	<b>configure ipsec radius</b>
Tree	<a href="#">radius</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**accounting-policy** [*name*] *string*

Synopsis	Enter the <b>accounting-policy</b> list instance
Context	<b>configure ipsec radius accounting-policy</b> <i>string</i>
Tree	<a href="#">accounting-policy</a>
Description	Commands in this context configure RADIUS accounting policies to collect accounting statistics.
Max. Instances	100
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	RADIUS accounting policy name
Context	<b>configure ipsec radius accounting-policy</b> <i>string</i>
Tree	<a href="#">accounting-policy</a>



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String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **include-radius-attribute**

Synopsis	Enter the <b>include-radius-attribute</b> context
Context	<b>configure ipsec radius accounting-policy string include-radius-attribute</b>
Tree	<a href="#">include-radius-attribute</a>
Description	Commands in this context specify the RADIUS attributes that are to be included in the RADIUS Authentication-Request messages.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **acct-stats** *boolean*

Synopsis	Include accounting attributes in RADIUS packets
Context	<b>configure ipsec radius accounting-policy string include-radius-attribute acct-stats boolean</b>
Tree	<a href="#">acct-stats</a>
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **called-station-id** *boolean*

Synopsis	Include the Called-Station-Id attribute
Context	<b>configure ipsec radius accounting-policy string include-radius-attribute called-station-id boolean</b>
Tree	<a href="#">called-station-id</a>
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**calling-station-id** *boolean*

Synopsis	Include the Calling-Station-Id attribute
Context	<b>configure</b> <a href="#">ipsec radius accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">calling-station-id</a> <i>boolean</i>
Tree	<a href="#">calling-station-id</a>
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**framed-ip-addr** *boolean*

Synopsis	Include the Framed-IP-Address attribute
Context	<b>configure</b> <a href="#">ipsec radius accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">framed-ip-addr</a> <i>boolean</i>
Tree	<a href="#">framed-ip-addr</a>
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**framed-ipv6-prefix** *boolean*

Synopsis	Include the Framed-IPv6-Prefix attribute
Context	<b>configure</b> <a href="#">ipsec radius accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">framed-ipv6-prefix</a> <i>boolean</i>
Tree	<a href="#">framed-ipv6-prefix</a>
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nas-identifier** *boolean*

Synopsis	Include the NAS-Identifier attribute
Context	<b>configure</b> <a href="#">ipsec radius accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">nas-identifier</a> <i>boolean</i>
Tree	<a href="#">nas-identifier</a>
Default	false

Introduced 19.7.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nas-ip-addr** *boolean*

Synopsis Include the NAS-IP-Address attribute  
Context **configure** [ipsec radius accounting-policy](#) *string* [include-radius-attribute nas-ip-addr](#) *boolean*  
Tree [nas-ip-addr](#)  
Default false  
Introduced 19.7.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nas-port-id** *boolean*

Synopsis Include the NAS-Port-Id attribute  
Context **configure** [ipsec radius accounting-policy](#) *string* [include-radius-attribute nas-port-id](#) *boolean*  
Tree [nas-port-id](#)  
Default false  
Introduced 19.7.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **radius-server-policy** *reference*

Synopsis Referenced RADIUS server policy  
Context **configure** [ipsec radius accounting-policy](#) *string* [radius-server-policy reference](#)  
Tree [radius-server-policy](#)  
Reference **configure** [aaa radius server-policy](#) *string*  
Introduced 19.7.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **update-interval**

Synopsis Enter the **update-interval** context  
Context **configure** [ipsec radius accounting-policy](#) *string* [update-interval](#)

Tree	<a href="#">update-interval</a>
Description	Commands in this context determine how RADIUS interim-update packets are sent for IKEv2 remote-access tunnels.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **jitter number**

Synopsis	Jitter interval for sending each interim-update packet
Context	<b>configure</b> <a href="#">ipsec radius accounting-policy</a> <i>string</i> <a href="#">update-interval</a> <a href="#">jitter number</a>
Tree	<a href="#">jitter</a>
Description	This command specifies the jitter interval for the RADIUS interim-update packets. When unconfigured, the system uses 10% of the update interval value.
Range	0 to 3600
Units	seconds
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **value number**

Synopsis	Update interval of the RADIUS accounting data
Context	<b>configure</b> <a href="#">ipsec radius accounting-policy</a> <i>string</i> <a href="#">update-interval</a> <a href="#">value number</a>
Tree	<a href="#">value</a>
Description	This command configures the update interval of the RADIUS accounting data. If a value of 0 is configured, no intermediate updates are sent.
Range	0   5 to 259200
Units	minutes
Default	10
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **authentication-policy [name] string**

Synopsis	Enter the <b>authentication-policy</b> list instance
Context	<b>configure</b> <a href="#">ipsec radius authentication-policy</a> <i>string</i>

Tree	<a href="#">authentication-policy</a>
Description	Commands in this context configure the RADIUS authentication policy associated with the IPsec gateway.
Max. Instances	100
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	RADIUS authentication policy name
Context	<b>configure</b> <a href="#">ipsec radius authentication-policy</a> <i>string</i>
Tree	<a href="#">authentication-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**include-radius-attribute**

Synopsis	Enter the <b>include-radius-attribute</b> context
Context	<b>configure</b> <a href="#">ipsec radius authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute</a>
Tree	<a href="#">include-radius-attribute</a>
Description	Commands in this context specify the RADIUS attributes to be included in the RADIUS Authentication-Request messages.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**called-station-id** *boolean*

Synopsis	Include the Called-Station-Id attribute
Context	<b>configure</b> <a href="#">ipsec radius authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">called-station-id</a> <i>boolean</i>
Tree	<a href="#">called-station-id</a>
Default	false
Introduced	19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **calling-station-id** *boolean*

Synopsis Include the Calling-Station-Id attribute

Context **configure ipsec radius authentication-policy** *string* **include-radius-attribute calling-station-id** *boolean*

Tree [calling-station-id](#)

Default false

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **client-cert-subject-key-id** *boolean*

Synopsis Include the Subject Key Identifier

Context **configure ipsec radius authentication-policy** *string* **include-radius-attribute client-cert-subject-key-id** *boolean*

Tree [client-cert-subject-key-id](#)

Description When configured to **true**, the Subject Key Identifier of the certificate of the peer is included in the RADIUS Access-Request packet as VSA: Alc-Subject-Key-Identifier.  
See the *7450 ESS, 7750 SR, 7950 XRS, and VSR RADIUS Attributes Reference Guide* for more information.

Default false

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nas-identifier** *boolean*

Synopsis Include the NAS-Identifier attribute

Context **configure ipsec radius authentication-policy** *string* **include-radius-attribute nas-identifier** *boolean*

Tree [nas-identifier](#)

Default false

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nas-ip-addr** *boolean*

Synopsis	Include the NAS-IP-Address attribute
Context	<b>configure</b> <a href="#">ipsec radius authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">nas-ip-addr</a> <i>boolean</i>
Tree	<a href="#">nas-ip-addr</a>
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nas-port-id** *boolean*

Synopsis	Include the NAS-Port-Id attribute
Context	<b>configure</b> <a href="#">ipsec radius authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">nas-port-id</a> <i>boolean</i>
Tree	<a href="#">nas-port-id</a>
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**password** *string*

Synopsis	Password used in RADIUS access requests
Context	<b>configure</b> <a href="#">ipsec radius authentication-policy</a> <i>string</i> <a href="#">password</a> <i>string</i>
Tree	<a href="#">password</a>
String Length	1 to 115
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**radius-server-policy** *reference*

Synopsis	Referenced RADIUS server policy
Context	<b>configure</b> <a href="#">ipsec radius authentication-policy</a> <i>string</i> <a href="#">radius-server-policy</a> <i>reference</i>
Tree	<a href="#">radius-server-policy</a>
Reference	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i>
Introduced	19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **show-ipsec-keys** *boolean*

Synopsis Show IPsec IKE and ESP keys in the output

Context **configure** [ipsec show-ipsec-keys](#) *boolean*

Tree [show-ipsec-keys](#)

Description When configured to **true**, this command allows IPsec keys to be (optionally) included in the display output of certain **debug** and **admin** commands.  
When configured to **false**, the key display is disabled.

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **static-sa** [[name](#)] *string*

Synopsis Enter the **static-sa** list instance

Context **configure** [ipsec static-sa](#) *string*

Tree [static-sa](#)

Max. Instances 1000

Introduced 16.0.R6

Platforms All

### **[name]** *string*

Synopsis Static SA name

Context **configure** [ipsec static-sa](#) *string*

Tree [static-sa](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R6

Platforms All



## authentication

Synopsis	Enable the <b>authentication</b> context
Context	<b>configure ipsec static-sa string authentication</b>
Tree	<a href="#">authentication</a>
Introduced	16.0.R6
Platforms	All

## algorithm *keyword*

Synopsis	Authentication algorithm used for an IPsec manual SA
Context	<b>configure ipsec static-sa string authentication algorithm keyword</b>
Tree	<a href="#">algorithm</a>
Options	md5, sha1
Notes	This element is mandatory.
Introduced	16.0.R6
Platforms	All

## key *string*

Synopsis	Key used for the authentication algorithm
Context	<b>configure ipsec static-sa string authentication key string</b>
Tree	<a href="#">key</a>
String Length	1 to 54
Notes	This element is mandatory.
Introduced	16.0.R6
Platforms	All

## description *string*

Synopsis	Text description
Context	<b>configure ipsec static-sa string description string</b>
Tree	<a href="#">description</a>
String Length	1 to 32
Introduced	16.0.R6

Platforms All

### **direction** *keyword*

Synopsis Direction to which the static SA entry can be applied

Context **configure ipsec static-sa** *string direction keyword*

Tree [direction](#)

Options inbound, outbound, bidirectional

Default bidirectional

Introduced 16.0.R6

Platforms All

### **protocol** *keyword*

Synopsis IPsec protocol used with the static SA

Context **configure ipsec static-sa** *string protocol keyword*

Tree [protocol](#)

Options ah, esp

Default esp

Introduced 16.0.R6

Platforms All

### **spi** *number*

Synopsis Security Parameter Index (SPI) for the static SA

Context **configure ipsec static-sa** *string spi number*

Tree [spi](#)

Description This command specifies the SPI for the static SA.

When the **direction** command is set to **inbound**, the SPI is used to look up the instruction to verify and decrypt the incoming IPsec packets. When the **direction** command is set to **outbound**, the SPI is used in the encoding of the outgoing packets. The remote node can use the SPI to look up the instruction to verify and decrypt the packet.

When unconfigured, the static SA cannot be used.

Range 256 to 16383

Introduced 16.0.R6

Platforms All

### **trust-anchor-profile** [[name](#)] *string*

Synopsis Enter the **trust-anchor-profile** list instance  
 Context **configure ipsec trust-anchor-profile** *string*  
 Tree [trust-anchor-profile](#)  
 Max. Instances 10128  
 Introduced 19.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis Trust anchor profile name for IPsec tunnel or gateway  
 Context **configure ipsec trust-anchor-profile** *string*  
 Tree [trust-anchor-profile](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 19.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **trust-anchor** [[ca-profile](#)] *reference*

Synopsis Add a list entry for **trust-anchor**  
 Context **configure ipsec trust-anchor-profile** *string trust-anchor reference*  
 Tree [trust-anchor](#)  
 Description Commands in this context configure a CA profile as a trust anchor CA.  
 Max. Instances 8  
 Introduced 19.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[ca-profile]** *reference*

Synopsis Name of the CA profile as a trust anchor profile

Context	<b>configure ipsec trust-anchor-profile</b> <i>string</i> <i>trust-anchor</i> <i>reference</i>
Tree	<a href="#">trust-anchor</a>
Reference	<b>configure system security pki ca-profile</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ts-list** [[name](#)] *string*

Synopsis	Enter the <b>ts-list</b> list instance
Context	<b>configure ipsec ts-list</b> <i>string</i>
Tree	<a href="#">ts-list</a>
Description	Commands in this context configure Traffic Selector (TS) settings.
Max. Instances	32768
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis	Traffic Selector (TS) list name
Context	<b>configure ipsec ts-list</b> <i>string</i>
Tree	<a href="#">ts-list</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **local**

Synopsis	Enter the <b>local</b> context
Context	<b>configure ipsec ts-list</b> <i>string</i> <b>local</b>
Tree	<a href="#">local</a>
Description	Commands in this context configure a local TS list, a traffic selector, such as TSr, when the system acts as an IKEv2 responder.

Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **entry** [id] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure ipsec ts-list string local entry number</b>
Tree	<b>entry</b>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[id]** *number*

Synopsis	TS list entry ID
Context	<b>configure ipsec ts-list string local entry number</b>
Tree	<b>entry</b>
Range	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **address**

Synopsis	Enable the <b>address</b> context
Context	<b>configure ipsec ts-list string local entry number address</b>
Tree	<b>address</b>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix for address range in IKEv2 traffic selector
Context	<b>configure ipsec ts-list string local entry number address prefix (<i>ipv4-prefix</i>   <i>ipv6-prefix</i>)</b>
Tree	<b>prefix</b>
Notes	The following elements are part of a mandatory choice: <b>prefix</b> or <b>range</b> .

Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## range

Synopsis	Enable the <b>range</b> context
Context	<b>configure ipsec ts-list string local entry number address range</b>
Tree	<a href="#">range</a>
Notes	The following elements are part of a mandatory choice: <b>prefix</b> or <b>range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## begin (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Lower bound of the IP address range for the entry
Context	<b>configure ipsec ts-list string local entry number address range begin</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">begin</a>
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## end (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Upper bound of the IP address range
Context	<b>configure ipsec ts-list string local entry number address range end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">end</a>
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## protocol

Synopsis	Enable the <b>protocol</b> context
Context	<b>configure ipsec ts-list string local entry number protocol</b>

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Tree	<a href="#">protocol</a>
Description	Commands in this context specify the protocol settings for the IKEv2 traffic selector.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## any

Synopsis	Match any protocol ID
Context	<b>configure ipsec ts-list</b> <i>string local entry number</i> <a href="#">protocol any</a>
Tree	<a href="#">any</a>
Notes	The following elements are part of a mandatory choice: <b>any</b> or <b>id</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## id

Synopsis	Enable the <b>id</b> context
Context	<b>configure ipsec ts-list</b> <i>string local entry number</i> <a href="#">protocol id</a>
Tree	<a href="#">id</a>
Notes	The following elements are part of a mandatory choice: <b>any</b> or <b>id</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## icmp

Synopsis	Enter the <b>icmp</b> context
Context	<b>configure ipsec ts-list</b> <i>string local entry number</i> <a href="#">protocol id icmp</a>
Tree	<a href="#">icmp</a>
Notes	The following elements are part of a mandatory choice: <b>icmp</b> , <b>icmp6</b> , <b>mipv6</b> , <b>protocol-id-with-any-port</b> , <b>sctp</b> , <b>tcp</b> , or <b>udp</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**opaque**

Synopsis	Support OPAQUE ports
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id icmp opaque</i>
Tree	<a href="#">opaque</a>
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port-range**

Synopsis	Enable the <b>port-range</b> context
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id icmp port-range</i>
Tree	<a href="#">port-range</a>
Description	Commands in this context configure port range information for the protocol.
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**begin-icmp-code** *number*

Synopsis	Lower bound of the ICMP code range
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id icmp port-range begin-icmp-code number</i>
Tree	<a href="#">begin-icmp-code</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**begin-icmp-type** *number*

Synopsis	Lower bound of the ICMP type range
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Context	<b>configure ipsec ts-list</b> <i>string</i> <b>local entry</b> <i>number</i> <b>protocol id icmp port-range begin-icmp-type</b> <i>number</i>
Tree	<a href="#">begin-icmp-type</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **end-icmp-code** *number*

Synopsis	Upper bound of the ICMP code range
Context	<b>configure ipsec ts-list</b> <i>string</i> <b>local entry</b> <i>number</i> <b>protocol id icmp port-range end-icmp-code</b> <i>number</i>
Tree	<a href="#">end-icmp-code</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **end-icmp-type** *number*

Synopsis	Upper bound of the ICMP type range
Context	<b>configure ipsec ts-list</b> <i>string</i> <b>local entry</b> <i>number</i> <b>protocol id icmp port-range end-icmp-type</b> <i>number</i>
Tree	<a href="#">end-icmp-type</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **icmp6**

Synopsis	Enter the <b>icmp6</b> context
Context	<b>configure ipsec ts-list</b> <i>string</i> <b>local entry</b> <i>number</i> <b>protocol id icmp6</b>
Tree	<a href="#">icmp6</a>

Notes	The following elements are part of a mandatory choice: <b>icmp</b> , <b>icmp6</b> , <b>mip6</b> , <b>protocol-id-with-any-port</b> , <b>sctp</b> , <b>tcp</b> , or <b>udp</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## opaque

Synopsis	Support OPAQUE ports
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id icmp6 opaque</i>
Tree	<a href="#">opaque</a>
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## port-range

Synopsis	Enable the <b>port-range</b> context
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id icmp6 port-range</i>
Tree	<a href="#">port-range</a>
Description	Commands in this context configure port range information for the protocol.
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## begin-icmp-code *number*

Synopsis	Lower bound of the ICMP code range
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id icmp6 port-range begin-icmp-code number</i>
Tree	<a href="#">begin-icmp-code</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **begin-icmp-type** *number*

Synopsis Lower bound of the ICMP type range

Context **configure ipsec ts-list** *string local entry number protocol id icmp6 port-range begin-icmp-type number*

Tree [begin-icmp-type](#)

Range 0 to 255

Notes This element is mandatory.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **end-icmp-code** *number*

Synopsis Upper bound of the ICMP code range

Context **configure ipsec ts-list** *string local entry number protocol id icmp6 port-range end-icmp-code number*

Tree [end-icmp-code](#)

Range 0 to 255

Notes This element is mandatory.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **end-icmp-type** *number*

Synopsis Upper bound of the ICMP type range

Context **configure ipsec ts-list** *string local entry number protocol id icmp6 port-range end-icmp-type number*

Tree [end-icmp-type](#)

Range 0 to 255

Notes This element is mandatory.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## mipv6

Synopsis	Enter the <b>mipv6</b> context
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id mipv6</i>
Tree	<a href="#">mipv6</a>
Notes	The following elements are part of a mandatory choice: <b>icmp</b> , <b>icmp6</b> , <b>mipv6</b> , <b>protocol-id-with-any-port</b> , <b>sctp</b> , <b>tcp</b> , or <b>udp</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## opaque

Synopsis	Support OPAQUE ports
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id mipv6 opaque</i>
Tree	<a href="#">opaque</a>
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## port-range

Synopsis	Enable the <b>port-range</b> context
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id mipv6 port-range</i>
Tree	<a href="#">port-range</a>
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## begin *number*

Synopsis	Lower bound of the port range
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id mipv6 port-range begin number</i>
Tree	<a href="#">begin</a>

Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **end number**

Synopsis	Upper bound of the port range
Context	<b>configure</b> <a href="#">ipsec ts-list</a> <i>string</i> <a href="#">local entry</a> <i>number</i> <a href="#">protocol id</a> <a href="#">mipv6</a> <a href="#">port-range</a> <b>end</b> <i>number</i>
Tree	<a href="#">end</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **protocol-id-with-any-port** (*keyword* | *number*)

Synopsis	Protocol ID that accepts any port value
Context	<b>configure</b> <a href="#">ipsec ts-list</a> <i>string</i> <a href="#">local entry</a> <i>number</i> <a href="#">protocol id</a> <a href="#">protocol-id-with-any-port</a> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">protocol-id-with-any-port</a>
Range	1 to 255
Options	icmp, tcp, udp, icmp6, sctp, mipv6
Notes	The following elements are part of a mandatory choice: <b>icmp</b> , <b>icmp6</b> , <b>mipv6</b> , <b>protocol-id-with-any-port</b> , <b>sctp</b> , <b>tcp</b> , or <b>udp</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **sctp**

Synopsis	Enter the <b>sctp</b> context
Context	<b>configure</b> <a href="#">ipsec ts-list</a> <i>string</i> <a href="#">local entry</a> <i>number</i> <a href="#">protocol id</a> <b>sctp</b>
Tree	<a href="#">sctp</a>
Notes	The following elements are part of a mandatory choice: <b>icmp</b> , <b>icmp6</b> , <b>mipv6</b> , <b>protocol-id-with-any-port</b> , <b>sctp</b> , <b>tcp</b> , or <b>udp</b> .

Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## opaque

Synopsis	Support OPAQUE ports
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id sctp opaque</i>
Tree	<a href="#">opaque</a>
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## port-range

Synopsis	Enable the <b>port-range</b> context
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id sctp port-range</i>
Tree	<a href="#">port-range</a>
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## begin *number*

Synopsis	Lower bound of the port range
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id sctp port-range begin number</i>
Tree	<a href="#">begin</a>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end number**

Synopsis	Upper bound of the port range
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id sctp port-range end number</i>
Tree	<a href="#">end</a>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**tcp**

Synopsis	Enter the <b>tcp</b> context
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id tcp</i>
Tree	<a href="#">tcp</a>
Notes	The following elements are part of a mandatory choice: <b>icmp</b> , <b>icmp6</b> , <b>mip6</b> , <b>protocol-id-with-any-port</b> , <b>sctp</b> , <b>tcp</b> , or <b>udp</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**opaque**

Synopsis	Support OPAQUE ports
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id tcp opaque</i>
Tree	<a href="#">opaque</a>
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port-range**

Synopsis	Enable the <b>port-range</b> context
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id tcp port-range</i>
Tree	<a href="#">port-range</a>

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Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **begin** *number*

Synopsis	Lower bound of the port range
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id tcp port-range begin number</i>
Tree	<b>begin</b>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **end** *number*

Synopsis	Upper bound of the port range
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id tcp port-range end number</i>
Tree	<b>end</b>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **udp**

Synopsis	Enter the <b>udp</b> context
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id udp</i>
Tree	<b>udp</b>
Notes	The following elements are part of a mandatory choice: <b>icmp</b> , <b>icmp6</b> , <b>mip6</b> , <b>protocol-id-with-any-port</b> , <b>sctp</b> , <b>tcp</b> , or <b>udp</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**opaque**

Synopsis	Support OPAQUE ports
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id udp opaque</i>
Tree	<a href="#">opaque</a>
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port-range**

Synopsis	Enable the <b>port-range</b> context
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id udp port-range</i>
Tree	<a href="#">port-range</a>
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**begin number**

Synopsis	Lower bound of the port range
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id udp port-range begin number</i>
Tree	<a href="#">begin</a>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end number**

Synopsis	Upper bound of the port range
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id udp port-range end number</i>
Tree	<a href="#">end</a>
Range	0 to 65535

Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## remote

Synopsis	Enter the <b>remote</b> context
Context	<b>configure ipsec ts-list string remote</b>
Tree	<b>remote</b>
Description	Commands in this context configure a remote TS list, a traffic selector, such as TSr, when the system acts as an IKEv2 responder.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## entry [id] number

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure ipsec ts-list string remote entry number</b>
Tree	<b>entry</b>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## [id] number

Synopsis	TS list entry ID
Context	<b>configure ipsec ts-list string remote entry number</b>
Tree	<b>entry</b>
Range	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## address

Synopsis	Enable the <b>address</b> context
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Context	<b>configure ipsec ts-list string remote entry number address</b>
Tree	<b>address</b>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **prefix** (*ipv4-prefix | ipv6-prefix*)

Synopsis	IP prefix for address range in IKEv2 traffic selector
Context	<b>configure ipsec ts-list string remote entry number address prefix</b> ( <i>ipv4-prefix   ipv6-prefix</i> )
Tree	<b>prefix</b>
Notes	The following elements are part of a mandatory choice: <b>prefix</b> or <b>range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure ipsec ts-list string remote entry number address range</b>
Tree	<b>range</b>
Notes	The following elements are part of a mandatory choice: <b>prefix</b> or <b>range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **begin** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Lower bound of the IP address range for the entry
Context	<b>configure ipsec ts-list string remote entry number address range begin</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<b>begin</b>
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Upper bound of the IP address range
Context	<b>configure ipsec ts-list</b> <i>string remote entry number address range end</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">end</a>
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**protocol**

Synopsis	Enable the <b>protocol</b> context
Context	<b>configure ipsec ts-list</b> <i>string remote entry number protocol</i>
Tree	<a href="#">protocol</a>
Description	Commands in this context specify the protocol settings for the IKEv2 traffic selector.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**any**

Synopsis	Match any protocol ID
Context	<b>configure ipsec ts-list</b> <i>string remote entry number protocol any</i>
Tree	<a href="#">any</a>
Notes	The following elements are part of a mandatory choice: <b>any</b> or <b>id</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**id**

Synopsis	Enable the <b>id</b> context
Context	<b>configure ipsec ts-list</b> <i>string remote entry number protocol id</i>
Tree	<a href="#">id</a>
Notes	The following elements are part of a mandatory choice: <b>any</b> or <b>id</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## icmp

Synopsis	Enter the <b>icmp</b> context
Context	<b>configure ipsec ts-list</b> <i>string remote entry number protocol id icmp</i>
Tree	<a href="#">icmp</a>
Notes	The following elements are part of a mandatory choice: <b>icmp</b> , <b>icmp6</b> , <b>mipv6</b> , <b>protocol-id-with-any-port</b> , <b>sctp</b> , <b>tcp</b> , or <b>udp</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## opaque

Synopsis	Support OPAQUE ports
Context	<b>configure ipsec ts-list</b> <i>string remote entry number protocol id icmp opaque</i>
Tree	<a href="#">opaque</a>
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## port-range

Synopsis	Enable the <b>port-range</b> context
Context	<b>configure ipsec ts-list</b> <i>string remote entry number protocol id icmp port-range</i>
Tree	<a href="#">port-range</a>
Description	Commands in this context configure port range information for the protocol.
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## begin-icmp-code *number*

Synopsis	Lower bound of the ICMP code range
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Context	<b>configure ipsec ts-list string remote entry number protocol id icmp port-range begin-icmp-code number</b>
Tree	<a href="#">begin-icmp-code</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **begin-icmp-type number**

Synopsis	Lower bound of the ICMP type range
Context	<b>configure ipsec ts-list string remote entry number protocol id icmp port-range begin-icmp-type number</b>
Tree	<a href="#">begin-icmp-type</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **end-icmp-code number**

Synopsis	Upper bound of the ICMP code range
Context	<b>configure ipsec ts-list string remote entry number protocol id icmp port-range end-icmp-code number</b>
Tree	<a href="#">end-icmp-code</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **end-icmp-type number**

Synopsis	Upper bound of the ICMP type range
Context	<b>configure ipsec ts-list string remote entry number protocol id icmp port-range end-icmp-type number</b>
Tree	<a href="#">end-icmp-type</a>

Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## icmp6

Synopsis	Enter the <b>icmp6</b> context
Context	<b>configure ipsec ts-list string remote entry number protocol id icmp6</b>
Tree	<a href="#">icmp6</a>
Notes	The following elements are part of a mandatory choice: <b>icmp</b> , <b>icmp6</b> , <b>mip6</b> , <b>protocol-id-with-any-port</b> , <b>sctp</b> , <b>tcp</b> , or <b>udp</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## opaque

Synopsis	Support OPAQUE ports
Context	<b>configure ipsec ts-list string remote entry number protocol id icmp6 opaque</b>
Tree	<a href="#">opaque</a>
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## port-range

Synopsis	Enable the <b>port-range</b> context
Context	<b>configure ipsec ts-list string remote entry number protocol id icmp6 port-range</b>
Tree	<a href="#">port-range</a>
Description	Commands in this context configure port range information for the protocol.
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**begin-icmp-code** *number*

Synopsis	Lower bound of the ICMP code range
Context	<b>configure</b> <a href="#">ipsec ts-list</a> <i>string</i> <a href="#">remote entry</a> <i>number</i> <a href="#">protocol id icmp6</a> <a href="#">port-range</a> <a href="#">begin-icmp-code</a> <i>number</i>
Tree	<a href="#">begin-icmp-code</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**begin-icmp-type** *number*

Synopsis	Lower bound of the ICMP type range
Context	<b>configure</b> <a href="#">ipsec ts-list</a> <i>string</i> <a href="#">remote entry</a> <i>number</i> <a href="#">protocol id icmp6</a> <a href="#">port-range</a> <a href="#">begin-icmp-type</a> <i>number</i>
Tree	<a href="#">begin-icmp-type</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end-icmp-code** *number*

Synopsis	Upper bound of the ICMP code range
Context	<b>configure</b> <a href="#">ipsec ts-list</a> <i>string</i> <a href="#">remote entry</a> <i>number</i> <a href="#">protocol id icmp6</a> <a href="#">port-range</a> <a href="#">end-icmp-code</a> <i>number</i>
Tree	<a href="#">end-icmp-code</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end-icmp-type** *number*

Synopsis	Upper bound of the ICMP type range
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Context	<b>configure ipsec ts-list</b> <i>string remote entry number protocol id icmp6 port-range end-icmp-type number</i>
Tree	<a href="#">end-icmp-type</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## mipv6

Synopsis	Enter the <b>mipv6</b> context
Context	<b>configure ipsec ts-list</b> <i>string remote entry number protocol id mipv6</i>
Tree	<a href="#">mipv6</a>
Notes	The following elements are part of a mandatory choice: <b>icmp</b> , <b>icmp6</b> , <b>mipv6</b> , <b>protocol-id-with-any-port</b> , <b>sctp</b> , <b>tcp</b> , or <b>udp</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## opaque

Synopsis	Support OPAQUE ports
Context	<b>configure ipsec ts-list</b> <i>string remote entry number protocol id mipv6 opaque</i>
Tree	<a href="#">opaque</a>
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## port-range

Synopsis	Enable the <b>port-range</b> context
Context	<b>configure ipsec ts-list</b> <i>string remote entry number protocol id mipv6 port-range</i>
Tree	<a href="#">port-range</a>
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .

Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**begin** *number*

Synopsis	Lower bound of the port range
Context	<b>configure</b> <a href="#">ipsec ts-list</a> <i>string</i> <a href="#">remote entry</a> <i>number</i> <a href="#">protocol id</a> <a href="#">mipv6</a> <a href="#">port-range</a> <a href="#">begin</a> <i>number</i>
Tree	<a href="#">begin</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end** *number*

Synopsis	Upper bound of the port range
Context	<b>configure</b> <a href="#">ipsec ts-list</a> <i>string</i> <a href="#">remote entry</a> <i>number</i> <a href="#">protocol id</a> <a href="#">mipv6</a> <a href="#">port-range</a> <a href="#">end</a> <i>number</i>
Tree	<a href="#">end</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**protocol-id-with-any-port** (*keyword* | *number*)

Synopsis	Protocol ID that accepts any port value
Context	<b>configure</b> <a href="#">ipsec ts-list</a> <i>string</i> <a href="#">remote entry</a> <i>number</i> <a href="#">protocol id</a> <a href="#">protocol-id-with-any-port</a> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">protocol-id-with-any-port</a>
Range	1 to 255
Options	icmp, tcp, udp, icmp6, sctp, mipv6
Notes	The following elements are part of a mandatory choice: <b>icmp</b> , <b>icmp6</b> , <b>mipv6</b> , <b>protocol-id-with-any-port</b> , <b>sctp</b> , <b>tcp</b> , or <b>udp</b> .
Introduced	19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## sctp

Synopsis Enter the **sctp** context

Context **configure ipsec ts-list** *string* *remote entry number* *protocol id* **sctp**

Tree **sctp**

Notes The following elements are part of a mandatory choice: **icmp**, **icmp6**, **mip6**, **protocol-id-with-any-port**, **sctp**, **tcp**, or **udp**.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## opaque

Synopsis Support OPAQUE ports

Context **configure ipsec ts-list** *string* *remote entry number* *protocol id* **sctp opaque**

Tree **opaque**

Description This command allows the protocol ID to be accepted even when the port information is not available.

Notes The following elements are part of a choice: **opaque** or **port-range**.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## port-range

Synopsis Enable the **port-range** context

Context **configure ipsec ts-list** *string* *remote entry number* *protocol id* **sctp port-range**

Tree **port-range**

Notes The following elements are part of a choice: **opaque** or **port-range**.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## begin *number*

Synopsis Lower bound of the port range

Context	<b>configure ipsec ts-list</b> <i>string remote entry number protocol id sctp port-range begin number</i>
Tree	<a href="#">begin</a>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **end number**

Synopsis	Upper bound of the port range
Context	<b>configure ipsec ts-list</b> <i>string remote entry number protocol id sctp port-range end number</i>
Tree	<a href="#">end</a>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tcp**

Synopsis	Enter the <b>tcp</b> context
Context	<b>configure ipsec ts-list</b> <i>string remote entry number protocol id tcp</i>
Tree	<a href="#">tcp</a>
Notes	The following elements are part of a mandatory choice: <b>icmp</b> , <b>icmp6</b> , <b>mip6</b> , <b>protocol-id-with-any-port</b> , <b>sctp</b> , <b>tcp</b> , or <b>udp</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **opaque**

Synopsis	Support OPAQUE ports
Context	<b>configure ipsec ts-list</b> <i>string remote entry number protocol id tcp opaque</i>
Tree	<a href="#">opaque</a>
Description	This command allows the protocol ID to be accepted even when the port information is not available.

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Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port-range**

Synopsis	Enable the <b>port-range</b> context
Context	<b>configure ipsec ts-list string remote entry number protocol id tcp port-range</b>
Tree	<a href="#">port-range</a>
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **begin number**

Synopsis	Lower bound of the port range
Context	<b>configure ipsec ts-list string remote entry number protocol id tcp port-range begin number</b>
Tree	<a href="#">begin</a>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **end number**

Synopsis	Upper bound of the port range
Context	<b>configure ipsec ts-list string remote entry number protocol id tcp port-range end number</b>
Tree	<a href="#">end</a>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## udp

Synopsis	Enter the <b>udp</b> context
Context	<b>configure ipsec ts-list</b> <i>string remote entry number protocol id udp</i>
Tree	<a href="#">udp</a>
Notes	The following elements are part of a mandatory choice: <b>icmp</b> , <b>icmp6</b> , <b>mipv6</b> , <b>protocol-id-with-any-port</b> , <b>sctp</b> , <b>tcp</b> , or <b>udp</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## opaque

Synopsis	Support OPAQUE ports
Context	<b>configure ipsec ts-list</b> <i>string remote entry number protocol id udp opaque</i>
Tree	<a href="#">opaque</a>
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## port-range

Synopsis	Enable the <b>port-range</b> context
Context	<b>configure ipsec ts-list</b> <i>string remote entry number protocol id udp port-range</i>
Tree	<a href="#">port-range</a>
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## begin *number*

Synopsis	Lower bound of the port range
Context	<b>configure ipsec ts-list</b> <i>string remote entry number protocol id udp port-range begin number</i>
Tree	<a href="#">begin</a>

Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end number**

Synopsis	Upper bound of the port range
Context	<b>configure ipsec ts-list</b> <i>string</i> <b>remote entry number</b> <b>protocol id udp port-range end number</b>
Tree	<b>end</b>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**tunnel-template [id] number**

Synopsis	Enter the <b>tunnel-template</b> list instance
Context	<b>configure ipsec tunnel-template</b> <i>number</i>
Tree	<b>tunnel-template</b>
Max. Instances	2048
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[id] number**

Synopsis	Tunnel template ID
Context	<b>configure ipsec tunnel-template</b> <i>number</i>
Tree	<b>tunnel-template</b>
Range	1 to 2048
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**clear-df-bit** *boolean*

Synopsis	Clear the Do-not-Fragment (DF) bit
Context	<b>configure</b> <i>ipsec tunnel-template number clear-df-bit boolean</i>
Tree	<i>clear-df-bit</i>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**copy-traffic-class-upon-decapsulation** *boolean*

Synopsis	Enable traffic class copy upon decapsulation
Context	<b>configure</b> <i>ipsec tunnel-template number copy-traffic-class-upon-decapsulation boolean</i>
Tree	<i>copy-traffic-class-upon-decapsulation</i>
Description	When configured to <b>true</b> , the system copies the traffic class from the outer tunnel IP packet header to the payload IP packet header in the decapsulating direction (public to private).  When configured to <b>false</b> , the system does not copy the traffic class from the outer IP packet to the payload IP packet header upon decapsulation.
Default	false
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <i>ipsec tunnel-template number description string</i>
Tree	<i>description</i>
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**encapsulated-ip-mtu** *number*

Synopsis	Maximum size of the encapsulated tunnel packet
Context	<b>configure</b> <i>ipsec tunnel-template number encapsulated-ip-mtu number</i>



Tree	<a href="#">encapsulated-ip-mtu</a>
Description	This command specifies the maximum size of the encapsulated tunnel packet to the IPsec tunnel, the IP tunnel, or the dynamic tunnels terminated on the IPsec Gateway. If the encapsulated IPv4 or IPv6 tunnel packet exceeds this value, the system fragments the packet.
Range	512 to 9000
Units	octets
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## icmp-generation

Synopsis	Enter the <b>icmp-generation</b> context
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">icmp-generation</a>
Tree	<a href="#">icmp-generation</a>
Description	Commands in this context configure settings for ICMPv4 message generation.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## frag-required

Synopsis	Enter the <b>frag-required</b> context
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">icmp-generation</a> <a href="#">frag-required</a>
Tree	<a href="#">frag-required</a>
Description	Commands in this context configure the attributes for sending generated ICMP Destination Unreachable "fragmentation needed and DF set" messages (type 3, code 4) back to the source, if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of sending ICMP messages
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">icmp-generation</a> <a href="#">frag-required</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>

Description	This command configures the administrative state of sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) messages to the source if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Options	enable, disable
Default	enable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **interval** *number*

Synopsis	Interval for sending ICMP messages
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">icmp-generation</a> <a href="#">frag-required</a> <a href="#">interval</a> <i>number</i>
Tree	<a href="#">interval</a>
Description	This command configures the interval for sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4).
Range	1 to 60
Units	seconds
Default	10
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **message-count** *number*

Synopsis	Maximum number of ICMP messages that can be sent
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">icmp-generation</a> <a href="#">frag-required</a> <a href="#">message-count</a> <i>number</i>
Tree	<a href="#">message-count</a>
Description	This command configures the maximum number of ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## icmp6-generation

Synopsis	Enter the <b>icmp6-generation</b> context
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">icmp6-generation</a>
Tree	<a href="#">icmp6-generation</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## pkt-too-big

Synopsis	Enter the <b>pkt-too-big</b> context
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">icmp6-generation</a> <a href="#">pkt-too-big</a>
Tree	<a href="#">pkt-too-big</a>
Description	Commands in this context configure values for the ICMPv6 Packet Too Big (PTB) messages. The system sends PTB messages if an IPv6 packet is received on the private side that is larger than 1280 bytes and also exceeds the private MTU of the tunnel.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of Packet Too Big message sends
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">icmp6-generation</a> <a href="#">pkt-too-big</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## interval *number*

Synopsis	Maximum interval during which PTB messages can be sent
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">icmp6-generation</a> <a href="#">pkt-too-big</a> <a href="#">interval</a> <i>number</i>
Tree	<a href="#">interval</a>
Range	1 to 60

Units	seconds
Default	10
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **message-count** *number*

Synopsis	Max ICMPv6 messages that can be sent during interval
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">icmp6-generation</a> <a href="#">pkt-too-big</a> <a href="#">message-count</a> <i>number</i>
Tree	<a href="#">message-count</a>
Range	10 to 1000
Default	100
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ignore-default-route** *boolean*

Synopsis	Ignore any full range traffic selector in TSi
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">ignore-default-route</a> <i>boolean</i>
Tree	<a href="#">ignore-default-route</a>
Description	When configured to <b>true</b> , any full range traffic selector is ignored when creating a reverse route. When configured to <b>false</b> , no CHILD_SA is created if any full range traffic selector is included in TSi.
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-mtu** *number*

Synopsis	Maximum size of the IP MTU for the payload packets
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">ip-mtu</a> <i>number</i>
Tree	<a href="#">ip-mtu</a>
Range	512 to 9000
Units	octets

Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipsec-transform** *reference*

Synopsis	IPsec transform ID for the tunnel template
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">ipsec-transform</a> <i>reference</i>
Tree	<a href="#">ipsec-transform</a>
Reference	<b>configure</b> <a href="#">ipsec</a> <a href="#">ipsec-transform</a> <i>number</i>
Max. Instances	4
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **pmtu-discovery-aging** *number*

Synopsis	Aging out time of the learned path MTU
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">pmtu-discovery-aging</a> <i>number</i>
Tree	<a href="#">pmtu-discovery-aging</a>
Description	This command configures the temporary public and private MTU expiration time. The temporary MTU is used for MTU propagation.
Range	900 to 3600
Units	seconds
Default	900
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **private-tcp-mss-adjust** *number*

Synopsis	New TCP MSS value on the private side
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">private-tcp-mss-adjust</a> <i>number</i>
Tree	<a href="#">private-tcp-mss-adjust</a>
Description	This command specifies the new (adjusted) TCP MSS value of TCP SYN packets on the private side.  When unconfigured, the MSS value is derived from the received TCP SYN packet on the private side.

Range	512 to 9000
Units	octets
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **propagate-pmtu-v4** *boolean*

Synopsis	Enable propagation of the path MTU to IPv4 hosts
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">propagate-pmtu-v4</a> <i>boolean</i>
Tree	<a href="#">propagate-pmtu-v4</a>
Description	When configured to <b>true</b> , the system propagates the path MTU learned from the public side to the private side (IPv4 hosts).
Default	true
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **propagate-pmtu-v6** *boolean*

Synopsis	Enable propagation of the path MTU to IPv6 hosts
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">propagate-pmtu-v6</a> <i>boolean</i>
Tree	<a href="#">propagate-pmtu-v6</a>
Description	When configured to <b>true</b> , the system propagates the path MTU learned from the public side to the private side (IPv6 hosts).
Default	true
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **public-tcp-mss-adjust** (*number* | *keyword*)

Synopsis	New TCP MSS value on the public side
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">public-tcp-mss-adjust</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">public-tcp-mss-adjust</a>
Description	This command specifies the new (adjusted) TCP MSS value for the TCP traffic in an IPsec tunnel which is sent from the public network to the private network. The system can use this value to adjust or insert the MSS option in the TCP SYN packet.  When unconfigured, the MSS value is derived from the public MTU and IPsec overhead.

---

Range	512 to 9000
Units	octets
Options	auto
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **replay-window** *number*

Synopsis	Anti-replay window size for the tunnel template
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">replay-window</a> <i>number</i>
Tree	<a href="#">replay-window</a>
Range	32   64   128   256   512
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **sp-reverse-route** *keyword*

Synopsis	Reverse route creation method in private service
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">sp-reverse-route</a> <i>keyword</i>
Tree	<a href="#">sp-reverse-route</a>
Description	This command allows the system to automatically create a reverse route based on dynamic LAN-to-LAN tunnel's TSi in private service.
Options	none, use-security-policy
Default	none
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## 3.20 isa commands

```

configure
- isa
  - application-assurance-group number
  - aa-sub-scale keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - backup
    - esa number vm number
    - isa string
  - description string
  - divert-fc keyword
  - failure-mode keyword
  - flow-attribute string
  - http-enrich-max-packet-size number
  - isa-capacity-cost-high-threshold number
  - isa-capacity-cost-low-threshold number
  - minimum-isa-generation number
  - overload-cut-through boolean
  - overload-sub-quarantine
    - admin-state keyword
  - primary
    - esa number vm number
    - isa string
  - qos
    - egress
      - from-subscriber
        - buffer-pool
          - name string
          - resv-cbs number
          - slope-policy reference
        - port-scheduler-policy reference
        - queue-policy reference
        - wa-shared-high-wmark (number | keyword)
        - wa-shared-low-wmark number
      - to-subscriber
        - buffer-pool
          - name string
          - resv-cbs number
          - slope-policy reference
        - port-scheduler-policy reference
        - queue-policy reference
        - wa-shared-high-wmark (number | keyword)
        - wa-shared-low-wmark number
    - shared-resources
      - gtp-tunnel-database number
      - tcp-advanced-functions number
      - url-filter-web-service-cache number
  - statistics
    - stats-type keyword
    - accounting-policy reference
    - apply-groups reference
    - apply-groups-exclude reference
    - collect-stats boolean
  - transit-prefix-limits
    - ipv4-entries number
    - ipv4-remote-entries number
    - ipv6-entries number
    - ipv6-remote-entries number

```



configure isa application-assurance-group vm-traffic-distribute-by-ip

```

- vm-traffic-distribute-by-ip boolean
- vm-traffic-distribute-by-teid boolean
- apply-groups reference
- apply-groups-exclude reference
- lms-group number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - esa reference vm reference
    - apply-groups reference
    - apply-groups-exclude reference
    - drain boolean
  - mda string
    - apply-groups reference
    - apply-groups-exclude reference
    - drain boolean
  - port-policy reference
- nat-group number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - esa reference vm reference
  - log
    - suppress-lsn-events boolean
    - suppress-lsn-sub-blocks-free boolean
  - mda string
  - radius-accounting-policy reference
  - redundancy
    - active-mda-limit number
  - inter-chassis
    - flow-timeout-on-switchover number
    - ip-mtu number
    - keepalive
      - dropcount number
      - interval number
    - local-ip-range-start string
    - monitor-oper-group reference
      - apply-groups reference
      - apply-groups-exclude reference
      - health-drop number
    - monitor-port string
      - apply-groups reference
      - apply-groups-exclude reference
      - health-drop number
    - preferred boolean
    - remote-ip-range-start string
    - replication-threshold number
    - router-instance string
    - sync boolean
  - intra-chassis
    - active-active
      - failed-mda-limit number
    - active-standby
    - l2aware-bypass
  - scaling-profile keyword
  - session-limits
    - reserved number
    - upnp-mappings number
    - watermarks
      - high number
      - low number
- tunnel-group number

```

## configure isa tunnel-group admin-state

- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **backup** *string*
- **description** *string*
- **ipsec-responder-only** *boolean*
- **isa-scale-mode** *keyword*
- **multi-active**
  - **active-isa-number** *number*
  - **esa** *reference* **vm** *reference*
  - **isa** *string*
  - **member-pool** *reference*
- **primary** *string*
- **reassembly**
  - **max-wait-time** *number*
- **stats-collection**
  - **isa-dp-cpu-usage** *boolean*
  - **strict-esp-sequence-number-ordering** *boolean*
- **tunnel-member-pool** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **esa** *reference* **vm** *reference*
  - **isa** *string*
- **video-group** *number*
  - **ad-insert** *boolean*
  - **admin-state** *keyword*
  - **analyzer** *boolean*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **fcc-server** *boolean*
  - **local-rt-server** *boolean*
  - **mda** *string*
  - **resv-ret** *number*
  - **rt-client** *boolean*
  - **stream-selection** *boolean*
  - **vapp** *reference* **vapp-id** *reference*
  - **watermark**
    - **bandwidth**
      - **fcc** *number*
      - **ret** *number*
      - **total** *number*
    - **session**
      - **fcc** *number*
      - **ret** *number*
      - **total** *number*
- **wlan-gw-group** *number*
  - **active-iom-limit** *number*
  - **active-mda-limit** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **distributed-sub-mgmt**
    - **isa-aa-group** *reference*
    - **isa-aa-oversubscription-factor** *number*
  - **esa** *reference* **vm** *reference*
  - **iom** *reference*
  - **mda** *string*
  - **nat**
    - **log**
      - **suppress-lsn-events** *boolean*
      - **suppress-lsn-sub-blocks-free** *boolean*

---

configure isa wlan-gw-group nat lsn

- **lsn** *boolean*
- **radius-accounting-policy** *reference*
- **session-limits**
  - **reserved** *number*
  - **upnp-mappings** *number*
  - **watermarks**
    - **high** *number*
    - **low** *number*
- **port-policy** *reference*
- **redundancy** *keyword*
- **scaling-profile** *keyword*
- **tunnel-port-policy** *reference*
- **watermarks**
  - **mark** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **high** *number*
    - **low** *number*

### 3.20.1 isa command descriptions

#### isa

Synopsis	Enter the <b>isa</b> context
Context	<b>configure isa</b>
Tree	<a href="#">isa</a>
Description	Commands in this context configure the Integrated Services Adapter (ISA).
Introduced	16.0.R1
Platforms	All

#### **application-assurance-group** [[aa-group-id](#)] *number*

Synopsis	Enter the <b>application-assurance-group</b> list instance
Context	<b>configure isa</b> <a href="#">application-assurance-group</a> <i>number</i>
Tree	<a href="#">application-assurance-group</a>
Max. Instances	7
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

#### [\[aa-group-id\]](#) *number*

Synopsis	AA group ID
Context	<b>configure isa</b> <a href="#">application-assurance-group</a> <i>number</i>
Tree	<a href="#">application-assurance-group</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**aa-sub-scale** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	AA group sub-scale
Context	<b>configure</b> isa application-assurance-group number aa-sub-scale keyword
Tree	aa-sub-scale
Options	residential, vpn, mobile-gateway, lightweight-internet, residential-8k, residential-16k, residential-32k, residential-64k, vpn-1k, vpn-2k, vpn-4k, vpn-8k, mobile-gateway-1m, mobile-gateway-2m, lightweight-internet-512k
Default	residential
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of this AA group
Context	<b>configure</b> isa application-assurance-group number admin-state keyword
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**backup**

Synopsis	Enter the <b>backup</b> context
Context	<b>configure</b> isa application-assurance-group number backup
Tree	backup
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**esa** [esa-id] number vm number

Synopsis	Add a list entry for <b>esa</b>
----------	---------------------------------

Context	<b>configure isa application-assurance-group number backup esa number vm number</b>
Tree	<a href="#">esa</a>
Max. Instances	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[esa-id] number**

Synopsis	ESA ID
Context	<b>configure isa application-assurance-group number backup esa number vm number</b>
Tree	<a href="#">esa</a>
Range	1 to 16
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**vm number**

Synopsis	VM ID within the ESA
Context	<b>configure isa application-assurance-group number backup esa number vm number</b>
Tree	<a href="#">esa</a>
Range	1 to 4
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**isa [mda-id] string**

Synopsis	Add a list entry for <b>isa</b>
Context	<b>configure isa application-assurance-group number backup isa string</b>
Tree	<a href="#">isa</a>
Max. Instances	1
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[mda-id]** *string*

Synopsis MDA/ISA ID  
 Context **configure** isa application-assurance-group number backup isa string  
 Tree isa  
 Notes This element is part of a list key.  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
 Context **configure** isa application-assurance-group number description string  
 Tree description  
 String Length 1 to 80  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **divert-fc** *keyword*

Synopsis Diverted traffic forwarding class  
 Context **configure** isa application-assurance-group number divert-fc keyword  
 Tree divert-fc  
 Options be, l2, af, l1, h2, ef, h1, nc  
 Max. 8  
 Instances  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **failure-mode** *keyword*

Synopsis Mode of operation when no ISA-AA cards are available  
 Context **configure** isa application-assurance-group number failure-mode keyword

Tree	<a href="#">failure-mode</a>
Options	fail-to-open
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **flow-attribute** [\[flow-attribute-name\]](#) *string*

Synopsis	Add a list entry for <b>flow-attribute</b>
Context	<b>configure</b> <a href="#">isa application-assurance-group</a> <i>number</i> <a href="#">flow-attribute</a> <i>string</i>
Tree	<a href="#">flow-attribute</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[flow-attribute-name]** *string*

Synopsis	Flow attribute name
Context	<b>configure</b> <a href="#">isa application-assurance-group</a> <i>number</i> <a href="#">flow-attribute</a> <i>string</i>
Tree	<a href="#">flow-attribute</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **http-enrich-max-packet-size** *number*

Synopsis	Maximum HTTP enriched packet size
Context	<b>configure</b> <a href="#">isa application-assurance-group</a> <i>number</i> <a href="#">http-enrich-max-packet-size</a> <i>number</i>
Tree	<a href="#">http-enrich-max-packet-size</a>
Range	576 to 9212
Units	octets
Default	1500
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**isa-capacity-cost-high-threshold** *number*

Synopsis	Capacity cost high threshold for the ISA-AA group
Context	<b>configure</b> isa application-assurance-group <i>number</i> isa-capacity-cost-high-threshold <i>number</i>
Tree	isa-capacity-cost-high-threshold
Range	0 to 4294967294
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**isa-capacity-cost-low-threshold** *number*

Synopsis	Capacity cost low threshold for the ISA-AA group
Context	<b>configure</b> isa application-assurance-group <i>number</i> isa-capacity-cost-low-threshold <i>number</i>
Tree	isa-capacity-cost-low-threshold
Range	1 to 4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**minimum-isa-generation** *number*

Synopsis	Minimum ISA generation for this AA group
Context	<b>configure</b> isa application-assurance-group <i>number</i> minimum-isa-generation <i>number</i>
Tree	minimum-isa-generation
Range	1 to 2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**overload-cut-through** *boolean*

Synopsis	Enable cut-through of traffic if ISA is in overload
Context	<b>configure</b> isa application-assurance-group <i>number</i> overload-cut-through <i>boolean</i>
Tree	overload-cut-through
Default	false
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## overload-sub-quarantine

Synopsis Enter the **overload-sub-quarantine** context

Context **configure isa application-assurance-group number overload-sub-quarantine**

Tree [overload-sub-quarantine](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis Administrative state of overload subscriber quarantine

Context **configure isa application-assurance-group number overload-sub-quarantine admin-state *keyword***

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## primary

Synopsis Enter the **primary** context

Context **configure isa application-assurance-group number primary**

Tree [primary](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## esa [*esa-id*] *number vm number*

Synopsis Add a list entry for **esa**

Context **configure isa application-assurance-group number primary esa *number vm number***

Tree [esa](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[esa-id]** *number*

Synopsis ESA ID

Context **configure** isa application-assurance-group number primary esa number vm number

Tree esa

Range 1 to 16

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **vm** *number*

Synopsis VM ID within the ESA

Context **configure** isa application-assurance-group number primary esa number vm number

Tree esa

Range 1 to 4

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **isa** [**mda-id**] *string*

Synopsis Add a list entry for **isa**

Context **configure** isa application-assurance-group number primary isa string

Tree isa

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[mda-id]** *string*

Synopsis MDA/ISA ID

Context **configure** isa application-assurance-group number primary isa string

Tree isa

---

Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure isa application-assurance-group number qos</b>
Tree	<a href="#">qos</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## egress

Synopsis	Enter the <b>egress</b> context
Context	<b>configure isa application-assurance-group number qos egress</b>
Tree	<a href="#">egress</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## from-subscriber

Synopsis	Enter the <b>from-subscriber</b> context
Context	<b>configure isa application-assurance-group number qos egress from-subscriber</b>
Tree	<a href="#">from-subscriber</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## buffer-pool

Synopsis	Enter the <b>buffer-pool</b> context
Context	<b>configure isa application-assurance-group number qos egress from-subscriber buffer-pool</b>
Tree	<a href="#">buffer-pool</a>
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### name *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Name of the buffer pool used for this ISA group

Context **configure** isa application-assurance-group *number* qos egress from-subscriber buffer-pool *name string*

Tree [name](#)

String Length 1 to 32

Default default

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### resv-cbs *number*

Synopsis Reserved CBS for this ISA group

Context **configure** isa application-assurance-group *number* qos egress from-subscriber buffer-pool *resv-cbs number*

Tree [resv-cbs](#)

Range 0 to 100

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### slope-policy *reference*

Synopsis Slope policy name

Context **configure** isa application-assurance-group *number* qos egress from-subscriber buffer-pool *slope-policy reference*

Tree [slope-policy](#)

Reference **configure** qos *slope-policy string*

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port-scheduler-policy** *reference*

Synopsis	Port scheduler policy name
Context	<b>configure</b> isa application-assurance-group <i>number</i> qos egress from-subscriber port-scheduler-policy <i>reference</i>
Tree	port-scheduler-policy
Reference	<b>configure</b> qos port-scheduler-policy <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**queue-policy** *reference*

Synopsis	Queue policy name
Context	<b>configure</b> isa application-assurance-group <i>number</i> qos egress from-subscriber queue-policy <i>reference</i>
Tree	queue-policy
Reference	<b>configure</b> qos network-queue <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**wa-shared-high-wmark** (*number* | *keyword*)

Synopsis	High watermark for weighted average utilization
Context	<b>configure</b> isa application-assurance-group <i>number</i> qos egress from-subscriber wa-shared-high-wmark ( <i>number</i>   <i>keyword</i> )
Tree	wa-shared-high-wmark
Range	1 to 100
Units	percent
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**wa-shared-low-wmark** *number*

Synopsis	Low watermark for the weighted average utilization
----------	--

Context	<b>configure</b> isa application-assurance-group <i>number</i> qos egress from-subscriber wa-shared-low-wmark <i>number</i>
Tree	wa-shared-low-wmark
Range	0 to 99
Units	percent
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### to-subscriber

Synopsis	Enter the <b>to-subscriber</b> context
Context	<b>configure</b> isa application-assurance-group <i>number</i> qos egress to-subscriber
Tree	to-subscriber
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### buffer-pool

Synopsis	Enter the <b>buffer-pool</b> context
Context	<b>configure</b> isa application-assurance-group <i>number</i> qos egress to-subscriber buffer-pool
Tree	buffer-pool
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### name *string*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the buffer pool used for this ISA group
Context	<b>configure</b> isa application-assurance-group <i>number</i> qos egress to-subscriber buffer-pool <i>name string</i>
Tree	<i>name</i>
String Length	1 to 32

Default	default
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**resv-cbs** *number*

Synopsis	Reserved CBS for this ISA group
Context	<b>configure</b> isa application-assurance-group <i>number</i> qos egress to-subscriber buffer-pool <b>resv-cbs</b> <i>number</i>
Tree	<a href="#">resv-cbs</a>
Range	0 to 100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**slope-policy** *reference*

Synopsis	Slope policy name
Context	<b>configure</b> isa application-assurance-group <i>number</i> qos egress to-subscriber buffer-pool <b>slope-policy</b> <i>reference</i>
Tree	<a href="#">slope-policy</a>
Reference	<b>configure</b> qos <b>slope-policy</b> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port-scheduler-policy** *reference*

Synopsis	Port scheduler policy name
Context	<b>configure</b> isa application-assurance-group <i>number</i> qos egress to-subscriber port-scheduler-policy <b>reference</b>
Tree	<a href="#">port-scheduler-policy</a>
Reference	<b>configure</b> qos <b>port-scheduler-policy</b> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



### **queue-policy** *reference*

Synopsis	Queue policy name
Context	<b>configure</b> <a href="#">isa application-assurance-group</a> <i>number</i> <a href="#">qos egress to-subscriber queue-policy</a> <i>reference</i>
Tree	<a href="#">queue-policy</a>
Reference	<b>configure</b> <a href="#">qos network-queue</a> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **wa-shared-high-wmark** (*number* | *keyword*)

Synopsis	High watermark for weighted average utilization
Context	<b>configure</b> <a href="#">isa application-assurance-group</a> <i>number</i> <a href="#">qos egress to-subscriber wa-shared-high-wmark</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">wa-shared-high-wmark</a>
Range	1 to 100
Units	percent
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **wa-shared-low-wmark** *number*

Synopsis	Low watermark for the weighted average utilization
Context	<b>configure</b> <a href="#">isa application-assurance-group</a> <i>number</i> <a href="#">qos egress to-subscriber wa-shared-low-wmark</a> <i>number</i>
Tree	<a href="#">wa-shared-low-wmark</a>
Range	0 to 99
Units	percent
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## shared-resources

Synopsis	Enter the <b>shared-resources</b> context
Context	<b>configure isa application-assurance-group number shared-resources</b>
Tree	<a href="#">shared-resources</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## gtp-tunnel-database *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Percentage of allocated memory resources
Context	<b>configure isa application-assurance-group number shared-resources gtp-tunnel-database number</b>
Tree	<a href="#">gtp-tunnel-database</a>
Range	1 to 100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## tcp-advanced-functions *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allocation of resources for TCP advanced functions
Context	<b>configure isa application-assurance-group number shared-resources tcp-advanced-functions number</b>
Tree	<a href="#">tcp-advanced-functions</a>
Range	1 to 100
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**url-filter-web-service-cache** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Amount of shared memory as a percentage
Context	<b>configure</b> isa application-assurance-group <i>number</i> shared-resources url-filter-web-service-cache <i>number</i>
Tree	url-filter-web-service-cache
Range	1 to 100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**statistics**

Synopsis	Enter the <b>statistics</b> context
Context	<b>configure</b> isa application-assurance-group <i>number</i> statistics
Tree	statistics
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**stats-type** [isa-aa-group-stats-type] *keyword*

Synopsis	Enter the <b>stats-type</b> list instance
Context	<b>configure</b> isa application-assurance-group <i>number</i> statistics stats-type <i>keyword</i>
Tree	stats-type
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[isa-aa-group-stats-type]** *keyword*

Synopsis	Group performance statistics type
Context	<b>configure</b> isa application-assurance-group <i>number</i> statistics stats-type <i>keyword</i>
Tree	stats-type
Options	aa-performance
Notes	This element is part of a list key.

Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **accounting-policy** *reference*

Synopsis Accounting policy ID used by AA  
Context **configure** isa application-assurance-group number statistics stats-type keyword *accounting-policy reference*  
Tree *accounting-policy*  
Reference **configure** log *accounting-policy number*  
Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **collect-stats** *boolean*

Synopsis Enable the collection of statistics  
Context **configure** isa application-assurance-group number statistics stats-type keyword *collect-stats boolean*  
Tree *collect-stats*  
Default false  
Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **transit-prefix-limits**

Synopsis Enter the **transit-prefix-limits** context  
Context **configure** isa application-assurance-group number *transit-prefix-limits*  
Tree *transit-prefix-limits*  
Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipv4-entries** *number*

Synopsis Limit of transit prefix IPv4 entries per AA group  
Context **configure** isa application-assurance-group number *transit-prefix-limits ipv4-entries number*

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Tree	<a href="#">ipv4-entries</a>
Range	1 to 16383
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipv4-remote-entries** *number*

Synopsis	Limit of transit prefix IPv4 remote entries per group
Context	<b>configure isa application-assurance-group</b> <i>number</i> <a href="#">transit-prefix-limits ipv4-remote-entries</a> <i>number</i>
Tree	<a href="#">ipv4-remote-entries</a>
Range	1 to 2047
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipv6-entries** *number*

Synopsis	Limit of transit prefix IPv6 entries per AA group
Context	<b>configure isa application-assurance-group</b> <i>number</i> <a href="#">transit-prefix-limits ipv6-entries</a> <i>number</i>
Tree	<a href="#">ipv6-entries</a>
Range	1 to 8191
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipv6-remote-entries** *number*

Synopsis	Limit of transit prefix IPv6 remote entries per group
Context	<b>configure isa application-assurance-group</b> <i>number</i> <a href="#">transit-prefix-limits ipv6-remote-entries</a> <i>number</i>
Tree	<a href="#">ipv6-remote-entries</a>
Range	1 to 1023
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**vm-traffic-distribute-by-ip** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow packet distribution by IP address for virtual AA
Context	<b>configure</b> isa application-assurance-group <i>number</i> vm-traffic-distribute-by-ip <i>boolean</i>
Tree	vm-traffic-distribute-by-ip
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**vm-traffic-distribute-by-teid** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable load balancing of the traffic using TEID
Context	<b>configure</b> isa application-assurance-group <i>number</i> vm-traffic-distribute-by-teid <i>boolean</i>
Tree	vm-traffic-distribute-by-teid
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**Ins-group** [*id*] *number*

Synopsis	Enter the <b>Ins-group</b> list instance
Context	<b>configure</b> isa Ins-group <i>number</i>
Tree	Ins-group
Description	Commands in this context configure the ISA L2TP Network Server (LNS) group.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[id] number**

Synopsis	LNS group ID
Context	<b>configure isa lns-group number</b>
Tree	<a href="#">lns-group</a>
Range	1 to 4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of the ISA LNS group
Context	<b>configure isa lns-group number admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure isa lns-group number description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**esa [esa-id] reference vm reference**

Synopsis	Enter the <b>esa</b> list instance
Context	<b>configure isa lns-group number esa reference vm reference</b>
Tree	<a href="#">esa</a>
Max. Instances	6

Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### [**esa-id**] *reference*

Synopsis	ESA ID
Context	<b>configure isa lns-group number esa reference vm reference</b>
Tree	<a href="#">esa</a>
Reference	<b>configure esa number</b>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **vm** *reference*

Synopsis	VM ID
Context	<b>configure isa lns-group number esa reference vm reference</b>
Tree	<a href="#">esa</a>
Reference	<b>configure esa number vm number</b>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **drain** *boolean*

Synopsis	Redirect subscribers to other ESA VMs
Context	<b>configure isa lns-group number esa reference vm reference drain boolean</b>
Tree	<a href="#">drain</a>
Description	<p>When configured to <b>true</b>, the ESA VM redirects new subscribers to use other ESA VMs.</p> <p>The drain function gracefully redirects subscribers to other ESA VMs and does not allow new subscribers to use the ESA VM. As the existing subscribers terminate their sessions, the ESA VM no longer services any subscribers and can be decommissioned gracefully.</p> <p>When configured to <b>false</b>, the ESA VM is set to the normal working operational state and accepts new LNS subscribers.</p>
Default	false



Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **mda** [*mda-id*] *string*

Synopsis	Enter the <b>mda</b> list instance
Context	<b>configure isa lns-group</b> <i>number mda string</i>
Tree	<b>mda</b>
Description	Commands in this context configure an ISA LNS group MDA.
Max. Instances	6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[mda-id]** *string*

Synopsis	MDA ID for the ISA LNS group
Context	<b>configure isa lns-group</b> <i>number mda string</i>
Tree	<b>mda</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **drain** *boolean*

Synopsis	Prevent new L2TP sessions from associating with ISA
Context	<b>configure isa lns-group</b> <i>number mda string drain boolean</i>
Tree	<b>drain</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port-policy** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Port policy for the ISA LNS group
Context	<b>configure</b> <i>isa lns-group number port-policy reference</i>
Tree	<i>port-policy</i>
Reference	<b>configure</b> <i>port-policy string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nat-group** [*id*] *number*

Synopsis	Enter the <b>nat-group</b> list instance
Context	<b>configure</b> <i>isa nat-group number</i>
Tree	<i>nat-group</i>
Max. Instances	4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[id]** *number*

Synopsis	NAT group ID
Context	<b>configure</b> <i>isa nat-group number</i>
Tree	<i>nat-group</i>
Range	1 to 4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the NAT group
Context	<b>configure</b> <i>isa nat-group number admin-state keyword</i>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **esa** [[esa-id](#)] *reference* [vm](#) *reference*

Synopsis	Add a list entry for <b>esa</b>
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">esa</a> <i>reference</i> <a href="#">vm</a> <i>reference</i>
Tree	<a href="#">esa</a>
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **[esa-id]** *reference*

Synopsis	Provisioned ESA ID
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">esa</a> <i>reference</i> <a href="#">vm</a> <i>reference</i>
Tree	<a href="#">esa</a>
Reference	<b>configure</b> <a href="#">esa</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

**vm reference**

Synopsis	VM ID for the provisioned BB ISA
Context	<b>configure isa nat-group number esa reference vm reference</b>
Tree	<a href="#">esa</a>
Reference	<b>configure esa number vm number</b>
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

**log**

Synopsis	Enter the <b>log</b> context
Context	<b>configure isa nat-group number log</b>
Tree	<a href="#">log</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**suppress-lsn-events *boolean***

Synopsis	Suppress LSN events when RADIUS accounting is enabled
Context	<b>configure isa nat-group number log suppress-lsn-events <i>boolean</i></b>
Tree	<a href="#">suppress-lsn-events</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**suppress-lsn-sub-blocks-free *boolean***

Synopsis	Suppress LSN Free block and NAT pool block notification
Context	<b>configure isa nat-group number log suppress-lsn-sub-blocks-free <i>boolean</i></b>
Tree	<a href="#">suppress-lsn-sub-blocks-free</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mda** [[mda-id](#)] *string*

Synopsis	Add a list entry for <b>mda</b>
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">mda</a> <i>string</i>
Tree	<a href="#">mda</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[mda-id]** *string*

Synopsis	MDA ID for ISA NAT group
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">mda</a> <i>string</i>
Tree	<a href="#">mda</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**radius-accounting-policy** *reference*

Synopsis	RADIUS accounting policy for ISA group
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">radius-accounting-policy</a> <i>reference</i>
Tree	<a href="#">radius-accounting-policy</a>
Reference	<b>configure</b> <a href="#">aaa radius</a> <a href="#">isa-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**redundancy**

Synopsis	Enter the <b>redundancy</b> context
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">redundancy</a>
Tree	<a href="#">redundancy</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**active-mda-limit** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Number of active MS-ISAs in the NAT group
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">redundancy</a> <a href="#">active-mda-limit</a> <i>number</i>
Tree	<a href="#">active-mda-limit</a>
Range	1 to 14
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**inter-chassis**

Synopsis	Enable the <b>inter-chassis</b> context
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">redundancy</a> <a href="#">inter-chassis</a>
Tree	<a href="#">inter-chassis</a>
Notes	The following elements are part of a choice: <b>inter-chassis</b> or <b>intra-chassis</b> .
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**flow-timeout-on-switchover** *number*

Synopsis	Flow timeout immediately following a switchover
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">redundancy</a> <a href="#">inter-chassis</a> <a href="#">flow-timeout-on-switchover</a> <i>number</i>
Tree	<a href="#">flow-timeout-on-switchover</a>
Description	<p>This command configures the initial flow timeout on the newly active node for the NAT group after a switchover. The timeout is in effect only if there is no traffic present over the flow; otherwise, the first packet over the flow resets the flow timeout to the originally configured value (under the NAT policy configuration).</p> <p>This command configuration restricts the flow timeout to a portion of the originally configured value.</p>
Range	1 to 50

Units	percent
Default	50
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-mtu** *number*

Synopsis	IP MTU for ISA-to-ISA communication
Context	<b>configure isa nat-group number redundancy inter-chassis ip-mtu number</b>
Tree	<a href="#">ip-mtu</a>
Description	This command configures the IP MTU size used to transport flow synchronization records between the ISAs. Multiple flow synchronization events can be packed into a single frame up to the IP MTU size.
Range	512 to 9000
Default	1500
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **keepalive**

Synopsis	Enter the <b>keepalive</b> context
Context	<b>configure isa nat-group number redundancy inter-chassis keepalive</b>
Tree	<a href="#">keepalive</a>
Description	Commands in this context configure keepalive messages between the CPMs residing on different chassis and are used to detect the presence of the peering node. If the redundant peer connectivity is lost beyond the limit defined by the keepalive messages, each node in the redundant pair transitions to standalone mode. Keepalive messages use UDP transport.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dropcount** *number*

Synopsis	Threshold for lost consecutive keepalive messages
Context	<b>configure isa nat-group number redundancy inter-chassis keepalive dropcount number</b>
Tree	<a href="#">dropcount</a>

Description	This command configures the threshold for the number of consecutive keepalive messages that are lost between the redundant nodes before the connection is declared down. When the peer is considered unreachable, each node transitions to standalone mode.
Range	2 to 20
Default	2
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **interval** *number*

Synopsis	Interval between two consecutive keepalive messages
Context	<b>configure</b> isa nat-group <i>number</i> redundancy inter-chassis keepalive interval <i>number</i>
Tree	interval
Description	This command configures the interval at which the keepalive messages are periodically sent between the redundant nodes (CPMs) to verify the presence of the peer. If peer connectivity is lost, each node transitions to standalone mode.
Range	2 to 250
Units	deciseconds
Default	30
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **local-ip-range-start** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Starting IP address for ISAs in the NAT group
Context	<b>configure</b> isa nat-group <i>number</i> redundancy inter-chassis local-ip-range-start <i>string</i>
Tree	local-ip-range-start
Description	This command configures the initial IP address for the ISAs in the NAT group. Consecutive IP addresses are automatically assigned for the remaining ISAs. The IP addresses are used to communicate between the ISAs on redundant nodes for the



purpose of flow synchronization. Traffic from the member ISA with the initial IP address is sent to the initial IP address from the remote IP range.

Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **monitor-oper-group** [[oper-group](#)] *reference*

Synopsis	Enter the <b>monitor-oper-group</b> list instance
Context	<b>configure</b> <a href="#">isa nat-group number redundancy inter-chassis monitor-oper-group reference</a>
Tree	<a href="#">monitor-oper-group</a>
Description	Commands in this context specify monitoring settings for objects in an operational group, such as SAPs, BFD sessions, or VRRP sessions, in order to adjust the overall health of the node in a redundant inter-chassis NAT system. A state change of the objects in the operational group influences the health of a NAT node in a redundant configuration.
Max. Instances	4
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[oper-group]** *reference*

Synopsis	Operational group name
Context	<b>configure</b> <a href="#">isa nat-group number redundancy inter-chassis monitor-oper-group reference</a>
Tree	<a href="#">monitor-oper-group</a>
Reference	<b>configure</b> <a href="#">service oper-group string</a>
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **health-drop** *number*

Synopsis	Overall health drop of the NAT group on a state change
Context	<b>configure</b> <a href="#">isa nat-group number redundancy inter-chassis monitor-oper-group reference health-drop number</a>
Tree	<a href="#">health-drop</a>
Range	1 to 255

Default	1
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **monitor-port** [*port-id*] *string*

Synopsis	Enter the <b>monitor-port</b> list instance
Context	<b>configure</b> isa nat-group number redundancy inter-chassis monitor-port <i>string</i>
Tree	<a href="#">monitor-port</a>
Description	Commands in this context specify monitoring settings for a port carrying NAT traffic, in order to adjust the overall health of the node in a redundant inter-chassis NAT system. A state change of a monitored port influences the health of a NAT node in a redundant configuration.
Max. Instances	16
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[port-id]** *string*

Synopsis	Port ID
Context	<b>configure</b> isa nat-group number redundancy inter-chassis monitor-port <i>string</i>
Tree	<a href="#">monitor-port</a>
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **health-drop** *number*

Synopsis	Overall health drop of the NAT group on a state change
Context	<b>configure</b> isa nat-group number redundancy inter-chassis monitor-port <i>string</i> health-drop <i>number</i>
Tree	<a href="#">health-drop</a>
Range	1 to 255
Default	1
Introduced	20.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### preferred *boolean*

Synopsis Set the preferred activity status for the node

Context **configure isa nat-group number redundancy inter-chassis preferred *boolean***

Tree [preferred](#)

Description When configured to **true**, the system designates the node in a redundant NAT system with the preferred activity status. The preferred status comes into consideration only when both redundant nodes have equal health values. If the peer traffic-serving node has an equal health value but does not have the preferred designation, a switch of activity occurs to route traffic to the preferred node. The switchover could cause a brief interruption in traffic flow.

When configured to **false**, the preferred designation is not set for the node.

Default false

Introduced 20.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### remote-ip-range-start *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis Starting IP address for ISAs on the remote node

Context **configure isa nat-group number redundancy inter-chassis remote-ip-range-start *string***

Tree [remote-ip-range-start](#)

Description This command configures the initial IP address for the ISAs in the NAT group on the remote node. Consecutive IP addresses are automatically assigned for the remaining ISAs. The IP addresses are used to communicate between the ISAs on redundant nodes for the purpose of flow synchronization. Traffic from the member ISA with the initial local IP address is sent to the initial IP address from the remote IP range.

Introduced 20.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**replication-threshold** *number*

Synopsis	Minimum time to wait before a NAT flow is synchronized
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">redundancy inter-chassis replication-threshold</a> <i>number</i>
Tree	<a href="#">replication-threshold</a>
Description	This command configures the minimum time to wait before a NAT flow is replicated (synchronized) to the standby node.
Range	0 to 300
Units	seconds
Default	20
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**router-instance** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Router instance for the ISA-to-ISA communication
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">redundancy inter-chassis router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>
Description	This command specifies the routing instance through which ISAs on redundant nodes communicate with each other and synchronize their flow state.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**sync** *boolean*

Synopsis	Synchronize NAT flows between nodes
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">redundancy inter-chassis sync</a> <i>boolean</i>
Tree	<a href="#">sync</a>
Default	true
Introduced	22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## intra-chassis

Synopsis Enter the **intra-chassis** context

Context **configure isa nat-group number redundancy intra-chassis**

Tree [intra-chassis](#)

Notes The following elements are part of a choice: **inter-chassis** or **intra-chassis**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## active-active

Synopsis Enter the **active-active** context

Context **configure isa nat-group number redundancy intra-chassis active-active**

Tree [active-active](#)

Notes The following elements are part of a choice: **active-active**, **active-standby**, or **I2aware-bypass**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## failed-mda-limit *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



### WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis Maximum failed MDAs allowed in ICR for the NAT group

Context **configure isa nat-group number redundancy intra-chassis active-active failed-mda-limit number**

Tree [failed-mda-limit](#)

Range 1 to 2

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## active-standby



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Active-standby intra-chassis NAT redundancy model
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">redundancy intra-chassis active-standby</a>
Tree	<a href="#">active-standby</a>
Notes	The following elements are part of a choice: <b>active-active</b> , <b>active-standby</b> , or <b>l2aware-bypass</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## l2aware-bypass



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	L2-aware-bypass NAT redundancy model
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">redundancy intra-chassis l2aware-bypass</a>
Tree	<a href="#">l2aware-bypass</a>
Notes	The following elements are part of a choice: <b>active-active</b> , <b>active-standby</b> , or <b>l2aware-bypass</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**scaling-profile** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Scaling profile for the NAT group
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">scaling-profile</a> <i>keyword</i>
Tree	<a href="#">scaling-profile</a>
Description	This command determines profiles for NAT scaling. Lower profile numbers allocate less resources, thus supporting lower scaling.  Contact your Nokia representative for more information about NAT scaling figures in each profile.
Options	profile1, profile2, profile3
Default	profile1
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**session-limits**

Synopsis	Enter the <b>session-limits</b> context
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">session-limits</a>
Tree	<a href="#">session-limits</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**reserved** *number*

Synopsis	Number of sessions reserved for prioritized sessions
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">session-limits</a> <a href="#">reserved</a> <i>number</i>
Tree	<a href="#">reserved</a>
Range	1 to 6291456
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## upnp-mappings *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Maximum number of UPnP mappings per member
Context	<b>configure isa nat-group</b> <i>number</i> <a href="#">session-limits upnp-mappings</a> <i>number</i>
Tree	<a href="#">upnp-mappings</a>
Description	This command specifies the maximum number of Universal Plug and Play (UPnP) mappings per member.
Range	1 to 524288
Default	524288
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## watermarks

Synopsis	Enable the <b>watermarks</b> context
Context	<b>configure isa nat-group</b> <i>number</i> <a href="#">session-limits watermarks</a>
Tree	<a href="#">watermarks</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## high *number*

Synopsis	Session limit high watermark for each MDA in the group
Context	<b>configure isa nat-group</b> <i>number</i> <a href="#">session-limits watermarks high</a> <i>number</i>
Tree	<a href="#">high</a>
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **low** *number*

Synopsis Session limit low watermark for each MDA in the group

Context **configure** [isa nat-group](#) *number* [session-limits](#) [watermarks](#) **low** *number*

Tree [low](#)

Range 0 to 100

Units percent

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tunnel-group** [*id*] *number*

Synopsis Enter the **tunnel-group** list instance

Context **configure** [isa tunnel-group](#) *number*

Tree [tunnel-group](#)

Description Commands in this context create or edit a tunnel group. A tunnel group is a set of one or more MS-ISAs that support the origination and termination of IPsec and IP/GRE tunnels. On a VSR, the **isa-scale-mode** command must be specified, which defines the maximum number of tunnels on each ISA.

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### [*id*] *number*

Synopsis Tunnel group ID

Context **configure** [isa tunnel-group](#) *number*

Tree [tunnel-group](#)

Range 1 to 64

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the ISA tunnel group
Context	<b>configure</b> <a href="#">isa tunnel-group</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**backup** *string*

Synopsis	IPsec module configured in the slot to the IPsec group
Context	<b>configure</b> <a href="#">isa tunnel-group</a> <i>number</i> <a href="#">backup</a> <i>string</i>
Tree	<a href="#">backup</a>
Notes	The following elements are part of a choice: <b>multi-active</b> or ( <b>backup</b> and <b>primary</b> ).
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">isa tunnel-group</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ipsec-responder-only** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Act as an IKE responder except upon MC-IPsec switchover
Context	<b>configure</b> <a href="#">isa tunnel-group</a> <i>number</i> <a href="#">ipsec-responder-only</a> <i>boolean</i>
Tree	<a href="#">ipsec-responder-only</a>

Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **isa-scale-mode** *keyword*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tunnel limit on each ISA for the tunnel group
Context	<b>configure</b> <a href="#">isa</a> <a href="#">tunnel-group</a> <i>number</i> <a href="#">isa-scale-mode</a> <i>keyword</i>
Tree	<a href="#">isa-scale-mode</a>
Options	tunnel-limit-2k, tunnel-limit-32k, tunnel-limit-64k, tunnel-limit-8, tunnel-limit-32
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **multi-active**

Synopsis	Enable the <b>multi-active</b> context
Context	<b>configure</b> <a href="#">isa</a> <a href="#">tunnel-group</a> <i>number</i> <a href="#">multi-active</a>
Tree	<a href="#">multi-active</a>
Notes	The following elements are part of a choice: <b>multi-active</b> or ( <b>backup</b> and <b>primary</b> ).
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **active-isa-number** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of active MS-ISAs in the tunnel group
Context	<b>configure</b> <a href="#">isa</a> <a href="#">tunnel-group</a> <i>number</i> <a href="#">multi-active</a> <a href="#">active-isa-number</a> <i>number</i>
Tree	<a href="#">active-isa-number</a>

Range	1 to 16
Default	1
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **esa** [[esa-id](#)] *reference* [vm](#) *reference*

Synopsis	Add a list entry for <b>esa</b>
Context	<b>configure</b> <a href="#">isa</a> <a href="#">tunnel-group</a> <i>number</i> <a href="#">multi-active</a> <a href="#">esa</a> <i>reference</i> <a href="#">vm</a> <i>reference</i>
Tree	<a href="#">esa</a>
Notes	The following elements are part of a choice: <b>esa</b> , <b>isa</b> , or <b>member-pool</b> .
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **[esa-id]** *reference*

Synopsis	ESA ID
Context	<b>configure</b> <a href="#">isa</a> <a href="#">tunnel-group</a> <i>number</i> <a href="#">multi-active</a> <a href="#">esa</a> <i>reference</i> <a href="#">vm</a> <i>reference</i>
Tree	<a href="#">esa</a>
Reference	<b>configure</b> <a href="#">esa</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **vm** *reference*

Synopsis	ESM-VM ID
Context	<b>configure</b> <a href="#">isa</a> <a href="#">tunnel-group</a> <i>number</i> <a href="#">multi-active</a> <a href="#">esa</a> <i>reference</i> <a href="#">vm</a> <i>reference</i>
Tree	<a href="#">esa</a>
Reference	<b>configure</b> <a href="#">esa</a> <i>number</i> <a href="#">vm</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

**isa** [*isa-id*] *string*

Synopsis	Add a list entry for <b>isa</b>
Context	<b>configure</b> <a href="#">isa</a> <a href="#">tunnel-group</a> <i>number</i> <a href="#">multi-active</a> <a href="#">isa</a> <i>string</i>
Tree	<a href="#">isa</a>
Notes	The following elements are part of a choice: <b>esa</b> , <b>isa</b> , or <b>member-pool</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[isa-id]** *string*

Synopsis	ISA ID associated with the tunnel member pool
Context	<b>configure</b> <a href="#">isa</a> <a href="#">tunnel-group</a> <i>number</i> <a href="#">multi-active</a> <a href="#">isa</a> <i>string</i>
Tree	<a href="#">isa</a>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**member-pool** *reference*

Synopsis	Tunnel-member pool name
Context	<b>configure</b> <a href="#">isa</a> <a href="#">tunnel-group</a> <i>number</i> <a href="#">multi-active</a> <a href="#">member-pool</a> <i>reference</i>
Tree	<a href="#">member-pool</a>
Reference	<b>configure</b> <a href="#">isa</a> <a href="#">tunnel-member-pool</a> <i>string</i>
Notes	The following elements are part of a choice: <b>esa</b> , <b>isa</b> , or <b>member-pool</b> .
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**primary** *string*

Synopsis	Primary ISA IPsec module assigned for the tunnel group
Context	<b>configure</b> <a href="#">isa</a> <a href="#">tunnel-group</a> <i>number</i> <a href="#">primary</a> <i>string</i>
Tree	<a href="#">primary</a>
Notes	The following elements are part of a choice: <b>multi-active</b> or ( <b>backup</b> and <b>primary</b> ).
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## reassemble

Synopsis Enter the **reassemble** context  
Context **configure isa tunnel-group number reassemble**  
Tree [reassemble](#)  
Introduced 16.0.R4  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## max-wait-time *number*

Synopsis Maximum time to receive fragments for packet reassembly  
Context **configure isa tunnel-group number reassemble max-wait-time number**  
Tree [max-wait-time](#)  
Range 1 to 5000  
Units milliseconds  
Introduced 16.0.R4  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## stats-collection

Synopsis Enter the **stats-collection** context  
Context **configure isa tunnel-group number stats-collection**  
Tree [stats-collection](#)  
Description Commands in this context configure the ISA statistics collection.  
Introduced 16.0.R4  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## isa-dp-cpu-usage *boolean*

Synopsis Collect statistics used to derive ISA DP CPU usage  
Context **configure isa tunnel-group number stats-collection isa-dp-cpu-usage boolean**  
Tree [isa-dp-cpu-usage](#)  
Description When configured to **true**, this command collects statistics used to derive ISA CPU DP usage and impacts the ISA performance.

	When configured to <b>false</b> , statistics are not collected.
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **strict-esp-sequence-number-ordering** *boolean*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable strict ESP sequence number ordering
Context	<b>configure</b> <i>isa tunnel-group number</i> <b>strict-esp-sequence-number-ordering</b> <i>boolean</i>
Tree	<a href="#">strict-esp-sequence-number-ordering</a>
Description	When configured to <b>true</b> , the router enables strict ESP sequence number ordering. When ESP sequence number ordering is enabled, the outbound ESP sequence number of a CHILD_SA must be in the same order as when clear packets are received by the same CHILD_SA.
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **tunnel-member-pool** [[name](#)] *string*

Synopsis	Enter the <b>tunnel-member-pool</b> list instance
Context	<b>configure</b> <i>isa tunnel-member-pool</i> <i>string</i>
Tree	<a href="#">tunnel-member-pool</a>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

#### **[name]** *string*

Synopsis	ISA tunnel-member pool name
Context	<b>configure</b> <i>isa tunnel-member-pool</i> <i>string</i>
Tree	<a href="#">tunnel-member-pool</a>
String Length	1 to 32

Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">isa</a> <a href="#">tunnel-member-pool</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **esa** [[esa-id](#)] *reference* [vm](#) *reference*

Synopsis	Add a list entry for <b>esa</b>
Context	<b>configure</b> <a href="#">isa</a> <a href="#">tunnel-member-pool</a> <i>string</i> <a href="#">esa</a> <i>reference</i> <a href="#">vm</a> <i>reference</i>
Tree	<a href="#">esa</a>
Description	Commands in this context add specified ESA-VMs to the pool.
Max. Instances	16
Notes	The following elements are part of a choice: <b>esa</b> or <b>isa</b> .
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **[esa-id]** *reference*

Synopsis	ESA ID
Context	<b>configure</b> <a href="#">isa</a> <a href="#">tunnel-member-pool</a> <i>string</i> <a href="#">esa</a> <i>reference</i> <a href="#">vm</a> <i>reference</i>
Tree	<a href="#">esa</a>
Reference	<b>configure</b> <a href="#">esa</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s



**vm reference**

Synopsis	ESM-VM ID
Context	<b>configure isa tunnel-member-pool string esa reference vm reference</b>
Tree	<a href="#">esa</a>
Reference	<b>configure esa number vm number</b>
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

**isa [isa-id] string**

Synopsis	Add a list entry for <b>isa</b>
Context	<b>configure isa tunnel-member-pool string isa string</b>
Tree	<a href="#">isa</a>
Max. Instances	16
Notes	The following elements are part of a choice: <b>esa</b> or <b>isa</b> .
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[isa-id] string**

Synopsis	ISA ID associated with the tunnel member pool
Context	<b>configure isa tunnel-member-pool string isa string</b>
Tree	<a href="#">isa</a>
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**video-group [video-group-id] number**

Synopsis	Enter the <b>video-group</b> list instance
Context	<b>configure isa video-group number</b>
Tree	<a href="#">video-group</a>

Max. Instances	4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **[video-group-id] number**

Synopsis	Video group identifier
Context	<b>configure isa video-group number</b>
Tree	<a href="#">video-group</a>
Range	1 to 4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **ad-insert boolean**



**WARNING:**

This element is deprecated and will be removed in a future release.



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable the ad insert server for the ISA video group
Context	<b>configure isa video-group number ad-insert boolean</b>
Tree	<a href="#">ad-insert</a>
Default	false
Introduced	16.0.R1
Deprecated	22.10.R3
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**admin-state** *keyword*

Synopsis	Administrative state of the video group
Context	<b>configure isa video-group</b> <i>number admin-state keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**analyzer** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable the analyzer for all streams on the video group
Context	<b>configure isa video-group</b> <i>number analyzer boolean</i>
Tree	<b>analyzer</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**description** *string*

Synopsis	Text description
Context	<b>configure isa video-group</b> <i>number description string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **fcc-server** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Allow FCC server capability for the group

Context **configure** *isa video-group number fcc-server boolean*

Tree *fcc-server*

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **local-rt-server** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Enable the local RET server for the group

Context **configure** *isa video-group number local-rt-server boolean*

Tree *local-rt-server*

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**mda** [*mda-id*] *string*

Synopsis	Add a list entry for <b>mda</b>
Context	<b>configure isa video-group number mda string</b>
Tree	<a href="#">mda</a>
Max. Instances	6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**[mda-id]** *string*

Synopsis	MDA identifier
Context	<b>configure isa video-group number mda string</b>
Tree	<a href="#">mda</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**resv-ret** *number*

Synopsis	Egress bandwidth reserved for retransmission
Context	<b>configure isa video-group number resv-ret number</b>
Tree	<a href="#">resv-ret</a>
Range	0 to 10500
Units	megabps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**rt-client** *boolean***WARNING:**

This element is deprecated and will be removed in a future release.

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Allow client capability for retransmission
Context	<b>configure</b> <a href="#">isa</a> <a href="#">video-group</a> <i>number</i> <a href="#">rt-client</a> <i>boolean</i>
Tree	<a href="#">rt-client</a>
Default	true
Introduced	16.0.R1
Deprecated	22.10.R3
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**stream-selection** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Allow stream selection for the group
Context	<b>configure</b> <a href="#">isa</a> <a href="#">video-group</a> <i>number</i> <a href="#">stream-selection</a> <i>boolean</i>
Tree	<a href="#">stream-selection</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**vapp** [[esa-id](#)] *reference* [vapp-id](#) *reference*

Synopsis	Add a list entry for <b>vapp</b>
Context	<b>configure</b> <a href="#">isa</a> <a href="#">video-group</a> <i>number</i> <a href="#">vapp</a> <i>reference</i> <a href="#">vapp-id</a> <i>reference</i>

Tree	<a href="#">vapp</a>
Description	This command adds a list entry for the ESA and VM ID to the list of video group member ESA virtual applications.
Max. Instances	6
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **[esa-id] reference**

Synopsis	ESA ID
Context	<b>configure</b> <a href="#">isa</a> <a href="#">video-group</a> <i>number</i> <a href="#">vapp</a> <i>reference</i> <a href="#">vapp-id</a> <i>reference</i>
Tree	<a href="#">vapp</a>
Reference	<b>configure</b> <a href="#">esa</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **vapp-id reference**

Synopsis	Virtual application ID
Context	<b>configure</b> <a href="#">isa</a> <a href="#">video-group</a> <i>number</i> <a href="#">vapp</a> <i>reference</i> <a href="#">vapp-id</a> <i>reference</i>
Tree	<a href="#">vapp</a>
Reference	<b>configure</b> <a href="#">esa</a> <i>number</i> <a href="#">vm</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **watermark**

Synopsis	Enter the <b>watermark</b> context
Context	<b>configure</b> <a href="#">isa</a> <a href="#">video-group</a> <i>number</i> <a href="#">watermark</a>
Tree	<a href="#">watermark</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## **bandwidth**

Synopsis Enter the **bandwidth** context

Context **configure** [isa video-group](#) *number* [watermark bandwidth](#)

Tree [bandwidth](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## **fcc number**

Synopsis FCC watermark parameters based on the bandwidth

Context **configure** [isa video-group](#) *number* [watermark bandwidth](#) *fcc number*

Tree [fcc](#)

Range 1 to 99

Units percent

Default 90

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## **ret number**

Synopsis RET watermark parameters based on the bandwidth

Context **configure** [isa video-group](#) *number* [watermark bandwidth](#) *ret number*

Tree [ret](#)

Range 1 to 99

Units percent

Default 90

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s



**total number**

Synopsis	Total watermark parameters based on the bandwidth
Context	<b>configure isa video-group number watermark bandwidth total number</b>
Tree	<b>total</b>
Range	1 to 99
Units	percent
Default	90
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**session**

Synopsis	Enter the <b>session</b> context
Context	<b>configure isa video-group number watermark session</b>
Tree	<b>session</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**fcc number**

Synopsis	FCC watermark parameters based on the session
Context	<b>configure isa video-group number watermark session fcc number</b>
Tree	<b>fcc</b>
Range	1 to 99
Units	percent
Default	90
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**ret number**

Synopsis	RET watermark parameters based on the session
Context	<b>configure isa video-group number watermark session ret number</b>

Tree	<a href="#">ret</a>
Range	1 to 99
Units	percent
Default	90
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**total number**

Synopsis	Total watermark parameters based on the session
Context	<b>configure</b> <a href="#">isa</a> <a href="#">video-group</a> <i>number</i> <a href="#">watermark</a> <a href="#">session</a> <a href="#">total</a> <i>number</i>
Tree	<a href="#">total</a>
Range	1 to 99
Units	percent
Default	90
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**wlan-gw-group [id] number**

Synopsis	Enter the <b>wlan-gw-group</b> list instance
Context	<b>configure</b> <a href="#">isa</a> <a href="#">wlan-gw-group</a> <i>number</i>
Tree	<a href="#">wlan-gw-group</a>
Max. Instances	1
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[id] number**

Synopsis	WLAN-GW ISA group ID
Context	<b>configure</b> <a href="#">isa</a> <a href="#">wlan-gw-group</a> <i>number</i>
Tree	<a href="#">wlan-gw-group</a>
Range	1 to 4

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **active-iom-limit** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Number of WLAN-GW IOMs used as active IOMs
Context	<b>configure</b> <i>isa wlan-gw-group number active-iom-limit number</i>
Tree	<a href="#">active-iom-limit</a>
Range	1 to 7
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **active-mda-limit** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Maximum number of ISA MDAs in active use by the group
Context	<b>configure</b> <i>isa wlan-gw-group number active-mda-limit number</i>
Tree	<a href="#">active-mda-limit</a>
Range	1 to 14
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s

**admin-state** *keyword*

Synopsis	Administrative state of the WLAN Gateway group
Context	<b>configure</b> <i>isa wlan-gw-group number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <i>isa wlan-gw-group number description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**distributed-sub-mgmt**

Synopsis	Enter the <b>distributed-sub-mgmt</b> context
Context	<b>configure</b> <i>isa wlan-gw-group number distributed-sub-mgmt</i>
Tree	<a href="#">distributed-sub-mgmt</a>
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**isa-aa-group** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA AA group for WLAN-GW DSM subscribers
Context	<b>configure</b> <i>isa wlan-gw-group number distributed-sub-mgmt isa-aa-group reference</i>
Tree	<a href="#">isa-aa-group</a>
Reference	<b>configure</b> <i>isa application-assurance-group number</i>

Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **isa-aa-oversubscription-factor** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of WLAN GW ISAs that a single ISA can serve
Context	<b>configure</b> <i>isa wlan-gw-group number distributed-sub-mgmt isa-aa-oversubscription-factor number</i>
Tree	<a href="#">isa-aa-oversubscription-factor</a>
Range	1 to 10
Default	1
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s

### **esa** [[esa-id](#)] *reference vm reference*

Synopsis	Add a list entry for <b>esa</b>
Context	<b>configure</b> <i>isa wlan-gw-group number esa reference vm reference</i>
Tree	<a href="#">esa</a>
Introduced	20.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s

### **[esa-id]** *reference*

Synopsis	ESA ID
Context	<b>configure</b> <i>isa wlan-gw-group number esa reference vm reference</i>
Tree	<a href="#">esa</a>
Reference	<b>configure</b> <i>esa number</i>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s

### **vm reference**

Synopsis	VM ID
Context	<b>configure isa wlan-gw-group number esa reference vm reference</b>
Tree	<a href="#">esa</a>
Reference	<b>configure esa number vm number</b>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s

### **iom [slot-number] reference**

Synopsis	Add a list entry for <b>iom</b>
Context	<b>configure isa wlan-gw-group number iom reference</b>
Tree	<a href="#">iom</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[slot-number] reference**

Synopsis	IOM slot to use in the WLAN-GW group
Context	<b>configure isa wlan-gw-group number iom reference</b>
Tree	<a href="#">iom</a>
Reference	<b>configure card number</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mda [mda-id] string**

Synopsis	Add a list entry for <b>mda</b>
Context	<b>configure isa wlan-gw-group number mda string</b>
Tree	<a href="#">mda</a>
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s

### **[mda-id]** *string*

Synopsis MDA slot value  
Context **configure** *isa wlan-gw-group number mda string*  
Tree [mda](#)  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s

### **nat**

Synopsis Enter the **nat** context  
Context **configure** *isa wlan-gw-group number nat*  
Tree [nat](#)  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **log**

Synopsis Enter the **log** context  
Context **configure** *isa wlan-gw-group number nat log*  
Tree [log](#)  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **suppress-lsn-events** *boolean*

Synopsis Suppress LSN events when RADIUS accounting is enabled  
Context **configure** *isa wlan-gw-group number nat log suppress-lsn-events boolean*  
Tree [suppress-lsn-events](#)  
Default true  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**suppress-lsn-sub-blocks-free** *boolean*

Synopsis	Suppress LSN Free block and NAT pool block notification
Context	<b>configure</b> <i>isa wlan-gw-group number nat log suppress-lsn-sub-blocks-free boolean</i>
Tree	<a href="#">suppress-lsn-sub-blocks-free</a>
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**lsn** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use Large Scale NAT
Context	<b>configure</b> <i>isa wlan-gw-group number nat lsn boolean</i>
Tree	<a href="#">lsn</a>
Default	true
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**radius-accounting-policy** *reference*

Synopsis	RADIUS accounting policy for ISA group
Context	<b>configure</b> <i>isa wlan-gw-group number nat radius-accounting-policy reference</i>
Tree	<a href="#">radius-accounting-policy</a>
Reference	<b>configure</b> <i>aaa radius isa-policy string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**session-limits**

Synopsis	Enter the <b>session-limits</b> context
Context	<b>configure</b> <i>isa wlan-gw-group number nat session-limits</i>
Tree	<a href="#">session-limits</a>



Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **reserved** *number*

Synopsis	Number of sessions reserved for prioritized sessions
Context	<b>configure</b> <a href="#">isa wlan-gw-group</a> <i>number</i> <a href="#">nat session-limits reserved</a> <i>number</i>
Tree	<a href="#">reserved</a>
Range	1 to 6291456
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **upnp-mappings** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Maximum number of UPnP mappings per member
Context	<b>configure</b> <a href="#">isa wlan-gw-group</a> <i>number</i> <a href="#">nat session-limits upnp-mappings</a> <i>number</i>
Tree	<a href="#">upnp-mappings</a>
Description	This command specifies the maximum number of Universal Plug and Play (UPnP) mappings per member.
Range	1 to 524288
Default	524288
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **watermarks**

Synopsis	Enable the <b>watermarks</b> context
Context	<b>configure</b> <a href="#">isa wlan-gw-group</a> <i>number</i> <a href="#">nat session-limits watermarks</a>
Tree	<a href="#">watermarks</a>
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **high** *number*

Synopsis Session limit high watermark for each MDA in the group

Context **configure isa wlan-gw-group** *number nat session-limits watermarks high number*

Tree [high](#)

Range 0 to 100

Units percent

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **low** *number*

Synopsis Session limit low watermark for each MDA in the group

Context **configure isa wlan-gw-group** *number nat session-limits watermarks low number*

Tree [low](#)

Range 0 to 100

Units percent

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port-policy** *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Port policy used to configure ports for the ISA group

Context **configure isa wlan-gw-group** *number port-policy reference*

Tree [port-policy](#)

Reference **configure port-policy** *string*

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### redundancy *keyword*



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Hardware unit subject to redundancy  
 Context **configure** *isa wlan-gw-group number redundancy keyword*  
 Tree [redundancy](#)  
 Options iom, mda  
 Default iom  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### scaling-profile *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis ISA scaling profile identifier  
 Context **configure** *isa wlan-gw-group number scaling-profile keyword*  
 Tree [scaling-profile](#)  
 Options profile1, profile2, profile3  
 Default profile1  
 Introduced 20.5.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s

## tunnel-port-policy *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Tunnel port policy for per-tunnel QoS processing
Context	<b>configure</b> <a href="#">isa wlan-gw-group</a> <i>number</i> <a href="#">tunnel-port-policy</a> <i>reference</i>
Tree	<a href="#">tunnel-port-policy</a>
Reference	<b>configure</b> <a href="#">port-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## watermarks

Synopsis	Enter the <b>watermarks</b> context
Context	<b>configure</b> <a href="#">isa wlan-gw-group</a> <i>number</i> <a href="#">watermarks</a>
Tree	<a href="#">watermarks</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## mark [[entity](#)] *keyword*

Synopsis	Enter the <b>mark</b> list instance
Context	<b>configure</b> <a href="#">isa wlan-gw-group</a> <i>number</i> <a href="#">watermarks</a> <a href="#">mark</a> <i>keyword</i>
Tree	<a href="#">mark</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## [[entity](#)] *keyword*

Synopsis	Entity to be monitored
Context	<b>configure</b> <a href="#">isa wlan-gw-group</a> <i>number</i> <a href="#">watermarks</a> <a href="#">mark</a> <i>keyword</i>
Tree	<a href="#">mark</a>
Options	user-equipment, bridge-domain, radius-proxy-client
Notes	This element is part of a list key.

---

Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **high** *number*

Synopsis	High watermark for the WLAN-GW group
Context	<b>configure</b> <a href="#">isa wlan-gw-group</a> <i>number</i> <a href="#">watermarks mark</a> <i>keyword</i> <b>high</b> <i>number</i>
Tree	<a href="#">high</a>
Range	1 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **low** *number*

Synopsis	Low watermark for the WLAN-GW group
Context	<b>configure</b> <a href="#">isa wlan-gw-group</a> <i>number</i> <a href="#">watermarks mark</a> <i>keyword</i> <b>low</b> <i>number</i>
Tree	<a href="#">low</a>
Range	0 to 99
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## 3.21 lag commands

```

configure
- lag string
  - access
    - adapt-qos
      - include-egr-hash-cfg boolean
      - mode keyword
    - bandwidth number
    - booking-factor number
    - per-fp-egr-queuing boolean
    - per-fp-ing-queuing boolean
    - per-fp-sap-instance boolean
  - adaptive-load-balancing
    - bandwidth-threshold number
    - interval number
    - tolerance number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd-liveness
    - ipv4
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - bfd-on-distributing-only boolean
      - local-ip-address string
      - max-admin-down-time (number | keyword)
      - max-setup-time (number | keyword)
      - multiplier number
      - receive-interval number
      - remote-ip-address string
      - transmit-interval number
    - ipv6
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - bfd-on-distributing-only boolean
      - local-ip-address string
      - max-admin-down-time (number | keyword)
      - max-setup-time (number | keyword)
      - multiplier number
      - receive-interval number
      - remote-ip-address string
      - transmit-interval number
  - soft-reset-extension boolean
  - description string
  - dynamic-cost boolean
  - encap-type keyword
  - eth-cfm
    - mep md-admin-name reference ma-admin-name reference mep-id number
    - admin-state keyword
    - ais
      - client-meg-level number
      - interface-support boolean
      - interval number
      - low-priority-defect keyword
      - priority number
    - alarm-notification
      - fng-alarm-time number
      - fng-reset-time number

```

## configure lag eth-cfm mep apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **ccm** *boolean*
- **ccm-ltm-priority** *number*
- **ccm-padding-size** *number*
- **ccm-tlv-ignore** *keyword*
- **collect-lmm-stats** *boolean*
- **csf**
  - **multiplier** *decimal-number*
- **description** *string*
- **eth-test**
  - **bit-error-threshold** *number*
  - **test-pattern**
    - **crc-tlv** *boolean*
    - **pattern** *keyword*
- **facility-fault** *boolean*
- **grace**
  - **eth-ed**
    - **max-rx-defect-window** *number*
    - **priority** *number*
    - **rx-eth-ed** *boolean*
    - **tx-eth-ed** *boolean*
  - **eth-vsm-grace**
    - **rx-eth-vsm-grace** *boolean*
    - **tx-eth-vsm-grace** *boolean*
- **low-priority-defect** *keyword*
- **mac-address** *string*
- **one-way-delay-threshold** *number*
- **vlan** (*number* | *keyword*)
- **hash-weight-threshold**
  - **action** *keyword*
  - **cost** *number*
  - **value** *number*
- **hold-time-down** *number*
- **lacp**
  - **administrative-key** *number*
  - **mode** *keyword*
  - **system-id** *string*
  - **system-priority** *number*
- **lacp-mux-control** *keyword*
- **lacp-xmit-interval** *keyword*
- **lacp-xmit-stdby** *boolean*
- **link-map-profile** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **failure-mode** *keyword*
  - **link** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **port-type** *keyword*
- **mac-address** *string*
- **max-ports** *number*
- **mode** *keyword*
- **monitor-oper-group** *reference*
- **per-link-hash**
  - **weighted**
    - **auto-rebalance** *boolean*
    - **subscriber-hash-mode** *keyword*
- **port** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **hash-weight** (*number* | *keyword*)
  - **priority** *number*

---

**configure lag port sub-group**

- **sub-group** (*number* | *keyword*)
- **port-threshold**
- **action** *keyword*
- **cost** *number*
- **value** *number*
- **port-type** *keyword*
- **port-weight-speed** *number*
- **selection-criteria**
  - **mode** *keyword*
  - **slave-to-partner** *boolean*
  - **subgroup-hold-time** (*number* | *keyword*)
- **standby-signaling** *keyword*
- **weight-threshold**
  - **action** *keyword*
  - **cost** *number*
  - **value** *number*



### 3.21.1 lag command descriptions

#### **lag** [*lag-name*] *string*

Synopsis	Enter the <b>lag</b> list instance
Context	<b>configure lag</b> <i>string</i>
Tree	<a href="#">lag</a>
Introduced	16.0.R1
Platforms	All

#### **[lag-name]** *string*

Synopsis	LAG name
Context	<b>configure lag</b> <i>string</i>
Tree	<a href="#">lag</a>
String Length	1 to 27
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

#### **access**

Synopsis	Enter the <b>access</b> context
Context	<b>configure lag</b> <i>string</i> <b>access</b>
Tree	<a href="#">access</a>
Introduced	16.0.R1
Platforms	All

#### **adapt-qos**

Synopsis	Enter the <b>adapt-qos</b> context
Context	<b>configure lag</b> <i>string</i> <b>access</b> <b>adapt-qos</b>
Tree	<a href="#">adapt-qos</a>
Introduced	16.0.R1

Platforms All

### **include-egr-hash-cfg** *boolean*

Synopsis Factor egress hashing into buffer and rate distribution  
 Context **configure lag** *string* **access adapt-qos include-egr-hash-cfg** *boolean*  
 Tree [include-egr-hash-cfg](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **mode** *keyword*

Synopsis QoS adaptation mode  
 Context **configure lag** *string* **access adapt-qos mode** *keyword*  
 Tree [mode](#)  
 Options link, distribute, port-fair  
 Introduced 16.0.R1  
 Platforms All

### **bandwidth** *number*

Synopsis Administrative bandwidth applied to this LAG  
 Context **configure lag** *string* **access bandwidth** *number*  
 Tree [bandwidth](#)  
 Range 1 to 6400000000  
 Units bps  
 Introduced 16.0.R1  
 Platforms All

### **booking-factor** *number*

Synopsis Booking factor against the administrative bandwidth  
 Context **configure lag** *string* **access booking-factor** *number*  
 Tree [booking-factor](#)

---

Range	1 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

### **per-fp-egr-queuing** *boolean*

Synopsis	Per FP egress queuing
Context	<b>configure lag</b> <i>string</i> <a href="#">access per-fp-egr-queuing</a> <i>boolean</i>
Tree	<a href="#">per-fp-egr-queuing</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **per-fp-ing-queuing** *boolean*

Synopsis	Enable ingress queuing per forwarding port
Context	<b>configure lag</b> <i>string</i> <a href="#">access per-fp-ing-queuing</a> <i>boolean</i>
Tree	<a href="#">per-fp-ing-queuing</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **per-fp-sap-instance** *boolean*

Synopsis	SAP instance allocation on a LAG
Context	<b>configure lag</b> <i>string</i> <a href="#">access per-fp-sap-instance</a> <i>boolean</i>
Tree	<a href="#">per-fp-sap-instance</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **adaptive-load-balancing**

Synopsis	Enable the <b>adaptive-load-balancing</b> context
----------	---

Context	<b>configure lag string adaptive-load-balancing</b>
Tree	<a href="#">adaptive-load-balancing</a>
Introduced	20.10.R1
Platforms	All

### **bandwidth-threshold** *number*

Synopsis	Minimum bandwidth for adaptive load balancing
Context	<b>configure lag string adaptive-load-balancing bandwidth-threshold</b> <i>number</i>
Tree	<a href="#">bandwidth-threshold</a>
Range	0 to 100
Units	percent
Introduced	22.10.R1
Platforms	All

### **interval** *number*

Synopsis	The statistics pooling interval for the LAG ports
Context	<b>configure lag string adaptive-load-balancing interval</b> <i>number</i>
Tree	<a href="#">interval</a>
Range	15   30   60   120
Units	seconds
Default	30
Introduced	21.5.R1
Platforms	All

### **tolerance** *number*

Synopsis	Threshold that triggers link utilization optimization
Context	<b>configure lag string adaptive-load-balancing tolerance</b> <i>number</i>
Tree	<a href="#">tolerance</a>
Description	This command configures the threshold value that is based on the difference between the most-loaded and least-loaded links in a LAG. When the threshold value is exceeded, the adaptive load balancing operation attempts to optimize traffic distribution between LAG links.
Range	1 to 100

---

Units	percent
Default	20
Introduced	20.10.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the LAG
Context	<b>configure lag</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **bfd-liveness**

Synopsis	Enter the <b>bfd-liveness</b> context
Context	<b>configure lag</b> <i>string</i> <b>bfd-liveness</b>
Tree	<a href="#">bfd-liveness</a>
Introduced	16.0.R1
Platforms	All

### **ipv4**

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure lag</b> <i>string</i> <b>bfd-liveness</b> <b>ipv4</b>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of micro-BFD session for IP family
Context	<b>configure lag</b> <i>string</i> <b>bfd-liveness</b> <b>ipv4</b> <b>admin-state</b> <i>keyword</i>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **bfd-on-distributing-only** *boolean*

Synopsis	Restrict micro-BFD sessions to LACP state distributing
Context	<b>configure lag</b> <i>string</i> <a href="#">bfd-liveness</a> <a href="#">ipv4</a> <a href="#">bfd-on-distributing-only</a> <i>boolean</i>
Tree	<a href="#">bfd-on-distributing-only</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **local-ip-address** *string*

Synopsis	BFD source address
Context	<b>configure lag</b> <i>string</i> <a href="#">bfd-liveness</a> <a href="#">ipv4</a> <a href="#">local-ip-address</a> <i>string</i>
Tree	<a href="#">local-ip-address</a>
Introduced	16.0.R1
Platforms	All

### **max-admin-down-time** (*number* | *keyword*)

Synopsis	Maximum time to forward traffic after micro-BFD is down
Context	<b>configure lag</b> <i>string</i> <a href="#">bfd-liveness</a> <a href="#">ipv4</a> <a href="#">max-admin-down-time</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">max-admin-down-time</a>
Range	0 to 3600
Units	seconds
Options	infinite
Default	0
Introduced	16.0.R1
Platforms	All

**max-setup-time** (*number* | *keyword*)

Synopsis	Maximum time to forward traffic during micro-BFD setup
Context	<b>configure lag</b> <i>string</i> <b>bfd-liveness ipv4</b> <b>max-setup-time</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>max-setup-time</b>
Range	0 to 60000
Units	milliseconds
Options	infinite
Default	infinite
Introduced	16.0.R1
Platforms	All

**multiplier** *number*

Synopsis	Interval multiplier to detect BFD packets not received
Context	<b>configure lag</b> <i>string</i> <b>bfd-liveness ipv4</b> <b>multiplier</b> <i>number</i>
Tree	<b>multiplier</b>
Range	3 to 20
Default	3
Introduced	16.0.R1
Platforms	All

**receive-interval** *number*

Synopsis	Receive timer for micro-BFD session over the LAG links
Context	<b>configure lag</b> <i>string</i> <b>bfd-liveness ipv4</b> <b>receive-interval</b> <i>number</i>
Tree	<b>receive-interval</b>
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

**remote-ip-address** *string*

Synopsis	BFD destination address
Context	<b>configure lag</b> <i>string</i> <a href="#">bfd-liveness</a> <a href="#">ipv4</a> <b>remote-ip-address</b> <i>string</i>
Tree	<a href="#">remote-ip-address</a>
Introduced	16.0.R1
Platforms	All

**transmit-interval** *number*

Synopsis	Transmit timer for micro-BFD session over the LAG links
Context	<b>configure lag</b> <i>string</i> <a href="#">bfd-liveness</a> <a href="#">ipv4</a> <b>transmit-interval</b> <i>number</i>
Tree	<a href="#">transmit-interval</a>
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

**ipv6**

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure lag</b> <i>string</i> <a href="#">bfd-liveness</a> <a href="#">ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of micro-BFD session for IP family
Context	<b>configure lag</b> <i>string</i> <a href="#">bfd-liveness</a> <a href="#">ipv6</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All



**bfd-on-distributing-only** *boolean*

Synopsis	Restrict micro-BFD sessions to LACP state distributing
Context	<b>configure lag</b> <i>string</i> <b>bfd-liveness ipv6</b> <b>bfd-on-distributing-only</b> <i>boolean</i>
Tree	<a href="#">bfd-on-distributing-only</a>
Default	false
Introduced	16.0.R1
Platforms	All

**local-ip-address** *string*

Synopsis	BFD source address
Context	<b>configure lag</b> <i>string</i> <b>bfd-liveness ipv6</b> <b>local-ip-address</b> <i>string</i>
Tree	<a href="#">local-ip-address</a>
Introduced	16.0.R1
Platforms	All

**max-admin-down-time** (*number* | *keyword*)

Synopsis	Maximum time to forward traffic after micro-BFD is down
Context	<b>configure lag</b> <i>string</i> <b>bfd-liveness ipv6</b> <b>max-admin-down-time</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">max-admin-down-time</a>
Range	0 to 3600
Units	seconds
Options	infinite
Default	0
Introduced	16.0.R1
Platforms	All

**max-setup-time** (*number* | *keyword*)

Synopsis	Maximum time to forward traffic during micro-BFD setup
Context	<b>configure lag</b> <i>string</i> <b>bfd-liveness ipv6</b> <b>max-setup-time</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">max-setup-time</a>
Range	0 to 60000

Units	milliseconds
Options	infinite
Default	infinite
Introduced	16.0.R1
Platforms	All

### **multiplier** *number*

Synopsis	Interval multiplier to detect BFD packets not received
Context	<b>configure lag</b> <i>string</i> <a href="#">bfd-liveness</a> <a href="#">ipv6</a> <a href="#">multiplier</a> <i>number</i>
Tree	<a href="#">multiplier</a>
Range	3 to 20
Default	3
Introduced	16.0.R1
Platforms	All

### **receive-interval** *number*

Synopsis	Receive timer for micro-BFD session over the LAG links
Context	<b>configure lag</b> <i>string</i> <a href="#">bfd-liveness</a> <a href="#">ipv6</a> <a href="#">receive-interval</a> <i>number</i>
Tree	<a href="#">receive-interval</a>
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

### **remote-ip-address** *string*

Synopsis	BFD destination address
Context	<b>configure lag</b> <i>string</i> <a href="#">bfd-liveness</a> <a href="#">ipv6</a> <a href="#">remote-ip-address</a> <i>string</i>
Tree	<a href="#">remote-ip-address</a>
Introduced	16.0.R1
Platforms	All

**transmit-interval** *number*

Synopsis	Transmit timer for micro-BFD session over the LAG links
Context	<b>configure lag</b> <i>string</i> <b>bfd-liveness ipv6</b> <b>transmit-interval</b> <i>number</i>
Tree	<b>transmit-interval</b>
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

**soft-reset-extension** *boolean*

Synopsis	Extend BFD timers during soft reset
Context	<b>configure lag</b> <i>string</i> <b>bfd-liveness</b> <b>soft-reset-extension</b> <i>boolean</i>
Tree	<b>soft-reset-extension</b>
Default	true
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure lag</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

**dynamic-cost** *boolean*

Synopsis	Allow LAG costing using operational aggregate bandwidth
Context	<b>configure lag</b> <i>string</i> <b>dynamic-cost</b> <i>boolean</i>
Tree	<b>dynamic-cost</b>
Default	false

Introduced 16.0.R1  
 Platforms All

### **encap-type** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Encapsulation type  
 Context **configure lag** *string* **encap-type** *keyword*  
 Tree [encap-type](#)  
 Options null, dot1q, qinq  
 Introduced 16.0.R1  
 Platforms All

### **eth-cfm**

Synopsis Enter the **eth-cfm** context  
 Context **configure lag** *string* **eth-cfm**  
 Tree [eth-cfm](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mep** *md-admin-name* *reference* *ma-admin-name* *reference* **mep-id** *number*

Synopsis Enter the **mep** list instance  
 Context **configure lag** *string* **eth-cfm mep** *md-admin-name* *reference* *ma-admin-name* *reference* **mep-id** *number*  
 Tree [mep](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **md-admin-name** *reference*

Synopsis	Maintenance Domain (MD) name
Context	<b>configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</b>
Tree	<b>mep</b>
Reference	<b>configure eth-cfm domain string</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ma-admin-name** *reference*

Synopsis	Maintenance Association (MA) name
Context	<b>configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</b>
Tree	<b>mep</b>
Reference	<b>configure eth-cfm domain string association string</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mep-id number**

Synopsis	Maintenance Endpoint (MEP) ID
Context	<b>configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</b>
Tree	<b>mep</b>
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**admin-state** *keyword*

Synopsis	Administrative state of the MEP
Context	<b>configure</b> <a href="#">lag</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ais**

Synopsis	Enable the <b>ais</b> context
Context	<b>configure</b> <a href="#">lag</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>ais</b>
Tree	<a href="#">ais</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**client-meg-level** *number*

Synopsis	Client MEG level for AIS message generation
Context	<b>configure</b> <a href="#">lag</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>ais</b> <a href="#">client-meg-level</a> <i>number</i>
Tree	<a href="#">client-meg-level</a>
Range	1 to 7
Max.	7
Instances	
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**interface-support** *boolean*

Synopsis	Enable generation of AIS PDUs based on endpoint state
Context	<b>configure</b> <a href="#">lag</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>ais</b> <a href="#">interface-support</a> <i>boolean</i>

Tree	<a href="#">interface-support</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **interval** *number*

Synopsis	Transmission interval for AIS messages
Context	<b>configure</b> <a href="#">lag</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ais</a> <a href="#">interval</a> <i>number</i>
Tree	<a href="#">interval</a>
Range	1   60
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **low-priority-defect** *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure</b> <a href="#">lag</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ais</a> <a href="#">low-priority-defect</a> <i>keyword</i>
Tree	<a href="#">low-priority-defect</a>
Options	all-def, mac-rem-err-xcon
Default	all-def
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **priority** *number*

Synopsis	Priority of the AIS messages generated by the node
Context	<b>configure</b> <a href="#">lag</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ais</a> <a href="#">priority</a> <i>number</i>
Tree	<a href="#">priority</a>
Range	0 to 7
Default	7

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## alarm-notification

Synopsis	Enter the <b>alarm-notification</b> context
Context	<b>configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification</b>
Tree	<a href="#">alarm-notification</a>
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	<b>configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-alarm-time number</b>
Tree	<a href="#">fng-alarm-time</a>
Range	250   500   1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	<b>configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-reset-time number</b>
Tree	<a href="#">fng-reset-time</a>
Range	250   500   1000
Units	centiseconds
Introduced	16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm boolean**

Synopsis Generate CCM messages

Context **configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm boolean**

Tree [ccm](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm-ltm-priority number**

Synopsis Priority of CCM and LTM messages transmitted by the MEP

Context **configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-ltm-priority number**

Tree [ccm-ltm-priority](#)

Range 0 to 7

Default 7

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm-padding-size number**

Synopsis Number of octets of padding to insert in CCM packets

Context **configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-padding-size number**

Tree [ccm-padding-size](#)

Description This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.

This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through **configure eth-cfm domain association ccm-interval**) is less than 1 second.

Range 3 to 1500

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm-tlv-ignore** *keyword*

Synopsis TLV to ignore on reception

Context **configure lag** *string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-tlv-ignore keyword*

Tree [ccm-tlv-ignore](#)

Description This command configures the receiving MEP to ignore the specified TLVs in the CCM PDU. The ignored TLVs are reported as absent and have no impact on the MEP state machine.

When unconfigured, the MEP processes all the recognized TLVs.

Options interface-status, port-status

Max. Instances 2

Introduced 16.0.R6

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **collect-lmm-stats** *boolean*

Synopsis Collect statistics for loss measurement message tests

Context **configure lag** *string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number collect-lmm-stats boolean*

Tree [collect-lmm-stats](#)

Description When configured to **true**, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.

The **show eth-cfm collect-lmm-stats** command displays entities that have been enabled to collect transit and receive counters.

When configured to **false**, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **csf**

Synopsis Enable the **csf** context

Context	<b>configure lag</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>csf</b>
Tree	<b>csf</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **multiplier** *decimal-number*

Synopsis	Multiplication factor used to clear the CSF condition
Context	<b>configure lag</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>csf multiplier</b> <i>decimal-number</i>
Tree	<b>multiplier</b>
Range	0.0   2.0 to 30.0
Default	3.5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **description** *string*

Synopsis	Text description
Context	<b>configure lag</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **eth-test**

Synopsis	Enable the <b>eth-test</b> context
Context	<b>configure lag</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>eth-test</b>
Tree	<b>eth-test</b>
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the <b>oam eth-cfm eth-test</b> command.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **bit-error-threshold** *number*

Synopsis Lowest priority defect allowed to generate fault alarm

Context **configure lag** *string* [eth-cfm mep md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id number](#) [eth-test bit-error-threshold number](#)

Tree [bit-error-threshold](#)

Range 0 to 11840

Units bit errors

Default 1

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **test-pattern**

Synopsis Enter the **test-pattern** context

Context **configure lag** *string* [eth-cfm mep md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id number](#) [eth-test test-pattern](#)

Tree [test-pattern](#)

Description Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **crc-tlv** *boolean*

Synopsis Generate a CRC checksum

Context **configure lag** *string* [eth-cfm mep md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id number](#) [eth-test test-pattern](#) [crc-tlv boolean](#)

Tree [crc-tlv](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**pattern** *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	<b>configure</b> <a href="#">lag</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test</a> <a href="#">test-pattern</a> <a href="#">pattern</a> <i>keyword</i>
Tree	<a href="#">pattern</a>
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**facility-fault** *boolean*

Synopsis	Allow the facility MEP to generate a network action
Context	<b>configure</b> <a href="#">lag</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">facility-fault</a> <i>boolean</i>
Tree	<a href="#">facility-fault</a>
Description	When configured to <b>true</b> , the system facility MEP responds to a fault with a network-actionable function instead of just reporting the defect condition.  When configured to <b>false</b> , the system monitors transmissions and reports fault conditions.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**grace**

Synopsis	Enter the <b>grace</b> context
Context	<b>configure</b> <a href="#">lag</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a>
Tree	<a href="#">grace</a>
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**eth-ed**

Synopsis	Enter the <b>eth-ed</b> context
Context	<b>configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed</b>
Tree	<a href="#">eth-ed</a>
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**max-rx-defect-window number**

Synopsis	Maximum received ETH-ED expected defect window duration
Context	<b>configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed max-rx-defect-window number</b>
Tree	<a href="#">max-rx-defect-window</a>
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**priority number**

Synopsis	Transmission priority for ETH-ED PDUs
Context	<b>configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed priority number</b>
Tree	<a href="#">priority</a>
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**rx-eth-ed boolean**

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	<b>configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed rx-eth-ed boolean</b>

Tree	<a href="#">rx-eth-ed</a>
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **tx-eth-ed** *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	<b>configure</b> <a href="#">lag</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace eth-ed tx-eth-ed</a> <i>boolean</i>
Tree	<a href="#">tx-eth-ed</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **eth-vsm-grace**

Synopsis	Enter the <b>eth-vsm-grace</b> context
Context	<b>configure</b> <a href="#">lag</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace eth-vsm-grace</a>
Tree	<a href="#">eth-vsm-grace</a>
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **rx-eth-vsm-grace** *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	<b>configure</b> <a href="#">lag</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace eth-vsm-grace rx-eth-vsm-grace</a> <i>boolean</i>
Tree	<a href="#">rx-eth-vsm-grace</a>
Description	When configured to <b>true</b> , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to <b>false</b> , the router disables the Nokia Grace function.

Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **tx-eth-vsm-grace** *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	<b>configure</b> <b>lag</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>grace eth-vsm-grace tx-eth-vsm-grace</b> <i>boolean</i>
Tree	<a href="#">tx-eth-vsm-grace</a>
Description	<p>When configured to <b>true</b>, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.</p> <p>The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.</p> <p>The operator must configure the <b>configure system eth-cfm grace</b> command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).</p> <p>When configured to <b>false</b>, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.</p>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **low-priority-defect** *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure</b> <b>lag</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>low-priority-defect</b> <i>keyword</i>
Tree	<a href="#">low-priority-defect</a>
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mac-address** *string*

Synopsis	MAC address of the MEP
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Context	<b>configure lag</b> <i>string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number mac-address string</i>
Tree	<a href="#">mac-address</a>
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **one-way-delay-threshold** *number*

Synopsis	Threshold time limit for the one-way delay test
Context	<b>configure lag</b> <i>string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number one-way-delay-threshold number</i>
Tree	<a href="#">one-way-delay-threshold</a>
Range	0 to 600
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **vlan** (*number* | *keyword*)



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Outer VLAN ID of the tunnel
Context	<b>configure lag</b> <i>string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number vlan (number   keyword)</i>
Tree	<a href="#">vlan</a>
Range	1 to 4094
Options	none
Default	none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## hash-weight-threshold

Synopsis	Enter the <b>hash-weight-threshold</b> context
Context	<b>configure lag string hash-weight-threshold</b>
Tree	<a href="#">hash-weight-threshold</a>
Introduced	19.10.R1
Platforms	All

## action keyword

Synopsis	Action when the sum of the hash weight is not exceeded
Context	<b>configure lag string hash-weight-threshold action keyword</b>
Tree	<a href="#">action</a>
Options	down, dynamic-cost, static-cost
Default	down
Introduced	19.10.R1
Platforms	All

## cost number

Synopsis	Static cost of the LAG
Context	<b>configure lag string hash-weight-threshold cost number</b>
Tree	<a href="#">cost</a>
Range	1 to 16777215
Introduced	19.10.R1
Platforms	All

## value number

Synopsis	Sum of the hash weight values of all active LAG ports
Context	<b>configure lag string hash-weight-threshold value number</b>
Tree	<a href="#">value</a>
Range	1 to 6400000
Introduced	19.10.R1
Platforms	All

**hold-time-down** *number*

Synopsis	Delay time for reporting the LAG is down
Context	<b>configure lag</b> <i>string</i> <b>hold-time-down</b> <i>number</i>
Tree	<b>hold-time-down</b>
Range	1 to 2000
Units	deciseconds
Introduced	16.0.R1
Platforms	All

**lACP**

Synopsis	Enable the <b>lACP</b> context
Context	<b>configure lag</b> <i>string</i> <b>lACP</b>
Tree	<b>lACP</b>
Introduced	16.0.R1
Platforms	All

**administrative-key** *number*

Synopsis	Key to identify the channel group on each LACP port
Context	<b>configure lag</b> <i>string</i> <b>lACP</b> <b>administrative-key</b> <i>number</i>
Tree	<b>administrative-key</b>
Description	<p>This command configures the administrative key that identifies the channel group on each port configured to use LACP.</p> <p>In an MC-LAG configuration, both redundant nodes must be configured with the same key values. In any other case, the key is only locally significant.</p>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**mode** *keyword*

Synopsis	Mode in which LACP operates
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Context	<b>configure lag string lacp mode keyword</b>
Tree	<b>mode</b>
Options	passive, active
Default	passive
Introduced	16.0.R1
Platforms	All

### **system-id string**

Synopsis	System ID
Context	<b>configure lag string lacp system-id string</b>
Tree	<b>system-id</b>
Default	00:00:00:00:00:00
Introduced	16.0.R1
Platforms	All

### **system-priority number**

Synopsis	System priority value
Context	<b>configure lag string lacp system-priority number</b>
Tree	<b>system-priority</b>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

### **lacp-mux-control keyword**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MUX machine control for LACP LAG in active/passive mode
Context	<b>configure lag string lacp-mux-control keyword</b>
Tree	<b>lacp-mux-control</b>
Options	coupled, independent
Default	coupled

Introduced 16.0.R1  
Platforms All

### **lacp-xmit-interval** *keyword*

Synopsis Time for periodic transmission  
Context **configure lag** *string lacp-xmit-interval keyword*  
Tree [lacp-xmit-interval](#)  
Options slow, fast  
Default fast  
Introduced 16.0.R1  
Platforms All

### **lacp-xmit-stdby** *boolean*

Synopsis Allow LACP message transmission on standby links  
Context **configure lag** *string lacp-xmit-stdby boolean*  
Tree [lacp-xmit-stdby](#)  
Default true  
Introduced 16.0.R1  
Platforms All

### **link-map-profile** [[link-map-profile-id](#)] *number*

Synopsis Enter the **link-map-profile** list instance  
Context **configure lag** *string link-map-profile number*  
Tree [link-map-profile](#)  
Introduced 16.0.R1  
Platforms All

### **[link-map-profile-id]** *number*

Synopsis Link map profile to control LAG ports  
Context **configure lag** *string link-map-profile number*  
Tree [link-map-profile](#)

---

Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure lag</b> <i>string link-map-profile number description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**failure-mode** *keyword*

Synopsis	Failure mode of LAG link profile
Context	<b>configure lag</b> <i>string link-map-profile number failure-mode keyword</i>
Tree	<a href="#">failure-mode</a>
Options	per-link-hash, discard
Default	per-link-hash
Introduced	16.0.R1
Platforms	All

**link** [[port-id](#)] *reference*

Synopsis	Enter the <b>link</b> list instance
Context	<b>configure lag</b> <i>string link-map-profile number link reference</i>
Tree	<a href="#">link</a>
Introduced	16.0.R1
Platforms	All

**[port-id]** *reference*

Synopsis	Port associated with the link map profile
----------	---

Context	<b>configure lag</b> <i>string</i> <a href="#">link-map-profile</a> <i>number</i> <a href="#">link</a> <i>reference</i>
Tree	<a href="#">link</a>
Reference	<b>configure lag</b> <i>string</i> <a href="#">port</a> <i>reference</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **port-type** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Type of the associated port for this entry
Context	<b>configure lag</b> <i>string</i> <a href="#">link-map-profile</a> <i>number</i> <a href="#">link</a> <i>reference</i> <a href="#">port-type</a> <i>keyword</i>
Tree	<a href="#">port-type</a>
Options	primary, secondary
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **mac-address** *string*

Synopsis	MAC address of the LAG
Context	<b>configure lag</b> <i>string</i> <a href="#">mac-address</a> <i>string</i>
Tree	<a href="#">mac-address</a>
Default	00:00:00:00:00:00
Introduced	16.0.R1
Platforms	All

### **max-ports** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ports allowed in the LAG
Context	<b>configure lag</b> <i>string</i> <b>max-ports</b> <i>number</i>
Tree	<b>max-ports</b>
Description	This command configures the maximum number of ports allowed in the LAG.  This command must be configured to 64 when the LAG name is a numeric identifier in the range of 1 to 64. If the LAG name is a numeric identifier in the range of 65 to 800, this command must be configured to 32.
Range	32   64
Introduced	21.2.R1
Platforms	All

### **mode** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Operation mode of the LAG
Context	<b>configure lag</b> <i>string</i> <b>mode</b> <i>keyword</i>
Tree	<b>mode</b>
Options	access, network, hybrid
Default	network
Introduced	16.0.R1
Platforms	All

### **monitor-oper-group** *reference*

Synopsis	Operational group to monitor
Context	<b>configure lag</b> <i>string</i> <b>monitor-oper-group</b> <i>reference</i>
Tree	<b>monitor-oper-group</b>
Reference	<b>configure service oper-group</b> <i>string</i>
Introduced	19.5.R1
Platforms	All



## per-link-hash

Synopsis	Enable the <b>per-link-hash</b> context
Context	<b>configure lag string per-link-hash</b>
Tree	<a href="#">per-link-hash</a>
Introduced	16.0.R1
Platforms	All

## weighted

Synopsis	Enable the <b>weighted</b> context
Context	<b>configure lag string per-link-hash weighted</b>
Tree	<a href="#">weighted</a>
Introduced	16.0.R1
Platforms	All

## auto-rebalance *boolean*

Synopsis	Auto-rebalance SAPs, users, or interfaces for new links
Context	<b>configure lag string per-link-hash weighted auto-rebalance <i>boolean</i></b>
Tree	<a href="#">auto-rebalance</a>
Default	false
Introduced	16.0.R1
Platforms	All

## subscriber-hash-mode *keyword*

Synopsis	Subscriber traffic load balance over LAG member links
Context	<b>configure lag string per-link-hash weighted subscriber-hash-mode <i>keyword</i></b>
Tree	<a href="#">subscriber-hash-mode</a>
Description	<p>This command configures weighted subscriber traffic to be load balanced over LAG member links. Traffic hashing can be performed based on SAPs or Vports.</p> <p>SAP-based hashing supports weights configured at the subscriber level in the subscriber profile. The SAP hashing mode supports only SAP to subscriber (1:1) deployment models.</p>

Vport-based load balancing supports SAP to subscriber (1:1) and SAP to service (N:1) deployment models.

Options	sap, vport
Default	sap
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **port** [[port-id](#)] *reference*

Synopsis	Enter the <b>port</b> list instance
Context	<b>configure lag</b> <i>string</i> <a href="#">port</a> <i>reference</i>
Tree	<a href="#">port</a>
Introduced	16.0.R1
Platforms	All

### **[port-id]** *reference*

Synopsis	Identifier to uniquely identify the port in the LAG
Context	<b>configure lag</b> <i>string</i> <a href="#">port</a> <i>reference</i>
Tree	<a href="#">port</a>
Reference	<b>configure</b> <a href="#">port</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **hash-weight** (*number* | *keyword*)

Synopsis	Flow hashing distribution between LAG ports
Context	<b>configure lag</b> <i>string</i> <a href="#">port</a> <i>reference</i> <b>hash-weight</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">hash-weight</a>
Range	1 to 100000
Options	port-speed
Introduced	19.5.R1
Platforms	All

**priority number**

Synopsis	Priority of the port in the LAG
Context	<b>configure lag string port reference priority number</b>
Tree	<a href="#">priority</a>
Range	1 to 65535
Default	32768
Introduced	16.0.R1
Platforms	All

**sub-group (number | keyword)****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Subgroup of the port in the LAG
Context	<b>configure lag string port reference sub-group (number   keyword)</b>
Tree	<a href="#">sub-group</a>
Range	1 to 8
Options	auto-iom, auto-mda
Default	1
Introduced	16.0.R1
Platforms	All

**port-threshold**

Synopsis	Enter the <b>port-threshold</b> context
Context	<b>configure lag string port-threshold</b>
Tree	<a href="#">port-threshold</a>
Introduced	16.0.R1
Platforms	All

**action keyword**

Synopsis	Action when the active links are at or below threshold
Context	<b>configure lag string port-threshold action keyword</b>

---

Tree	<a href="#">action</a>
Options	down, dynamic-cost, static-cost
Default	down
Introduced	16.0.R1
Platforms	All

### **cost** *number*

Synopsis	Static cost of the LAG
Context	<b>configure lag</b> <i>string</i> <a href="#">port-threshold</a> <a href="#">cost</a> <i>number</i>
Tree	<a href="#">cost</a>
Range	1 to 16777215
Introduced	16.0.R3
Platforms	All

### **value** *number*

Synopsis	Active link threshold at which action is taken
Context	<b>configure lag</b> <i>string</i> <a href="#">port-threshold</a> <a href="#">value</a> <i>number</i>
Tree	<a href="#">value</a>
Range	0 to 63
Introduced	16.0.R1
Platforms	All

### **port-type** *keyword*

Synopsis	Port type of the LAG
Context	<b>configure lag</b> <i>string</i> <a href="#">port-type</a> <i>keyword</i>
Tree	<a href="#">port-type</a>
Options	standard, hs
Default	standard
Introduced	16.0.R1
Platforms	All

**port-weight-speed** *number***WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	Speed corresponding to a port weight unit
Context	<b>configure lag</b> <i>string</i> <b>port-weight-speed</b> <i>number</i>
Tree	<a href="#">port-weight-speed</a>
Range	1   10
Units	gigabps
Introduced	16.0.R1
Deprecated	22.10.R1
Platforms	All

**selection-criteria**

Synopsis	Enter the <b>selection-criteria</b> context
Context	<b>configure lag</b> <i>string</i> <b>selection-criteria</b>
Tree	<a href="#">selection-criteria</a>
Introduced	16.0.R1
Platforms	All

**mode** *keyword*

Synopsis	Criteria to select the active subgroup
Context	<b>configure lag</b> <i>string</i> <b>selection-criteria mode</b> <i>keyword</i>
Tree	<a href="#">mode</a>
Options	highest-count, highest-weight, best-port
Default	highest-count
Introduced	16.0.R1
Platforms	All

**slave-to-partner** *boolean*

Synopsis	Use slave-to-partner for selection criteria
Context	<b>configure lag</b> <i>string</i> <b>selection-criteria slave-to-partner</b> <i>boolean</i>

Tree	<a href="#">slave-to-partner</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **subgroup-hold-time** (*number* | *keyword*)

Synopsis	Delay time when switching to a new active subgroup
Context	<b>configure lag</b> <i>string</i> <a href="#">selection-criteria subgroup-hold-time</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">subgroup-hold-time</a>
Range	0 to 2000
Units	deciseconds
Options	infinite
Default	0
Introduced	16.0.R1
Platforms	All

### **standby-signaling** *keyword*

Synopsis	Way of signaling a member port to the remote side
Context	<b>configure lag</b> <i>string</i> <a href="#">standby-signaling</a> <i>keyword</i>
Tree	<a href="#">standby-signaling</a>
Options	lacp, power-off
Default	lacp
Introduced	16.0.R1
Platforms	All

### **weight-threshold**



#### **WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	Enter the <b>weight-threshold</b> context
Context	<b>configure lag</b> <i>string</i> <a href="#">weight-threshold</a>
Tree	<a href="#">weight-threshold</a>

Introduced	16.0.R1
Deprecated	22.10.R1
Platforms	All

**action** *keyword***WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	Action to take if the number of active links in the LAG is at or below the threshold value
Context	<b>configure lag</b> <i>string</i> <b>weight-threshold</b> <i>action keyword</i>
Tree	<i>action</i>
Options	down, dynamic-cost, static-cost
Default	down
Introduced	16.0.R1
Deprecated	22.10.R1
Platforms	All

**cost** *number***WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	Static cost of the LAG
Context	<b>configure lag</b> <i>string</i> <b>weight-threshold</b> <i>cost number</i>
Tree	<i>cost</i>
Range	1 to 16777215
Introduced	16.0.R3
Deprecated	22.10.R1
Platforms	All

**value** *number***WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	Active link threshold at which action is taken
----------	--

---

Context	<b>configure lag</b> <i>string</i> <b>weight-threshold</b> <i>value</i> <i>number</i>
Tree	<b>value</b>
Range	0 to 63
Introduced	16.0.R1
Deprecated	22.10.R1
Platforms	All



## 3.22 li commands

```

li
- li-filter
- associations
  - li-ip-filter reference
    - ip-filter string
  - li-ipv6-filter reference
    - ipv6-filter string
  - li-mac-filter reference
    - mac-filter string
- li-ip-filter string
- description string
- entry number
- description string
- match
  - dst-ip
    - address (ipv4-address | ipv4-prefix-with-host-bits)
    - mask string
  - dst-port
    - eq number
    - gt number
    - lt number
    - range
      - end number
      - start number
  - fragment keyword
  - protocol (number | keyword)
  - src-ip
    - address (ipv4-address | ipv4-prefix-with-host-bits)
    - mask string
  - src-port
    - eq number
    - gt number
    - lt number
    - range
      - end number
      - start number
- li-ipv6-filter string
- description string
- entry number
- description string
- match
  - dst-ip
    - address (ipv6-address | ipv6-prefix-with-host-bits)
    - mask string
  - dst-port
    - eq number
    - gt number
    - lt number
    - range
      - end number
      - start number
  - next-header (number | keyword)
  - src-ip
    - address (ipv6-address | ipv6-prefix-with-host-bits)
    - mask string
  - src-port
    - eq number
    - gt number
    - lt number

```

## li li-filter li-ipv6-filter entry match src-port range

```

    - range
      - end number
      - start number
- li-mac-filter string
- description string
- entry number
  - description string
  - match
    - dst-mac
      - address string
      - mask string
    - frame-type keyword
    - src-mac
      - address string
      - mask string
- lock-filter keyword
- reserved-block string
- description string
- entry-range
  - end number
  - start number
- ip-filter string
- ipv6-filter string
- mac-filter string
- li-source string
- admin-state keyword
- li-ip-filter reference
  - entry reference
  - intercept-id number
  - session-id number
- li-ipv6-filter reference
  - entry reference
  - intercept-id number
  - session-id number
- li-mac-filter reference
  - entry reference
  - intercept-id number
  - session-id number
- nat
  - dslite string b4 string
  - intercept-id number
  - session-id number
  - ethernet-header
    - destination-address string
    - source-address string
    - type number
  - l2-aware string
  - intercept-id number
  - session-id number
  - nat44 string ip string
  - intercept-id number
  - session-id number
  - nat64 string ip string
  - intercept-id number
  - session-id number
- port string
  - egress boolean
  - ingress boolean
- sap string
  - egress boolean
  - ingress boolean
  - intercept-id number
  - session-id number
- subscriber string

```

## li li-source subscriber egress

```

- egress boolean
- fc keyword
- host-type keyword
- ingress boolean
- intercept-id number
- ip-address string
- ip-family keyword
- mac-address string
- sap-id string
- session-id number
- sla-profile string
- wlan-gw-dsm-ue string
- intercept-id number
- session-id number
- log
- log-id string
- admin-state keyword
- description string
- destination
- memory
- max-entries number
- netconf
- max-entries number
- snmp
- max-entries number
- filter string
- netconf-stream string
- source
- li boolean
- time-format keyword
- mirror-dest-reservation
- end number
- start number
- mirror-dest-template string
- layer-3-encap
- direction-bit boolean
- encap-type keyword
- ip-source string
- router-instance string
- udp
- destination number
- source number
- type keyword
- nat
- use-outside-ip-address boolean
- radius
- mirror-dest-template reference
- x-interfaces
- admin-state keyword
- correlation-id
- ipoe keyword
- pppoe keyword
- ine-identifier string
- lic string
- authentication
- password string
- private-ki string
- sequence-group string
- description string
- identifier string
- ipv4
- ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
- port number
- router-instance string

```

## li x-interfaces user-db

```
- user-db string
- x1
  - ipv4
    - local-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - lic-peer reference
    - local-tcp-port number
    - timeouts
      - message-timeout number
  - x2
    - ipv4
      - local-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - lic-peer reference
      - timeouts
        - keep-alive number
        - request number
  - x3
    - alarms
      - cpu-alarm
        - high-threshold number
        - low-threshold number
      - memory-alarm
        - high-threshold number
        - low-threshold number
      - throughput-alarm
        - high-threshold number
        - low-threshold number
    - ipv4
      - local-address-range
        - end string
        - start string
    - li-group number
    - lic-peers reference
    - session-limit number
    - timeouts
      - keep-alive number
      - request number
      - target-retry-wait number
```

### 3.22.1 li command descriptions

#### li

Synopsis	Configure lawful intercept
Context	<a href="#">li</a>
Tree	<a href="#">li</a>
Introduced	19.10.R1
Platforms	All

#### li-filter

Synopsis	Enter the <b>li-filter</b> context
Context	<a href="#">li li-filter</a>
Tree	<a href="#">li-filter</a>
Introduced	19.10.R1
Platforms	All

#### associations

Synopsis	Enter the <b>associations</b> context
Context	<a href="#">li li-filter associations</a>
Tree	<a href="#">associations</a>
Introduced	19.10.R1
Platforms	All

#### li-ip-filter [[li-filter-name](#)] *reference*

Synopsis	Enter the <b>li-ip-filter</b> list instance
Context	<a href="#">li li-filter associations li-ip-filter reference</a>
Tree	<a href="#">li-ip-filter</a>
Introduced	19.10.R1
Platforms	All

**[li-filter-name] reference**

Synopsis	Name of an existing LI IP filter
Context	<a href="#">li li-filter associations li-ip-filter reference</a> <i>reference</i>
Tree	<a href="#">li-ip-filter</a>
Reference	<a href="#">li li-filter li-ip-filter string</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**ip-filter [filter-name] string**

Synopsis	Add a list entry for <b>ip-filter</b>
Context	<a href="#">li li-filter associations li-ip-filter reference ip-filter string</a> <i>string</i>
Tree	<a href="#">ip-filter</a>
Max. Instances	1
Min. Instances	1
Introduced	19.10.R1
Platforms	All

**[filter-name] string**

Synopsis	IP filter to be associated with specified LI IP filter
Context	<a href="#">li li-filter associations li-ip-filter reference ip-filter string</a> <i>string</i>
Tree	<a href="#">ip-filter</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**li-ipv6-filter [li-filter-name] reference**

Synopsis	Enter the <b>li-ipv6-filter</b> list instance
Context	<a href="#">li li-filter associations li-ipv6-filter reference</a> <i>reference</i>

Tree	<a href="#">li-ipv6-filter</a>
Introduced	19.10.R1
Platforms	All

**[li-filter-name]** *reference*

Synopsis	LI IPv6 filter name
Context	<a href="#">li li-filter associations li-ipv6-filter reference</a>
Tree	<a href="#">li-ipv6-filter</a>
Reference	<a href="#">li li-filter li-ipv6-filter string</a>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**ipv6-filter** [[filter-name](#)] *string*

Synopsis	Add a list entry for <b>ipv6-filter</b>
Context	<a href="#">li li-filter associations li-ipv6-filter reference ipv6-filter string</a>
Tree	<a href="#">ipv6-filter</a>
Max. Instances	1
Min. Instances	1
Introduced	19.10.R1
Platforms	All

**[filter-name]** *string*

Synopsis	IP filter to be associated with specified LI IP filter
Context	<a href="#">li li-filter associations li-ipv6-filter reference ipv6-filter string</a>
Tree	<a href="#">ipv6-filter</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**li-mac-filter** [[li-filter-name](#)] *reference*

Synopsis	Enter the <b>li-mac-filter</b> list instance
Context	<a href="#">li li-filter associations</a> <a href="#">li-mac-filter reference</a>
Tree	<a href="#">li-mac-filter</a>
Introduced	19.10.R1
Platforms	All

**[li-filter-name]** *reference*

Synopsis	LI MAC filter name
Context	<a href="#">li li-filter associations</a> <a href="#">li-mac-filter reference</a>
Tree	<a href="#">li-mac-filter</a>
Reference	<a href="#">li li-filter</a> <a href="#">li-mac-filter string</a>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**mac-filter** [[filter-name](#)] *string*

Synopsis	Add a list entry for <b>mac-filter</b>
Context	<a href="#">li li-filter associations</a> <a href="#">li-mac-filter reference</a> <a href="#">mac-filter string</a>
Tree	<a href="#">mac-filter</a>
Max. Instances	1
Min. Instances	1
Introduced	19.10.R1
Platforms	All

**[filter-name]** *string*

Synopsis	IP filter to be associated with specified LI IP filter
Context	<a href="#">li li-filter associations</a> <a href="#">li-mac-filter reference</a> <a href="#">mac-filter string</a>
Tree	<a href="#">mac-filter</a>



String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

### **li-ip-filter** [[li-filter-name](#)] *string*

Synopsis	Enter the <b>li-ip-filter</b> list instance
Context	<a href="#">li li-filter</a> <a href="#">li-ip-filter</a> <i>string</i>
Tree	<a href="#">li-ip-filter</a>
Description	<p>Commands in this context create LI IPv4 filter lists, which can be used to create confidential IPv4 filter based LI source entries.</p> <p>The LI IPv4 filter entries are merged into normal IPv4 filters configured with the <b>li li-filter associations</b> and <b>li li-filter reserved-block</b> commands. The LI IPv4 filter entries are visible only to users with LI permissions.</p>
Introduced	19.10.R1
Platforms	All

### **[li-filter-name]** *string*

Synopsis	LI filter name
Context	<a href="#">li li-filter</a> <a href="#">li-ip-filter</a> <i>string</i>
Tree	<a href="#">li-ip-filter</a>
Description	This command specifies the LI filter name. Filter names cannot start with an underscore character (for example, “_my-filter”) and cannot use the name “default”.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<a href="#">li li-filter</a> <a href="#">li-ip-filter</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80

Introduced	19.10.R1
Platforms	All

### **entry** [*li-entry-id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ip-filter</a> <i>string</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>

Description Commands in this context configure an entry for the LI filter.

Multiple entries can be created using unique entry ID numbers within the filter. An entry in an LI filter always has an implicit action of “forward”. LI filter entries can be used as LI source entries.

The entry numbers for LI filters serve only as keys for managing the entries (deleting entries, and so on). The order of the LI filter entries is not guaranteed to match the entry numbers and the software may reorder entries. Operators must therefore use LI entries in such a way that their relative order is not important.

Entries removed from the filter are immediately removed from all services or network ports where the associated filter is applied.

Introduced	19.10.R1
Platforms	All

### **[li-entry-id]** *number*

Synopsis	LI filter entry ID
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ip-filter</a> <i>string</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>

Range 1 to 65535

Notes This element is part of a list key.

Introduced	19.10.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ip-filter</a> <i>string</i> <b>entry</b> <i>number</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>

String Length 1 to 80

Introduced	19.10.R1
Platforms	All

## match

Synopsis	Enter the <b>match</b> context
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a>
Tree	<a href="#">match</a>
Description	<p>Commands in this context configure match criteria for the filter entry. If more than one match criteria (within one match statement) are configured, all criteria must be satisfied (and function) for a match to occur.</p> <p>A match context may consist of multiple match criteria, but multiple match statements cannot be configured per entry.</p>
Introduced	19.10.R1
Platforms	All

## dst-ip

Synopsis	Enter the <b>dst-ip</b> context
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-ip</a>
Tree	<a href="#">dst-ip</a>
Introduced	19.10.R1
Platforms	All

## address (*ipv4-address* | *ipv4-prefix-with-host-bits*)

Synopsis	IP address to match
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-ip</a> <a href="#">address</a> ( <i>ipv4-address</i>   <i>ipv4-prefix-with-host-bits</i> )
Tree	<a href="#">address</a>
Introduced	19.10.R1
Platforms	All

## mask *string*

Synopsis	Mask that is applied as an AND to the IP address
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Context	<a href="#">li li-filter li-ip-filter</a> <i>string entry number match dst-ip mask string</i>
Tree	<a href="#">mask</a>
Introduced	19.10.R1
Platforms	All

### **dst-port**

Synopsis	Enter the <b>dst-port</b> context
Context	<a href="#">li li-filter li-ip-filter</a> <i>string entry number match dst-port</i>
Tree	<a href="#">dst-port</a>
Introduced	19.10.R1
Platforms	All

### **eq number**

Synopsis	Condition on equality to specified value
Context	<a href="#">li li-filter li-ip-filter</a> <i>string entry number match dst-port eq number</i>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.10.R1
Platforms	All

### **gt number**

Synopsis	Condition on being greater than the specified value
Context	<a href="#">li li-filter li-ip-filter</a> <i>string entry number match dst-port gt number</i>
Tree	<a href="#">gt</a>
Range	0 to 65534
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.10.R1
Platforms	All

### **lt number**

Synopsis	Condition on being less than the specified value
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <a href="#">lt</a> <i>number</i>
Tree	<a href="#">lt</a>
Range	1 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.10.R1
Platforms	All

### **range**

Synopsis	Enable the <b>range</b> context
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <a href="#">range</a>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.10.R1
Platforms	All

### **end number**

Synopsis	Upper bound port to match
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <a href="#">range</a> <a href="#">end</a> <i>number</i>
Tree	<a href="#">end</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

### **start number**

Synopsis	Lower bound port to match
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <a href="#">range</a> <a href="#">start</a> <i>number</i>
Tree	<a href="#">start</a>
Range	0 to 65534

Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

### **fragment** *keyword*

Synopsis	Fragmentation state as the match criterion
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">fragment</a> <i>keyword</i>
Tree	<a href="#">fragment</a>
Options	false, true
Introduced	20.2.R1
Platforms	All

### **protocol** (*number* | *keyword*)

Synopsis	IP protocol to match
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">protocol</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">protocol</a>
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	19.10.R1
Platforms	All

### **src-ip**

Synopsis	Enter the <b>src-ip</b> context
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-ip</a>
Tree	<a href="#">src-ip</a>
Introduced	19.10.R1
Platforms	All

### **address** (*ipv4-address* | *ipv4-prefix-with-host-bits*)

Synopsis	IP address to match
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Context	<a href="#">li li-filter li-ip-filter</a> <i>string entry number match src-ip address (ipv4-address   ipv4-prefix-with-host-bits)</i>
Tree	<a href="#">address</a>
Introduced	19.10.R1
Platforms	All

### **mask string**

Synopsis	Mask that is applied as an AND to the IP address
Context	<a href="#">li li-filter li-ip-filter</a> <i>string entry number match src-ip mask string</i>
Tree	<a href="#">mask</a>
Introduced	19.10.R1
Platforms	All

### **src-port**

Synopsis	Enter the <b>src-port</b> context
Context	<a href="#">li li-filter li-ip-filter</a> <i>string entry number match src-port</i>
Tree	<a href="#">src-port</a>
Introduced	19.10.R1
Platforms	All

### **eq number**

Synopsis	Condition on equality to specified value
Context	<a href="#">li li-filter li-ip-filter</a> <i>string entry number match src-port eq number</i>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.10.R1
Platforms	All

### **gt number**

Synopsis	Condition on being greater than the specified value
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Context	<a href="#">li li-filter li-ip-filter</a> <i>string entry number match src-port gt number</i>
Tree	<a href="#">gt</a>
Range	0 to 65534
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.10.R1
Platforms	All

### **lt** *number*

Synopsis	Condition on being less than the specified value
Context	<a href="#">li li-filter li-ip-filter</a> <i>string entry number match src-port lt number</i>
Tree	<a href="#">lt</a>
Range	1 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.10.R1
Platforms	All

### **range**

Synopsis	Enable the <b>range</b> context
Context	<a href="#">li li-filter li-ip-filter</a> <i>string entry number match src-port range</i>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.10.R1
Platforms	All

### **end** *number*

Synopsis	Upper bound port to match
Context	<a href="#">li li-filter li-ip-filter</a> <i>string entry number match src-port range end number</i>
Tree	<a href="#">end</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	19.10.R1



Platforms All

### **start number**

Synopsis Lower bound port to match

Context [li li-filter li-ip-filter](#) *string entry number match src-port range start number*

Tree [start](#)

Range 0 to 65534

Notes This element is mandatory.

Introduced 19.10.R1

Platforms All

### **li-ipv6-filter** [[li-filter-name](#)] *string*

Synopsis Enter the **li-ipv6-filter** list instance

Context [li li-filter li-ipv6-filter](#) *string*

Tree [li-ipv6-filter](#)

Description Commands in this context create LI IPv6 filter lists, which can be used to create confidential IPv6 filter based LI source entries.

The LI IPv6 filter entries are merged into normal IPv6 filters configured with the **li li-filter associations** and **li li-filter reserved-block** commands. However, the LI IPv6 filter entries are visible only to users with LI permissions.

Introduced 19.10.R1

Platforms All

### **[li-filter-name]** *string*

Synopsis LI filter name

Context [li li-filter li-ipv6-filter](#) *string*

Tree [li-ipv6-filter](#)

Description This command specifies the LI filter name. Filter names cannot start with an underscore character (for example, “\_my-filter”) and cannot use the name “default”.

String Length 1 to 32

Notes This element is part of a list key.

Introduced 19.10.R1

Platforms All

**description** *string*

Synopsis	Text description
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ipv6-filter</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	19.10.R1
Platforms	All

**entry** [[li-entry-id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Description	<p>Commands in this context configure an entry for the LI filter.</p> <p>Multiple entries can be created using unique entry ID numbers within the filter. An entry in an LI filter always has an implicit action of “forward”. LI filter entries can be used as LI source entries.</p> <p>The entry numbers for LI filters serve only as keys for managing the entries (deleting entries, and so on). The order of the LI filter entries is not guaranteed to match the entry numbers and the software may reorder entries. Operators must therefore use LI entries in such a way that their relative order is not important.</p> <p>Entries removed from the filter are immediately removed from all services or network ports where the associated filter is applied.</p>
Introduced	19.10.R1
Platforms	All

**[[li-entry-id](#)]** *number*

Synopsis	LI filter entry ID
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<a href="#">li li-filter li-ipv6-filter</a> <i>string entry number description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	19.10.R1
Platforms	All

**match**

Synopsis	Enter the <b>match</b> context
Context	<a href="#">li li-filter li-ipv6-filter</a> <i>string entry number match</i>
Tree	<a href="#">match</a>
Description	<p>Commands in this context configure match criteria for the filter entry. If more than one match criteria (within one match statement) are configured, all criteria must be satisfied (and function) for a match to occur.</p> <p>A match context may consist of multiple match criteria, but multiple match statements cannot be configured per entry.</p>
Introduced	19.10.R1
Platforms	All

**dst-ip**

Synopsis	Enter the <b>dst-ip</b> context
Context	<a href="#">li li-filter li-ipv6-filter</a> <i>string entry number match dst-ip</i>
Tree	<a href="#">dst-ip</a>
Introduced	19.10.R1
Platforms	All

**address** (*ipv6-address | ipv6-prefix-with-host-bits*)

Synopsis	IP address to match
Context	<a href="#">li li-filter li-ipv6-filter</a> <i>string entry number match dst-ip address (ipv6-address   ipv6-prefix-with-host-bits)</i>
Tree	<a href="#">address</a>

Introduced	19.10.R1
Platforms	All

### **mask string**

Synopsis	Mask that is applied as an AND to the IPv6 address
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ipv6-filter</a> <i>string entry number match dst-ip mask string</i>
Tree	<a href="#">mask</a>
Introduced	19.10.R1
Platforms	All

### **dst-port**

Synopsis	Enter the <b>dst-port</b> context
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ipv6-filter</a> <i>string entry number match dst-port</i>
Tree	<a href="#">dst-port</a>
Introduced	19.10.R1
Platforms	All

### **eq number**

Synopsis	Condition on equality to specified value
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ipv6-filter</a> <i>string entry number match dst-port eq number</i>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.10.R1
Platforms	All

### **gt number**

Synopsis	Condition on being greater than the specified value
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ipv6-filter</a> <i>string entry number match dst-port gt number</i>
Tree	<a href="#">gt</a>
Range	0 to 65534

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Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.10.R1
Platforms	All

### **lt** *number*

Synopsis	Condition on being less than the specified value
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ipv6-filter</a> <i>string entry number match dst-port lt number</i>
Tree	<a href="#">lt</a>
Range	1 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.10.R1
Platforms	All

### **range**

Synopsis	Enable the <b>range</b> context
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ipv6-filter</a> <i>string entry number match dst-port range</i>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.10.R1
Platforms	All

### **end** *number*

Synopsis	Upper bound port to match
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ipv6-filter</a> <i>string entry number match dst-port range end number</i>
Tree	<a href="#">end</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

**start number**

Synopsis	Lower bound port to match
Context	<a href="#">li li-filter li-ipv6-filter</a> <i>string entry number match dst-port range start number</i>
Tree	<a href="#">start</a>
Range	0 to 65534
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

**next-header** (*number | keyword*)

Synopsis	IP protocol to match
Context	<a href="#">li li-filter li-ipv6-filter</a> <i>string entry number match next-header (number   keyword)</i>
Tree	<a href="#">next-header</a>
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egg, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	19.10.R1
Platforms	All

**src-ip**

Synopsis	Enter the <b>src-ip</b> context
Context	<a href="#">li li-filter li-ipv6-filter</a> <i>string entry number match src-ip</i>
Tree	<a href="#">src-ip</a>
Introduced	19.10.R1
Platforms	All

**address** (*ipv6-address | ipv6-prefix-with-host-bits*)

Synopsis	IP address to match
Context	<a href="#">li li-filter li-ipv6-filter</a> <i>string entry number match src-ip address (ipv6-address   ipv6-prefix-with-host-bits)</i>
Tree	<a href="#">address</a>
Introduced	19.10.R1

Platforms All

### **mask string**

Synopsis Mask that is applied as an AND to the IPv6 address  
Context [li li-filter li-ipv6-filter string entry number match src-ip mask string](#)  
Tree [mask](#)  
Introduced 19.10.R1  
Platforms All

### **src-port**

Synopsis Enter the **src-port** context  
Context [li li-filter li-ipv6-filter string entry number match src-port](#)  
Tree [src-port](#)  
Introduced 19.10.R1  
Platforms All

### **eq number**

Synopsis Condition on equality to specified value  
Context [li li-filter li-ipv6-filter string entry number match src-port eq number](#)  
Tree [eq](#)  
Range 0 to 65535  
Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.  
Introduced 19.10.R1  
Platforms All

### **gt number**

Synopsis Condition on being greater than the specified value  
Context [li li-filter li-ipv6-filter string entry number match src-port gt number](#)  
Tree [gt](#)  
Range 0 to 65534  
Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

Introduced	19.10.R1
Platforms	All

**lt number**

Synopsis	Condition on being less than the specified value
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ipv6-filter</a> <i>string entry number match src-port lt number</i>
Tree	<a href="#">lt</a>
Range	1 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.10.R1
Platforms	All

**range**

Synopsis	Enable the <b>range</b> context
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ipv6-filter</a> <i>string entry number match src-port range</i>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.10.R1
Platforms	All

**end number**

Synopsis	Upper bound port to match
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ipv6-filter</a> <i>string entry number match src-port range end number</i>
Tree	<a href="#">end</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

**start number**

Synopsis	Lower bound port to match
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Context	<a href="#">li li-filter li-ipv6-filter</a> <i>string entry number match src-port range start number</i>
Tree	<a href="#">start</a>
Range	0 to 65534
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

### **li-mac-filter** [[li-filter-name](#)] *string*

Synopsis	Enter the <b>li-mac-filter</b> list instance
Context	<a href="#">li li-filter li-mac-filter</a> <i>string</i>
Tree	<a href="#">li-mac-filter</a>
Description	<p>Commands in this context configure LI MAC filter lists, which can be used to create confidential MAC filter based LI source entries.</p> <p>The LI MAC filter entries are merged into normal MAC filters as configured using the <b>li-filter associations</b> and <b>li-filter reserved-block</b> commands. The LI MAC filter entries are visible only to users with LI permissions.</p>
Introduced	19.10.R1
Platforms	All

### **[li-filter-name]** *string*

Synopsis	LI filter name
Context	<a href="#">li li-filter li-mac-filter</a> <i>string</i>
Tree	<a href="#">li-mac-filter</a>
Description	This command specifies the LI filter name. Filter names cannot start with an underscore character (for example, “_my-filter”) and cannot use the name “default”.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<a href="#">li li-filter li-mac-filter</a> <i>string description string</i>

Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	19.10.R1
Platforms	All

### **entry** [[li-entry-id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<a href="#">li li-filter li-mac-filter</a> <i>string entry number</i>
Tree	<a href="#">entry</a>

Description Commands in this context configure an entry for the LI filter.

Multiple entries can be created using unique entry ID numbers within the filter. An entry in an LI filter always has an implicit action of “forward”. LI filter entries can be used as LI source entries.

The entry numbers for LI filters serve only as keys for managing the entries (deleting entries, and so on). The order of the LI filter entries is not guaranteed to match the entry numbers and the software may reorder entries. Operators must therefore use LI entries in such a way that their relative order is not important.

Entries removed from the filter are immediately removed from all services or network ports where the associated filter is applied.

Introduced	19.10.R1
Platforms	All

### **[li-entry-id]** *number*

Synopsis	LI filter entry ID
Context	<a href="#">li li-filter li-mac-filter</a> <i>string entry number</i>
Tree	<a href="#">entry</a>

Range 1 to 65535

Notes This element is part of a list key.

Introduced	19.10.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<a href="#">li li-filter li-mac-filter</a> <i>string entry number description string</i>

Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	19.10.R1
Platforms	All

## match

Synopsis	Enter the <b>match</b> context
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a>
Tree	<a href="#">match</a>
Description	<p>Commands in this context configure match criteria for the filter entry. If more than one match criteria (within one match statement) are configured, all criteria must be satisfied (and function) for a match to occur.</p> <p>A match context may consist of multiple match criteria, but multiple match statements cannot be configured per entry.</p>
Introduced	19.10.R1
Platforms	All

## dst-mac

Synopsis	Enable the <b>dst-mac</b> context
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-mac</a>
Tree	<a href="#">dst-mac</a>
Introduced	19.10.R1
Platforms	All

## address *string*

Synopsis	MAC address for filter match
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-mac</a> <a href="#">address</a> <i>string</i>
Tree	<a href="#">address</a>
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

**mask string**

Synopsis	MAC address mask for filter match
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-mac</a> <a href="#">mask</a> <i>string</i>
Tree	<a href="#">mask</a>
Default	ff:ff:ff:ff:ff:ff
Introduced	19.10.R1
Platforms	All

**frame-type keyword**

Synopsis	Frame type for MAC filter match
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">frame-type</a> <i>keyword</i>
Tree	<a href="#">frame-type</a>
Description	This command specifies the frame type for MAC filter entry matching. A filter can be edited even if an LI source references an entry in the filter.
Options	802dot3, 802dot2-llc, 802dot2-snap, ethernet-ii
Default	802dot3
Introduced	19.10.R1
Platforms	All

**src-mac**

Synopsis	Enable the <b>src-mac</b> context
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-mac</a>
Tree	<a href="#">src-mac</a>
Introduced	19.10.R1
Platforms	All

**address string**

Synopsis	MAC address for filter match
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-mac</a> <a href="#">address</a> <i>string</i>
Tree	<a href="#">address</a>
Notes	This element is mandatory.
Introduced	19.10.R1

Platforms All

### **mask** *string*

Synopsis MAC address mask for filter match  
 Context [li li-filter li-mac-filter](#) *string entry number match src-mac mask string*  
 Tree [mask](#)  
 Default ff:ff:ff:ff:ff:ff  
 Introduced 19.10.R1  
 Platforms All

### **lock-filter** *keyword*

Synopsis Lock state of LI filters  
 Context [li li-filter lock-filter](#) *keyword*  
 Tree [lock-filter](#)  
 Options lock, unlock  
 Default lock  
 Introduced 19.10.R1  
 Platforms All

### **reserved-block** [[block-name](#)] *string*

Synopsis Enter the **reserved-block** list instance  
 Context [li li-filter reserved-block](#) *string*  
 Tree [reserved-block](#)  
 Max. Instances 8  
 Introduced 19.10.R1  
 Platforms All

### **[block-name]** *string*

Synopsis Object uniquely identifying an LI reserved block  
 Context [li li-filter reserved-block](#) *string*  
 Tree [reserved-block](#)

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String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">reserved-block</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	19.10.R1
Platforms	All

### **entry-range**

Synopsis	Enable the <b>entry-range</b> context
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">reserved-block</a> <i>string</i> <a href="#">entry-range</a>
Tree	<a href="#">entry-range</a>
Introduced	19.10.R1
Platforms	All

### **end** *number*

Synopsis	Upper bound of the range
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">reserved-block</a> <i>string</i> <a href="#">entry-range</a> <a href="#">end</a> <i>number</i>
Tree	<a href="#">end</a>
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

### **start** *number*

Synopsis	Lower bound of the range
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Context	<a href="#">li li-filter reserved-block</a> <i>string</i> <a href="#">entry-range</a> <i>start number</i>
Tree	<a href="#">start</a>
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

### **ip-filter** [[filter-name](#)] *string*

Synopsis	Add a list entry for <b>ip-filter</b>
Context	<a href="#">li li-filter reserved-block</a> <i>string</i> <a href="#">ip-filter</a> <i>string</i>
Tree	<a href="#">ip-filter</a>
Introduced	19.10.R1
Platforms	All

### **[filter-name]** *string*

Synopsis	IP filter ID for LI filter reserved block
Context	<a href="#">li li-filter reserved-block</a> <i>string</i> <a href="#">ip-filter</a> <i>string</i>
Tree	<a href="#">ip-filter</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

### **ipv6-filter** [[filter-name](#)] *string*

Synopsis	Add a list entry for <b>ipv6-filter</b>
Context	<a href="#">li li-filter reserved-block</a> <i>string</i> <a href="#">ipv6-filter</a> <i>string</i>
Tree	<a href="#">ipv6-filter</a>
Introduced	19.10.R1
Platforms	All

**[filter-name]** *string*

Synopsis	IP filter ID for LI filter reserved block
Context	<a href="#">li li-filter reserved-block</a> <i>string</i> <a href="#">ipv6-filter</a> <i>string</i>
Tree	<a href="#">ipv6-filter</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**mac-filter** [[filter-name](#)] *string*

Synopsis	Add a list entry for <b>mac-filter</b>
Context	<a href="#">li li-filter reserved-block</a> <i>string</i> <a href="#">mac-filter</a> <i>string</i>
Tree	<a href="#">mac-filter</a>
Introduced	19.10.R1
Platforms	All

**[filter-name]** *string*

Synopsis	IP filter ID for LI filter reserved block
Context	<a href="#">li li-filter reserved-block</a> <i>string</i> <a href="#">mac-filter</a> <i>string</i>
Tree	<a href="#">mac-filter</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**li-source** [[service-name](#)] *string*

Synopsis	Enter the <b>li-source</b> list instance
Context	<a href="#">li li-source</a> <i>string</i>
Tree	<a href="#">li-source</a>
Introduced	19.10.R1
Platforms	All



**[service-name]** *string*

Synopsis	Administrative service name
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i>
Tree	<a href="#">li-source</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of mirror service
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	19.10.R1
Platforms	All

**li-ip-filter** [[li-filter-name](#)] *reference*

Synopsis	Enter the <b>li-ip-filter</b> list instance
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">li-ip-filter</a> <i>reference</i>
Tree	<a href="#">li-ip-filter</a>
Introduced	19.10.R1
Platforms	All

**[li-filter-name]** *reference*

Synopsis	A unique ID for an li-ip-filter
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">li-ip-filter</a> <i>reference</i>
Tree	<a href="#">li-ip-filter</a>
Reference	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ip-filter</a> <i>string</i>
Notes	This element is part of a list key.

Introduced	19.10.R1
Platforms	All

### **entry** [*li-entry-id*] *reference*

Synopsis	Enter the <b>entry</b> list instance
Context	<a href="#">li li-source</a> <i>string</i> <a href="#">li-ip-filter</a> <i>reference</i> <a href="#">entry</a> <i>reference</i>
Tree	<a href="#">entry</a>
Min. Instances	1
Introduced	19.10.R1
Platforms	All

### **[li-entry-id]** *reference*

Synopsis	A unique ID for an li-ip-filter entry
Context	<a href="#">li li-source</a> <i>string</i> <a href="#">li-ip-filter</a> <i>reference</i> <a href="#">entry</a> <i>reference</i>
Tree	<a href="#">entry</a>
Reference	<a href="#">li li-filter</a> <a href="#">li-ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

### **intercept-id** *number*

Synopsis	Intercept ID of the traffic flow
Context	<a href="#">li li-source</a> <i>string</i> <a href="#">li-ip-filter</a> <i>reference</i> <a href="#">entry</a> <i>reference</i> <a href="#">intercept-id</a> <i>number</i>
Tree	<a href="#">intercept-id</a>
Description	<p>This command configures the intercept ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This intercept ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.</p> <p>For LI source entries, when the <b>configure mirror mirror-dest encap layer-3-encap header-type</b> command is configured with <b>ip-udp-shim</b> routable encap, an intercept-id field (as part of the routable encap) is always present in the mirrored packets. If there is no intercept ID configured for an LI source entry, the default value is inserted.</p>

When the mirror service is configured with **ip-gre** routable encap under the **header-type** command, no intercept ID is inserted and none should be specified against the LI source entries.

Range	1 to 1073741823
Introduced	19.10.R1
Platforms	All

### **session-id** *number*

Synopsis	Session ID of the traffic flow
Context	<a href="#">li li-source</a> <i>string</i> <a href="#">li-ip-filter</a> <i>reference</i> <a href="#">entry</a> <i>reference</i> <a href="#">session-id</a> <i>number</i>
Tree	<a href="#">session-id</a>

**Description** This command configures the session ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This session ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.

The session ID is only valid and used for mirror services that are configured with **ip-udp-shim** routable encap under the **configure mirror mirror-dest encap layer-3-encap header-type** command. For all types of LI source entries, when the mirror service is configured with **ip-udp-shim** routable encap, a session ID field (as part of the routable encap) is always present in the mirrored packets. If no session ID is configured for an LI source entry, the default value is inserted.

When a mirror service is configured with **ip-gre** routable encap under the header-type command, no session ID is inserted and none is specified against the LI source entries.

Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

### **li-ipv6-filter** [[li-filter-name](#)] *reference*

Synopsis	Enter the <b>li-ipv6-filter</b> list instance
Context	<a href="#">li li-source</a> <i>string</i> <a href="#">li-ipv6-filter</a> <i>reference</i>
Tree	<a href="#">li-ipv6-filter</a>
Introduced	19.10.R1
Platforms	All

### **[li-filter-name]** *reference*

Synopsis	A unique ID for an li-ipv6-filter
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Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">li-ipv6-filter</a> <i>reference</i>
Tree	<a href="#">li-ipv6-filter</a>
Reference	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ipv6-filter</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

### **entry** [[li-entry-id](#)] *reference*

Synopsis	Enter the <b>entry</b> list instance
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">li-ipv6-filter</a> <i>reference</i> <a href="#">entry</a> <i>reference</i>
Tree	<a href="#">entry</a>
Min. Instances	1
Introduced	19.10.R1
Platforms	All

### **[li-entry-id]** *reference*

Synopsis	A unique ID for an <a href="#">li-ipv6-filter</a> entry
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">li-ipv6-filter</a> <i>reference</i> <a href="#">entry</a> <i>reference</i>
Tree	<a href="#">entry</a>
Reference	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

### **intercept-id** *number*

Synopsis	Intercept ID of the traffic flow
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">li-ipv6-filter</a> <i>reference</i> <a href="#">entry</a> <i>reference</i> <a href="#">intercept-id</a> <i>number</i>
Tree	<a href="#">intercept-id</a>
Description	This command configures the intercept ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This intercept ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.

For LI source entries, when the **configure mirror mirror-dest encap layer-3-encap header-type** command is configured with **ip-udp-shim** routable encap, an intercept-id field (as part of the routable encap) is always present in the mirrored packets. If there is no intercept ID configured for an LI source entry, the default value is inserted.

When the mirror service is configured with **ip-gre** routable encap under the **header-type** command, no intercept ID is inserted and none should be specified against the LI source entries.

Range	1 to 1073741823
Introduced	19.10.R1
Platforms	All

### **session-id** *number*

Synopsis	Session ID of the traffic flow
Context	<a href="#">li li-source</a> <i>string</i> <a href="#">li-ipv6-filter</a> <i>reference</i> <a href="#">entry</a> <i>reference</i> <a href="#">session-id</a> <i>number</i>
Tree	<a href="#">session-id</a>
Description	This command configures the session ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This session ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.

The session ID is only valid and used for mirror services that are configured with **ip-udp-shim** routable encap under the **configure mirror mirror-dest encap layer-3-encap header-type** command. For all types of LI source entries, when the mirror service is configured with **ip-udp-shim** routable encap, a session ID field (as part of the routable encap) is always present in the mirrored packets. If no session ID is configured for an LI source entry, the default value is inserted.

When a mirror service is configured with **ip-gre** routable encap under the header-type command, no session ID is inserted and none is specified against the LI source entries.

Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

### **li-mac-filter** [[li-filter-name](#)] *reference*

Synopsis	Enter the <b>li-mac-filter</b> list instance
Context	<a href="#">li li-source</a> <i>string</i> <a href="#">li-mac-filter</a> <i>reference</i>
Tree	<a href="#">li-mac-filter</a>
Introduced	19.10.R1
Platforms	All

**[li-filter-name] reference**

Synopsis	A unique ID for an li-mac-filter
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">li-mac-filter</a> <i>reference</i>
Tree	<a href="#">li-mac-filter</a>
Reference	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-mac-filter</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**entry [li-entry-id] reference**

Synopsis	Enter the <b>entry</b> list instance
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">li-mac-filter</a> <i>reference</i> <a href="#">entry</a> <i>reference</i>
Tree	<a href="#">entry</a>
Min. Instances	1
Introduced	19.10.R1
Platforms	All

**[li-entry-id] reference**

Synopsis	A unique ID for an li-mac-filter entry
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">li-mac-filter</a> <i>reference</i> <a href="#">entry</a> <i>reference</i>
Tree	<a href="#">entry</a>
Reference	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**intercept-id number**

Synopsis	Intercept ID of the traffic flow
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">li-mac-filter</a> <i>reference</i> <a href="#">entry</a> <i>reference</i> <a href="#">intercept-id</a> <i>number</i>
Tree	<a href="#">intercept-id</a>

Description	<p>This command configures the intercept ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This intercept ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.</p> <p>For LI source entries, when the <b>configure mirror mirror-dest encap layer-3-encap header-type</b> command is configured with <b>ip-udp-shim</b> routable encap, an intercept-id field (as part of the routable encap) is always present in the mirrored packets. If there is no intercept ID configured for an LI source entry, the default value is inserted.</p> <p>When the mirror service is configured with <b>ip-gre</b> routable encap under the <b>header-type</b> command, no intercept ID is inserted and none should be specified against the LI source entries.</p>
Range	1 to 1073741823
Introduced	19.10.R1
Platforms	All

### **session-id** *number*

Synopsis	Session ID of the traffic flow
Context	<a href="#">li li-source</a> <i>string</i> <a href="#">li-mac-filter</a> <i>reference</i> <a href="#">entry</a> <i>reference</i> <a href="#">session-id</a> <i>number</i>
Tree	<a href="#">session-id</a>
Description	<p>This command configures the session ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This session ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.</p> <p>The session ID is only valid and used for mirror services that are configured with <b>ip-udp-shim</b> routable encap under the <b>configure mirror mirror-dest encap layer-3-encap header-type</b> command. For all types of LI source entries, when the mirror service is configured with <b>ip-udp-shim</b> routable encap, a session ID field (as part of the routable encap) is always present in the mirrored packets. If no session ID is configured for an LI source entry, the default value is inserted.</p> <p>When a mirror service is configured with <b>ip-gre</b> routable encap under the header-type command, no session ID is inserted and none is specified against the LI source entries.</p>
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

### **nat**

Synopsis	Enter the <b>nat</b> context
Context	<a href="#">li li-source</a> <i>string</i> <b>nat</b>

Tree [nat](#)  
 Introduced 19.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dslite** [[router-instance](#)] *string b4 string*

Synopsis Enter the **dslite** list instance  
 Context [li li-source string nat dslite string b4 string](#)  
 Tree [dslite](#)  
 Introduced 19.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[router-instance]** *string*

Synopsis Name of the service  
 Context [li li-source string nat dslite string b4 string](#)  
 Tree [dslite](#)  
 String Length 1 to 64  
 Notes This element is part of a list key.  
 Introduced 19.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **b4** *string*

Synopsis B4 prefix of the subscriber  
 Context [li li-source string nat dslite string b4 string](#)  
 Tree [dslite](#)  
 Notes This element is part of a list key.  
 Introduced 19.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **intercept-id** *number*

Synopsis The intercept id of the traffic flow  
 Context [li li-source string nat dslite string b4 string intercept-id number](#)



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Tree	<a href="#">intercept-id</a>
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **session-id** *number*

Synopsis	The session id of the traffic flow
Context	<a href="#">li li-source</a> <i>string</i> <a href="#">nat dslite</a> <i>string</i> <a href="#">b4</a> <i>string</i> <a href="#">session-id</a> <i>number</i>
Tree	<a href="#">session-id</a>
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ethernet-header**

Synopsis	Enter the <b>ethernet-header</b> context
Context	<a href="#">li li-source</a> <i>string</i> <a href="#">nat ethernet-header</a>
Tree	<a href="#">ethernet-header</a>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **destination-address** *string*

Synopsis	Destination MAC address field of Ethernet encapsulation
Context	<a href="#">li li-source</a> <i>string</i> <a href="#">nat ethernet-header destination-address</a> <i>string</i>
Tree	<a href="#">destination-address</a>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **source-address** *string*

Synopsis	Source MAC address field of the Ethernet encapsulation
Context	<a href="#">li li-source</a> <i>string</i> <a href="#">nat ethernet-header source-address</a> <i>string</i>
Tree	<a href="#">source-address</a>

Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **type** *number*

Synopsis	Ethertype of the ethernet encapsulation
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">nat</a> <a href="#">ethernet-header</a> <a href="#">type</a> <i>number</i>
Tree	<a href="#">type</a>
Range	1536 to 65535
Default	1792
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **l2-aware** [[subscriber-id](#)] *string*

Synopsis	Enter the <b>l2-aware</b> list instance
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">nat</a> <a href="#">l2-aware</a> <i>string</i>
Tree	<a href="#">l2-aware</a>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[subscriber-id]** *string*

Synopsis	The string identifying the subscribe
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">nat</a> <a href="#">l2-aware</a> <i>string</i>
Tree	<a href="#">l2-aware</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **intercept-id** *number*

Synopsis	The intercept id of the traffic flow
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">nat</a> <a href="#">l2-aware</a> <i>string</i> <a href="#">intercept-id</a> <i>number</i>

Tree	<a href="#">intercept-id</a>
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**session-id** *number*

Synopsis	The session id of the traffic flow
Context	<a href="#">li li-source</a> <i>string</i> <a href="#">nat l2-aware</a> <i>string</i> <a href="#">session-id</a> <i>number</i>
Tree	<a href="#">session-id</a>
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nat44** [[router-instance](#)] *string ip string*

Synopsis	Enter the <b>nat44</b> list instance
Context	<a href="#">li li-source</a> <i>string</i> <a href="#">nat nat44</a> <i>string ip string</i>
Tree	<a href="#">nat44</a>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[router-instance]** *string*

Synopsis	Name of the service
Context	<a href="#">li li-source</a> <i>string</i> <a href="#">nat nat44</a> <i>string ip string</i>
Tree	<a href="#">nat44</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip** *string*

Synopsis	IP address of the subscriber
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Context	<a href="#">li li-source string nat nat44 string ip string</a>
Tree	<a href="#">nat44</a>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **intercept-id** *number*

Synopsis	The intercept id of the traffic flow
Context	<a href="#">li li-source string nat nat44 string ip string intercept-id number</a>
Tree	<a href="#">intercept-id</a>
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **session-id** *number*

Synopsis	The session id of the traffic flow
Context	<a href="#">li li-source string nat nat44 string ip string session-id number</a>
Tree	<a href="#">session-id</a>
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nat64** [[router-instance](#)] *string ip string*

Synopsis	Enter the <b>nat64</b> list instance
Context	<a href="#">li li-source string nat nat64 string ip string</a>
Tree	<a href="#">nat64</a>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[router-instance]** *string*

Synopsis	Name of the service
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Context	<a href="#">li li-source string nat nat64 string ip string</a>
Tree	<a href="#">nat64</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip string**

Synopsis	IP prefix of the subscriber
Context	<a href="#">li li-source string nat nat64 string ip string</a>
Tree	<a href="#">nat64</a>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **intercept-id number**

Synopsis	The intercept id of the traffic flow
Context	<a href="#">li li-source string nat nat64 string ip string intercept-id number</a>
Tree	<a href="#">intercept-id</a>
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **session-id number**

Synopsis	The session id of the traffic flow
Context	<a href="#">li li-source string nat nat64 string ip string session-id number</a>
Tree	<a href="#">session-id</a>
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port** [**port-id**] *string*

Synopsis	Enter the <b>port</b> list instance
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <b>port</b> <i>string</i>
Tree	<a href="#">port</a>
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[port-id]** *string*

Synopsis	Port ID
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <b>port</b> <i>string</i>
Tree	<a href="#">port</a>
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**egress** *boolean*

Synopsis	Perform lawful intercept on egress traffic
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <b>port</b> <i>string</i> <b>egress</b> <i>boolean</i>
Tree	<a href="#">egress</a>
Description	When configured to <b>true</b> , the router allows lawful intercept on egress traffic. This command configures packets that egress the SAP to be mirrored. Egress packets are mirrored to the mirror destination after egress packet modification.
Default	false
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ingress** *boolean*

Synopsis	Perform lawful intercept on ingress traffic
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <b>port</b> <i>string</i> <b>ingress</b> <i>boolean</i>
Tree	<a href="#">ingress</a>
Description	When configured to <b>true</b> , the router allows lawful intercept on ingress traffic. This command configures packets that ingress the SAP to be mirrored. Ingress packets are mirrored to the mirror destination before ingress packet modification.

Default	false
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**sap** [*sap-id*] *string*

Synopsis	Enter the <b>sap</b> list instance
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <b>sap</b> <i>string</i>
Tree	<a href="#">sap</a>
Description	Commands in this context create a service access point (SAP) within an LI configuration. The specified SAP must define a FastE, GigE, or XGigE, or XGigE access port with a dot1q, null, or q-in-q encapsulation type.
Introduced	19.10.R1
Platforms	All

**[sap-id]** *string*

Synopsis	SAP ID
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <b>sap</b> <i>string</i>
Tree	<a href="#">sap</a>
Description	This command specifies the physical port identifier portion of the SAP definition.
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**egress** *boolean*

Synopsis	Perform lawful intercept on egress traffic
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <b>sap</b> <i>string</i> <b>egress</b> <i>boolean</i>
Tree	<a href="#">egress</a>
Description	When configured to <b>true</b> , the router allows lawful intercept on egress traffic. This command configures packets that egress the SAP to be mirrored. Egress packets are mirrored to the mirror destination after egress packet modification.
Default	false
Introduced	19.10.R1

Platforms All

### **ingress** *boolean*

Synopsis Perform lawful intercept on ingress traffic

Context [li](#) [li-source](#) *string* [sap](#) *string* [ingress](#) *boolean*

Tree [ingress](#)

Description When configured to **true**, the router allows lawful intercept on ingress traffic. This command configures packets that ingress the SAP to be mirrored. Ingress packets are mirrored to the mirror destination before ingress packet modification.

Default false

Introduced 19.10.R1

Platforms All

### **intercept-id** *number*

Synopsis Intercept ID of the traffic flow

Context [li](#) [li-source](#) *string* [sap](#) *string* [intercept-id](#) *number*

Tree [intercept-id](#)

Description This command configures the intercept ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This intercept ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.

For LI source entries, when the **configure mirror mirror-dest encap layer-3-encap header-type** command is configured with **ip-udp-shim** routable encap, an intercept-id field (as part of the routable encap) is always present in the mirrored packets. If there is no intercept ID configured for an LI source entry, the default value is inserted.

When the mirror service is configured with **ip-gre** routable encap under the **header-type** command, no intercept ID is inserted and none should be specified against the LI source entries.

Range 1 to 1073741823

Introduced 19.10.R1

Platforms All

### **session-id** *number*

Synopsis Session ID of the traffic flow

Context [li](#) [li-source](#) *string* [sap](#) *string* [session-id](#) *number*



Tree	<a href="#">session-id</a>
Description	<p>This command configures the session ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This session ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.</p> <p>The session ID is only valid and used for mirror services that are configured with <b>ip-udp-shim</b> routable encap under the <b>configure mirror mirror-dest encap layer-3-encap header-type</b> command. For all types of LI source entries, when the mirror service is configured with <b>ip-udp-shim</b> routable encap, a session ID field (as part of the routable encap) is always present in the mirrored packets. If no session ID is configured for an LI source entry, the default value is inserted.</p> <p>When a mirror service is configured with <b>ip-gre</b> routable encap under the header-type command, no session ID is inserted and none is specified against the LI source entries.</p>
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

### **subscriber** [[subscriber-id](#)] *string*

Synopsis	Enter the <b>subscriber</b> list instance
Context	<a href="#">li li-source</a> <i>string</i> <a href="#">subscriber</a> <i>string</i>
Tree	<a href="#">subscriber</a>
Description	Commands in this context add hosts of a subscriber to a mirroring service.
Introduced	19.10.R1
Platforms	All

### **[subscriber-id]** *string*

Synopsis	Subscriber ID
Context	<a href="#">li li-source</a> <i>string</i> <a href="#">subscriber</a> <i>string</i>
Tree	<a href="#">subscriber</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**egress boolean**

Synopsis	Perform lawful intercept on egress traffic
Context	<a href="#">li li-source</a> <i>string</i> <a href="#">subscriber</a> <i>string</i> <a href="#">egress</a> <i>boolean</i>
Tree	<a href="#">egress</a>
Description	When configured to <b>true</b> , the router allows lawful intercept on egress traffic. This command configures packets that egress the SAP to be mirrored. Egress packets are mirrored to the mirror destination after egress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

**fc keyword**

Synopsis	Forwarding classes to be mirrored
Context	<a href="#">li li-source</a> <i>string</i> <a href="#">subscriber</a> <i>string</i> <a href="#">fc</a> <i>keyword</i>
Tree	<a href="#">fc</a>
Description	This command specifies the name of the forwarding class with which to associate LI traffic. The forwarding class name must already be defined within the system.  If the FC name is not already defined, an error is returned and this command has no effect. If the FC name is defined, the forwarding class associated with the FC name overrides the default forwarding class.
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	19.10.R1
Platforms	All

**host-type keyword**

Synopsis	Subscriber host type to be monitored
Context	<a href="#">li li-source</a> <i>string</i> <a href="#">subscriber</a> <i>string</i> <a href="#">host-type</a> <i>keyword</i>
Tree	<a href="#">host-type</a>
Description	This command specifies the host type for LI.
Options	ipoe, ppp
Introduced	19.10.R1
Platforms	All

**ingress** *boolean*

Synopsis	Perform lawful intercept on ingress traffic
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">subscriber</a> <i>string</i> <a href="#">ingress</a> <i>boolean</i>
Tree	<a href="#">ingress</a>
Description	When configured to <b>true</b> , the router allows lawful intercept on ingress traffic. This command configures packets that ingress the SAP to be mirrored. Ingress packets are mirrored to the mirror destination before ingress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

**intercept-id** *number*

Synopsis	Intercept ID of the traffic flow
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">subscriber</a> <i>string</i> <a href="#">intercept-id</a> <i>number</i>
Tree	<a href="#">intercept-id</a>
Description	<p>This command configures the intercept ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This intercept ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.</p> <p>For LI source entries, when the <b>configure mirror mirror-dest encap layer-3-encap header-type</b> command is configured with <b>ip-udp-shim</b> routable encap, an intercept-id field (as part of the routable encap) is always present in the mirrored packets. If there is no intercept ID configured for an LI source entry, the default value is inserted.</p> <p>When the mirror service is configured with <b>ip-gre</b> routable encap under the <b>header-type</b> command, no intercept ID is inserted and none should be specified against the LI source entries.</p>
Range	1 to 1073741823
Introduced	19.10.R1
Platforms	All

**ip-address** *string*

Synopsis	IP address of the subscriber
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">subscriber</a> <i>string</i> <a href="#">ip-address</a> <i>string</i>
Tree	<a href="#">ip-address</a>

Description	This command specifies the service IP address (system IP address) of the remote device sending LI traffic. If 0.0.0.0 is specified, any remote router is allowed to send to this service.
Notes	The following elements are part of a choice: ( <b>ip-address</b> , <b>mac-address</b> , and <b>sap-id</b> ) or <b>sla-profile</b> .
Introduced	19.10.R1
Platforms	All

### **ip-family** *keyword*

Synopsis	IP family for LI
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">subscriber</a> <i>string</i> <b>ip-family</b> <i>keyword</i>
Tree	<a href="#">ip-family</a>
Description	This command specifies the IP family for LI.
Options	ipv4, ipv6
Introduced	19.10.R1
Platforms	All

### **mac-address** *string*

Synopsis	The source MAC address
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">subscriber</a> <i>string</i> <b>mac-address</b> <i>string</i>
Tree	<a href="#">mac-address</a>
Description	This command specifies a MAC address when defining a static host.  Multiple static hosts may be configured with the same MAC address because each definition is distinguished by a unique IP address.
Notes	The following elements are part of a choice: ( <b>ip-address</b> , <b>mac-address</b> , and <b>sap-id</b> ) or <b>sla-profile</b> .
Introduced	19.10.R1
Platforms	All

### **sap-id** *string*

Synopsis	SAP ID
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">subscriber</a> <i>string</i> <b>sap-id</b> <i>string</i>
Tree	<a href="#">sap-id</a>

String Length	1 to 45
Notes	The following elements are part of a choice: ( <b>ip-address</b> , <b>mac-address</b> , and <b>sap-id</b> ) or <b>sla-profile</b> .
Introduced	19.10.R1
Platforms	All

### **session-id** *number*

Synopsis	Session ID of the traffic flow
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">subscriber</a> <i>string</i> <b>session-id</b> <i>number</i>
Tree	<a href="#">session-id</a>
Description	<p>This command configures the session ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This session ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.</p> <p>The session ID is only valid and used for mirror services that are configured with <b>ip-udp-shim</b> routable encap under the <b>configure mirror mirror-dest encap layer-3-encap header-type</b> command. For all types of LI source entries, when the mirror service is configured with <b>ip-udp-shim</b> routable encap, a session ID field (as part of the routable encap) is always present in the mirrored packets. If no session ID is configured for an LI source entry, the default value is inserted.</p> <p>When a mirror service is configured with <b>ip-gre</b> routable encap under the header-type command, no session ID is inserted and none is specified against the LI source entries.</p>
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

### **sla-profile** *string*

Synopsis	SLA profile
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">subscriber</a> <i>string</i> <b>sla-profile</b> <i>string</i>
Tree	<a href="#">sla-profile</a>
Description	<p>This command specifies an SLA profile name.</p> <p>Each host of a subscriber can use a different SLA profile. This option allows interception of only the hosts using the specified SLA profile. In some deployments, SLA profiles are assigned per type of traffic. There can be, for example, a specific SLA profile for voice traffic (which could be used for all SIP hosts).</p>
String Length	1 to 32

Notes	The following elements are part of a choice: ( <b>ip-address</b> , <b>mac-address</b> , and <b>sap-id</b> ) or <b>sla-profile</b> .
Introduced	19.10.R1
Platforms	All

### **wlan-gw-dsm-ue** [**mac**] *string*

Synopsis	Enter the <b>wlan-gw-dsm-ue</b> list instance
Context	<a href="#">li li-source</a> <i>string</i> <b>wlan-gw-dsm-ue</b> <i>string</i>
Tree	<a href="#">wlan-gw-dsm-ue</a>
Introduced	19.10.R1
Platforms	All

### **[mac]** *string*

Synopsis	MAC address of the DSM UE
Context	<a href="#">li li-source</a> <i>string</i> <b>wlan-gw-dsm-ue</b> <i>string</i>
Tree	<a href="#">wlan-gw-dsm-ue</a>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

### **intercept-id** *number*

Synopsis	Intercept identifier
Context	<a href="#">li li-source</a> <i>string</i> <b>wlan-gw-dsm-ue</b> <i>string</i> <b>intercept-id</b> <i>number</i>
Tree	<a href="#">intercept-id</a>
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

### **session-id** *number*

Synopsis	Session identifier
Context	<a href="#">li li-source</a> <i>string</i> <b>wlan-gw-dsm-ue</b> <i>string</i> <b>session-id</b> <i>number</i>

Tree	<a href="#">session-id</a>
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

## log

Synopsis	Enter the <b>log</b> context
Context	<a href="#">li log</a>
Tree	<a href="#">log</a>
Introduced	19.10.R1
Platforms	All

## log-id [[name](#)] *string*

Synopsis	Enter the <b>log-id</b> list instance
Context	<a href="#">li log log-id string</a>
Tree	<a href="#">log-id</a>
Max. Instances	30
Introduced	19.10.R1
Platforms	All

## [\[name\]](#) *string*

Synopsis	Log ID
Context	<a href="#">li log log-id string</a>
Tree	<a href="#">log-id</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	The administrative state of the log
Context	<a href="#">li log log-id string admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	19.10.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<a href="#">li log log-id string description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	19.10.R1
Platforms	All

### **destination**

Synopsis	Enter the <b>destination</b> context
Context	<a href="#">li log log-id string destination</a>
Tree	<a href="#">destination</a>
Introduced	19.10.R1
Platforms	All

### **memory**

Synopsis	Enable the <b>memory</b> context
Context	<a href="#">li log log-id string destination memory</a>
Tree	<a href="#">memory</a>
Notes	The following elements are part of a choice: <b>memory</b> , <b>netconf</b> , or <b>snmp</b> .
Introduced	19.10.R1
Platforms	All



**max-entries** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of events stored in this memory log
Context	<a href="#">li log log-id string destination memory max-entries number</a>
Tree	<a href="#">max-entries</a>
Range	50 to 1024
Default	100
Introduced	19.10.R1
Platforms	All

**netconf**

Synopsis	Enable the <b>netconf</b> context
Context	<a href="#">li log log-id string destination netconf</a>
Tree	<a href="#">netconf</a>
Notes	The following elements are part of a choice: <b>memory</b> , <b>netconf</b> , or <b>snmp</b> .
Introduced	20.2.R1
Platforms	All

**max-entries** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maximum number of events stored in the NETCONF log
Context	<a href="#">li log log-id string destination netconf max-entries number</a>
Tree	<a href="#">max-entries</a>
Description	This command configures the maximum number of events stored in the NETCONF log. If this setting needs to be modified, the log ID must be removed and re-created.
Range	50 to 1024
Default	100

Introduced	20.2.R1
Platforms	All

## snmp

Synopsis	Enable the <b>snmp</b> context
Context	<a href="#">li log log-id string destination snmp</a>
Tree	<a href="#">snmp</a>
Notes	The following elements are part of a choice: <b>memory</b> , <b>netconf</b> , or <b>snmp</b> .
Introduced	19.10.R1
Platforms	All

## max-entries *number*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of events stored in this snmp log
Context	<a href="#">li log log-id string destination snmp max-entries number</a>
Tree	<a href="#">max-entries</a>
Range	50 to 1024
Default	100
Introduced	19.10.R1
Platforms	All

## filter *string*

Synopsis	Event filter ID to associate with log ID configuration
Context	<a href="#">li log log-id string filter string</a>
Tree	<a href="#">filter</a>
String Length	1 to 64
Introduced	19.10.R1
Platforms	All

**netconf-stream** *string*

Synopsis	Destination NETCONF stream name
Context	<a href="#">li log log-id</a> <i>string</i> <a href="#">netconf-stream</a> <i>string</i>
Tree	<a href="#">netconf-stream</a>
String Length	1 to 32
Introduced	20.2.R1
Platforms	All

**source**

Synopsis	Enter the <b>source</b> context
Context	<a href="#">li log log-id</a> <i>string</i> <a href="#">source</a>
Tree	<a href="#">source</a>
Introduced	19.10.R1
Platforms	All

**li** *boolean*

Synopsis	Event stream for events configured for LI activities
Context	<a href="#">li log log-id</a> <i>string</i> <a href="#">source</a> <a href="#">li</a> <i>boolean</i>
Tree	<a href="#">li</a>
Default	false
Introduced	19.10.R1
Platforms	All

**time-format** *keyword*

Synopsis	Time zone to display date and time
Context	<a href="#">li log log-id</a> <i>string</i> <a href="#">time-format</a> <i>keyword</i>
Tree	<a href="#">time-format</a>
Options	utc, local
Default	utc
Introduced	19.10.R1
Platforms	All

## mirror-dest-reservation

Synopsis	Enter the <b>mirror-dest-reservation</b> context
Context	<a href="#">li mirror-dest-reservation</a>
Tree	<a href="#">mirror-dest-reservation</a>
Description	Commands in this context configure the attributes to reserve mirror destination resources.
Introduced	19.10.R1
Platforms	All

## end number

Synopsis	Upper bound of the mirror destination ID
Context	<a href="#">li mirror-dest-reservation end number</a>
Tree	<a href="#">end</a>
Range	1 to 2147483647
Introduced	19.10.R1
Platforms	All

## start number

Synopsis	Lower bound of the mirror destination ID
Context	<a href="#">li mirror-dest-reservation start number</a>
Tree	<a href="#">start</a>
Range	1 to 2147483647
Introduced	19.10.R1
Platforms	All

## mirror-dest-template [[name](#)] *string*

Synopsis	Enter the <b>mirror-dest-template</b> list instance
Context	<a href="#">li mirror-dest-template string</a>
Tree	<a href="#">mirror-dest-template</a>
Max. Instances	8
Introduced	19.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### [name] *string*

Synopsis Mirror destination template name  
 Context [li mirror-dest-template](#) *string*  
 Tree [mirror-dest-template](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 19.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### layer-3-encap

Synopsis Enter the **layer-3-encap** context  
 Context [li mirror-dest-template](#) *string* [layer-3-encap](#)  
 Tree [layer-3-encap](#)  
 Introduced 19.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### direction-bit *boolean*

Synopsis Use highest bit in interception ID for flow direction  
 Context [li mirror-dest-template](#) *string* [layer-3-encap](#) [direction-bit](#) *boolean*  
 Tree [direction-bit](#)  
 Default false  
 Introduced 19.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### encap-type *keyword*



#### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis The header type of the layer 3 encapsulation.

Context	<a href="#">li mirror-dest-template</a> <i>string</i> <a href="#">layer-3-encap</a> <a href="#">encap-type</a> <i>keyword</i>
Tree	<a href="#">encap-type</a>
Options	ip-udp-shim, ip-gre
Default	ip-udp-shim
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-source** *string*

Synopsis	Source IPv4 address for Layer 3 encapsulation
Context	<a href="#">li mirror-dest-template</a> <i>string</i> <a href="#">layer-3-encap</a> <a href="#">ip-source</a> <i>string</i>
Tree	<a href="#">ip-source</a>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **router-instance** *string*

Synopsis	Virtual router instance to inject mirrored packets
Context	<a href="#">li mirror-dest-template</a> <i>string</i> <a href="#">layer-3-encap</a> <a href="#">router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>
String Length	1 to 64
Default	Base
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **udp**

Synopsis	Enter the <b>udp</b> context
Context	<a href="#">li mirror-dest-template</a> <i>string</i> <a href="#">layer-3-encap</a> <a href="#">udp</a>
Tree	<a href="#">udp</a>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**destination number**

Synopsis	Destination UDP port
Context	<a href="#">li mirror-dest-template</a> <i>string layer-3-encap udp destination number</i>
Tree	<a href="#">destination</a>
Range	1 to 65535
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**source number**

Synopsis	Source UDP port
Context	<a href="#">li mirror-dest-template</a> <i>string layer-3-encap udp source number</i>
Tree	<a href="#">source</a>
Range	1 to 65535
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**type keyword****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Encapsulation type supported by the mirror service
Context	<a href="#">li mirror-dest-template</a> <i>string type keyword</i>
Tree	<a href="#">type</a>
Options	ether, ip-only
Default	ether
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nat**

Synopsis	Enter the <b>nat</b> context
Context	<a href="#">li nat</a>
Tree	<a href="#">nat</a>

Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **use-outside-ip-address** *boolean*

Synopsis	Report outside IP address for L2-Aware NAT subscribers
Context	<a href="#">li nat use-outside-ip-address</a> <i>boolean</i>
Tree	<a href="#">use-outside-ip-address</a>
Default	false
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **radius**

Synopsis	Enter the <b>radius</b> context
Context	<a href="#">li radius</a>
Tree	<a href="#">radius</a>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mirror-dest-template** *reference*

Synopsis	RADIUS triggered mirror destination template
Context	<a href="#">li radius mirror-dest-template</a> <i>reference</i>
Tree	<a href="#">mirror-dest-template</a>
Reference	<a href="#">li mirror-dest-template</a> <i>string</i>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **x-interfaces**

Synopsis	Enter the <b>x-interfaces</b> context
Context	<a href="#">li x-interfaces</a>
Tree	<a href="#">x-interfaces</a>
Introduced	21.5.R1



Platforms 7750 SR-1, 7750 SR-7/12/12e

### **admin-state** *keyword*

Synopsis Administrative state of the x-interfaces  
Context [li x-interfaces admin-state keyword](#)  
Tree [admin-state](#)  
Options enable, disable  
Default disable  
Introduced 21.5.R1  
Platforms 7750 SR-1, 7750 SR-7/12/12e

### **correlation-id**

Synopsis Enter the **correlation-id** context  
Context [li x-interfaces correlation-id](#)  
Tree [correlation-id](#)  
Introduced 21.5.R1  
Platforms 7750 SR-1, 7750 SR-7/12/12e

### **ipoe** *keyword*

Synopsis RADIUS accounting ID type for subscriber correlation  
Context [li x-interfaces correlation-id ipoe keyword](#)  
Tree [ipoe](#)  
Options radius-host-acct-id, radius-queue-acct-id, radius-session-acct-id  
Default radius-host-acct-id  
Introduced 21.5.R1  
Platforms 7750 SR-1, 7750 SR-7/12/12e

### **pppoe** *keyword*

Synopsis RADIUS accounting ID type for subscriber correlation  
Context [li x-interfaces correlation-id pppoe keyword](#)  
Tree [pppoe](#)

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Options	radius-host-acct-id, radius-queue-acct-id, radius-session-acct-id
Default	radius-host-acct-id
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

**ine-identifier** *string*

Synopsis	Intercepting Network Element (INE) ID
Context	<a href="#">li x-interfaces</a> <b>ine-identifier</b> <i>string</i>
Tree	<a href="#">ine-identifier</a>
String Length	1 to 32
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

**lic** [[name](#)] *string*

Synopsis	Enter the <b>lic</b> list instance
Context	<a href="#">li x-interfaces</a> <b>lic</b> <i>string</i>
Tree	<a href="#">lic</a>
Max. Instances	18
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

**[name]** *string*

Synopsis	LIC name
Context	<a href="#">li x-interfaces</a> <b>lic</b> <i>string</i>
Tree	<a href="#">lic</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

## authentication

Synopsis	Enter the <b>authentication</b> context
Context	<a href="#">li x-interfaces lic string authentication</a>
Tree	<a href="#">authentication</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

## password *string*

Synopsis	Password for the X1 and X2 interfaces
Context	<a href="#">li x-interfaces lic string authentication password string</a>
Tree	<a href="#">password</a>
String Length	1 to 50
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

## private-ki *string*

Synopsis	Private Ki string for the X1 and X2 interfaces
Context	<a href="#">li x-interfaces lic string authentication private-ki string</a>
Tree	<a href="#">private-ki</a>
String Length	1 to 50
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

## sequence-group *string*

Synopsis	Sequence group for the X1 and X2 interfaces
Context	<a href="#">li x-interfaces lic string authentication sequence-group string</a>
Tree	<a href="#">sequence-group</a>
String Length	1 to 42
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

**description string**

Synopsis	Text description
Context	<a href="#">li x-interfaces lic string description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

**identifier string**

Synopsis	LIC ID
Context	<a href="#">li x-interfaces lic string identifier string</a>
Tree	<a href="#">identifier</a>
String Length	1 to 32
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

**ipv4**

Synopsis	Enter the <b>ipv4</b> context
Context	<a href="#">li x-interfaces lic string ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

**ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the LIC
Context	<a href="#">li x-interfaces lic string ipv4 ip-address (ipv4-address-no-zone   ipv6-address-no-zone)</a>
Tree	<a href="#">ip-address</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

**port number**

Synopsis	TCP port associated with the LIC
Context	<a href="#">li x-interfaces lic string port number</a>
Tree	<a href="#">port</a>
Range	0 to 65535
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

**router-instance string**

Synopsis	Virtual router instance used by the X-interfaces
Context	<a href="#">li x-interfaces lic string router-instance string</a>
Tree	<a href="#">router-instance</a>
String Length	0 to 64
Default	
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

**user-db string**

Synopsis	Location of the data-trigger host for the LIC
Context	<a href="#">li x-interfaces user-db string</a>
Tree	<a href="#">user-db</a>
String Length	1 to 32
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

**x1**

Synopsis	Enter the <b>x1</b> context
Context	<a href="#">li x-interfaces x1</a>
Tree	<a href="#">x1</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<a href="#">li x-interfaces x1 ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

## local-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	X1 interface IP address
Context	<a href="#">li x-interfaces x1 ipv4 local-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">local-address</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

## lic-peer *reference*

Synopsis	Peer LIC for the X1 interface
Context	<a href="#">li x-interfaces x1 lic-peer</a> <i>reference</i>
Tree	<a href="#">lic-peer</a>
Reference	<a href="#">li x-interfaces lic</a> <i>string</i>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

## local-tcp-port *number*

Synopsis	Local TCP port used for the X1 interface
Context	<a href="#">li x-interfaces x1 local-tcp-port</a> <i>number</i>
Tree	<a href="#">local-tcp-port</a>
Range	1 to 65535
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

## timeouts

Synopsis	Enter the <b>timeouts</b> context
Context	<a href="#">li x-interfaces x1 timeouts</a>
Tree	<a href="#">timeouts</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

## message-timeout *number*

Synopsis	Maximum time for the LIC to reply to an X1 message
Context	<a href="#">li x-interfaces x1 timeouts message-timeout <i>number</i></a>
Tree	<a href="#">message-timeout</a>
Range	180 to 300
Units	seconds
Default	180
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

## x2

Synopsis	Enter the <b>x2</b> context
Context	<a href="#">li x-interfaces x2</a>
Tree	<a href="#">x2</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<a href="#">li x-interfaces x2 ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

**local-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	X2 interface IP address
Context	<a href="#">li x-interfaces x2 ipv4 local-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">local-address</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

**lic-peer** *reference*

Synopsis	Peer LIC for the X2 interface
Context	<a href="#">li x-interfaces x2 lic-peer</a> <i>reference</i>
Tree	<a href="#">lic-peer</a>
Reference	<a href="#">li x-interfaces lic</a> <i>string</i>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

**timeouts**

Synopsis	Enter the <b>timeouts</b> context
Context	<a href="#">li x-interfaces x2 timeouts</a>
Tree	<a href="#">timeouts</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

**keep-alive** *number*

Synopsis	Keep-alive timeout
Context	<a href="#">li x-interfaces x2 timeouts keep-alive</a> <i>number</i>
Tree	<a href="#">keep-alive</a>
Range	300 to 600
Units	seconds
Default	300
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e



### **request number**

Synopsis	Tx2-normal timeout
Context	<a href="#">li x-interfaces x2 timeouts request number</a>
Tree	<a href="#">request</a>
Range	5 to 30
Units	seconds
Default	5
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### **x3**

Synopsis	Enter the <b>x3</b> context
Context	<a href="#">li x-interfaces x3</a>
Tree	<a href="#">x3</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### **alarms**

Synopsis	Enter the <b>alarms</b> context
Context	<a href="#">li x-interfaces x3 alarms</a>
Tree	<a href="#">alarms</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### **cpu-alarm**

Synopsis	Enter the <b>cpu-alarm</b> context
Context	<a href="#">li x-interfaces x3 alarms cpu-alarm</a>
Tree	<a href="#">cpu-alarm</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### **high-threshold** *number*

Synopsis	High threshold value of the CPU usage alarm
Context	<a href="#">li x-interfaces x3 alarms cpu-alarm high-threshold</a> <i>number</i>
Tree	<a href="#">high-threshold</a>
Range	1 to 100
Units	percent
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### **low-threshold** *number*

Synopsis	Low threshold value of the CPU usage alarm
Context	<a href="#">li x-interfaces x3 alarms cpu-alarm low-threshold</a> <i>number</i>
Tree	<a href="#">low-threshold</a>
Range	0 to 99
Units	percent
Default	0
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### **memory-alarm**

Synopsis	Enter the <b>memory-alarm</b> context
Context	<a href="#">li x-interfaces x3 alarms memory-alarm</a>
Tree	<a href="#">memory-alarm</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### **high-threshold** *number*

Synopsis	High threshold of the packet buffer memory usage alarm
Context	<a href="#">li x-interfaces x3 alarms memory-alarm high-threshold</a> <i>number</i>
Tree	<a href="#">high-threshold</a>
Range	1 to 100

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Units	percent
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### **low-threshold** *number*

Synopsis	Low threshold of the packet buffer memory usage alarm
Context	<a href="#">li x-interfaces x3 alarms memory-alarm low-threshold</a> <i>number</i>
Tree	<a href="#">low-threshold</a>
Range	0 to 99
Units	percent
Default	0
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### **throughput-alarm**

Synopsis	Enter the <b>throughput-alarm</b> context
Context	<a href="#">li x-interfaces x3 alarms throughput-alarm</a>
Tree	<a href="#">throughput-alarm</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### **high-threshold** *number*

Synopsis	High threshold value of the throughput alarm
Context	<a href="#">li x-interfaces x3 alarms throughput-alarm high-threshold</a> <i>number</i>
Tree	<a href="#">high-threshold</a>
Range	1 to 4294967295
Units	megabps
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### **low-threshold** *number*

Synopsis	Low threshold value of the throughput alarm
Context	<a href="#">li x-interfaces x3 alarms throughput-alarm low-threshold</a> <i>number</i>
Tree	<a href="#">low-threshold</a>
Range	1 to 4294967295
Units	megabps
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### **ipv4**

Synopsis	Enter the <b>ipv4</b> context
Context	<a href="#">li x-interfaces x3 ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### **local-address-range**

Synopsis	Enter the <b>local-address-range</b> context
Context	<a href="#">li x-interfaces x3 ipv4 local-address-range</a>
Tree	<a href="#">local-address-range</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### **end** *string*

Synopsis	Upper bound of the range
Context	<a href="#">li x-interfaces x3 ipv4 local-address-range end</a> <i>string</i>
Tree	<a href="#">end</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

**start string**

Synopsis	Lower bound of the range
Context	<a href="#">li x-interfaces x3 ipv4 local-address-range start string</a>
Tree	<a href="#">start</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

**li-group number**

Synopsis	ISA group of the X3 interface
Context	<a href="#">li x-interfaces x3 li-group number</a>
Tree	<a href="#">li-group</a>
Range	1 to 4
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

**lic-peers [name] reference**

Synopsis	Add a list entry for <b>lic-peers</b>
Context	<a href="#">li x-interfaces x3 lic-peers reference</a>
Tree	<a href="#">lic-peers</a>
Max. Instances	16
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

**[name] reference**

Synopsis	Peer LIC for the X3 interface
Context	<a href="#">li x-interfaces x3 lic-peers reference</a>
Tree	<a href="#">lic-peers</a>
Reference	<a href="#">li x-interfaces lic string</a>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

**session-limit** *number*

Synopsis	Maximum number of X3 sessions initiated to the LIC
Context	<a href="#">li x-interfaces x3 session-limit</a> <i>number</i>
Tree	<a href="#">session-limit</a>
Range	1 to 32
Default	32
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

**timeouts**

Synopsis	Enter the <b>timeouts</b> context
Context	<a href="#">li x-interfaces x3 timeouts</a>
Tree	<a href="#">timeouts</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

**keep-alive** *number*

Synopsis	Keep-alive timeout
Context	<a href="#">li x-interfaces x3 timeouts keep-alive</a> <i>number</i>
Tree	<a href="#">keep-alive</a>
Range	300 to 600
Units	seconds
Default	300
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

**request** *number*

Synopsis	Tx3-normal timeout
Context	<a href="#">li x-interfaces x3 timeouts request</a> <i>number</i>
Tree	<a href="#">request</a>
Range	5 to 30

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Units	seconds
Default	5
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

**target-retry-wait** *number*

Synopsis	Retry interval for target tunnel setup
Context	<a href="#">li x-interfaces x3 timeouts target-retry-wait</a> <i>number</i>
Tree	<a href="#">target-retry-wait</a>
Range	300 to 1200
Units	seconds
Default	300
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

## 3.23 log commands

```

configure
- log
- accounting-policy number
- admin-state keyword
- align boolean
- apply-groups reference
- apply-groups-exclude reference
- collection-interval number
- custom-record
- aa-specific
- aa-sub-attributes
- app-profile boolean
- app-service-options boolean
- aa-sub-counters
- long-duration-flow-count boolean
- medium-duration-flow-count boolean
- short-duration-flow-count boolean
- total-flow-duration boolean
- total-flows-completed-count boolean
- from-aa-sub-counters
- flows-active-count boolean
- flows-admitted-count boolean
- flows-denied-count boolean
- forwarding-class boolean
- max-throughput-octet-count boolean
- max-throughput-packet-count boolean
- max-throughput-timestamp boolean
- octets-admitted-count boolean
- octets-denied-count boolean
- packets-admitted-count boolean
- packets-denied-count boolean
- to-aa-sub-counters
- flows-active-count boolean
- flows-admitted-count boolean
- flows-denied-count boolean
- forwarding-class boolean
- max-throughput-octet-count boolean
- max-throughput-packet-count boolean
- max-throughput-timestamp boolean
- octets-admitted-count boolean
- octets-denied-count boolean
- packets-admitted-count boolean
- packets-denied-count boolean
- apply-groups reference
- apply-groups-exclude reference
- policer number
- apply-groups reference
- apply-groups-exclude reference
- e-counters
- exceed-profile-octets-discarded-count boolean
- exceed-profile-octets-forwarded-count boolean
- exceed-profile-octets-offered-count boolean
- exceed-profile-packets-discarded-count boolean
- exceed-profile-packets-forwarded-count boolean
- exceed-profile-packets-offered-count boolean
- in-plus-profile-octets-discarded-count boolean
- in-plus-profile-octets-forwarded-count boolean
- in-plus-profile-octets-offered-count boolean
- in-plus-profile-packets-discarded-count boolean

```



configure log accounting-policy custom-record policer e-counters in-plus-profile-packets-forwarded-count

```

- in-plus-profile-packets-forwarded-count boolean
- in-plus-profile-packets-offered-count boolean
- in-profile-octets-discarded-count boolean
- in-profile-octets-forwarded-count boolean
- in-profile-octets-offered-count boolean
- in-profile-packets-discarded-count boolean
- in-profile-packets-forwarded-count boolean
- in-profile-packets-offered-count boolean
- out-profile-octets-discarded-count boolean
- out-profile-octets-forwarded-count boolean
- out-profile-octets-offered-count boolean
- out-profile-packets-discarded-count boolean
- out-profile-packets-forwarded-count boolean
- out-profile-packets-offered-count boolean
- uncoloured-octets-offered-count boolean
- uncoloured-packets-offered-count boolean
- i-counters
- in-profile-octets-discarded-count boolean
- in-profile-octets-forwarded-count boolean
- in-profile-octets-offered-count boolean
- in-profile-packets-discarded-count boolean
- in-profile-packets-forwarded-count boolean
- in-profile-packets-offered-count boolean
- out-profile-octets-discarded-count boolean
- out-profile-octets-forwarded-count boolean
- out-profile-octets-offered-count boolean
- out-profile-packets-discarded-count boolean
- out-profile-packets-forwarded-count boolean
- out-profile-packets-offered-count boolean
- uncoloured-octets-offered-count boolean
- uncoloured-packets-offered-count boolean
- queue number
- apply-groups reference
- apply-groups-exclude reference
- e-counters
- in-profile-octets-discarded-count boolean
- in-profile-octets-forwarded-count boolean
- in-profile-packets-discarded-count boolean
- in-profile-packets-forwarded-count boolean
- out-profile-octets-discarded-count boolean
- out-profile-octets-forwarded-count boolean
- out-profile-packets-discarded-count boolean
- out-profile-packets-forwarded-count boolean
- i-counters
- all-octets-offered-count boolean
- all-packets-offered-count boolean
- high-octets-discarded-count boolean
- high-octets-offered-count boolean
- high-packets-discarded-count boolean
- high-packets-offered-count boolean
- in-profile-octets-forwarded-count boolean
- in-profile-packets-forwarded-count boolean
- low-octets-discarded-count boolean
- low-octets-offered-count boolean
- low-packets-discarded-count boolean
- low-packets-offered-count boolean
- out-profile-octets-forwarded-count boolean
- out-profile-packets-forwarded-count boolean
- uncoloured-octets-offered-count boolean
- uncoloured-packets-offered-count boolean
- ref-aa-specific-counter
- any boolean
- ref-policer
- all

```

configure log accounting-policy custom-record ref-policer e-counters

```

- e-counters
  - exceed-profile-octets-discarded-count boolean
  - exceed-profile-octets-forwarded-count boolean
  - exceed-profile-octets-offered-count boolean
  - exceed-profile-packets-discarded-count boolean
  - exceed-profile-packets-forwarded-count boolean
  - exceed-profile-packets-offered-count boolean
  - in-plus-profile-octets-discarded-count boolean
  - in-plus-profile-octets-forwarded-count boolean
  - in-plus-profile-octets-offered-count boolean
  - in-plus-profile-packets-discarded-count boolean
  - in-plus-profile-packets-forwarded-count boolean
  - in-plus-profile-packets-offered-count boolean
  - in-profile-octets-discarded-count boolean
  - in-profile-octets-forwarded-count boolean
  - in-profile-octets-offered-count boolean
  - in-profile-packets-discarded-count boolean
  - in-profile-packets-forwarded-count boolean
  - in-profile-packets-offered-count boolean
  - out-profile-octets-discarded-count boolean
  - out-profile-octets-forwarded-count boolean
  - out-profile-octets-offered-count boolean
  - out-profile-packets-discarded-count boolean
  - out-profile-packets-forwarded-count boolean
  - out-profile-packets-offered-count boolean
  - uncoloured-octets-offered-count boolean
  - uncoloured-packets-offered-count boolean
- i-counters
  - in-profile-octets-discarded-count boolean
  - in-profile-octets-forwarded-count boolean
  - in-profile-octets-offered-count boolean
  - in-profile-packets-discarded-count boolean
  - in-profile-packets-forwarded-count boolean
  - in-profile-packets-offered-count boolean
  - out-profile-octets-discarded-count boolean
  - out-profile-octets-forwarded-count boolean
  - out-profile-octets-offered-count boolean
  - out-profile-packets-discarded-count boolean
  - out-profile-packets-forwarded-count boolean
  - out-profile-packets-offered-count boolean
  - uncoloured-octets-offered-count boolean
  - uncoloured-packets-offered-count boolean
- id reference
- ref-queue
  - all
  - e-counters
    - in-profile-octets-discarded-count boolean
    - in-profile-octets-forwarded-count boolean
    - in-profile-packets-discarded-count boolean
    - in-profile-packets-forwarded-count boolean
    - out-profile-octets-discarded-count boolean
    - out-profile-octets-forwarded-count boolean
    - out-profile-packets-discarded-count boolean
    - out-profile-packets-forwarded-count boolean
  - i-counters
    - all-octets-offered-count boolean
    - all-packets-offered-count boolean
    - high-octets-discarded-count boolean
    - high-octets-offered-count boolean
    - high-packets-discarded-count boolean
    - high-packets-offered-count boolean
    - in-profile-octets-forwarded-count boolean
    - in-profile-packets-forwarded-count boolean
    - low-octets-discarded-count boolean

```

configure log accounting-policy custom-record ref-queue i-counters low-octets-offered-count

```

    - low-octets-offered-count boolean
    - low-packets-discarded-count boolean
    - low-packets-offered-count boolean
    - out-profile-octets-forwarded-count boolean
    - out-profile-packets-forwarded-count boolean
    - uncoloured-octets-offered-count boolean
    - uncoloured-packets-offered-count boolean
  - id reference
  - significant-change number
- default boolean
- description string
- destination
  - file reference
  - null
- include-system-info boolean
- record keyword
- app-route-notifications
  - cold-start-wait number
  - route-recovery-wait number
- apply-groups reference
- apply-groups-exclude reference
- encryption-key string
- event-damping boolean
- event-handling
  - handler string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - entry number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - min-delay number
      - script-policy
        - name reference
        - owner reference
  - event-trigger
    - adp event keyword
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - entry number
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - debounce
          - time number
          - value number
        - description string
        - filter reference
        - handler reference
    - application-assurance event keyword
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - entry number
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - debounce

```

configure log event-trigger application-assurance entry debounce time

```

    - time number
    - value number
    - description string
    - filter reference
    - handler reference
- aps event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- atm event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- auto-prov event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- bfd event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference

```

## configure log event-trigger bfd entry handler

- **handler** *reference*
- **bgp event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **bier event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **calltrace event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **cflowd event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **chassis event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*

configure log event-trigger chassis apply-groups-exclude

- **apply-groups-exclude** *reference*
- **description** *string*
- **entry** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **debounce**
    - **time** *number*
    - **value** *number*
  - **description** *string*
  - **filter** *reference*
  - **handler** *reference*
- **debug event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **dhcp event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **dhcps event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **diameter event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*

configure log event-trigger diameter entry apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **debounce**
  - **time** *number*
  - **value** *number*
- **description** *string*
- **filter** *reference*
- **handler** *reference*
- **dynsvc event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **efm-oam event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **elmi event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **ering event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*

configure log event-trigger ering entry debounce value

```

    - value number
    - description string
    - filter reference
    - handler reference
- eth-cfm event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- etun event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- filter event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- gmpls event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference

```



## configure log event-trigger gsm

- **gsm** event *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **igh** event *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **igmp** event *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **igmp-snooping** event *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **ip** event *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*

configure log event-trigger ip description

- **description** *string*
- **entry** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **debounce**
    - **time** *number*
    - **value** *number*
  - **description** *string*
  - **filter** *reference*
  - **handler** *reference*
- **ipsec event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **isis event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **l2tp event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **lag event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*

configure log event-trigger lag entry apply-groups-exclude

```

    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
  - ldap event keyword
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - entry number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - debounce
        - time number
        - value number
      - description string
      - filter reference
      - handler reference
  - ldp event keyword
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - entry number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - debounce
        - time number
        - value number
      - description string
      - filter reference
      - handler reference
  - li event keyword
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - entry number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - debounce
        - time number
        - value number
      - description string
      - filter reference
      - handler reference
  - lldp event keyword
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - entry number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - debounce
        - time number
        - value number

```

configure log event-trigger lldp entry description

- **description** *string*
- **filter** *reference*
- **handler** *reference*
- **lldp event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **logger event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **macsec event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **mc-redundancy event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **mcpath event** *keyword*

configure log event-trigger mcpath admin-state

- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **entry** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **debounce**
    - **time** *number*
    - **value** *number*
  - **description** *string*
  - **filter** *reference*
  - **handler** *reference*
- **mgmt-core event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **mirror event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **mld event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **mld-snooping event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*

configure log event-trigger mld-snooping entry

- **entry** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **debounce**
    - **time** *number*
    - **value** *number*
  - **description** *string*
  - **filter** *reference*
  - **handler** *reference*
- **mpls event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **mpls-tp event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **msdp event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **nat event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*

configure log event-trigger nat entry debounce

```

- debounce
  - time number
  - value number
- description string
- filter reference
- handler reference
- ntp event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- oam event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- openflow event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- ospf event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string

```

## configure log event-trigger ospf entry filter

- **filter** *reference*
- **handler** *reference*
- **pcap event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **pcep event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **pim event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **pim-snooping event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **port event** *keyword*
  - **admin-state** *keyword*



## configure log event-trigger port apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **entry** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **debounce**
    - **time** *number*
    - **value** *number*
  - **description** *string*
  - **filter** *reference*
  - **handler** *reference*
- **ppp event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **pppoe event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **pppoe-clnt event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **ptp event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*

configure log event-trigger ptp entry admin-state

- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **debounce**
  - **time** *number*
  - **value** *number*
- **description** *string*
- **filter** *reference*
- **handler** *reference*
- **python event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **radius event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **rip event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **ripng event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**

configure log event-trigger ripng entry debounce time

```

    - time number
    - value number
    - description string
    - filter reference
    - handler reference
- route-policy event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- rpki event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- rsvp event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- satellite event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference

```

configure log event-trigger satellite entry handler

- **handler** *reference*
- **security event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
- **entry** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **debounce**
    - **time** *number*
    - **value** *number*
  - **description** *string*
  - **filter** *reference*
  - **handler** *reference*
- **sflow event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
- **entry** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **debounce**
    - **time** *number*
    - **value** *number*
  - **description** *string*
  - **filter** *reference*
  - **handler** *reference*
- **snmp event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
- **entry** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **debounce**
    - **time** *number*
    - **value** *number*
  - **description** *string*
  - **filter** *reference*
  - **handler** *reference*
- **sr-mpls event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
- **entry** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **debounce**
    - **time** *number*
    - **value** *number*
  - **description** *string*
  - **filter** *reference*
  - **handler** *reference*
- **srv6 event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*

configure log event-trigger srv6 apply-groups-exclude

- **apply-groups-exclude** *reference*
- **description** *string*
- **entry** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **debounce**
    - **time** *number*
    - **value** *number*
  - **description** *string*
  - **filter** *reference*
  - **handler** *reference*
- **stp event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **svcmgr event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **system event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **tls event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*

configure log event-trigger tls entry apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **debounce**
  - **time** *number*
  - **value** *number*
- **description** *string*
- **filter** *reference*
- **handler** *reference*
- **tree-sid event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **user event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **video event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **vrp event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*

configure log event-trigger vrrp entry debounce value

```

    - value number
    - description string
    - filter reference
    - handler reference
- vrrp event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- wlan-gw event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- wpp event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- file string
  - apply-groups reference
  - apply-groups-exclude reference
  - compact-flash-location
    - backup keyword
    - primary keyword
  - description string
  - retention number
  - rollover number
- filter string
  - apply-groups reference
  - apply-groups-exclude reference
  - default-action keyword
  - description string
  - named-entry string

```

## configure log filter named-entry action

- **action** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **match**
  - **application**
    - **eq** *keyword*
    - **neq** *keyword*
  - **event**
    - **eq** *number*
    - **gt** *number*
    - **gte** *number*
    - **lt** *number*
    - **lte** *number*
    - **neq** *number*
  - **message**
    - **eq** *string*
    - **neq** *string*
    - **regexp** *boolean*
  - **severity**
    - **eq** *keyword*
    - **gt** *keyword*
    - **gte** *keyword*
    - **lt** *keyword*
    - **lte** *keyword*
    - **neq** *keyword*
  - **subject**
    - **eq** *string*
    - **neq** *string*
    - **regexp** *boolean*
  - **vrtr-name**
    - **eq** *string*
    - **neq** *string*
    - **regexp** *boolean*
- **log-events**
  - **adp event** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **generate** *boolean*
    - **repeat** *boolean*
    - **severity** *keyword*
    - **specific-throttle** *boolean*
    - **specific-throttle-interval** *number*
    - **specific-throttle-limit** *number*
    - **throttle** *boolean*
  - **application-assurance event** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **generate** *boolean*
    - **repeat** *boolean*
    - **severity** *keyword*
    - **specific-throttle** *boolean*
    - **specific-throttle-interval** *number*
    - **specific-throttle-limit** *number*
    - **throttle** *boolean*
  - **aps event** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **generate** *boolean*
    - **repeat** *boolean*
    - **severity** *keyword*
    - **specific-throttle** *boolean*
    - **specific-throttle-interval** *number*
    - **specific-throttle-limit** *number*



## configure log log-events aps throttle

- **throttle** *boolean*
- **atm event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **auto-prov event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **bfd event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **bgp event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **bier event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **calltrace event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **cflowd event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*

configure log log-events cflowd generate

```

- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- chassis event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- debug event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- dhcp event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- dhcps event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- diameter event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- dot1x event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean

```

configure log log-events dot1x specific-throttle-interval

```

- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- dynsvc event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- efm-oam event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- elmi event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- ering event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- eth-cfm event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- etun event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- filter event keyword

```

## configure log log-events filter apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- gmpls event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- gsmf event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- igh event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- igmp event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- igmp-snooping event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- ip event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean

```

## configure log log-events ip severity

- **severity** *keyword*
- **specific-throttle** *boolean*
- **specific-throttle-interval** *number*
- **specific-throttle-limit** *number*
- **throttle** *boolean*
- **ipsec event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **isis event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **l2tp event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **lag event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **ldap event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **ldp event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*

## configure log log-events ldp throttle

- **throttle** *boolean*
- **li event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **lldp event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **lmp event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **logger event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **macsec event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **mc-redundancy event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **mcpath event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*

configure log log-events mcpath generate

```

- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- mgmt-core event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- mirror event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- mld event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- mld-snooping event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- mpls event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- mpls-tp event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean

```

configure log log-events mpls-tp specific-throttle-interval

```

- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- msdp event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- nat event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- ntp event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- oam event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- openflow event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- ospf event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- pcap event keyword

```



## configure log log-events pcap apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **generate** *boolean*
- **repeat** *boolean*
- **severity** *keyword*
- **specific-throttle** *boolean*
- **specific-throttle-interval** *number*
- **specific-throttle-limit** *number*
- **throttle** *boolean*
- **pcep event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **pfcp event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **pim event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **pim-snooping event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **port event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **ppp event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*

configure log log-events ppp severity

```

- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- pppoe event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- pppoe-clnt event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- ptp event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- python event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- radius event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- rip event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number

```

## configure log log-events rip throttle

- **throttle** *boolean*
- **ripng event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **route-policy event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **rpki event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **rsvp event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **satellite event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **security event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **sflow event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*

configure log log-events sflow generate

```

- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- snmp event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- sr-mpls event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- srv6 event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- stp event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- svcmgr event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- system event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean

```

configure log log-events system specific-throttle-interval

```

- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- tls event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- tree-sid event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- user event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- video event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- vrtr event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- vrtr event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- wlan-gw event keyword

```

configure log log-events wlan-gw apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- wpp event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- log-id string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - destination
    - cli
      - max-entries number
    - console
    - file reference
    - memory
      - max-entries number
    - netconf
      - max-entries number
    - snmp
      - max-entries number
    - syslog reference
  - filter reference
  - netconf-stream string
  - python-policy reference
  - source
    - change boolean
    - debug boolean
    - main boolean
    - security boolean
  - time-format keyword
- route-preference
  - primary keyword
  - secondary keyword
- services-all-events
  - service reference
- snmp-trap-group string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - trap-target string
    - address (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - notify-community string
    - port number
    - replay boolean
    - security-level keyword
    - version keyword

```

---

**configure log syslog**

- **syslog** *string*
  - **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **facility** *keyword*
  - **log-prefix** (*keyword* | *string*)
  - **port** *number*
  - **severity** *keyword*
  - **tls-client-profile** *reference*
- **throttle-rate**
  - **interval** *number*
  - **limit** *number*

### 3.23.1 log command descriptions

#### log

Synopsis	Enter the <b>log</b> context
Context	<b>configure log</b>
Tree	<a href="#">log</a>
Introduced	16.0.R1
Platforms	All

#### accounting-policy [[policy-id](#)] *number*

Synopsis	Enter the <b>accounting-policy</b> list instance
Context	<b>configure log accounting-policy</b> <i>number</i>
Tree	<a href="#">accounting-policy</a>
Introduced	16.0.R1
Platforms	All

#### [\[policy-id\]](#) *number*

Synopsis	Accounting policy unique ID
Context	<b>configure log accounting-policy</b> <i>number</i>
Tree	<a href="#">accounting-policy</a>
Range	1 to 99
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

#### **admin-state** *keyword*

Synopsis	Administrative state of the accounting policy
Context	<b>configure log accounting-policy</b> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Description	This command controls the administrative state of the accounting policy.



When an accounting policy is disabled, no accounting data is written to the destination log ID. Counters in the billing data reflect totals, and not increments. When the policy is re-enabled, the counters include the data collected during the period the policy was administratively disabled.

Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **align** *boolean*

Synopsis	Align statistics collection interval to absolute time
Context	<b>configure</b> <b>log accounting-policy</b> <i>number</i> <b>align</b> <i>boolean</i>
Tree	<a href="#">align</a>
Description	<p>When the <b>align</b> command is configured to <b>true</b>, statistics collection is aligned to the nearest interval within an hour. Statistics are generated when the absolute time can be divided by the collection-interval value, after which the collection interval continues. For example, if the interval is set to 15 minutes and the current time is 15:03, the statistics are collected at 15:15, 15:30, 15:45, 16:00, 16:15, and so on. This supports synchronized statistics intervals and collection across multiple nodes in the network.</p> <p>When the <b>align</b> command is configured to <b>false</b>, statistics collection occurs immediately after the configuration has been committed. For example, if the interval is set to 15 minutes and the current time is 15:03, the statistics are collected at 15:03, 15:18, 15:33, 15:48, 16:03, and so on.</p>
Default	false
Introduced	19.10.R1
Platforms	All

### **collection-interval** *number*

Synopsis	Accounting collection interval
Context	<b>configure</b> <b>log accounting-policy</b> <i>number</i> <b>collection-interval</b> <i>number</i>
Tree	<a href="#">collection-interval</a>
Range	1 to 120
Units	minutes
Introduced	16.0.R1
Platforms	All

## custom-record

Synopsis	Enter the <b>custom-record</b> context
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a>
Tree	<a href="#">custom-record</a>
Introduced	16.0.R1
Platforms	All

## aa-specific

Synopsis	Enter the <b>aa-specific</b> context
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a>
Tree	<a href="#">aa-specific</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## aa-sub-attributes

Synopsis	Enter the <b>aa-sub-attributes</b> context
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">aa-sub-attributes</a>
Tree	<a href="#">aa-sub-attributes</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## app-profile *boolean*

Synopsis	Include application profile to be exported
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">aa-sub-attributes</a> <a href="#">app-profile</a> <i>boolean</i>
Tree	<a href="#">app-profile</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **app-service-options** *boolean*

Synopsis	Include application service options
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <a href="#">number</a> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">aa-sub-attributes</a> <a href="#">app-service-options</a> <i>boolean</i>
Tree	<a href="#">app-service-options</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **aa-sub-counters**

Synopsis	Enter the <b>aa-sub-counters</b> context
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <a href="#">number</a> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">aa-sub-counters</a>
Tree	<a href="#">aa-sub-counters</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **long-duration-flow-count** *boolean*

Synopsis	Include the long duration flow count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <a href="#">number</a> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">aa-sub-counters</a> <a href="#">long-duration-flow-count</a> <i>boolean</i>
Tree	<a href="#">long-duration-flow-count</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **medium-duration-flow-count** *boolean*

Synopsis	Include the medium duration flow
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <a href="#">number</a> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">aa-sub-counters</a> <a href="#">medium-duration-flow-count</a> <i>boolean</i>
Tree	<a href="#">medium-duration-flow-count</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**short-duration-flow-count** *boolean*

Synopsis	Include the short duration flow count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">aa-sub-counters</a> <a href="#">short-duration-flow-count</a> <i>boolean</i>
Tree	<a href="#">short-duration-flow-count</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**total-flow-duration** *boolean*

Synopsis	Include the total flow duration count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">aa-sub-counters</a> <a href="#">total-flow-duration</a> <i>boolean</i>
Tree	<a href="#">total-flow-duration</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**total-flows-completed-count** *boolean*

Synopsis	Include the total of completed flows count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">aa-sub-counters</a> <a href="#">total-flows-completed-count</a> <i>boolean</i>
Tree	<a href="#">total-flows-completed-count</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**from-aa-sub-counters**

Synopsis	Enter the <b>from-aa-sub-counters</b> context
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">from-aa-sub-counters</a>
Tree	<a href="#">from-aa-sub-counters</a>

Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **flows-active-count** *boolean*

Synopsis Include the active flows  
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [aa-specific](#) [from-aa-sub-counters](#) [flows-active-count](#) *boolean*  
Tree [flows-active-count](#)  
Default false  
Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **flows-admitted-count** *boolean*

Synopsis Include the admitted flows  
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [aa-specific](#) [from-aa-sub-counters](#) [flows-admitted-count](#) *boolean*  
Tree [flows-admitted-count](#)  
Default false  
Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **flows-denied-count** *boolean*

Synopsis Include the denied flows  
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [aa-specific](#) [from-aa-sub-counters](#) [flows-denied-count](#) *boolean*  
Tree [flows-denied-count](#)  
Default false  
Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **forwarding-class** *boolean*

Synopsis Include forwarding class

---

Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">from-aa-sub-counters</a> <a href="#">forwarding-class</a> <i>boolean</i>
Tree	<a href="#">forwarding-class</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **max-throughput-octet-count** *boolean*

Synopsis	Include maximum throughput as measured in octet count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">from-aa-sub-counters</a> <a href="#">max-throughput-octet-count</a> <i>boolean</i>
Tree	<a href="#">max-throughput-octet-count</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **max-throughput-packet-count** *boolean*

Synopsis	Include maximum throughput as measured in packet count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">from-aa-sub-counters</a> <a href="#">max-throughput-packet-count</a> <i>boolean</i>
Tree	<a href="#">max-throughput-packet-count</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **max-throughput-timestamp** *boolean*

Synopsis	Include timestamp of the maximum throughput
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">from-aa-sub-counters</a> <a href="#">max-throughput-timestamp</a> <i>boolean</i>
Tree	<a href="#">max-throughput-timestamp</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**octets-admitted-count** *boolean*

Synopsis	Include the admitted octets count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">from-aa-sub-counters</a> <a href="#">octets-admitted-count</a> <i>boolean</i>
Tree	<a href="#">octets-admitted-count</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**octets-denied-count** *boolean*

Synopsis	Include the denied octets count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">from-aa-sub-counters</a> <a href="#">octets-denied-count</a> <i>boolean</i>
Tree	<a href="#">octets-denied-count</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**packets-admitted-count** *boolean*

Synopsis	Include the admitted packets count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">from-aa-sub-counters</a> <a href="#">packets-admitted-count</a> <i>boolean</i>
Tree	<a href="#">packets-admitted-count</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**packets-denied-count** *boolean*

Synopsis	Include the denied packets count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">from-aa-sub-counters</a> <a href="#">packets-denied-count</a> <i>boolean</i>
Tree	<a href="#">packets-denied-count</a>

Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **to-aa-sub-counters**

Synopsis	Enter the <b>to-aa-sub-counters</b> context
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">to-aa-sub-counters</a>
Tree	<a href="#">to-aa-sub-counters</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **flows-active-count** *boolean*

Synopsis	Include the active flows
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">to-aa-sub-counters</a> <a href="#">flows-active-count</a> <i>boolean</i>
Tree	<a href="#">flows-active-count</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **flows-admitted-count** *boolean*

Synopsis	Include the admitted flows
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">to-aa-sub-counters</a> <a href="#">flows-admitted-count</a> <i>boolean</i>
Tree	<a href="#">flows-admitted-count</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **flows-denied-count** *boolean*

Synopsis	Include the denied flows
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Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">to-aa-sub-counters</a> <a href="#">flows-denied-count</a> <i>boolean</i>
Tree	<a href="#">flows-denied-count</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **forwarding-class** *boolean*

Synopsis	Include forwarding class
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">to-aa-sub-counters</a> <a href="#">forwarding-class</a> <i>boolean</i>
Tree	<a href="#">forwarding-class</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **max-throughput-octet-count** *boolean*

Synopsis	Include maximum throughput as measured in octet count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">to-aa-sub-counters</a> <a href="#">max-throughput-octet-count</a> <i>boolean</i>
Tree	<a href="#">max-throughput-octet-count</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **max-throughput-packet-count** *boolean*

Synopsis	Include maximum throughput as measured in packet count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">to-aa-sub-counters</a> <a href="#">max-throughput-packet-count</a> <i>boolean</i>
Tree	<a href="#">max-throughput-packet-count</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**max-throughput-timestamp** *boolean*

Synopsis	Include timestamp of the maximum throughput
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">to-aa-sub-counters</a> <a href="#">max-throughput-timestamp</a> <i>boolean</i>
Tree	<a href="#">max-throughput-timestamp</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**octets-admitted-count** *boolean*

Synopsis	Include the admitted octets count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">to-aa-sub-counters</a> <a href="#">octets-admitted-count</a> <i>boolean</i>
Tree	<a href="#">octets-admitted-count</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**octets-denied-count** *boolean*

Synopsis	Include the denied octets count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">to-aa-sub-counters</a> <a href="#">octets-denied-count</a> <i>boolean</i>
Tree	<a href="#">octets-denied-count</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**packets-admitted-count** *boolean*

Synopsis	Include the admitted packets count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">to-aa-sub-counters</a> <a href="#">packets-admitted-count</a> <i>boolean</i>
Tree	<a href="#">packets-admitted-count</a>

Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **packets-denied-count** *boolean*

Synopsis	Include the denied packets count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record aa-specific to-aa-sub-counters</a> <a href="#">packets-denied-count</a> <i>boolean</i>
Tree	<a href="#">packets-denied-count</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **policer** [*id*] *number*

Synopsis	Enter the <b>policer</b> list instance
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record policer</a> <i>number</i>
Tree	<a href="#">policer</a>
Introduced	19.10.R1
Platforms	All

### **[id]** *number*

Synopsis	Policer ID
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record policer</a> <i>number</i>
Tree	<a href="#">policer</a>
Range	1 to 63
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

### **e-counters**

Synopsis	Enter the <b>e-counters</b> context
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Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">e-counters</a>
Tree	<a href="#">e-counters</a>
Introduced	19.10.R1
Platforms	All

### **exceed-profile-octets-discarded-count** *boolean*

Synopsis	Include the exceed profile octets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">exceed-profile-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">exceed-profile-octets-discarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **exceed-profile-octets-forwarded-count** *boolean*

Synopsis	Include the exceed profile octets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">exceed-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">exceed-profile-octets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **exceed-profile-octets-offered-count** *boolean*

Synopsis	Include the exceed profile octets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">exceed-profile-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">exceed-profile-octets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**exceed-profile-packets-discarded-count** *boolean*

Synopsis	Include the exceed profile packets discarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">exceed-profile-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">exceed-profile-packets-discarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**exceed-profile-packets-forwarded-count** *boolean*

Synopsis	Include the exceed profile packets forwarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">exceed-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">exceed-profile-packets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**exceed-profile-packets-offered-count** *boolean*

Synopsis	Include the exceed profile packets offered count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">exceed-profile-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">exceed-profile-packets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**in-plus-profile-octets-discarded-count** *boolean*

Synopsis	Include the in-plus profile octets discarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">in-plus-profile-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">in-plus-profile-octets-discarded-count</a>
Default	false

Introduced 19.10.R1  
Platforms All

### **in-plus-profile-octets-forwarded-count** *boolean*

Synopsis Include the in-plus profile octets forwarded count  
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [e-counters](#) [in-plus-profile-octets-forwarded-count](#) *boolean*  
Tree [in-plus-profile-octets-forwarded-count](#)  
Default false  
Introduced 19.10.R1  
Platforms All

### **in-plus-profile-octets-offered-count** *boolean*

Synopsis Include the in-plus profile octets offered count  
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [e-counters](#) [in-plus-profile-octets-offered-count](#) *boolean*  
Tree [in-plus-profile-octets-offered-count](#)  
Default false  
Introduced 19.10.R1  
Platforms All

### **in-plus-profile-packets-discarded-count** *boolean*

Synopsis Include the in-plus profile packets discarded count  
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [e-counters](#) [in-plus-profile-packets-discarded-count](#) *boolean*  
Tree [in-plus-profile-packets-discarded-count](#)  
Default false  
Introduced 19.10.R1  
Platforms All

### **in-plus-profile-packets-forwarded-count** *boolean*

Synopsis Include the in-plus profile packets forwarded count

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Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">in-plus-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-plus-profile-packets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **in-plus-profile-packets-offered-count** *boolean*

Synopsis	Include the in-plus profile packets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">in-plus-profile-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">in-plus-profile-packets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **in-profile-octets-discarded-count** *boolean*

Synopsis	Include the in profile octets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">in-profile-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-octets-discarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **in-profile-octets-forwarded-count** *boolean*

Synopsis	Include the in profile octets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">in-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-octets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**in-profile-octets-offered-count** *boolean*

Synopsis	Include the in profile octets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">in-profile-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-octets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**in-profile-packets-discarded-count** *boolean*

Synopsis	Include the in profile packets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">in-profile-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-discarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**in-profile-packets-forwarded-count** *boolean*

Synopsis	Include the in profile packets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">in-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**in-profile-packets-offered-count** *boolean*

Synopsis	Include the in profile packets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">in-profile-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-offered-count</a>



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Default	false
Introduced	19.10.R1
Platforms	All

### **out-profile-octets-discarded-count** *boolean*

Synopsis	Include the out profile octets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">out-profile-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-discarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **out-profile-octets-forwarded-count** *boolean*

Synopsis	Include the out profile octets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">out-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **out-profile-octets-offered-count** *boolean*

Synopsis	Include the out profile octets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">out-profile-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**out-profile-packets-discarded-count** *boolean*

Synopsis	Include the out profile packets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">out-profile-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-packets-discarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**out-profile-packets-forwarded-count** *boolean*

Synopsis	Include the out profile packets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">out-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-packets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**out-profile-packets-offered-count** *boolean*

Synopsis	Include the out profile packets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">out-profile-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-packets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**uncoloured-octets-offered-count** *boolean*

Synopsis	Include the uncolored octets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">uncoloured-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">uncoloured-octets-offered-count</a>
Default	false

Introduced 19.10.R1  
Platforms All

### **uncoloured-packets-offered-count** *boolean*

Synopsis Include the uncolored packets offered count  
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [e-counters](#) [uncoloured-packets-offered-count](#) *boolean*  
Tree [uncoloured-packets-offered-count](#)  
Default false  
Introduced 19.10.R1  
Platforms All

### **i-counters**

Synopsis Enter the **i-counters** context  
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [i-counters](#)  
Tree [i-counters](#)  
Introduced 19.10.R1  
Platforms All

### **in-profile-octets-discarded-count** *boolean*

Synopsis Include the in profile octets discarded count  
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [i-counters](#) [in-profile-octets-discarded-count](#) *boolean*  
Tree [in-profile-octets-discarded-count](#)  
Default false  
Introduced 19.10.R1  
Platforms All

### **in-profile-octets-forwarded-count** *boolean*

Synopsis Include the in profile octets forwarded count  
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [i-counters](#) [in-profile-octets-forwarded-count](#) *boolean*

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Tree	<a href="#">in-profile-octets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **in-profile-octets-offered-count** *boolean*

Synopsis	Include the in profile octets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">i-counters</a> <a href="#">in-profile-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-octets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **in-profile-packets-discarded-count** *boolean*

Synopsis	Include the in profile packets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">i-counters</a> <a href="#">in-profile-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-discarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **in-profile-packets-forwarded-count** *boolean*

Synopsis	Include the in profile packets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">i-counters</a> <a href="#">in-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**in-profile-packets-offered-count** *boolean*

Synopsis	Include the in profile packets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record policer</a> <i>number</i> <a href="#">i-counters in-profile-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**out-profile-octets-discarded-count** *boolean*

Synopsis	Include the out profile octets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record policer</a> <i>number</i> <a href="#">i-counters out-profile-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-discarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**out-profile-octets-forwarded-count** *boolean*

Synopsis	Include the out profile octets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record policer</a> <i>number</i> <a href="#">i-counters out-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**out-profile-octets-offered-count** *boolean*

Synopsis	Include the out profile octets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record policer</a> <i>number</i> <a href="#">i-counters out-profile-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-offered-count</a>
Default	false

Introduced 19.10.R1  
Platforms All

### **out-profile-packets-discarded-count** *boolean*

Synopsis Include the out profile packets discarded count  
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [i-counters](#) [out-profile-packets-discarded-count](#) *boolean*  
Tree [out-profile-packets-discarded-count](#)  
Default false  
Introduced 19.10.R1  
Platforms All

### **out-profile-packets-forwarded-count** *boolean*

Synopsis Include the out profile packets forwarded count  
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [i-counters](#) [out-profile-packets-forwarded-count](#) *boolean*  
Tree [out-profile-packets-forwarded-count](#)  
Default false  
Introduced 19.10.R1  
Platforms All

### **out-profile-packets-offered-count** *boolean*

Synopsis Include the out profile packets offered count  
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [i-counters](#) [out-profile-packets-offered-count](#) *boolean*  
Tree [out-profile-packets-offered-count](#)  
Default false  
Introduced 19.10.R1  
Platforms All

### **uncoloured-octets-offered-count** *boolean*

Synopsis Include the uncolored octets offered count

Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">i-counters</a> <a href="#">uncoloured-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">uncoloured-octets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **uncoloured-packets-offered-count** *boolean*

Synopsis	Include the uncolored packets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">i-counters</a> <a href="#">uncoloured-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">uncoloured-packets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **queue** [*id*] *number*

Synopsis	Enter the <b>queue</b> list instance
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i>
Tree	<a href="#">queue</a>
Introduced	16.0.R1
Platforms	All

### [*id*] *number*

Synopsis	Queue ID for which counters are collected in the record
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i>
Tree	<a href="#">queue</a>
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## e-counters

Synopsis	Enter the <b>e-counters</b> context
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <b>e-counters</b>
Tree	<a href="#">e-counters</a>
Introduced	16.0.R1
Platforms	All

## in-profile-octets-discarded-count *boolean*

Synopsis	Include the in-profile octets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <b>e-counters</b> <a href="#">in-profile-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-octets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

## in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in-profile octets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <b>e-counters</b> <a href="#">in-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-octets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

## in-profile-packets-discarded-count *boolean*

Synopsis	Include the in-profile packets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <b>e-counters</b> <a href="#">in-profile-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All



**in-profile-packets-forwarded-count** *boolean*

Synopsis	Include the in-profile packets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i> <a href="#">e-counters</a> <a href="#">in-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

**out-profile-octets-discarded-count** *boolean*

Synopsis	Include the out-profile octets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i> <a href="#">e-counters</a> <a href="#">out-profile-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

**out-profile-octets-forwarded-count** *boolean*

Synopsis	Include the out-of-profile octets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i> <a href="#">e-counters</a> <a href="#">out-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

**out-profile-packets-discarded-count** *boolean*

Synopsis	Include the out-profile packets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i> <a href="#">e-counters</a> <a href="#">out-profile-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-packets-discarded-count</a>

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Default	false
Introduced	16.0.R1
Platforms	All

### **out-profile-packets-forwarded-count** *boolean*

Synopsis	Include the out-of-profile packets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <a href="#">e-counters out-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-packets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **i-counters**

Synopsis	Enter the <b>i-counters</b> context
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <a href="#">i-counters</a>
Tree	<a href="#">i-counters</a>
Introduced	16.0.R1
Platforms	All

### **all-octets-offered-count** *boolean*

Synopsis	Include the all octets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <a href="#">i-counters all-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">all-octets-offered-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **all-packets-offered-count** *boolean*

Synopsis	Include all packets offered count
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Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">all-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">all-packets-offered-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **high-octets-discarded-count** *boolean*

Synopsis	Include the high octets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">high-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">high-octets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **high-octets-offered-count** *boolean*

Synopsis	Include the high octets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">high-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">high-octets-offered-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **high-packets-discarded-count** *boolean*

Synopsis	Include the high packets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">high-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">high-packets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

**high-packets-offered-count** *boolean*

Synopsis	Include the high packets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">high-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">high-packets-offered-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

**in-profile-octets-forwarded-count** *boolean*

Synopsis	Include the in-profile octets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">in-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-octets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

**in-profile-packets-forwarded-count** *boolean*

Synopsis	Include the in-profile packets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">in-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

**low-octets-discarded-count** *boolean*

Synopsis	Include the low octets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">low-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">low-octets-discarded-count</a>

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Default	false
Introduced	16.0.R1
Platforms	All

### **low-octets-offered-count** *boolean*

Synopsis	Include the low octets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">low-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">low-octets-offered-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **low-packets-discarded-count** *boolean*

Synopsis	Include the low packets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">low-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">low-packets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **low-packets-offered-count** *boolean*

Synopsis	Include the low packets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">low-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">low-packets-offered-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

**out-profile-octets-forwarded-count** *boolean*

Synopsis	Include the out-of-profile octets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">out-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

**out-profile-packets-forwarded-count** *boolean*

Synopsis	Include the out-of-profile packets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">out-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-packets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

**uncoloured-octets-offered-count** *boolean*

Synopsis	Include the uncolored octets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">uncoloured-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">uncoloured-octets-offered-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

**uncoloured-packets-offered-count** *boolean*

Synopsis	Include the uncolored packets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">uncoloured-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">uncoloured-packets-offered-count</a>
Default	false

Introduced 16.0.R1  
Platforms All

### ref-aa-specific-counter

Synopsis Enter the **ref-aa-specific-counter** context  
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-aa-specific-counter](#)  
Tree [ref-aa-specific-counter](#)  
Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### any *boolean*

Synopsis Report a change to any counter  
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-aa-specific-counter](#) [any](#) *boolean*  
Tree [any](#)  
Default false  
Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### ref-policer

Synopsis Enter the **ref-policer** context  
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-policer](#)  
Tree [ref-policer](#)  
Introduced 19.10.R1  
Platforms All

### all

Synopsis Apply significant change to counters for all policers  
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-policer](#) [all](#)  
Tree [all](#)  
Notes The following elements are part of a choice: **all** or **id**.

Introduced 19.10.R1  
Platforms All

### **e-counters**

Synopsis Enter the **e-counters** context  
Context **configure** [log](#) [accounting-policy](#) *number* [custom-record](#) [ref-policer](#) [e-counters](#)  
Tree [e-counters](#)  
Introduced 19.10.R1  
Platforms All

### **exceed-profile-octets-discarded-count** *boolean*

Synopsis Include the exceed profile octets discarded count  
Context **configure** [log](#) [accounting-policy](#) *number* [custom-record](#) [ref-policer](#) [e-counters](#) [exceed-profile-octets-discarded-count](#) *boolean*  
Tree [exceed-profile-octets-discarded-count](#)  
Default false  
Introduced 19.10.R1  
Platforms All

### **exceed-profile-octets-forwarded-count** *boolean*

Synopsis Include the exceed profile octets forwarded count  
Context **configure** [log](#) [accounting-policy](#) *number* [custom-record](#) [ref-policer](#) [e-counters](#) [exceed-profile-octets-forwarded-count](#) *boolean*  
Tree [exceed-profile-octets-forwarded-count](#)  
Default false  
Introduced 19.10.R1  
Platforms All

### **exceed-profile-octets-offered-count** *boolean*

Synopsis Include the exceed profile octets offered count  
Context **configure** [log](#) [accounting-policy](#) *number* [custom-record](#) [ref-policer](#) [e-counters](#) [exceed-profile-octets-offered-count](#) *boolean*



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Tree	<a href="#">exceed-profile-octets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **exceed-profile-packets-discarded-count** *boolean*

Synopsis	Include the exceed profile packets discarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">exceed-profile-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">exceed-profile-packets-discarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **exceed-profile-packets-forwarded-count** *boolean*

Synopsis	Include the exceed profile packets forwarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">exceed-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">exceed-profile-packets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **exceed-profile-packets-offered-count** *boolean*

Synopsis	Include the exceed profile packets offered count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">exceed-profile-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">exceed-profile-packets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**in-plus-profile-octets-discarded-count** *boolean*

Synopsis	Include the in-plus profile octets discarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">in-plus-profile-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">in-plus-profile-octets-discarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**in-plus-profile-octets-forwarded-count** *boolean*

Synopsis	Include the in-plus profile octets forwarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">in-plus-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-plus-profile-octets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**in-plus-profile-octets-offered-count** *boolean*

Synopsis	Include the in-plus profile octets offered count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">in-plus-profile-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">in-plus-profile-octets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**in-plus-profile-packets-discarded-count** *boolean*

Synopsis	Include the in-plus profile packets discarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">in-plus-profile-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">in-plus-profile-packets-discarded-count</a>
Default	false

Introduced 19.10.R1  
Platforms All

### **in-plus-profile-packets-forwarded-count** *boolean*

Synopsis Include the in-plus profile packets forwarded count  
Context **configure** [log](#) [accounting-policy](#) [number](#) [custom-record](#) [ref-policer](#) [e-counters](#) [in-plus-profile-packets-forwarded-count](#) *boolean*  
Tree [in-plus-profile-packets-forwarded-count](#)  
Default false  
Introduced 19.10.R1  
Platforms All

### **in-plus-profile-packets-offered-count** *boolean*

Synopsis Include the in-plus profile packets offered count  
Context **configure** [log](#) [accounting-policy](#) [number](#) [custom-record](#) [ref-policer](#) [e-counters](#) [in-plus-profile-packets-offered-count](#) *boolean*  
Tree [in-plus-profile-packets-offered-count](#)  
Default false  
Introduced 19.10.R1  
Platforms All

### **in-profile-octets-discarded-count** *boolean*

Synopsis Include the in profile octets discarded count  
Context **configure** [log](#) [accounting-policy](#) [number](#) [custom-record](#) [ref-policer](#) [e-counters](#) [in-profile-octets-discarded-count](#) *boolean*  
Tree [in-profile-octets-discarded-count](#)  
Default false  
Introduced 19.10.R1  
Platforms All

### **in-profile-octets-forwarded-count** *boolean*

Synopsis Include the in profile octets forwarded count

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Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">in-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-octets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **in-profile-octets-offered-count** *boolean*

Synopsis	Include the in profile octets offered count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">in-profile-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-octets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **in-profile-packets-discarded-count** *boolean*

Synopsis	Include the in profile packets discarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">in-profile-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-discarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **in-profile-packets-forwarded-count** *boolean*

Synopsis	Include the in profile packets forwarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">in-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**in-profile-packets-offered-count** *boolean*

Synopsis	Include the in profile packets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">in-profile-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**out-profile-octets-discarded-count** *boolean*

Synopsis	Include the out profile octets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">out-profile-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-discarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**out-profile-octets-forwarded-count** *boolean*

Synopsis	Include the out profile octets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">out-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**out-profile-octets-offered-count** *boolean*

Synopsis	Include the out profile octets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">out-profile-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-offered-count</a>

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Default	false
Introduced	19.10.R1
Platforms	All

### **out-profile-packets-discarded-count** *boolean*

Synopsis	Include the out profile packets discarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">out-profile-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-packets-discarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **out-profile-packets-forwarded-count** *boolean*

Synopsis	Include the out profile packets forwarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">out-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-packets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **out-profile-packets-offered-count** *boolean*

Synopsis	Include the out profile packets offered count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">out-profile-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-packets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**uncoloured-octets-offered-count** *boolean*

Synopsis	Include the uncolored octets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">uncoloured-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">uncoloured-octets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**uncoloured-packets-offered-count** *boolean*

Synopsis	Include the uncolored packets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">uncoloured-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">uncoloured-packets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**i-counters**

Synopsis	Enter the <b>i-counters</b> context
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">i-counters</a>
Tree	<a href="#">i-counters</a>
Introduced	19.10.R1
Platforms	All

**in-profile-octets-discarded-count** *boolean*

Synopsis	Include the in profile octets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">i-counters</a> <a href="#">in-profile-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-octets-discarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**in-profile-octets-forwarded-count** *boolean*

Synopsis	Include the in profile octets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">i-counters</a> <a href="#">in-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-octets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**in-profile-octets-offered-count** *boolean*

Synopsis	Include the in profile octets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">i-counters</a> <a href="#">in-profile-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-octets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**in-profile-packets-discarded-count** *boolean*

Synopsis	Include the in profile packets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">i-counters</a> <a href="#">in-profile-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-discarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**in-profile-packets-forwarded-count** *boolean*

Synopsis	Include the in profile packets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">i-counters</a> <a href="#">in-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-forwarded-count</a>



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Default	false
Introduced	19.10.R1
Platforms	All

### **in-profile-packets-offered-count** *boolean*

Synopsis	Include the in profile packets offered count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">i-counters</a> <a href="#">in-profile-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **out-profile-octets-discarded-count** *boolean*

Synopsis	Include the out profile octets discarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">i-counters</a> <a href="#">out-profile-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-discarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **out-profile-octets-forwarded-count** *boolean*

Synopsis	Include the out profile octets forwarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">i-counters</a> <a href="#">out-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**out-profile-octets-offered-count** *boolean*

Synopsis	Include the out profile octets offered count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">i-counters</a> <a href="#">out-profile-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**out-profile-packets-discarded-count** *boolean*

Synopsis	Include the out profile packets discarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">i-counters</a> <a href="#">out-profile-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-packets-discarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**out-profile-packets-forwarded-count** *boolean*

Synopsis	Include the out profile packets forwarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">i-counters</a> <a href="#">out-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-packets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**out-profile-packets-offered-count** *boolean*

Synopsis	Include the out profile packets offered count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">i-counters</a> <a href="#">out-profile-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-packets-offered-count</a>
Default	false

Introduced 19.10.R1  
 Platforms All

### **uncoloured-octets-offered-count** *boolean*

Synopsis Include the uncolored octets offered count  
 Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-policer](#) [i-counters](#)  
[uncoloured-octets-offered-count](#) *boolean*  
 Tree [uncoloured-octets-offered-count](#)  
 Default false  
 Introduced 19.10.R1  
 Platforms All

### **uncoloured-packets-offered-count** *boolean*

Synopsis Include the uncolored packets offered count  
 Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-policer](#) [i-counters](#)  
[uncoloured-packets-offered-count](#) *boolean*  
 Tree [uncoloured-packets-offered-count](#)  
 Default false  
 Introduced 19.10.R1  
 Platforms All

### **id** *reference*

Synopsis Policer ID  
 Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-policer](#) [id](#) *reference*  
 Tree [id](#)  
 Reference **configure** [log accounting-policy](#) *number* [custom-record](#) [policer](#) *number*  
 Notes The following elements are part of a choice: **all** or **id**.  
 Introduced 19.10.R1  
 Platforms All

### **ref-queue**

Synopsis Enter the **ref-queue** context

Context	<b>configure log accounting-policy number custom-record ref-queue</b>
Tree	<a href="#">ref-queue</a>
Description	Commands in this context configure reference queue counters for significant change only reporting. The custom record is only generated when the change in the sum of all queue and policer reference counters equals or exceeds the configured (non-zero) significant change value.
Introduced	16.0.R1
Platforms	All

## all

Synopsis	Apply significant change to counters for all queues
Context	<b>configure log accounting-policy number custom-record ref-queue all</b>
Tree	<a href="#">all</a>
Notes	The following elements are part of a choice: <b>all</b> or <b>id</b> .
Introduced	16.0.R1
Platforms	All

## e-counters

Synopsis	Enter the <b>e-counters</b> context
Context	<b>configure log accounting-policy number custom-record ref-queue e-counters</b>
Tree	<a href="#">e-counters</a>
Introduced	16.0.R1
Platforms	All

## in-profile-octets-discarded-count *boolean*

Synopsis	Include the in-profile octets discarded count
Context	<b>configure log accounting-policy number custom-record ref-queue e-counters in-profile-octets-discarded-count <i>boolean</i></b>
Tree	<a href="#">in-profile-octets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

**in-profile-octets-forwarded-count** *boolean*

Synopsis	Include the in-profile octets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">e-counters</a> <a href="#">in-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-octets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

**in-profile-packets-discarded-count** *boolean*

Synopsis	Include the in-profile packets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">e-counters</a> <a href="#">in-profile-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

**in-profile-packets-forwarded-count** *boolean*

Synopsis	Include the in-profile packets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">e-counters</a> <a href="#">in-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

**out-profile-octets-discarded-count** *boolean*

Synopsis	Include the out-profile octets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">e-counters</a> <a href="#">out-profile-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-discarded-count</a>

---

Default	false
Introduced	16.0.R1
Platforms	All

### **out-profile-octets-forwarded-count** *boolean*

Synopsis	Include the out-of-profile octets forwarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">e-counters</a> <a href="#">out-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **out-profile-packets-discarded-count** *boolean*

Synopsis	Include the out-profile packets discarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">e-counters</a> <a href="#">out-profile-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-packets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **out-profile-packets-forwarded-count** *boolean*

Synopsis	Include the out-of-profile packets forwarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">e-counters</a> <a href="#">out-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-packets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

## **i-counters**

Synopsis	Enter the <b>i-counters</b> context
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a>
Tree	<a href="#">i-counters</a>
Introduced	16.0.R1
Platforms	All

## **all-octets-offered-count** *boolean*

Synopsis	Include the all octets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">all-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">all-octets-offered-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

## **all-packets-offered-count** *boolean*

Synopsis	Include all packets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">all-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">all-packets-offered-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

## **high-octets-discarded-count** *boolean*

Synopsis	Include the high octets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">high-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">high-octets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **high-octets-offered-count** *boolean*

Synopsis	Include the high octets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">high-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">high-octets-offered-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **high-packets-discarded-count** *boolean*

Synopsis	Include the high packets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">high-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">high-packets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **high-packets-offered-count** *boolean*

Synopsis	Include the high packets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">high-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">high-packets-offered-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **in-profile-octets-forwarded-count** *boolean*

Synopsis	Include the in-profile octets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">in-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-octets-forwarded-count</a>



---

Default	false
Introduced	16.0.R1
Platforms	All

### **in-profile-packets-forwarded-count** *boolean*

Synopsis	Include the in-profile packets forwarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">in-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **low-octets-discarded-count** *boolean*

Synopsis	Include the low octets discarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">low-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">low-octets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **low-octets-offered-count** *boolean*

Synopsis	Include the low octets offered count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">low-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">low-octets-offered-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **low-packets-discarded-count** *boolean*

Synopsis	Include the low packets discarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">low-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">low-packets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **low-packets-offered-count** *boolean*

Synopsis	Include the low packets offered count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">low-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">low-packets-offered-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **out-profile-octets-forwarded-count** *boolean*

Synopsis	Include the out-of-profile octets forwarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">out-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **out-profile-packets-forwarded-count** *boolean*

Synopsis	Include the out-of-profile packets forwarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">out-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-packets-forwarded-count</a>
Default	false

Introduced 16.0.R1  
 Platforms All

### **uncoloured-octets-offered-count** *boolean*

Synopsis Include the uncolored octets offered count  
 Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-queue](#) [i-counters](#)  
[uncoloured-octets-offered-count](#) *boolean*  
 Tree [uncoloured-octets-offered-count](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **uncoloured-packets-offered-count** *boolean*

Synopsis Include the uncolored packets offered count  
 Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-queue](#) [i-counters](#)  
[uncoloured-packets-offered-count](#) *boolean*  
 Tree [uncoloured-packets-offered-count](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **id** *reference*

Synopsis Queue ID  
 Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-queue](#) [id](#) *reference*  
 Tree [id](#)  
 Reference **configure** [log accounting-policy](#) *number* [custom-record](#) [queue](#) *number*  
 Notes The following elements are part of a choice: **all** or **id**.  
 Introduced 16.0.R1  
 Platforms All

### **significant-change** *number*

Synopsis Significant change required to generate the record

Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record significant-change</a> <i>number</i>
Tree	<a href="#">significant-change</a>
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

### **default** *boolean*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default accounting policy for all objects that do not have an accounting policy
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <b>default</b> <i>boolean</i>
Tree	<a href="#">default</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **destination**

Synopsis	Enter the <b>destination</b> context
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">destination</a>
Tree	<a href="#">destination</a>
Introduced	16.0.R1
Platforms	All

**file reference****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Unique file identifier when creating a log or accounting file
Context	<b>configure log accounting-policy number destination file reference</b>
Tree	<a href="#">file</a>
Reference	<b>configure log file string</b>
Notes	The following elements are part of a choice: <b>file</b> or <b>null</b> .
Introduced	16.0.R1
Platforms	All

**null****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Indicate no destination for accounting policy records
Context	<b>configure log accounting-policy number destination null</b>
Tree	<a href="#">null</a>
Notes	The following elements are part of a choice: <b>file</b> or <b>null</b> .
Introduced	16.0.R1
Platforms	All

**include-system-info boolean**

Synopsis	Include system information in accounting policy records
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Context	<b>configure log accounting-policy</b> <i>number</i> <b>include-system-info</b> <i>boolean</i>
Tree	<b>include-system-info</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **record** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Accounting policy record type
Context	<b>configure log accounting-policy</b> <i>number</i> <b>record</b> <i>keyword</i>
Tree	<b>record</b>
Description	<p>This command adds the accounting record type to the accounting policy that is forwarded to the configured accounting file. A record name can only be used in one accounting policy. To obtain a list of all record types that can be configured, use the <b>show log accounting-records</b> command.</p> <p>To configure an accounting policy for access ports, select a service record (for example, <b>service-ingress-octets</b>). To change the record name to another service record, configure the new record name with this command.</p> <p>When configuring an accounting policy for network ports, select a network record. To change the record name to another network record, configure the new record name with this command.</p> <p><b>Note:</b> AA, video, and subscriber records are not applicable to the 7950 XRS.</p>
Options	<p>service-ingress-octets, service-egress-octets, service-ingress-packets, service-egress-packets, network-ingress-octets, network-egress-octets, network-ingress-packets, network-egress-packets, compact-service-ingress-octets, combined-service-ingress, combined-network-ing-egr-octets, combined-service-ing-egr-octets, complete-service-ingress-egress, combined-sdp-ingress-egress, complete-sdp-ingress-egress, complete-subscriber-ingress-egress, aa-protocol, aa-application, aa-app-group, aa-subscriber-protocol, aa-subscriber-application, custom-record-subscriber, custom-record-service, custom-record-aa-sub, queue-group-octets, queue-group-packets, combined-queue-group, combined-mpls-lsp-ingress, combined-mpls-lsp-egress, combined-ldp-lsp-egress, saa, video, aa-performance, complete-ethernet-port, extended-service-ingress-egress, complete-network-ing-egr, aa-partition, complete-pm, aa-admit-deny, network-interface-ingress-octets,</p>

network-interface-egress-octets, network-interface-ingress-packets, network-interface-egress-packets, combined-network-interface-ingress, combined-network-interface-egress, complete-network-interface-ing-egr, access-egress-octets, access-egress-packets, combined-access-egress, combined-network-egress, complete-service-activation-test, combined-mpls-srte-egress

Introduced 16.0.R1

Platforms All

## app-route-notifications

Synopsis Enter the **app-route-notifications** context

Context **configure** [log app-route-notifications](#)

Tree [app-route-notifications](#)

Introduced 16.0.R1

Platforms All

## cold-start-wait *number*

Synopsis Time delay before notifying specific CPM applications for available route

Context **configure** [log app-route-notifications cold-start-wait \*number\*](#)

Tree [cold-start-wait](#)

Range 1 to 300

Introduced 16.0.R1

Platforms All

## route-recovery-wait *number*

Synopsis Time delay before notifying specific CPM applications after route recovery or change

Context **configure** [log app-route-notifications route-recovery-wait \*number\*](#)

Tree [route-recovery-wait](#)

Range 1 to 100

Introduced 16.0.R1

Platforms All

## encryption-key *string*

Synopsis Secret key for the encryption of log files

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Context	<b>configure log encryption-key</b> <i>string</i>
Tree	<a href="#">encryption-key</a>
Description	This command specifies the encryption key used by AES-256-CTR for log file encryption. The encryption key is used for all local log files on the system.
String Length	1 to 71
Introduced	22.7.R1
Platforms	All

### **event-damping** *boolean*

Synopsis	Allow event damping algorithm to suppress QoS or filter change events
Context	<b>configure log event-damping</b> <i>boolean</i>
Tree	<a href="#">event-damping</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **event-handling**

Synopsis	Enter the <b>event-handling</b> context
Context	<b>configure log event-handling</b>
Tree	<a href="#">event-handling</a>
Introduced	16.0.R1
Platforms	All

### **handler** [[name](#)] *string*

Synopsis	Enter the <b>handler</b> list instance
Context	<b>configure log event-handling handler</b> <i>string</i>
Tree	<a href="#">handler</a>
Max. Instances	1500
Introduced	16.0.R1
Platforms	All



**[name]** *string*

Synopsis	EHS handler name
Context	<b>configure log event-handling handler</b> <i>string</i>
Tree	<a href="#">handler</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS handler
Context	<b>configure log event-handling handler</b> <i>string admin-state</i> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure log event-handling handler</b> <i>string description</i> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure log event-handling handler</b> <i>string entry</i> <i>number</i>
Tree	<a href="#">entry</a>
Max. Instances	1500

Introduced 16.0.R1  
 Platforms All

### **[id]** *number*

Synopsis EHS handler entry ID  
 Context **configure log event-handling handler** *string entry number*  
 Tree [entry](#)  
 Range 1 to 1500  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS handler entry  
 Context **configure log event-handling handler** *string entry number admin-state keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure log event-handling handler** *string entry number description string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **min-delay** *number*

Synopsis Minimum delay between subsequent executions of the script policy

Context	<b>configure</b> log event-handling handler <i>string</i> entry <i>number</i> min-delay <i>number</i>
Tree	<a href="#">min-delay</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

## script-policy

Synopsis	Enable the <b>script-policy</b> context
Context	<b>configure</b> log event-handling handler <i>string</i> entry <i>number</i> script-policy
Tree	<a href="#">script-policy</a>
Introduced	16.0.R1
Platforms	All

## name *reference*

Synopsis	Script policy name
Context	<b>configure</b> log event-handling handler <i>string</i> entry <i>number</i> script-policy <i>name</i> <i>reference</i>
Tree	<a href="#">name</a>
Reference	<b>configure</b> system script-control script-policy <i>string</i> owner <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## owner *reference*

Synopsis	Script policy owner
Context	<b>configure</b> log event-handling handler <i>string</i> entry <i>number</i> script-policy owner <i>reference</i>
Tree	<a href="#">owner</a>
Default	TIMOS CLI
Reference	<b>configure</b> system script-control script-policy <i>string</i> owner <i>string</i>
Introduced	16.0.R1
Platforms	All

## event-trigger

Synopsis	Enter the <b>event-trigger</b> context
Context	<b>configure log event-trigger</b>
Tree	<a href="#">event-trigger</a>
Introduced	16.0.R1
Platforms	All

## adp event keyword

Synopsis	Enter the <b>adp</b> list instance
Context	<b>configure log event-trigger adp event keyword</b>
Tree	<a href="#">adp</a>
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

## event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger adp event keyword</b>
Tree	<a href="#">adp</a>
Options	tmnxDiscoveryEndNotify, tmnxDiscoveryCellularReq
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

## admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure log event-trigger adp event keyword admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger adp event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger adp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger adp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger adp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1

Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

## debounce

Synopsis Enter the **debounce** context  
 Context **configure log event-trigger adp event** *keyword entry number* **debounce**  
 Tree **debounce**  
 Introduced 16.0.R1  
 Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

## time *number*

Synopsis Time window for events for EHS to trigger a response  
 Context **configure log event-trigger adp event** *keyword entry number* **debounce time** *number*  
 Tree **time**  
 Range 1 to 604800  
 Units seconds  
 Introduced 16.0.R1  
 Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

## value *number*

Synopsis Occurrences in time interval to trigger EHS response  
 Context **configure log event-trigger adp event** *keyword entry number* **debounce value** *number*  
 Tree **value**  
 Range 2 to 15  
 Introduced 16.0.R1  
 Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

## description *string*

Synopsis Text description  
 Context **configure log event-trigger adp event** *keyword entry number* **description** *string*  
 Tree **description**  
 String Length 1 to 80

Introduced 16.0.R1  
Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

### **filter reference**

Synopsis Log filter for EHS event trigger entry  
Context **configure log event-trigger adp event** *keyword entry number filter reference*  
Tree [filter](#)  
Reference **configure log filter** *string*  
Introduced 16.0.R1  
Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

### **handler reference**

Synopsis Event handler for EHS event trigger entry  
Context **configure log event-trigger adp event** *keyword entry number handler reference*  
Tree [handler](#)  
Reference **configure log event-handling handler** *string*  
Introduced 16.0.R1  
Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

### **application-assurance event keyword**

Synopsis Enter the **application-assurance** list instance  
Context **configure log event-trigger application-assurance event** *keyword*  
Tree [application-assurance](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **event keyword**

Synopsis Log event as a trigger for one or more EHS handlers  
Context **configure log event-trigger application-assurance event** *keyword*  
Tree [application-assurance](#)

Options	tmnxBsxIlsaAaGrpFailureV2, tmnxBsxIlsaAaGrpFailureClearV2, tmnxBsxIlsaAaGrpNonRedundantV2, tmnxBsxIlsaAaGrpSwitchover, tmnxBsxIlsaAaGrpFlowFull, tmnxBsxIlsaAaGrpFlowFullClear, tmnxBsxIlsaAaSubLoadBalance, tmnxBsxIlsaAaGrpCapCostThres, tmnxBsxIlsaAaGrpCapCostThresClear, tmnxBsxAaSubscribersUnassigned, tmnxBsxAaSubscriberAcctDataLoss, tmnxBsxAaSubPolResExceeded, tmnxBsxAaSubPolResExceededClear, tmnxBsxIlsaAaGrpFlowSetup, tmnxBsxIlsaAaGrpFlowSetupClear, tmnxBsxIlsaAaGrpPacketRate, tmnxBsxIlsaAaGrpPacketRateClear, tmnxBsxIlsaAaGrpBitRate, tmnxBsxIlsaAaGrpBitRateClear, tmnxBsxTransIpPolAaSubCreated, tmnxBsxTransIpPolAaSubDeleted, tmnxBsxTransIpPolRadCoAAudit, tmnxBsxTransIpPolRadCoAError, tmnxBsxTransIpPolRadDiscError, tmnxBsxTransIpPolDhcpAddWarning, tmnxBsxTransIpPolDhcpDelWarning, tmnxBsxIlsaAaGrpFmSbWaSBufOvld, tmnxBsxIlsaAaGrpFmSbWaSBufOvldClr, tmnxBsxIlsaAaGrpToSbWaSBufOvld, tmnxBsxIlsaAaGrpToSbWaSBufOvldClr, tmnxBsxIlsaAaGrpOvrlidCutthru, tmnxBsxIlsaAaGrpOvrlidCutthruClr, tmnxBsxTransIpPersistenceWarn, tmnxBsxAarplnstOperStateChanged, tmnxBsxAarplnstStateChanged, tmnxBsxRadApFailure, tmnxBsxRadApServOperStateChange, tmnxBsxMobileSubModifyFailure, tmnxBsxRadApIntrmUpdateSkipped, tmnxBsxHttpUrlParamLimitExceeded, tmnxBsxUrlFilterOperStateChange, tmnxBsxSubModifyFailure, tmnxBsxDnsIpCacheFull, tmnxBsxDnsIpCacheFullClear, tmnxBsxUrlListUpdate, tmnxBsxUrlListFailure, tmnxBsxIlsaAaTimFileProcFailure, tmnxBsxStatTcaThreshCrossed, tmnxBsxStatTcaThreshCrossedClear, tmnxBsxStatPolcrTcaThreshCrossed, tmnxBsxStatPolcrTcaThreshCrClear, tmnxBsxStatFtrTcaThreshCrossed, tmnxBsxStatFtrTcaThreshCrClear, tmnxBsxStatFtrEnTcaThreshCrossed, tmnxBsxStatFtrEnTcaThreshCrClear, tmnxBsxTransIpPolDiamGxError, tmnxBsxDatapathCpuUsage, tmnxBsxDatapathCpuUsageClear, tmnxBsxTcpValTcaCrossed, tmnxBsxTcpValTcaCrossedClear, tmnxBsxCertProfileOperStateChngd, tmnxBsxSubQuarantined, tmnxBsxSubQuarantinedClear, tmnxBsxUrlFtrWebServOprStateChg
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <b>log</b> <b>event-trigger</b> <b>application-assurance</b> <b>event</b> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger application-assurance event](#) *keyword* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance  
 Context **configure** [log event-trigger application-assurance event](#) *keyword* [entry](#) *number*  
 Tree [entry](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure** [log event-trigger application-assurance event](#) *keyword* [entry](#) *number*  
 Tree [entry](#)  
 Range 1 to 1500  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry  
 Context **configure** [log event-trigger application-assurance event](#) *keyword* [entry](#) *number* [admin-state](#) *keyword*  
 Tree [admin-state](#)

Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## debounce

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger application-assurance event</b> <i>keyword entry number</i> <b>debounce</b>
Tree	<b>debounce</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger application-assurance event</b> <i>keyword entry number</i> <b>debounce time</b> <i>number</i>
Tree	<b>time</b>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure log event-trigger application-assurance event</b> <i>keyword entry number</i> <b>debounce value</b> <i>number</i>
Tree	<b>value</b>
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger application-assurance event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger application-assurance event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">filter</a> <i>reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger application-assurance event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">handler</a> <i>reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**aps event** *keyword*

Synopsis	Enter the <b>aps</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger aps event</a> <i>keyword</i>
Tree	<a href="#">aps</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log event-trigger](#) [aps event](#) *keyword*

Tree [aps](#)

Options [apsEventSwitchover](#), [apsEventModeMismatch](#), [apsEventChannelMismatch](#), [apsEventPSBF](#), [apsEventFEPLF](#), [tApsModeMismatchClear](#), [tApsChannelMismatchClear](#), [tApsPSBFClear](#), [tApsFEPLFClear](#), [tApsLocalSwitchCommandSet](#), [tApsLocalSwitchCommandClear](#), [tApsRemoteSwitchCommandSet](#), [tApsRemoteSwitchCommandClear](#), [tApsMcApsCtlLinkStateChange](#), [tApsChanTxLaisStateChange](#), [tApsPrimaryChannelChange](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger

Context **configure** [log event-trigger](#) [aps event](#) *keyword* [admin-state](#) *keyword*

Tree [admin-state](#)

Options [enable](#), [disable](#)

Default [disable](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **description** *string*

Synopsis Text description

Context **configure** [log event-trigger](#) [aps event](#) *keyword* [description](#) *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**entry [id] number**

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure log event-trigger aps event keyword entry number</b>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger aps event keyword entry number</b>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger aps event keyword entry number admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger aps event keyword entry number debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger aps event</b> <i>keyword entry number debounce time number</i>
Tree	<b>time</b>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure log event-trigger aps event</b> <i>keyword entry number debounce value number</i>
Tree	<b>value</b>
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**description string**

Synopsis	Text description
Context	<b>configure log event-trigger aps event</b> <i>keyword entry number description string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure log event-trigger aps event</b> <i>keyword entry number filter reference</i>
Tree	<b>filter</b>
Reference	<b>configure log filter</b> <i>string</i>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger aps event keyword entry number handler reference](#)  
 Tree [handler](#)  
 Reference **configure** [log event-handling handler string](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **atm event** *keyword*

Synopsis Enter the **atm** list instance  
 Context **configure** [log event-trigger atm event keyword](#)  
 Tree [atm](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure** [log event-trigger atm event keyword](#)  
 Tree [atm](#)  
 Options tAtmTcSubLayerDown, tAtmTcSubLayerClear, atmVclStatusChange, atmVplStatusChange, atmVtlStatusChange, atmIfcStatusChange, tAtmPlcpSubLayerDown, tAtmPlcpSubLayerClear, tAtmEpOutOfPeerVpiOrVciRange, tAtmMaxPeerVccsExceeded, tAtmMaxPeerVpcsExceeded, tAtmIlliLinkStatusChange, atmIlliPeerVclStatusChange, atmIlliPeerVplStatusChange  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger

Context	<b>configure log event-trigger atm event</b> <i>keyword admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

### **description** *string*

Synopsis	Text description
Context	<b>configure log event-trigger atm event</b> <i>keyword description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure log event-trigger atm event</b> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

### **[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger atm event</b> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS



**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger atm event</a> <i>keyword entry number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger atm event</a> <i>keyword entry number debounce</i>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

**time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger atm event</a> <i>keyword entry number debounce time number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

**value** *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger atm event</a> <i>keyword entry number debounce value number</i>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

**description string**

Synopsis	Text description
Context	<b>configure log event-trigger atm event</b> <i>keyword entry number description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure log event-trigger atm event</b> <i>keyword entry number filter reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure log filter</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure log event-trigger atm event</b> <i>keyword entry number handler reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure log event-handling handler</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

**auto-prov event keyword**

Synopsis	Enter the <b>auto-prov</b> list instance
Context	<b>configure log event-trigger auto-prov event</b> <i>keyword</i>
Tree	<a href="#">auto-prov</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger auto-prov event</a> <i>keyword</i>
Tree	<a href="#">auto-prov</a>
Options	autoNodeProv
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger auto-prov event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger auto-prov event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger auto-prov event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1

Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry

Context **configure** [log event-trigger auto-prov event](#) *keyword entry number*

Tree [entry](#)

Range 1 to 1500

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry

Context **configure** [log event-trigger auto-prov event](#) *keyword entry number admin-state keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 16.0.R1

Platforms All

### **debounce**

Synopsis Enter the **debounce** context

Context **configure** [log event-trigger auto-prov event](#) *keyword entry number debounce*

Tree [debounce](#)

Introduced 16.0.R1

Platforms All

### **time** *number*

Synopsis Time window for events for EHS to trigger a response

Context **configure** [log event-trigger auto-prov event](#) *keyword entry number debounce time number*

Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger auto-prov event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger auto-prov event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger auto-prov event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1
Platforms	All

**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger auto-prov event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">handler</a> <i>reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**bfd event** *keyword*

Synopsis	Enter the <b>bfd</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger bfd event</a> <i>keyword</i>
Tree	<a href="#">bfd</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger bfd event</a> <i>keyword</i>
Tree	<a href="#">bfd</a>
Options	tmnxBfdOnLspSessDown, tmnxBfdOnLspSessUp, tmnxBfdOnLspSessDeleted, tmnxBfdOnLspSessProtChange, tmnxBfdOnLspSessNoCpmNpResources, tmnxBfdOnLspSessNoTailResources, tmnxBfdOnLspExtSessDown, tmnxBfdOnLspExtSessUp, tmnxBfdOnLspExtSessDeleted, tmnxBfdOnLspExtSessProtChange, tmnxBfdOnLspExtSessNoCpmNpResrcs
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger bfd event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable

Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger bfd event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger bfd event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger bfd event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger bfd event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## **debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger bfd event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

## **time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger bfd event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce</a> <a href="#">time</a> <i>number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

## **value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger bfd event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce</a> <a href="#">value</a> <i>number</i>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All



**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger bfd event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger bfd event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger bfd event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**bgp event** *keyword*

Synopsis	Enter the <b>bgp</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger bgp event</a> <i>keyword</i>
Tree	<a href="#">bgp</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <b>log event-trigger</b> <b>bgp event keyword</b>
Tree	<b>bgp</b>
Options	sendNotification, receiveNotification, bgpInterfaceDown, bgpConnNoKA, bgpConnNoOpenRcvd, bgpRejectConnBadLocAddr, bgpRemoteEndClosedConn, bgpPeerNotFound, bgpConnMgrTerminated, bgpTerminated, bgpNoMemoryPeer, bgpVariableRangeViolation, bgpCfgViol, tBgpPeerGRStatusChange, tBgpNgEstablished, tBgpNgBackwardTransition, tBgpPeerNgHoldTimeInconsistent, tBgpFlowspecUnsupportdComAction, tBgp4RouteInvalid, tBgp4PathAttrInvalid, tBgp4WithdrawnRtFromUpdateError, tBgp4UpdateInvalid, tBgpGeneral, tBgpFibResourceFailPeer, tBgpReceivedInvalidNlri, tBgpMaxNgPfxLmt, tBgpMaxNgPfxLmtThresholdReached, tBgpInstanceDynamicPeerLmtReachd, tBgpPGDynamicPeerLmtReached, bgpEstablishedNotification, bgpBackwardTransNotification, tBgp4PathAttrDiscarded, tmnxBmpSessionStatusChange, tBgpInstConvStateTransition, tBgpPeerNgGRStatusChange, tBgpPGDynNbrIfMaxSessLmtReachd
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <b>log event-trigger</b> <b>bgp event keyword admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <b>log event-trigger</b> <b>bgp event keyword description string</b>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1

Platforms All

### **entry** [id] *number*

Synopsis Enter the **entry** list instance  
 Context **configure log event-trigger bgp event** *keyword entry number*  
 Tree [entry](#)  
 Introduced 16.0.R1  
 Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure log event-trigger bgp event** *keyword entry number*  
 Tree [entry](#)  
 Range 1 to 1500  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry  
 Context **configure log event-trigger bgp event** *keyword entry number admin-state keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 16.0.R1  
 Platforms All

### **debounce**

Synopsis Enter the **debounce** context  
 Context **configure log event-trigger bgp event** *keyword entry number debounce*  
 Tree [debounce](#)

Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger bgp event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger bgp event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger bgp event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger bgp event keyword entry number filter reference</a>

Tree	<a href="#">filter</a>
Reference	<b>configure log filter</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure log event-trigger bgp event</b> <i>keyword entry number handler reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure log event-handling handler</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **bier event** *keyword*

Synopsis	Enter the <b>bier</b> list instance
Context	<b>configure log event-trigger bier event</b> <i>keyword</i>
Tree	<a href="#">bier</a>
Introduced	19.5.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger bier event</b> <i>keyword</i>
Tree	<a href="#">bier</a>
Options	vRtrBierBfrldCollision, vRtrBierMtMismatch, vRtrBierSubDomainMismatch, vRtrBierUnsupportedNhop
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger bier event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	19.5.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger bier event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	19.5.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger bier event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	19.5.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger bier event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger bier event</a> <i>keyword entry number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	19.5.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger bier event</a> <i>keyword entry number debounce</i>
Tree	<a href="#">debounce</a>
Introduced	19.5.R1
Platforms	All

**time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger bier event</a> <i>keyword entry number debounce time number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	19.5.R1
Platforms	All

**value** *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger bier event</a> <i>keyword entry number debounce value number</i>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	19.5.R1

Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger bier event](#) *keyword entry number description string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 19.5.R1  
 Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
 Context **configure** [log event-trigger bier event](#) *keyword entry number filter reference*  
 Tree [filter](#)  
 Reference **configure** [log filter](#) *string*  
 Introduced 19.5.R1  
 Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger bier event](#) *keyword entry number handler reference*  
 Tree [handler](#)  
 Reference **configure** [log event-handling handler](#) *string*  
 Introduced 19.5.R1  
 Platforms All

### **calltrace** [event](#) *keyword*

Synopsis Enter the **calltrace** list instance  
 Context **configure** [log event-trigger calltrace event](#) *keyword*  
 Tree [calltrace](#)  
 Introduced 16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log event-trigger](#) [calltrace event](#) *keyword*

Tree [calltrace](#)

Options tmnxCallTraceMaxFilesNumReached, tmnxCallTraceLocSizeLimitReached, calltraceDebugEvent

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger

Context **configure** [log event-trigger](#) [calltrace event](#) *keyword* [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description

Context **configure** [log event-trigger](#) [calltrace event](#) *keyword* [description](#) *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance

Context	<b>configure log event-trigger calltrace event</b> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger calltrace event</b> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger calltrace event</b> <i>keyword entry number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger calltrace event</b> <i>keyword entry number debounce</i>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">calltrace event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">calltrace event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">calltrace event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">calltrace event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">calltrace event</a> <i>keyword</i> <a href="#">entry number handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cflowd** [event](#) *keyword*

Synopsis	Enter the <b>cflowd</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">cflowd event</a> <i>keyword</i>
Tree	<a href="#">cflowd</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">cflowd event</a> <i>keyword</i>
Tree	<a href="#">cflowd</a>
Options	tmnCflowdCreateFailure, tmnCflowdStateChange, tmnCflowdFlowCreateFailure, tmnCflowdPacketTxFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">cflowd event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger cflowd event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **entry** [[id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger cflowd event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

### **[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger cflowd event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger cflowd event keyword entry number admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger cflowd event keyword entry number debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger cflowd event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value** *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger cflowd event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure log event-trigger cflowd event keyword entry number description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure log event-trigger cflowd event keyword entry number filter reference</b>
Tree	<a href="#">filter</a>
Reference	<b>configure log filter string</b>
Introduced	16.0.R1
Platforms	All

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure log event-trigger cflowd event keyword entry number handler reference</b>
Tree	<a href="#">handler</a>
Reference	<b>configure log event-handling handler string</b>
Introduced	16.0.R1
Platforms	All

**chassis event keyword**

Synopsis	Enter the <b>chassis</b> list instance
Context	<b>configure log event-trigger chassis event keyword</b>
Tree	<a href="#">chassis</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <b>log event-trigger chassis event keyword</b>
Tree	<b>chassis</b>
Options	tmnxEqCardFailure, tmnxEqCardInserted, tmnxEqCardRemoved, tmnxEqWrongCard, tmnxEnvTempTooHigh, tmnxEqPowerSupplyInserted, tmnxEqPowerSupplyRemoved, tmnxRedPrimaryCPMFail, tmnxChassisNotificationClear, tmnxEqSynclftimingHoldover, tmnxEqSynclftimingHoldoverClear, tmnxEqSynclftimingRef1Alarm, tmnxEqSynclftimingRef1AlarmClear, tmnxEqSynclftimingRef2Alarm, tmnxEqSynclftimingRef2AlarmClear, tmnxEqFlashDataLoss, tmnxEqFlashDiskFull, tmnxPeSoftwareVersionMismatch, tmnxPeSoftwareLoadFailed, tmnxPeBootloaderVersionMismatch, tmnxPeBootromVersionMismatch, tmnxPeFPGAVersionMismatch, tmnxEqSynclftimingBITSAlarm, tmnxEqSynclftimingBITSAlarmClear, tmnxEqCardFirmwareUpgraded, tmnxChassisUpgradeInProgress, tmnxChassisUpgradeComplete, tmnxChassisHiBwMcastAlarm, tmnxEqOperStateChange, tmnxEqMdaCfgNotCompatible, tmnxCpmCardSyncFileNotPresent, tmnxEqMdaXplError, tmnxEqCardPChipError, tmnxEqCardSoftResetAlarm, tmnxEqMdaSyncENotCompatible, tmnxIPseclsaGrpActivelsaChgd, tmnxEqCardPChipMemoryEvent, tmnxIPseclsaGrpUnableToSwitch, tmnxIPseclsaGrpTnlLowWMark, tmnxIPseclsaGrpTnlHighWMark, tmnxIPseclsaGrpTnlMax, tmnxEqSynclftimingRef1Quality, tmnxEqSynclftimingRef2Quality, tmnxEqSynclftimingBITSQuality, tmnxEqSynclftimingBITS2Quality, tmnxEqSynclftimingRefSwitch, tmnxEqSynclftimingBITS2Alarm, tmnxEqSynclftimingBITS2AlarmClr, tmnxEqSynclftimingBITSOutRefChg, tmnxEqCardPChipCamEvent, tmnxEqSynclftimingSystemQuality, tmnxEqHwEnhancedCapability, tmnxEqSynclftimingPTPQuality, tmnxEqSynclftimingPTPAlarm, tmnxEqSynclftimingPTPAlarmClr, tmnxPeFirmwareVersionWarning, tmnxMDAIsaTunnelGroupChange, tmnxEqPowerCapacityExceeded, tmnxEqPowerCapacityExceededClear, tmnxEqPowerLostCapacity, tmnxEqPowerLostCapacityClear, tmnxEqPowerOverloadState, tmnxEqPowerOverloadStateClear, tmnxEqCardQChipBufMemoryEvent, tmnxEqCardQChipStatsMemoryEvent, tmnxEqCardQChipIntMemoryEvent, tmnxEqCardChipIfDownEvent, tmnxEqCardChipIfCellEvent, tmnxEqLowSwitchFabricCap, tmnxEqLowSwitchFabricCapClear, tmnxEqPowerSafetyAlertThreshold, tmnxEqPowerSafetyAlertClear, tmnxEqPowerSafetyLevelThreshold, tmnxEqPowerSafetyLevelClear, tmnxEqCardTChipParityEvent, tmnxEqProvPowerCapacityAlm, tmnxEqProvPowerCapacityAlmClr, tmnxPlcyAcctStatsPoolExcResource, tmnxPlcyAcctStatsPoolLowResource, tmnxPlcyAcctStatsEventOvrflwClr, tmnxPlcyAcctStatsEventOvrflw, tmnxlomResHighLimitReached, tmnxlomResExhausted, tmnxlomResStateClr, tmnxlomEventOverflow, tmnxlomEventOverflowClr, tmnxEqDataPathFailureProtImpact, tmnxExtStandbyCpmReboot, tmnxExtStandbyCpmRebootFail, tmnxEqMdaIngrXplError, tmnxSynclftimBITS2048khzUnsup, tmnxSynclftimBITS2048khzUnsupClr, tmnxEqMgmtEthRedStandbyRaise, tmnxEqMgmtEthRedStandbyClear, tmnxEqPhysChassPowerSupOvrTmp,



tmnxEqPhysChassPowerSupOvrTmpClr, tmnxEqPhysChassPowerSupAcFail,  
tmnxEqPhysChassPowerSupAcFailClr, tmnxEqPhysChassPowerSupDcFail,  
tmnxEqPhysChassPowerSupDcFailClr, tmnxEqPhysChassPowerSupInFail,  
tmnxEqPhysChassPowerSupInFailClr, tmnxEqPhysChassPowerSupOutFail,  
tmnxEqPhysChassPowerSupOutFailCl, tmnxEqPhysChassisFanFailure,  
tmnxEqPhysChassisFanFailureClear, tIPseclsaMemLowWatermark,  
tIPseclsaMemHighWatermark, tIPseclsaMemMax, tmnxCpmMemSizeMismatch,  
tmnxCpmMemSizeMismatchClear, tmnxPhysChassPwrSupWrgFanDir,  
tmnxPhysChassPwrSupWrgFanDirClr, tmnxPhysChassPwrSupPemACRect,  
tmnxPhysChassPwrSupPemACRectClr, tmnxPhysChassPwrSupInputFeed,  
tmnxPhysChassPwrSupInputFeedClr, tmnxEqBpEpromFail,  
tmnxEqBpEpromFailClear, tmnxEqBpEpromWarning, tmnxEqBpEpromWarningClear,  
tmnxPhysChassisPCMInputFeed, tmnxPhysChassisPCMInputFeedClr,  
tmnxIPMacQosIngOverload, tmnxIPMacQosIngOverloadClear,  
tmnxIPQosEgrOverload, tmnxIPQosEgrOverloadClear, tmnxIPv6QosIngOverload,  
tmnxIPv6QosIngOverloadClear, tmnxIPv6QosEgrOverload,  
tmnxIPv6QosEgrOverloadClear, tmnxIPMacFilterIngOverload,  
tmnxIPMacFilterIngOverloadClear, tmnxIPMacFilterEgrOverload,  
tmnxIPMacFilterEgrOverloadClear, tmnxIPv6FilterIngOverload,  
tmnxIPv6FilterIngOverloadClear, tmnxIPv6FilterEgrOverload,  
tmnxIPv6FilterEgrOverloadClear, tmnxIPMacCpmFilterOverload,  
tmnxIPMacCpmFilterOverloadClear, tmnxIPv6CpmFilterOverload,  
tmnxIPv6CpmFilterOverloadClear, tmnxBluetoothModuleConnectionChg,  
tmnxGnssAcquiringFix, tmnxGnssAcquiredFix, tmnxPhysChassisPMOutFail,  
tmnxPhysChassisPMOutFailClr, tmnxPhysChassisPMInputFeed,  
tmnxPhysChassisPMInputFeedClr, tmnxPhysChassisFilterDoorOpen,  
tmnxPhysChassisFilterDoorClosed, tmnxPhysChassisPMOverTemp,  
tmnxPhysChassisPMOverTempClr, tmnxEqFpgaSoftError,  
tmnxEqSynclfTimingSyncEQuality, tmnxEqSynclfTimingSyncE2Quality,  
tmnxEqSynclfTimingSyncEAlarm, tmnxEqSynclfTimingSyncEAlarmClr,  
tmnxEqSynclfTimingSyncE2Alarm, tmnxEqSynclfTimingSyncE2AlarmClr,  
tmnxEqHwEventDetected, tmnxTunnelGrpEsaVmActivity, tmnxEsaDiscovered,  
tmnxEsaConnected, tmnxEsaDisconnected, tmnxEsaFailure, tmnxEsaCleared,  
tmnxEsaVmCreated, tmnxEsaVmBooted, tmnxEsaVmRemoved,  
tmnxEsaVmCleared, tmnxEsaVmFailure, tIPsecEsaVmMemLowWatermark,  
tIPsecEsaVmMemHighWatermark, tmnxPeKernelVersionMismatch,  
tmnxFPResourcePolicyModified, tmnxFPResourcePolicyModifiedClr,  
tmnxEqSynclfTimingGnssQuality, tmnxEqSynclfTimingGnss2Quality,  
tmnxEqSynclfTimingGnssAlarm, tmnxEqSynclfTimingGnss2Alarm,  
tmnxEqSynclfTimingGnssAlarmClr, tmnxEqSynclfTimingGnss2AlarmClr,  
tmnxEsaFirmwareUpgradeStarted, tmnxPlcyAcctPlcrPoolExcResource,  
tmnxPlcyAcctPlcrPoolLowResource, tChassisAirflowDirMismatch,  
tChassisAirflowDirMismatchClr, tChassisPowerSupplyMismatch,  
tChassisPowerSupplyMismatchClr, tChassisPowerSupplyUnsup,  
tmnxHwAggShpSchedEventOvrflwClr, tmnxHwAggShpSchedEventOvrflw,  
tmnxFPResOversubscribed, tmnxFPResOversubscribedCleared,  
tmnxIPMacFilterIngNearFull, tmnxIPMacFilterIngNearFullClear,  
tmnxIPMacFilterEgrNearFull, tmnxIPMacFilterEgrNearFullClear,  
tmnxIPv6FilterIngNearFull, tmnxIPv6FilterIngNearFullClear, tmnxIPv6FilterEgrNearFull,  
tmnxIPv6FilterEgrNearFullClear, tmnxEsaHwStatusDegraded,  
tmnxEsaHwStatusDegradedClr, tmnxEsaHwStatusCritical, tmnxEsaHwStatusCriticalClr,

tmnxEsaHwPwrSup1Degraded, tmnxEsaHwPwrSup1DegradedClr,  
 tmnxEsaHwPwrSup1Failed, tmnxEsaHwPwrSup1FailedClr,  
 tmnxEsaHwPwrSup2Degraded, tmnxEsaHwPwrSup2DegradedClr,  
 tmnxEsaHwPwrSup2Failed, tmnxEsaHwPwrSup2FailedClr,  
 tmnxEsaHwFanBankNonRedun, tmnxEsaHwFanBankNonRedunClr,  
 tmnxEsaHwFanBankFailRedun, tmnxEsaHwFanBankFailRedunClr,  
 tmnxEsaHwFanStatusDegraded, tmnxEsaHwFanStatusDegradedClr,  
 tmnxEsaHwFanStatusFailed, tmnxEsaHwFanStatusFailedClr,  
 tmnxEsaHwPwrSupMismatch, tmnxEsaHwPwrSupMismatchClr,  
 tmnxEsaHwPwrSupBankNonRedun, tmnxEsaHwPwrSupBankNonRedunClr,  
 tmnxEsaHwPwrSupBankFailRedun, tmnxEsaHwPwrSupBankFailRedunClr,  
 tmnxEsaHwTemperatureDegraded, tmnxEsaHwTemperatureDegradedClr,  
 tmnxEsaHwTemperatureFailed, tmnxEsaHwTemperatureFailedClr,  
 tmnxPowerSupplyFanFailed, tmnxPowerSupplyFanFailedClear,  
 tmnxSasAlarminput1StateChanged, tmnxSasAlarminput2StateChanged,  
 tmnxSasAlarminput3StateChanged, tmnxSasAlarminput4StateChanged,  
 tmnxAlarmInputVoltageFailure, tmnxlomRsrcUsageHighLimitReached,  
 tmnxlomRsrcUsageExhausted, tmnxlomRsrcUsageRecovered,  
 tmnxlomRsrcUserOversubscribed, tmnxlomRsrcUserOversubscribedClr,  
 tmnxlomRsrcEventOverflow, tmnxlomRsrcEventOverflowClr,  
 tmnxlomRsrcOwnerOversubscribed, tmnxlomRsrcOwnerOversubscribedClr,  
 tmnxInterChassisCommsDown, tmnxInterChassisCommsUp,  
 tmnxCpmlcPortDown, tmnxCpmlcPortUp, tmnxCpmlcPortSFFInserted,  
 tmnxCpmlcPortSFFRemoved, tmnxCpmANoLocallcPort, tmnxCpmBNoLocallcPort,  
 tmnxCpmALocallcPortAvail, tmnxCpmBLocallcPortAvail, CpmlcPortSFFStatusFailure,  
 CpmlcPortSFFStatusDDMCorrupt, CpmlcPortSFFStatusReadError,  
 CpmlcPortSFFStatusUnsupported, tmnxCpmlcPortDDMFailure,  
 tmnxCpmlcPortDDMClear, tmnxSfmlcPortDown, tmnxSfmlcPortUp,  
 tmnxSfmlcPortSFFInserted, tmnxSfmlcPortSFFRemoved, SfmlcPortSFFStatusFailure,  
 SfmlcPortSFFStatusDDMCorrupt, SfmlcPortSFFStatusReadError,  
 SfmlcPortSFFStatusUnsupported, tmnxSfmlcPortDDMFailure,  
 tmnxSfmlcPortDDMClear, tmnxSfmlcPortDegraded, tmnxSfmlcPortDegradedClear,  
 tmnxCardResMacFdbHighUsgSet, tmnxCardResMacFdbHighUsgClr,  
 tmnxPowerShelfInputPwrModeSwitch, tmnxPowerShelfCommsDown,  
 tmnxPowerShelfCommsUp, tmnxPowerShelfOutputStatusSwitch,  
 tmnxPowerShelfOutputStatusDown, tmnxPowerShelfOutputStatusUp

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger

Context **configure** **log** **event-trigger** **chassis** **event** *keyword* **admin-state** *keyword*

Tree **admin-state**

Options enable, disable

Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger chassis event keyword</a> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger chassis event keyword</a> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger chassis event keyword</a> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger chassis event keyword</a> <a href="#">entry</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## debounce

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger chassis event keyword entry number</a> <b>debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

## time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger chassis event keyword entry number</a> <b>debounce time</b> <i>number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

## value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger chassis event keyword entry number</a> <b>debounce value</b> <i>number</i>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger chassis event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger chassis event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1
Platforms	All

**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger chassis event keyword entry number handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler string</a>
Introduced	16.0.R1
Platforms	All

**debug** [event keyword](#)

Synopsis	Enter the <b>debug</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger debug event keyword</a>
Tree	<a href="#">debug</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger debug event keyword</a>
Tree	<a href="#">debug</a>
Options	traceEvent
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger debug event keyword admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger debug event keyword description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry [id] number**

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger debug event keyword entry number</a>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger debug event keyword entry number</b>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger debug event keyword entry number admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger debug event keyword entry number debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger debug event keyword entry number debounce time number</b>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds

Introduced 16.0.R1  
Platforms All

### **value** *number*

Synopsis Occurrences in time interval to trigger EHS response  
Context **configure** [log event-trigger debug event keyword entry number debounce value number](#)  
Tree [value](#)  
Range 2 to 15  
Introduced 16.0.R1  
Platforms All

### **description** *string*

Synopsis Text description  
Context **configure** [log event-trigger debug event keyword entry number description string](#)  
Tree [description](#)  
String Length 1 to 80  
Introduced 16.0.R1  
Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
Context **configure** [log event-trigger debug event keyword entry number filter reference](#)  
Tree [filter](#)  
Reference **configure** [log filter string](#)  
Introduced 16.0.R1  
Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
Context **configure** [log event-trigger debug event keyword entry number handler reference](#)  
Tree [handler](#)



Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **dhcp event** *keyword*

Synopsis	Enter the <b>dhcp</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger dhcp event</a> <i>keyword</i>
Tree	<a href="#">dhcp</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger dhcp event</a> <i>keyword</i>
Tree	<a href="#">dhcp</a>
Options	svcDHCPLeaseStateRestoreProblem, sapDHCPLeaseEntriesExceeded, sapDHCPLeaseStateOverride, sapDHCPSuspiciousPcktRcvd, sapDHCPLeaseStatePopulateErr, sdpBindDHCPLeaseEntriesExceeded, sdpBindDHCPLeaseStateOverride, sdpBindDHCPSuspiciousPcktRcvd, sdpBindDHCPLeaseStatePopulateErr, tmnxVRtrDHCPSuspiciousPcktRcvd, sapStaticHostDynMacConflict, sapDHCPProxyServerError, tmnxVRtrDHCPIfLseStatesExceeded, sdpBindDHCPProxyServerError, tmnxVRtrDHCP6RelayLseStExceeded, tmnxVRtrDHCP6ServerLseStExceeded, tmnxVRtrDHCP6LseStateOverride, tmnxVRtrDHCP6RelayReplyStripUni, tmnxVRtrDHCP6IllegalClientAddr, tmnxVRtrDHCP6AssignedIllegSubnet, tmnxVRtrDHCP6ClientMacUnresolved, sapDHCPLeaseStateMobilityError, sdpBindDHCPLeaseStateMobilityErr, svcDHCPMiscellaneousProblem, sapStatHost6DynMacConflict
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger dhcp event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>

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Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger dhcp event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [[id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger dhcp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger dhcp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
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Context	<b>configure</b> <a href="#">log event-trigger dhcp event keyword entry number admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## debounce

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger dhcp event keyword entry number debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

## time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger dhcp event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

## value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger dhcp event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger dhcp event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger dhcp event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1
Platforms	All

**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger dhcp event keyword entry number handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler string</a>
Introduced	16.0.R1
Platforms	All

**dhcps** [event](#) *keyword*

Synopsis	Enter the <b>dhcps</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger dhcps event keyword</a>
Tree	<a href="#">dhcps</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger dhcps event keyword</a>
Tree	<a href="#">dhcps</a>
Options	tmnxDhcpSvrSubnetMinFreeExc, tmnxDhcpSvrHostConflict, tmnxDhcpSvrPoolUnknown, tmnxDhcpSvrLeaseNotOwner, tmnxDhcpSvrDeclineStaticAddr, tmnxDhcpSvrMsgTooLong, tmnxDhcpsFoStateChange, tmnxDhcpsFoLeaseUpdateFailed, tmnxDhcpSvrUserDbUnknown, tmnxDhcpSvrMaxLeasesReached, tmnxDhcpSvrNoSubnetFixAddr, tmnxDhcpSvrLeaseDefaultTimers, tmnxDhcpSvrPoolMinFreeExc, tmnxDhcpSvrSubnetDepleted, tmnxDhcpSvrPoolDepleted, tmnxDhcpSvrIntLseConflict, tmnxDhcpSvrLeaseModify, tmnxDhcpSvrLeaseCreate, tmnxDhcpSvrLeaseDelete, tmnxLudbDhcpGroupIfTooLong, tmnxLudbPppoeGroupIfTooLong, tmnxDhcpSvrNoContFreeBlocks, tmnxDhcpsPoolFoStateChange, tmnxDhcpsPoolFoLeaseUpdateFailed, tmnxDhcpSvrPIThTooLowV6, tmnxDhcpSvrPIThDepletedV6, tmnxDhcpSvrPfxThTooLowV6, tmnxDhcpSvrPfxThDepletedV6, tmnxDhcpsLeaseOfferedExpired, tmnxDhcpsAddrAllocationFailure, tmnxDhcpsPacketDropped
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger dhcps event keyword admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger dhcps event keyword description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **entry** [id] *number*

Synopsis Enter the **entry** list instance

Context **configure log event-trigger dhcp event keyword entry number**

Tree [entry](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[id]** *number*

Synopsis ID of the EHS event trigger entry

Context **configure log event-trigger dhcp event keyword entry number**

Tree [entry](#)

Range 1 to 1500

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry

Context **configure log event-trigger dhcp event keyword entry number admin-state keyword**

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **debounce**

Synopsis Enter the **debounce** context

Context **configure log event-trigger dhcp event keyword entry number debounce**

Tree [debounce](#)

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger dhcp event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger dhcp event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger dhcp event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger dhcp event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">filter reference</a>

Tree	<a href="#">filter</a>
Reference	<b>configure log filter</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure log event-trigger dhcps event</b> <i>keyword entry number handler reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure log event-handling handler</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **diameter event** *keyword*

Synopsis	Enter the <b>diameter</b> list instance
Context	<b>configure log event-trigger diameter event</b> <i>keyword</i>
Tree	<a href="#">diameter</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger diameter event</b> <i>keyword</i>
Tree	<a href="#">diameter</a>
Options	tmnxDiamPolicyPeerStateChange, tmnxDiamAppSessionFailure, tmnxDiamSessionEvent, tmnxDiamPpPrxMcLocStateChanged, tmnxDiamMessageDropped, tmnxDiamNdPeerStatActiveChanged
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All



**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger diameter event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger diameter event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger diameter event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger diameter event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger diameter event keyword entry number admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger diameter event keyword entry number debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger diameter event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value** *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger diameter event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15

Introduced 16.0.R1  
Platforms All

### **description** *string*

Synopsis Text description  
Context **configure** [log event-trigger](#) [diameter event](#) *keyword* [entry](#) *number* [description](#) *string*  
Tree [description](#)  
String Length 1 to 80  
Introduced 16.0.R1  
Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
Context **configure** [log event-trigger](#) [diameter event](#) *keyword* [entry](#) *number* [filter](#) *reference*  
Tree [filter](#)  
Reference **configure** [log filter](#) *string*  
Introduced 16.0.R1  
Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
Context **configure** [log event-trigger](#) [diameter event](#) *keyword* [entry](#) *number* [handler](#) *reference*  
Tree [handler](#)  
Reference **configure** [log event-handling](#) [handler](#) *string*  
Introduced 16.0.R1  
Platforms All

### **dynsvc** [event](#) *keyword*

Synopsis Enter the **dynsvc** list instance  
Context **configure** [log event-trigger](#) [dynsvc event](#) *keyword*  
Tree [dynsvc](#)

Introduced 16.0.R1  
Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
Context **configure log event-trigger dynsvc event keyword**  
Tree [dynsvc](#)  
Options tmnxDynSvcSapFailed  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger  
Context **configure log event-trigger dynsvc event keyword admin-state keyword**  
Tree [admin-state](#)  
Options enable, disable  
Default disable  
Introduced 16.0.R1  
Platforms All

### **description** *string*

Synopsis Text description  
Context **configure log event-trigger dynsvc event keyword description string**  
Tree [description](#)  
String Length 1 to 80  
Introduced 16.0.R1  
Platforms All

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance

Context	<b>configure log event-trigger dynsvc event keyword entry number</b>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger dynsvc event keyword entry number</b>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger dynsvc event keyword entry number admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger dynsvc event keyword entry number debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">dynsvc event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a> <a href="#">time</a> <i>number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">dynsvc event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a> <a href="#">value</a> <i>number</i>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">dynsvc event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">dynsvc event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">filter</a> <i>reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	16.0.R1

Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger dynsvc event keyword entry number handler reference](#)  
 Tree [handler](#)  
 Reference **configure** [log event-handling handler string](#)  
 Introduced 16.0.R1  
 Platforms All

### **efm-oam event keyword**

Synopsis Enter the **efm-oam** list instance  
 Context **configure** [log event-trigger efm-oam event keyword](#)  
 Tree [efm-oam](#)  
 Introduced 16.0.R1  
 Platforms All

### **event keyword**

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure** [log event-trigger efm-oam event keyword](#)  
 Tree [efm-oam](#)  
 Options tmnxDot3OamPeerChanged, tmnxDot3OamLoopDetected, tmnxDot3OamLoopCleared, dot3OamThresholdEvent, dot3OamNonThresholdEvent, tmnxDot3OamSdThresholdEvent, tmnxDot3OamThresholdEventClr, tmnxDot3OamNonThresholdEventClr  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state keyword**

Synopsis Administrative state of the EHS event trigger  
 Context **configure** [log event-trigger efm-oam event keyword admin-state keyword](#)

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger efm-oam event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger efm-oam event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

### **[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger efm-oam event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All



**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger efm-oam event</a> <i>keyword</i> <a href="#">entry number</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger efm-oam event</a> <i>keyword</i> <a href="#">entry number</a> <b>debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger efm-oam event</a> <i>keyword</i> <a href="#">entry number</a> <b>debounce</b> <i>time number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value** *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger efm-oam event</a> <i>keyword</i> <a href="#">entry number</a> <b>debounce</b> <i>value number</i>
Tree	<a href="#">value</a>
Range	2 to 15

Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger efm-oam event](#) *keyword* [entry](#) *number* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
 Context **configure** [log event-trigger efm-oam event](#) *keyword* [entry](#) *number* [filter](#) *reference*  
 Tree [filter](#)  
 Reference **configure** [log filter](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger efm-oam event](#) *keyword* [entry](#) *number* [handler](#) *reference*  
 Tree [handler](#)  
 Reference **configure** [log event-handling](#) [handler](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### **elmi** [event](#) *keyword*

Synopsis Enter the **elmi** list instance  
 Context **configure** [log event-trigger elmi event](#) *keyword*  
 Tree [elmi](#)

Introduced 16.0.R1  
Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
Context **configure** [log event-trigger elmi event](#) *keyword*  
Tree [elmi](#)  
Options tmnxElmilfStatusChangeEvent, tmnxElmiEVCStatusChangeEvent  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger  
Context **configure** [log event-trigger elmi event](#) *keyword* [admin-state](#) *keyword*  
Tree [admin-state](#)  
Options enable, disable  
Default disable  
Introduced 16.0.R1  
Platforms All

### **description** *string*

Synopsis Text description  
Context **configure** [log event-trigger elmi event](#) *keyword* [description](#) *string*  
Tree [description](#)  
String Length 1 to 80  
Introduced 16.0.R1  
Platforms All

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance

Context	<b>configure log event-trigger elmi event</b> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger elmi event</b> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger elmi event</b> <i>keyword entry number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger elmi event</b> <i>keyword entry number debounce</i>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

### **time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger elmi event</a> <i>keyword entry number debounce time number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

### **value** *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger elmi event</a> <i>keyword entry number debounce value number</i>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger elmi event</a> <i>keyword entry number description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger elmi event</a> <i>keyword entry number filter reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1
Platforms	All

**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger elmi event</a> <i>keyword entry number handler reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**ering event** *keyword*

Synopsis	Enter the <b>ering</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger ering event</a> <i>keyword</i>
Tree	<a href="#">ering</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger ering event</a> <i>keyword</i>
Tree	<a href="#">ering</a>
Options	tmnxEthRingPathFwdStateChange, tmnxEthRingApsPrvsnRaiseAlarm, tmnxEthRingApsPrvsnClearAlarm
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger ering event</a> <i>keyword admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable

Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger](#) [ering event](#) *keyword* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance  
 Context **configure** [log event-trigger](#) [ering event](#) *keyword* [entry](#) *number*  
 Tree [entry](#)  
 Introduced 16.0.R1  
 Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure** [log event-trigger](#) [ering event](#) *keyword* [entry](#) *number*  
 Tree [entry](#)  
 Range 1 to 1500  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry  
 Context **configure** [log event-trigger](#) [ering event](#) *keyword* [entry](#) *number* [admin-state](#) *keyword*  
 Tree [admin-state](#)

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Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## **debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger ering event keyword entry number debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

## **time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger ering event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

## **value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger ering event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

## **description string**

Synopsis	Text description
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Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">ering event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">ering event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">filter</a> <i>reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">ering event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">handler</a> <i>reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling</a> <a href="#">handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**eth-cfm** [event](#) *keyword*

Synopsis	Enter the <b>eth-cfm</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">eth-cfm event</a> <i>keyword</i>
Tree	<a href="#">eth-cfm</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
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Context	<b>configure log event-trigger eth-cfm event</b> <i>keyword</i>
Tree	<a href="#">eth-cfm</a>
Options	dot1agCfmFaultAlarm, tmnxDot1agCfmMepLbmTestComplete, tmnxDot1agCfmMepLtmTestComplete, tmnxDot1agCfmMepEthTestComplete, tmnxDot1agCfmMepDMTestComplete, tmnxDot1agCfmMepAisStateChanged, tmnxDot1agCfmMipEvaluation, tmnxDot1agCfmMepSLMTestComplete, tmnxDot1agCfmMepCsfStateChanged, tmnxDot1agCfmMepFcltyFaultRaise, tmnxDot1agCfmMepFcltyFaultClear
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure log event-trigger eth-cfm event</b> <i>keyword admin-state</i> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure log event-trigger eth-cfm event</b> <i>keyword description</i> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure log event-trigger eth-cfm event</b> <i>keyword entry</i> <i>number</i>
Tree	<a href="#">entry</a>

Introduced 16.0.R1  
 Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure log event-trigger eth-cfm event keyword entry number**  
 Tree [entry](#)  
 Range 1 to 1500  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry  
 Context **configure log event-trigger eth-cfm event keyword entry number admin-state keyword**  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 16.0.R1  
 Platforms All

### **debounce**

Synopsis Enter the **debounce** context  
 Context **configure log event-trigger eth-cfm event keyword entry number debounce**  
 Tree [debounce](#)  
 Introduced 16.0.R1  
 Platforms All

### **time** *number*

Synopsis Time window for events for EHS to trigger a response  
 Context **configure log event-trigger eth-cfm event keyword entry number debounce time number**

Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger eth-cfm event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger eth-cfm event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger eth-cfm event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1
Platforms	All

**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger eth-cfm event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**etun** [event](#) *keyword*

Synopsis	Enter the <b>etun</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger etun event</a> <i>keyword</i>
Tree	<a href="#">etun</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger etun event</a> <i>keyword</i>
Tree	<a href="#">etun</a>
Options	tmnxEthTunnelApsCfgRaiseAlarm, tmnxEthTunnelApsCfgClearAlarm, tmnxEthTunnelApsPrvsnRaiseAlarm, tmnxEthTunnelApsPrvsnClearAlarm, tmnxEthTunnelApsNoRspRaiseAlarm, tmnxEthTunnelApsNoRspClearAlarm, tmnxEthTunnelApsSwitchoverAlarm
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger etun event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable

Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger etun event](#) *keyword* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance  
 Context **configure** [log event-trigger etun event](#) *keyword* [entry](#) *number*  
 Tree [entry](#)  
 Introduced 16.0.R1  
 Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure** [log event-trigger etun event](#) *keyword* [entry](#) *number*  
 Tree [entry](#)  
 Range 1 to 1500  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry  
 Context **configure** [log event-trigger etun event](#) *keyword* [entry](#) *number* [admin-state](#) *keyword*  
 Tree [admin-state](#)

Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## **debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger etun event keyword entry number</a> <a href="#">debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

## **time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger etun event keyword entry number</a> <a href="#">debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

## **value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger etun event keyword entry number</a> <a href="#">debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

## **description string**

Synopsis	Text description
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Context	<b>configure</b> <a href="#">log event-trigger etun event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger etun event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1
Platforms	All

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger etun event keyword entry number handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler string</a>
Introduced	16.0.R1
Platforms	All

**filter event keyword**

Synopsis	Enter the <b>filter</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger filter event keyword</a>
Tree	<a href="#">filter</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
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Context	<b>configure log event-trigger filter event</b> <i>keyword</i>
Tree	<a href="#">filter</a>
Options	tIPFilterPBRPacketsDrop, tFilterSubInsSpaceAlarmRaised, tFilterSubInsSpaceAlarmCleared, tFilterSubInsFltrEntryDropped, tFilterBgpFlowSpecProblem, tFilterApplyPathProblem, tFilterRadSharedFltrAlarmRaised, tFilterRadSharedFltrAlarmClear, tFilterEmbeddingOperStateChange, tFilterEmbedOpenflowOperStateChg, tFilterOpenflowRequestRejected, tFilterEmbedFlowspecOperStateChg, tFilterEmbedVsdOperStateChg, tFilterRPActiveDestChangeEvent
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure log event-trigger filter event</b> <i>keyword admin-state</i> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure log event-trigger filter event</b> <i>keyword description</i> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure log event-trigger filter event</b> <i>keyword entry</i> <i>number</i>
Tree	<a href="#">entry</a>

Introduced 16.0.R1  
 Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure** [log](#) [event-trigger](#) [filter](#) [event](#) *keyword* [entry](#) *number*  
 Tree [entry](#)  
 Range 1 to 1500  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry  
 Context **configure** [log](#) [event-trigger](#) [filter](#) [event](#) *keyword* [entry](#) *number* **admin-state** *keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 16.0.R1  
 Platforms All

### **debounce**

Synopsis Enter the **debounce** context  
 Context **configure** [log](#) [event-trigger](#) [filter](#) [event](#) *keyword* [entry](#) *number* **debounce**  
 Tree [debounce](#)  
 Introduced 16.0.R1  
 Platforms All

### **time** *number*

Synopsis Time window for events for EHS to trigger a response  
 Context **configure** [log](#) [event-trigger](#) [filter](#) [event](#) *keyword* [entry](#) *number* **debounce** [time](#) *number*

Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger filter event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger filter event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger filter event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1
Platforms	All

**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger filter event keyword entry number handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler string</a>
Introduced	16.0.R1
Platforms	All

**gmpls event** *keyword*

Synopsis	Enter the <b>gmpls</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger gmpls event keyword</a>
Tree	<a href="#">gmpls</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger gmpls event keyword</a>
Tree	<a href="#">gmpls</a>
Options	vRtrGmplsLspPathStateChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger gmpls event keyword admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1

Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger gmpls event](#) *keyword* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance  
 Context **configure** [log event-trigger gmpls event](#) *keyword* [entry](#) *number*  
 Tree [entry](#)  
 Introduced 16.0.R1  
 Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure** [log event-trigger gmpls event](#) *keyword* [entry](#) *number*  
 Tree [entry](#)  
 Range 1 to 1500  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry  
 Context **configure** [log event-trigger gmpls event](#) *keyword* [entry](#) *number* [admin-state](#) *keyword*  
 Tree [admin-state](#)  
 Options enable, disable

Default	enable
Introduced	16.0.R1
Platforms	All

## **debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger gmpls event keyword entry number debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

## **time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger gmpls event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

## **value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger gmpls event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

## **description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger gmpls event keyword entry number description string</a>

Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">gmpls event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">filter</a> <i>reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">gmpls event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">handler</a> <i>reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling</a> <a href="#">handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **gsmp event** *keyword*

Synopsis	Enter the <b>gsmp</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">gsmp event</a> <i>keyword</i>
Tree	<a href="#">gsmp</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">gsmp event</a> <i>keyword</i>

Tree	<a href="#">gsmp</a>
Options	tmnxAncpIngRateMonitorEvent, tmnxAncpIngRateMonitorEventL, tmnxAncpEgrRateMonitorEvent, tmnxAncpEgrRateMonitorEventL, tmnxAncpShcvDisabledEvent, tmnxAncpShcvDisabledEventL, tmnxAncpSesRejected, tmnxAncpStringRejected
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger gsmp event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger gsmp event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger gsmp event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All



**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger gsmp event</b> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger gsmp event</b> <i>keyword entry number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger gsmp event</b> <i>keyword entry number debounce</i>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger gsmp event</b> <i>keyword entry number debounce time number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds

Introduced 16.0.R1  
 Platforms All

### **value** *number*

Synopsis Occurrences in time interval to trigger EHS response  
 Context **configure** [log event-trigger gsmp event](#) *keyword* [entry](#) *number* [debounce](#) [value](#) *number*  
 Tree [value](#)  
 Range 2 to 15  
 Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger gsmp event](#) *keyword* [entry](#) *number* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
 Context **configure** [log event-trigger gsmp event](#) *keyword* [entry](#) *number* [filter](#) *reference*  
 Tree [filter](#)  
 Reference **configure** [log filter](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger gsmp event](#) *keyword* [entry](#) *number* [handler](#) *reference*  
 Tree [handler](#)

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Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **igh event** *keyword*

Synopsis	Enter the <b>igh</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger igh event</a> <i>keyword</i>
Tree	<a href="#">igh</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger igh event</a> <i>keyword</i>
Tree	<a href="#">igh</a>
Options	tmnxIfGroupHandlerProtoOprChange, tmnxIfGroupHdlrMbrProtoOprChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger igh event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
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Context	<b>configure log event-trigger igh event</b> <i>keyword description string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry [id] number**

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure log event-trigger igh event</b> <i>keyword entry number</i>
Tree	<b>entry</b>
Introduced	16.0.R1
Platforms	All

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger igh event</b> <i>keyword entry number</i>
Tree	<b>entry</b>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger igh event</b> <i>keyword entry number admin-state keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## debounce

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger igh event keyword entry number debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

## time number

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger igh event keyword entry number debounce time number</b>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

## value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure log event-trigger igh event keyword entry number debounce value number</b>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

## description string

Synopsis	Text description
Context	<b>configure log event-trigger igh event keyword entry number description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger igh event</a> <i>keyword</i> <a href="#">entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger igh event</a> <i>keyword</i> <a href="#">entry number handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**igmp event keyword**

Synopsis	Enter the <b>igmp</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger igmp event</a> <i>keyword</i>
Tree	<a href="#">igmp</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger igmp event</a> <i>keyword</i>
Tree	<a href="#">igmp</a>
Options	vRtrIgmplfRxQueryVerMismatch, vRtrIgmplfCModeRxQueryMismatch, vRtrIgmplfMaxGrpsLimitExceeded, vRtrIgmplfMcacPlyDropped, vRtrIgmplfHostInstantiationFail, vRtrIgmplfHostMaxGrpsLimitExceeded, vRtrIgmplfHostMcacPlyDropped, vRtrIgmplfHostCModeRxQueryMismatch, vRtrIgmplfHostRxQueryVerMismatch, vRtrIgmplfHostMaxSrcsLimitExceeded, vRtrIgmplfMaxSrcsLimitExceeded, vRtrIgmplfGrpIfSapMaxGrpsLimExceed,

vRtrIgmPGrpIfSapMaxSrcsLimExceed, vRtrIgmPGrpIfSapMcacPlyDropped, vRtrIgmPGrpIfSapCModeRxQueryMism, vRtrIgmPGrpIfSapRxQueryVerMism, vRtrIgmPHostMaxGrpSrcsLimitExcd, vRtrIgmPMaxGrpSrcsLimitExceeded, vRtrIgmPGrpIfSapMaxGrpSrcLimExcd, vRtrIgmPHostQryIntervalConflict, vRtrIgmPNotifyNumOfIPseclfLowWm, vRtrIgmPNotifyNumOfIPseclfHighWm, vRtrIgmPNotifyNumOfIPseclfMaxRch, vRtrIgmPSlaProflnstMcacPlyDrop

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger igmp event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger igmp event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger igmp event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger igmp event keyword entry number</b>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger igmp event keyword entry number admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger igmp event keyword entry number debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger igmp event keyword entry number debounce time number</b>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds



Introduced 16.0.R1  
 Platforms All

### **value** *number*

Synopsis Occurrences in time interval to trigger EHS response  
 Context **configure** [log event-trigger igmp event](#) *keyword* [entry](#) *number* [debounce](#) *value* [number](#)  
 Tree [value](#)  
 Range 2 to 15  
 Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger igmp event](#) *keyword* [entry](#) *number* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
 Context **configure** [log event-trigger igmp event](#) *keyword* [entry](#) *number* [filter](#) *reference*  
 Tree [filter](#)  
 Reference **configure** [log filter](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger igmp event](#) *keyword* [entry](#) *number* [handler](#) *reference*  
 Tree [handler](#)

Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **igmp-snooping** [event](#) *keyword*

Synopsis	Enter the <b>igmp-snooping</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger igmp-snooping event</a> <i>keyword</i>
Tree	<a href="#">igmp-snooping</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger igmp-snooping event</a> <i>keyword</i>
Tree	<a href="#">igmp-snooping</a>
Options	sapIgmPsnPgGrpLimitExceeded, sapIgmPsnPgMcacPlcyDropped, sdpBndIgmPsnPgGrpLimitExceeded, sdpBndIgmPsnPgMcacPlcyDropped, sapIgmPsnPgMcsFailure, sapIgmPsnPgSrcLimitExceeded, sdpBndIgmPsnPgSrcLimitExceeded, sdpBndIgmPsnPgGrpSrcLimitExceed, sapIgmPsnPgGrpSrcLimitExceeded, eMplslgmPsnPgMfibFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger igmp-snooping event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger igmp-snooping event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [[id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger igmp-snooping event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger igmp-snooping event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger igmp-snooping event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable

Introduced	16.0.R1
Platforms	All

## debounce

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger igmp-snooping event</a> <i>keyword</i> <a href="#">entry number</a> <b>debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

## time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger igmp-snooping event</a> <i>keyword</i> <a href="#">entry number</a> <b>debounce</b> <i>time number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

## value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger igmp-snooping event</a> <i>keyword</i> <a href="#">entry number</a> <b>debounce</b> <i>value number</i>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

## description *string*

Synopsis	Text description
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Context	<b>configure</b> <a href="#">log event-trigger igmp-snooping event</a> <i>keyword entry number description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger igmp-snooping event</a> <i>keyword entry number filter reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger igmp-snooping event</a> <i>keyword entry number handler reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **ip event** *keyword*

Synopsis	Enter the <b>ip</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger ip event</a> <i>keyword</i>
Tree	<a href="#">ip</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">ip event</a> <i>keyword</i>
Tree	<a href="#">ip</a>
Options	clearRTMError, ipEtherBroadcast, ipDuplicateAddress, ipArpInfoOverwritten, fibAddFailed, qosNetworkPolicyMallocFailed, ipArpBadInterface, ipArpDuplicateIpAddress, ipArpDuplicateMacAddress, ipAnyDuplicateAddress, labelIndexAllocFailed
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">ip event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">ip event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry [id] number**

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">ip event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>

Introduced 16.0.R1  
 Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure** [log event-trigger ip event](#) *keyword entry number*  
 Tree [entry](#)  
 Range 1 to 1500  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry  
 Context **configure** [log event-trigger ip event](#) *keyword entry number* [admin-state](#) *keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 16.0.R1  
 Platforms All

### **debounce**

Synopsis Enter the **debounce** context  
 Context **configure** [log event-trigger ip event](#) *keyword entry number* [debounce](#)  
 Tree [debounce](#)  
 Introduced 16.0.R1  
 Platforms All

### **time** *number*

Synopsis Time window for events for EHS to trigger a response  
 Context **configure** [log event-trigger ip event](#) *keyword entry number* [debounce time](#) *number*

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Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger ip event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger ip event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger ip event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1
Platforms	All



**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger ip event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">handler</a> <i>reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**ipsec event** *keyword*

Synopsis	Enter the <b>ipsec</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger ipsec event</a> <i>keyword</i>
Tree	<a href="#">ipsec</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger ipsec event</a> <i>keyword</i>
Tree	<a href="#">ipsec</a>
Options	tIPsecRUTnIFailToCreate, tIPsecRUSAFailToAddRoute, tIPsecBfdIntfSessStateChgd, tIPsecRadAcctPlyFailure, tIPsecTrustAnchorPrfOprChg, tIPsecTunnelEncapIpMtuTooSmall, tIPsecRuTnIFailToCreate, tIPsecRuTnIFailToCreate, tmnxSecNotifCmptdCertHashChngd, tmnxSecNotifCmptdCertChnChngd, tmnxSecNotifSendChnNotInCmptChn, tmnxIPsecTunnelOperStateChange, tmnxIPsecGWOperStateChange, tIPsecRUTnIRemoved, tIPsecTunnelProtocolFailed
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger ipsec event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>

Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger ipsec event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger ipsec event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger ipsec event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
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Context	<b>configure</b> <a href="#">log event-trigger ipsec event</a> <i>keyword entry number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## debounce

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger ipsec event</a> <i>keyword entry number</i> <a href="#">debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger ipsec event</a> <i>keyword entry number</i> <a href="#">debounce</a> <a href="#">time</a> <i>number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger ipsec event</a> <i>keyword entry number</i> <a href="#">debounce</a> <a href="#">value</a> <i>number</i>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger ipsec event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger ipsec event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">filter</a> <i>reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger ipsec event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">handler</a> <i>reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**isis event keyword**

Synopsis	Enter the <b>isis</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger isis event</a> <i>keyword</i>
Tree	<a href="#">isis</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">isis event</a> <i>keyword</i>
Tree	<a href="#">isis</a>
Options	vRtrIsisSpbNbrMultAdjExists, vRtrIsisSpbNbrMultAdjExistsClear, vRtrSpbEctFidCfgChg, tmnxIsisDatabaseOverload, tmnxIsisManualAddressDrops, tmnxIsisCorruptedLSPDetected, tmnxIsisMaxSeqExceedAttempt, tmnxIsisIDLenMismatch, tmnxIsisMaxAreaAdrsMismatch, tmnxIsisOwnLSPPurge, tmnxIsisSequenceNumberSkip, tmnxIsisAutTypeFail, tmnxIsisAuthFail, tmnxIsisVersionSkew, tmnxIsisAreaMismatch, tmnxIsisRejectedAdjacency, tmnxIsisLSPTooLargeToPropagate, tmnxIsisOrigLSPBufSizeMismatch, tmnxIsisProtoSuppMismatch, tmnxIsisAdjacencyChange, tmnxIsisCirclDExhausted, tmnxIsisAdjRestartStatusChange, tmnxIsisLdpSyncTimerStarted, tmnxIsisLdpSyncExit, tmnxIsisExportLimitReached, tmnxIsisExportLimitWarning, tmnxIsisRoutesExpLmtDropped, tmnxIsisFailureDisabled, tmnxIsisSidError, tmnxIsisSidNotInLabelRange, tmnxIsisRejectedAdjacencySid, tmnxIsisLSPPurge, tmnxIsisPfxLimitOverloadWarning, tmnxIsisAdjBfdSessionSetupFail, tmnxIsisSrgbBadLabelRange, tmnxIsisCircMtuTooLow, tmnxIsisRejectedAdjacencySet, tmnxIsisCorruptRemainingLifetime, tmnxIsisSidStatsIndexAlloc, tmnxIsisFaOperParticipationDown, tmnxIsisRejectedEndXSid, tmnxIsisRejectedPglD, tmnxIsisSrv6LocError
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">isis event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">isis event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>

String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger isis event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger isis event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger isis event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
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Context	<b>configure</b> <a href="#">log event-trigger isis event keyword entry number debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger isis event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger isis event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger isis event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger isis event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger isis event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**l2tp event keyword**

Synopsis	Enter the <b>l2tp</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger l2tp event</a> <i>keyword</i>
Tree	<a href="#">l2tp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger l2tp event</a> <i>keyword</i>
Tree	<a href="#">l2tp</a>
Options	tmnxL2tpPeerUnreachable, tmnxL2tpIsmMdaVRtrStateChange, tmnxL2tpLnsSePppSessionFailure, tmnxL2tpVappVRtrStateChange, tmnxL2tpTunnelBlacklisted, tmnxL2tpTunnelSelBlacklistFull, tmnxL2tpLnsPppNcpFailure, tmnxL2tpApFailure
Notes	This element is part of a list key.



Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger l2tp event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger l2tp event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger l2tp event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger l2tp event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>

Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger l2tp event keyword entry number admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger l2tp event keyword entry number debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger l2tp event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger l2tp event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger l2tp event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger l2tp event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger l2tp event keyword entry number handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler string</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**lag event keyword**

Synopsis	Enter the <b>lag</b> list instance
Context	<b>configure log event-trigger lag event keyword</b>
Tree	<a href="#">lag</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger lag event keyword</b>
Tree	<a href="#">lag</a>
Options	DynamicCostOn, DynamicCostOff, LagPortAddFailed, LagSubGroupSelected, LagPortAddFailureCleared, LagStateEvent, tLagMemberStateEvent, tmnxLagBfdMemStateChanged, tLagAdaptiveLoadbalancingChanged
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure log event-trigger lag event keyword admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure log event-trigger lag event keyword description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80

Introduced 16.0.R1  
 Platforms All

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance  
 Context **configure** [log event-trigger lag event](#) *keyword* [entry](#) *number*  
 Tree [entry](#)  
 Introduced 16.0.R1  
 Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure** [log event-trigger lag event](#) *keyword* [entry](#) *number*  
 Tree [entry](#)  
 Range 1 to 1500  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry  
 Context **configure** [log event-trigger lag event](#) *keyword* [entry](#) *number* [admin-state](#) *keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 16.0.R1  
 Platforms All

### **debounce**

Synopsis Enter the **debounce** context  
 Context **configure** [log event-trigger lag event](#) *keyword* [entry](#) *number* [debounce](#)

Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger lag event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger lag event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger lag event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
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Context	<b>configure log event-trigger lag event</b> <i>keyword entry number filter reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure log filter</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure log event-trigger lag event</b> <i>keyword entry number handler reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure log event-handling handler</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **ldap event** *keyword*

Synopsis	Enter the <b>ldap</b> list instance
Context	<b>configure log event-trigger ldap event</b> <i>keyword</i>
Tree	<a href="#">ldap</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger ldap event</b> <i>keyword</i>
Tree	<a href="#">ldap</a>
Options	tmnxLdapOperStateChange, tmnxLdapServerOperStateChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger ldap event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger ldap event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger ldap event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger ldap event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All



**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger ldap event keyword entry number admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger ldap event keyword entry number debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger ldap event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value** *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger ldap event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1

Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger ldap event](#) *keyword entry number description string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
 Context **configure** [log event-trigger ldap event](#) *keyword entry number filter reference*  
 Tree [filter](#)  
 Reference **configure** [log filter](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger ldap event](#) *keyword entry number handler reference*  
 Tree [handler](#)  
 Reference **configure** [log event-handling handler](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### **ldap event** *keyword*

Synopsis Enter the **ldap** list instance  
 Context **configure** [log event-trigger ldap event](#) *keyword*  
 Tree [ldap](#)  
 Introduced 16.0.R1

Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log event-trigger ldp event keyword](#)

Tree [ldp](#)

Options vRtrLdpStateChange, vRtrLdpGroupIdMismatch, vRtrLdpNgIpv4InstStateChange, vRtrLdpNgIpv6InstStateChange, vRtrLdpNgIfStateChange, vRtrLdpNgInetIfStateChange, vRtrLdpNgTargPeerStateChange, vRtrLdpNgSessionStateChange, vRtrLdpNgSessMaxFecThresChanged, vRtrLdpNgSessMaxFecLimitReached, vRtrLdpNgResourceExhaustion, vRtrLdpNgAddrFecCommMismatch

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger

Context **configure** [log event-trigger ldp event keyword admin-state keyword](#)

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms All

### **description** *string*

Synopsis Text description

Context **configure** [log event-trigger ldp event keyword description string](#)

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

**entry [id] number**

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure log event-trigger ldp event keyword entry number</b>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger ldp event keyword entry number</b>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger ldp event keyword entry number admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger ldp event keyword entry number debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger ldp event keyword entry number debounce time number</b>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure log event-trigger ldp event keyword entry number debounce value number</b>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure log event-trigger ldp event keyword entry number description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure log event-trigger ldp event keyword entry number filter reference</b>
Tree	<a href="#">filter</a>
Reference	<b>configure log filter string</b>
Introduced	16.0.R1

Platforms All

### handler reference

Synopsis Event handler for EHS event trigger entry  
 Context **configure** log event-trigger ldp event keyword entry number handler reference  
 Tree handler  
 Reference **configure** log event-handling handler string  
 Introduced 16.0.R1  
 Platforms All

### li event keyword

Synopsis Enter the **li** list instance  
 Context **configure** log event-trigger li event keyword  
 Tree li  
 Introduced 16.0.R1  
 Platforms All

### event keyword

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure** log event-trigger li event keyword  
 Tree li  
 Options sbiBootLiConfig, sourceEnabled, sourceDisabled, destinationEnabled, destinationDisabled, sourceSapChange, sourceSubscriberChange, tMirrorSourceIPFtrChangeReject, tMirrorSourceMacFtrChangeReject, tMirrorSourceFilterAssignReject, tMirrorDestinationChangeReject, tMirrorSourceFilterOverruled, tMirrorSourceFilterAssignWarn, tMirrorFilterAssignToSapWarn, tMirrorFilterAssignToSdpWarn, tMirrorFilterAssignToIrfWarn, tMirrorSourceLiFilterChanged, tMirrorSourceLiSubProblem, tMirrorSourceIPv6FtrChangeRej, tMirrorLiNatLsnSubOperStateCh, tMirrorLiNatL2awSubOperStateCh, tMirrorLiNat64SubOperStateCh, tMirrorLiX2Alarm, tFtrLiRsvdBlockRangeChangeEvent, tMirrorLiSrcPortLicInvalid, tMirrorLiXIfLicenseInvalid, cli\_user\_login, cli\_user\_logout, cli\_user\_login\_failed, cli\_user\_login\_max\_attempts, ftp\_user\_login, ftp\_user\_logout, ftp\_user\_login\_failed, ftp\_user\_login\_max\_attempts, ssh\_user\_login, ssh\_user\_logout, ssh\_user\_login\_failed, ssh\_user\_login\_max\_attempts, cli\_user\_io, snmp\_user\_set, cli\_config\_io, cli\_unauth\_user\_io, cli\_unauth\_config\_io, grpc\_user\_login, grpc\_user\_logout, grpc\_user\_login\_failed, grpc\_user\_login\_max\_attempts,

host\_snmp\_attempts, radiusFailed, netconf\_user\_login, netconf\_user\_logout, netconf\_user\_login\_failed, netconf\_user\_login\_max\_attempts, mdSaveCommitHistoryFailed, sbiBootMdReadCommitHistoryFailed, ssiSaveConfigSucceeded, ssiSaveConfigFailed, tmnxConfigModify, tmnxConfigCreate, tmnxConfigDelete, tmnxStateChange, mdLiConfigChange, ssiSyncConfigOK, ssiSyncConfigFailed, md\_cli\_io, md\_cli\_unauth\_io, tmnxClear, netconf\_auth, netconf\_unauth, grpc\_auth, grpc\_unauth

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger

Context **configure** [log event-trigger li event keyword admin-state keyword](#)

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms All

### **description** *string*

Synopsis Text description

Context **configure** [log event-trigger li event keyword description string](#)

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance

Context **configure** [log event-trigger li event keyword entry number](#)

Tree [entry](#)

Introduced 16.0.R1

Platforms All

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger li event</b> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger li event</b> <i>keyword entry number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger li event</b> <i>keyword entry number debounce</i>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger li event</b> <i>keyword entry number debounce time number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds



Introduced 16.0.R1  
Platforms All

### **value** *number*

Synopsis Occurrences in time interval to trigger EHS response  
Context **configure log event-trigger li event** *keyword entry number debounce value number*  
Tree [value](#)  
Range 2 to 15  
Introduced 16.0.R1  
Platforms All

### **description** *string*

Synopsis Text description  
Context **configure log event-trigger li event** *keyword entry number description string*  
Tree [description](#)  
String Length 1 to 80  
Introduced 16.0.R1  
Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
Context **configure log event-trigger li event** *keyword entry number filter reference*  
Tree [filter](#)  
Reference **configure log filter** *string*  
Introduced 16.0.R1  
Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
Context **configure log event-trigger li event** *keyword entry number handler reference*  
Tree [handler](#)

Reference	<b>configure log event-handling handler</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **lldp event** *keyword*

Synopsis	Enter the <b>lldp</b> list instance
Context	<b>configure log event-trigger lldp event</b> <i>keyword</i>
Tree	<b>lldp</b>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger lldp event</b> <i>keyword</i>
Tree	<b>lldp</b>
Options	lldpRemTablesChange, tmnxLldpRemEntryPeerAdded, tmnxLldpRemEntryPeerUpdated, tmnxLldpRemEntryPeerRemoved, tmnxLldpRemManAddrEntryAdded, tmnxLldpRemManAddrEntryRemoved
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure log event-trigger lldp event</b> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger lldp event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger lldp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger lldp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger lldp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger lldp event keyword entry number debounce</b>
Tree	<b>debounce</b>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger lldp event keyword entry number debounce time number</b>
Tree	<b>time</b>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure log event-trigger lldp event keyword entry number debounce value number</b>
Tree	<b>value</b>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure log event-trigger lldp event keyword entry number description string</b>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure log event-trigger lldp event</b> <i>keyword entry number filter reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure log filter</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure log event-trigger lldp event</b> <i>keyword entry number handler reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure log event-handling handler</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

**Imp event keyword**

Synopsis	Enter the <b>Imp</b> list instance
Context	<b>configure log event-trigger Imp event</b> <i>keyword</i>
Tree	<a href="#">Imp</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger Imp event</b> <i>keyword</i>
Tree	<a href="#">Imp</a>
Options	tmnxLmpVRtrTeLinkPropMismatch, tmnxLmpVRtrTeLinkPropMismatchClr, tmnxLmpVRtrDbLinkPropMismatch, tmnxLmpVRtrDbLinkPropMismatchClr, tmnxLmpVRtrControlChannelState, tmnxLmpVRtrTeLinkState
Notes	This element is part of a list key.

Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">Imp event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">Imp event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">Imp event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">Imp event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>

Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger lmp event keyword entry number admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger lmp event keyword entry number debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger lmp event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">Imp event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce value</a> <i>number</i>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">Imp event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">Imp event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">filter</a> <i>reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">Imp event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">handler</a> <i>reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling</a> <a href="#">handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS



**logger event keyword**

Synopsis	Enter the <b>logger</b> list instance
Context	<b>configure log event-trigger logger event keyword</b>
Tree	<a href="#">logger</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger logger event keyword</b>
Tree	<a href="#">logger</a>
Options	STARTED, tmnxLogTraceError, tmnxLogSpaceContention, tmnxLogAdminLocFailed, tmnxLogBackupLocFailed, tmnxLogFileRollover, tmnxLogFileDeleted, tmnxClear, tmnxTestEvent, tmnxLogEventThrottled, tmnxSysLogTargetProblem, tmnxLogAccountingDataLoss, tmnxStdEventsReplayed, tmnxLogOnlyEventThrottled, tmnxLogEventOverrun, tmnxLogOnlyEventOverrun
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure log event-trigger logger event keyword admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure log event-trigger logger event keyword description string</b>

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Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">logger event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

### **[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">logger event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">logger event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">logger event</a> <i>keyword</i> <a href="#">entry number</a> <b>debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">logger event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce</a> <b>time</b> <i>number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">logger event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce</a> <b>value</b> <i>number</i>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">logger event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">description</a> <b>string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure log event-trigger logger event</b> <i>keyword entry number filter reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure log filter</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure log event-trigger logger event</b> <i>keyword entry number handler reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure log event-handling handler</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

**macsec event keyword**

Synopsis	Enter the <b>macsec</b> list instance
Context	<b>configure log event-trigger macsec event</b> <i>keyword</i>
Tree	<a href="#">macsec</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger macsec event</b> <i>keyword</i>
Tree	<a href="#">macsec</a>
Options	tmnxMacsecConfiguredPortCA, tmnxMacsecUnconfiguredPortCA, tmnxMacsecEnabledPort, tmnxMacsecDisabledPort, tmnxMacsecMaxPeerLimitExceeded, tmnxMkaSessionEstablished, tmnxMkaPskRollover, tmnxMkaSessionEnded, tmnxMkaOperStateChanged, tmnxMacsecMaxPeerLimitCleared, tmnxMacsecCaCreate, tmnxMacsecSakCreate, tmnxMacsecSakInstalledRx, tmnxMacsecSakInstalledTx,

	tmnxMacsecMkaReplayAttemptDisc, tmnxMacsecDpReplayAttempt, tmnxMacsecSakDelete
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger macsec event keyword admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger macsec event keyword description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger macsec event keyword entry number</a>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

### **[id]** *number*

Synopsis	ID of the EHS event trigger entry
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Context	<b>configure</b> <a href="#">log event-trigger macsec event</a> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger macsec event</a> <i>keyword entry number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger macsec event</a> <i>keyword entry number debounce</i>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

### **time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger macsec event</a> <i>keyword entry number debounce time number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger macsec event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger macsec event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger macsec event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger macsec event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1

Platforms All

### **mc-redundancy event** *keyword*

Synopsis Enter the **mc-redundancy** list instance

Context **configure log event-trigger mc-redundancy event** *keyword*

Tree [mc-redundancy](#)

Introduced 16.0.R1

Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure log event-trigger mc-redundancy event** *keyword*

Tree [mc-redundancy](#)

Options tmnxMcRedundancyPeerStateChanged, tmnxMcRedundancyMismatchDetected, tmnxMcRedundancyMismatchResolved, tmnxMcPeerSyncStatusChanged, tmnxMcSyncClientAlarmRaised, tmnxMcSyncClientAlarmCleared, tmnxSrrpSubnetMismatch, tmnxSrrpSubnetMismatchCleared, tmnxSrrpInstanceIdMismatch, tmnxSrrpSapMismatch, tmnxSrrpSapTagMismatch, tmnxSrrpRedIfMismatch, tmnxSrrpDualMaster, tmnxMcLagInfoLagChanged, tmnxSrrpSystemIpNotSet, tmnxMcRingOperStateChanged, tmnxMcRingInbCtrlOperStateChgd, tmnxMcRingNodeLocOperStateChgd, tmnxMcSyncClockSkewRaised, tmnxMcSyncClockSkewCleared, tmnxSrrpDuplicateSubIfAddress, tmnxMcPeerRingsOperStateChanged, tmnxSrrpTrapNewMaster, tmnxSrrpBecameBackup, srrpPacketDiscarded, tmnxSrrpBfdIntfSessStateChgd, tmnxMcPeerEPBfdSessionOpen, tmnxMcPeerEPBfdSessionClose, tmnxMcPeerEPBfdSessionUp, tmnxMcPeerEPBfdSessionDown, tmnxMcPeerEPOperDown, tmnxMcPeerEPOperUp, tmnxMCEPSessionPsvModeEnabled, tmnxMCEPSessionPsvModeDisabled, tMcPeerIPsecTnlGrpMasterStateChg, tMcPeerIPsecTnlGrpProtStatusChg, tmnxMcOmcrStatFailedChanged, tmnxMcOmcrClientNumEntriesHigh, tmnxSrrpOperDownInvalidMac, tmnxSrrpOperDownInvalidMacClear, tmnxSrrpPrivRetailMismatch, tMcIPsecDomainActivityStateChg, tMcIPsecDomainProtStatusChg

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All



**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger mc-redundancy event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger mc-redundancy event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger mc-redundancy event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mc-redundancy event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mc-redundancy event keyword entry number admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger mc-redundancy event keyword entry number debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger mc-redundancy event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value** *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger mc-redundancy event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>

Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger mc-redundancy event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mc-redundancy event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1
Platforms	All

**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mc-redundancy event keyword entry number handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler string</a>
Introduced	16.0.R1
Platforms	All

**mcpath** [event keyword](#)

Synopsis	Enter the <b>mcpath</b> list instance
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Context	<b>configure log event-trigger mcpath event keyword</b>
Tree	<a href="#">mcpath</a>
Introduced	16.0.R1
Platforms	All

### **event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger mcpath event keyword</b>
Tree	<a href="#">mcpath</a>
Options	tmnxMcPathSrcGrpBlackHole, tmnxMcPathSrcGrpBlackHoleCleared, tmnxMcPathAvailBwLimitExceeded, tmnxMcPathAvailBwLimitCleared
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state keyword**

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure log event-trigger mcpath event keyword admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description string**

Synopsis	Text description
Context	<b>configure log event-trigger mcpath event keyword description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [id] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger mcpath event keyword entry number</a>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mcpath event keyword entry number</a>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mcpath event keyword entry number admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger mcpath event keyword entry number debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger mcpath event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger mcpath event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger mcpath event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mcpath event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>

Introduced 16.0.R1  
 Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger mcpath event keyword entry number handler reference](#)  
 Tree [handler](#)  
 Reference **configure** [log event-handling handler string](#)  
 Introduced 16.0.R1  
 Platforms All

### **mgmt-core** [event keyword](#)

Synopsis Enter the **mgmt-core** list instance  
 Context **configure** [log event-trigger mgmt-core event keyword](#)  
 Tree [mgmt-core](#)  
 Introduced 16.0.R1  
 Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure** [log event-trigger mgmt-core event keyword](#)  
 Tree [mgmt-core](#)  
 Options none, mdConfigChange, mdOcConfigChange, mdBofConfigChange, mdDebugConfigChange, asyncOperationStatusChange, syncOperationStatusChange  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger  
 Context **configure** [log event-trigger mgmt-core event keyword admin-state keyword](#)

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger mgmt-core event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger mgmt-core event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

### **[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mgmt-core event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All



**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mgmt-core event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger mgmt-core event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger mgmt-core event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce</a> <a href="#">time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value** *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger mgmt-core event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce</a> <a href="#">value number</a>
Tree	<a href="#">value</a>
Range	2 to 15

Introduced 16.0.R1  
Platforms All

### **description** *string*

Synopsis Text description  
Context **configure** [log event-trigger mgmt-core event](#) *keyword entry number description string*  
Tree [description](#)  
String Length 1 to 80  
Introduced 16.0.R1  
Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
Context **configure** [log event-trigger mgmt-core event](#) *keyword entry number filter reference*  
Tree [filter](#)  
Reference **configure** [log filter](#) *string*  
Introduced 16.0.R1  
Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
Context **configure** [log event-trigger mgmt-core event](#) *keyword entry number handler reference*  
Tree [handler](#)  
Reference **configure** [log event-handling handler](#) *string*  
Introduced 16.0.R1  
Platforms All

### **mirror** [event](#) *keyword*

Synopsis Enter the **mirror** list instance  
Context **configure** [log event-trigger mirror event](#) *keyword*  
Tree [mirror](#)

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Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger mirror event</a> <i>keyword</i>
Tree	<a href="#">mirror</a>
Options	sourceEnabled, sourceDisabled, destinationEnabled, destinationDisabled, sourceIpFilterChange, sourceMacFilterChange, sourceSapChange, sourceSubscriberChange, tMirrorSourceIpv6FilterChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger mirror event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger mirror event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [id] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger mirror event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mirror event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mirror event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger mirror event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger mirror event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger mirror event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger mirror event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mirror event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1

Platforms All

### handler *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger mirror event](#) *keyword* [entry number handler reference](#)  
 Tree [handler](#)  
 Reference **configure** [log event-handling handler](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### mld [event](#) *keyword*

Synopsis Enter the **mld** list instance  
 Context **configure** [log event-trigger mld event](#) *keyword*  
 Tree [mld](#)  
 Introduced 16.0.R1  
 Platforms All

### event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure** [log event-trigger mld event](#) *keyword*  
 Tree [mld](#)  
 Options vRtrMldIfRxQueryVerMismatch, vRtrMldIfCModeRxQueryMismatch, vRtrMldMaxGrpsLimitExceeded, vRtrMldMcacPclyDropped, vRtrMldHostInstantiationFail, vRtrMldHostMaxGrpsLimitExceeded, vRtrMldHostMcacPclyDropped, vRtrMldHostCModeRxQueryMismatch, vRtrMldHostRxQueryVerMismatch, vRtrMldHostMaxSrcsLimitExceeded, vRtrMldMaxSrcsLimitExceeded, vRtrMldGrpIfSapMaxGrpsLimExceed, vRtrMldGrpIfSapMaxSrcsLimExceed, vRtrMldGrpIfSapMcacPclyDropped, vRtrMldGrpIfSapCModeRxQueryMism, vRtrMldGrpIfSapRxQueryVerMism, vRtrMldHostMaxGrpSrcsLimitExcd, vRtrMldMaxGrpSrcsLimitExceeded, vRtrMldGrpIfSapMaxGrpSrcLimExcd, vRtrMldHostQryIntervalConflict, vRtrMldSlaProfInstMcacPclyDrop  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger mld event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger mld event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger mld event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mld event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry  
 Context **configure** [log event-trigger mld event keyword entry number admin-state keyword](#)  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 16.0.R1  
 Platforms All

### **debounce**

Synopsis Enter the **debounce** context  
 Context **configure** [log event-trigger mld event keyword entry number debounce](#)  
 Tree [debounce](#)  
 Introduced 16.0.R1  
 Platforms All

### **time** *number*

Synopsis Time window for events for EHS to trigger a response  
 Context **configure** [log event-trigger mld event keyword entry number debounce time number](#)  
 Tree [time](#)  
 Range 1 to 604800  
 Units seconds  
 Introduced 16.0.R1  
 Platforms All

### **value** *number*

Synopsis Occurrences in time interval to trigger EHS response  
 Context **configure** [log event-trigger mld event keyword entry number debounce value number](#)  
 Tree [value](#)



Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger mld event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mld event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">filter</a> <i>reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mld event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">handler</a> <i>reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**mld-snooping** [event](#) *keyword*

Synopsis	Enter the <b>mld-snooping</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger mld-snooping event</a> <i>keyword</i>

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Tree	<a href="#">mld-snooping</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger mld-snooping event keyword</a>
Tree	<a href="#">mld-snooping</a>
Options	sapMldSnpGGrpLimitExceeded, sdpBndMldSnpGGrpLimitExceeded, sapMldSnpGMcsFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger mld-snooping event keyword admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger mld-snooping event keyword description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [id] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger mld-snooping event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mld-snooping event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mld-snooping event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger mld-snooping event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger mld-snooping event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value** *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger mld-snooping event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger mld-snooping event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mld-snooping event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>

Introduced	16.0.R1
Platforms	All

### handler reference

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">mld-snooping event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### mpls event keyword

Synopsis	Enter the <b>mpls</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">mpls event</a> <i>keyword</i>
Tree	<a href="#">mpls</a>
Introduced	16.0.R1
Platforms	All

### event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">mpls event</a> <i>keyword</i>
Tree	<a href="#">mpls</a>
Options	<a href="#">mplsXCUp</a> , <a href="#">mplsXCDown</a> , <a href="#">mplsTunnelUp</a> , <a href="#">mplsTunnelDown</a> , <a href="#">mplsTunnelRerouted</a> , <a href="#">mplsTunnelReoptimized</a> , <a href="#">vRtrMplsStateChange</a> , <a href="#">vRtrMplsIfStateChange</a> , <a href="#">vRtrMplsLspUp</a> , <a href="#">vRtrMplsLspDown</a> , <a href="#">vRtrMplsLspPathUp</a> , <a href="#">vRtrMplsLspPathDown</a> , <a href="#">vRtrMplsLspPathRerouted</a> , <a href="#">vRtrMplsLspPathResignaled</a> , <a href="#">vRtrMplsP2mplInstanceUp</a> , <a href="#">vRtrMplsP2mplInstanceDown</a> , <a href="#">vRtrMplsS2ISubLspUp</a> , <a href="#">vRtrMplsS2ISubLspDown</a> , <a href="#">vRtrMplsS2ISubLspRerouted</a> , <a href="#">vRtrMplsS2ISubLspResignaled</a> , <a href="#">vRtrMplsLspPathSoftPreempted</a> , <a href="#">vRtrMplsLspPathLstFillReoptElig</a> , <a href="#">vRtrMplsP2mplInstanceResignaled</a> , <a href="#">vRtrMplsResignalTimerExpired</a> , <a href="#">vRtrMplsLspPathMbbStatusEvent</a> , <a href="#">vRtrMplsLspSwitchStbyFailure</a> , <a href="#">vRtrMplsLspActivePathChanged</a> , <a href="#">vRtrMplsXCBundleChange</a> , <a href="#">vRtrMplsNodeInIgpOverload</a> , <a href="#">vRtrMplsIPv6StateChange</a> , <a href="#">vRtrMplsIfIPv6StateChange</a> , <a href="#">vRtrMplsLspResourceExhaustion</a> , <a href="#">vRtrMplsLspManualSwitchFailure</a> , <a href="#">vRtrMplsLspPathManualDegStateChg</a> , <a href="#">vRtrMplsS2ISubLspPreempted</a>

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger mpls event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger mpls event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger mpls event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

### **[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mpls event</a> <i>keyword</i> <b>entry</b> <i>number</i>

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Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mpls event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger mpls event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

### **time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger mpls event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a> <a href="#">time</a> <i>number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger mpls event keyword entry number</a> <a href="#">debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger mpls event keyword entry number</a> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mpls event keyword entry number</a> <a href="#">filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1
Platforms	All

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mpls event keyword entry number</a> <a href="#">handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler string</a>
Introduced	16.0.R1
Platforms	All



**mpls-tp event keyword**

Synopsis	Enter the <b>mpls-tp</b> list instance
Context	<b>configure log event-trigger mpls-tp event keyword</b>
Tree	<a href="#">mpls-tp</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger mpls-tp event keyword</b>
Tree	<a href="#">mpls-tp</a>
Options	vRtrMplsTpLspRevertMismatchAlarm, vRtrMplsTpLspRevertMismatchClear, vRtrMplsTpLspPtTypeMismatchAlarm, vRtrMplsTpLspPtTypeMismatchClear, vRtrMplsTpLspActivePathUp, vRtrMplsTpLspActivePathChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure log event-trigger mpls-tp event keyword admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure log event-trigger mpls-tp event keyword description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80

Introduced 16.0.R1  
 Platforms All

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance  
 Context **configure** [log event-trigger mpls-tp event](#) *keyword* [entry](#) *number*  
 Tree [entry](#)  
 Introduced 16.0.R1  
 Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure** [log event-trigger mpls-tp event](#) *keyword* [entry](#) *number*  
 Tree [entry](#)  
 Range 1 to 1500  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry  
 Context **configure** [log event-trigger mpls-tp event](#) *keyword* [entry](#) *number* [admin-state](#) *keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 16.0.R1  
 Platforms All

### **debounce**

Synopsis Enter the **debounce** context  
 Context **configure** [log event-trigger mpls-tp event](#) *keyword* [entry](#) *number* [debounce](#)

Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger mpls-tp event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger mpls-tp event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger mpls-tp event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
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Context	<b>configure log event-trigger mpls-tp event keyword entry number filter reference</b>
Tree	<b>filter</b>
Reference	<b>configure log filter string</b>
Introduced	16.0.R1
Platforms	All

### handler reference

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure log event-trigger mpls-tp event keyword entry number handler reference</b>
Tree	<b>handler</b>
Reference	<b>configure log event-handling handler string</b>
Introduced	16.0.R1
Platforms	All

### msdp event keyword

Synopsis	Enter the <b>msdp</b> list instance
Context	<b>configure log event-trigger msdp event keyword</b>
Tree	<b>msdp</b>
Introduced	16.0.R1
Platforms	All

### event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger msdp event keyword</b>
Tree	<b>msdp</b>
Options	msdpEstablished, msdpBackwardTransition, tmnxMsdpNgActSrcLimExcd, tmnxMsdpNgPeerActSrcLimExcd, tmnxMsdpNgRPFFailure, tmnxMsdpNgSourceSrcActMsgsExcd, tmnxMsdpNgGroupSrcActMsgsExcd
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger msdp event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger msdp event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger msdp event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger msdp event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger msdp event</b> <i>keyword entry number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger msdp event</b> <i>keyword entry number debounce</i>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger msdp event</b> <i>keyword entry number debounce time number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value** *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure log event-trigger msdp event</b> <i>keyword entry number debounce value number</i>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1

Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure log event-trigger msdp event** *keyword entry number description string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
 Context **configure log event-trigger msdp event** *keyword entry number filter reference*  
 Tree [filter](#)  
 Reference **configure log filter** *string*  
 Introduced 16.0.R1  
 Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure log event-trigger msdp event** *keyword entry number handler reference*  
 Tree [handler](#)  
 Reference **configure log event-handling handler** *string*  
 Introduced 16.0.R1  
 Platforms All

### **nat event** *keyword*

Synopsis Enter the **nat** list instance  
 Context **configure log event-trigger nat event** *keyword*  
 Tree [nat](#)  
 Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### event keyword

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log event-trigger nat event keyword](#)

Tree [nat](#)

Options tmnxNatPIL2AwBlockUsageHigh, tmnxNatIlsaMemberSessionUsageHigh, tmnxNatPILsnMemberBlockUsageHigh, tmnxNatL2AwSublcmpPortUsageHigh, tmnxNatL2AwSubUdpPortUsageHigh, tmnxNatL2AwSubTcpPortUsageHigh, tmnxNatL2AwSubSessionUsageHigh, tmnxNatPIBlockAllocationLsn, tmnxNatPIBlockAllocationL2Aw, tmnxNatResourceProblemDetected, tmnxNatResourceProblemCause, tmnxNatPIAddrFree, tmnxNatPILsnRedActiveChanged, tmnxNatPcpSrvStateChanged, tmnxNatMdaActive, tmnxNatLsnSubBlksFree, tmnxNatDetPclyChanged, tmnxNatMdaDetectsLoadSharingErr, tmnxNatIlsaGrpOperStateChanged, tmnxNatIlsaGrplsDegraded, tmnxNatLsnSublcmpPortUsgHigh, tmnxNatLsnSubUdpPortUsgHigh, tmnxNatLsnSubTcpPortUsgHigh, tmnxNatLsnSubSessionUsgHigh, tmnxNatInAddrPrefixBlksFree, tmnxNatFwd2EntryAdded, tmnxNatDetPclyOperStateChanged, tmnxNatDetMapOperStateChanged, tmnxNatFwd2OperStateChanged, tmnxNatVrtrOutDnatOnlyRoutesHigh, tmnxNatMapRuleChange, tmnxNatMaxNbrSubsOrHostsExceeded, tmnxNatNbrSubsOrHostsBelowThrsh, tmnxNatVappActive, tmnxNatVappDetectsLoadSharingErr, tmnxNatDetPfxMapOperStateChanged, tmnxNatDetMap2OperStateChanged, tmnxNatDynamicConfigMismatch, tmnxNatPIL2AwMembrBlockUsageHigh, tmnxNatPIMemberExtBlockUsageHigh

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### admin-state keyword

Synopsis Administrative state of the EHS event trigger

Context **configure** [log event-trigger nat event keyword admin-state keyword](#)

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger nat event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger nat event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger nat event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger nat event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **debounce**

Synopsis Enter the **debounce** context

Context **configure log event-trigger nat event** *keyword* *entry number* **debounce**

Tree **debounce**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **time number**

Synopsis Time window for events for EHS to trigger a response

Context **configure log event-trigger nat event** *keyword* *entry number* **debounce time number**

Tree **time**

Range 1 to 604800

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **value number**

Synopsis Occurrences in time interval to trigger EHS response

Context **configure log event-trigger nat event** *keyword* *entry number* **debounce value number**

Tree **value**

Range 2 to 15

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **description string**

Synopsis Text description

Context **configure log event-trigger nat event** *keyword* *entry number* **description string**

Tree **description**

String Length 1 to 80

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
Context **configure** [log event-trigger nat event](#) *keyword* [entry number](#) [filter](#) *reference*  
Tree [filter](#)  
Reference **configure** [log filter](#) *string*  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
Context **configure** [log event-trigger nat event](#) *keyword* [entry number](#) [handler](#) *reference*  
Tree [handler](#)  
Reference **configure** [log event-handling handler](#) *string*  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ntp event** *keyword*

Synopsis Enter the **ntp** list instance  
Context **configure** [log event-trigger ntp event](#) *keyword*  
Tree [ntp](#)  
Introduced 16.0.R1  
Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
Context **configure** [log event-trigger ntp event](#) *keyword*  
Tree [ntp](#)

Options	tmnxNtpAuthMismatch, tmnxNtpNoServersAvail, tmnxNtpServersAvail, tmnxNtpOperChange, tmnxNtpServerChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger ntp event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger ntp event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger ntp event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger ntp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger ntp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger ntp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger ntp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a> <a href="#">time</a> <i>number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1

Platforms All

### **value** *number*

Synopsis Occurrences in time interval to trigger EHS response  
 Context **configure** [log event-trigger ntp event](#) *keyword* [entry number](#) [debounce value number](#)  
 Tree [value](#)  
 Range 2 to 15  
 Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger ntp event](#) *keyword* [entry number](#) [description string](#)  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
 Context **configure** [log event-trigger ntp event](#) *keyword* [entry number](#) [filter reference](#)  
 Tree [filter](#)  
 Reference **configure** [log filter string](#)  
 Introduced 16.0.R1  
 Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger ntp event](#) *keyword* [entry number](#) [handler reference](#)  
 Tree [handler](#)  
 Reference **configure** [log event-handling handler string](#)

Introduced 16.0.R1  
 Platforms All

### **oam event** keyword

Synopsis Enter the **oam** list instance  
 Context **configure log event-trigger oam event** keyword  
 Tree **oam**  
 Introduced 16.0.R1  
 Platforms All

### **event** keyword

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure log event-trigger oam event** keyword  
 Tree **oam**  
 Options tmnxOamPingProbeFailedV3, tmnxOamPingTestFailedV3, tmnxOamPingTestCompletedV3, tmnxAncpLoopbackTestCompleted, tmnxAncpLoopbackTestCompletedL, tmnxOamTrPathChange, tmnxOamTrTestFailed, tmnxOamTrTestCompleted, svclInvalid, svclWrongType, tmnxOamLdpTtraceAutoDiscState, tmnxOamLdpTtraceFecProbeState, tmnxOamLdpTtraceFecDisStatus, tmnxOamLdpTtraceFecPFailUpdate, tmnxOamSaaThreshold, tmnxOamDiagTestCompleted, tmnxTwampSrvInactivityTimeout, tmnxTwampSrvMaxConnsExceeded, tmnxTwampSrvPfxMaxConnsExceeded, tmnxTwampSrvMaxSessExceeded, tmnxTwampSrvPfxMaxSessExceeded, tmnxTwampRflInactivityTimeout, tmnxOamPmThrRaise, tmnxOamPmThrClear, tmnxOamSathSvcTestCompleted, tmnxOamSathSvcStrmCompleted  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** keyword

Synopsis Administrative state of the EHS event trigger  
 Context **configure log event-trigger oam event** keyword **admin-state** keyword  
 Tree **admin-state**  
 Options enable, disable

Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">oam event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">oam event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">oam event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">oam event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>



Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## **debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger oam event keyword entry number</a> <a href="#">debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

## **time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger oam event keyword entry number</a> <a href="#">debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

## **value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger oam event keyword entry number</a> <a href="#">debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">oam event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">oam event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">filter</a> <i>reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">oam event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">handler</a> <i>reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling</a> <a href="#">handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**openflow event keyword**

Synopsis	Enter the <b>openflow</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">openflow</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">openflow</a>
Introduced	16.0.R2
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">openflow event keyword</a>
Tree	<a href="#">openflow</a>
Options	tmnxOFFlowEntryInsertFailed
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger openflow event keyword admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R2
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger openflow event keyword description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R2
Platforms	All

**entry [id] number**

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger openflow event keyword entry number</a>
Tree	<a href="#">entry</a>
Introduced	16.0.R2
Platforms	All

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger openflow event keyword entry number</b>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger openflow event keyword entry number admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R2
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger openflow event keyword entry number debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R2
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger openflow event keyword entry number debounce time number</b>
Tree	<a href="#">time</a>
Range	1 to 604800

Units	seconds
Introduced	16.0.R2
Platforms	All

**value** *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger openflow event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R2
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger openflow event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R2
Platforms	All

**filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger openflow event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R2
Platforms	All

**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
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Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">openflow event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">handler</a> <i>reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling</a> <a href="#">handler</a> <i>string</i>
Introduced	16.0.R2
Platforms	All

### **ospf event** *keyword*

Synopsis	Enter the <b>ospf</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">ospf event</a> <i>keyword</i>
Tree	<a href="#">ospf</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">ospf event</a> <i>keyword</i>
Tree	<a href="#">ospf</a>
Options	tmnxOspfVirtIfStateChange, tmnxOspfVirtNbrStateChange, tmnxOspfVirtIfConfigError, tmnxOspfVirtIfAuthFailure, tmnxOspfVirtIfRxBadPacket, tmnxOspfAreaOriginateLsa, tmnxOspfAreaMaxAgeLsa, tmnxOspfLsdbOverflow, tmnxOspfLsdbApproachingOverflow, tmnxOspfNssaTranslatorStatusChg, tmnxOspfRestartStatusChange, tmnxOspfVirtNbrRestartHlprStsChg, tmnxOspfSpfRunsStopped, tmnxOspfSpfRunsRestarted, tmnxOspfOverloadEntered, tmnxOspfOverloadExited, tmnxOspfAsOriginateLsa, tmnxOspfAsMaxAgeLsa, tmnxOspfShamIfStateChange, tmnxOspfShamNbrStateChange, tmnxOspfShamIfConfigError, tmnxOspfShamIfAuthFailure, tmnxOspfShamIfRxBadPacket, tmnxOspfShamNbrRestartHlprStsChg, tmnxOspfFailureDisabled, tmnxOspfExportLimitReached, tmnxOspfExportLimitWarning, tmnxOspfRoutesExpLmtDropped, tmnxOspfNgNbrStateChange, tmnxOspfNgIfConfigError, tmnxOspfNgIfAuthFailure, tmnxOspfNgIfRxBadPacket, tmnxOspfNgIfStateChange, tmnxOspfNgNbrRestartHlprStsChg, tmnxOspfNgLinkOriginateLsa, tmnxOspfNgLinkMaxAgeLsa, tmnxOspfNgLdpSyncTimerStarted, tmnxOspfNgLdpSyncExit, tmnxOspfSrSidError, tmnxOspfSrSidNotInLabelRange, tmnxOspfOverloadWarning, tmnxOspfRejectedAdjacencySid, tmnxOspfAdjBfdSessionSetupFail, tmnxOspfSrgbBadLabelRange, tmnxOspfRejectedAdjacencySet, tmnxOspfSidStatsIndexAlloc, tmnxOspfDynHostnameDuplicate, tmnxOspfDynHostnameInconsistent, tmnxOspfFaOperParticipationDown
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger ospf event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger ospf event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger ospf event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger ospf event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>

Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger ospf event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger ospf event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <b>debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

### **time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger ospf event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <b>debounce</b> <b>time</b> <i>number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All



**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger ospf event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a> <i>value</i> <i>number</i>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger ospf event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger ospf event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">filter</a> <i>reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger ospf event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">handler</a> <i>reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**pcap event keyword**

Synopsis	Enter the <b>pcap</b> list instance
Context	<b>configure log event-trigger pcap event keyword</b>
Tree	<a href="#">pcap</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger pcap event keyword</b>
Tree	<a href="#">pcap</a>
Options	tmnxPcapFileError, tmnxPcapBufferFull, tmnxPcapBufferReadWriteFailure, tmnxPcapSoftwareFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure log event-trigger pcap event keyword admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure log event-trigger pcap event keyword description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80

Introduced	16.0.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure log event-trigger pcap event keyword entry number</b>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

### **[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger pcap event keyword entry number</b>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger pcap event keyword entry number admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger pcap event keyword entry number debounce</b>

Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger pcap event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger pcap event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger pcap event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
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Context	<b>configure log event-trigger pcap event keyword entry number filter reference</b>
Tree	<b>filter</b>
Reference	<b>configure log filter string</b>
Introduced	16.0.R1
Platforms	All

### **handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure log event-trigger pcap event keyword entry number handler reference</b>
Tree	<b>handler</b>
Reference	<b>configure log event-handling handler string</b>
Introduced	16.0.R1
Platforms	All

### **pcep event keyword**

Synopsis	Enter the <b>pcep</b> list instance
Context	<b>configure log event-trigger pcep event keyword</b>
Tree	<b>pcep</b>
Introduced	22.2.R1
Platforms	All

### **event keyword**

Synopsis	PCEP module events
Context	<b>configure log event-trigger pcep event keyword</b>
Tree	<b>pcep</b>
Options	tmnxPcepPccPeerStateChange
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger pcep event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	22.2.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger pcep event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	22.2.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger pcep event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	22.2.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger pcep event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger pcep event keyword entry number admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	22.2.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger pcep event keyword entry number debounce</a>
Tree	<a href="#">debounce</a>
Introduced	22.2.R1
Platforms	All

**time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger pcep event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	22.2.R1
Platforms	All

**value** *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger pcep event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	22.2.R1

Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger pcep event](#) *keyword* [entry](#) *number* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 22.2.R1  
 Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
 Context **configure** [log event-trigger pcep event](#) *keyword* [entry](#) *number* [filter](#) *reference*  
 Tree [filter](#)  
 Reference **configure** [log filter](#) *string*  
 Introduced 22.2.R1  
 Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger pcep event](#) *keyword* [entry](#) *number* [handler](#) *reference*  
 Tree [handler](#)  
 Reference **configure** [log event-handling handler](#) *string*  
 Introduced 22.2.R1  
 Platforms All

### **pim event** *keyword*

Synopsis Enter the **pim** list instance  
 Context **configure** [log event-trigger pim event](#) *keyword*  
 Tree [pim](#)  
 Introduced 16.0.R1



Platforms All

### **event keyword**

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** log event-trigger pim event keyword

Tree pim

Options vRtrPimNgIfNeighborLoss, vRtrPimNgIfNeighborUp, vRtrPimNgInvalidJoinPrune, vRtrPimNgInvalidRegister, vRtrPimNgGrpInSSMRange, vRtrPimNgBSRStateChange, vRtrPimNgHelloDropped, vRtrPimNgSGLimitExceeded, vRtrPimNgReplicationLmtExceeded, vRtrPimNgMDTLimitExceeded, vRtrPimNgMaxGrpsLimitExceeded, vRtrPimNgDataMtReused, vRtrPimNgMcacPlyDropped, vRtrPimNgInvalidIPmsiTunnel, vRtrPimNgMaxGraftRetry, vRtrPimNgBierInbInvSD, vRtrPimNgBierInbInvBfrId, vRtrPimNgUmhBMonFastFailPriToStb, vRtrPimNgUmhBMonFastFailStbToPri, vRtrPimNgInstMaxNbrReached, vRtrPimNgIfMaxNbrReached

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **admin-state keyword**

Synopsis Administrative state of the EHS event trigger

Context **configure** log event-trigger pim event keyword admin-state keyword

Tree admin-state

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms All

### **description string**

Synopsis Text description

Context **configure** log event-trigger pim event keyword description string

Tree description

String Length 1 to 80

Introduced 16.0.R1

Platforms All

### **entry** [id] *number*

Synopsis Enter the **entry** list instance  
 Context **configure log event-trigger pim event** *keyword entry number*  
 Tree [entry](#)  
 Introduced 16.0.R1  
 Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure log event-trigger pim event** *keyword entry number*  
 Tree [entry](#)  
 Range 1 to 1500  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry  
 Context **configure log event-trigger pim event** *keyword entry number admin-state keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 16.0.R1  
 Platforms All

### **debounce**

Synopsis Enter the **debounce** context  
 Context **configure log event-trigger pim event** *keyword entry number debounce*  
 Tree [debounce](#)

Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger pim event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger pim event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger pim event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger pim event keyword entry number filter reference</a>

Tree	<a href="#">filter</a>
Reference	<b>configure log filter</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure log event-trigger pim event</b> <i>keyword entry number handler reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure log event-handling handler</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **pim-snooping** [event](#) *keyword*

Synopsis	Enter the <b>pim-snooping</b> list instance
Context	<b>configure log event-trigger pim-snooping event</b> <i>keyword</i>
Tree	<a href="#">pim-snooping</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger pim-snooping event</b> <i>keyword</i>
Tree	<a href="#">pim-snooping</a>
Options	tmnxPimSnpgIfNeighborLoss, tmnxPimSnpgIfNeighborUp, tmnxPimSnpgSGLimitExceeded, tmnxPimSnpgSnoopModeChanged, tmnxPimSnpgIfMaxNbrReached, tmnxPimSnpgMaxNbrReached
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger pim-snooping event</a> <i>keyword admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger pim-snooping event</a> <i>keyword description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger pim-snooping event</a> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger pim-snooping event</a> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger pim-snooping event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger pim-snooping event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger pim-snooping event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value** *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger pim-snooping event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce value number</a>
Tree	<a href="#">value</a>

Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger pim-snooping event</a> <i>keyword entry number</i> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger pim-snooping event</a> <i>keyword entry number</i> <a href="#">filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger pim-snooping event</a> <i>keyword entry number</i> <a href="#">handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**port** [event](#) *keyword*

Synopsis	Enter the <b>port</b> list instance
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Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">port event</a> <i>keyword</i>
Tree	<a href="#">port</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">port event</a> <i>keyword</i>
Tree	<a href="#">port</a>
Options	sonetSDHAlarmSet, sonetSDHAlarmClear, sonetSDHChannelAlarmSet, sonetSDHChannelAlarmClear, SFPInserted, SFPRemoved, SFPStatusFailure, portError, yellowDiffDelayExceeded, redDiffDelayExceeded, bndlBadEndPtDiscriminator, ds3AlarmSet, ds3AlarmClear, ds1AlarmSet, ds1AlarmClear, etherAlarmSet, etherAlarmClear, ds1LoopbackStart, ds1LoopbackStop, ds3LoopbackStart, ds3LoopbackStop, sdhLoopbackStart, sdhLoopbackStop, etherLoopDetected, etherLoopCleared, etherSpeedNotCompatible, etherDuplexNotCompatible, etherIngressRateCfgNotCompatible, digitalDiagnosticMonitorFailed, SFPStatusDDMCorrupt, SFPStatusReadError, SFPStatusUnsupported, dsxClockSyncStateChange, bundleMlfrMemberLoopback, tmnxPortUnsupportedFunction, otuAlarms, tPortAccEgrQGrpHostMatchFailure, tPortEgrVPortHostMatchFailure, digitalDiagnosticMonitorCleared, tmnxEqSonetClockSrcNotCompatible, tmnxEqSonetSfThreshNotCompatible, tmnxEqSonetFramingNotCompatible, tmnxResvCbsPoolThreshGreen, tmnxResvCbsPoolThreshAmber, tmnxResvCbsPoolThreshRed, tmnxEqPortEtherCrcAlarm, tmnxEqPortEtherCrcAlarmClear, tmnxEqPortEtherInternalAlarm, tmnxEqPortEtherInternalAlarmClr, tmnxEqCohOptPortAlarm, tmnxEqPortEtherSymMonAlarm, tmnxEqPortEtherSymMonAlarmClear, SFPStatusCulprit, SFPStatusBlocked, SFPStatusOperational, tmnxRS232ControlLeadSignalChg, tmnxRS232SquelchStatusChange, tmnxRS232SquelchResetIssued, tmnxCellularBearerCreated, tmnxCellularBearerDeleted, tmnxCellularBearerModified, tmnxEqPortEtherEgressRateChange, tmnxCellularNoServiceReset, tmnxCellularActiveSimCardChange, tmnxPortEtherLoopbackStart, tmnxPortEtherLoopbackStop, tmnxPortGnssStatusChange, tmnxWlanNetworkConnected, tmnxWlanNetworkDisconnected, tmnxPortAUIReset, tmnxCellPortCbsdRegistered, tmnxCellPortCbsdUnregistered, tmnxCellPortCbsdGranted, tmnxCellPortCbsdAuthorized, tmnxCellPortCbsdTransDown, tmnxHwAggShpSchedOperColorGreen, tmnxHwAggShpSchedOperColorAmber, tmnxHwAggShpSchedOperColorRed, tmnxCellularRssiAlarm, tmnxCellularRssiAlarmClear
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All



**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger port event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger port event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger port event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger port event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry  
 Context **configure** [log event-trigger port event keyword entry number admin-state keyword](#)  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 16.0.R1  
 Platforms All

### **debounce**

Synopsis Enter the **debounce** context  
 Context **configure** [log event-trigger port event keyword entry number debounce](#)  
 Tree [debounce](#)  
 Introduced 16.0.R1  
 Platforms All

### **time** *number*

Synopsis Time window for events for EHS to trigger a response  
 Context **configure** [log event-trigger port event keyword entry number debounce time number](#)  
 Tree [time](#)  
 Range 1 to 604800  
 Units seconds  
 Introduced 16.0.R1  
 Platforms All

### **value** *number*

Synopsis Occurrences in time interval to trigger EHS response  
 Context **configure** [log event-trigger port event keyword entry number debounce value number](#)  
 Tree [value](#)

Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger port event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger port event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1
Platforms	All

**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger port event keyword entry number handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler string</a>
Introduced	16.0.R1
Platforms	All

**ppp event** *keyword*

Synopsis	Enter the <b>ppp</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger ppp event keyword</a>

Tree	<a href="#">ppp</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">ppp event</a> <i>keyword</i>
Tree	<a href="#">ppp</a>
Options	tmnxPppCpUp, tmnxPppCpDown, tmnxPppNcpUp, tmnxPppNcpDown, tmnxPppKeepaliveFailure, tmnxPppLqmFailure, ipcpRemotelpUnknown, ipcpSameLocalAndRemotelp, ipcpPeerSuggestedDifferentIp, ipcpPeerRejectedOurIp, ipcpPeerOnDifferentSubnet, tmnxPppLoopback, tmnxPppLoopbackClear, ipv6cpRemotelpUnknown, ipv6cpSameLocalAndRemotelp, ipv6cpPeerSuggestedDiffIntId, ipv6cpPeerRejectedOurIntId, ipv6cpPeerOnDifferentSubnet
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">ppp event</a> <i>keyword</i> <i>admin-state</i> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">ppp event</a> <i>keyword</i> <i>description</i> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1

Platforms All

### **entry** [id] *number*

Synopsis Enter the **entry** list instance  
 Context **configure log event-trigger ppp event** *keyword entry number*  
 Tree [entry](#)  
 Introduced 16.0.R1  
 Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure log event-trigger ppp event** *keyword entry number*  
 Tree [entry](#)  
 Range 1 to 1500  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry  
 Context **configure log event-trigger ppp event** *keyword entry number admin-state keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 16.0.R1  
 Platforms All

### **debounce**

Synopsis Enter the **debounce** context  
 Context **configure log event-trigger ppp event** *keyword entry number debounce*  
 Tree [debounce](#)

Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger ppp event</b> <i>keyword entry number debounce time number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure log event-trigger ppp event</b> <i>keyword entry number debounce value number</i>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure log event-trigger ppp event</b> <i>keyword entry number description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure log event-trigger ppp event</b> <i>keyword entry number filter reference</i>

Tree	<a href="#">filter</a>
Reference	<b>configure log filter</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure log event-trigger ppp event</b> <i>keyword entry number handler reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure log event-handling handler</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **pppoe event** *keyword*

Synopsis	Enter the <b>pppoe</b> list instance
Context	<b>configure log event-trigger pppoe event</b> <i>keyword</i>
Tree	<a href="#">pppoe</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger pppoe event</b> <i>keyword</i>
Tree	<a href="#">pppoe</a>
Options	tmnxPppoeSessionFailure, tmnxPppoeNcpFailure, tmnxMlpppBundleIndicatorsChange, tmnxPppoeLacSteeringActive, tmnxPppoeLacSteeringStopped, tmnxPppoeLacSteeringFailed, tmnxPppoeMaxSessionsOvrExceeded
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">pppoe event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">pppoe event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">pppoe event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">pppoe event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger pppoe event keyword entry number admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger pppoe event keyword entry number debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger pppoe event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**value** *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger pppoe event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
 Context **configure log event-trigger pppoe event** *keyword entry number description string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
 Context **configure log event-trigger pppoe event** *keyword entry number filter reference*  
 Tree [filter](#)  
 Reference **configure log filter** *string*  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure log event-trigger pppoe event** *keyword entry number handler reference*  
 Tree [handler](#)  
 Reference **configure log event-handling handler** *string*  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pppoe-clnt** [event](#) *keyword*

Synopsis Enter the **pppoe-clnt** list instance  
 Context **configure log event-trigger pppoe-clnt event** *keyword*  
 Tree [pppoe-clnt](#)  
 Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log event-trigger](#) [pppoe-clnt event](#) *keyword*

Tree [pppoe-clnt](#)

Options tmnxPppoeClientSetupFailure, tmnxPppoeClientEchoTimeout, tmnxPppoeClientNcpFailure

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger

Context **configure** [log event-trigger](#) [pppoe-clnt event](#) *keyword* [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description

Context **configure** [log event-trigger](#) [pppoe-clnt event](#) *keyword* [description](#) *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance

Context	<b>configure</b> log event-trigger pppoe-clnt event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> log event-trigger pppoe-clnt event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> log event-trigger pppoe-clnt event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> log event-trigger pppoe-clnt event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger pppoe-clnt event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger pppoe-clnt event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger pppoe-clnt event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger pppoe-clnt event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger](#) [pppoe-clnt event](#) *keyword* [entry](#) *number* [handler](#) *reference*  
 Tree [handler](#)  
 Reference **configure** [log event-handling](#) [handler](#) *string*  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ptp event** *keyword*

Synopsis Enter the **ptp** list instance  
 Context **configure** [log event-trigger](#) [ptp event](#) *keyword*  
 Tree [ptp](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure** [log event-trigger](#) [ptp event](#) *keyword*  
 Tree [ptp](#)  
 Options tmnxPtpCardNotSupported, tmnxPtpCardNotSupportedClear, tmnxPtpMasterClockChangedEvent, tmnxPtpClockRecoveryStateChange, tmnxPtpOutOfResources, tmnxPtpOutOfResourcesClear, tmnxPtpDynamicChange, tmnxPtpPortNoTimestamping, tmnxPtpPortPtsfUnusable, tmnxPtpRequiresSystemReboot, tmnxPtpRequiresSystemRebootClear, tmnxPtpTimeRecoveryStateChange  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">ptp event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">ptp event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">ptp event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">ptp event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">ptp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">ptp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">ptp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a> <a href="#">time</a> <i>number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**value** *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">ptp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a> <a href="#">value</a> <i>number</i>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger](#) [ptp event](#) *keyword* [entry](#) *number* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
 Context **configure** [log event-trigger](#) [ptp event](#) *keyword* [entry](#) *number* [filter](#) *reference*  
 Tree [filter](#)  
 Reference **configure** [log filter](#) *string*  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger](#) [ptp event](#) *keyword* [entry](#) *number* [handler](#) *reference*  
 Tree [handler](#)  
 Reference **configure** [log event-handling](#) [handler](#) *string*  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **python** [event](#) *keyword*

Synopsis Enter the **python** list instance  
 Context **configure** [log event-trigger](#) [python](#) [event](#) *keyword*  
 Tree [python](#)  
 Introduced 22.10.R4

Platforms All

### **event** *keyword*

Synopsis Python module events  
 Context **configure** [log](#) [event-trigger](#) [python](#) [event](#) *keyword*  
 Tree [python](#)  
 Options tmnxPythonInterpreterRestarted  
 Notes This element is part of a list key.  
 Introduced 22.10.R4  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger  
 Context **configure** [log](#) [event-trigger](#) [python](#) [event](#) *keyword* [admin-state](#) *keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 22.10.R4  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log](#) [event-trigger](#) [python](#) [event](#) *keyword* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 22.10.R4  
 Platforms All

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance  
 Context **configure** [log](#) [event-trigger](#) [python](#) [event](#) *keyword* [entry](#) *number*

Tree	<a href="#">entry</a>
Introduced	22.10.R4
Platforms	All

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger python event keyword entry number</a>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	22.10.R4
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger python event keyword entry number admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	22.10.R4
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger python event keyword entry number debounce</a>
Tree	<a href="#">debounce</a>
Introduced	22.10.R4
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
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Context	<b>configure</b> <a href="#">log event-trigger python event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	22.10.R4
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger python event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	22.10.R4
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger python event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	22.10.R4
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger python event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	22.10.R4
Platforms	All

**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger python event</a> <i>keyword entry number handler reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	22.10.R4
Platforms	All

**radius event** *keyword*

Synopsis	Enter the <b>radius</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger radius event</a> <i>keyword</i>
Tree	<a href="#">radius</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger radius event</a> <i>keyword</i>
Tree	<a href="#">radius</a>
Options	tmnxRadSrvPlcySrvOperStateCh, tmnxRadRouteDownloadFailed, tmnxRadAcctOnOngoing
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger radius event</a> <i>keyword admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1

Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger radius event](#) *keyword* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance  
 Context **configure** [log event-trigger radius event](#) *keyword* [entry](#) *number*  
 Tree [entry](#)  
 Introduced 16.0.R1  
 Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure** [log event-trigger radius event](#) *keyword* [entry](#) *number*  
 Tree [entry](#)  
 Range 1 to 1500  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry  
 Context **configure** [log event-trigger radius event](#) *keyword* [entry](#) *number* [admin-state](#) *keyword*  
 Tree [admin-state](#)  
 Options enable, disable

Default	enable
Introduced	16.0.R1
Platforms	All

## **debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger radius event keyword entry number</a> <b>debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

## **time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger radius event keyword entry number</a> <b>debounce time number</b>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

## **value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger radius event keyword entry number</a> <b>debounce value number</b>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

## **description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger radius event keyword entry number</a> <b>description string</b>

Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">radius event</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">filter</a> <a href="#">reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <a href="#">string</a>
Introduced	16.0.R1
Platforms	All

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">radius event</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">handler</a> <a href="#">reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling</a> <a href="#">handler</a> <a href="#">string</a>
Introduced	16.0.R1
Platforms	All

**rip event keyword**

Synopsis	Enter the <b>rip</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">rip event</a> <a href="#">keyword</a>
Tree	<a href="#">rip</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">rip event</a> <a href="#">keyword</a>



Tree	<a href="#">rip</a>
Options	ripPacketDiscarded, vRtrRipAuthTypeMismatch, vRtrRipAuthTypeFailure, vRtrRipInstanceShuttingDown, vRtrRipInstanceRestarted, vRtrRipInstanceExpLmtReached, vRtrRipInstanceExpLmtWarning, vRtrRipInstanceRtsExpLmtDropped, vRtrRipPeerBfdDown
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger rip event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger rip event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger rip event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger rip event</b> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger rip event</b> <i>keyword entry number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger rip event</b> <i>keyword entry number debounce</i>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger rip event</b> <i>keyword entry number debounce time number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds

Introduced 16.0.R1  
 Platforms All

### **value** *number*

Synopsis Occurrences in time interval to trigger EHS response  
 Context **configure** [log event-trigger rip event](#) *keyword* [entry](#) *number* [debounce](#) [value](#) *number*  
 Tree [value](#)  
 Range 2 to 15  
 Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger rip event](#) *keyword* [entry](#) *number* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
 Context **configure** [log event-trigger rip event](#) *keyword* [entry](#) *number* [filter](#) *reference*  
 Tree [filter](#)  
 Reference **configure** [log filter](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger rip event](#) *keyword* [entry](#) *number* [handler](#) *reference*  
 Tree [handler](#)

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Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **ripng event** *keyword*

Synopsis	Enter the <b>ripng</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger ripng event</a> <i>keyword</i>
Tree	<a href="#">ripng</a>
Introduced	16.0.R3
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger ripng event</a> <i>keyword</i>
Tree	<a href="#">ripng</a>
Options	tmnxRipNgPacketDiscarded, tmnxRipNgAuthTypeMismatch, tmnxRipNgAuthFailure, tmnxRipNgInstShuttingDown, tmnxRipNgInstRestarted, tmnxRipNgInstExpLmtReached, tmnxRipNgInstExpLmtWarning, tmnxRipNgInstRtsExpLmtDropped, tmnxRipNgIfUcastAddrNotUsed, tmnxRipNgPeerBfdDown
Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger ripng event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R3
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger ripng event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R3
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger ripng event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R3
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger ripng event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger ripng event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R3
Platforms	All

## debounce

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger ripng event</b> <i>keyword entry number</i> <b>debounce</b>
Tree	<b>debounce</b>
Introduced	16.0.R3
Platforms	All

## time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger ripng event</b> <i>keyword entry number</i> <b>debounce</b> <i>time number</i>
Tree	<b>time</b>
Range	1 to 604800
Units	seconds
Introduced	16.0.R3
Platforms	All

## value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure log event-trigger ripng event</b> <i>keyword entry number</i> <b>debounce</b> <i>value number</i>
Tree	<b>value</b>
Range	2 to 15
Introduced	16.0.R3
Platforms	All

## description *string*

Synopsis	Text description
Context	<b>configure log event-trigger ripng event</b> <i>keyword entry number</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R3
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure log event-trigger ripng event</b> <i>keyword entry number filter reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure log filter</b> <i>string</i>
Introduced	16.0.R3
Platforms	All

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure log event-trigger ripng event</b> <i>keyword entry number handler reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure log event-handling handler</b> <i>string</i>
Introduced	16.0.R3
Platforms	All

**route-policy event keyword**

Synopsis	Enter the <b>route-policy</b> list instance
Context	<b>configure log event-trigger route-policy event</b> <i>keyword</i>
Tree	<a href="#">route-policy</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger route-policy event</b> <i>keyword</i>
Tree	<a href="#">route-policy</a>
Options	trigPolicyPrevEval
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger route-policy event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger route-policy event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger route-policy event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger route-policy event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1



Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry

Context **configure** [log event-trigger route-policy event keyword entry number admin-state keyword](#)

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 16.0.R1

Platforms All

### **debounce**

Synopsis Enter the **debounce** context

Context **configure** [log event-trigger route-policy event keyword entry number debounce](#)

Tree [debounce](#)

Introduced 16.0.R1

Platforms All

### **time** *number*

Synopsis Time window for events for EHS to trigger a response

Context **configure** [log event-trigger route-policy event keyword entry number debounce time number](#)

Tree [time](#)

Range 1 to 604800

Units seconds

Introduced 16.0.R1

Platforms All

### **value** *number*

Synopsis Occurrences in time interval to trigger EHS response

Context	<b>configure</b> <a href="#">log event-trigger route-policy event keyword entry number</a> <a href="#">debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger route-policy event keyword entry number</a> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger route-policy event keyword entry number</a> <a href="#">filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1
Platforms	All

**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger route-policy event keyword entry number</a> <a href="#">handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler string</a>
Introduced	16.0.R1
Platforms	All

**rpki event** *keyword*

Synopsis	Enter the <b>rpki</b> list instance
Context	<b>configure log event-trigger rpki event</b> <i>keyword</i>
Tree	<a href="#">rpki</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger rpki event</b> <i>keyword</i>
Tree	<a href="#">rpki</a>
Options	tmnxRpkiNotifySession, tmnxRpkiStaleTimerExpiry
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure log event-trigger rpki event</b> <i>keyword admin-state</i> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure log event-trigger rpki event</b> <i>keyword description</i> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure log event-trigger rpki event</b> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<b>entry</b>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger rpki event</b> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<b>entry</b>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger rpki event</b> <i>keyword</i> <b>entry</b> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger rpki event</b> <i>keyword</i> <b>entry</b> <i>number</i> <b>debounce</b>
Tree	<b>debounce</b>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger rpki event</b> <i>keyword entry number debounce time number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure log event-trigger rpki event</b> <i>keyword entry number debounce value number</i>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure log event-trigger rpki event</b> <i>keyword entry number description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure log event-trigger rpki event</b> <i>keyword entry number filter reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure log filter</b> <i>string</i>
Introduced	16.0.R1

Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger rpki event keyword entry number handler reference](#)  
 Tree [handler](#)  
 Reference **configure** [log event-handling handler string](#)  
 Introduced 16.0.R1  
 Platforms All

### **rsvp event** *keyword*

Synopsis Enter the **rsvp** list instance  
 Context **configure** [log event-trigger rsvp event keyword](#)  
 Tree [rsvp](#)  
 Introduced 16.0.R1  
 Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure** [log event-trigger rsvp event keyword](#)  
 Tree [rsvp](#)  
 Options vRtrRsvpStateChange, vRtrRsvplfStateChange, vRtrRsvplfNbrStateUp, vRtrRsvplfNbrStateDown, vRtrRsvpPEFailOverPriToStdBy, vRtrRsvpPEFailOverStdByToPri  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger  
 Context **configure** [log event-trigger rsvp event keyword admin-state keyword](#)  
 Tree [admin-state](#)

Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">rsvp event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [[id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">rsvp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">rsvp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
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Context	<b>configure</b> <a href="#">log event-trigger rsvp event keyword entry number admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## debounce

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger rsvp event keyword entry number debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

## time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger rsvp event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

## value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger rsvp event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All



**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger rsvp event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger rsvp event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1
Platforms	All

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger rsvp event keyword entry number handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler string</a>
Introduced	16.0.R1
Platforms	All

**satellite event keyword**

Synopsis	Enter the <b>satellite</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger satellite event keyword</a>
Tree	<a href="#">satellite</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">satellite event</a> <i>keyword</i>
Tree	<a href="#">satellite</a>
Options	tmnxSatelliteOperStateChange, tmnxSatSynclfTimRefSwitch, tmnxSatSynclfTimSystemQuality, tmnxSatSynclfTimRef1Quality, tmnxSatSynclfTimRef2Quality, tmnxSatSynclfTimHoldover, tmnxSatSynclfTimHoldoverClear, tmnxSatSynclfTimRef1Alarm, tmnxSatSynclfTimRef1AlarmClear, tmnxSatSynclfTimRef2Alarm, tmnxSatSynclfTimRef2AlarmClear, tmnxSatLocalForwardStateChg, tmnxSatLocalForwardSapStateChg
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">satellite event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">satellite event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**entry [id] number**

Synopsis	Enter the <b>entry</b> list instance
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Context	<b>configure log event-trigger satellite event</b> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger satellite event</b> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger satellite event</b> <i>keyword entry number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger satellite event</b> <i>keyword entry number debounce</i>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger satellite event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger satellite event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger satellite event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger satellite event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### handler *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger satellite event keyword entry number handler reference](#)  
 Tree [handler](#)  
 Reference **configure** [log event-handling handler string](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### security event *keyword*

Synopsis Enter the **security** list instance  
 Context **configure** [log event-trigger security event keyword](#)  
 Tree [security](#)  
 Introduced 16.0.R1  
 Platforms All

### event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure** [log event-trigger security event keyword](#)  
 Tree [security](#)  
 Options cli\_user\_login, cli\_user\_logout, cli\_user\_login\_failed, cli\_user\_login\_max\_attempts, ftp\_user\_login, ftp\_user\_logout, ftp\_user\_login\_failed, ftp\_user\_login\_max\_attempts, ssh\_user\_login, ssh\_user\_logout, ssh\_user\_login\_failed, ssh\_user\_login\_max\_attempts, radiusOperStatusChange, user\_disconnect, radiusSystemIpAddrNotSet, tacplusOperStatusChange, mafEntryMatch, ftp\_transfer\_successful, ftp\_transfer\_failed, enable\_admin, host\_snmp\_attempts, SSH\_server\_preserve\_key\_fail, tacplusInetSvrOperStatusChange, radiusInetServerOperStatusChange, tmnxKeyChainAuthFailure, tmnxCpmProtViolPort, tmnxCpmProtViolPortAgg, tmnxCpmProtViolIf, tmnxCpmProtViolSap, tmnxCpmProtViolMac, tmnxCpmProtViolVdoSvcClient, tmnxCpmProtViolVdoVrtrClient, tmnxMD5AuthFailure, tmnxCpmProtDefPolModified, tmnxCpmProtViolSdpBind, tmnxCpmProtExcdSdpBind, tmnxCpmProtExcdSapEcm, tmnxCpmProtExcdSdpBindEcm, tmnxPkiFileReadFailed, tmnxPkiCertVerificationFailed, tmnxCAPprofileStateChange, tmnxCpmProtExcdSapIp, tmnxDcpFpDynPoolUsageHiAlmRaise, tmnxDcpFpDynPoolUsageHiAlmClear, tmnxDcpCardFpEventOvrflwClr, tmnxDcpCardSapEventOvrflwClr,

tmnxDcpCardVrtrfEventOvrflwClr, sapDcpStaticExcd, sapDcpDynamicExcd, sapDcpStaticHoldDownStart, sapDcpDynamicHoldDownStart, sapDcpStaticHoldDownEnd, sapDcpDynamicHoldDownEnd, sapDcpStaticConform, sapDcpDynamicConform, sapDcpLocMonExcd, sapDcpLocMonExcdDynResource, sapDcpLocMonExcdAllDynAlloc, sapDcpLocMonExcdAllDynFreed, sapDcpDynamicEnforceAlloc, sapDcpDynamicEnforceFreed, vRtrfDcpStaticExcd, vRtrfDcpDynamicExcd, vRtrfDcpStaticHoldDownStart, vRtrfDcpDynamicHoldDownStart, vRtrfDcpStaticHoldDownEnd, vRtrfDcpDynamicHoldDownEnd, vRtrfDcpStaticConform, vRtrfDcpDynamicConform, vRtrfDcpLocMonExcd, vRtrfDcpLocMonExcdDynResource, vRtrfDcpLocMonExcdAllDynAlloc, vRtrfDcpLocMonExcdAllDynFreed, vRtrfDcpDynamicEnforceAlloc, vRtrfDcpDynamicEnforceFreed, tmnxDcpCardFpEventOvrflw, tmnxDcpCardSapEventOvrflw, tmnxDcpCardVrtrfEventOvrflw, tmnxPkiCAProfActnStatusChg, tmnxCpmProtViolSapOutProf, tmnxCpmProtViolIfOutProf, sysDNSSecFailedAuthentication, tmnxCpmProtExcdSdpBindIp, tmnxSecComputeCertChainFailure, tmnxCpmProtViolSdpBindOutProf, tmnxSecNotifKeyChainExpired, tmnxSysLicenseInvalid, tmnxSysLicenseExpiresSoon, tmnxPkiCAProfRevokeChkWarning, tmnxCAProfUpDueToRevokeChkCrlOpt, tmnxPkiCertBeforeExpWarning, tmnxPkiCertAfterExpWarning, tmnxPkiCertExpWarningCleared, tmnxPkiCRLBeforeExpWarning, tmnxPkiCRLAfterExpWarning, tmnxPkiCRLExpWarningCleared, tmnxSecNotifFileReloaded, tmnxSysLicenseValid, tmnxSecPwdHistoryFileLoadFailed, tmnxSecPwdHistoryFileWriteFailed, tmnxPkiCAProfCrlUpdateStart, tmnxPkiCAProfCrlUpdateSuccess, tmnxPkiCAProfCrlUpdateUrlFail, tmnxPkiCAProfCrlUpdAllUrlsFail, tmnxPkiFileWriteFailed, tmnxPkiCAProfCrlUpdNoNxtUpdTime, tmnxUshrProfSessionLimitExceeded, tmnxCliGroupSessionLimitExceeded, tmnxPkiCAProfCrlUpdLargPreUpdTm, tmnxPkiCertNotYetValid, tmnxPkiCRLNotYetValid, tmnxAppPkiCertVerificationFailed, grpc\_user\_login, grpc\_user\_logout, grpc\_user\_login\_failed, grpc\_user\_login\_max\_attempts, netconf\_user\_login, netconf\_user\_logout, netconf\_user\_login\_failed, netconf\_user\_login\_max\_attempts, tmnxSysLicenseActivated, tmnxConfigModify, tmnxConfigCreate, tmnxConfigDelete, tmnxStateChange, radiusUserProfileInvalid, tmnxSysStandbyLicensingError, tmnxSysStandbyLicensingReady, md\_cli\_io, md\_cli\_unauth\_io, tmnxSysAppLicenseInsufficient, tmnxSysLicenseUpdateRequired, netconf\_auth, netconf\_unauth, grpc\_auth, grpc\_unauth, tmnxCertKeyPairGen, tmnxCertImport, tmnxCertExport, tmnxFileDeleted, tmnxFileMoved, tmnxFileCopied, tmnxFileUnzip, tmnxPasswordHashingChanged, tmnxUserPasswordChangedByAdmin, tmnxSSHSessionFailed, tmnxPkiCertUpdUpdateStarted, tmnxPkiCertUpdUpdateFinished, tmnxPkiCertUpdUpdateFailed, tmnxSystemPasswordChangedByAdmin

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger security event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger security event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger security event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger security event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger security event</a> <i>keyword</i> <a href="#">entry number</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger security event</a> <i>keyword</i> <a href="#">entry number</a> <b>debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger security event</a> <i>keyword</i> <a href="#">entry number</a> <b>debounce</b> <a href="#">time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value** *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger security event</a> <i>keyword</i> <a href="#">entry number</a> <b>debounce</b> <a href="#">value number</a>
Tree	<a href="#">value</a>
Range	2 to 15



Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger security event](#) *keyword entry number description string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
 Context **configure** [log event-trigger security event](#) *keyword entry number filter reference*  
 Tree [filter](#)  
 Reference **configure** [log filter](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger security event](#) *keyword entry number handler reference*  
 Tree [handler](#)  
 Reference **configure** [log event-handling handler](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### **sflow event** *keyword*

Synopsis Enter the **sflow** list instance  
 Context **configure** [log event-trigger sflow event](#) *keyword*  
 Tree [sflow](#)

Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-s, 7950 XRS

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
Context **configure** [log event-trigger sflow event](#) *keyword*  
Tree [sflow](#)  
Options none, tmnxSflowCpEntrySampling, tmnxSflowPacketTxFailure  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-s, 7950 XRS

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger  
Context **configure** [log event-trigger sflow event](#) *keyword* [admin-state](#) *keyword*  
Tree [admin-state](#)  
Options enable, disable  
Default disable  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-s, 7950 XRS

### **description** *string*

Synopsis Text description  
Context **configure** [log event-trigger sflow event](#) *keyword* [description](#) *string*  
Tree [description](#)  
String Length 1 to 80  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-s, 7950 XRS

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance

Context	<b>configure log event-trigger sflow event</b> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger sflow event</b> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger sflow event</b> <i>keyword entry number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger sflow event</b> <i>keyword entry number debounce</i>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

### **time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger sflow event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

### **value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger sflow event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

### **description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger sflow event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

### **filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger sflow event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger sflow event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

**snmp event** *keyword*

Synopsis	Enter the <b>snmp</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger snmp event</a> <i>keyword</i>
Tree	<a href="#">snmp</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger snmp event</a> <i>keyword</i>
Tree	<a href="#">snmp</a>
Options	coldStart, warmStart, authenticationFailure, linkDown, linkUp, risingAlarm, fallingAlarm, snmpdError
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger snmp event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable

Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger snmp event](#) *keyword* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance  
 Context **configure** [log event-trigger snmp event](#) *keyword* [entry](#) *number*  
 Tree [entry](#)  
 Introduced 16.0.R1  
 Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure** [log event-trigger snmp event](#) *keyword* [entry](#) *number*  
 Tree [entry](#)  
 Range 1 to 1500  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry  
 Context **configure** [log event-trigger snmp event](#) *keyword* [entry](#) *number* [admin-state](#) *keyword*  
 Tree [admin-state](#)

Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## debounce

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger snmp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

## time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger snmp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a> <a href="#">time</a> <i>number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

## value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger snmp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a> <a href="#">value</a> <i>number</i>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

## description *string*

Synopsis	Text description
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Context	<b>configure</b> <a href="#">log event-trigger snmp event</a> <i>keyword entry number description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger snmp event</a> <i>keyword entry number filter reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger snmp event</a> <i>keyword entry number handler reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**sr-mpls event keyword**

Synopsis	Enter the <b>sr-mpls</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger sr-mpls event</a> <i>keyword</i>
Tree	<a href="#">sr-mpls</a>
Introduced	21.10.R1
Platforms	All

**event keyword**

Synopsis	SR MPLS event
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Context	<b>configure log event-trigger sr-mpls event keyword</b>
Tree	<a href="#">sr-mpls</a>
Options	tmnxSrMplsPfxSidFailure
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

### **admin-state keyword**

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure log event-trigger sr-mpls event keyword admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	All

### **description string**

Synopsis	Text description
Context	<b>configure log event-trigger sr-mpls event keyword description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	All

### **entry [id] number**

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure log event-trigger sr-mpls event keyword entry number</b>
Tree	<a href="#">entry</a>
Introduced	21.10.R1
Platforms	All

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger sr-mpls event keyword entry number</b>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger sr-mpls event keyword entry number admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	21.10.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger sr-mpls event keyword entry number debounce</b>
Tree	<a href="#">debounce</a>
Introduced	21.10.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger sr-mpls event keyword entry number debounce time number</b>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	21.10.R1

Platforms All

### **value** *number*

Synopsis Occurrences in time interval to trigger EHS response  
 Context **configure** [log event-trigger sr-mpls event keyword entry number](#) [debounce value number](#)  
 Tree [value](#)  
 Range 2 to 15  
 Introduced 21.10.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger sr-mpls event keyword entry number](#) [description string](#)  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 21.10.R1  
 Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
 Context **configure** [log event-trigger sr-mpls event keyword entry number](#) [filter reference](#)  
 Tree [filter](#)  
 Reference **configure** [log filter string](#)  
 Introduced 21.10.R1  
 Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger sr-mpls event keyword entry number](#) [handler reference](#)  
 Tree [handler](#)

Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	21.10.R1
Platforms	All

### **srv6 event** *keyword*

Synopsis	Enter the <b>srv6</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">srv6 event</a> <i>keyword</i>
Tree	<a href="#">srv6</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">srv6 event</a> <i>keyword</i>
Tree	<a href="#">srv6</a>
Options	vRtrSrv6FunctionExhaustion, vRtrSrv6SvcSidIndex, vRtrSrv6LocatorResExhaustion
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">srv6 event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **description** *string*

Synopsis	Text description
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Context	<b>configure log event-trigger srv6 event</b> <i>keyword description string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**entry [id] number**

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure log event-trigger srv6 event</b> <i>keyword entry number</i>
Tree	<b>entry</b>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger srv6 event</b> <i>keyword entry number</i>
Tree	<b>entry</b>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger srv6 event</b> <i>keyword entry number admin-state keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger srv6 event keyword entry number debounce</b>
Tree	<a href="#">debounce</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger srv6 event keyword entry number debounce time number</b>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure log event-trigger srv6 event keyword entry number debounce value number</b>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**description string**

Synopsis	Text description
Context	<b>configure log event-trigger srv6 event keyword entry number description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger srv6 event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger srv6 event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**stp event keyword**

Synopsis	Enter the <b>stp</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger stp event</a> <i>keyword</i>
Tree	<a href="#">stp</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger stp event</a> <i>keyword</i>
Tree	<a href="#">stp</a>
Options	topologyChangeSapMajorState, newRootSap, topologyChangeVcpState, newRootVcpState, topologyChangeSapState, receivedTCN, newRootBridge, unacknowledgedTCN, higherPriorityBridge, sapEncapPVST, sapEncapDot1d, tmnxSvcTopoChgSdpBindMajorState, tmnxSvcNewRootSdpBind, tmnxSvcTopoChgSdpBindState, tmnxSvcSdpBindRcvdTCN, tmnxSvcSdpBindRcvdHigherBriPrio, tmnxSvcSdpBindEncapPVST,

tmnxSvcSdpBindEncapDot1d, tmnxNewCistRegionalRootBridge, tmnxNewMstiRegionalRootBridge, tmnxStpRootGuardViolation, tmnxStpMeshNotInMstRegion, tmnxSapStpExcepCondStateChng, tmnxSdpBndStpExcepCondStateChng, sapActiveProtocolChange, tmnxSvcSdpActiveProtocolChange, vcpActiveProtocolChange, topologyChangePipMajorState, topologyChangePipState, tmnxPipStpExcepCondStateChng, pipActiveProtocolChange

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger stp event keyword admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger stp event keyword description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger stp event keyword entry number</a>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All



**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger stp event</b> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger stp event</b> <i>keyword entry number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger stp event</b> <i>keyword entry number debounce</i>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger stp event</b> <i>keyword entry number debounce time number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds

Introduced 16.0.R1  
 Platforms All

### **value** *number*

Synopsis Occurrences in time interval to trigger EHS response  
 Context **configure** [log event-trigger stp event](#) *keyword* [entry number](#) [debounce value](#) *number*  
 Tree [value](#)  
 Range 2 to 15  
 Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger stp event](#) *keyword* [entry number](#) [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
 Context **configure** [log event-trigger stp event](#) *keyword* [entry number](#) [filter](#) *reference*  
 Tree [filter](#)  
 Reference **configure** [log filter](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger stp event](#) *keyword* [entry number](#) [handler](#) *reference*  
 Tree [handler](#)

Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **svcmgr event** *keyword*

Synopsis	Enter the <b>svcmgr</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger svcmgr event</a> <i>keyword</i>
Tree	<a href="#">svcmgr</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger svcmgr event</a> <i>keyword</i>
Tree	<a href="#">svcmgr</a>
Options	<p> <a href="#">svcTlsMacPinningViolation</a>, <a href="#">tmnxSubSlaacOverride</a>,  <a href="#">svcEvpnMplsMacMoveExceedNonBlock</a>, <a href="#">svcTlsVxInstReplicatorChgd</a>,  <a href="#">svcArpHostOverride</a>, <a href="#">svcEvpnMHEsEviDFStateChgd</a>, <a href="#">svcEvpnMHEsIsidDFStateChgd</a>,  <a href="#">svcEvpnRcvdProtSrcMac</a>, <a href="#">svcBgpEvpnBHDupMacAddrsDetected</a>,  <a href="#">svcEvpnEtreeBumLabelSysHiUsgSet</a>, <a href="#">svcEvpnEtreeBumLabelSysHiUsgClr</a>,  <a href="#">svcVxlanEvpnMplsDestSysHiUsgSet</a>, <a href="#">svcVxlanEvpnMplsDestSysHiUsgClr</a>,  <a href="#">svcStatusChanged</a>, <a href="#">svcTlsFdbTableFullAlarmRaised</a>, <a href="#">svcTlsFdbTableFullAlarmCleared</a>,  <a href="#">svcSysEvpnESDfPrefOperValChange</a>, <a href="#">tmnxSvcSysFdbTableHighUsgSet</a>,  <a href="#">ieslStatusChanged</a>, <a href="#">tmnxEndPointTxActiveChanged</a>, <a href="#">tmnxSvcSysFdbTableHighUsgClr</a>,  <a href="#">svcEvpnMHStandbyStatusChg</a>, <a href="#">svcEvpnVxVTepLclBiasAddFailSet</a>,  <a href="#">svcEvpnESVxVTepLclBiasAddFailSet</a>, <a href="#">svcEvpnVxVTepLclBiasAddFailClr</a>,  <a href="#">svcEvpnESVxVTepLclBiasAddFailClr</a>, <a href="#">svcEvpnRcvdPbbProtSrcMac</a>,  <a href="#">svcTlsMrpAttrRegistrationFailed</a>, <a href="#">svcTlsMrpAttrTblFullAlarmRaised</a>,  <a href="#">svcTlsMrpAttrTblFullAlarmCleared</a>, <a href="#">svcEpipePbbOperStatusChanged</a>,  <a href="#">sapStatusChanged</a>, <a href="#">sapTlsMacAddrLimitAlarmRaised</a>,  <a href="#">sapTlsMacAddrLimitAlarmCleared</a>, <a href="#">hostConnectivityLost</a>,  <a href="#">hostConnectivityRestored</a>, <a href="#">sapReceivedProtSrcMac</a>, <a href="#">sapTlsMacMoveExceeded</a>,  <a href="#">sapPortStateChangeProcessed</a>, <a href="#">sapCemPacketDefectAlarm</a>,  <a href="#">sapCemPacketDefectAlarmClear</a>, <a href="#">msapStateChanged</a>, <a href="#">msapCreationFailure</a>,  <a href="#">sapTlsMacMoveExceedNonBlock</a>, <a href="#">sapEthLoopbackStarted</a>, <a href="#">sapEthLoopbackStopped</a>,  <a href="#">sapTunnelEncapIpMtuTooSmall</a>, <a href="#">tmnxIpTunnelOperStateChange</a>,  <a href="#">sapIgnorePortStateStart</a>, <a href="#">sapIgnorePortStateStop</a>, <a href="#">sapReceivedPbbProtSrcMac</a>,  <a href="#">sdpStatusChanged</a>, <a href="#">sdpBindStatusChanged</a>, <a href="#">sdpKeepAliveStarted</a>,  <a href="#">sdpKeepAliveStopped</a>, <a href="#">sdpKeepAliveProbeFailure</a>, <a href="#">sdpKeepAliveLateReply</a>,  <a href="#">sdpTlsMacAddrLimitAlarmRaised</a>, <a href="#">sdpTlsMacAddrLimitAlarmCleared</a>,  <a href="#">sdpBindPwPeerStatusBitsChanged</a>, <a href="#">sdpBindTlsMacMoveExceeded</a>, </p>

sdpBindPwPeerFaultAddrChanged, sdpBindSdpStateChangeProcessed,  
sdpBandwidthOverbooked, sdpBindInsufficientBandwidth, dynamicSdpConfigChanged,  
dynamicSdpBindConfigChanged, dynamicSdpCreationFailed,  
dynamicSdpBindCreationFailed, sdpEgrlfsNetDomInconsCntChanged,  
sdpBindPipeCelpAddressChange, sdpBindReceivedProtSrcMac,  
sdpBindPwLocalStatusBitsChanged, sdpBindTlsMacMoveExceedNonBlock,  
sdpBindEthLoopbackStarted, sdpBindEthLoopbackStopped,  
sdpPbbActvPwWithNonActvCtrlPwChg, svcBgpEvpnDupMacAddrsDetected,  
svcBgpEvpnDupMacAddrsCleared, svcTlsVTEPHiUsageAlarmRaised,  
svcTlsVTEPHiUsageAlarmCleared, svcTlsVTEPEgrVniSysHiUsgAlarmSet,  
svcTlsVTEPEgrVniSysHiUsgAlarmClr, svcTlsVTEPEgrVniSvcHiUsgAlarmSet,  
svcTlsVTEPEgrVniSvcHiUsgAlarmClr, svcBindSysHiUsageAlarmRaised,  
svcBindSysHiUsageAlarmCleared, sdpControlPwActiveStateChg,  
svcTlsProxyArpDupDetect, svcTlsProxyArpDupClear, svcTlsProxyNdDupDetect,  
svcTlsProxyNdDupClear, svcTlsEvpnTunnNHopHiUsgAlarmSet,  
svcTlsEvpnTunnNHopHiUsgAlarmClr, svcEvpnMplsTEPHiUsageRaised,  
svcEvpnMplsTEPHiUsageCleared, svcEvpnMplsTEPEgrBndSysHiUsgSet,  
svcEvpnMplsTEPEgrBndSysHiUsgClr, svcEvpnMplsTEPEgrBndSvcHiUsgSet,  
svcEvpnMplsTEPEgrBndSvcHiUsgClr, svcTlsProxyArpSysHiUsgSet,  
svcTlsProxyArpSysHiUsgClr, svcTlsProxyArpSvcHiUsgSet,  
svcTlsProxyArpSvcHiUsgClr, svcTlsProxyNdSysHiUsgSet, svcTlsProxyNdSysHiUsgClr,  
svcTlsProxyNdSvcHiUsgSet, svcTlsProxyNdSvcHiUsgClr, svcSiteMinDnTimerStateChg,  
sdpBindReceivedPbbProtSrcMac, svcTlsMfibTableFullAlarmRaised,  
svcTlsMfibTableFullAlarmCleared, tmnxSubscriberCreated,  
tmnxSubscriberDeleted, tmnxSubscriberRenamed, tmnxSubAcctPclyFailure,  
tmnxSubMcsRelatedProblem, tmnxSubAuthPclyRadSerOperStatChg,  
tmnxSubAcctPclyRadSerOperStatChg, svcEndPointMacLimitAlarmRaised,  
svcEndPointMacLimitAlarmCleared, tmnxSubRadSapDisconnectError,  
tmnxSubRadSdpBndDisconnectError, tmnxSubRadSapCoAError,  
tmnxSubRadSdpBndCoAError, tmnxSubRadSapSubAuthError,  
tmnxSubRadSdpBndSubAuthError, svcFdbMimDestTblFullAlrm,  
svcFdbMimDestTblFullAlrmCleared, svcPersistencyProblem, svcArpHostPopulateErr,  
svcEPMCEPConfigMismatch, svcEPMCEPConfigMismatchResolved,  
svcEPMCEPPassiveModeActive, svcEPMCEPPassiveModePassive,  
sapHostBGPPeeringSetupFailed, tmnxSubUserCategoryOutOfCredit,  
svcRestoreHostProblem, tmnxSubUserCategoryRefreshCredit,  
tmnxSubUserCategoryError, svcTlsSiteDesigFwdrChg, sapTlsDataSapInstStatusChgd,  
svcTlsGroupOperStatusChanged, sapTunnelStateChange,  
tmnxSubHostInconsistentAtmTdOvr, sapAtmPppSessionFailure, sapAtmPppNcpFailure,  
svcMSPwRtMisconfig, svcOperGrpOperStatusChanged, sapPipeCelpAddrChange,  
svcMSPwRetryExpiredNotif, svcVllSiteDesigFwdrChg, tmnxSubSlaacSetupFailure,  
tmnxIpTunnelOperRemIpChg, tmnxSubHostLcktLimitReached,  
tmnxSubHostLcktSapLimitReached, tmnxSubSysChassMemoryUsageHi,  
tmnxSubVSubnetHostsDeleted, sapHostRipListenerSetupFailed,  
tmnxSublpoeInvalidSessionKey, tmnxSublpoeInvalidCidRidChange,  
tmnxSublpoeSessionLimitReached, tmnxSublpoePersistenceRecovery,  
tmnxSublpoeMigrHostDeleted, tmnxSubMngdHostCreationFail,  
tmnxSubMngdHostOverride, tmnxSubHostInfoConflict, tmnxSubPIBndFailed,  
tmnxSubBrgCreated, tmnxSubBrgDeleted, tmnxSubBrgCvInitFailed,  
tmnxSubBrgRadiusUpdatelpoeSeFail, tmnxSubBrgRadiusCoaError,  
tmnxSubBrgRadiusAuthError, tmnxSubBrgSessionLimitReached,

tmnxSubStatsResourceLimitReached, tmnxSubDhcpOverloadDetected, aluIpTransportStateChanged, tmnxSubBrgRadiusProxyAuthError, tmnxSubLpoeSessionBrgNotAuth, tmnxSubRadiusCoaNatFwdFailed, tmnxSubSVlanStatsReachedMaximum, svcTlsVxInstMacAdrLimitAlrmRsd, svcTlsVxInstMacAdrLimitAlrmClrd, tmnxSubCupsUpSapCreationFailed, tmnxSubCupsUpLfCreationFailed, tmnxPfcPAssocPathMgmtStateChgd, tmnxSubInfoEgrAggRateLimitLowReq, tmnxSubLpoeWppRegistrationFailed, svcEvpnMplsTEPIpSysHiUsgSet, svcEvpnMplsTEPIpSysHiUsgClr, svcEvpnMHAutoEsiCreated, svcEvpnMHAutoEsiConflict, svcSrv6TEPEgrBndSysHiUsgSet, svcSrv6TEPEgrBndSysHiUsgClr, svcSrv6FunctionExhaustion, svclFSubForwardingStatsDisNotify, svclFSubForwardingStatsEnNotify, svcRoutedVplsEvpnGWDrStateChgd, svcSrv6TEPEgrBndSvcHiUsgSet, svcSrv6TEPEgrBndSvcHiUsgClr, tmnxSapMRtCpeChkStatusChange

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger

Context **configure** [log event-trigger svcmgr event](#) *keyword* **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms All

### **description** *string*

Synopsis Text description

Context **configure** [log event-trigger svcmgr event](#) *keyword* **description** *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger svcmgr event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger svcmgr event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger svcmgr event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger svcmgr event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger svcmgr event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger svcmgr event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger svcmgr event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger svcmgr event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>

Introduced	16.0.R1
Platforms	All

### handler reference

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger svcmgr event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### system event keyword

Synopsis	Enter the <b>system</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger system event</a> <i>keyword</i>
Tree	<a href="#">system</a>
Introduced	16.0.R1
Platforms	All

### event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger system event</a> <i>keyword</i>
Tree	<a href="#">system</a>
Options	stiDateAndTimeChanged, ssiSaveConfigSucceeded, ssiSaveConfigFailed, sbiBootConfig, sbiBootSnmpd, tmnxConfigModify, tmnxConfigCreate, tmnxConfigDelete, tmnxStateChange, tmnxModuleMallocFailed, tmnxTrapDropped, ssiSyncConfigOK, ssiSyncConfigFailed, ssiSyncBootEnvOK, ssiSyncBootEnvFailed, socket_bind_failed, socket_conn_accept_failed, sntpTimeDiffExceedsThreshold, tmnxSssiMismatch, tmnxSnmpdStateChange, tmnxRedStandbySyncing, tmnxRedStandbyReady, tmnxRedStandbySyncLost, tmnxRedSwitchover, tmnxRedCpmActive, tmnxRedSingleCpm, persistencyClosedAlarmRaised, persistencyClosedAlarmCleared, tmnxSntpOperChange, tmnxFtpClientFailure, persistencyEventReport, sbiBootConfigFailFileError, sbiBootConfigOKFileError, persistenceRestoreProblem, tmnxSysRollbackStarted, tmnxSysRollbackStatusChange, tmnxSysRollbackSaveStatusChange, tmnxSysRollbackFileDeleteStatus, ssiSyncRollbackOK, ssiSyncRollbackFailed, ssiSyncCertOK, ssiSyncCertFailed, persistencyFileSysThresRaised, persistencyFileSysThresCleared, tmnxSysExecStarted, tmnxSysExecFinished, tmnxSysRollbackSaveStarted,



tmnxSysRollbackDeleteStarted, tmnxSysNvsysFileError, tmnxConfigConflict, tmnxSysVsdServerAvailable, tmnxSysVsdServerUnavailable, tmnxSysXmppServerFunctional, tmnxSysXmppServerNotFunctional, tmnxSysBaseMacAddressNotSet, tmnxSmLaunchStartFailed, tmnxEhsHandlerInvoked, tmnxEhsDroppedByMinDelay, tmnxSysAppStats24HrsAvailable, tmnxSysAppStatsWeekAvailable, tmnxSysMgmtIfModeChangeStart, tmnxSysMgmtIfModeChangeComplete, tmnxSysMgmtIfModeChangeFailure, tmnxSysMgmtIfLiIncorrectFormat, tmnxSysMgmtIfLiCfgNotEncrypted, stiDateAndTimeChanging, tmnxSysSwFabFailRecStarted, tmnxSysSwFabFailRecCompleted, tmnxSysSwFabFailRecAborted, tmnxSysSwFabFailRecDetected, tMirrorLiXlIfLicenseInvalid, mdSaveCommitHistoryFailed, sbiBootMdReadCommitHistoryFailed, tmnxSysDyingGasp, tmnxSysHttpRdrOutOfSeqLimitExc, schedActionFailure, smScriptAbort, smScriptResult, smScriptException, ssiSaveIncrementConfigSucceeded, ssiSaveIncrementConfigFailed, ssiSaveBackgroundConfigSucceeded, ssiSaveBackgroundConfigFailed, mdCommitInProgress

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log</a> <a href="#">event-trigger</a> <a href="#">system</a> <a href="#">event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log</a> <a href="#">event-trigger</a> <a href="#">system</a> <a href="#">event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure log event-trigger system event</b> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger system event</b> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger system event</b> <i>keyword entry number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger system event</b> <i>keyword entry number debounce</i>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger system event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger system event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger system event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger system event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>

Introduced 16.0.R1  
 Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger system event keyword entry number handler reference](#)  
 Tree [handler](#)  
 Reference **configure** [log event-handling handler string](#)  
 Introduced 16.0.R1  
 Platforms All

### **tls event** *keyword*

Synopsis Enter the **tls** list instance  
 Context **configure** [log event-trigger tls event keyword](#)  
 Tree [tls](#)  
 Introduced 20.5.R1  
 Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure** [log event-trigger tls event keyword](#)  
 Tree [tls](#)  
 Options tmnxTlsInitiateSession, tmnxTlsTermination, tmnxTlsFailure  
 Notes This element is part of a list key.  
 Introduced 20.5.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger  
 Context **configure** [log event-trigger tls event keyword admin-state keyword](#)  
 Tree [admin-state](#)

Options	enable, disable
Default	disable
Introduced	20.5.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">tls event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	20.5.R1
Platforms	All

**entry** [[id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">tls event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	20.5.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">tls event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
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Context	<b>configure</b> <a href="#">log event-trigger tls event keyword entry number admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	20.5.R1
Platforms	All

## debounce

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger tls event keyword entry number debounce</a>
Tree	<a href="#">debounce</a>
Introduced	20.5.R1
Platforms	All

## time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger tls event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	20.5.R1
Platforms	All

## value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger tls event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	20.5.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">tls event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	20.5.R1
Platforms	All

**filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">tls event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">filter</a> <i>reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	20.5.R1
Platforms	All

**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">tls event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">handler</a> <i>reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling</a> <a href="#">handler</a> <i>string</i>
Introduced	20.5.R1
Platforms	All

**tree-sid** [event](#) *keyword*

Synopsis	Enter the <b>tree-sid</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">tree-sid</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">tree-sid</a>
Introduced	20.10.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger tree-sid event keyword</b>
Tree	<a href="#">tree-sid</a>
Options	vRtrTreeSidCdtPathChanged, vRtrTreeSidCdtPathActInsChanged, vRtrTreeSidInSidRegFailure, vRtrTreeSidTreeldAllocFailure, vRtrTreeSidRepSegResExhaustion, vRtrTreeSidRepSegResExhstCleared, vRtrTreeSidLabelRangeExhaustion, vRtrTreeSidLblRangeExhstCleared
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure log event-trigger tree-sid event keyword admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure log event-trigger tree-sid event keyword description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	20.10.R1
Platforms	All

**entry [id] number**

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure log event-trigger tree-sid event keyword entry number</b>
Tree	<a href="#">entry</a>



Introduced 20.10.R1  
 Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure log event-trigger tree-sid event keyword entry number**  
 Tree [entry](#)  
 Range 1 to 1500  
 Notes This element is part of a list key.  
 Introduced 20.10.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry  
 Context **configure log event-trigger tree-sid event keyword entry number admin-state keyword**  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 20.10.R1  
 Platforms All

### **debounce**

Synopsis Enter the **debounce** context  
 Context **configure log event-trigger tree-sid event keyword entry number debounce**  
 Tree [debounce](#)  
 Introduced 20.10.R1  
 Platforms All

### **time** *number*

Synopsis Time window for events for EHS to trigger a response  
 Context **configure log event-trigger tree-sid event keyword entry number debounce time number**

Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	20.10.R1
Platforms	All

**value *number***

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger tree-sid event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	20.10.R1
Platforms	All

**description *string***

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger tree-sid event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	20.10.R1
Platforms	All

**filter *reference***

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger tree-sid event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	20.10.R1
Platforms	All

**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger tree-sid event keyword entry number handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler string</a>
Introduced	20.10.R1
Platforms	All

**user event** *keyword*

Synopsis	Enter the <b>user</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger user event keyword</a>
Tree	<a href="#">user</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger user event keyword</a>
Tree	<a href="#">user</a>
Options	cli_user_login, cli_user_logout, cli_user_login_failed, cli_user_login_max_attempts, ftp_user_login, ftp_user_logout, ftp_user_login_failed, ftp_user_login_max_attempts, cli_user_io, snmp_user_set, cli_config_io, cli_unauth_user_io, cli_unauth_config_io, grpc_user_login, grpc_user_logout, grpc_user_login_failed, grpc_user_login_max_attempts, netconf_user_login, netconf_user_logout, netconf_user_login_failed, netconf_user_login_max_attempts
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger user event keyword admin-state keyword</a>
Tree	<a href="#">admin-state</a>

Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger user event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [[id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger user event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger user event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
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Context	<b>configure</b> <a href="#">log event-trigger user event keyword entry number admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## debounce

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger user event keyword entry number debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

## time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger user event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

## value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger user event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger user event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger user event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1
Platforms	All

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger user event keyword entry number handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler string</a>
Introduced	16.0.R1
Platforms	All

**video event keyword**

Synopsis	Enter the <b>video</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger video event keyword</a>
Tree	<a href="#">video</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">video event</a> <i>keyword</i>
Tree	<a href="#">video</a>
Options	tmnxVdoDuplicateSsrclId, tmnxVdoMdaSessionsLimitExceeded, tmnxVdoMdaSGLimitExceeded, tmnxVdoMdaSessionsLimitCleared, tmnxVdoMdaSGLimitCleared, tmnxVdoAdSpliceAbort, tmnxVdoClientSessionsLmtExceeded, tmnxVdoClientSessionsLmtCleared, tmnxVdoGrpSrcAnlyzrErrState, tmnxVdoGrpSrcAnlyzrStClear, tmnxVdoMdaFccBwLimitExceeded, tmnxVdoMdaFccBwLimitCleared, tmnxVdoMdaRetBwLimitExceeded, tmnxVdoMdaRetBwLimitCleared, tmnxVdoMdaFccRetTotBwLmtExceeded, tmnxVdoMdaFccRetTotBwLmtCleared, tmnxVdoMdaFccSesLimitExceeded, tmnxVdoMdaFccSesLimitCleared, tmnxVdoMdaRetSesLimitExceeded, tmnxVdoMdaRetSesLimitCleared, tmnxVdoMdaFccRetTotSeLmtExceeded, tmnxVdoMdaFccRetTotSeLmtCleared, tmnxVdoVappSessionsLimitExceeded, tmnxVdoVappSGLimitExceeded, tmnxVdoVappSessionsLimitCleared, tmnxVdoVappSGLimitCleared, tmnxVdoVappFccBwLimitExceeded, tmnxVdoVappFccBwLimitCleared, tmnxVdoVappRetBwLimitExceeded, tmnxVdoVappRetBwLimitCleared, tmnxVdoVappFccRetTotBwLmtExceeded, tmnxVdoVappFccRetTotBwLmtCleared, tmnxVdoVappFccSesLimitExceeded, tmnxVdoVappFccSesLimitCleared, tmnxVdoVappRetSesLimitExceeded, tmnxVdoVappRetSesLimitCleared, tmnxVdoVappFccRetTotSeLmtExceeded, tmnxVdoVappFccRetTotSeLmtCleared
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">video event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">video event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**entry [id] number**

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">video event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">video event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">video event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable



Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## debounce

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">video event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">video event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a> <a href="#">time</a> <i>number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">video event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a> <a href="#">value</a> <i>number</i>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## description *string*

Synopsis	Text description
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Context	<b>configure</b> <a href="#">log event-trigger video event</a> <i>keyword entry number description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger video event</a> <i>keyword entry number filter reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger video event</a> <i>keyword entry number handler reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **vrrp** [event](#) *keyword*

Synopsis	Enter the <b>vrrp</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger vrrp event</a> <i>keyword</i>
Tree	<a href="#">vrrp</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">vrrp event</a> <i>keyword</i>
Tree	<a href="#">vrrp</a>
Options	vrrpTrapNewMaster, vrrpTrapAuthFailure, tmnxVrrpIPListMismatch, tmnxVrrpIPListMismatchClear, tmnxVrrpMultipleOwners, tmnxVrrpBecameBackup, vrrpPacketDiscarded, tmnxVrrpBfdIntfSessStateChgd, vrrpTrapProtoError, tVrrpBecameBackup, tVrrpTrapNewMaster, tVrrpIPListMismatch, tVrrpIPListMismatchClear, tVrrpMultipleOwners, tVrrpPacketDiscarded, tVrrpRouterAdvNotActivated, tVrrpRouterAdvNotActivatedClear, tVrrpOperDownInvalidMac, tVrrpOperDownInvalidMacClear, tmnxVrrpOperDownInvalidMac, tmnxVrrpOperDownInvalidMacClear
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">vrrp event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">vrrp event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** *[id] number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger vrrp event</a> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger vrrp event</a> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger vrrp event</a> <i>keyword entry number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger vrrp event</a> <i>keyword entry number debounce</i>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger vrrp event</b> <i>keyword entry number debounce time number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure log event-trigger vrrp event</b> <i>keyword entry number debounce value number</i>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure log event-trigger vrrp event</b> <i>keyword entry number description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure log event-trigger vrrp event</b> <i>keyword entry number filter reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure log filter</b> <i>string</i>
Introduced	16.0.R1

Platforms All

### handler *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger vrrp event](#) *keyword* [entry](#) *number* [handler](#) *reference*  
 Tree [handler](#)  
 Reference **configure** [log event-handling handler](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### vrrp [event](#) *keyword*

Synopsis Enter the **vrrp** list instance  
 Context **configure** [log event-trigger vrrp event](#) *keyword*  
 Tree [vrrp](#)  
 Introduced 16.0.R1  
 Platforms All

### event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure** [log event-trigger vrrp event](#) *keyword*  
 Tree [vrrp](#)  
 Options tmnxVRtrMidRouteTCA, tmnxVRtrHighRouteTCA, tmnxVRtrHighRouteCleared, tmnxVRtrMcastMidRouteTCA, tmnxVRtrMcastMaxRoutesTCA, tmnxVRtrMcastMaxRoutesCleared, tmnxVRtrMaxArpEntriesTCA, tmnxVRtrMaxArpEntriesCleared, tmnxVRtrMaxRoutes, tmnxVRtrBfdMaxSessionOnSlot, tmnxVRtrBfdPortTypeNotSupported, tmnxVRtrIPv6MidRouteTCA, tmnxVRtrIPv6HighRouteTCA, tmnxVRtrIPv6HighRouteCleared, tmnxVRtrStaticRouteCPEStatus, tmnxVRtrManagedRouteAddFailed, tmnxVRtrFibOccupancyThreshold, tmnxVRtrInetAddressAttachFailed, tmnxVRtrSingleSfmOverloadStateCh, tmnxVRtrGrExportLimitReached, tmnxVRtrGrRoutesExpLimitDropped, tmnxVRtrIfLdpSyncTimerStart, tmnxVRtrIfLdpSyncTimerStop, tmnxVRtrGrV6ExportLimitReached, tmnxVRtrGrV6RoutesExpLimDropped, tmnxVRtrStaticRouteStatusChanged, tmnxVRtrBfdSessExtDown, tmnxVRtrBfdSessExtUp, tmnxVRtrBfdSessExtDeleted, tmnxVRtrBfdSessExtProtChange, tmnxVRtrBfdExtNoCpmNpResources, tmnxVRtrDnsFault, tmnxVRtrMacAcctLimitReached, tmnxVRtrMacAcctLimitCleared, tmnxVRtrNgBfdSessDown, tmnxVRtrNgBfdSessUp, tmnxVRtrNgBfdSessDeleted,

tmnxVRtrNgBfdSessProtChange, tmnxVRtrNgBfdNoCpmNpResources, tmnxVRtrNHRvplsARPHighUsage, tmnxVRtrNHRvplsARPExhaust, tmnxVRtrNHRvplsARPHighUsageClr, tmnxVRtrArpLmt, tmnxVRtrArpThresholdExceeded, tmnxVRtrIpv6NbrLmt, tmnxVRtrIpv6NbrThresholdExceeded, tmnxVRtrIfIgnorePortState, tmnxVRtrPdnAddrMismatch, tmnxVRtrPdnAddrMismatchCleared, tmnxVRtrLeakExportLimitReached, tmnxVRtrLeakExportLimitDropped, tmnxVRtrDhcpClientStatusChanged, tmnxVRtrDhcp6ClientStatusChanged, tmnxVRtrNeDiscovered, tmnxVRtrNeRemoved, tmnxVRtrNeModified, vRtrIfDhcpCIRtStatusChanged, vRtrIfDhcpCISetDnsChanged, vRtrAutoCfgRaRtStatusChanged, vRtrIfDhcp6CISetDnsChanged, tipNbrAllocFailed, vRtrIfEthLoopbackStarted, vRtrIfEthLoopbackStopped, tmnxVRtrBfdExtNoFreeTxIntrvlSlot, tmnxVRtrFibVPNOccupancyThreshold, vRtrBgpInstanceError

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger

Context **configure** **log event-trigger vrtr event** *keyword* **admin-state** *keyword*

Tree **admin-state**

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms All

### **description** *string*

Synopsis Text description

Context **configure** **log event-trigger vrtr event** *keyword* **description** *string*

Tree **description**

String Length 1 to 80

Introduced 16.0.R1

Platforms All

**entry** *[id] number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger vrtr event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger vrtr event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger vrtr event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger vrtr event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All



**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger vrtr event keyword entry number debounce time number</b>
Tree	<b>time</b>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure log event-trigger vrtr event keyword entry number debounce value number</b>
Tree	<b>value</b>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure log event-trigger vrtr event keyword entry number description string</b>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure log event-trigger vrtr event keyword entry number filter reference</b>
Tree	<b>filter</b>
Reference	<b>configure log filter string</b>
Introduced	16.0.R1

Platforms All

### handler *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger vrtr event keyword entry number handler reference](#)  
 Tree [handler](#)  
 Reference **configure** [log event-handling handler string](#)  
 Introduced 16.0.R1  
 Platforms All

### wlan-gw [event keyword](#)

Synopsis Enter the **wlan-gw** list instance  
 Context **configure** [log event-trigger wlan-gw event keyword](#)  
 Tree [wlan-gw](#)  
 Introduced 16.0.R1  
 Platforms All

### event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure** [log event-trigger wlan-gw event keyword](#)  
 Tree [wlan-gw](#)  
 Options tmnxWlanGwResrcProblemDetected, tmnxWlanGwResrcProblemCause, tmnxWlanGwTuQosProblem, tmnxWlanGwGrpOperStateChanged, tmnxWlanGwlomActive, tmnxWlanGwMgwConnected, tmnxWlanGwMgwRestarted, tmnxWlanGwNumMgwHi, tmnxWlanGwMgwStateChanged, tmnxWlanGwQosRadiusGtpMismatch, tmnxWlanGwSubIfRedActiveChanged, tmnxWlanGwDsmGtpTunnelSetupFail, tmnxWlanGwSubIfPmStartD6cFailed, tmnxWlanGwSubIfPmNewPIReqFailed, tmnxWlanGwSubIfPmAddNewPIFailed, tmnxWlanGwSubIfPmCrIntObjFailed, tmnxWlanGwSubIfPmPoolTimeout, tmnxWlanGwSubIfPmPoolUsageLow, tmnxWlanGwSubIfPmLsQryRtryFailed, tmnxWlanGwGtpMessageDropped, tmnxWlanGwSubIfPmPoolPartialUse, tmnxWlanGwBdCreated, tmnxWlanGwBdDeleted, tmnxWlanGwUeCreationFail, tmnxWlanGwUeReplacement, tmnxWlanGwGrpMemberUsageHigh  
 Notes This element is part of a list key.  
 Introduced 16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger  
 Context **configure** [log event-trigger wlan-gw event](#) *keyword* **admin-state** *keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger wlan-gw event](#) *keyword* **description** *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance  
 Context **configure** [log event-trigger wlan-gw event](#) *keyword* **entry** *number*  
 Tree [entry](#)  
 Introduced 16.0.R1  
 Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure** [log event-trigger wlan-gw event](#) *keyword* **entry** *number*  
 Tree [entry](#)  
 Range 1 to 1500

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger wlan-gw event</a> <i>keyword</i> <a href="#">entry number</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger wlan-gw event</a> <i>keyword</i> <a href="#">entry number</a> <b>debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

### **time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger wlan-gw event</a> <i>keyword</i> <a href="#">entry number</a> <b>debounce</b> <a href="#">time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger wlan-gw event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger wlan-gw event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger wlan-gw event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger wlan-gw event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**wpp event** *keyword*

Synopsis	Enter the <b>wpp</b> list instance
Context	<b>configure log event-trigger wpp event</b> <i>keyword</i>
Tree	<b>wpp</b>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger wpp event</b> <i>keyword</i>
Tree	<b>wpp</b>
Options	tmnxWppPortalStatChanged, tmnxWppHostAuthenticationFailed, tmnxWppPortalUnreachable, tmnxWppPortalGroupStatChanged, tmnxWppPGHostAuthFailed
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure log event-trigger wpp event</b> <i>keyword admin-state</i> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure log event-trigger wpp event</b> <i>keyword description</i> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80

Introduced	16.0.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure log event-trigger wpp event</b> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

### **[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger wpp event</b> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger wpp event</b> <i>keyword entry number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger wpp event</b> <i>keyword entry number debounce</i>

Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger wpp event keyword entry number</a> <a href="#">debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger wpp event keyword entry number</a> <a href="#">debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger wpp event keyword entry number</a> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
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Context	<b>configure</b> <a href="#">log event-trigger wpp event</a> <i>keyword entry number filter reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger wpp event</a> <i>keyword entry number handler reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **file** [[file-policy-name](#)] *string*

Synopsis	Enter the <b>file</b> list instance
Context	<b>configure</b> <a href="#">log file</a> <i>string</i>
Tree	<a href="#">file</a>
Max. Instances	99
Introduced	16.0.R1
Platforms	All

### **[file-policy-name]** *string*

Synopsis	File ID for a log or accounting file
Context	<b>configure</b> <a href="#">log file</a> <i>string</i>
Tree	<a href="#">file</a>
Description	This command specifies the identification name or number for a log or accounting file. If the name begins with a numerical digit (from 1 to 9), the name must be a number from 1 to 99.
String Length	1 to 64
Notes	This element is part of a list key.

Introduced	22.2.R1
Platforms	All

## compact-flash-location

Synopsis	Enter the <b>compact-flash-location</b> context
Context	<b>configure</b> <a href="#">log file</a> <i>string</i> <a href="#">compact-flash-location</a>
Tree	<a href="#">compact-flash-location</a>
Introduced	16.0.R1
Platforms	All

## backup *keyword*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Log file location
Context	<b>configure</b> <a href="#">log file</a> <i>string</i> <a href="#">compact-flash-location</a> <b>backup</b> <i>keyword</i>
Tree	<a href="#">backup</a>
Options	cf-unspecified, cf1, cf2, cf3, cf4
Default	cf-unspecified
Introduced	16.0.R1
Platforms	All

## primary *keyword*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Log file location
Context	<b>configure</b> <a href="#">log file</a> <i>string</i> <a href="#">compact-flash-location</a> <b>primary</b> <i>keyword</i>
Tree	<a href="#">primary</a>
Options	cf-unspecified, cf1, cf2, cf3, cf4
Default	cf-unspecified
Introduced	16.0.R1

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Platforms All

### **description** *string*

Synopsis Text description  
Context **configure** [log file](#) *string* [description](#) *string*  
Tree [description](#)  
String Length 1 to 80  
Introduced 16.0.R1  
Platforms All

### **retention** *number*

Synopsis Minimum time that a file is retained on the media  
Context **configure** [log file](#) *string* [retention](#) *number*  
Tree [retention](#)  
Range 1 to 500  
Units hours  
Default 12  
Introduced 16.0.R1  
Platforms All

### **rollover** *number*

Synopsis Frequency at which a new log or accounting file is created  
Context **configure** [log file](#) *string* [rollover](#) *number*  
Tree [rollover](#)  
Range 5 to 10080  
Units minutes  
Default 1440  
Introduced 16.0.R1  
Platforms All

**filter** [*filter-name*] *string*

Synopsis	Enter the <b>filter</b> list instance
Context	<b>configure log filter</b> <i>string</i>
Tree	<a href="#">filter</a>
Max. Instances	1500
Introduced	16.0.R1
Platforms	All

**[filter-name]** *string*

Synopsis	Filter name
Context	<b>configure log filter</b> <i>string</i>
Tree	<a href="#">filter</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

**default-action** *keyword*

Synopsis	Default action for the event filter
Context	<b>configure log filter</b> <i>string</i> <b>default-action</b> <i>keyword</i>
Tree	<a href="#">default-action</a>
Options	drop, forward
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure log filter</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1

Platforms All

### **named-entry** *[entry-name] string*

Synopsis Enter the **named-entry** list instance

Context **configure log filter string named-entry string**

Tree [named-entry](#)

Description Commands in this context create or edit an event filter entry.

Max. Instances 999

Notes This element is ordered by the user.

Introduced 21.2.R1

Platforms All

### **[entry-name]** *string*

Synopsis Entry name

Context **configure log filter string named-entry string**

Tree [named-entry](#)

String Length 1 to 64

Notes This element is part of a list key.

Introduced 21.2.R1

Platforms All

### **action** *keyword*

Synopsis Action for this event filter entry

Context **configure log filter string named-entry string action keyword**

Tree [action](#)

Options drop, forward

Introduced 21.2.R1

Platforms All

**description string**

Synopsis	Text description
Context	<b>configure log filter string named-entry string description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.2.R1
Platforms	All

**match**

Synopsis	Enter the <b>match</b> context
Context	<b>configure log filter string named-entry string match</b>
Tree	<a href="#">match</a>
Introduced	21.2.R1
Platforms	All

**application**

Synopsis	Enter the <b>application</b> context
Context	<b>configure log filter string named-entry string match application</b>
Tree	<a href="#">application</a>
Introduced	21.2.R1
Platforms	All

**eq keyword**

Synopsis	Application to match
Context	<b>configure log filter string named-entry string match application eq keyword</b>
Tree	<a href="#">eq</a>
Options	application-assurance, aps, atm, bgp, cflowd, chassis, debug, dhcp, dhcps, diameter, dot1x, efm-oam, elmi, ering, eth-cfm, etun, filter, gsmp, igh, igmp, igmp-snooping, ip, ipsec, isis, l2tp, lag, ldp, li, lldp, logger, mcpath, mc-redundancy, mirror, mld, mld-snooping, mpls, msdp, nat, ntp, oam, ospf, pim, pim-snooping, port, ppp, pppoe, ptp, rip, route-policy, rsvp, security, snmp, stp, svcmgr, system, user, video, vrrp, vrtr, radius, wpp, wlan-gw, dynsvc, mpls-tp, bfd, python, ripng, openflow, sflow, rpki, gmpis, lmp, pcep, calltrace, satellite, ldap, pppoe-clnt, tls, adp, mgmt-core, macsec, pcap, auto-prov, bier, pfc, tree-sid, srv6, sr-mpls

Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

### **neq** keyword

Synopsis	Application to be filtered out
Context	<b>configure</b> <b>log filter</b> <i>string</i> <b>named-entry</b> <i>string</i> <b>match</b> <b>application</b> <b>neq</b> <i>keyword</i>
Tree	<b>neq</b>
Options	application-assurance, aps, atm, bgp, cflowd, chassis, debug, dhcp, dhcps, diameter, dot1x, efm-oam, elmi, ering, eth-cfm, etun, filter, gsmp, igh, igmp, igmp-snooping, ip, ipsec, isis, l2tp, lag, ldp, li, lldp, logger, mcpath, mc-redundancy, mirror, mld, mld-snooping, mpls, msdp, nat, ntp, oam, ospf, pim, pim-snooping, port, ppp, pppoe, ptp, rip, route-policy, rsvp, security, snmp, stp, svcmgr, system, user, video, vrrp, vrtr, radius, wpp, wlan-gw, dynsvc, mpls-tp, bfd, python, ripng, openflow, sflow, rpki, gmpls, lmp, pcep, calltrace, satellite, ldap, pppoe-clnt, tls, adp, mgmt-core, macsec, pcap, auto-prov, bier, pfc, tree-sid, srv6, sr-mpls
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

### **event**

Synopsis	Enter the <b>event</b> context
Context	<b>configure</b> <b>log filter</b> <i>string</i> <b>named-entry</b> <i>string</i> <b>match</b> <b>event</b>
Tree	<b>event</b>
Introduced	21.2.R1
Platforms	All

### **eq** number

Synopsis	Log event message to match
Context	<b>configure</b> <b>log filter</b> <i>string</i> <b>named-entry</b> <i>string</i> <b>match</b> <b>event</b> <b>eq</b> <i>number</i>
Tree	<b>eq</b>
Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>gte</b> , <b>lt</b> , <b>lte</b> , or <b>neq</b> .
Introduced	21.2.R1

Platforms All

### **gt number**

Synopsis Number of the log event to match  
 Context **configure log filter** *string* **named-entry** *string* **match event gt** *number*  
 Tree [gt](#)  
 Range 1 to 4294967295  
 Notes The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.  
 Introduced 21.2.R1  
 Platforms All

### **gte number**

Synopsis Number of the log event to match  
 Context **configure log filter** *string* **named-entry** *string* **match event gte** *number*  
 Tree [gte](#)  
 Range 1 to 4294967295  
 Notes The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.  
 Introduced 21.2.R1  
 Platforms All

### **lt number**

Synopsis Number of the log event to match  
 Context **configure log filter** *string* **named-entry** *string* **match event lt** *number*  
 Tree [lt](#)  
 Range 1 to 4294967295  
 Notes The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.  
 Introduced 21.2.R1  
 Platforms All

### **lte number**

Synopsis Number of the log event to match



Context	<b>configure log filter</b> <i>string</i> <b>named-entry</b> <i>string</i> <b>match event</b> <i>lte</i> <i>number</i>
Tree	<b>lte</b>
Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>gte</b> , <b>lt</b> , <b>lte</b> , or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

### **neq** *number*

Synopsis	Log event message to filter out
Context	<b>configure log filter</b> <i>string</i> <b>named-entry</b> <i>string</i> <b>match event</b> <i>neq</i> <i>number</i>
Tree	<b>neq</b>
Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>gte</b> , <b>lt</b> , <b>lte</b> , or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

### **message**

Synopsis	Enter the <b>message</b> context
Context	<b>configure log filter</b> <i>string</i> <b>named-entry</b> <i>string</i> <b>match</b> <i>message</i>
Tree	<b>message</b>
Introduced	21.2.R1
Platforms	All

### **eq** *string*

Synopsis	Log event message to match
Context	<b>configure log filter</b> <i>string</i> <b>named-entry</b> <i>string</i> <b>match</b> <i>message</i> <i>eq</i> <i>string</i>
Tree	<b>eq</b>
String Length	1 to 400
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

### **neq string**

Synopsis	Log event message to be filtered out
Context	<b>configure log filter string named-entry string match message neq string</b>
Tree	<a href="#">neq</a>
String Length	1 to 400
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

### **regexp boolean**

Synopsis	String comparison to determine if the log event matches the value of pattern
Context	<b>configure log filter string named-entry string match message regexp boolean</b>
Tree	<a href="#">regexp</a>
Default	false
Introduced	21.2.R1
Platforms	All

### **severity**

Synopsis	Enter the <b>severity</b> context
Context	<b>configure log filter string named-entry string match severity</b>
Tree	<a href="#">severity</a>
Introduced	21.2.R1
Platforms	All

### **eq keyword**

Synopsis	Log event severity level to match
Context	<b>configure log filter string named-entry string match severity eq keyword</b>
Tree	<a href="#">eq</a>
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>gte</b> , <b>lt</b> , <b>lte</b> , or <b>neq</b> .
Introduced	21.2.R1

Platforms All

### **gt** keyword

Synopsis Log event severity level

Context **configure log filter** *string* **named-entry** *string* **match severity gt** *keyword*

Tree [gt](#)

Options cleared, indeterminate, critical, major, minor, warning

Notes The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.

Introduced 21.2.R1

Platforms All

### **gte** keyword

Synopsis Log event severity level

Context **configure log filter** *string* **named-entry** *string* **match severity gte** *keyword*

Tree [gte](#)

Options cleared, indeterminate, critical, major, minor, warning

Notes The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.

Introduced 21.2.R1

Platforms All

### **lt** keyword

Synopsis Log event severity level

Context **configure log filter** *string* **named-entry** *string* **match severity lt** *keyword*

Tree [lt](#)

Options cleared, indeterminate, critical, major, minor, warning

Notes The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.

Introduced 21.2.R1

Platforms All

### **lte** keyword

Synopsis Log event severity level

Context	<b>configure log filter</b> <i>string</i> <b>named-entry</b> <i>string</i> <b>match severity lte</b> <i>keyword</i>
Tree	<b>lte</b>
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>gte</b> , <b>lt</b> , <b>lte</b> , or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

### **neq** *keyword*

Synopsis	Log event severity level to filter out
Context	<b>configure log filter</b> <i>string</i> <b>named-entry</b> <i>string</i> <b>match severity neq</b> <i>keyword</i>
Tree	<b>neq</b>
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>gte</b> , <b>lt</b> , <b>lte</b> , or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

### **subject**

Synopsis	Enter the <b>subject</b> context
Context	<b>configure log filter</b> <i>string</i> <b>named-entry</b> <i>string</i> <b>match subject</b>
Tree	<b>subject</b>
Introduced	21.2.R1
Platforms	All

### **eq** *string*

Synopsis	Log event subject string to match
Context	<b>configure log filter</b> <i>string</i> <b>named-entry</b> <i>string</i> <b>match subject eq</b> <i>string</i>
Tree	<b>eq</b>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

**neq string**

Synopsis	Log event subject string to filter out
Context	<b>configure log filter string named-entry string match subject neq string</b>
Tree	<a href="#">neq</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

**regexp boolean**

Synopsis	String comparison to determine if the log event matches the value of subject
Context	<b>configure log filter string named-entry string match subject regexp boolean</b>
Tree	<a href="#">regexp</a>
Default	false
Introduced	21.2.R1
Platforms	All

**vrtr-name**

Synopsis	Enter the <b>vrtr-name</b> context
Context	<b>configure log filter string named-entry string match vrtr-name</b>
Tree	<a href="#">vrtr-name</a>
Description	<p>Commands in this context configure the criteria for the name of a router instance.</p> <p>The vrtr-name is a name for a router instance, in a special format, used in the logging system. Examples of names include Base and vprn101, where 101 is the service ID of the VPRN service. The name represents the router instance that generated the log event.</p>
Introduced	21.2.R1
Platforms	All

**eq string**

Synopsis	Log event router instance to match
Context	<b>configure log filter string named-entry string match vrtr-name eq string</b>

Tree	<a href="#">eq</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

### **neq string**

Synopsis	Log event router instance to filter out
Context	<b>configure</b> <a href="#">log filter string</a> <a href="#">named-entry string</a> <a href="#">match vrtr-name neq string</a>
Tree	<a href="#">neq</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

### **regexp boolean**

Synopsis	Match the router instance string
Context	<b>configure</b> <a href="#">log filter string</a> <a href="#">named-entry string</a> <a href="#">match vrtr-name regexp boolean</a>
Tree	<a href="#">regexp</a>
Default	false
Introduced	21.2.R1
Platforms	All

### **log-events**

Synopsis	Enter the <b>log-events</b> context
Context	<b>configure</b> <a href="#">log log-events</a>
Tree	<a href="#">log-events</a>
Introduced	16.0.R1
Platforms	All

**adp event keyword**

Synopsis	Enter the <b>adp</b> list instance
Context	<b>configure log log-events adp event keyword</b>
Tree	<b>adp</b>
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events adp event keyword</b>
Tree	<b>adp</b>
Options	tmnxDiscoveryEndNotify, tmnxDiscoveryCellularReq
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events adp event keyword generate boolean</b>
Tree	<b>generate</b>
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events adp event keyword repeat boolean</b>
Tree	<b>repeat</b>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure log log-events adp event</b> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure log log-events adp event</b> <i>keyword specific-throttle boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure log log-events adp event</b> <i>keyword specific-throttle-interval number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure log log-events adp event</b> <i>keyword specific-throttle-limit number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s



**throttle boolean**

Synopsis	Throttle log events of this type
Context	<b>configure log log-events adp event</b> keyword <b>throttle boolean</b>
Tree	<b>throttle</b>
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

**application-assurance event keyword**

Synopsis	Enter the <b>application-assurance</b> list instance
Context	<b>configure log log-events application-assurance event</b> keyword
Tree	<b>application-assurance</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events application-assurance event</b> keyword
Tree	<b>application-assurance</b>
Options	tmnxBsxIsaAaGrpFailureV2, tmnxBsxIsaAaGrpFailureClearV2, tmnxBsxIsaAaGrpNonRedundantV2, tmnxBsxIsaAaGrpSwitchover, tmnxBsxIsaAaGrpFlowFull, tmnxBsxIsaAaGrpFlowFullClear, tmnxBsxIsaAaSubLoadBalance, tmnxBsxIsaAaGrpCapCostThres, tmnxBsxIsaAaGrpCapCostThresClear, tmnxBsxAaSubscribersUnassigned, tmnxBsxAaSubscriberAcctDataLoss, tmnxBsxAaSubPolResExceeded, tmnxBsxAaSubPolResExceededClear, tmnxBsxIsaAaGrpFlowSetup, tmnxBsxIsaAaGrpFlowSetupClear, tmnxBsxIsaAaGrpPacketRate, tmnxBsxIsaAaGrpPacketRateClear, tmnxBsxIsaAaGrpBitRate, tmnxBsxIsaAaGrpBitRateClear, tmnxBsxTransIpPolAaSubCreated, tmnxBsxTransIpPolAaSubDeleted, tmnxBsxTransIpPolRadCoAAudit, tmnxBsxTransIpPolRadCoAError, tmnxBsxTransIpPolRadDiscError, tmnxBsxTransIpPolDhcpAddWarning, tmnxBsxTransIpPolDhcpDelWarning, tmnxBsxIsaAaGrpFmSbWaSBufOvld, tmnxBsxIsaAaGrpFmSbWaSBufOvldClr, tmnxBsxIsaAaGrpToSbWaSBufOvld, tmnxBsxIsaAaGrpToSbWaSBufOvldClr, tmnxBsxIsaAaGrpOvrlidCutthru, tmnxBsxIsaAaGrpOvrlidCutthruClr, tmnxBsxTransitIpPersistenceWarn, tmnxBsxAarpInstOperStateChanged, tmnxBsxAarpInstStateChanged, tmnxBsxRadApFailure, tmnxBsxRadApServOperStateChange, tmnxBsxMobileSubModifyFailure, tmnxBsxRadApIntrmUpdateSkipped, tmnxBsxHttpUrlParamLimitExceeded, tmnxBsxUrlFilterOperStateChange, tmnxBsxSubModifyFailure, tmnxBsxDnsIpCacheFull, tmnxBsxDnsIpCacheFullClear, tmnxBsxUrlListUpdate,

tmnxBsxUrlListFailure, tmnxBsxIsaAaTimFileProcFailure,  
 tmnxBsxStatTcaThreshCrossed, tmnxBsxStatTcaThreshCrossedClear,  
 tmnxBsxStatPolcrTcaThreshCrossed, tmnxBsxStatPolcrTcaThreshCrClear,  
 tmnxBsxStatFtrTcaThreshCrossed, tmnxBsxStatFtrTcaThreshCrClear,  
 tmnxBsxStatFtrEnTcaThreshCrossed, tmnxBsxStatFtrEnTcaThreshCrClear,  
 tmnxBsxTranslpPolDiamGxError, tmnxBsxDatapathCpuUsage,  
 tmnxBsxDatapathCpuUsageClear, tmnxBsxTcpValTcaCrossed,  
 tmnxBsxTcpValTcaCrossedClear, tmnxBsxCertProfileOperStateChngd,  
 tmnxBsxSubQuarantined, tmnxBsxSubQuarantinedClear,  
 tmnxBsxUrlFiltrWebServOprStateChg

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log log-events application-assurance event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log log-events application-assurance event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log log-events application-assurance event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **specific-throttle** *boolean*

Synopsis Use parameters to throttle the specific event  
Context **configure** [log](#) [log-events](#) [application-assurance](#) [event](#) *keyword* [specific-throttle](#) *boolean*  
Tree [specific-throttle](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **specific-throttle-interval** *number*

Synopsis Duration of the event specific throttling interval  
Context **configure** [log](#) [log-events](#) [application-assurance](#) [event](#) *keyword* [specific-throttle-interval](#) *number*  
Tree [specific-throttle-interval](#)  
Range 1 to 1200  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **specific-throttle-limit** *number*

Synopsis Throttle limit within which events can be logged  
Context **configure** [log](#) [log-events](#) [application-assurance](#) [event](#) *keyword* [specific-throttle-limit](#) *number*  
Tree [specific-throttle-limit](#)  
Range 1 to 20000  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **throttle** *boolean*

Synopsis Throttle log events of this type  
Context **configure** [log](#) [log-events](#) [application-assurance](#) [event](#) *keyword* [throttle](#) *boolean*  
Tree [throttle](#)  
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **aps event** *keyword*

Synopsis Enter the **aps** list instance

Context **configure log log-events aps event** *keyword*

Tree [aps](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure log log-events aps event** *keyword*

Tree [aps](#)

Options apsEventSwitchover, apsEventModeMismatch, apsEventChannelMismatch, apsEventPSBF, apsEventFEPLF, tApsModeMismatchClear, tApsChannelMismatchClear, tApsPSBFClear, tApsFEPLFClear, tApsLocalSwitchCommandSet, tApsLocalSwitchCommandClear, tApsRemoteSwitchCommandSet, tApsRemoteSwitchCommandClear, tApsMcApsCtlLinkStateChange, tApsChanTxLaisStateChange, tApsPrimaryChannelChange

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **generate** *boolean*

Synopsis Generate log events when the event occurs

Context **configure log log-events aps event** *keyword generate* *boolean*

Tree [generate](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared

Context	<b>configure log log-events aps event</b> <i>keyword repeat boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure log log-events aps event</b> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure log log-events aps event</b> <i>keyword specific-throttle boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure log log-events aps event</b> <i>keyword specific-throttle-interval number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
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Context	<b>configure log log-events aps event</b> <i>keyword specific-throttle-limit number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure log log-events aps event</b> <i>keyword throttle boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **atm event** *keyword*

Synopsis	Enter the <b>atm</b> list instance
Context	<b>configure log log-events atm event</b> <i>keyword</i>
Tree	<a href="#">atm</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events atm event</b> <i>keyword</i>
Tree	<a href="#">atm</a>
Options	tAtmTcSubLayerDown, tAtmTcSubLayerClear, atmVclStatusChange, atmVplStatusChange, atmVtlStatusChange, atmIfcStatusChange, tAtmPlcpSubLayerDown, tAtmPlcpSubLayerClear, tAtmEpOutOfPeerVpiOrVciRange, tAtmMaxPeerVccsExceeded, tAtmMaxPeerVpcsExceeded, tAtmIImiLinkStatusChange, atmIImiPeerVclStatusChange, atmIImiPeerVplStatusChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">atm</a> <a href="#">event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">atm</a> <a href="#">event</a> <i>keyword</i> <b>repeat</b> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">atm</a> <a href="#">event</a> <i>keyword</i> <b>severity</b> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">atm</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">atm</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">atm</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">atm</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

**auto-prov** [event](#) *keyword*

Synopsis	Enter the <b>auto-prov</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">auto-prov</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">auto-prov</a>
Introduced	16.0.R1
Platforms	All



**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events auto-prov event keyword</b>
Tree	<a href="#">auto-prov</a>
Options	autoNodeProv
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events auto-prov event keyword generate boolean</b>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events auto-prov event keyword repeat boolean</b>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity keyword**

Synopsis	Severity level associated with event type
Context	<b>configure log log-events auto-prov event keyword severity keyword</b>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure log log-events auto-prov event</b> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<b>specific-throttle</b>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure log log-events auto-prov event</b> <i>keyword</i> <b>specific-throttle-interval</b> <i>number</i>
Tree	<b>specific-throttle-interval</b>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure log log-events auto-prov event</b> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>
Tree	<b>specific-throttle-limit</b>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure log log-events auto-prov event</b> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<b>throttle</b>
Introduced	16.0.R1
Platforms	All

**bfd event keyword**

Synopsis	Enter the <b>bfd</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">bfd event keyword</a>
Tree	<a href="#">bfd</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">bfd event keyword</a>
Tree	<a href="#">bfd</a>
Options	tmnxBfdOnLspSessDown, tmnxBfdOnLspSessUp, tmnxBfdOnLspSessDeleted, tmnxBfdOnLspSessProtChange, tmnxBfdOnLspSessNoCpmNpResources, tmnxBfdOnLspSessNoTailResources, tmnxBfdOnLspExtSessDown, tmnxBfdOnLspExtSessUp, tmnxBfdOnLspExtSessDeleted, tmnxBfdOnLspExtSessProtChange, tmnxBfdOnLspExtSessNoCpmNpResrcs
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">bfd event keyword</a> <a href="#">generate boolean</a>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">bfd event keyword</a> <a href="#">repeat boolean</a>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4

Platforms All

### **severity** *keyword*

Synopsis Severity level associated with event type  
 Context **configure** [log](#) [log-events](#) [bfd event](#) *keyword* **severity** *keyword*  
 Tree [severity](#)  
 Options cleared, indeterminate, critical, major, minor, warning  
 Introduced 16.0.R1  
 Platforms All

### **specific-throttle** *boolean*

Synopsis Use parameters to throttle the specific event  
 Context **configure** [log](#) [log-events](#) [bfd event](#) *keyword* **specific-throttle** *boolean*  
 Tree [specific-throttle](#)  
 Introduced 16.0.R1  
 Platforms All

### **specific-throttle-interval** *number*

Synopsis Duration of the event specific throttling interval  
 Context **configure** [log](#) [log-events](#) [bfd event](#) *keyword* **specific-throttle-interval** *number*  
 Tree [specific-throttle-interval](#)  
 Range 1 to 1200  
 Introduced 16.0.R1  
 Platforms All

### **specific-throttle-limit** *number*

Synopsis Throttle limit within which events can be logged  
 Context **configure** [log](#) [log-events](#) [bfd event](#) *keyword* **specific-throttle-limit** *number*  
 Tree [specific-throttle-limit](#)  
 Range 1 to 20000  
 Introduced 16.0.R1

Platforms All

### **throttle** *boolean*

Synopsis Throttle log events of this type  
 Context **configure** [log](#) [log-events](#) [bfd](#) [event](#) *keyword* **throttle** *boolean*  
 Tree [throttle](#)  
 Introduced 16.0.R1  
 Platforms All

### **bgp** [event](#) *keyword*

Synopsis Enter the **bgp** list instance  
 Context **configure** [log](#) [log-events](#) [bgp](#) [event](#) *keyword*  
 Tree [bgp](#)  
 Introduced 16.0.R1  
 Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure** [log](#) [log-events](#) [bgp](#) [event](#) *keyword*  
 Tree [bgp](#)  
 Options sendNotification, receiveNotification, bgpInterfaceDown, bgpConnNoKA, bgpConnNoOpenRcvd, bgpRejectConnBadLocAddr, bgpRemoteEndClosedConn, bgpPeerNotFound, bgpConnMgrTerminated, bgpTerminated, bgpNoMemoryPeer, bgpVariableRangeViolation, bgpCfgViol, tBgpPeerGRStatusChange, tBgpNgEstablished, tBgpNgBackwardTransition, tBgpPeerNgHoldTimeInconsistent, tBgpFlowspecUnsupportdComAction, tBgp4RouteInvalid, tBgp4PathAttrInvalid, tBgp4WithdrawnRtFromUpdateError, tBgp4UpdateInvalid, tBgpGeneral, tBgpFibResourceFailPeer, tBgpReceivedInvalidNlri, tBgpMaxNgPfxLmt, tBgpMaxNgPfxLmtThresholdReached, tBgpInstanceDynamicPeerLmtReachd, tBgpPGDynamicPeerLmtReached, bgpEstablishedNotification, bgpBackwardTransNotification, tBgp4PathAttrDiscarded, tmnxBmpSessionStatusChange, tBgpInstConvStateTransition, tBgpPeerNgGRStatusChange, tBgpPGDynNbrIfMaxSessLmtReachd  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

**generate** *boolean*

Synopsis	Generate log events of this type and increment the event counter
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">bgp event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">bgp event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">bgp event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters that throttle this specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">bgp event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">bgp event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Times that this event can be logged within the specific throttle interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">bgp event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">bgp event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**bier event** *keyword*

Synopsis	Enter the <b>bier</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">bier event</a> <i>keyword</i>
Tree	<a href="#">bier</a>
Introduced	19.5.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events bier event keyword</b>
Tree	<a href="#">bier</a>
Options	vRtrBierBfrldCollision, vRtrBierMtMismatch, vRtrBierSubDomainMismatch, vRtrBierUnsupportedNhop
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events bier event keyword generate boolean</b>
Tree	<a href="#">generate</a>
Introduced	19.5.R1
Platforms	All

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events bier event keyword repeat boolean</b>
Tree	<a href="#">repeat</a>
Default	false
Introduced	19.5.R1
Platforms	All

**severity keyword**

Synopsis	Severity level associated with event type
Context	<b>configure log log-events bier event keyword severity keyword</b>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	19.5.R1
Platforms	All



**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">bier</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	19.5.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">bier</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	19.5.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">bier</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	19.5.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">bier</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	19.5.R1
Platforms	All

**calltrace event keyword**

Synopsis	Enter the <b>calltrace</b> list instance
Context	<b>configure log log-events calltrace event keyword</b>
Tree	<a href="#">calltrace</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events calltrace event keyword</b>
Tree	<a href="#">calltrace</a>
Options	tmnxCallTraceMaxFilesNumReached, tmnxCallTraceLocSizeLimitReached, calltraceDebugEvent
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events calltrace event keyword generate boolean</b>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events calltrace event keyword repeat boolean</b>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">calltrace</a> <a href="#">event</a> <i>keyword</i> <b>severity</b> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">calltrace</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">calltrace</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle-interval</b> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">calltrace</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">calltrace</a> <a href="#">event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**cflowd** [event](#) *keyword*

Synopsis	Enter the <b>cflowd</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">cflowd</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">cflowd</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">cflowd</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">cflowd</a>
Options	tmnCflowdCreateFailure, tmnCflowdStateChange, tmnCflowdFlowCreateFailure, tmnCflowdPacketTxFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">cflowd</a> <a href="#">event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events cflowd event</b> <i>keyword repeat boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure log log-events cflowd event</b> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure log log-events cflowd event</b> <i>keyword specific-throttle boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure log log-events cflowd event</b> <i>keyword specific-throttle-interval number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">cflowd</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">cflowd</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**chassis** [event](#) *keyword*

Synopsis	Enter the <b>chassis</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">chassis</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">chassis</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">chassis</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">chassis</a>
Options	tmnxEqCardFailure, tmnxEqCardInserted, tmnxEqCardRemoved, tmnxEqWrongCard, tmnxEnvTempTooHigh, tmnxEqPowerSupplyInserted, tmnxEqPowerSupplyRemoved, tmnxRedPrimaryCPMFail, tmnxChassisNotificationClear, tmnxEqSynclftimingHoldover, tmnxEqSynclftimingHoldoverClear, tmnxEqSynclftimingRef1Alarm, tmnxEqSynclftimingRef1AlarmClear, tmnxEqSynclftimingRef2Alarm, tmnxEqSynclftimingRef2AlarmClear, tmnxEqFlashDataLoss, tmnxEqFlashDiskFull, tmnxPeSoftwareVersionMismatch, tmnxPeSoftwareLoadFailed, tmnxPeBootloaderVersionMismatch, tmnxPeBootromVersionMismatch, tmnxPeFPGAVersionMismatch, tmnxEqSynclftimingBITSAlarm,

tmnxEqSynclfTimingBITSAlarmClear, tmnxEqCardFirmwareUpgraded,  
tmnxChassisUpgradeInProgress, tmnxChassisUpgradeComplete,  
tmnxChassisHiBwMcastAlarm, tmnxEqOperStateChange,  
tmnxEqMdaCfgNotCompatible, tmnxCpmCardSyncFileNotPresent,  
tmnxEqMdaXplError, tmnxEqCardPChipError, tmnxEqCardSoftResetAlarm,  
tmnxEqMdaSyncENotCompatible, tmnxIPseclsaGrpActivesaChgd,  
tmnxEqCardPChipMemoryEvent, tmnxIPseclsaGrpUnableToSwitch,  
tmnxIPseclsaGrpTnlLowWMark, tmnxIPseclsaGrpTnlHighWMark,  
tmnxIPseclsaGrpTnlMax, tmnxEqSynclfTimingRef1Quality,  
tmnxEqSynclfTimingRef2Quality, tmnxEqSynclfTimingBITSQuality,  
tmnxEqSynclfTimingBITS2Quality, tmnxEqSynclfTimingRefSwitch,  
tmnxEqSynclfTimingBITS2Alarm, tmnxEqSynclfTimingBITS2AlarmClr,  
tmnxEqSynclfTimingBITSOutRefChg, tmnxEqCardPChipCamEvent,  
tmnxEqSynclfTimingSystemQuality, tmnxEqHwEnhancedCapability,  
tmnxEqSynclfTimingPTPQuality, tmnxEqSynclfTimingPTPAlarm,  
tmnxEqSynclfTimingPTPAlarmClr, tmnxPeFirmwareVersionWarning,  
tmnxMDAIsaTunnelGroupChange, tmnxEqPowerCapacityExceeded,  
tmnxEqPowerCapacityExceededClear, tmnxEqPowerLostCapacity,  
tmnxEqPowerLostCapacityClear, tmnxEqPowerOverloadState,  
tmnxEqPowerOverloadStateClear, tmnxEqCardQChipBufMemoryEvent,  
tmnxEqCardQChipStatsMemoryEvent, tmnxEqCardQChipIntMemoryEvent,  
tmnxEqCardChipIfDownEvent, tmnxEqCardChipIfCellEvent,  
tmnxEqLowSwitchFabricCap, tmnxEqLowSwitchFabricCapClear,  
tmnxEqPowerSafetyAlertThreshold, tmnxEqPowerSafetyAlertClear,  
tmnxEqPowerSafetyLevelThreshold, tmnxEqPowerSafetyLevelClear,  
tmnxEqCardTChipParityEvent, tmnxEqProvPowerCapacityAlm,  
tmnxEqProvPowerCapacityAlmClr, tmnxPlyAcctStatsPoolExcResource,  
tmnxPlyAcctStatsPoolLowResource, tmnxPlyAcctStatsEventOvrflwClr,  
tmnxPlyAcctStatsEventOvrflw, tmnxlomResHighLimitReached,  
tmnxlomResExhausted, tmnxlomResStateClr, tmnxlomEventOverflow,  
tmnxlomEventOverflowClr, tmnxEqDataPathFailureProtImpact,  
tmnxExtStandbyCpmReboot, tmnxExtStandbyCpmRebootFail,  
tmnxEqMdaIngrXplError, tmnxSynclfTimBITS2048khzUnsup,  
tmnxSynclfTimBITS2048khzUnsupClr, tmnxEqMgmtEthRedStandbyRaise,  
tmnxEqMgmtEthRedStandbyClear, tmnxEqPhysChassPowerSupOvrTmp,  
tmnxEqPhysChassPowerSupOvrTmpClr, tmnxEqPhysChassPowerSupAcFail,  
tmnxEqPhysChassPowerSupAcFailClr, tmnxEqPhysChassPowerSupDcFail,  
tmnxEqPhysChassPowerSupDcFailClr, tmnxEqPhysChassPowerSupInFail,  
tmnxEqPhysChassPowerSupInFailClr, tmnxEqPhysChassPowerSupOutFail,  
tmnxEqPhysChassPowerSupOutFailCl, tmnxEqPhysChassisFanFailure,  
tmnxEqPhysChassisFanFailureClear, tIPseclsaMemLowWatermark,  
tIPseclsaMemHighWatermark, tIPseclsaMemMax, tmnxCpmMemSizeMismatch,  
tmnxCpmMemSizeMismatchClear, tmnxPhysChassPwrSupWrgFanDir,  
tmnxPhysChassPwrSupWrgFanDirClr, tmnxPhysChassPwrSupPemACRect,  
tmnxPhysChassPwrSupPemACRectClr, tmnxPhysChassPwrSupInputFeed,  
tmnxPhysChassPwrSupInputFeedClr, tmnxEqBpEpromFail,  
tmnxEqBpEpromFailClear, tmnxEqBpEpromWarning, tmnxEqBpEpromWarningClear,  
tmnxPhysChassisPCMIInputFeed, tmnxPhysChassisPCMIInputFeedClr,  
tmnxIPMacQosIngOverload, tmnxIPMacQosIngOverloadClear,  
tmnxIPQosEgrOverload, tmnxIPQosEgrOverloadClear, tmnxIPv6QosIngOverload,  
tmnxIPv6QosIngOverloadClear, tmnxIPv6QosEgrOverload,

tmnxIPv6QosEgrOverloadClear, tmnxIPMacFilterIngOverload,  
tmnxIPMacFilterIngOverloadClear, tmnxIPMacFilterEgrOverload,  
tmnxIPMacFilterEgrOverloadClear, tmnxIPv6FilterIngOverload,  
tmnxIPv6FilterIngOverloadClear, tmnxIPv6FilterEgrOverload,  
tmnxIPv6FilterEgrOverloadClear, tmnxIPMacCpmFilterOverload,  
tmnxIPMacCpmFilterOverloadClear, tmnxIPv6CpmFilterOverload,  
tmnxIPv6CpmFilterOverloadClear, tmnxBluetoothModuleConnectionChg,  
tmnxGnssAcquiringFix, tmnxGnssAcquiredFix, tmnxPhysChassisPMOutFail,  
tmnxPhysChassisPMOutFailClr, tmnxPhysChassisPMInputFeed,  
tmnxPhysChassisPMInputFeedClr, tmnxPhysChassisFilterDoorOpen,  
tmnxPhysChassisFilterDoorClosed, tmnxPhysChassisPMOverTemp,  
tmnxPhysChassisPMOverTempClr, tmnxEqFpgaSoftError,  
tmnxEqSynclfTimingSyncEQuality, tmnxEqSynclfTimingSyncE2Quality,  
tmnxEqSynclfTimingSyncEAlarm, tmnxEqSynclfTimingSyncEAlarmClr,  
tmnxEqSynclfTimingSyncE2Alarm, tmnxEqSynclfTimingSyncE2AlarmClr,  
tmnxEqHwEventDetected, tmnxTunnelGrpEsaVmActivity, tmnxEsaDiscovered,  
tmnxEsaConnected, tmnxEsaDisconnected, tmnxEsaFailure, tmnxEsaCleared,  
tmnxEsaVmCreated, tmnxEsaVmBooted, tmnxEsaVmRemoved,  
tmnxEsaVmCleared, tmnxEsaVmFailure, tIPsecEsaVmMemLowWatermark,  
tIPsecEsaVmMemHighWatermark, tmnxPeKernelVersionMismatch,  
tmnxFPResourcePolicyModified, tmnxFPResourcePolicyModifiedClr,  
tmnxEqSynclfTimingGnssQuality, tmnxEqSynclfTimingGnss2Quality,  
tmnxEqSynclfTimingGnssAlarm, tmnxEqSynclfTimingGnss2Alarm,  
tmnxEqSynclfTimingGnssAlarmClr, tmnxEqSynclfTimingGnss2AlarmClr,  
tmnxEsaFirmwareUpgradeStarted, tmnxPlyAcctPldrPoolExcResource,  
tmnxPlyAcctPldrPoolLowResource, tChassisAirflowDirMismatch,  
tChassisAirflowDirMismatchClr, tChassisPowerSupplyMismatch,  
tChassisPowerSupplyMismatchClr, tChassisPowerSupplyUnsup,  
tmnxHwAggShpSchedEventOvrflwClr, tmnxHwAggShpSchedEventOvrflw,  
tmnxFPResOversubscribed, tmnxFPResOversubscribedCleared,  
tmnxIPMacFilterIngNearFull, tmnxIPMacFilterIngNearFullClear,  
tmnxIPMacFilterEgrNearFull, tmnxIPMacFilterEgrNearFullClear,  
tmnxIPv6FilterIngNearFull, tmnxIPv6FilterIngNearFullClear, tmnxIPv6FilterEgrNearFull,  
tmnxIPv6FilterEgrNearFullClear, tmnxEsaHwStatusDegraded,  
tmnxEsaHwStatusDegradedClr, tmnxEsaHwStatusCritical, tmnxEsaHwStatusCriticalClr,  
tmnxEsaHwPwrSup1Degraded, tmnxEsaHwPwrSup1DegradedClr,  
tmnxEsaHwPwrSup1Failed, tmnxEsaHwPwrSup1FailedClr,  
tmnxEsaHwPwrSup2Degraded, tmnxEsaHwPwrSup2DegradedClr,  
tmnxEsaHwPwrSup2Failed, tmnxEsaHwPwrSup2FailedClr,  
tmnxEsaHwFanBankNonRedun, tmnxEsaHwFanBankNonRedunClr,  
tmnxEsaHwFanBankFailRedun, tmnxEsaHwFanBankFailRedunClr,  
tmnxEsaHwFanStatusDegraded, tmnxEsaHwFanStatusDegradedClr,  
tmnxEsaHwFanStatusFailed, tmnxEsaHwFanStatusFailedClr,  
tmnxEsaHwPwrSupMismatch, tmnxEsaHwPwrSupMismatchClr,  
tmnxEsaHwPwrSupBankNonRedun, tmnxEsaHwPwrSupBankNonRedunClr,  
tmnxEsaHwPwrSupBankFailRedun, tmnxEsaHwPwrSupBankFailRedunClr,  
tmnxEsaHwTemperatureDegraded, tmnxEsaHwTemperatureDegradedClr,  
tmnxEsaHwTemperatureFailed, tmnxEsaHwTemperatureFailedClr,  
tmnxPowerSupplyFanFailed, tmnxPowerSupplyFanFailedClear,  
tmnxSasAlarminput1StateChanged, tmnxSasAlarminput2StateChanged,  
tmnxSasAlarminput3StateChanged, tmnxSasAlarminput4StateChanged,



tmnxAlarmInputVoltageFailure, tmnxlomRsrcUsageHighLimitReached, tmnxlomRsrcUsageExhausted, tmnxlomRsrcUsageRecovered, tmnxlomRsrcUserOversubscribed, tmnxlomRsrcUserOversubscribedClr, tmnxlomRsrcEventOverflow, tmnxlomRsrcEventOverflowClr, tmnxlomRsrcOwnerOversubscribed, tmnxlomRsrcOwnerOversubscribedClr, tmnxInterChassisCommsDown, tmnxInterChassisCommsUp, tmnxCpmlcPortDown, tmnxCpmlcPortUp, tmnxCpmlcPortSFFInserted, tmnxCpmlcPortSFFRemoved, tmnxCpmANoLocallcPort, tmnxCpmBNoLocallcPort, tmnxCpmALocallcPortAvail, tmnxCpmBLocallcPortAvail, CpmlcPortSFFStatusFailure, CpmlcPortSFFStatusDDMCorrupt, CpmlcPortSFFStatusReadError, CpmlcPortSFFStatusUnsupported, tmnxCpmlcPortDDMFailure, tmnxCpmlcPortDDMClear, tmnxSfmlcPortDown, tmnxSfmlcPortUp, tmnxSfmlcPortSFFInserted, tmnxSfmlcPortSFFRemoved, SfmlcPortSFFStatusFailure, SfmlcPortSFFStatusDDMCorrupt, SfmlcPortSFFStatusReadError, SfmlcPortSFFStatusUnsupported, tmnxSfmlcPortDDMFailure, tmnxSfmlcPortDDMClear, tmnxSfmlcPortDegraded, tmnxSfmlcPortDegradedClear, tmnxCardResMacFdbHighUsgSet, tmnxCardResMacFdbHighUsgClr, tmnxPowerShelfInputPwrModeSwitch, tmnxPowerShelfCommsDown, tmnxPowerShelfCommsUp, tmnxPowerShelfOutputStatusSwitch, tmnxPowerShelfOutputStatusDown, tmnxPowerShelfOutputStatusUp

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **generate** *boolean*

Synopsis Generate log events when the event occurs

Context **configure** [log log-events chassis event](#) *keyword generate boolean*

Tree [generate](#)

Introduced 16.0.R1

Platforms All

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** [log log-events chassis event](#) *keyword repeat boolean*

Tree [repeat](#)

Default false

Introduced 16.0.R4

Platforms All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure log log-events chassis event</b> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure log log-events chassis event</b> <i>keyword specific-throttle boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure log log-events chassis event</b> <i>keyword specific-throttle-interval number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure log log-events chassis event</b> <i>keyword specific-throttle-limit number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">chassis</a> <a href="#">event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**debug** [event](#) *keyword*

Synopsis	Enter the <b>debug</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">debug</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">debug</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">debug</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">debug</a>
Options	traceEvent
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">debug</a> <a href="#">event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">debug</a> <a href="#">event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">debug</a> <a href="#">event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">debug</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">debug</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">debug</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">debug</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**dhcp** [event](#) *keyword*

Synopsis	Enter the <b>dhcp</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">dhcp</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">dhcp</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">dhcp</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">dhcp</a>
Options	svcDHCPLeaseStateRestoreProblem, sapDHCPLeaseEntriesExceeded, sapDHCPLeaseStateOverride, sapDHCPSuspiciousPcktRcvd, sapDHCPLeaseStatePopulateErr, sdpBindDHCPLeaseEntriesExceeded, sdpBindDHCPLeaseStateOverride, sdpBindDHCPSuspiciousPcktRcvd, sdpBindDHCPLeaseStatePopulateErr, tmnxVRtrDHCPSuspiciousPcktRcvd, sapStaticHostDynMacConflict, sapDHCPProxyServerError, tmnxVRtrDHCPIfLseStatesExceeded, sdpBindDHCPProxyServerError, tmnxVRtrDHCP6RelayLseStExceeded, tmnxVRtrDHCP6ServerLseStExceeded, tmnxVRtrDHCP6LseStateOverride, tmnxVRtrDHCP6RelayReplyStripUni,

tmnxVRtrDHCP6IllegalClientAddr, tmnxVRtrDHCP6AssignedIllegSubnet, tmnxVRtrDHCP6ClientMacUnresolved, sapDHCP6LseStateMobilityError, sdpBindDHCP6LseStateMobilityErr, svcDHCP6MiscellaneousProblem, sapStatHost6DynMacConflict

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log log-events dhcp event</a> <i>keyword generate boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

### **repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log log-events dhcp event</a> <i>keyword repeat boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log log-events dhcp event</a> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle *boolean***

Synopsis	Use parameters to throttle the specific event
Context	<b>configure log log-events dhcp event</b> <i>keyword specific-throttle boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval *number***

Synopsis	Duration of the event specific throttling interval
Context	<b>configure log log-events dhcp event</b> <i>keyword specific-throttle-interval number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit *number***

Synopsis	Throttle limit within which events can be logged
Context	<b>configure log log-events dhcp event</b> <i>keyword specific-throttle-limit number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle *boolean***

Synopsis	Throttle log events of this type
Context	<b>configure log log-events dhcp event</b> <i>keyword throttle boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**dhcps event** *keyword*

Synopsis	Enter the <b>dhcps</b> list instance
Context	<b>configure log log-events dhcps event</b> <i>keyword</i>
Tree	<b>dhcps</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events dhcps event</b> <i>keyword</i>
Tree	<b>dhcps</b>
Options	tmnxDhcpSvrSubnetMinFreeExc, tmnxDhcpSvrHostConflict, tmnxDhcpSvrPoolUnknown, tmnxDhcpSvrLeaseNotOwner, tmnxDhcpSvrDeclineStaticAddr, tmnxDhcpSvrMsgTooLong, tmnxDhcpsFoStateChange, tmnxDhcpsFoLeaseUpdateFailed, tmnxDhcpSvrUserDbUnknown, tmnxDhcpSvrMaxLeasesReached, tmnxDhcpSvrNoSubnetFixAddr, tmnxDhcpSvrLeaseDefaultTimers, tmnxDhcpSvrPoolMinFreeExc, tmnxDhcpSvrSubnetDepleted, tmnxDhcpSvrPoolDepleted, tmnxDhcpSvrIntLseConflict, tmnxDhcpSvrLeaseModify, tmnxDhcpSvrLeaseCreate, tmnxDhcpSvrLeaseDelete, tmnxLudbDhcpGroupIfTooLong, tmnxLudbPppoeGroupIfTooLong, tmnxDhcpSvrNoContFreeBlocks, tmnxDhcpsPoolFoStateChange, tmnxDhcpsPoolFoLeaseUpdateFailed, tmnxDhcpSvrPIThTooLowV6, tmnxDhcpSvrPIThDepletedV6, tmnxDhcpSvrPfxThTooLowV6, tmnxDhcpSvrPfxThDepletedV6, tmnxDhcpsLeaseOfferedExpired, tmnxDhcpsAddrAllocationFailure, tmnxDhcpsPacketDropped
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events dhcps event</b> <i>keyword generate</i> <i>boolean</i>
Tree	<b>generate</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events dhcp event</b> keyword <b>repeat</b> <i>boolean</i>
Tree	<b>repeat</b>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure log log-events dhcp event</b> keyword <b>severity</b> <i>keyword</i>
Tree	<b>severity</b>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure log log-events dhcp event</b> keyword <b>specific-throttle</b> <i>boolean</i>
Tree	<b>specific-throttle</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure log log-events dhcp event</b> keyword <b>specific-throttle-interval</b> <i>number</i>
Tree	<b>specific-throttle-interval</b>
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>dhcp</b> <b>event</b> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>dhcp</b> <b>event</b> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**diameter** [event](#) *keyword*

Synopsis	Enter the <b>diameter</b> list instance
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>diameter</b> <b>event</b> <i>keyword</i>
Tree	<a href="#">diameter</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>diameter</b> <b>event</b> <i>keyword</i>
Tree	<a href="#">diameter</a>
Options	tmnxDiamPolicyPeerStateChange, tmnxDiamAppSessionFailure, tmnxDiamSessionEvent, tmnxDiamPpPrxMcLocStateChanged, tmnxDiamMessageDropped, tmnxDiamNdPeerStatActiveChanged
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">diameter</a> <a href="#">event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">diameter</a> <a href="#">event</a> <i>keyword</i> <b>repeat</b> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">diameter</a> <a href="#">event</a> <i>keyword</i> <b>severity</b> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">diameter</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">diameter</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">diameter</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">diameter</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**dot1x** [event](#) *keyword*

Synopsis	Enter the <b>dot1x</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">dot1x</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">dot1x</a>
Introduced	21.2.R1
Platforms	All

**event keyword**

Synopsis	Events for dynsvc module.
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">dot1x</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">dot1x</a>
Options	alxDot1xHostAuthEvent
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">dot1x</a> <a href="#">event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	21.2.R1
Platforms	All

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">dot1x</a> <a href="#">event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	21.2.R1
Platforms	All

**severity keyword**

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">dot1x</a> <a href="#">event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	21.2.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">dot1x</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	21.2.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">dot1x</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	21.2.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">dot1x</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	21.2.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">dot1x</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	21.2.R1
Platforms	All

**dynsvc event** *keyword*

Synopsis	Enter the <b>dynsvc</b> list instance
Context	<b>configure log log-events dynsvc event keyword</b>
Tree	<a href="#">dynsvc</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events dynsvc event keyword</b>
Tree	<a href="#">dynsvc</a>
Options	tmnxDynSvcSapFailed
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events dynsvc event keyword generate boolean</b>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events dynsvc event keyword repeat boolean</b>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">dynsvc</a> <a href="#">event</a> <i>keyword</i> <b>severity</b> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">dynsvc</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">dynsvc</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle-interval</b> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">dynsvc</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All



**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">dynsvc</a> <a href="#">event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**efm-oam** [event](#) *keyword*

Synopsis	Enter the <b>efm-oam</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">efm-oam</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">efm-oam</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">efm-oam</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">efm-oam</a>
Options	tmnxDot3OamPeerChanged, tmnxDot3OamLoopDetected, tmnxDot3OamLoopCleared, dot3OamThresholdEvent, dot3OamNonThresholdEvent, tmnxDot3OamSdThresholdEvent, tmnxDot3OamThresholdEventClr, tmnxDot3OamNonThresholdEventClr
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">efm-oam</a> <a href="#">event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events efm-oam event</b> <i>keyword repeat boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure log log-events efm-oam event</b> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure log log-events efm-oam event</b> <i>keyword specific-throttle boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure log log-events efm-oam event</b> <i>keyword specific-throttle-interval number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure log log-events efm-oam event</b> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>
Tree	<b>specific-throttle-limit</b>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure log log-events efm-oam event</b> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<b>throttle</b>
Introduced	16.0.R1
Platforms	All

**elmi** *event* *keyword*

Synopsis	Enter the <b>elmi</b> list instance
Context	<b>configure log log-events elmi event</b> <i>keyword</i>
Tree	<b>elmi</b>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events elmi event</b> <i>keyword</i>
Tree	<b>elmi</b>
Options	tmnxElmilfStatusChangeEvent, tmnxElmiEVCStatusChangeEvent
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log log-events elmi event</a> <i>keyword generate boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log log-events elmi event</a> <i>keyword repeat boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log log-events elmi event</a> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log log-events elmi event</a> <i>keyword specific-throttle boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">elmi</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">elmi</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">elmi</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**ering** [event](#) *keyword*

Synopsis	Enter the <b>ering</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ering</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">ering</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events ering event keyword</b>
Tree	<a href="#">ering</a>
Options	tmnxEthRingPathFwdStateChange, tmnxEthRingApsPrvsnRaiseAlarm, tmnxEthRingApsPrvsnClearAlarm
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events ering event keyword generate boolean</b>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events ering event keyword repeat boolean</b>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity keyword**

Synopsis	Severity level associated with event type
Context	<b>configure log log-events ering event keyword severity keyword</b>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ering</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ering</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ering</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ering</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**eth-cfm event keyword**

Synopsis	Enter the <b>eth-cfm</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">eth-cfm</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">eth-cfm</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">eth-cfm</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">eth-cfm</a>
Options	dot1agCfmFaultAlarm, tmnxDot1agCfmMepLbmTestComplete, tmnxDot1agCfmMepLtmTestComplete, tmnxDot1agCfmMepEthTestComplete, tmnxDot1agCfmMepDMTestComplete, tmnxDot1agCfmMepAisStateChanged, tmnxDot1agCfmMipEvaluation, tmnxDot1agCfmMepSLMTestComplete, tmnxDot1agCfmMepCsfStateChanged, tmnxDot1agCfmMepFclyFaultRaise, tmnxDot1agCfmMepFclyFaultClear
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">eth-cfm</a> <a href="#">event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">eth-cfm</a> <a href="#">event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false



Introduced 16.0.R4  
Platforms All

### **severity** *keyword*

Synopsis Severity level associated with event type  
Context **configure** [log](#) [log-events](#) [eth-cfm](#) [event](#) *keyword severity keyword*  
Tree [severity](#)  
Options cleared, indeterminate, critical, major, minor, warning  
Introduced 16.0.R1  
Platforms All

### **specific-throttle** *boolean*

Synopsis Use parameters to throttle the specific event  
Context **configure** [log](#) [log-events](#) [eth-cfm](#) [event](#) *keyword specific-throttle boolean*  
Tree [specific-throttle](#)  
Introduced 16.0.R1  
Platforms All

### **specific-throttle-interval** *number*

Synopsis Duration of the event specific throttling interval  
Context **configure** [log](#) [log-events](#) [eth-cfm](#) [event](#) *keyword specific-throttle-interval number*  
Tree [specific-throttle-interval](#)  
Range 1 to 1200  
Introduced 16.0.R1  
Platforms All

### **specific-throttle-limit** *number*

Synopsis Throttle limit within which events can be logged  
Context **configure** [log](#) [log-events](#) [eth-cfm](#) [event](#) *keyword specific-throttle-limit number*  
Tree [specific-throttle-limit](#)  
Range 1 to 20000

Introduced 16.0.R1  
 Platforms All

### **throttle** *boolean*

Synopsis Throttle log events of this type  
 Context **configure** [log](#) [log-events](#) [eth-cfm](#) [event](#) *keyword* **throttle** *boolean*  
 Tree [throttle](#)  
 Introduced 16.0.R1  
 Platforms All

### **etun** [event](#) *keyword*

Synopsis Enter the **etun** list instance  
 Context **configure** [log](#) [log-events](#) [etun](#) [event](#) *keyword*  
 Tree [etun](#)  
 Introduced 16.0.R1  
 Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure** [log](#) [log-events](#) [etun](#) [event](#) *keyword*  
 Tree [etun](#)  
 Options tmnxEthTunnelApsCfgRaiseAlarm, tmnxEthTunnelApsCfgClearAlarm, tmnxEthTunnelApsPrvsnRaiseAlarm, tmnxEthTunnelApsPrvsnClearAlarm, tmnxEthTunnelApsNoRspRaiseAlarm, tmnxEthTunnelApsNoRspClearAlarm, tmnxEthTunnelApsSwitchoverAlarm  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **generate** *boolean*

Synopsis Generate log events when the event occurs  
 Context **configure** [log](#) [log-events](#) [etun](#) [event](#) *keyword* **generate** *boolean*

Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">etun</a> <a href="#">event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">etun</a> <a href="#">event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">etun</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">etun</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>

Range	1 to 1200
Introduced	16.0.R1
Platforms	All

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">etun</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

### **throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">etun</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

### **filter** [event](#) *keyword*

Synopsis	Enter the <b>filter</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">filter</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">filter</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">filter</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">filter</a>
Options	tIPFilterPBRPacketsDrop, tFilterSubInsSpaceAlarmRaised, tFilterSubInsSpaceAlarmCleared, tFilterSubInsFltrEntryDropped,

tFilterBgpFlowSpecProblem, tFilterApplyPathProblem,  
 tFilterRadSharedFitrAlarmRaised, tFilterRadSharedFitrAlarmClear,  
 tFilterEmbeddingOperStateChange, tFilterEmbedOpenflowOperStateChg,  
 tFilterOpenflowRequestRejected, tFilterEmbedFlowspecOperStateChg,  
 tFilterEmbedVsdOperStateChg, tFilterRPActiveDestChangeEvent

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">filter</a> <a href="#">event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

### **repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">filter</a> <a href="#">event</a> <i>keyword</i> <b>repeat</b> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">filter</a> <a href="#">event</a> <i>keyword</i> <b>severity</b> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">filter</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">filter</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">filter</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">filter</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**gmpls event** *keyword*

Synopsis	Enter the <b>gmpls</b> list instance
Context	<b>configure log log-events gmpls event</b> <i>keyword</i>
Tree	<a href="#">gmpls</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events gmpls event</b> <i>keyword</i>
Tree	<a href="#">gmpls</a>
Options	vRtrGmplsLspPathStateChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events gmpls event</b> <i>keyword generate</i> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events gmpls event</b> <i>keyword repeat</i> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">gmpls</a> <a href="#">event</a> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">gmpls</a> <a href="#">event</a> <i>keyword specific-throttle boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">gmpls</a> <a href="#">event</a> <i>keyword specific-throttle-interval number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">gmpls</a> <a href="#">event</a> <i>keyword specific-throttle-limit number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All



**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">gmps</a> <a href="#">event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**gsmp** [event](#) *keyword*

Synopsis	Enter the <b>gsmp</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">gsmp</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">gsmp</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">gsmp</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">gsmp</a>
Options	tmnxAncpIngRateMonitorEvent, tmnxAncpIngRateMonitorEventL, tmnxAncpEgrRateMonitorEvent, tmnxAncpEgrRateMonitorEventL, tmnxAncpShcvDisabledEvent, tmnxAncpShcvDisabledEventL, tmnxAncpSesRejected, tmnxAncpStringRejected
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">gsmp</a> <a href="#">event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">gsmp event</a> <i>keyword</i> <b>repeat</b> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">gsmp event</a> <i>keyword</i> <b>severity</b> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">gsmp event</a> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">gsmp event</a> <i>keyword</i> <b>specific-throttle-interval</b> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">gsm</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">gsm</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**igh** *event* *keyword*

Synopsis	Enter the <b>igh</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">igh</a> <i>event</i> <i>keyword</i>
Tree	<a href="#">igh</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">igh</a> <i>event</i> <i>keyword</i>
Tree	<a href="#">igh</a>
Options	tmnxIfGroupHandlerProtoOprChange, tmnxIfGroupHdlrMbrProtoOprChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">igh event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">igh event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">igh event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">igh event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">igh</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">igh</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">igh</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**igmp** [event](#) *keyword*

Synopsis	Enter the <b>igmp</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">igmp</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">igmp</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events igmp event keyword</b>
Tree	<a href="#">igmp</a>
Options	vRtrIgmPlfRxQueryVerMismatch, vRtrIgmPlfCModeRxQueryMismatch, vRtrIgmPMaxGrpsLimitExceeded, vRtrIgmPMcacPlyDropped, vRtrIgmPHostInstantiationFail, vRtrIgmPHostMaxGrpsLimitExceeded, vRtrIgmPHostMcacPlyDropped, vRtrIgmPHostCModeRxQueryMismatch, vRtrIgmPHostRxQueryVerMismatch, vRtrIgmPHostMaxSrcsLimitExceeded, vRtrIgmPMaxSrcsLimitExceeded, vRtrIgmPGrpIfSapMaxGrpsLimExceed, vRtrIgmPGrpIfSapMaxSrcsLimExceed, vRtrIgmPGrpIfSapMcacPlyDropped, vRtrIgmPGrpIfSapCModeRxQueryMism, vRtrIgmPGrpIfSapRxQueryVerMism, vRtrIgmPHostMaxGrpSrcsLimitExcd, vRtrIgmPMaxGrpSrcsLimitExceeded, vRtrIgmPGrpIfSapMaxGrpSrcLimExcd, vRtrIgmPHostQryIntervalConflict, vRtrIgmPNotifyNumOfIPseclfLowWm, vRtrIgmPNotifyNumOfIPseclfHighWm, vRtrIgmPNotifyNumOfIPseclfMaxRch, vRtrIgmPSlaProfInstMcacPlyDrop
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events igmp event keyword generate boolean</b>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events igmp event keyword repeat boolean</b>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">igmp event</a> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">igmp event</a> <i>keyword specific-throttle boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">igmp event</a> <i>keyword specific-throttle-interval number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">igmp event</a> <i>keyword specific-throttle-limit number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">igmp event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**igmp-snooping** [event](#) *keyword*

Synopsis	Enter the <b>igmp-snooping</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">igmp-snooping event</a> <i>keyword</i>
Tree	<a href="#">igmp-snooping</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">igmp-snooping event</a> <i>keyword</i>
Tree	<a href="#">igmp-snooping</a>
Options	sapIgmPsnPgGrpLimitExceeded, sapIgmPsnPgMcacPlcyDropped, sdpBndIgmPsnPgGrpLimitExceeded, sdpBndIgmPsnPgMcacPlcyDropped, sapIgmPsnPgMcsFailure, sapIgmPsnPgSrcLimitExceeded, sdpBndIgmPsnPgSrcLimitExceeded, sdpBndIgmPsnPgGrpSrcLimitExceed, sapIgmPsnPgGrpSrcLimitExceeded, eMplslgmPsnPgMfibFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">igmp-snooping event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All



**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">igmp-snooping event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">igmp-snooping event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">igmp-snooping event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">igmp-snooping event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">igmp-snooping event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">igmp-snooping event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**ip event** *keyword*

Synopsis	Enter the <b>ip</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ip event</a> <i>keyword</i>
Tree	<a href="#">ip</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ip event</a> <i>keyword</i>
Tree	<a href="#">ip</a>
Options	clearRTMError, ipEtherBroadcast, ipDuplicateAddress, ipArpInfoOverwritten, fibAddFailed, qosNetworkPolicyMallocFailed, ipArpBadInterface, ipArpDuplicateIpAddress, ipArpDuplicateMacAddress, ipAnyDuplicateAddress, labelIndexAllocFailed
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms All

### **generate** *boolean*

Synopsis Generate log events when the event occurs  
Context **configure log log-events ip event** keyword **generate** *boolean*  
Tree **generate**  
Introduced 16.0.R1  
Platforms All

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared  
Context **configure log log-events ip event** keyword **repeat** *boolean*  
Tree **repeat**  
Default false  
Introduced 16.0.R4  
Platforms All

### **severity** *keyword*

Synopsis Severity level associated with event type  
Context **configure log log-events ip event** keyword **severity** *keyword*  
Tree **severity**  
Options cleared, indeterminate, critical, major, minor, warning  
Introduced 16.0.R1  
Platforms All

### **specific-throttle** *boolean*

Synopsis Use parameters to throttle the specific event  
Context **configure log log-events ip event** keyword **specific-throttle** *boolean*  
Tree **specific-throttle**  
Introduced 16.0.R1  
Platforms All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ip event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ip event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ip event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**ipsec** [event](#) *keyword*

Synopsis	Enter the <b>ipsec</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ipsec event</a> <i>keyword</i>
Tree	<a href="#">ipsec</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events ipsec event keyword</b>
Tree	<a href="#">ipsec</a>
Options	tIPsecRUTnIFailToCreate, tIPsecRUSAFailToAddRoute, tIPsecBfdIntfSessStateChgd, tIPsecRadAcctPlyFailure, tIPsecTrustAnchorPrfOprChg, tIPsecTunnelEncapIpMtuTooSmall, tIPsecRuTnIFailToCreate, tmnxSecNotifCmptedCertHashChngd, tmnxSecNotifCmptedCertChnChngd, tmnxSecNotifSendChnNotInCmptChn, tmnxIPsecTunnelOperStateChange, tmnxIPsecGWOperStateChange, tIPsecRUTnIRemoved, tIPsecTunnelProtocolFailed
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events ipsec event keyword generate boolean</b>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events ipsec event keyword repeat boolean</b>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**severity keyword**

Synopsis	Severity level associated with event type
Context	<b>configure log log-events ipsec event keyword severity keyword</b>
Tree	<a href="#">severity</a>

Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log log-events ipsec event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log log-events ipsec event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log log-events ipsec event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log log-events ipsec event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**isis event keyword**

Synopsis	Enter the <b>isis</b> list instance
Context	<b>configure</b> <a href="#">log log-events isis event keyword</a>
Tree	<a href="#">isis</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log log-events isis event keyword</a>
Tree	<a href="#">isis</a>
Options	vRtrIisisSpbNbrMultAdjExists, vRtrIisisSpbNbrMultAdjExistsClear, vRtrSpbEctFidCfgChg, tmnxIisisDatabaseOverload, tmnxIisisManualAddressDrops, tmnxIisisCorruptedLSPDetected, tmnxIisisMaxSeqExceedAttempt, tmnxIisisIDLenMismatch, tmnxIisisMaxAreaAdrsMismatch, tmnxIisisOwnLSPPurge, tmnxIisisSequenceNumberSkip, tmnxIisisAutTypeFail, tmnxIisisAuthFail, tmnxIisisVersionSkew, tmnxIisisAreaMismatch, tmnxIisisRejectedAdjacency, tmnxIisisLSPTooLargeToPropagate, tmnxIisisOrigLSPBufSizeMismatch, tmnxIisisProtoSuppMismatch, tmnxIisisAdjacencyChange, tmnxIisisCirclDExhausted, tmnxIisisAdjRestartStatusChange, tmnxIisisLdpSyncTimerStarted, tmnxIisisLdpSyncExit, tmnxIisisExportLimitReached, tmnxIisisExportLimitWarning, tmnxIisisRoutesExpLmtDropped, tmnxIisisFailureDisabled, tmnxIisisSidError, tmnxIisisSidNotInLabelRange, tmnxIisisRejectedAdjacencySid, tmnxIisisLSPPurge, tmnxIisisPfxLimitOverloadWarning, tmnxIisisAdjBfdSessionSetupFail, tmnxIisisSrgbBadLabelRange, tmnxIisisCircMtuTooLow, tmnxIisisRejectedAdjacencySet, tmnxIisisCorruptRemainingLifetime, tmnxIisisSidStatsIndexAlloc, tmnxIisisFaOperParticipationDown, tmnxIisisRejectedEndXSid, tmnxIisisRejectedPglD, tmnxIisisSrv6LocError
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
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Context	<b>configure log log-events isis event keyword generate boolean</b>
Tree	<b>generate</b>
Introduced	16.0.R1
Platforms	All

### **repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events isis event keyword repeat boolean</b>
Tree	<b>repeat</b>
Default	false
Introduced	16.0.R4
Platforms	All

### **severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure log log-events isis event keyword severity keyword</b>
Tree	<b>severity</b>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

### **specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure log log-events isis event keyword specific-throttle boolean</b>
Tree	<b>specific-throttle</b>
Introduced	16.0.R1
Platforms	All

### **specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure log log-events isis event keyword specific-throttle-interval number</b>



Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log log-events isis event keyword</a> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

### **throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log log-events isis event keyword</a> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

### **l2tp event** *keyword*

Synopsis	Enter the <b>l2tp</b> list instance
Context	<b>configure</b> <a href="#">log log-events l2tp event keyword</a>
Tree	<a href="#">l2tp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log log-events l2tp event keyword</a>
Tree	<a href="#">l2tp</a>

Options	tmnxL2tpPeerUnreachable, tmnxL2tpIlsaMdaVRtrStateChange, tmnxL2tpLnsSePppSessionFailure, tmnxL2tpVappVRtrStateChange, tmnxL2tpTunnelBlacklisted, tmnxL2tpTunnelSelBlacklistFull, tmnxL2tpLnsPppNcpFailure, tmnxL2tpApFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log log-events l2tp event</a> <i>keyword generate boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log log-events l2tp event</a> <i>keyword repeat boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log log-events l2tp event</a> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**specific-throttle *boolean***

Synopsis	Use parameters to throttle the specific event
Context	<b>configure log log-events l2tp event</b> <i>keyword specific-throttle boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**specific-throttle-interval *number***

Synopsis	Duration of the event specific throttling interval
Context	<b>configure log log-events l2tp event</b> <i>keyword specific-throttle-interval number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**specific-throttle-limit *number***

Synopsis	Throttle limit within which events can be logged
Context	<b>configure log log-events l2tp event</b> <i>keyword specific-throttle-limit number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**throttle *boolean***

Synopsis	Throttle log events of this type
Context	<b>configure log log-events l2tp event</b> <i>keyword throttle boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**lag event keyword**

Synopsis	Enter the <b>lag</b> list instance
Context	<b>configure log log-events lag event keyword</b>
Tree	<a href="#">lag</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events lag event keyword</b>
Tree	<a href="#">lag</a>
Options	DynamicCostOn, DynamicCostOff, LagPortAddFailed, LagSubGroupSelected, LagPortAddFailureCleared, LagStateEvent, tLagMemberStateEvent, tmnxLagBfdMemStateChanged, tLagAdaptiveLoadbalancingChanged
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events lag event keyword generate boolean</b>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events lag event keyword repeat boolean</b>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">lag event</a> <i>keyword</i> <b>severity</b> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">lag event</a> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">lag event</a> <i>keyword</i> <b>specific-throttle-interval</b> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">lag event</a> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">lag event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**ldap** [event](#) *keyword*

Synopsis	Enter the <b>ldap</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ldap event</a> <i>keyword</i>
Tree	<a href="#">ldap</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ldap event</a> <i>keyword</i>
Tree	<a href="#">ldap</a>
Options	tmnxLdapOperStateChange, tmnxLdapServerOperStateChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ldap event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ldap event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ldap event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ldap event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ldap event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>ldp</b> <b>event</b> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>
Tree	<b>specific-throttle-limit</b>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>ldp</b> <b>event</b> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<b>throttle</b>
Introduced	16.0.R1
Platforms	All

**ldp** *event* *keyword*

Synopsis	Enter the <b>ldp</b> list instance
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>ldp</b> <b>event</b> <i>keyword</i>
Tree	<b>ldp</b>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>ldp</b> <b>event</b> <i>keyword</i>
Tree	<b>ldp</b>
Options	vRtrLdpStateChange, vRtrLdpGroupIdMismatch, vRtrLdpNgIpv4InstStateChange, vRtrLdpNgIpv6InstStateChange, vRtrLdpNgIfStateChange, vRtrLdpNgInetIfStateChange, vRtrLdpNgTargPeerStateChange, vRtrLdpNgSessionStateChange, vRtrLdpNgSessMaxFecThresChanged, vRtrLdpNgSessMaxFecLimitReached, vRtrLdpNgResourceExhaustion, vRtrLdpNgAddrFecCommMismatch
Notes	This element is part of a list key.



Introduced 16.0.R1  
Platforms All

### **generate** *boolean*

Synopsis Generate log events when the event occurs  
Context **configure** [log log-events ldp event keyword generate boolean](#)  
Tree [generate](#)  
Introduced 16.0.R1  
Platforms All

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared  
Context **configure** [log log-events ldp event keyword repeat boolean](#)  
Tree [repeat](#)  
Default false  
Introduced 16.0.R4  
Platforms All

### **severity** *keyword*

Synopsis Severity level associated with event type  
Context **configure** [log log-events ldp event keyword severity keyword](#)  
Tree [severity](#)  
Options cleared, indeterminate, critical, major, minor, warning  
Introduced 16.0.R1  
Platforms All

### **specific-throttle** *boolean*

Synopsis Use parameters to throttle the specific event  
Context **configure** [log log-events ldp event keyword specific-throttle boolean](#)  
Tree [specific-throttle](#)  
Introduced 16.0.R1

Platforms All

### **specific-throttle-interval** *number*

Synopsis Duration of the event specific throttling interval  
Context **configure** [log](#) [log-events](#) [ldp event](#) *keyword* [specific-throttle-interval](#) *number*  
Tree [specific-throttle-interval](#)  
Range 1 to 1200  
Introduced 16.0.R1  
Platforms All

### **specific-throttle-limit** *number*

Synopsis Throttle limit within which events can be logged  
Context **configure** [log](#) [log-events](#) [ldp event](#) *keyword* [specific-throttle-limit](#) *number*  
Tree [specific-throttle-limit](#)  
Range 1 to 20000  
Introduced 16.0.R1  
Platforms All

### **throttle** *boolean*

Synopsis Throttle log events of this type  
Context **configure** [log](#) [log-events](#) [ldp event](#) *keyword* [throttle](#) *boolean*  
Tree [throttle](#)  
Introduced 16.0.R1  
Platforms All

### **li** [event](#) *keyword*

Synopsis Enter the **li** list instance  
Context **configure** [log](#) [log-events](#) [li event](#) *keyword*  
Tree [li](#)  
Introduced 16.0.R1  
Platforms All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log log-events</a> <a href="#">li event</a> <i>keyword</i>
Tree	<a href="#">li</a>
Options	sbiBootLiConfig, sourceEnabled, sourceDisabled, destinationEnabled, destinationDisabled, sourceSapChange, sourceSubscriberChange, tMirrorSourceIPFtrChangeReject, tMirrorSourceMacFtrChangeReject, tMirrorSourceFilterAssignReject, tMirrorDestinationChangeReject, tMirrorSourceFilterOverruled, tMirrorSourceFilterAssignWarn, tMirrorFilterAssignToSapWarn, tMirrorFilterAssignToSdpWarn, tMirrorFilterAssignToIrfWarn, tMirrorSourceLiFilterChanged, tMirrorSourceLiSubProblem, tMirrorSourceIPv6FtrChangeRej, tMirrorLiNatLsnSubOperStateCh, tMirrorLiNatL2awSubOperStateCh, tMirrorLiNat64SubOperStateCh, tMirrorLiX2Alarm, tFtrLiRsvdBlockRangeChangeEvent, tMirrorLiSrcPortLicInvalid, tMirrorLiXIfLicenseInvalid, cli_user_login, cli_user_logout, cli_user_login_failed, cli_user_login_max_attempts, ftp_user_login, ftp_user_logout, ftp_user_login_failed, ftp_user_login_max_attempts, ssh_user_login, ssh_user_logout, ssh_user_login_failed, ssh_user_login_max_attempts, cli_user_io, snmp_user_set, cli_config_io, cli_unauth_user_io, cli_unauth_config_io, grpc_user_login, grpc_user_logout, grpc_user_login_failed, grpc_user_login_max_attempts, host_snmp_attempts, radiusFailed, netconf_user_login, netconf_user_logout, netconf_user_login_failed, netconf_user_login_max_attempts, mdSaveCommitHistoryFailed, sbiBootMdReadCommitHistoryFailed, ssiSaveConfigSucceeded, ssiSaveConfigFailed, tmnxConfigModify, tmnxConfigCreate, tmnxConfigDelete, tmnxStateChange, mdLiConfigChange, ssiSyncConfigOK, ssiSyncConfigFailed, md_cli_io, md_cli_unauth_io, tmnxClear, netconf_auth, netconf_unauth, grpc_auth, grpc_unauth
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log log-events</a> <a href="#">li event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">li</a> <a href="#">event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">li</a> <a href="#">event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">li</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">li</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>li</b> <b>event</b> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>
Tree	<b>specific-throttle-limit</b>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>li</b> <b>event</b> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<b>throttle</b>
Introduced	16.0.R1
Platforms	All

**lldp** **event** *keyword*

Synopsis	Enter the <b>lldp</b> list instance
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>lldp</b> <b>event</b> <i>keyword</i>
Tree	<b>lldp</b>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>lldp</b> <b>event</b> <i>keyword</i>
Tree	<b>lldp</b>
Options	lldpRemTablesChange, tmnxLldpRemEntryPeerAdded, tmnxLldpRemEntryPeerUpdated, tmnxLldpRemEntryPeerRemoved, tmnxLldpRemManAddrEntryAdded, tmnxLldpRemManAddrEntryRemoved
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">lldp event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">lldp event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">lldp event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">lldp event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>lldp</b> <b>event</b> <i>keyword</i> <b>specific-throttle-interval</b> <i>number</i>
Tree	<b>specific-throttle-interval</b>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>lldp</b> <b>event</b> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>
Tree	<b>specific-throttle-limit</b>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>lldp</b> <b>event</b> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<b>throttle</b>
Introduced	16.0.R1
Platforms	All

**Imp event** *keyword*

Synopsis	Enter the <b>Imp</b> list instance
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>Imp</b> <b>event</b> <i>keyword</i>
Tree	<b>Imp</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events Imp event keyword</b>
Tree	<a href="#">Imp</a>
Options	tmnxLmpVRtrTeLinkPropMismatch, tmnxLmpVRtrTeLinkPropMismatchClr, tmnxLmpVRtrDbLinkPropMismatch, tmnxLmpVRtrDbLinkPropMismatchClr, tmnxLmpVRtrControlChannelState, tmnxLmpVRtrTeLinkState
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events Imp event keyword generate boolean</b>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events Imp event keyword repeat boolean</b>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**severity keyword**

Synopsis	Severity level associated with event type
Context	<b>configure log log-events Imp event keyword severity keyword</b>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1



Platforms 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **specific-throttle** *boolean*

Synopsis Use parameters to throttle the specific event  
Context **configure log log-events Imp event** *keyword specific-throttle boolean*  
Tree [specific-throttle](#)  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **specific-throttle-interval** *number*

Synopsis Duration of the event specific throttling interval  
Context **configure log log-events Imp event** *keyword specific-throttle-interval number*  
Tree [specific-throttle-interval](#)  
Range 1 to 1200  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **specific-throttle-limit** *number*

Synopsis Throttle limit within which events can be logged  
Context **configure log log-events Imp event** *keyword specific-throttle-limit number*  
Tree [specific-throttle-limit](#)  
Range 1 to 20000  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **throttle** *boolean*

Synopsis Throttle log events of this type  
Context **configure log log-events Imp event** *keyword throttle boolean*  
Tree [throttle](#)  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**logger event keyword**

Synopsis	Enter the <b>logger</b> list instance
Context	<b>configure log log-events logger event keyword</b>
Tree	<b>logger</b>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events logger event keyword</b>
Tree	<b>logger</b>
Options	STARTED, tmnxLogTraceError, tmnxLogSpaceContention, tmnxLogAdminLocFailed, tmnxLogBackupLocFailed, tmnxLogFileRollover, tmnxLogFileDeleted, tmnxClear, tmnxTestEvent, tmnxLogEventThrottled, tmnxSysLogTargetProblem, tmnxLogAccountingDataLoss, tmnxStdEventsReplayed, tmnxLogOnlyEventThrottled, tmnxLogEventOverrun, tmnxLogOnlyEventOverrun
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events logger event keyword generate boolean</b>
Tree	<b>generate</b>
Introduced	16.0.R1
Platforms	All

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events logger event keyword repeat boolean</b>
Tree	<b>repeat</b>
Default	false

Introduced 16.0.R4  
Platforms All

### **severity** *keyword*

Synopsis Severity level associated with event type  
Context **configure** [log](#) [log-events](#) [logger](#) [event](#) *keyword severity keyword*  
Tree [severity](#)  
Options cleared, indeterminate, critical, major, minor, warning  
Introduced 16.0.R1  
Platforms All

### **specific-throttle** *boolean*

Synopsis Use parameters to throttle the specific event  
Context **configure** [log](#) [log-events](#) [logger](#) [event](#) *keyword specific-throttle boolean*  
Tree [specific-throttle](#)  
Introduced 16.0.R1  
Platforms All

### **specific-throttle-interval** *number*

Synopsis Duration of the event specific throttling interval  
Context **configure** [log](#) [log-events](#) [logger](#) [event](#) *keyword specific-throttle-interval number*  
Tree [specific-throttle-interval](#)  
Range 1 to 1200  
Introduced 16.0.R1  
Platforms All

### **specific-throttle-limit** *number*

Synopsis Throttle limit within which events can be logged  
Context **configure** [log](#) [log-events](#) [logger](#) [event](#) *keyword specific-throttle-limit number*  
Tree [specific-throttle-limit](#)  
Range 1 to 20000

Introduced 16.0.R1  
 Platforms All

### **throttle** *boolean*

Synopsis Throttle log events of this type  
 Context **configure** [log](#) [log-events](#) [logger](#) [event](#) *keyword* **throttle** *boolean*  
 Tree [throttle](#)  
 Introduced 16.0.R1  
 Platforms All

### **macsec** [event](#) *keyword*

Synopsis Enter the **macsec** list instance  
 Context **configure** [log](#) [log-events](#) [macsec](#) [event](#) *keyword*  
 Tree [macsec](#)  
 Introduced 16.0.R1  
 Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure** [log](#) [log-events](#) [macsec](#) [event](#) *keyword*  
 Tree [macsec](#)  
 Options tmnxMacsecConfiguredPortCA, tmnxMacsecUnconfiguredPortCA, tmnxMacsecEnabledPort, tmnxMacsecDisabledPort, tmnxMacsecMaxPeerLimitExceeded, tmnxMkaSessionEstablished, tmnxMkaPskRollover, tmnxMkaSessionEnded, tmnxMkaOperStateChanged, tmnxMacsecMaxPeerLimitCleared, tmnxMacsecCaCreate, tmnxMacsecSakCreate, tmnxMacsecSakInstalledRx, tmnxMacsecSakInstalledTx, tmnxMacsecMkaReplayAttemptDisc, tmnxMacsecDpReplayAttempt, tmnxMacsecSakDelete  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">macsec event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">macsec event</a> <i>keyword</i> <b>repeat</b> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">macsec event</a> <i>keyword</i> <b>severity</b> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">macsec event</a> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">macsec</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">macsec</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">macsec</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**mc-redundancy** [event](#) *keyword*

Synopsis	Enter the <b>mc-redundancy</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mc-redundancy</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">mc-redundancy</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mc-redundancy</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">mc-redundancy</a>
Options	tmnxMcRedundancyPeerStateChanged, tmnxMcRedundancyMismatchDetected, tmnxMcRedundancyMismatchResolved, tmnxMcPeerSyncStatusChanged, tmnxMcSyncClientAlarmRaised, tmnxMcSyncClientAlarmCleared, tmnxSrrpSubnetMismatch, tmnxSrrpSubnetMismatchCleared, tmnxSrrpInstanceldMismatch, tmnxSrrpSapMismatch, tmnxSrrpSapTagMismatch, tmnxSrrpRedlIfMismatch, tmnxSrrpDualMaster, tmnxMcLagInfoLagChanged, tmnxSrrpSystemIpNotSet, tmnxMcRingOperStateChanged, tmnxMcRingInbCtrlOperStateChgd, tmnxMcRingNodeLocOperStateChgd, tmnxMcSyncClockSkewRaised, tmnxMcSyncClockSkewCleared, tmnxSrrpDuplicateSubIfAddress, tmnxMcPeerRingsOperStateChanged, tmnxSrrpTrapNewMaster, tmnxSrrpBecameBackup, srrpPacketDiscarded, tmnxSrrpBfdIntfSessStateChgd, tmnxMcPeerEPBfdSessionOpen, tmnxMcPeerEPBfdSessionClose, tmnxMcPeerEPBfdSessionUp, tmnxMcPeerEPBfdSessionDown, tmnxMcPeerEPOperDown, tmnxMcPeerEPOperUp, tmnxMCEPSessionPsvModeEnabled, tmnxMCEPSessionPsvModeDisabled, tMcPeerIPsecTnlGrpMasterStateChg, tMcPeerIPsecTnlGrpProtStatusChg, tmnxMcOmcrStatFailedChanged, tmnxMcOmcrClientNumEntriesHigh, tmnxSrrpOperDownInvalidMac, tmnxSrrpOperDownInvalidMacClear, tmnxSrrpPrivRetailMismatch, tMcIPsecDomainActivityStateChg, tMcIPsecDomainProtStatusChg
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mc-redundancy</a> <a href="#">event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mc-redundancy</a> <a href="#">event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>

---

Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mc-redundancy</a> <a href="#">event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mc-redundancy</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mc-redundancy</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mc-redundancy</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>



---

Range	1 to 20000
Introduced	16.0.R1
Platforms	All

### **throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mc-redundancy</a> <a href="#">event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

### **mcpath** [event](#) *keyword*

Synopsis	Enter the <b>mcpath</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mcpath</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">mcpath</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mcpath</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">mcpath</a>
Options	tmnxMcPathSrcGrpBlackHole, tmnxMcPathSrcGrpBlackHoleCleared, tmnxMcPathAvailBwLimitExceeded, tmnxMcPathAvailBwLimitCleared
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mcpath</a> <a href="#">event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>

---

Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

### **repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mcp</a> <a href="#">path</a> <a href="#">event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mcp</a> <a href="#">path</a> <a href="#">event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

### **specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mcp</a> <a href="#">path</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

### **specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mcp</a> <a href="#">path</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>

---

Range	1 to 1200
Introduced	16.0.R1
Platforms	All

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mcpath</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

### **throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mcpath</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

### **mgmt-core** [event](#) *keyword*

Synopsis	Enter the <b>mgmt-core</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mgmt-core</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">mgmt-core</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mgmt-core</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">mgmt-core</a>
Options	none, mdConfigChange, mdOcConfigChange, mdBofConfigChange, mdDebugConfigChange, asyncOperationStatusChange, syncOperationStatusChange

---

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mgmt-core</a> <a href="#">event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

### **repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mgmt-core</a> <a href="#">event</a> <i>keyword</i> <b>repeat</b> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mgmt-core</a> <a href="#">event</a> <i>keyword</i> <b>severity</b> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

### **specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mgmt-core</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>

Introduced 16.0.R1  
Platforms All

### **specific-throttle-interval** *number*

Synopsis Duration of the event specific throttling interval  
Context **configure log log-events mgmt-core event** *keyword* **specific-throttle-interval** *number*  
Tree **specific-throttle-interval**  
Range 1 to 1200  
Introduced 16.0.R1  
Platforms All

### **specific-throttle-limit** *number*

Synopsis Throttle limit within which events can be logged  
Context **configure log log-events mgmt-core event** *keyword* **specific-throttle-limit** *number*  
Tree **specific-throttle-limit**  
Range 1 to 20000  
Introduced 16.0.R1  
Platforms All

### **throttle** *boolean*

Synopsis Throttle log events of this type  
Context **configure log log-events mgmt-core event** *keyword* **throttle** *boolean*  
Tree **throttle**  
Introduced 16.0.R1  
Platforms All

### **mirror** *event* *keyword*

Synopsis Enter the **mirror** list instance  
Context **configure log log-events mirror event** *keyword*  
Tree **mirror**  
Introduced 16.0.R1

Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log](#) [log-events](#) [mirror](#) [event](#) *keyword*

Tree [mirror](#)

Options sourceEnabled, sourceDisabled, destinationEnabled, destinationDisabled, sourceIpfFilterChange, sourceMacFilterChange, sourceSapChange, sourceSubscriberChange, tMirrorSourceIpv6FilterChange

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **generate** *boolean*

Synopsis Generate log events when the event occurs

Context **configure** [log](#) [log-events](#) [mirror](#) [event](#) *keyword* [generate](#) *boolean*

Tree [generate](#)

Introduced 16.0.R1

Platforms All

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** [log](#) [log-events](#) [mirror](#) [event](#) *keyword* [repeat](#) *boolean*

Tree [repeat](#)

Default false

Introduced 16.0.R4

Platforms All

### **severity** *keyword*

Synopsis Severity level associated with event type

Context **configure** [log](#) [log-events](#) [mirror](#) [event](#) *keyword* [severity](#) *keyword*

Tree [severity](#)

---

Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

### **specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mirror</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

### **specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mirror</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mirror</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

### **throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mirror</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>

Introduced	16.0.R1
Platforms	All

### **mld event** *keyword*

Synopsis	Enter the <b>mld</b> list instance
Context	<b>configure log log-events mld event</b> <i>keyword</i>
Tree	<b>mld</b>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events mld event</b> <i>keyword</i>
Tree	<b>mld</b>
Options	vRtrMldIfRxQueryVerMismatch, vRtrMldIfCModeRxQueryMismatch, vRtrMldMaxGrpsLimitExceeded, vRtrMldMcacPlcyDropped, vRtrMldHostInstantiationFail, vRtrMldHostMaxGrpsLimitExceeded, vRtrMldHostMcacPlcyDropped, vRtrMldHostCModeRxQueryMismatch, vRtrMldHostRxQueryVerMismatch, vRtrMldHostMaxSrcsLimitExceeded, vRtrMldMaxSrcsLimitExceeded, vRtrMldGrpIfSapMaxGrpsLimExceed, vRtrMldGrpIfSapMaxSrcsLimExceed, vRtrMldGrpIfSapMcacPlcyDropped, vRtrMldGrpIfSapCModeRxQueryMism, vRtrMldGrpIfSapRxQueryVerMism, vRtrMldHostMaxGrpSrcsLimitExcd, vRtrMldMaxGrpSrcsLimitExceeded, vRtrMldGrpIfSapMaxGrpSrcLimExcd, vRtrMldHostQryIntervalConflict, vRtrMldSlaProfInstMcacPlcyDrop
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events mld event</b> <i>keyword generate</i> <i>boolean</i>
Tree	<b>generate</b>
Introduced	16.0.R1
Platforms	All



**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events mld event</b> <i>keyword repeat boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure log log-events mld event</b> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure log log-events mld event</b> <i>keyword specific-throttle boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure log log-events mld event</b> <i>keyword specific-throttle-interval number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>mld</b> <b>event</b> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>
Tree	<b>specific-throttle-limit</b>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>mld</b> <b>event</b> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<b>throttle</b>
Introduced	16.0.R1
Platforms	All

**mld-snooping** *event* *keyword*

Synopsis	Enter the <b>mld-snooping</b> list instance
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>mld-snooping</b> <b>event</b> <i>keyword</i>
Tree	<b>mld-snooping</b>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>mld-snooping</b> <b>event</b> <i>keyword</i>
Tree	<b>mld-snooping</b>
Options	sapMldSnpgGrpLimitExceeded, sdpBndMldSnpgGrpLimitExceeded, sapMldSnpgMcsFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log log-events mld-snooping event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log log-events mld-snooping event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log log-events mld-snooping event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log log-events mld-snooping event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mld-snooping</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mld-snooping</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mld-snooping</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**mpls** [event](#) *keyword*

Synopsis	Enter the <b>mpls</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mpls</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">mpls</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>mpls</b> <b>event</b> <i>keyword</i>
Tree	<b>mpls</b>
Options	mplsXCUp, mplsXCDown, mplsTunnelUp, mplsTunnelDown, mplsTunnelRerouted, mplsTunnelReoptimized, vRtrMplsStateChange, vRtrMplsIfStateChange, vRtrMplsLspUp, vRtrMplsLspDown, vRtrMplsLspPathUp, vRtrMplsLspPathDown, vRtrMplsLspPathRerouted, vRtrMplsLspPathResignaled, vRtrMplsP2mplInstanceUp, vRtrMplsP2mplInstanceDown, vRtrMplsS2ISubLspUp, vRtrMplsS2ISubLspDown, vRtrMplsS2ISubLspRerouted, vRtrMplsS2ISubLspResignaled, vRtrMplsLspPathSoftPreempted, vRtrMplsLspPathLstFillReoptElig, vRtrMplsP2mplInstanceResignaled, vRtrMplsResignalTimerExpired, vRtrMplsLspPathMbbStatusEvent, vRtrMplsLspSwitchStbyFailure, vRtrMplsLspActivePathChanged, vRtrMplsXCBundleChange, vRtrMplsNodeInlgnOverload, vRtrMplsIPv6StateChange, vRtrMplsIfIPv6StateChange, vRtrMplsLspResourceExhaustion, vRtrMplsLspManualSwitchFailure, vRtrMplsLspPathManualDegStateChg, vRtrMplsS2ISubLspPreempted
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>mpls</b> <b>event</b> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<b>generate</b>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>mpls</b> <b>event</b> <i>keyword</i> <b>repeat</b> <i>boolean</i>
Tree	<b>repeat</b>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mpls</a> <a href="#">event</a> <i>keyword</i> <b>severity</b> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mpls</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mpls</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle-interval</b> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mpls</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mpls</a> <a href="#">event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**mpls-tp** [event](#) *keyword*

Synopsis	Enter the <b>mpls-tp</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mpls-tp</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">mpls-tp</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mpls-tp</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">mpls-tp</a>
Options	vRtrMplsTpLspRevertMismatchAlarm, vRtrMplsTpLspRevertMismatchClear, vRtrMplsTpLspPtTypeMismatchAlarm, vRtrMplsTpLspPtTypeMismatchClear, vRtrMplsTpLspActivePathUp, vRtrMplsTpLspActivePathChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mpls-tp</a> <a href="#">event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>mpls-tp</b> <b>event</b> <i>keyword</i> <b>repeat</b> <i>boolean</i>
Tree	<b>repeat</b>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>mpls-tp</b> <b>event</b> <i>keyword</i> <b>severity</b> <i>keyword</i>
Tree	<b>severity</b>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>mpls-tp</b> <b>event</b> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<b>specific-throttle</b>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>mpls-tp</b> <b>event</b> <i>keyword</i> <b>specific-throttle-interval</b> <i>number</i>
Tree	<b>specific-throttle-interval</b>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All



**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mpls-tp event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mpls-tp event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**msdp** [event](#) *keyword*

Synopsis	Enter the <b>msdp</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">msdp event</a> <i>keyword</i>
Tree	<a href="#">msdp</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">msdp event</a> <i>keyword</i>
Tree	<a href="#">msdp</a>
Options	<a href="#">msdpEstablished</a> , <a href="#">msdpBackwardTransition</a> , <a href="#">tmnxMsdpNgActSrcLimExcd</a> , <a href="#">tmnxMsdpNgPeerActSrcLimExcd</a> , <a href="#">tmnxMsdpNgRPFFailure</a> , <a href="#">tmnxMsdpNgSourceSrcActMsgsExcd</a> , <a href="#">tmnxMsdpNgGroupSrcActMsgsExcd</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log log-events msdp event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log log-events msdp event</a> <i>keyword</i> <b>repeat</b> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log log-events msdp event</a> <i>keyword</i> <b>severity</b> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log log-events msdp event</a> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">msdp</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">msdp</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">msdp</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**nat** [event](#) *keyword*

Synopsis	Enter the <b>nat</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">nat</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">nat</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">nat</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">nat</a>
Options	tmnxNatPIL2AwBlockUsageHigh, tmnxNatIlsaMemberSessionUsageHigh, tmnxNatPILsnMemberBlockUsageHigh, tmnxNatL2AwSublcmpPortUsageHigh, tmnxNatL2AwSubUdpPortUsageHigh, tmnxNatL2AwSubTcpPortUsageHigh, tmnxNatL2AwSubSessionUsageHigh, tmnxNatPIBlockAllocationLsn, tmnxNatPIBlockAllocationL2Aw, tmnxNatResourceProblemDetected, tmnxNatResourceProblemCause, tmnxNatPIAddrFree, tmnxNatPILsnRedActiveChanged, tmnxNatPcpSrvStateChanged, tmnxNatMdaActive, tmnxNatLsnSubBlksFree, tmnxNatDetPlcyChanged, tmnxNatMdaDetectsLoadSharingErr, tmnxNatIlsaGrpOperStateChanged, tmnxNatIlsaGrplsDegraded, tmnxNatLsnSublcmpPortUsgHigh, tmnxNatLsnSubUdpPortUsgHigh, tmnxNatLsnSubTcpPortUsgHigh, tmnxNatLsnSubSessionUsgHigh, tmnxNatInAddrPrefixBlksFree, tmnxNatFwd2EntryAdded, tmnxNatDetPlcyOperStateChanged, tmnxNatDetMapOperStateChanged, tmnxNatFwd2OperStateChanged, tmnxNatVrtrOutDnatOnlyRoutesHigh, tmnxNatMapRuleChange, tmnxNatMaxNbrSubsOrHostsExceeded, tmnxNatNbrSubsOrHostsBelowThrsh, tmnxNatVappActive, tmnxNatVappDetectsLoadSharingErr, tmnxNatDetPfxMapOperStateChanged, tmnxNatDetMap2OperStateChanged, tmnxNatDynamicConfigMismatch, tmnxNatPIL2AwMembrBlockUsageHigh, tmnxNatPIMemberExtBlockUsageHigh
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">nat</a> <a href="#">event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">nat</a> <a href="#">event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>

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Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log log-events nat event keyword severity keyword</a>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log log-events nat event keyword specific-throttle boolean</a>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log log-events nat event keyword specific-throttle-interval number</a>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log log-events nat event keyword specific-throttle-limit number</a>
Tree	<a href="#">specific-throttle-limit</a>

Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log log-events nat event keyword throttle boolean</a>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ntp event** *keyword*

Synopsis	Enter the <b>ntp</b> list instance
Context	<b>configure</b> <a href="#">log log-events ntp event keyword</a>
Tree	<a href="#">ntp</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log log-events ntp event keyword</a>
Tree	<a href="#">ntp</a>
Options	tmnxNtpAuthMismatch, tmnxNtpNoServersAvail, tmnxNtpServersAvail, tmnxNtpOperChange, tmnxNtpServerChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log log-events ntp event keyword generate boolean</a>

---

Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

### **repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ntp event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ntp event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

### **specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ntp event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

### **specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ntp event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>

Range	1 to 1200
Introduced	16.0.R1
Platforms	All

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ntp event</a> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

### **throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ntp event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

### **oam** [event](#) *keyword*

Synopsis	Enter the <b>oam</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">oam event</a> <i>keyword</i>
Tree	<a href="#">oam</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">oam event</a> <i>keyword</i>
Tree	<a href="#">oam</a>
Options	tmnxOamPingProbeFailedV3, tmnxOamPingTestFailedV3, tmnxOamPingTestCompletedV3, tmnxAncpLoopbackTestCompleted,



tmnxAncpLoopbackTestCompletedL, tmnxOamTrPathChange, tmnxOamTrTestFailed, tmnxOamTrTestCompleted, svcldInvalid, svcldWrongType, tmnxOamLdpTtraceAutoDiscState, tmnxOamLdpTtraceFecProbeState, tmnxOamLdpTtraceFecDisStatus, tmnxOamLdpTtraceFecPFailUpdate, tmnxOamSaaThreshold, tmnxOamDiagTestCompleted, tmnxTwampSrvInactivityTimeout, tmnxTwampSrvMaxConnsExceeded, tmnxTwampSrvPfxMaxConnsExceeded, tmnxTwampSrvMaxSessExceeded, tmnxTwampSrvPfxMaxSessExceeded, tmnxTwampRflInactivityTimeout, tmnxOamPmThrRaise, tmnxOamPmThrClear, tmnxOamSathSvcTestCompleted, tmnxOamSathSvcStrmCompleted

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **generate** *boolean*

Synopsis Generate log events when the event occurs

Context **configure** [log log-events oam event](#) keyword [generate](#) *boolean*

Tree [generate](#)

Introduced 16.0.R1

Platforms All

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** [log log-events oam event](#) keyword [repeat](#) *boolean*

Tree [repeat](#)

Default false

Introduced 16.0.R4

Platforms All

### **severity** *keyword*

Synopsis Severity level associated with event type

Context **configure** [log log-events oam event](#) keyword [severity](#) *keyword*

Tree [severity](#)

Options cleared, indeterminate, critical, major, minor, warning

Introduced 16.0.R1

Platforms All

### **specific-throttle** *boolean*

Synopsis Use parameters to throttle the specific event  
Context **configure** [log](#) [log-events](#) [oam](#) [event](#) *keyword* [specific-throttle](#) *boolean*  
Tree [specific-throttle](#)  
Introduced 16.0.R1  
Platforms All

### **specific-throttle-interval** *number*

Synopsis Duration of the event specific throttling interval  
Context **configure** [log](#) [log-events](#) [oam](#) [event](#) *keyword* [specific-throttle-interval](#) *number*  
Tree [specific-throttle-interval](#)  
Range 1 to 1200  
Introduced 16.0.R1  
Platforms All

### **specific-throttle-limit** *number*

Synopsis Throttle limit within which events can be logged  
Context **configure** [log](#) [log-events](#) [oam](#) [event](#) *keyword* [specific-throttle-limit](#) *number*  
Tree [specific-throttle-limit](#)  
Range 1 to 20000  
Introduced 16.0.R1  
Platforms All

### **throttle** *boolean*

Synopsis Throttle log events of this type  
Context **configure** [log](#) [log-events](#) [oam](#) [event](#) *keyword* [throttle](#) *boolean*  
Tree [throttle](#)  
Introduced 16.0.R1  
Platforms All

**openflow event keyword**

Synopsis	Enter the <b>openflow</b> list instance
Context	<b>configure log log-events openflow event keyword</b>
Tree	<b>openflow</b>
Introduced	16.0.R2
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events openflow event keyword</b>
Tree	<b>openflow</b>
Options	tmnxOFFlowEntryInsertFailed
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events openflow event keyword generate boolean</b>
Tree	<b>generate</b>
Introduced	16.0.R2
Platforms	All

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events openflow event keyword repeat boolean</b>
Tree	<b>repeat</b>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure log log-events openflow event</b> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R2
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure log log-events openflow event</b> <i>keyword specific-throttle boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R2
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure log log-events openflow event</b> <i>keyword specific-throttle-interval number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R2
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure log log-events openflow event</b> <i>keyword specific-throttle-limit number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R2
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">openflow</a> <a href="#">event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R2
Platforms	All

**ospf** [event](#) *keyword*

Synopsis	Enter the <b>ospf</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ospf</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">ospf</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ospf</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">ospf</a>
Options	tmnxOspfVirtIfStateChange, tmnxOspfVirtNbrStateChange, tmnxOspfVirtIfConfigError, tmnxOspfVirtIfAuthFailure, tmnxOspfVirtIfRxBadPacket, tmnxOspfAreaOriginateLsa, tmnxOspfAreaMaxAgeLsa, tmnxOspfLsdbOverflow, tmnxOspfLsdbApproachingOverflow, tmnxOspfNssaTranslatorStatusChg, tmnxOspfRestartStatusChange, tmnxOspfVirtNbrRestartHlprStsChg, tmnxOspfSpfRunsStopped, tmnxOspfSpfRunsRestarted, tmnxOspfOverloadEntered, tmnxOspfOverloadExited, tmnxOspfAsOriginateLsa, tmnxOspfAsMaxAgeLsa, tmnxOspfShamIfStateChange, tmnxOspfShamNbrStateChange, tmnxOspfShamIfConfigError, tmnxOspfShamIfAuthFailure, tmnxOspfShamIfRxBadPacket, tmnxOspfShamNbrRestartHlprStsChg, tmnxOspfFailureDisabled, tmnxOspfExportLimitReached, tmnxOspfExportLimitWarning, tmnxOspfRoutesExpLmtDropped, tmnxOspfNgNbrStateChange, tmnxOspfNgIfConfigError, tmnxOspfNgIfAuthFailure, tmnxOspfNgIfRxBadPacket, tmnxOspfNgIfStateChange, tmnxOspfNgNbrRestartHlprStsChg, tmnxOspfNgLinkOriginateLsa, tmnxOspfNgLinkMaxAgeLsa, tmnxOspfNgLdpSyncTimerStarted, tmnxOspfNgLdpSyncExit, tmnxOspfSrSidError, tmnxOspfSrSidNotInLabelRange, tmnxOspfOverloadWarning, tmnxOspfRejectedAdjacencySid, tmnxOspfAdjBfdSessionSetupFail, tmnxOspfSrgbBadLabelRange, tmnxOspfRejectedAdjacencySet,

	tmnxOspfSidStatsIndexAlloc, tmnxOspfDynHostnameDuplicate, tmnxOspfDynHostnameInconsistent, tmnxOspfFaOperParticipationDown
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log log-events ospf event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log log-events ospf event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log log-events ospf event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log log-events ospf event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>

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Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

### **specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log log-events ospf event keyword</a> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log log-events ospf event keyword</a> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

### **throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log log-events ospf event keyword</a> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

### **pcap** [event](#) *keyword*

Synopsis	Enter the <b>pcap</b> list instance
Context	<b>configure</b> <a href="#">log log-events pcap event</a> <i>keyword</i>
Tree	<a href="#">pcap</a>

Introduced 16.0.R1  
Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
Context **configure** [log log-events pcap event keyword](#)  
Tree [pcap](#)  
Options tmnxPcapFileError, tmnxPcapBufferFull, tmnxPcapBufferReadWriteFailure, tmnxPcapSoftwareFailure  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms All

### **generate** *boolean*

Synopsis Generate log events when the event occurs  
Context **configure** [log log-events pcap event keyword generate boolean](#)  
Tree [generate](#)  
Introduced 16.0.R1  
Platforms All

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared  
Context **configure** [log log-events pcap event keyword repeat boolean](#)  
Tree [repeat](#)  
Default false  
Introduced 16.0.R4  
Platforms All

### **severity** *keyword*

Synopsis Severity level associated with event type  
Context **configure** [log log-events pcap event keyword severity keyword](#)



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Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

### **specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">pcap event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

### **specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">pcap event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">pcap event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

### **throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">pcap event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>

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Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

### **pcep event** *keyword*

Synopsis	Enter the <b>pcep</b> list instance
Context	<b>configure log log-events pcep event</b> <i>keyword</i>
Tree	<a href="#">pcep</a>
Introduced	22.2.R1
Platforms	All

### **event** *keyword*

Synopsis	PCEP module events
Context	<b>configure log log-events pcep event</b> <i>keyword</i>
Tree	<a href="#">pcep</a>
Options	tmnxPcepPccPeerStateChange
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	All

### **generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events pcep event</b> <i>keyword generate</i> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	22.2.R1
Platforms	All

### **repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events pcep event</b> <i>keyword repeat</i> <i>boolean</i>
Tree	<a href="#">repeat</a>

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Default	false
Introduced	22.2.R1
Platforms	All

### **severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">pcep event</a> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	22.2.R1
Platforms	All

### **specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">pcep event</a> <i>keyword specific-throttle boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	22.2.R1
Platforms	All

### **specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">pcep event</a> <i>keyword specific-throttle-interval number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	22.2.R1
Platforms	All

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">pcep event</a> <i>keyword specific-throttle-limit number</i>
Tree	<a href="#">specific-throttle-limit</a>

Range	1 to 20000
Introduced	22.2.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log log-events pcep event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	22.2.R1
Platforms	All

**pfcp event** *keyword*

Synopsis	Enter the <b>pfcp</b> list instance
Context	<b>configure</b> <a href="#">log log-events pfcp event</a> <i>keyword</i>
Tree	<a href="#">pfcp</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**event** *keyword*

Synopsis	PFCP events
Context	<b>configure</b> <a href="#">log log-events pfcp event</a> <i>keyword</i>
Tree	<a href="#">pfcp</a>
Options	tmnxPfcplInvalidle
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log log-events pfcp event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<a href="#">generate</a>

Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared  
Context **configure** [log log-events pfc](#) [event](#) *keyword* [repeat](#) *boolean*  
Tree [repeat](#)  
Default false  
Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **severity** *keyword*

Synopsis Severity level associated with event type  
Context **configure** [log log-events pfc](#) [event](#) *keyword* [severity](#) *keyword*  
Tree [severity](#)  
Options cleared, indeterminate, critical, major, minor, warning  
Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **specific-throttle** *boolean*

Synopsis Use parameters to throttle the specific event  
Context **configure** [log log-events pfc](#) [event](#) *keyword* [specific-throttle](#) *boolean*  
Tree [specific-throttle](#)  
Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **specific-throttle-interval** *number*

Synopsis Duration of the event specific throttling interval  
Context **configure** [log log-events pfc](#) [event](#) *keyword* [specific-throttle-interval](#) *number*  
Tree [specific-throttle-interval](#)  
Range 1 to 1200

Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **specific-throttle-limit** *number*

Synopsis Throttle limit within which events can be logged  
 Context **configure** [log](#) [log-events](#) [pfc](#) [event](#) *keyword* [specific-throttle-limit](#) *number*  
 Tree [specific-throttle-limit](#)  
 Range 1 to 20000  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **throttle** *boolean*

Synopsis Throttle log events of this type  
 Context **configure** [log](#) [log-events](#) [pfc](#) [event](#) *keyword* [throttle](#) *boolean*  
 Tree [throttle](#)  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **pim event** *keyword*

Synopsis Enter the **pim** list instance  
 Context **configure** [log](#) [log-events](#) [pim](#) [event](#) *keyword*  
 Tree [pim](#)  
 Introduced 16.0.R1  
 Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure** [log](#) [log-events](#) [pim](#) [event](#) *keyword*  
 Tree [pim](#)  
 Options vRtrPimNgIfNeighborLoss, vRtrPimNgIfNeighborUp, vRtrPimNgInvalidJoinPrune, vRtrPimNgInvalidRegister, vRtrPimNgGrpInSSMRange, vRtrPimNgBSRStateChange, vRtrPimNgHelloDropped, vRtrPimNgSGLimitExceeded,

vRtrPimNgReplicationLmtExceeded, vRtrPimNgMDTLimitExceeded,  
 vRtrPimNgMaxGrpsLimitExceeded, vRtrPimNgDataMtReused,  
 vRtrPimNgMcacPlcyDropped, vRtrPimNgInvalidIPmsiTunnel,  
 vRtrPimNgMaxGraftRetry, vRtrPimNgBierInbInvSD, vRtrPimNgBierInbInvBfrId,  
 vRtrPimNgUmhBMonFastFailPriToStb, vRtrPimNgUmhBMonFastFailStbToPri,  
 vRtrPimNgInstMaxNbrReached, vRtrPimNgIfMaxNbrReached

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log log-events pim event</a> <i>keyword generate boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

### **repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log log-events pim event</a> <i>keyword repeat boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log log-events pim event</a> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure log log-events pim event</b> <i>keyword specific-throttle boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure log log-events pim event</b> <i>keyword specific-throttle-interval number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure log log-events pim event</b> <i>keyword specific-throttle-limit number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure log log-events pim event</b> <i>keyword throttle boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All



**pim-snooping event keyword**

Synopsis	Enter the <b>pim-snooping</b> list instance
Context	<b>configure log log-events pim-snooping event keyword</b>
Tree	<a href="#">pim-snooping</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events pim-snooping event keyword</b>
Tree	<a href="#">pim-snooping</a>
Options	tmnxPimSnpgIfNeighborLoss, tmnxPimSnpgIfNeighborUp, tmnxPimSnpgSGLimitExceeded, tmnxPimSnpgSnoopModeChanged, tmnxPimSnpgIfMaxNbrReached, tmnxPimSnpgMaxNbrReached
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events pim-snooping event keyword generate boolean</b>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events pim-snooping event keyword repeat boolean</b>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">pim-snooping</a> <a href="#">event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">pim-snooping</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">pim-snooping</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">pim-snooping</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">pim-snooping event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**port event** *keyword*

Synopsis	Enter the <b>port</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">port event</a> <i>keyword</i>
Tree	<a href="#">port</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">port event</a> <i>keyword</i>
Tree	<a href="#">port</a>
Options	sonetSDHAlarmSet, sonetSDHAlarmClear, sonetSDHChannelAlarmSet, sonetSDHChannelAlarmClear, SFPInserted, SFPRemoved, SFPStatusFailure, portError, yellowDiffDelayExceeded, redDiffDelayExceeded, bndlBadEndPtDiscriminator, ds3AlarmSet, ds3AlarmClear, ds1AlarmSet, ds1AlarmClear, etherAlarmSet, etherAlarmClear, ds1LoopbackStart, ds1LoopbackStop, ds3LoopbackStart, ds3LoopbackStop, sdhLoopbackStart, sdhLoopbackStop, etherLoopDetected, etherLoopCleared, etherSpeedNotCompatible, etherDuplexNotCompatible, etherIngressRateCfgNotCompatible, digitalDiagnosticMonitorFailed, SFPStatusDDMCorrupt, SFPStatusReadError, SFPStatusUnsupported, dsxClockSyncStateChange, bundleMlfrMemberLoopback, tmnxPortUnsupportedFunction, otuAlarms, tPortAccEgrQGrpHostMatchFailure, tPortEgrVPortHostMatchFailure, digitalDiagnosticMonitorCleared, tmnxEqSonetClockSrcNotCompatible, tmnxEqSonetSfThreshNotCompatible, tmnxEqSonetFramingNotCompatible, tmnxResvCbsPoolThreshGreen, tmnxResvCbsPoolThreshAmber, tmnxResvCbsPoolThreshRed, tmnxEqPortEtherCrcAlarm, tmnxEqPortEtherCrcAlarmClear, tmnxEqPortEtherInternalAlarm, tmnxEqPortEtherInternalAlarmClr, tmnxEqCohOptPortAlarm, tmnxEqPortEtherSymMonAlarm, tmnxEqPortEtherSymMonAlarmClear, SFPStatusCulprit, SFPStatusBlocked, SFPStatusOperational, tmnxRS232ControlLeadSignalChg, tmnxRS232SquelchStatusChange, tmnxRS232SquelchResetIssued,

tmnxCellularBearerCreated, tmnxCellularBearerDeleted, tmnxCellularBearerModified, tmnxEqPortEtherEgressRateChange, tmnxCellularNoServiceReset, tmnxCellularActiveSimCardChange, tmnxPortEtherLoopbackStart, tmnxPortEtherLoopbackStop, tmnxPortGnssStatusChange, tmnxWlanNetworkConnected, tmnxWlanNetworkDisconnected, tmnxPortAUIReset, tmnxCellPortCbsdRegistered, tmnxCellPortCbsdUnregistered, tmnxCellPortCbsdGranted, tmnxCellPortCbsdAuthorized, tmnxCellPortCbsdTransDown, tmnxHwAggShpSchedOperColorGreen, tmnxHwAggShpSchedOperColorAmber, tmnxHwAggShpSchedOperColorRed, tmnxCellularRssiAlarm, tmnxCellularRssiAlarmClear

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **generate** *boolean*

Synopsis	Generate log events of this type and increment the event counter
Context	<b>configure</b> <a href="#">log log-events port event keyword generate boolean</a>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

### **repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log log-events port event keyword repeat boolean</a>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log log-events port event keyword severity keyword</a>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1

Platforms All

### **specific-throttle** *boolean*

Synopsis Use parameters that throttle this specific event  
Context **configure** [log](#) [log-events](#) [port](#) [event](#) *keyword* [specific-throttle](#) *boolean*  
Tree [specific-throttle](#)  
Introduced 16.0.R1  
Platforms All

### **specific-throttle-interval** *number*

Synopsis Duration of the event specific throttling interval  
Context **configure** [log](#) [log-events](#) [port](#) [event](#) *keyword* [specific-throttle-interval](#) *number*  
Tree [specific-throttle-interval](#)  
Range 1 to 1200  
Introduced 16.0.R1  
Platforms All

### **specific-throttle-limit** *number*

Synopsis Times that this event can be logged within the specific throttle interval  
Context **configure** [log](#) [log-events](#) [port](#) [event](#) *keyword* [specific-throttle-limit](#) *number*  
Tree [specific-throttle-limit](#)  
Range 1 to 20000  
Introduced 16.0.R1  
Platforms All

### **throttle** *boolean*

Synopsis Throttle log events of this type  
Context **configure** [log](#) [log-events](#) [port](#) [event](#) *keyword* [throttle](#) *boolean*  
Tree [throttle](#)  
Introduced 16.0.R1  
Platforms All

**ppp event** *keyword*

Synopsis	Enter the <b>ppp</b> list instance
Context	<b>configure log log-events ppp event</b> <i>keyword</i>
Tree	<b>ppp</b>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events ppp event</b> <i>keyword</i>
Tree	<b>ppp</b>
Options	tmnxPppCpUp, tmnxPppCpDown, tmnxPppNcpUp, tmnxPppNcpDown, tmnxPppKeepaliveFailure, tmnxPppLqmFailure, ipcpRemotelpUnknown, ipcpSameLocalAndRemotelp, ipcpPeerSuggestedDifferentlp, ipcpPeerRejectedOurlp, ipcpPeerOnDifferentSubnet, tmnxPppLoopback, tmnxPppLoopbackClear, ipv6cpRemoteIntldUnknown, ipv6cpSameLocalAndRemoteIntld, ipv6cpPeerSuggestedDiffIntld, ipv6cpPeerRejectedOurIntld, ipv6cpPeerOnDifferentSubnet
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events ppp event</b> <i>keyword generate</i> <i>boolean</i>
Tree	<b>generate</b>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events ppp event</b> <i>keyword repeat</i> <i>boolean</i>
Tree	<b>repeat</b>

Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log log-events ppp event</a> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log log-events ppp event</a> <i>keyword specific-throttle boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log log-events ppp event</a> <i>keyword specific-throttle-interval number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log log-events ppp event</a> <i>keyword specific-throttle-limit number</i>
Tree	<a href="#">specific-throttle-limit</a>

Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ppp</a> <a href="#">event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**pppoe** [event](#) *keyword*

Synopsis	Enter the <b>pppoe</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">pppoe</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">pppoe</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">pppoe</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">pppoe</a>
Options	tmnxPppoeSessionFailure, tmnxPppoeNcpFailure, tmnxMlpppBundleIndicatorsChange, tmnxPppoeLacSteeringActive, tmnxPppoeLacSteeringStopped, tmnxPppoeLacSteeringFailed, tmnxPppoeMaxSessionsOvrExceeded
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">pppoe</a> <a href="#">event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>



Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log log-events pppoe event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log log-events pppoe event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log log-events pppoe event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log log-events pppoe event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>

Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log log-events pppoe event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log log-events pppoe event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pppoe-clnt** [event](#) *keyword*

Synopsis	Enter the <b>pppoe-clnt</b> list instance
Context	<b>configure</b> <a href="#">log log-events pppoe-clnt event</a> <i>keyword</i>
Tree	<a href="#">pppoe-clnt</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log log-events pppoe-clnt event</a> <i>keyword</i>
Tree	<a href="#">pppoe-clnt</a>
Options	tmnxPppoeClientSetupFailure, tmnxPppoeClientEchoTimeout, tmnxPppoeClientNcpFailure

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log log-events pppoe-clnt event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log log-events pppoe-clnt event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log log-events pppoe-clnt event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log log-events pppoe-clnt event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **specific-throttle-interval** *number*

Synopsis Duration of the event specific throttling interval  
Context **configure** [log log-events pppoe-clnt event](#) *keyword* [specific-throttle-interval](#) *number*  
Tree [specific-throttle-interval](#)  
Range 1 to 1200  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **specific-throttle-limit** *number*

Synopsis Throttle limit within which events can be logged  
Context **configure** [log log-events pppoe-clnt event](#) *keyword* [specific-throttle-limit](#) *number*  
Tree [specific-throttle-limit](#)  
Range 1 to 20000  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **throttle** *boolean*

Synopsis Throttle log events of this type  
Context **configure** [log log-events pppoe-clnt event](#) *keyword* [throttle](#) *boolean*  
Tree [throttle](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ptp** *event* *keyword*

Synopsis Enter the **ptp** list instance  
Context **configure** [log log-events ptp event](#) *keyword*  
Tree [ptp](#)  
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log](#) [log-events](#) [ptp](#) [event](#) *keyword*

Tree [ptp](#)

Options tmnxPtpCardNotSupported, tmnxPtpCardNotSupportedClear, tmnxPtpMasterClockChangedEvent, tmnxPtpClockRecoveryStateChange, tmnxPtpOutOfResources, tmnxPtpOutOfResourcesClear, tmnxPtpDynamicChange, tmnxPtpPortNoTimestamping, tmnxPtpPortPtsfUnusable, tmnxPtpRequiresSystemReboot, tmnxPtpRequiresSystemRebootClear, tmnxPtpTimeRecoveryStateChange

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **generate** *boolean*

Synopsis Generate log events when the event occurs

Context **configure** [log](#) [log-events](#) [ptp](#) [event](#) *keyword* [generate](#) *boolean*

Tree [generate](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** [log](#) [log-events](#) [ptp](#) [event](#) *keyword* [repeat](#) *boolean*

Tree [repeat](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **severity** *keyword*

Synopsis Severity level associated with event type

Context	<b>configure log log-events ptp event</b> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure log log-events ptp event</b> <i>keyword specific-throttle boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure log log-events ptp event</b> <i>keyword specific-throttle-interval number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure log log-events ptp event</b> <i>keyword specific-throttle-limit number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **throttle** *boolean*

Synopsis	Throttle log events of this type
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Context	<b>configure log log-events ptp event keyword throttle boolean</b>
Tree	<b>throttle</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **python event keyword**

Synopsis	Enter the <b>python</b> list instance
Context	<b>configure log log-events python event keyword</b>
Tree	<b>python</b>
Introduced	21.2.R1
Platforms	All

### **event keyword**

Synopsis	Python module events
Context	<b>configure log log-events python event keyword</b>
Tree	<b>python</b>
Options	tmnxPythonInterpreterRestarted
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

### **generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events python event keyword generate boolean</b>
Tree	<b>generate</b>
Introduced	21.2.R1
Platforms	All

### **repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events python event keyword repeat boolean</b>

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Tree	<a href="#">repeat</a>
Default	false
Introduced	21.2.R1
Platforms	All

### **severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">python</a> <a href="#">event</a> <i>keyword</i> <b>severity</b> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	21.2.R1
Platforms	All

### **specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">python</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	21.2.R1
Platforms	All

### **specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">python</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle-interval</b> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	21.2.R1
Platforms	All

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">python</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>



Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	21.2.R1
Platforms	All

### **throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log log-events python event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	21.2.R1
Platforms	All

### **radius event** *keyword*

Synopsis	Enter the <b>radius</b> list instance
Context	<b>configure</b> <a href="#">log log-events radius event</a> <i>keyword</i>
Tree	<a href="#">radius</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log log-events radius event</a> <i>keyword</i>
Tree	<a href="#">radius</a>
Options	tmnxRadSrvPlcySrvOperStateCh, tmnxRadRouteDownloadFailed, tmnxRadAcctOnOngoing
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **generate** *boolean*

Synopsis	Generate log events when the event occurs
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Context	<b>configure log log-events radius event</b> <i>keyword generate boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

### **repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events radius event</b> <i>keyword repeat boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure log log-events radius event</b> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

### **specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure log log-events radius event</b> <i>keyword specific-throttle boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

### **specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure log log-events radius event</b> <i>keyword specific-throttle-interval number</i>

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Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">radius event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

### **throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">radius event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

### **rip event** *keyword*

Synopsis	Enter the <b>rip</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">rip event</a> <i>keyword</i>
Tree	<a href="#">rip</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">rip event</a> <i>keyword</i>
Tree	<a href="#">rip</a>

Options	ripPacketDiscarded, vRtrRipAuthTypeMismatch, vRtrRipAuthTypeFailure, vRtrRipInstanceShuttingDown, vRtrRipInstanceRestarted, vRtrRipInstanceExpLmtReached, vRtrRipInstanceExpLmtWarning, vRtrRipInstanceRtsExpLmtDropped, vRtrRipPeerBfdDown
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log log-events rip event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log log-events rip event</a> <i>keyword</i> <b>repeat</b> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log log-events rip event</a> <i>keyword</i> <b>severity</b> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>rip event</b> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>rip event</b> <i>keyword</i> <b>specific-throttle-interval</b> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>rip event</b> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>rip event</b> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

### **ripng event keyword**

Synopsis	Enter the <b>ripng</b> list instance
Context	<b>configure log log-events ripng event keyword</b>
Tree	<b>ripng</b>
Introduced	16.0.R3
Platforms	All

### **event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events ripng event keyword</b>
Tree	<b>ripng</b>
Options	tmnxRipNgPacketDiscarded, tmnxRipNgAuthTypeMismatch, tmnxRipNgAuthFailure, tmnxRipNgInstShuttingDown, tmnxRipNgInstRestarted, tmnxRipNgInstExpLmtReached, tmnxRipNgInstExpLmtWarning, tmnxRipNgInstRtsExpLmtDropped, tmnxRipNgIfUcastAddrNotUsed, tmnxRipNgPeerBfdDown
Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

### **generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events ripng event keyword generate boolean</b>
Tree	<b>generate</b>
Introduced	16.0.R3
Platforms	All

### **repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events ripng event keyword repeat boolean</b>
Tree	<b>repeat</b>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure log log-events ripng event</b> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R3
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure log log-events ripng event</b> <i>keyword specific-throttle boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R3
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure log log-events ripng event</b> <i>keyword specific-throttle-interval number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R3
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure log log-events ripng event</b> <i>keyword specific-throttle-limit number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R3
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ripng</a> <a href="#">event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R3
Platforms	All

**route-policy** [event](#) *keyword*

Synopsis	Enter the <b>route-policy</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">route-policy</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">route-policy</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">route-policy</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">route-policy</a>
Options	trigPolicyPrevEval
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">route-policy</a> <a href="#">event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All



**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">route-policy</a> <a href="#">event</a> <i>keyword</i> <b>repeat</b> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">route-policy</a> <a href="#">event</a> <i>keyword</i> <b>severity</b> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">route-policy</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">route-policy</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle-interval</b> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">route-policy</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">route-policy</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**rpki event** *keyword*

Synopsis	Enter the <b>rpki</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">rpki</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">rpki</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">rpki</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">rpki</a>
Options	tmnxRpkiNotifySession, tmnxRpkiStaleTimerExpiry
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">rpki event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">rpki event</a> <i>keyword</i> <b>repeat</b> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">rpki event</a> <i>keyword</i> <b>severity</b> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">rpki event</a> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">rpk</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">rpk</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">rpk</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**rsvp** [event](#) *keyword*

Synopsis	Enter the <b>rsvp</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">rsvp</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">rsvp</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events rsvp event keyword</b>
Tree	<a href="#">rsvp</a>
Options	vRtrRsvpStateChange, vRtrRsvplfStateChange, vRtrRsvplfNbrStateUp, vRtrRsvplfNbrStateDown, vRtrRsvpPEFailOverPriToStdBy, vRtrRsvpPEFailOverStdByToPri
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events rsvp event keyword generate boolean</b>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events rsvp event keyword repeat boolean</b>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity keyword**

Synopsis	Severity level associated with event type
Context	<b>configure log log-events rsvp event keyword severity keyword</b>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1

Platforms All

### **specific-throttle** *boolean*

Synopsis Use parameters to throttle the specific event  
Context **configure** [log](#) [log-events](#) [rsvp event](#) *keyword* [specific-throttle](#) *boolean*  
Tree [specific-throttle](#)  
Introduced 16.0.R1  
Platforms All

### **specific-throttle-interval** *number*

Synopsis Duration of the event specific throttling interval  
Context **configure** [log](#) [log-events](#) [rsvp event](#) *keyword* [specific-throttle-interval](#) *number*  
Tree [specific-throttle-interval](#)  
Range 1 to 1200  
Introduced 16.0.R1  
Platforms All

### **specific-throttle-limit** *number*

Synopsis Throttle limit within which events can be logged  
Context **configure** [log](#) [log-events](#) [rsvp event](#) *keyword* [specific-throttle-limit](#) *number*  
Tree [specific-throttle-limit](#)  
Range 1 to 20000  
Introduced 16.0.R1  
Platforms All

### **throttle** *boolean*

Synopsis Throttle log events of this type  
Context **configure** [log](#) [log-events](#) [rsvp event](#) *keyword* [throttle](#) *boolean*  
Tree [throttle](#)  
Introduced 16.0.R1  
Platforms All

**satellite event keyword**

Synopsis	Enter the <b>satellite</b> list instance
Context	<b>configure log log-events satellite event keyword</b>
Tree	<b>satellite</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events satellite event keyword</b>
Tree	<b>satellite</b>
Options	tmnxSatelliteOperStateChange, tmnxSatSynclfTimRefSwitch, tmnxSatSynclfTimSystemQuality, tmnxSatSynclfTimRef1Quality, tmnxSatSynclfTimRef2Quality, tmnxSatSynclfTimHoldover, tmnxSatSynclfTimHoldoverClear, tmnxSatSynclfTimRef1Alarm, tmnxSatSynclfTimRef1AlarmClear, tmnxSatSynclfTimRef2Alarm, tmnxSatSynclfTimRef2AlarmClear, tmnxSatLocalForwardStateChg, tmnxSatLocalForwardSapStateChg
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events satellite event keyword generate boolean</b>
Tree	<b>generate</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events satellite event keyword repeat boolean</b>
Tree	<b>repeat</b>

Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">satellite</a> <a href="#">event</a> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">satellite</a> <a href="#">event</a> <i>keyword specific-throttle boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">satellite</a> <a href="#">event</a> <i>keyword specific-throttle-interval number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">satellite</a> <a href="#">event</a> <i>keyword specific-throttle-limit number</i>
Tree	<a href="#">specific-throttle-limit</a>



Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">satellite event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **security event** *keyword*

Synopsis	Enter the <b>security</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">security event</a> <i>keyword</i>
Tree	<a href="#">security</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">security event</a> <i>keyword</i>
Tree	<a href="#">security</a>
Options	cli_user_login, cli_user_logout, cli_user_login_failed, cli_user_login_max_attempts, ftp_user_login, ftp_user_logout, ftp_user_login_failed, ftp_user_login_max_attempts, ssh_user_login, ssh_user_logout, ssh_user_login_failed, ssh_user_login_max_attempts, radiusOperStatusChange, user_disconnect, radiusSystemIpAddrNotSet, tacplusOperStatusChange, mafEntryMatch, ftp_transfer_successful, ftp_transfer_failed, enable_admin, host_snmp_attempts, SSH_server_preserve_key_fail, tacplusInetSrvrOperStatusChange, radiusInetServerOperStatusChange, tmnxKeyChainAuthFailure, tmnxCpmProtViolPort, tmnxCpmProtViolPortAgg, tmnxCpmProtViolIf, tmnxCpmProtViolSap, tmnxCpmProtViolMac, tmnxCpmProtViolVdoSvcClient, tmnxCpmProtViolVdoVrtrClient, tmnxMD5AuthFailure, tmnxCpmProtDefPolModified, tmnxCpmProtViolSdpBind, tmnxCpmProtExcdSdpBind, tmnxCpmProtExcdSapEcm, tmnxCpmProtExcdSdpBindEcm, tmnxPkiFileReadFailed, tmnxPkiCertVerificationFailed, tmnxCAProfileStateChange, tmnxCpmProtExcdSaplp, tmnxDcpFpDynPoolUsageHiAlmRaise, tmnxDcpFpDynPoolUsageHiAlmClear,

tmnxDcpCardFpEventOvrflwClr, tmnxDcpCardSapEventOvrflwClr,  
 tmnxDcpCardVrtrlfEventOvrflwClr, sapDcpStaticExcd, sapDcpDynamicExcd,  
 sapDcpStaticHoldDownStart, sapDcpDynamicHoldDownStart,  
 sapDcpStaticHoldDownEnd, sapDcpDynamicHoldDownEnd, sapDcpStaticConform,  
 sapDcpDynamicConform, sapDcpLocMonExcd, sapDcpLocMonExcdDynResource,  
 sapDcpLocMonExcdAllDynAlloc, sapDcpLocMonExcdAllDynFreed,  
 sapDcpDynamicEnforceAlloc, sapDcpDynamicEnforceFreed,  
 vRtrlfDcpStaticExcd, vRtrlfDcpDynamicExcd, vRtrlfDcpStaticHoldDownStart,  
 vRtrlfDcpDynamicHoldDownStart, vRtrlfDcpStaticHoldDownEnd,  
 vRtrlfDcpDynamicHoldDownEnd, vRtrlfDcpStaticConform, vRtrlfDcpDynamicConform,  
 vRtrlfDcpLocMonExcd, vRtrlfDcpLocMonExcdDynResource,  
 vRtrlfDcpLocMonExcdAllDynAlloc, vRtrlfDcpLocMonExcdAllDynFreed,  
 vRtrlfDcpDynamicEnforceAlloc, vRtrlfDcpDynamicEnforceFreed,  
 tmnxDcpCardFpEventOvrflw, tmnxDcpCardSapEventOvrflw,  
 tmnxDcpCardVrtrlfEventOvrflw, tmnxPkiCAProfActnStatusChg,  
 tmnxCpmProtViolSapOutProf, tmnxCpmProtViolIfOutProf,  
 sysDNSSecFailedAuthentication, tmnxCpmProtExcdSdpBindIp,  
 tmnxSecComputeCertChainFailure, tmnxCpmProtViolSdpBindOutProf,  
 tmnxSecNotifKeyChainExpired, tmnxSysLicenseInvalid,  
 tmnxSysLicenseExpiresSoon, tmnxPkiCAProfRevokeChkWarning,  
 tmnxCAProfUpDueToRevokeChkCrlOpt, tmnxPkiCertBeforeExpWarning,  
 tmnxPkiCertAfterExpWarning, tmnxPkiCertExpWarningCleared,  
 tmnxPkiCRLBeforeExpWarning, tmnxPkiCRLAfterExpWarning,  
 tmnxPkiCRLExpWarningCleared, tmnxSecNotifFileReloaded, tmnxSysLicenseValid,  
 tmnxSecPwdHistoryFileLoadFailed, tmnxSecPwdHistoryFileWriteFailed,  
 tmnxPkiCAProfCrlUpdateStart, tmnxPkiCAProfCrlUpdateSuccess,  
 tmnxPkiCAProfCrlUpdateUrlFail, tmnxPkiCAProfCrlUpdAllUrlsFail,  
 tmnxPkiFileWriteFailed, tmnxPkiCAProfCrlUpdNoNxtUpdTime,  
 tmnxUsrProfSessionLimitExceeded, tmnxCliGroupSessionLimitExceeded,  
 tmnxPkiCAProfCrlUpdLargPreUpdTm, tmnxPkiCertNotYetValid,  
 tmnxPkiCRLNotYetValid, tmnxAppPkiCertVerificationFailed, grpc\_user\_login,  
 grpc\_user\_logout, grpc\_user\_login\_failed, grpc\_user\_login\_max\_attempts,  
 netconf\_user\_login, netconf\_user\_logout, netconf\_user\_login\_failed,  
 netconf\_user\_login\_max\_attempts, tmnxSysLicenseActivated, tmnxConfigModify,  
 tmnxConfigCreate, tmnxConfigDelete, tmnxStateChange, radiusUserProfileInvalid,  
 tmnxSysStandbyLicensingError, tmnxSysStandbyLicensingReady, md\_cli\_io,  
 md\_cli\_unauth\_io, tmnxSysAppLicenseInsufficient, tmnxSysLicenseUpdateRequired,  
 netconf\_auth, netconf\_unauth, grpc\_auth, grpc\_unauth, tmnxCertKeyPairGen,  
 tmnxCertImport, tmnxCertExport, tmnxFileDeleted, tmnxFileMoved,  
 tmnxFileCopied, tmnxFileUnzip, tmnxPasswordHashingChanged,  
 tmnxUserPasswordChangedByAdmin, tmnxSSHSessionFailed,  
 tmnxPkiCertUpdUpdateStarted, tmnxPkiCertUpdUpdateFinished,  
 tmnxPkiCertUpdUpdateFailed, tmnxSystemPasswordChangedByAdmin

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">security event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">security event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">security event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">security event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">security event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">security event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">security event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**sflow** [event](#) *keyword*

Synopsis	Enter the <b>sflow</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">sflow event</a> <i>keyword</i>
Tree	<a href="#">sflow</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events sflow event keyword</b>
Tree	<a href="#">sflow</a>
Options	none, tmnxSflowCpEntrySampling, tmnxSflowPacketTxFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events sflow event keyword generate boolean</b>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events sflow event keyword repeat boolean</b>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-s, 7950 XRS

**severity keyword**

Synopsis	Severity level associated with event type
Context	<b>configure log log-events sflow event keyword severity keyword</b>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure log log-events sflow event</b> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<b>specific-throttle</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure log log-events sflow event</b> <i>keyword</i> <b>specific-throttle-interval</b> <i>number</i>
Tree	<b>specific-throttle-interval</b>
Range	1 to 1200
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure log log-events sflow event</b> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>
Tree	<b>specific-throttle-limit</b>
Range	1 to 20000
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure log log-events sflow event</b> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<b>throttle</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

**snmp event keyword**

Synopsis	Enter the <b>snmp</b> list instance
Context	<b>configure log log-events snmp event keyword</b>
Tree	<a href="#">snmp</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events snmp event keyword</b>
Tree	<a href="#">snmp</a>
Options	coldStart, warmStart, authenticationFailure, linkDown, linkUp, risingAlarm, fallingAlarm, snmpdError
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events snmp event keyword generate boolean</b>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events snmp event keyword repeat boolean</b>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">snmp</a> <a href="#">event</a> <i>keyword</i> <b>severity</b> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">snmp</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">snmp</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle-interval</b> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">snmp</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All



**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">snmp event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**sr-mpls** [event](#) *keyword*

Synopsis	Enter the <b>sr-mpls</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">sr-mpls event</a> <i>keyword</i>
Tree	<a href="#">sr-mpls</a>
Introduced	21.10.R1
Platforms	All

**event** *keyword*

Synopsis	SR MPLS event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">sr-mpls event</a> <i>keyword</i>
Tree	<a href="#">sr-mpls</a>
Options	tmnxSrMplsPfxSidFailure
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">sr-mpls event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	21.10.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>sr-mpls</b> <b>event</b> <i>keyword</i> <b>repeat</b> <i>boolean</i>
Tree	<b>repeat</b>
Default	false
Introduced	21.10.R1
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>sr-mpls</b> <b>event</b> <i>keyword</i> <b>severity</b> <i>keyword</i>
Tree	<b>severity</b>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	21.10.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>sr-mpls</b> <b>event</b> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<b>specific-throttle</b>
Introduced	21.10.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>sr-mpls</b> <b>event</b> <i>keyword</i> <b>specific-throttle-interval</b> <i>number</i>
Tree	<b>specific-throttle-interval</b>
Range	1 to 1200
Introduced	21.10.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>sr-mpls</b> <b>event</b> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>
Tree	<b>specific-throttle-limit</b>
Range	1 to 20000
Introduced	21.10.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>sr-mpls</b> <b>event</b> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<b>throttle</b>
Introduced	21.10.R1
Platforms	All

**srv6** **event** *keyword*

Synopsis	Enter the <b>srv6</b> list instance
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>srv6</b> <b>event</b> <i>keyword</i>
Tree	<b>srv6</b>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>srv6</b> <b>event</b> <i>keyword</i>
Tree	<b>srv6</b>
Options	vRtrSrv6FunctionExhaustion, vRtrSrv6SvcSidIndex, vRtrSrv6LocatorResExhaustion
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">srv6</a> <a href="#">event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">srv6</a> <a href="#">event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">srv6</a> <a href="#">event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">srv6</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>srv6</b> <b>event</b> <i>keyword</i> <b>specific-throttle-interval</b> <i>number</i>
Tree	<b>specific-throttle-interval</b>
Range	1 to 1200
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>srv6</b> <b>event</b> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>
Tree	<b>specific-throttle-limit</b>
Range	1 to 20000
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>srv6</b> <b>event</b> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<b>throttle</b>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**stp** **event** *keyword*

Synopsis	Enter the <b>stp</b> list instance
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>stp</b> <b>event</b> <i>keyword</i>
Tree	<b>stp</b>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">stp</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">stp</a>
Options	topologyChangeSapMajorState, newRootSap, topologyChangeVcpState, newRootVcpState, topologyChangeSapState, receivedTCN, newRootBridge, unacknowledgedTCN, higherPriorityBridge, sapEncapPVST, sapEncapDot1d, tmnxSvcTopoChgSdpBindMajorState, tmnxSvcNewRootSdpBind, tmnxSvcTopoChgSdpBindState, tmnxSvcSdpBindRcvdTCN, tmnxSvcSdpBindRcvdHigherBriPrio, tmnxSvcSdpBindEncapPVST, tmnxSvcSdpBindEncapDot1d, tmnxNewCistRegionalRootBridge, tmnxNewMstiRegionalRootBridge, tmnxStpRootGuardViolation, tmnxStpMeshNotInMstRegion, tmnxSapStpExcepCondStateChng, tmnxSdpBndStpExcepCondStateChng, sapActiveProtocolChange, tmnxSvcSdpActiveProtocolChange, vcpActiveProtocolChange, topologyChangePipMajorState, topologyChangePipState, tmnxPipStpExcepCondStateChng, pipActiveProtocolChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">stp</a> <a href="#">event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">stp</a> <a href="#">event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure log log-events stp event keyword severity keyword</b>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure log log-events stp event keyword specific-throttle boolean</b>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure log log-events stp event keyword specific-throttle-interval number</b>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure log log-events stp event keyword specific-throttle-limit number</b>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle boolean**

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">stp event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**svcmgr event keyword**

Synopsis	Enter the <b>svcmgr</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">svcmgr event</a> <i>keyword</i>
Tree	<a href="#">svcmgr</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">svcmgr event</a> <i>keyword</i>
Tree	<a href="#">svcmgr</a>
Options	<p>svcTlsMacPinningViolation, tmnxSubSlaacOverride, svcEvpnMplsMacMoveExceedNonBlock, svcTlsVxInstReplicatorChgd, svcArpHostOverride, svcEvpnMHEsEviDFStateChgd, svcEvpnMHEsIsidDFStateChgd, svcEvpnRcvdProtSrcMac, svcBgpEvpnBHDupMacAdrsDetected, svcEvpnEtreeBumLabelSysHiUsgSet, svcEvpnEtreeBumLabelSysHiUsgClr, svcVxlanEvpnMplsDestSysHiUsgSet, svcVxlanEvpnMplsDestSysHiUsgClr, svcStatusChanged, svcTlsFdbTableFullAlarmRaised, svcTlsFdbTableFullAlarmCleared, svcSysEvpnESDfPrefOperValChange, tmnxSvcSysFdbTableHighUsgSet, iesIfStatusChanged, tmnxEndPointTxActiveChanged, tmnxSvcSysFdbTableHighUsgClr, svcEvpnMHStandbyStatusChg, svcEvpnVxVTepLclBiasAddFailSet, svcEvpnESVxVTepLclBiasAddFailSet, svcEvpnVxVTepLclBiasAddFailClr, svcEvpnESVxVTepLclBiasAddFailClr, svcEvpnRcvdPbbProtSrcMac, svcTlsMrpAttrRegistrationFailed, svcTlsMrpAttrTblFullAlarmRaised, svcTlsMrpAttrTblFullAlarmCleared, svcEpipePbbOperStatusChanged, sapStatusChanged, sapTlsMacAddrLimitAlarmRaised, sapTlsMacAddrLimitAlarmCleared, hostConnectivityLost, hostConnectivityRestored, sapReceivedProtSrcMac, sapTlsMacMoveExceeded, sapPortStateChangeProcessed, sapCemPacketDefectAlarm, sapCemPacketDefectAlarmClear, msapStateChanged, msapCreationFailure, sapTlsMacMoveExceedNonBlock, sapEthLoopbackStarted, sapEthLoopbackStopped, sapTunnelEncapIpMtuTooSmall, tmnxIpTunnelOperStateChange, sapIfIgnorePortStateStart, sapIfIgnorePortStateStop, sapReceivedPbbProtSrcMac,</p>



sdpStatusChanged, sdpBindStatusChanged, sdpKeepAliveStarted,  
sdpKeepAliveStopped, sdpKeepAliveProbeFailure, sdpKeepAliveLateReply,  
sdpTlsMacAddrLimitAlarmRaised, sdpTlsMacAddrLimitAlarmCleared,  
sdpBindPwPeerStatusBitsChanged, sdpBindTlsMacMoveExceeded,  
sdpBindPwPeerFaultAddrChanged, sdpBindSdpStateChangeProcessed,  
sdpBandwidthOverbooked, sdpBindInsufficientBandwidth, dynamicSdpConfigChanged,  
dynamicSdpBindConfigChanged, dynamicSdpCreationFailed,  
dynamicSdpBindCreationFailed, sdpEgrlfsNetDomInconsCntChanged,  
sdpBindPipeCelpAddressChange, sdpBindReceivedProtSrcMac,  
sdpBindPwLocalStatusBitsChanged, sdpBindTlsMacMoveExceedNonBlock,  
sdpBindEthLoopbackStarted, sdpBindEthLoopbackStopped,  
sdpPbbActvPwWithNonActvCtrlPwChg, svcBgpEvpnDupMacAddrsDetected,  
svcBgpEvpnDupMacAddrsCleared, svcTlsVTEPHiUsageAlarmRaised,  
svcTlsVTEPHiUsageAlarmCleared, svcTlsVTEPEgrVniSysHiUsgAlarmSet,  
svcTlsVTEPEgrVniSysHiUsgAlarmClr, svcTlsVTEPEgrVniSvcHiUsgAlarmSet,  
svcTlsVTEPEgrVniSvcHiUsgAlarmClr, svcBindSysHiUsageAlarmRaised,  
svcBindSysHiUsageAlarmCleared, sdpControlPwActiveStateChg,  
svcTlsProxyArpDupDetect, svcTlsProxyArpDupClear, svcTlsProxyNdDupDetect,  
svcTlsProxyNdDupClear, svcTlsEvpnTunnNHopHiUsgAlarmSet,  
svcTlsEvpnTunnNHopHiUsgAlarmClr, svcEvpnMplsTEPHiUsageRaised,  
svcEvpnMplsTEPHiUsageCleared, svcEvpnMplsTEPEgrBndSysHiUsgSet,  
svcEvpnMplsTEPEgrBndSysHiUsgClr, svcEvpnMplsTEPEgrBndSvcHiUsgSet,  
svcEvpnMplsTEPEgrBndSvcHiUsgClr, svcTlsProxyArpSysHiUsgSet,  
svcTlsProxyArpSysHiUsgClr, svcTlsProxyArpSvcHiUsgSet,  
svcTlsProxyArpSvcHiUsgClr, svcTlsProxyNdSysHiUsgSet, svcTlsProxyNdSysHiUsgClr,  
svcTlsProxyNdSvcHiUsgSet, svcTlsProxyNdSvcHiUsgClr, svcSiteMinDnTimerStateChg,  
sdpBindReceivedPbbProtSrcMac, svcTlsMfibTableFullAlarmRaised,  
svcTlsMfibTableFullAlarmCleared, tmnxSubscriberCreated,  
tmnxSubscriberDeleted, tmnxSubscriberRenamed, tmnxSubAcctPclyFailure,  
tmnxSubMcsRelatedProblem, tmnxSubAuthPclyRadSerOperStatChg,  
tmnxSubAcctPclyRadSerOperStatChg, svcEndPointMacLimitAlarmRaised,  
svcEndPointMacLimitAlarmCleared, tmnxSubRadSapDisconnectError,  
tmnxSubRadSdpBndDisconnectError, tmnxSubRadSapCoAError,  
tmnxSubRadSdpBndCoAError, tmnxSubRadSapSubAuthError,  
tmnxSubRadSdpBndSubAuthError, svcFdbMimDestTblFullAlrm,  
svcFdbMimDestTblFullAlrmCleared, svcPersistencyProblem, svcArpHostPopulateErr,  
svcEPMCEPConfigMismatch, svcEPMCEPConfigMismatchResolved,  
svcEPMCEPPassiveModeActive, svcEPMCEPPassiveModePassive,  
sapHostBGPPeeringSetupFailed, tmnxSubUserCategoryOutOfCredit,  
svcRestoreHostProblem, tmnxSubUserCategoryRefreshCredit,  
tmnxSubUserCategoryError, svcTlsSiteDesigFwdrChg, sapTlsDataSapInstStatusChgd,  
svcTlsGroupOperStatusChanged, sapTunnelStateChange,  
tmnxSubHostInconsistentAtmTdOvr, sapAtmPppSessionFailure, sapAtmPppNcpFailure,  
svcMSPwRtMisconfig, svcOperGrpOperStatusChanged, sapPipeCelpAddrChange,  
svcMSPwRetryExpiredNotif, svcVlSiteDesigFwdrChg, tmnxSubSlaacSetupFailure,  
tmnxIpTunnelOperRemIpChg, tmnxSubHostLcktLimitReached,  
tmnxSubHostLcktSapLimitReached, tmnxSubSysChassMemoryUsageHi,  
tmnxSubVSubnetHostsDeleted, sapHostRipListenerSetupFailed,  
tmnxSublpoeInvalidSessionKey, tmnxSublpoeInvalidCidRidChange,  
tmnxSublpoeSessionLimitReached, tmnxSublpoePersistenceRecovery,  
tmnxSublpoeMigrHostDeleted, tmnxSubMngdHostCreationFail,

tmnxSubMngdHostOverride, tmnxSubHostInfoConflict, tmnxSubPIBndFailed, tmnxSubBrgCreated, tmnxSubBrgDeleted, tmnxSubBrgCvInitFailed, tmnxSubBrgRadiusUpdatelpoeSeFail, tmnxSubBrgRadiusCoaError, tmnxSubBrgRadiusAuthError, tmnxSubBrgSessionLimitReached, tmnxSubStatsResourceLimitReached, tmnxSubDhcpOverloadDetected, aluIpTransportStateChanged, tmnxSubBrgRadiusProxyAuthError, tmnxSublpoeSessionBrgNotAuth, tmnxSubRadiusCoaNatFwdFailed, tmnxSubSVlanStatsReachedMaximum, svcTlsVxInstMacAdrLimitAlrmRsd, svcTlsVxInstMacAdrLimitAlrmClrd, tmnxSubCupsUpSapCreationFailed, tmnxSubCupsUpIfCreationFailed, tmnxPfcPAssocPathMgmtStateChgd, tmnxSubInfoEgrAggRateLimitLowReq, tmnxSublpoeWppRegistrationFailed, svcEvpnMplsTEPIpSysHiUsgSet, svcEvpnMplsTEPIpSysHiUsgClr, svcEvpnMHAutoEsiCreated, svcEvpnMHAutoEsiConflict, svcSrv6TEPEgrBndSysHiUsgSet, svcSrv6TEPEgrBndSysHiUsgClr, svcSrv6FunctionExhaustion, svclFSubForwardingStatsDisNotify, svclFSubForwardingStatsEnNotify, svcRoutedVplsEvpnGWDrStateChgd, svcSrv6TEPEgrBndSvcHiUsgSet, svcSrv6TEPEgrBndSvcHiUsgClr, tmnxSapMRtCpeChkStatusChange

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **generate** *boolean*

Synopsis Generate log events when the event occurs

Context **configure** [log log-events](#) [svcmgr event](#) *keyword* [generate](#) *boolean*

Tree [generate](#)

Introduced 16.0.R1

Platforms All

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** [log log-events](#) [svcmgr event](#) *keyword* [repeat](#) *boolean*

Tree [repeat](#)

Default false

Introduced 16.0.R4

Platforms All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">svcmgr event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">svcmgr event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">svcmgr event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">svcmgr event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle boolean**

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">svcmgr event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**system event keyword**

Synopsis	Enter the <b>system</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">system event</a> <i>keyword</i>
Tree	<a href="#">system</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">system event</a> <i>keyword</i>
Tree	<a href="#">system</a>
Options	stiDateAndTimeChanged, ssiSaveConfigSucceeded, ssiSaveConfigFailed, sbiBootConfig, sbiBootSnmpd, tmnxConfigModify, tmnxConfigCreate, tmnxConfigDelete, tmnxStateChange, tmnxModuleMallocFailed, tmnxTrapDropped, ssiSyncConfigOK, ssiSyncConfigFailed, ssiSyncBootEnvOK, ssiSyncBootEnvFailed, socket_bind_failed, socket_conn_accept_failed, sntpTimeDiffExceedsThreshold, tmnxSssiMismatch, tmnxSnmpdStateChange, tmnxRedStandbySyncing, tmnxRedStandbyReady, tmnxRedStandbySyncLost, tmnxRedSwitchover, tmnxRedCpmActive, tmnxRedSingleCpm, persistencyClosedAlarmRaised, persistencyClosedAlarmCleared, tmnxSntpOperChange, tmnxFtpClientFailure, persistencyEventReport, sbiBootConfigFailFileError, sbiBootConfigOKFileError, persistenceRestoreProblem, tmnxSysRollbackStarted, tmnxSysRollbackStatusChange, tmnxSysRollbackSaveStatusChange, tmnxSysRollbackFileDeleteStatus, ssiSyncRollbackOK, ssiSyncRollbackFailed, ssiSyncCertOK, ssiSyncCertFailed, persistencyFileSysThresRaised, persistencyFileSysThresCleared, tmnxSysExecStarted, tmnxSysExecFinished, tmnxSysRollbackSaveStarted, tmnxSysRollbackDeleteStarted, tmnxSysNvsysFileError, tmnxConfigConflict, tmnxSysVsdServerAvailable, tmnxSysVsdServerUnavailable, tmnxSysXmppServerFunctional, tmnxSysXmppServerNotFunctional, tmnxSysBaseMacAddressNotSet, tmnxSmLaunchStartFailed, tmnxEhsHandlerInvoked, tmnxEhsDroppedByMinDelay, tmnxSysAppStats24HrsAvailable, tmnxSysAppStatsWeekAvailable, tmnxSysMgmtIfModeChangeStart, tmnxSysMgmtIfModeChangeComplete, tmnxSysMgmtIfModeChangeFailure,

tmnxSysMgmtIfLiIncorrectFormat, tmnxSysMgmtIfLiCfgNotEncrypted, stiDateAndTimeChanging, tmnxSysSwFabFailRecStarted, tmnxSysSwFabFailRecCompleted, tmnxSysSwFabFailRecAborted, tmnxSysSwFabFailRecDetected, tMirrorLiXIfLicenseInvalid, mdSaveCommitHistoryFailed, sbiBootMdReadCommitHistoryFailed, tmnxSysDyingGasp, tmnxSysHttpRdrOutOfSeqLimitExc, schedActionFailure, smScriptAbort, smScriptResult, smScriptException, ssiSaveIncrementConfigSucceeded, ssiSaveIncrementConfigFailed, ssiSaveBackgroundConfigSucceeded, ssiSaveBackgroundConfigFailed, mdCommitInProgress

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **generate** *boolean*

Synopsis Generate log events when the event occurs

Context **configure** [log](#) [log-events](#) [system event](#) *keyword* [generate](#) *boolean*

Tree [generate](#)

Introduced 16.0.R1

Platforms All

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** [log](#) [log-events](#) [system event](#) *keyword* [repeat](#) *boolean*

Tree [repeat](#)

Default false

Introduced 16.0.R4

Platforms All

### **severity** *keyword*

Synopsis Severity level associated with event type

Context **configure** [log](#) [log-events](#) [system event](#) *keyword* [severity](#) *keyword*

Tree [severity](#)

Options cleared, indeterminate, critical, major, minor, warning

Introduced 16.0.R1

Platforms All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">system event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">system event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">system event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">system event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**tls event keyword**

Synopsis	Enter the <b>tls</b> list instance
Context	<b>configure log log-events tls event keyword</b>
Tree	<b>tls</b>
Introduced	20.5.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events tls event keyword</b>
Tree	<b>tls</b>
Options	tmnxTlsInitiateSession, tmnxTlsTermination, tmnxTlsFailure
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events tls event keyword generate boolean</b>
Tree	<b>generate</b>
Introduced	20.5.R1
Platforms	All

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events tls event keyword repeat boolean</b>
Tree	<b>repeat</b>
Default	false
Introduced	20.5.R1
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">tls event</a> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	20.5.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">tls event</a> <i>keyword specific-throttle boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	20.5.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">tls event</a> <i>keyword specific-throttle-interval number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	20.5.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">tls event</a> <i>keyword specific-throttle-limit number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	20.5.R1
Platforms	All



**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">tls event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	20.5.R1
Platforms	All

**tree-sid** [event](#) *keyword*

Synopsis	Enter the <b>tree-sid</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">tree-sid event</a> <i>keyword</i>
Tree	<a href="#">tree-sid</a>
Introduced	20.10.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">tree-sid event</a> <i>keyword</i>
Tree	<a href="#">tree-sid</a>
Options	vRtrTreeSidCdtPathChanged, vRtrTreeSidCdtPathActInsChanged, vRtrTreeSidInSidRegFailure, vRtrTreeSidTreeldAllocFailure, vRtrTreeSidRepSegResExhaustion, vRtrTreeSidRepSegResExhstCleared, vRtrTreeSidLabelRangeExhaustion, vRtrTreeSidLblRangeExhstCleared
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">tree-sid event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	20.10.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">tree-sid</a> <a href="#">event</a> <i>keyword</i> <b>repeat</b> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	20.10.R1
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">tree-sid</a> <a href="#">event</a> <i>keyword</i> <b>severity</b> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	20.10.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">tree-sid</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	20.10.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">tree-sid</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle-interval</b> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	20.10.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">tree-sid</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	20.10.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">tree-sid</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	20.10.R1
Platforms	All

**user** [event](#) *keyword*

Synopsis	Enter the <b>user</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">user</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">user</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">user</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">user</a>
Options	<a href="#">cli_user_login</a> , <a href="#">cli_user_logout</a> , <a href="#">cli_user_login_failed</a> , <a href="#">cli_user_login_max_attempts</a> , <a href="#">ftp_user_login</a> , <a href="#">ftp_user_logout</a> , <a href="#">ftp_user_login_failed</a> , <a href="#">ftp_user_login_max_attempts</a> , <a href="#">cli_user_io</a> , <a href="#">snmp_user_set</a> , <a href="#">cli_config_io</a> , <a href="#">cli_unauth_user_io</a> , <a href="#">cli_unauth_config_io</a> , <a href="#">grpc_user_login</a> , <a href="#">grpc_user_logout</a> , <a href="#">grpc_user_login_failed</a> , <a href="#">grpc_user_login_max_attempts</a> , <a href="#">netconf_user_login</a> , <a href="#">netconf_user_logout</a> , <a href="#">netconf_user_login_failed</a> , <a href="#">netconf_user_login_max_attempts</a>
Notes	This element is part of a list key.

Introduced 16.0.R1  
Platforms All

### **generate** *boolean*

Synopsis Generate log events when the event occurs  
Context **configure** [log log-events user event keyword generate](#) *boolean*  
Tree [generate](#)  
Introduced 16.0.R1  
Platforms All

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared  
Context **configure** [log log-events user event keyword repeat](#) *boolean*  
Tree [repeat](#)  
Default false  
Introduced 16.0.R4  
Platforms All

### **severity** *keyword*

Synopsis Severity level associated with event type  
Context **configure** [log log-events user event keyword severity](#) *keyword*  
Tree [severity](#)  
Options cleared, indeterminate, critical, major, minor, warning  
Introduced 16.0.R1  
Platforms All

### **specific-throttle** *boolean*

Synopsis Use parameters to throttle the specific event  
Context **configure** [log log-events user event keyword specific-throttle](#) *boolean*  
Tree [specific-throttle](#)  
Introduced 16.0.R1

Platforms All

### **specific-throttle-interval** *number*

Synopsis Duration of the event specific throttling interval  
Context **configure** [log log-events user event keyword](#) [specific-throttle-interval](#) *number*  
Tree [specific-throttle-interval](#)  
Range 1 to 1200  
Introduced 16.0.R1  
Platforms All

### **specific-throttle-limit** *number*

Synopsis Throttle limit within which events can be logged  
Context **configure** [log log-events user event keyword](#) [specific-throttle-limit](#) *number*  
Tree [specific-throttle-limit](#)  
Range 1 to 20000  
Introduced 16.0.R1  
Platforms All

### **throttle** *boolean*

Synopsis Throttle log events of this type  
Context **configure** [log log-events user event keyword](#) [throttle](#) *boolean*  
Tree [throttle](#)  
Introduced 16.0.R1  
Platforms All

### **video event** *keyword*

Synopsis Enter the **video** list instance  
Context **configure** [log log-events video event keyword](#)  
Tree [video](#)  
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log](#) [log-events](#) [video](#) [event](#) *keyword*

Tree [video](#)

Options tmnxVdoDuplicateSsrcId, tmnxVdoMdaSessionsLimitExceeded, tmnxVdoMdaSGLimitExceeded, tmnxVdoMdaSessionsLimitCleared, tmnxVdoMdaSGLimitCleared, tmnxVdoAdSpliceAbort, tmnxVdoClientSessionsLmtExceeded, tmnxVdoClientSessionsLmtCleared, tmnxVdoGrpSrcAnlyzrErrState, tmnxVdoGrpSrcAnlyzrStClear, tmnxVdoMdaFccBwLimitExceeded, tmnxVdoMdaFccBwLimitCleared, tmnxVdoMdaRetBwLimitExceeded, tmnxVdoMdaRetBwLimitCleared, tmnxVdoMdaFccRetTotBwLmtExceeded, tmnxVdoMdaFccRetTotBwLmtCleared, tmnxVdoMdaFccSesLimitExceeded, tmnxVdoMdaFccSesLimitCleared, tmnxVdoMdaRetSesLimitExceeded, tmnxVdoMdaRetSesLimitCleared, tmnxVdoMdaFccRetTotSeLmtExceeded, tmnxVdoMdaFccRetTotSeLmtCleared, tmnxVdoVappSessionsLimitExceeded, tmnxVdoVappSGLimitExceeded, tmnxVdoVappSessionsLimitCleared, tmnxVdoVappSGLimitCleared, tmnxVdoVappFccBwLimitExceeded, tmnxVdoVappFccBwLimitCleared, tmnxVdoVappRetBwLimitExceeded, tmnxVdoVappRetBwLimitCleared, tmnxVdoVappFccRetTotBwLmtExceeded, tmnxVdoVappFccRetTotBwLmtCleared, tmnxVdoVappFccSesLimitExceeded, tmnxVdoVappFccSesLimitCleared, tmnxVdoVappRetSesLimitExceeded, tmnxVdoVappRetSesLimitCleared, tmnxVdoVappFccRetTotSeLmtExceeded, tmnxVdoVappFccRetTotSeLmtCleared

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **generate** *boolean*

Synopsis Generate log events when the event occurs

Context **configure** [log](#) [log-events](#) [video](#) [event](#) *keyword* [generate](#) *boolean*

Tree [generate](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">video</a> <a href="#">event</a> <i>keyword</i> <b>repeat</b> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">video</a> <a href="#">event</a> <i>keyword</i> <b>severity</b> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">video</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">video</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle-interval</b> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **specific-throttle-limit** *number*

Synopsis Throttle limit within which events can be logged

Context **configure** [log log-events video event](#) *keyword* [specific-throttle-limit](#) *number*

Tree [specific-throttle-limit](#)

Range 1 to 20000

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **throttle** *boolean*

Synopsis Throttle log events of this type

Context **configure** [log log-events video event](#) *keyword* [throttle](#) *boolean*

Tree [throttle](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **vrrp event** *keyword*

Synopsis Enter the **vrrp** list instance

Context **configure** [log log-events vrrp event](#) *keyword*

Tree [vrrp](#)

Introduced 16.0.R1

Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log log-events vrrp event](#) *keyword*

Tree [vrrp](#)

Options vrrpTrapNewMaster, vrrpTrapAuthFailure, tmnxVrrpIPListMismatch, tmnxVrrpIPListMismatchClear, tmnxVrrpMultipleOwners, tmnxVrrpBecameBackup,



vrrpPacketDiscarded, tmnxVrrpBfdIntfSessStateChgd, vrrpTrapProtoError, tVrrpBecameBackup, tVrrpTrapNewMaster, tVrrpIPListMismatch, tVrrpIPListMismatchClear, tVrrpMultipleOwners, tVrrpPacketDiscarded, tVrrpRouterAdvNotActivated, tVrrpRouterAdvNotActivatedClear, tVrrpOperDownInvalidMac, tVrrpOperDownInvalidMacClear, tmnxVrrpOperDownInvalidMac, tmnxVrrpOperDownInvalidMacClear

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **generate** *boolean*

Synopsis Generate log events when the event occurs

Context **configure** [log log-events vrrp event](#) *keyword generate boolean*

Tree [generate](#)

Introduced 16.0.R1

Platforms All

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** [log log-events vrrp event](#) *keyword repeat boolean*

Tree [repeat](#)

Default false

Introduced 16.0.R4

Platforms All

### **severity** *keyword*

Synopsis Severity level associated with event type

Context **configure** [log log-events vrrp event](#) *keyword severity keyword*

Tree [severity](#)

Options cleared, indeterminate, critical, major, minor, warning

Introduced 16.0.R1

Platforms All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>vrrp</b> <b>event</b> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<b>specific-throttle</b>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>vrrp</b> <b>event</b> <i>keyword</i> <b>specific-throttle-interval</b> <i>number</i>
Tree	<b>specific-throttle-interval</b>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>vrrp</b> <b>event</b> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>
Tree	<b>specific-throttle-limit</b>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>vrrp</b> <b>event</b> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<b>throttle</b>
Introduced	16.0.R1
Platforms	All

**vrtr event keyword**

Synopsis	Enter the <b>vrtr</b> list instance
Context	<b>configure log log-events vrtr event keyword</b>
Tree	<b>vrtr</b>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events vrtr event keyword</b>
Tree	<b>vrtr</b>
Options	tmnxVRtrMidRouteTCA, tmnxVRtrHighRouteTCA, tmnxVRtrHighRouteCleared, tmnxVRtrMcastMidRouteTCA, tmnxVRtrMcastMaxRoutesTCA, tmnxVRtrMcastMaxRoutesCleared, tmnxVRtrMaxArpEntriesTCA, tmnxVRtrMaxArpEntriesCleared, tmnxVRtrMaxRoutes, tmnxVRtrBfdMaxSessionOnSlot, tmnxVRtrBfdPortTypeNotSupported, tmnxVRtrIPv6MidRouteTCA, tmnxVRtrIPv6HighRouteTCA, tmnxVRtrIPv6HighRouteCleared, tmnxVRtrStaticRouteCPEStatus, tmnxVRtrManagedRouteAddFailed, tmnxVRtrFibOccupancyThreshold, tmnxVRtrInetAddressAttachFailed, tmnxVRtrSingleSfmOverloadStateCh, tmnxVRtrGrExportLimitReached, tmnxVRtrGrRoutesExpLimitDropped, tmnxVRtrIfLdpSyncTimerStart, tmnxVRtrIfLdpSyncTimerStop, tmnxVRtrGrV6ExportLimitReached, tmnxVRtrGrV6RoutesExpLimDropped, tmnxVRtrStaticRouteStatusChanged, tmnxVRtrBfdSessExtDown, tmnxVRtrBfdSessExtUp, tmnxVRtrBfdSessExtDeleted, tmnxVRtrBfdSessExtProtChange, tmnxVRtrBfdExtNoCpmNpResources, tmnxVRtrDnsFault, tmnxVRtrMacAcctLimitReached, tmnxVRtrMacAcctLimitCleared, tmnxVRtrNgBfdSessDown, tmnxVRtrNgBfdSessUp, tmnxVRtrNgBfdSessDeleted, tmnxVRtrNgBfdSessProtChange, tmnxVRtrNgBfdNoCpmNpResources, tmnxVRtrNHRvplsARPHighUsage, tmnxVRtrNHRvplsARPExhaust, tmnxVRtrNHRvplsARPHighUsageClr, tmnxVRtrArpLmt, tmnxVRtrArpThresholdExceeded, tmnxVRtrIpv6NbrLmt, tmnxVRtrIpv6NbrThresholdExceeded, tmnxVRtrIfIgnorePortState, tmnxVRtrPdnAddrMismatch, tmnxVRtrPdnAddrMismatchCleared, tmnxVRtrLeakExportLimitReached, tmnxVRtrLeakExportLimitDropped, tmnxVRtrDhcpClientStatusChanged, tmnxVRtrDhcp6ClientStatusChanged, tmnxVRtrNeDiscovered, tmnxVRtrNeRemoved, tmnxVRtrNeModified, vRtrIfDhcpCIrtStatusChanged, vRtrIfDhcpCIStateDnsChanged, vRtrAutoCfgRaRtStatusChanged, vRtrIfDhcp6CIStateDnsChanged, tipNbrAllocFailed, vRtrIfEthLoopbackStarted, vRtrIfEthLoopbackStopped, tmnxVRtrBfdExtNoFreeTxIntrvlSlot, tmnxVRtrFibVPNOccupancyThreshold, vRtrBgplInstanceError
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms All

### **generate** *boolean*

Synopsis Generate log events when the event occurs  
Context **configure** [log](#) [log-events](#) [vrtr event](#) *keyword* [generate](#) *boolean*  
Tree [generate](#)  
Introduced 16.0.R1  
Platforms All

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared  
Context **configure** [log](#) [log-events](#) [vrtr event](#) *keyword* [repeat](#) *boolean*  
Tree [repeat](#)  
Default false  
Introduced 16.0.R4  
Platforms All

### **severity** *keyword*

Synopsis Severity level associated with event type  
Context **configure** [log](#) [log-events](#) [vrtr event](#) *keyword* [severity](#) *keyword*  
Tree [severity](#)  
Options cleared, indeterminate, critical, major, minor, warning  
Introduced 16.0.R1  
Platforms All

### **specific-throttle** *boolean*

Synopsis Use parameters to throttle the specific event  
Context **configure** [log](#) [log-events](#) [vrtr event](#) *keyword* [specific-throttle](#) *boolean*  
Tree [specific-throttle](#)  
Introduced 16.0.R1  
Platforms All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure log log-events vrtr event</b> <i>keyword</i> <b>specific-throttle-interval</b> <i>number</i>
Tree	<b>specific-throttle-interval</b>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure log log-events vrtr event</b> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>
Tree	<b>specific-throttle-limit</b>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure log log-events vrtr event</b> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<b>throttle</b>
Introduced	16.0.R1
Platforms	All

**wlan-gw** *event* *keyword*

Synopsis	Enter the <b>wlan-gw</b> list instance
Context	<b>configure log log-events wlan-gw event</b> <i>keyword</i>
Tree	<b>wlan-gw</b>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">wlan-gw</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">wlan-gw</a>
Options	tmnxWlanGwResrcProblemDetected, tmnxWlanGwResrcProblemCause, tmnxWlanGwTuQosProblem, tmnxWlanGwGrpOperStateChanged, tmnxWlanGwlomActive, tmnxWlanGwMgwConnected, tmnxWlanGwMgwRestarted, tmnxWlanGwNumMgwHi, tmnxWlanGwMgwStateChanged, tmnxWlanGwQosRadiusGtpMismatch, tmnxWlanGwSubIfRedActiveChanged, tmnxWlanGwDsmGtpTunnelSetupFail, tmnxWlanGwSubIfPmStartD6cFailed, tmnxWlanGwSubIfPmNewPIReqFailed, tmnxWlanGwSubIfPmAddNewPIFailed, tmnxWlanGwSubIfPmCrIntObjFailed, tmnxWlanGwSubIfPmPoolTimeout, tmnxWlanGwSubIfPmPoolUsageLow, tmnxWlanGwSubIfPmLsQryRtryFailed, tmnxWlanGwGtpMessageDropped, tmnxWlanGwSubIfPmPoolPartialUse, tmnxWlanGwBdCreated, tmnxWlanGwBdDeleted, tmnxWlanGwUeCreationFail, tmnxWlanGwUeReplacement, tmnxWlanGwGrpMemberUsageHigh
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">wlan-gw</a> <a href="#">event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">wlan-gw</a> <a href="#">event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">wlan-gw</a> <a href="#">event</a> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">wlan-gw</a> <a href="#">event</a> <i>keyword specific-throttle boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">wlan-gw</a> <a href="#">event</a> <i>keyword specific-throttle-interval number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">wlan-gw</a> <a href="#">event</a> <i>keyword specific-throttle-limit number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

### **throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">wlan-gw</a> <a href="#">event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

### **wpp** [event](#) *keyword*

Synopsis	Enter the <b>wpp</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">wpp</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">wpp</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">wpp</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">wpp</a>
Options	tmnxWppPortalStatChanged, tmnxWppHostAuthenticationFailed, tmnxWppPortalUnreachable, tmnxWppPortalGroupStatChanged, tmnxWppPGHostAuthFailed
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">wpp</a> <a href="#">event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All



**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">wpp event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">wpp event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">wpp event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">wpp event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>wpp</b> <b>event</b> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>
Tree	<b>specific-throttle-limit</b>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>wpp</b> <b>event</b> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<b>throttle</b>
Introduced	16.0.R1
Platforms	All

**log-id** [*name*] *string*

Synopsis	Enter the <b>log-id</b> list instance
Context	<b>configure</b> <b>log</b> <b>log-id</b> <i>string</i>
Tree	<b>log-id</b>
Max. Instances	30
Introduced	16.0.R1
Platforms	All

**[name]** *string*

Synopsis	Log ID
Context	<b>configure</b> <b>log</b> <b>log-id</b> <i>string</i>
Tree	<b>log-id</b>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the log
Context	<b>configure log log-id string admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure log log-id string description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**destination**

Synopsis	Enter the <b>destination</b> context
Context	<b>configure log log-id string destination</b>
Tree	<a href="#">destination</a>
Introduced	16.0.R1
Platforms	All

**cli**

Synopsis	Enable the <b>cli</b> context
Context	<b>configure log log-id string destination cli</b>
Tree	<a href="#">cli</a>
Notes	The following elements are part of a choice: <b>cli</b> , <b>console</b> , <b>file</b> , <b>memory</b> , <b>netconf</b> , <b>snmp</b> , or <b>syslog</b> .
Introduced	16.0.R1

Platforms All

### max-entries *number*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Number of events stored in this CLI log

Context **configure log log-id string destination cli max-entries number**

Tree [max-entries](#)

Range 50 to 3000

Default 100

Introduced 16.0.R1

Platforms All

### console



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Log events to send to the system console port

Context **configure log log-id string destination console**

Tree [console](#)

Notes The following elements are part of a choice: **cli**, **console**, **file**, **memory**, **netconf**, **snmp**, or **syslog**.

Introduced 16.0.R1

Platforms All

### file reference



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Log events to send to the specified file ID

Context **configure log log-id string destination file reference**

Tree	<a href="#">file</a>
Reference	<b>configure log file</b> <i>string</i>
Notes	The following elements are part of a choice: <b>cli</b> , <b>console</b> , <b>file</b> , <b>memory</b> , <b>netconf</b> , <b>snmp</b> , or <b>syslog</b> .
Introduced	16.0.R1
Platforms	All

## memory

Synopsis	Enable the <b>memory</b> context
Context	<b>configure log log-id</b> <i>string</i> <a href="#">destination</a> <a href="#">memory</a>
Tree	<a href="#">memory</a>
Notes	The following elements are part of a choice: <b>cli</b> , <b>console</b> , <b>file</b> , <b>memory</b> , <b>netconf</b> , <b>snmp</b> , or <b>syslog</b> .
Introduced	16.0.R1
Platforms	All

## max-entries *number*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of events stored in this memory log
Context	<b>configure log log-id</b> <i>string</i> <a href="#">destination</a> <a href="#">memory</a> <b>max-entries</b> <i>number</i>
Tree	<a href="#">max-entries</a>
Range	50 to 3000
Default	100
Introduced	16.0.R1
Platforms	All

## netconf

Synopsis	Enable the <b>netconf</b> context
Context	<b>configure log log-id</b> <i>string</i> <a href="#">destination</a> <a href="#">netconf</a>
Tree	<a href="#">netconf</a>

Notes	The following elements are part of a choice: <b>cli</b> , <b>console</b> , <b>file</b> , <b>memory</b> , <b>netconf</b> , <b>snmp</b> , or <b>syslog</b> .
Introduced	16.0.R1
Platforms	All

### **max-entries** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of events stored in this NETCONF log
Context	<b>configure log log-id string destination netconf max-entries number</b>
Tree	<a href="#">max-entries</a>
Range	50 to 3000
Default	100
Introduced	16.0.R1
Platforms	All

### **snmp**

Synopsis	Enable the <b>snmp</b> context
Context	<b>configure log log-id string destination snmp</b>
Tree	<a href="#">snmp</a>
Notes	The following elements are part of a choice: <b>cli</b> , <b>console</b> , <b>file</b> , <b>memory</b> , <b>netconf</b> , <b>snmp</b> , or <b>syslog</b> .
Introduced	16.0.R1
Platforms	All

### **max-entries** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of events stored in this SNMP log
Context	<b>configure log log-id string destination snmp max-entries number</b>

Tree	<a href="#">max-entries</a>
Range	50 to 3000
Default	100
Introduced	16.0.R1
Platforms	All

### **syslog** *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Log events to send to the specified syslog ID
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-id</a> <i>string</i> <a href="#">destination</a> <a href="#">syslog</a> <i>reference</i>
Tree	<a href="#">syslog</a>
Reference	<b>configure</b> <a href="#">log</a> <a href="#">syslog</a> <i>string</i>
Notes	The following elements are part of a choice: <b>cli</b> , <b>console</b> , <b>file</b> , <b>memory</b> , <b>netconf</b> , <b>snmp</b> , or <b>syslog</b> .
Introduced	16.0.R1
Platforms	All

### **filter** *reference*

Synopsis	Event filter policy with the log destination
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-id</a> <i>string</i> <a href="#">filter</a> <i>reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log</a> <a href="#">filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **netconf-stream** *string*

Synopsis	Destination NETCONF stream name
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-id</a> <i>string</i> <a href="#">netconf-stream</a> <i>string</i>
Tree	<a href="#">netconf-stream</a>
String Length	1 to 32

Introduced 16.0.R1  
Platforms All

### **python-policy** *reference*

Synopsis Python policy name  
Context **configure** [log log-id string python-policy reference](#)  
Tree [python-policy](#)  
Reference **configure** [python python-policy string](#)  
Introduced 16.0.R1  
Platforms All

### **source**

Synopsis Enter the **source** context  
Context **configure** [log log-id string source](#)  
Tree [source](#)  
Introduced 16.0.R1  
Platforms All

### **change** *boolean*

Synopsis Collect log events from change event stream  
Context **configure** [log log-id string source change boolean](#)  
Tree [change](#)  
Introduced 16.0.R1  
Platforms All

### **debug** *boolean*

Synopsis Collect log events from the debug event stream  
Context **configure** [log log-id string source debug boolean](#)  
Tree [debug](#)  
Default false  
Introduced 16.0.R1



---

Platforms All

### **main** *boolean*

Synopsis Collect log events from the main event stream  
Context **configure log log-id string source main boolean**  
Tree [main](#)  
Introduced 16.0.R1  
Platforms All

### **security** *boolean*

Synopsis Collect log events from the security event stream  
Context **configure log log-id string source security boolean**  
Tree [security](#)  
Introduced 16.0.R1  
Platforms All

### **time-format** *keyword*

Synopsis Time zone output for file log contents and syslog  
Context **configure log log-id string time-format keyword**  
Tree [time-format](#)  
Options utc, local  
Default utc  
Introduced 16.0.R1  
Platforms All

### **route-preference**

Synopsis Enter the **route-preference** context  
Context **configure log route-preference**  
Tree [route-preference](#)  
Introduced 16.0.R1  
Platforms All

### **primary** *keyword*

Synopsis	Primary routing preference for traffic that is generated for SNMP notifications and syslog messages
Context	<b>configure log route-preference primary</b> <i>keyword</i>
Tree	<a href="#">primary</a>
Options	inband, outband
Default	outband
Introduced	16.0.R1
Platforms	All

### **secondary** *keyword*

Synopsis	Secondary route preference for SNMP and syslog traffic
Context	<b>configure log route-preference secondary</b> <i>keyword</i>
Tree	<a href="#">secondary</a>
Options	inband, outband, none
Default	inband
Introduced	16.0.R1
Platforms	All

### **services-all-events**

Synopsis	Enter the <b>services-all-events</b> context
Context	<b>configure log services-all-events</b>
Tree	<a href="#">services-all-events</a>
Introduced	19.10.R1
Platforms	All

### **service** [[service-name](#)] *reference*

Synopsis	Add a list entry for <b>service</b>
Context	<b>configure log services-all-events service</b> <i>reference</i>
Tree	<a href="#">service</a>
Introduced	19.10.R1

Platforms All

### **[service-name]** *reference*

Synopsis Administrative service name  
Context **configure** [log services-all-events service](#) *reference*  
Tree [service](#)  
Reference **configure** [service vprn](#) *string*  
Notes This element is part of a list key.  
Introduced 19.10.R1  
Platforms All

### **snmp-trap-group** [[log-name](#)] *string*

Synopsis Enter the **snmp-trap-group** list instance  
Context **configure** [log snmp-trap-group](#) *string*  
Tree [snmp-trap-group](#)  
Max. Instances 15  
Introduced 16.0.R1  
Platforms All

### **[log-name]** *string*

Synopsis Log ID  
Context **configure** [log snmp-trap-group](#) *string*  
Tree [snmp-trap-group](#)  
String Length 1 to 32  
Notes This element is part of a list key.  
Introduced 21.2.R1  
Platforms All

### **description** *string*

Synopsis Text description

Context	<b>configure</b> <a href="#">log snmp-trap-group</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **trap-target** [[name](#)] *string*

Synopsis	Enter the <b>trap-target</b> list instance
Context	<b>configure</b> <a href="#">log snmp-trap-group</a> <i>string</i> <a href="#">trap-target</a> <i>string</i>
Tree	<a href="#">trap-target</a>
Max. Instances	25
Introduced	16.0.R1
Platforms	All

### **[name]** *string*

Synopsis	Trap target name
Context	<b>configure</b> <a href="#">log snmp-trap-group</a> <i>string</i> <a href="#">trap-target</a> <i>string</i>
Tree	<a href="#">trap-target</a>
String Length	1 to 28
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the trap receiver
Context	<b>configure</b> <a href="#">log snmp-trap-group</a> <i>string</i> <a href="#">trap-target</a> <i>string</i> <a href="#">address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">address</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log snmp-trap-group</a> <i>string</i> <a href="#">trap-target</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**notify-community** *string*

Synopsis	SNMPv1 or SNMPv2c community name string, or SNMPv3 security name, for sending a notification
Context	<b>configure</b> <a href="#">log snmp-trap-group</a> <i>string</i> <a href="#">trap-target</a> <i>string</i> <a href="#">notify-community</a> <i>string</i>
Tree	<a href="#">notify-community</a>
String Length	1 to 31
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**port** *number*

Synopsis	UDP port number to send messages to this remote SNMP notification collector
Context	<b>configure</b> <a href="#">log snmp-trap-group</a> <i>string</i> <a href="#">trap-target</a> <i>string</i> <a href="#">port</a> <i>number</i>
Tree	<a href="#">port</a>
Range	0   1 to 65535
Default	162
Introduced	16.0.R1
Platforms	All

**replay** *boolean*

Synopsis	Retransmit missed notifications
Context	<b>configure</b> <a href="#">log snmp-trap-group</a> <i>string</i> <a href="#">trap-target</a> <i>string</i> <a href="#">replay</a> <i>boolean</i>
Tree	<a href="#">replay</a>

Default	false
Introduced	16.0.R1
Platforms	All

### **security-level** *keyword*

Synopsis	Security level at which SNMP notification messages are sent to SNMP notification collector
Context	<b>configure</b> <a href="#">log snmp-trap-group</a> <i>string</i> <a href="#">trap-target</a> <i>string</i> <b>security-level</b> <i>keyword</i>
Tree	<a href="#">security-level</a>
Options	no-auth-no-privacy, auth-no-privacy, privacy
Default	no-auth-no-privacy
Introduced	16.0.R1
Platforms	All

### **version** *keyword*

Synopsis	SNMP version to format notification messages sent to this SNMP notification collector
Context	<b>configure</b> <a href="#">log snmp-trap-group</a> <i>string</i> <a href="#">trap-target</a> <i>string</i> <b>version</b> <i>keyword</i>
Tree	<a href="#">version</a>
Options	snmpv1, snmpv2c, snmpv3
Default	snmpv3
Introduced	16.0.R1
Platforms	All

### **syslog** [[syslog-name](#)] *string*

Synopsis	Enter the <b>syslog</b> list instance
Context	<b>configure</b> <a href="#">log syslog</a> <i>string</i>
Tree	<a href="#">syslog</a>
Max. Instances	10
Introduced	16.0.R1
Platforms	All

**[syslog-name] string**

Synopsis	Syslog name
Context	<b>configure log syslog string</b>
Tree	<a href="#">syslog</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

**address (ipv4-address-no-zone | ipv6-address-no-zone)**

Synopsis	IP address of the Syslog target host
Context	<b>configure log syslog string address (ipv4-address-no-zone   ipv6-address-no-zone)</b>
Tree	<a href="#">address</a>
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure log syslog string description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**facility keyword**

Synopsis	Facility code for messages
Context	<b>configure log syslog string facility keyword</b>
Tree	<a href="#">facility</a>
Options	kernel, user, mail, systemd, auth, syslogd, printer, netnews, uucp, cron, authpriv, ftp, ntp, logaudit, logalert, cron2, local0, local1, local2, local3, local4, local5, local6, local7
Default	local7
Introduced	16.0.R1

Platforms All

### **log-prefix** (*keyword* | *string*)

Synopsis String that is prepended to every log message sent to this target syslog host

Context **configure** **log syslog** *string* **log-prefix** (*keyword* | *string*)

Tree **log-prefix**

String Length 1 to 32

Options no-prefix

Default TMNX

Introduced 16.0.R1

Platforms All

### **port number**

Synopsis Destination port when sending syslog over UDP

Context **configure** **log syslog** *string* **port number**

Tree **port**

Range 0 | 1 to 65535

Default 514

Introduced 16.0.R1

Platforms All

### **severity keyword**

Synopsis Severity level threshold for the syslog message

Context **configure** **log syslog** *string* **severity keyword**

Tree **severity**

Options emergency, alert, critical, error, warning, notice, info, debug

Default info

Introduced 16.0.R1

Platforms All



## tls-client-profile *reference*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	TLS client profile used to encrypt syslog communication
Context	<b>configure</b> <a href="#">log syslog</a> <i>string</i> <a href="#">tls-client-profile</a> <i>reference</i>
Tree	<a href="#">tls-client-profile</a>
Description	<p>This command specifies the Transport Layer Security (TLS) client profile used to encrypt syslog communications. When configured, syslog messages are sent using TLS.</p> <p>Any change to this command results in a brief interruption of the event log, which may cause the loss of a few syslog messages.</p> <p>When this command is unconfigured, the syslog messages are sent over UDP.</p>
Reference	<b>configure</b> <a href="#">system security</a> <a href="#">tls client-tls-profile</a> <i>string</i>
Introduced	21.10.R1
Platforms	All

## throttle-rate

Synopsis	Enter the <b>throttle-rate</b> context
Context	<b>configure</b> <a href="#">log throttle-rate</a>
Tree	<a href="#">throttle-rate</a>
Introduced	16.0.R1
Platforms	All

## interval *number*

Synopsis	Duration of an event throttling interval
Context	<b>configure</b> <a href="#">log throttle-rate</a> <a href="#">interval</a> <i>number</i>
Tree	<a href="#">interval</a>
Range	1 to 1200
Default	1
Introduced	16.0.R1
Platforms	All

**limit number**

Synopsis	Number of log events within the throttle interval
Context	<b>configure</b> <a href="#">log throttle-rate</a> <i>limit number</i>
Tree	<a href="#">limit</a>
Range	1 to 20000
Default	2000
Introduced	16.0.R1
Platforms	All

## 3.24 macsec commands

```
configure
- macsec
  - apply-groups reference
  - apply-groups-exclude reference
  - connectivity-association string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - cipher-suite keyword
    - clear-tag-mode keyword
    - delay-protection boolean
    - description string
    - encryption-offset number
    - macsec-encrypt boolean
    - replay-protection boolean
    - replay-window-size number
  - static-cak
    - active-psk number
    - apply-groups reference
    - apply-groups-exclude reference
    - mka-hello-interval keyword
    - mka-key-server-priority number
    - pre-shared-key number
      - apply-groups reference
      - apply-groups-exclude reference
      - cak string
      - cak-name string
      - encryption-type keyword
  - mac-policy number
    - apply-groups reference
    - apply-groups-exclude reference
    - destination-mac-address string
```

### 3.24.1 macsec command descriptions

#### macsec

Synopsis	Enter the <b>macsec</b> context
Context	<b>configure macsec</b>
Tree	<a href="#">macsec</a>
Introduced	16.0.R1
Platforms	All

#### connectivity-association [[ca-name](#)] *string*

Synopsis	Enter the <b>connectivity-association</b> list instance
Context	<b>configure macsec connectivity-association string</b>
Tree	<a href="#">connectivity-association</a>
Introduced	16.0.R1
Platforms	All

#### [[ca-name](#)] *string*

Synopsis	Connectivity association name
Context	<b>configure macsec connectivity-association string</b>
Tree	<a href="#">connectivity-association</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

#### admin-state *keyword*

Synopsis	Administrative state of the connectivity association
Context	<b>configure macsec connectivity-association string admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable

Introduced	16.0.R1
Platforms	All

### **cipher-suite** *keyword*

Synopsis	Data path encryption algorithm
Context	<b>configure</b> <b>macsec</b> <b>connectivity-association</b> <i>string</i> <b>cipher-suite</b> <i>keyword</i>
Tree	<b>cipher-suite</b>
Options	gcm-aes-128, gcm-aes-256, gcm-aes-xpn-128, gcm-aes-xpn-256
Default	gcm-aes-128
Introduced	16.0.R1
Platforms	All

### **clear-tag-mode** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear tag mode for clear text before the SecTAG
Context	<b>configure</b> <b>macsec</b> <b>connectivity-association</b> <i>string</i> <b>clear-tag-mode</b> <i>keyword</i>
Tree	<b>clear-tag-mode</b>
Options	none, single-tag, dual-tag
Default	none
Introduced	16.0.R1
Platforms	All

### **delay-protection** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable delay protection
Context	<b>configure</b> <b>macsec</b> <b>connectivity-association</b> <i>string</i> <b>delay-protection</b> <i>boolean</i>
Tree	<b>delay-protection</b>
Default	false

Introduced	20.10.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">macsec connectivity-association</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**encryption-offset** *number*

Synopsis	Confidentiality (encryption) offset
Context	<b>configure</b> <a href="#">macsec connectivity-association</a> <i>string</i> <a href="#">encryption-offset</a> <i>number</i>
Tree	<a href="#">encryption-offset</a>
Range	0   30   50
Default	0
Introduced	16.0.R1
Platforms	All

**macsec-encrypt** *boolean*

Synopsis	Encrypt and authenticate all PDUs
Context	<b>configure</b> <a href="#">macsec connectivity-association</a> <i>string</i> <a href="#">macsec-encrypt</a> <i>boolean</i>
Tree	<a href="#">macsec-encrypt</a>
Description	When configured to <b>true</b> , all PDUs are encrypted and authenticated. When configured to <b>false</b> , all PDUs are transmitted in clear text, however, they are still authenticated and have the trailing ICV.
Default	true
Introduced	16.0.R1
Platforms	All

**replay-protection *boolean***

Synopsis	Discard packet when not within the replay window size
Context	<b>configure macsec connectivity-association</b> <i>string</i> <b>replay-protection</b> <i>boolean</i>
Tree	<b>replay-protection</b>
Description	<p>When configured to <b>true</b>, replay protection is enabled and packets are discarded when they are not within the replay window size.</p> <p>With replay protection, the sequence of the ID number of received packets is checked. If a packet arrives out of sequence and the difference between the packet IDs exceeds the replay protection window size, the packet is counted by the receiving port and discarded. For example if the replay protection window size is configured to five and a packet with an ID of 1006 arrives on the receiving link immediately following the packet assigned an ID of 1000, the packet with ID 1006 is counted and discarded because it is outside the parameter of the window size.</p> <p>Replay protection is particularly useful for addressing man-in-the-middle attacks. A packet that is replayed by a man-in-the-middle attacker on the Ethernet link that arrives on the receiving link out of sequence will be detected and dropped instead of forwarded through the network.</p> <p>Replay protection should not be enabled in cases where packets are expected to arrive out of order.</p> <p>When configured to <b>false</b>, replay protection is not enabled.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**replay-window-size *number***

Synopsis	Replay protection window size
Context	<b>configure macsec connectivity-association</b> <i>string</i> <b>replay-window-size</b> <i>number</i>
Tree	<b>replay-window-size</b>
Range	0 to 4294967294
Default	0
Introduced	16.0.R1
Platforms	All

**static-cak**

Synopsis	Enter the <b>static-cak</b> context
Context	<b>configure macsec connectivity-association</b> <i>string</i> <b>static-cak</b>

Tree	<a href="#">static-cak</a>
Description	Commands in this context configure the Connectivity Association Key (CAK) to manage the MACsec Key Agreement (MKA).
Introduced	16.0.R1
Platforms	All

### **active-psk** *number*

Synopsis	Active pre-shared-key (PSK)
Context	<b>configure</b> <a href="#">macsec connectivity-association</a> <i>string</i> <a href="#">static-cak</a> <b>active-psk</b> <i>number</i>
Tree	<a href="#">active-psk</a>
Description	This command specifies the active transmitting PSK. If two PSKs are configured, the arriving MACsec MKA can be decrypted via CAKs using either PSK; however, only the active PSK is used for TX encryption of MKA PDUs.
Range	1 to 2
Default	1
Introduced	16.0.R1
Platforms	All

### **mka-hello-interval** *keyword*

Synopsis	MKA hello interval
Context	<b>configure</b> <a href="#">macsec connectivity-association</a> <i>string</i> <a href="#">static-cak</a> <b>mka-hello-interval</b> <i>keyword</i>
Tree	<a href="#">mka-hello-interval</a>
Description	This command configures the interval at which MKA hello packets are sent or received for the connectivity association.
Options	1, 2, 3, 4, 5, 6, 500ms
Default	2
Introduced	19.5.R1
Platforms	All

### **mka-key-server-priority** *number*

Synopsis	Key server priority used by the MKA protocol
Context	<b>configure</b> <a href="#">macsec connectivity-association</a> <i>string</i> <a href="#">static-cak</a> <b>mka-key-server-priority</b> <i>number</i>



Tree	<a href="#">mka-key-server-priority</a>
Description	This command specifies the key server priority used by the MACsec Key Agreement (MKA) protocol to select the key server when MACsec is enabled using static connectivity association key (CAK) security mode.
Range	0 to 255
Default	16
Introduced	16.0.R1
Platforms	All

### **pre-shared-key** [[psk-id](#)] *number*

Synopsis	Enter the <b>pre-shared-key</b> list instance
Context	<b>configure macsec connectivity-association</b> <i>string static-cak pre-shared-key number</i>
Tree	<a href="#">pre-shared-key</a>
Description	<p>Commands in this context configure pre-shared key attributes to enable MACsec using static connectivity association key (CAK) security mode.</p> <p>A pre-shared key includes a connectivity association key name (CKN) and a connectivity association key (CAK). The pre-shared key, the CKN and the CAK, must match on both ends of a link.</p> <p>A pre-shared key is configured on both devices at each end of a point-to-point link to enable MACsec via static CAK security mode. The MACsec Key Agreement (MKA) protocol is enabled after the successful MKA liveness negotiation.</p> <p>The encryption type is used to encrypt the SAK and authenticate the MKA packet. The symmetric encryption key SAK (Security Association Key) must be encrypted (wrapped) via the MKA protocols. The AES key is derived from the pre-shared-key.</p>
Max. Instances	2
Introduced	16.0.R1
Platforms	All

### **[psk-id]** *number*

Synopsis	Pre-shared-key (PSK) ID
Context	<b>configure macsec connectivity-association</b> <i>string static-cak pre-shared-key number</i>
Tree	<a href="#">pre-shared-key</a>
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **cak string**

Synopsis Connectivity association key (CAK) for the PSK

Context **configure macsec connectivity-association string static-cak pre-shared-key number cak string**

Tree **cak**

Description This command specifies the connectivity association key (CAK) for the pre-shared key. Two values are derived from the CAK:

- Key Encryption Key (KEK), used to encrypt the MKA and SAK (symmetric key used for data path PDUs) distributed between all members
- Integrity Check Value (ICV), used to authenticate the MKA and SAK PDUs distributed between all members

String Length 1 to 71

Introduced 16.0.R1

Platforms All

### **cak-name string**

Synopsis Connectivity association key name (CKN) for the PSK

Context **configure macsec connectivity-association string static-cak pre-shared-key number cak-name string**

Tree **cak-name**

Description This command specifies the connectivity association key name (CKN) for the pre-shared key. The CKN is appended to the MKA for identification of the appropriate CAK by the peer.

String Length 1 to 64

Introduced 16.0.R1

Platforms All

### **encryption-type keyword**

Synopsis Encryption for authentication of the MKA packet

Context **configure macsec connectivity-association string static-cak pre-shared-key number encryption-type keyword**

Tree **encryption-type**

Options	aes-128-cmac, aes-256-cmac
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **mac-policy** [[mac-policy-id](#)] *number*

Synopsis	Enter the <b>mac-policy</b> list instance
Context	<b>configure macsec mac-policy</b> <i>number</i>
Tree	<a href="#">mac-policy</a>
Introduced	16.0.R5
Platforms	All

### **[mac-policy-id]** *number*

Synopsis	MAC address policy ID
Context	<b>configure macsec mac-policy</b> <i>number</i>
Tree	<a href="#">mac-policy</a>
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

### **destination-mac-address** [[dest-mac-addr](#)] *string*

Synopsis	Add a list entry for <b>destination-mac-address</b>
Context	<b>configure macsec mac-policy</b> <i>number</i> <a href="#">destination-mac-address</a> <i>string</i>
Tree	<a href="#">destination-mac-address</a>
Max. Instances	5
Introduced	16.0.R5
Platforms	All

**[dest-mac-addr]** *string*

Synopsis	Destination MAC address added to the MAC policy
Context	<b>configure</b> <b>macsec</b> <b>mac-policy</b> <i>number</i> <b>destination-mac-address</b> <i>string</i>
Tree	<b>destination-mac-address</b>
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

## 3.25 mcac commands

```

configure
- mcac
  - apply-groups reference
  - apply-groups-exclude reference
  - interface-policy string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - bandwidth
      - mandatory (number | keyword)
      - total (number | keyword)
    - description string
  - policy string
    - apply-groups reference
    - apply-groups-exclude reference
    - bundle string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - bandwidth number
      - channel start (ipv4-address-no-zone | ipv6-address-no-zone) end (ipv4-address-
no-zone | ipv6-address-no-zone) source (ipv4-prefix | ipv6-prefix)
        - apply-groups reference
        - apply-groups-exclude reference
        - bandwidth number
        - priority-class keyword
        - type keyword
    - description string
  - mc-constraints
    - lag-port-down string number-down number
      - apply-groups reference
      - apply-groups-exclude reference
      - level number
    - level number
      - apply-groups reference
      - apply-groups-exclude reference
      - bandwidth number
      - use-lag-port-weight boolean
  - default-action keyword
  - description string

```

### 3.25.1 mcac command descriptions

#### mcac

Synopsis	Enter the <b>mcac</b> context
Context	<b>configure mcac</b>
Tree	<a href="#">mcac</a>
Introduced	16.0.R1
Platforms	All

#### interface-policy [[policy-name](#)] *string*

Synopsis	Enter the <b>interface-policy</b> list instance
Context	<b>configure mcac interface-policy</b> <i>string</i>
Tree	<a href="#">interface-policy</a>
Introduced	16.0.R1
Platforms	All

#### [[policy-name](#)] *string*

Synopsis	MCAC interface policy name
Context	<b>configure mcac interface-policy</b> <i>string</i>
Tree	<a href="#">interface-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

#### admin-state *keyword*

Synopsis	Administrative state of the MCAC interface policy
Context	<b>configure mcac interface-policy</b> <i>string admin-state</i> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable

Introduced	16.0.R1
Platforms	All

## **bandwidth**

Synopsis	Enter the <b>bandwidth</b> context
Context	<b>configure mcac interface-policy</b> <i>string</i> <b>bandwidth</b>
Tree	<b>bandwidth</b>
Introduced	16.0.R1
Platforms	All

## **mandatory** (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	<b>configure mcac interface-policy</b> <i>string</i> <b>bandwidth mandatory</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>mandatory</b>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

## **total** (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	<b>configure mcac interface-policy</b> <i>string</i> <b>bandwidth total</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>total</b>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure mcac interface-policy</b> <i>string description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**policy** [[policy-name](#)] *string*

Synopsis	Enter the <b>policy</b> list instance
Context	<b>configure mcac policy</b> <i>string</i>
Tree	<a href="#">policy</a>
Introduced	16.0.R1
Platforms	All

**[policy-name]** *string*

Synopsis	Name of the global MCAC channel definition policy
Context	<b>configure mcac policy</b> <i>string</i>
Tree	<a href="#">policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**bundle** [[bundle-name](#)] *string*

Synopsis	Enter the <b>bundle</b> list instance
Context	<b>configure mcac policy</b> <i>string bundle string</i>
Tree	<a href="#">bundle</a>
Max. Instances	64
Introduced	16.0.R1
Platforms	All



**[bundle-name]** *string*

Synopsis	Multicast policy bundle name
Context	<b>configure mcac policy string bundle string</b>
Tree	<b>bundle</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the policy bundle
Context	<b>configure mcac policy string bundle string admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**bandwidth** *number*

Synopsis	Maximum bandwidth for the MCAC policy bundle
Context	<b>configure mcac policy string bundle string bandwidth number</b>
Tree	<b>bandwidth</b>
Range	1 to 4294967295
Units	kilobps
Default	100
Introduced	16.0.R1
Platforms	All

**channel** *start* (*ipv4-address-no-zone* | *ipv6-address-no-zone*) *end* (*ipv4-address-no-zone* | *ipv6-address-no-zone*) *source* (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the <b>channel</b> list instance
----------	--

Context	<b>configure mcac policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<b>channel</b>
Introduced	16.0.R1
Platforms	All

### **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Starting multicast IP address for a multicast stream
Context	<b>configure mcac policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<b>channel</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Ending multicast IP address for a multicast stream
Context	<b>configure mcac policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<b>channel</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **source** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Source prefix for the multicast IP stream
Context	<b>configure mcac policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<b>channel</b>
Notes	This element is part of a list key.

Introduced	16.0.R1
Platforms	All

### **bandwidth** *number*

Synopsis	Bandwidth required by the channel
Context	<b>configure mcac policy string bundle string channel start</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>source</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>bandwidth</b> <i>number</i>
Tree	<a href="#">bandwidth</a>
Range	10 to 10000000
Units	kilobps
Default	10
Introduced	16.0.R1
Platforms	All

### **priority-class** *keyword*

Synopsis	Channel classification for when LAG ports change state
Context	<b>configure mcac policy string bundle string channel start</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>source</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>priority-class</b> <i>keyword</i>
Tree	<a href="#">priority-class</a>
Options	low, high
Default	low
Introduced	16.0.R1
Platforms	All

### **type** *keyword*

Synopsis	Channel type
Context	<b>configure mcac policy string bundle string channel start</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>source</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>type</b> <i>keyword</i>
Tree	<a href="#">type</a>
Options	optional, mandatory
Default	optional

Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [mcac](#) [policy](#) *string* [bundle](#) *string* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **mc-constraints**

Synopsis Enter the **mc-constraints** context  
 Context **configure** [mcac](#) [policy](#) *string* [bundle](#) *string* [mc-constraints](#)  
 Tree [mc-constraints](#)  
 Introduced 16.0.R1  
 Platforms All

### **lag-port-down** [[lag-name](#)] *string* [number-down](#) *number*

Synopsis Enter the **lag-port-down** list instance  
 Context **configure** [mcac](#) [policy](#) *string* [bundle](#) *string* [mc-constraints](#) [lag-port-down](#) *string* [number-down](#) *number*  
 Tree [lag-port-down](#)  
 Introduced 16.0.R1  
 Platforms All

### **[lag-name]** *string*

Synopsis LAG name  
 Context **configure** [mcac](#) [policy](#) *string* [bundle](#) *string* [mc-constraints](#) [lag-port-down](#) *string* [number-down](#) *number*  
 Tree [lag-port-down](#)  
 String Length 1 to 27

Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

### **number-down** *number*

Synopsis	Number of LAG ports that are down
Context	<b>configure mcac policy</b> <i>string bundle string mc-constraints lag-port-down string number-down number</i>
Tree	<a href="#">lag-port-down</a>
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **level** *number*

Synopsis	Level ID to associate with number of down LAG ports
Context	<b>configure mcac policy</b> <i>string bundle string mc-constraints lag-port-down string number-down number level number</i>
Tree	<a href="#">level</a>
Description	This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.
Range	1 to 8
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **level** [[level-id](#)] *number*

Synopsis	Enter the <b>level</b> list instance
Context	<b>configure mcac policy</b> <i>string bundle string mc-constraints level number</i>
Tree	<a href="#">level</a>
Introduced	16.0.R1
Platforms	All

**[level-id] *number***

Synopsis	Bandwidth level ID for an MCAC constraint
Context	<b>configure mcac policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>mc-constraints level</b> <i>number</i>
Tree	<b>level</b>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**bandwidth *number***

Synopsis	Bandwidth available for this level
Context	<b>configure mcac policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>mc-constraints level</b> <i>number</i> <b>bandwidth</b> <i>number</i>
Tree	<b>bandwidth</b>
Range	0 to 2147483647
Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**use-lag-port-weight *boolean***

Synopsis	Use LAG port weight in calculating MCAC constraints
Context	<b>configure mcac policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>mc-constraints use-lag-port-weight</b> <i>boolean</i>
Tree	<b>use-lag-port-weight</b>
Description	When configured to <b>true</b> , port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs.
Default	false
Introduced	16.0.R1
Platforms	All

**default-action** *keyword*

Synopsis	Default action for the MCAC policy
Context	<b>configure mcac policy</b> <i>string</i> <b>default-action</b> <i>keyword</i>
Tree	<b>default-action</b>
Options	accept, discard
Default	discard
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure mcac policy</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

## 3.26 mirror commands

```

configure
- mirror
- apply-groups reference
- apply-groups-exclude reference
- global-sampling-rate number
- mirror-dest string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- description string
- encap
- layer-3-encap
- apply-groups reference
- apply-groups-exclude reference
- direction-bit boolean
- gateway
- apply-groups reference
- apply-groups-exclude reference
- ip-address
- destination string
- source string
- udp-port
- destination number
- source number
- header-type keyword
- router-instance string
- endpoint string
- apply-groups reference
- apply-groups-exclude reference
- description string
- revert-time (number | keyword)
- fc keyword
- include-port-id boolean
- pcap string
- apply-groups reference
- apply-groups-exclude reference
- file-url string
- remote-source
- far-end string
- apply-groups reference
- apply-groups-exclude reference
- icb boolean
- ing-vc-label number
- label-signaling keyword
- vc-id number
- spoke-sdp string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- control-word boolean
- egress
- vc-label number
- endpoint
- icb boolean
- name reference
- ingress
- l2tpv3
- cookie
- cookie1 string

```



configure mirror mirror-dest remote-source spoke-sdp ingress l2tpv3 cookie cookie2

```

    - cookie2 string
      - vc-label number
- sampling-rate number
- sap string
  - apply-groups reference
  - apply-groups-exclude reference
- egress
  - ip-mirror
    - mac
      - destination string
      - source string
    - qos
      - sap-egress
        - policy-name reference
        - port-redirect-group
          - group-name reference
          - instance number
  - endpoint reference
- service-id number
- slice-size number
- spoke-sdp string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - control-word boolean
  - egress
    - l2tpv3
      - cookie string
      - vc-label number
    - endpoint
      - icb boolean
      - name reference
      - precedence (number | keyword)
  - ingress
    - vc-label number
- type keyword
- use-global-sampling-rate boolean
- mirror-source string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - ip-filter reference
    - apply-groups reference
    - apply-groups-exclude reference
    - entry number
  - ipv6-filter reference
    - apply-groups reference
    - apply-groups-exclude reference
    - entry number
  - mac-filter reference
    - apply-groups reference
    - apply-groups-exclude reference
    - entry number
  - port string
    - apply-groups reference
    - apply-groups-exclude reference
    - egress boolean
    - ingress boolean
  - sap string
    - apply-groups reference
    - apply-groups-exclude reference
    - egress boolean
    - ingress boolean
- subscriber string

```

---

configure mirror mirror-source subscriber apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **egress** *boolean*
- **fc** *keyword*
- **host-type** *keyword*
- **ingress** *boolean*
- **ip-address** *string*
- **ip-family** *keyword*
- **mac-address** *string*
- **sap-id** *string*
- **sla-profile** *string*

### 3.26.1 mirror command descriptions

#### mirror

Synopsis	Enter the <b>mirror</b> context
Context	<b>configure mirror</b>
Tree	<a href="#">mirror</a>
Introduced	16.0.R1
Platforms	All

#### global-sampling-rate *number*

Synopsis	System wide global sampling rate
Context	<b>configure mirror global-sampling-rate</b> <i>number</i>
Tree	<a href="#">global-sampling-rate</a>
Description	<p>This command configures the global sampling rate. The global sampling rate provides a higher sampling rate than the sampling rate specified on the mirror destination. When set, this command applies to all mirror destination services that have the <b>use-global-sampling-rate</b> command configured.</p> <p>The global sampling rate takes precedence over the rate specified on the mirror destination. This means that when this command and the <b>configure mirror mirror-dest sampling-rate</b> are configured under the same mirror destination, the system automatically samples using the higher rate configured with this command and ignores the lower rate configured with the <b>sampling-rate</b> command.</p> <p>When unconfigured, no mirror destinations are associated to a global sampling rate and all mirror destinations mirror at the full rate, which means every packet is mirrored unless a mirror destination rate is specified.</p>
Range	0   2 to 255
Default	0
Introduced	22.10.R1
Platforms	All

#### mirror-dest [[service-name](#)] *string*

Synopsis	Enter the <b>mirror-dest</b> list instance
Context	<b>configure mirror mirror-dest</b> <i>string</i>
Tree	<a href="#">mirror-dest</a>

---

Max. Instances	255
Introduced	16.0.R1
Platforms	All

**[service-name] string**

Synopsis	Administrative service name
Context	<b>configure mirror mirror-dest string</b>
Tree	<a href="#">mirror-dest</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the service
Context	<b>configure mirror mirror-dest string admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure mirror mirror-dest string description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

## encap

Synopsis	Enter the <b>encap</b> context
Context	<b>configure mirror mirror-dest string encap</b>
Tree	<a href="#">encap</a>
Introduced	16.0.R1
Platforms	All

## layer-3-encap

Synopsis	Enable the <b>layer-3-encap</b> context
Context	<b>configure mirror mirror-dest string encap layer-3-encap</b>
Tree	<a href="#">layer-3-encap</a>
Introduced	16.0.R1
Platforms	All

## direction-bit *boolean*

Synopsis	Use the highest bit to specify traffic flow direction
Context	<b>configure mirror mirror-dest string encap layer-3-encap direction-bit <i>boolean</i></b>
Tree	<a href="#">direction-bit</a>
Default	false
Introduced	16.0.R1
Platforms	All

## gateway

Synopsis	Enable the <b>gateway</b> context
Context	<b>configure mirror mirror-dest string encap layer-3-encap gateway</b>
Tree	<a href="#">gateway</a>
Introduced	16.0.R1
Platforms	All

## ip-address

Synopsis	Enter the <b>ip-address</b> context
----------	-------------------------------------

---

Context	<b>configure mirror mirror-dest string encap layer-3-encap gateway ip-address</b>
Tree	<a href="#">ip-address</a>
Introduced	16.0.R1
Platforms	All

### **destination string**

Synopsis	IPv4 destination address for the gateway
Context	<b>configure mirror mirror-dest string encap layer-3-encap gateway ip-address destination string</b>
Tree	<a href="#">destination</a>
Introduced	16.0.R1
Platforms	All

### **source string**

Synopsis	IPv4 source address for the gateway
Context	<b>configure mirror mirror-dest string encap layer-3-encap gateway ip-address source string</b>
Tree	<a href="#">source</a>
Introduced	16.0.R1
Platforms	All

### **udp-port**

Synopsis	Enter the <b>udp-port</b> context
Context	<b>configure mirror mirror-dest string encap layer-3-encap gateway udp-port</b>
Tree	<a href="#">udp-port</a>
Introduced	16.0.R1
Platforms	All

### **destination number**

Synopsis	UDP destination port to use with the gateway
Context	<b>configure mirror mirror-dest string encap layer-3-encap gateway udp-port destination number</b>

Tree	<a href="#">destination</a>
Range	0   1 to 65535
Default	0
Introduced	16.0.R1
Platforms	All

**source number**

Synopsis	UDP source port to use with the gateway
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">encap</a> <a href="#">layer-3-encap</a> <a href="#">gateway</a> <a href="#">udp-port</a> <a href="#">source</a> <i>number</i>
Tree	<a href="#">source</a>
Range	0   1 to 65535
Default	0
Introduced	16.0.R1
Platforms	All

**header-type keyword****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Header type for Layer 3 encapsulation
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">encap</a> <a href="#">layer-3-encap</a> <a href="#">header-type</a> <i>keyword</i>
Tree	<a href="#">header-type</a>
Options	ip-udp-shim, ip-gre, ip-udp-shim-sampled
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**router-instance string**

Synopsis	Router instance to use with routed encapsulation
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">encap</a> <a href="#">layer-3-encap</a> <a href="#">router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>

---

Default	Base
Introduced	16.0.R1
Platforms	All

**endpoint** [*name*] *string*

Synopsis	Enter the <b>endpoint</b> list instance
Context	<b>configure mirror mirror-dest</b> <i>string endpoint string</i>
Tree	<a href="#">endpoint</a>
Max. Instances	2
Introduced	16.0.R1
Platforms	All

**[name]** *string*

Synopsis	Service endpoint name
Context	<b>configure mirror mirror-dest</b> <i>string endpoint string</i>
Tree	<a href="#">endpoint</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure mirror mirror-dest</b> <i>string endpoint string description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All



**revert-time** (*number* | *keyword*)

Synopsis	Time to wait before reverting back to primary spoke SDP
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>endpoint</b> <i>string</i> <b>revert-time</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>revert-time</b>
Range	1 to 600
Units	seconds
Options	never, immediate
Default	immediate
Introduced	16.0.R1
Platforms	All

**fc** *keyword*

Synopsis	Forwarding class for destination traffic
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>fc</b> <i>keyword</i>
Tree	<b>fc</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Default	be
Introduced	16.0.R1
Platforms	All

**include-port-id** *boolean*

Synopsis	Include the system port ID in the packet
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>include-port-id</b> <i>boolean</i>
Tree	<b>include-port-id</b>
Default	false
Introduced	16.0.R1
Platforms	All

**pcap** [*session-name*] *string*

Synopsis	Enter the <b>pcap</b> list instance
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>pcap</b> <i>string</i>
Tree	<b>pcap</b>

Max. Instances	1
Introduced	16.0.R1
Platforms	All

**[session-name]** *string*

Synopsis	PCAP session name
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">pcap</a> <i>string</i>
Tree	<a href="#">pcap</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**file-url** *string*

Synopsis	URL and file name for packet capture transfer
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">pcap</a> <i>string</i> <b>file-url</b> <i>string</i>
Tree	<a href="#">file-url</a>
String Length	1 to 180
Introduced	16.0.R1
Platforms	All

**remote-source**

Synopsis	Enable the <b>remote-source</b> context
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <b>remote-source</b>
Tree	<a href="#">remote-source</a>
Introduced	16.0.R1
Platforms	All

**far-end** [[far-end-addr](#)] *string*

Synopsis	Enter the <b>far-end</b> list instance
----------	--

Context	<b>configure mirror mirror-dest</b> <i>string</i> <b>remote-source far-end</b> <i>string</i>
Tree	<b>far-end</b>
Introduced	16.0.R1
Platforms	All

**[far-end-addr]** *string*

Synopsis	Far end IP address
Context	<b>configure mirror mirror-dest</b> <i>string</i> <b>remote-source far-end</b> <i>string</i>
Tree	<b>far-end</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**icb** *boolean*

Synopsis	Remote source as an inter-chassis backup
Context	<b>configure mirror mirror-dest</b> <i>string</i> <b>remote-source far-end</b> <i>string</i> <b>icb</b> <i>boolean</i>
Tree	<b>icb</b>
Default	false
Introduced	16.0.R1
Platforms	All

**ing-vc-label** *number*

Synopsis	Ingress virtual circuit label
Context	<b>configure mirror mirror-dest</b> <i>string</i> <b>remote-source far-end</b> <i>string</i> <b>ing-vc-label</b> <i>number</i>
Tree	<b>ing-vc-label</b>
Range	32 to 18431
Notes	The following elements are part of a choice: <b>ing-vc-label</b> or <b>label-signaling</b> .
Introduced	16.0.R1
Platforms	All

**label-signaling** *keyword*

Synopsis	Protocol to obtain the ingress labels
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>remote-source</b> <b>far-end</b> <i>string</i> <b>label-signaling</b> <i>keyword</i>
Tree	<b>label-signaling</b>
Options	tldp
Default	tldp
Notes	The following elements are part of a choice: <b>ing-vc-label</b> or <b>label-signaling</b> .
Introduced	16.0.R1
Platforms	All

**vc-id** *number*

Synopsis	Virtual circuit ID associated with the remote source
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>remote-source</b> <b>far-end</b> <i>string</i> <b>vc-id</b> <i>number</i>
Tree	<b>vc-id</b>
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**spoke-sdp** [**sdp-bind-id**] *string*

Synopsis	Enter the <b>spoke-sdp</b> list instance
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>remote-source</b> <b>spoke-sdp</b> <i>string</i>
Tree	<b>spoke-sdp</b>
Introduced	16.0.R1
Platforms	All

**[sdp-bind-id]** *string*

Synopsis	SDP ID number
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>remote-source</b> <b>spoke-sdp</b> <i>string</i>
Tree	<b>spoke-sdp</b>
String Length	3 to 16

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the service SDP binding
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>remote-source</b> <b>spoke-sdp</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **control-word** *boolean*

Synopsis	Enable the PW control word on spoke SDPs
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>remote-source</b> <b>spoke-sdp</b> <i>string</i> <b>control-word</b> <i>boolean</i>
Tree	<b>control-word</b>
Description	When configured to <b>true</b> , this command enables the PW control word on spoke SDPs that are part of a mirror destination. The control word must be enabled to allow MPLS-TP OAM on spoke SDP and is only valid for spoke SDPs that are part of a mirror service of type <b>ether</b> .  When configured to <b>false</b> , this command disables the PW control word.
Default	false
Introduced	16.0.R1
Platforms	All

### **egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>remote-source</b> <b>spoke-sdp</b> <i>string</i> <b>egress</b>
Tree	<b>egress</b>
Introduced	16.0.R1
Platforms	All

**vc-label** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MPLS VC label that sends packets to the far end device
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>remote-source</b> <b>spoke-sdp</b> <i>string</i> <b>egress</b> <b>vc-label</b> <i>number</i>
Tree	<b>vc-label</b>
Range	16 to 1048575
Introduced	16.0.R1
Platforms	All

**endpoint**

Synopsis	Enter the <b>endpoint</b> context
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>remote-source</b> <b>spoke-sdp</b> <i>string</i> <b>endpoint</b>
Tree	<b>endpoint</b>
Introduced	16.0.R1
Platforms	All

**icb** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Bind the SDP as the Inter-Chassis Backup (ICB) type
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>remote-source</b> <b>spoke-sdp</b> <i>string</i> <b>endpoint</b> <b>icb</b> <i>boolean</i>
Tree	<b>icb</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **name** *reference*

Synopsis	SAP-associated endpoint name
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>remote-source</b> <b>spoke-sdp</b> <i>string</i> <b>endpoint</b> <i>name reference</i>
Tree	<b>name</b>
Reference	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>endpoint</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **ingress**

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>remote-source</b> <b>spoke-sdp</b> <i>string</i> <b>ingress</b>
Tree	<b>ingress</b>
Introduced	16.0.R1
Platforms	All

### **l2tpv3**

Synopsis	Enter the <b>l2tpv3</b> context
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>remote-source</b> <b>spoke-sdp</b> <i>string</i> <b>ingress</b> <b>l2tpv3</b>
Tree	<b>l2tpv3</b>
Introduced	16.0.R1
Platforms	All

### **cookie**

Synopsis	Enter the <b>cookie</b> context
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>remote-source</b> <b>spoke-sdp</b> <i>string</i> <b>ingress</b> <b>l2tpv3</b> <b>cookie</b>
Tree	<b>cookie</b>
Introduced	16.0.R1
Platforms	All

**cookie1** *string*

Synopsis	Value of the first cookie for the tunnel
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">remote-source</a> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress</a> <a href="#">l2tpv3</a> <a href="#">cookie</a> <a href="#">cookie1</a> <i>string</i>
Tree	<a href="#">cookie1</a>
String Length	18 to 23
Introduced	16.0.R1
Platforms	All

**cookie2** *string*

Synopsis	Value of the second cookie for the tunnel
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">remote-source</a> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress</a> <a href="#">l2tpv3</a> <a href="#">cookie</a> <a href="#">cookie2</a> <i>string</i>
Tree	<a href="#">cookie2</a>
String Length	18 to 23
Introduced	16.0.R1
Platforms	All

**vc-label** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MPLS VC label that sends packets to the far end device
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">remote-source</a> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress</a> <a href="#">vc-label</a> <i>number</i>
Tree	<a href="#">vc-label</a>
Range	32 to 18431
Introduced	16.0.R1
Platforms	All

**sampling-rate** *number*

Synopsis	Sampling rate
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">sampling-rate</a> <i>number</i>



Tree	<a href="#">sampling-rate</a>
Description	This command configures the packet sampling rate value for mirrored traffic and is supported with mirror source configurations. The sampling rate is common to all endpoints on a given line card FP per mirror destination service.
Range	256 to 10000
Introduced	20.7.R1
Platforms	All

### **sap** [[sap-id](#)] *string*

Synopsis	Enter the <b>sap</b> list instance
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">sap</a> <i>string</i>
Tree	<a href="#">sap</a>
Max. Instances	1
Introduced	16.0.R1
Platforms	All

### **[sap-id]** *string*

Synopsis	SAP ID
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">sap</a> <i>string</i>
Tree	<a href="#">sap</a>
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>egress</b>
Tree	<a href="#">egress</a>
Introduced	16.0.R1
Platforms	All

## ip-mirror

Synopsis	Enter the <b>ip-mirror</b> context
Context	<b>configure mirror mirror-dest</b> <i>string</i> <i>sap</i> <i>string</i> <i>egress</i> <i>ip-mirror</i>
Tree	<a href="#">ip-mirror</a>
Introduced	16.0.R1
Platforms	All

## mac

Synopsis	Enter the <b>mac</b> context
Context	<b>configure mirror mirror-dest</b> <i>string</i> <i>sap</i> <i>string</i> <i>egress</i> <i>ip-mirror</i> <i>mac</i>
Tree	<a href="#">mac</a>
Introduced	16.0.R1
Platforms	All

## destination *string*

Synopsis	Destination MAC address
Context	<b>configure mirror mirror-dest</b> <i>string</i> <i>sap</i> <i>string</i> <i>egress</i> <i>ip-mirror</i> <i>mac</i> <i>destination</i> <i>string</i>
Tree	<a href="#">destination</a>
Introduced	16.0.R1
Platforms	All

## source *string*

Synopsis	Source MAC address
Context	<b>configure mirror mirror-dest</b> <i>string</i> <i>sap</i> <i>string</i> <i>egress</i> <i>ip-mirror</i> <i>mac</i> <i>source</i> <i>string</i>
Tree	<a href="#">source</a>
Introduced	16.0.R1
Platforms	All

## qos

Synopsis	Enter the <b>qos</b> context
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Context	<b>configure mirror mirror-dest string sap string egress qos</b>
Tree	<b>qos</b>
Introduced	16.0.R1
Platforms	All

### **sap-egress**

Synopsis	Enter the <b>sap-egress</b> context
Context	<b>configure mirror mirror-dest string sap string egress qos sap-egress</b>
Tree	<b>sap-egress</b>
Introduced	16.0.R1
Platforms	All

### **policy-name reference**

Synopsis	Policy ID to associate with SAP for mirrored service
Context	<b>configure mirror mirror-dest string sap string egress qos sap-egress policy-name reference</b>
Tree	<b>policy-name</b>
Reference	<b>configure qos sap-egress string</b>
Introduced	16.0.R1
Platforms	All

### **port-redirect-group**

Synopsis	Enter the <b>port-redirect-group</b> context
Context	<b>configure mirror mirror-dest string sap string egress qos sap-egress port-redirect-group</b>
Tree	<b>port-redirect-group</b>
Introduced	16.0.R1
Platforms	All

### **group-name reference**

Synopsis	Name of the queue group redirect list policy
Context	<b>configure mirror mirror-dest string sap string egress qos sap-egress port-redirect-group group-name reference</b>

Tree	<a href="#">group-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **instance** *number*

Synopsis	Port queue group instance
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">port-redirect-group</a> <a href="#">instance</a> <i>number</i>
Tree	<a href="#">instance</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

### **endpoint** *reference*

Synopsis	Service endpoint name
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">endpoint</a> <i>reference</i>
Tree	<a href="#">endpoint</a>
Reference	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">endpoint</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **service-id** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service ID
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">service-id</a> <i>number</i>
Tree	<a href="#">service-id</a>
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

**slice-size** *number*

Synopsis	Maximum size of the transmitted mirrored frame
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>slice-size</b> <i>number</i>
Tree	<b>slice-size</b>
Range	0   128 to 9216
Default	0
Introduced	16.0.R1
Platforms	All

**spoke-sdp** [**sdp-bind-id**] *string*

Synopsis	Enter the <b>spoke-sdp</b> list instance
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>spoke-sdp</b> <i>string</i>
Tree	<b>spoke-sdp</b>
Introduced	16.0.R1
Platforms	All

**[sdp-bind-id]** *string*

Synopsis	SDP ID number
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>spoke-sdp</b> <i>string</i>
Tree	<b>spoke-sdp</b>
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the service SDP binding
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable

Introduced 16.0.R1  
 Platforms All

### **control-word** *boolean*

Synopsis Enable the PW control word on spoke SDPs

Context **configure** *mirror mirror-dest string spoke-sdp string control-word boolean*

Tree [control-word](#)

Description When configured to **true**, this command enables the PW control word on spoke SDPs that are part of a mirror destination. The control word must be enabled to allow MPLS-TP OAM on spoke SDP and is only valid for spoke SDPs that are part of a mirror service of type **ether**.

When configured to **false**, this command disables the PW control word.

Default false

Introduced 16.0.R1

Platforms All

### **egress**

Synopsis Enter the **egress** context

Context **configure** *mirror mirror-dest string spoke-sdp string egress*

Tree [egress](#)

Introduced 16.0.R1

Platforms All

### **I2tpv3**

Synopsis Enter the **I2tpv3** context

Context **configure** *mirror mirror-dest string spoke-sdp string egress I2tpv3*

Tree [I2tpv3](#)

Introduced 16.0.R1

Platforms All

### **cookie** *string*

Synopsis RX or TX cookie for L2TPv3 spoke SDPs

Context	<b>configure mirror mirror-dest</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>egress l2tpv3 cookie</b> <i>string</i>
Tree	<b>cookie</b>
String Length	18 to 23
Introduced	16.0.R1
Platforms	All

### **vc-label** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MPLS VC label that sends packets to the far end device
Context	<b>configure mirror mirror-dest</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>egress vc-label</b> <i>number</i>
Tree	<b>vc-label</b>
Range	16 to 1048575
Introduced	16.0.R1
Platforms	All

### **endpoint**

Synopsis	Enter the <b>endpoint</b> context
Context	<b>configure mirror mirror-dest</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>endpoint</b>
Tree	<b>endpoint</b>
Introduced	16.0.R1
Platforms	All

### **icb** *boolean*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Bind the SDP as the Inter-Chassis Backup (ICB) type
Context	<b>configure mirror mirror-dest</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>endpoint icb</b> <i>boolean</i>
Tree	<b>icb</b>
Default	false

Introduced 16.0.R1  
Platforms All

### **name** *reference*

Synopsis Endpoint name associated with the SAP  
Context **configure** **mirror** **mirror-dest** *string* **spoke-sdp** *string* **endpoint** *name* *reference*  
Tree [name](#)  
Reference **configure** **mirror** **mirror-dest** *string* **endpoint** *string*  
Introduced 16.0.R1  
Platforms All

### **precedence** (*number* | *keyword*)

Synopsis Precedence when multiple SDP binds are on one endpoint  
Context **configure** **mirror** **mirror-dest** *string* **spoke-sdp** *string* **endpoint** **precedence** (*number* | *keyword*)  
Tree [precedence](#)  
Range 1 to 4  
Options primary  
Default 4  
Introduced 16.0.R1  
Platforms All

### **ingress**

Synopsis Enter the **ingress** context  
Context **configure** **mirror** **mirror-dest** *string* **spoke-sdp** *string* **ingress**  
Tree [ingress](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS



**vc-label** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MPLS VC label that sends packets to the far end device
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>ingress</b> <b>vc-label</b> <i>number</i>
Tree	<b>vc-label</b>
Range	32 to 18431
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Mirror type information
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>type</b> <i>keyword</i>
Tree	<b>type</b>
Options	ether, ip-only
Default	ether
Introduced	16.0.R1
Platforms	All

**use-global-sampling-rate** *boolean*

Synopsis	Enables global sampling rate by mirror destination
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>use-global-sampling-rate</b> <i>boolean</i>
Tree	<b>use-global-sampling-rate</b>
Description	<p>When configured to <b>true</b>, this command configures each mirror destination service to use the global sampling rate, which allows a single high sampling rate for the entire system.</p> <p>When configured to <b>false</b>, the mirror destination mirrors at the full rate (all packets) or mirrors based on the sampling rate for the mirror destination if the <b>sampling-rate</b> command is configured.</p>
Default	false

Introduced 22.10.R1  
Platforms All

### **mirror-source** [[service-name](#)] *string*

Synopsis Enter the **mirror-source** list instance  
Context **configure mirror mirror-source** *string*  
Tree [mirror-source](#)  
Introduced 19.10.R1  
Platforms All

### **[service-name]** *string*

Synopsis Administrative service name  
Context **configure mirror mirror-source** *string*  
Tree [mirror-source](#)  
String Length 1 to 64  
Notes This element is part of a list key.  
Introduced 19.10.R1  
Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the mirror service  
Context **configure mirror mirror-source** *string admin-state* *keyword*  
Tree [admin-state](#)  
Options enable, disable  
Default enable  
Introduced 19.10.R1  
Platforms All

### **ip-filter** [[filter-name](#)] *reference*

Synopsis Enter the **ip-filter** list instance  
Context **configure mirror mirror-source** *string ip-filter* *reference*

Tree	<a href="#">ip-filter</a>
Introduced	19.10.R1
Platforms	All

**[filter-name] reference**

Synopsis	IP filter name
Context	<b>configure mirror mirror-source</b> <i>string</i> <a href="#">ip-filter</a> <i>reference</i>
Tree	<a href="#">ip-filter</a>
Reference	<b>configure filter</b> <a href="#">ip-filter</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**entry [entry-id] number**

Synopsis	Add a list entry for <b>entry</b>
Context	<b>configure mirror mirror-source</b> <i>string</i> <a href="#">ip-filter</a> <i>reference</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Min. Instances	1
Introduced	19.10.R1
Platforms	All

**[entry-id] number**

Synopsis	IP filter entry ID
Context	<b>configure mirror mirror-source</b> <i>string</i> <a href="#">ip-filter</a> <i>reference</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**ipv6-filter** [[filter-name](#)] *reference*

Synopsis	Enter the <b>ipv6-filter</b> list instance
Context	<b>configure mirror mirror-source</b> <i>string</i> <a href="#">ipv6-filter</a> <i>reference</i>
Tree	<a href="#">ipv6-filter</a>
Introduced	19.10.R1
Platforms	All

**[filter-name]** *reference*

Synopsis	IPv6 filter name
Context	<b>configure mirror mirror-source</b> <i>string</i> <a href="#">ipv6-filter</a> <i>reference</i>
Tree	<a href="#">ipv6-filter</a>
Reference	<b>configure filter</b> <a href="#">ipv6-filter</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**entry** [[entry-id](#)] *number*

Synopsis	Add a list entry for <b>entry</b>
Context	<b>configure mirror mirror-source</b> <i>string</i> <a href="#">ipv6-filter</a> <i>reference</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Min. Instances	1
Introduced	19.10.R1
Platforms	All

**[entry-id]** *number*

Synopsis	IPv6 filter entry ID
Context	<b>configure mirror mirror-source</b> <i>string</i> <a href="#">ipv6-filter</a> <i>reference</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	19.10.R1

Platforms All

### **mac-filter** [[filter-name](#)] *reference*

Synopsis Enter the **mac-filter** list instance

Context **configure** [mirror](#) [mirror-source](#) *string* [mac-filter](#) *reference*

Tree [mac-filter](#)

Introduced 19.10.R1

Platforms All

### **[filter-name]** *reference*

Synopsis MAC filter name

Context **configure** [mirror](#) [mirror-source](#) *string* [mac-filter](#) *reference*

Tree [mac-filter](#)

Reference **configure** [filter](#) [mac-filter](#) *string*

Notes This element is part of a list key.

Introduced 19.10.R1

Platforms All

### **entry** [[entry-id](#)] *number*

Synopsis Add a list entry for **entry**

Context **configure** [mirror](#) [mirror-source](#) *string* [mac-filter](#) *reference* [entry](#) *number*

Tree [entry](#)

Min. 1

Instances

Introduced 19.10.R1

Platforms All

### **[entry-id]** *number*

Synopsis MAC filter entry ID

Context **configure** [mirror](#) [mirror-source](#) *string* [mac-filter](#) *reference* [entry](#) *number*

Tree [entry](#)

---

Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**port** [*port-id*] *string*

Synopsis	Enter the <b>port</b> list instance
Context	<b>configure mirror mirror-source</b> <i>string port string</i>
Tree	<i>port</i>
Introduced	19.10.R1
Platforms	All

**[port-id]** *string*

Synopsis	Port ID
Context	<b>configure mirror mirror-source</b> <i>string port string</i>
Tree	<i>port</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**egress** *boolean*

Synopsis	Mirror egress packets
Context	<b>configure mirror mirror-source</b> <i>string port string egress boolean</i>
Tree	<i>egress</i>
Description	When configured to <b>true</b> , egressing packets are mirrored. Egress packets are mirrored to the mirror destination after egress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

**ingress** *boolean*

Synopsis	Mirror ingress packets
Context	<b>configure</b> <b>mirror</b> <b>mirror-source</b> <i>string</i> <b>port</b> <i>string</i> <b>ingress</b> <i>boolean</i>
Tree	<b>ingress</b>
Description	When configured to <b>true</b> , ingress packets are mirrored. Ingress packets are mirrored to the mirror destination before ingress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

**sap** [**sap-id**] *string*

Synopsis	Enter the <b>sap</b> list instance
Context	<b>configure</b> <b>mirror</b> <b>mirror-source</b> <i>string</i> <b>sap</b> <i>string</i>
Tree	<b>sap</b>
Introduced	19.10.R1
Platforms	All

**[sap-id]** *string*

Synopsis	SAP ID
Context	<b>configure</b> <b>mirror</b> <b>mirror-source</b> <i>string</i> <b>sap</b> <i>string</i>
Tree	<b>sap</b>
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**egress** *boolean*

Synopsis	Mirror egress packets
Context	<b>configure</b> <b>mirror</b> <b>mirror-source</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress</b> <i>boolean</i>
Tree	<b>egress</b>
Description	When configured to <b>true</b> , egress packets are mirrored. Egress packets are mirrored to the mirror destination after egress packet modification.

Default	false
Introduced	19.10.R1
Platforms	All

### **ingress** *boolean*

Synopsis	Mirror ingress packets
Context	<b>configure</b> <b>mirror</b> <b>mirror-source</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress</b> <i>boolean</i>
Tree	<b>ingress</b>
Description	When configured to <b>true</b> , ingressing packets are mirrored. Ingress packets are mirrored to the mirror destination before ingress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

### **subscriber** [**subscriber-id**] *string*

Synopsis	Enter the <b>subscriber</b> list instance
Context	<b>configure</b> <b>mirror</b> <b>mirror-source</b> <i>string</i> <b>subscriber</b> <i>string</i>
Tree	<b>subscriber</b>
Introduced	19.10.R1
Platforms	All

### [**subscriber-id**] *string*

Synopsis	Subscriber ID
Context	<b>configure</b> <b>mirror</b> <b>mirror-source</b> <i>string</i> <b>subscriber</b> <i>string</i>
Tree	<b>subscriber</b>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All



**egress** *boolean*

Synopsis	Mirror egress packets
Context	<b>configure</b> <b>mirror</b> <b>mirror-source</b> <i>string</i> <b>subscriber</b> <i>string</i> <b>egress</b> <i>boolean</i>
Tree	<b>egress</b>
Description	When configured to <b>true</b> , egressing packets are mirrored. Egress packets are mirrored to the mirror destination after egress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

**fc** *keyword*

Synopsis	The forwarding classes traffic which should be mirrored
Context	<b>configure</b> <b>mirror</b> <b>mirror-source</b> <i>string</i> <b>subscriber</b> <i>string</i> <b>fc</b> <i>keyword</i>
Tree	<b>fc</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	19.10.R1
Platforms	All

**host-type** *keyword*

Synopsis	Host type for mirroring
Context	<b>configure</b> <b>mirror</b> <b>mirror-source</b> <i>string</i> <b>subscriber</b> <i>string</i> <b>host-type</b> <i>keyword</i>
Tree	<b>host-type</b>
Options	ipoe, ppp
Introduced	19.10.R1
Platforms	All

**ingress** *boolean*

Synopsis	Mirror ingress packets
Context	<b>configure</b> <b>mirror</b> <b>mirror-source</b> <i>string</i> <b>subscriber</b> <i>string</i> <b>ingress</b> <i>boolean</i>
Tree	<b>ingress</b>

Description	When configured to <b>true</b> , ingressing packets are mirrored. Ingress packets are mirrored to the mirror destination before ingress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

### **ip-address** *string*

Synopsis	Service IP address of remote device sending LI traffic
Context	<b>configure</b> <b>mirror</b> <b>mirror-source</b> <i>string</i> <b>subscriber</b> <i>string</i> <b>ip-address</b> <i>string</i>
Tree	<a href="#">ip-address</a>
Notes	The following elements are part of a choice: ( <b>ip-address</b> , <b>mac-address</b> , and <b>sap-id</b> ) or <b>sla-profile</b> .
Introduced	19.10.R1
Platforms	All

### **ip-family** *keyword*

Synopsis	IP family for mirroring
Context	<b>configure</b> <b>mirror</b> <b>mirror-source</b> <i>string</i> <b>subscriber</b> <i>string</i> <b>ip-family</b> <i>keyword</i>
Tree	<a href="#">ip-family</a>
Options	ipv4, ipv6
Introduced	19.10.R1
Platforms	All

### **mac-address** *string*

Synopsis	MAC address for the subscriber
Context	<b>configure</b> <b>mirror</b> <b>mirror-source</b> <i>string</i> <b>subscriber</b> <i>string</i> <b>mac-address</b> <i>string</i>
Tree	<a href="#">mac-address</a>
Notes	The following elements are part of a choice: ( <b>ip-address</b> , <b>mac-address</b> , and <b>sap-id</b> ) or <b>sla-profile</b> .
Introduced	19.10.R1
Platforms	All

### **sap-id** *string*

Synopsis	Subscriber SAP ID
Context	<b>configure</b> <b>mirror</b> <b>mirror-source</b> <i>string</i> <b>subscriber</b> <i>string</i> <b>sap-id</b> <i>string</i>
Tree	<a href="#">sap-id</a>
String Length	1 to 45
Notes	The following elements are part of a choice: ( <b>ip-address</b> , <b>mac-address</b> , and <b>sap-id</b> ) or <b>sla-profile</b> .
Introduced	19.10.R1
Platforms	All

### **sla-profile** *string*

Synopsis	SLA profile name
Context	<b>configure</b> <b>mirror</b> <b>mirror-source</b> <i>string</i> <b>subscriber</b> <i>string</i> <b>sla-profile</b> <i>string</i>
Tree	<a href="#">sla-profile</a>
String Length	1 to 32
Notes	The following elements are part of a choice: ( <b>ip-address</b> , <b>mac-address</b> , and <b>sap-id</b> ) or <b>sla-profile</b> .
Introduced	19.10.R1
Platforms	All

## 3.27 multicast-management commands

```

configure
- multicast-management
- apply-groups reference
- apply-groups-exclude reference
- bandwidth-policy string
- admin-bw-threshold number
- apply-groups reference
- apply-groups-exclude reference
- description string
- falling-percent-reset number
- impn-paths
- primary-path
- apply-groups reference
- apply-groups-exclude reference
- queue-parameters
- cbs decimal-number
- drop-tail
- low
- percent-reduction-from-mbs number
- mbs decimal-number
- secondary-path
- apply-groups reference
- apply-groups-exclude reference
- number-paths
- number-of-paths number
- redundant-sfm number
- queue-parameters
- cbs decimal-number
- drop-tail
- low
- percent-reduction-from-mbs number
- mbs decimal-number
- mcast-pool
- percent-of-total number
- resv-cbs number
- slope-policy reference
- chassis-level
- apply-groups reference
- apply-groups-exclude reference
- mrrp-impn-override boolean
- per-mcast-plane-capacity
- mcast-capacity
- primary-percentage decimal-number
- secondary-percentage decimal-number
- redundant-mcast-capacity
- primary-percentage decimal-number
- secondary-percentage decimal-number
- total-capacity keyword
- round-robin-inactive-records boolean
- multicast-info-policy string
- apply-groups reference
- apply-groups-exclude reference
- bundle string
- admin-bw number
- apply-groups reference
- apply-groups-exclude reference
- bw-activity
- black-hole-rate number
- bw-activity-type keyword

```

configure multicast-management multicast-info-policy bundle bw-activity falling-delay

```

- falling-delay number
- channel start (ipv4-address-no-zone | ipv6-address-no-zone) end (ipv4-address-
no-zone | ipv6-address-no-zone)
- admin-bw number
- apply-groups reference
- apply-groups-exclude reference
- bw-activity
- black-hole-rate number
- bw-activity-type keyword
- falling-delay number
- explicit-sf-path keyword
- keepalive-override number
- preference number
- primary-tunnel-interface
- ldp-p2mp number
- rsvp-p2mp string
- sender string
- source-override (ipv4-address-no-zone | ipv6-address-no-zone)
- admin-bw number
- apply-groups reference
- apply-groups-exclude reference
- bw-activity
- black-hole-rate number
- bw-activity-type keyword
- falling-delay number
- explicit-sf-path keyword
- keepalive-override number
- preference number
- primary-tunnel-interface
- ldp-p2mp number
- rsvp-p2mp string
- sender string
- video
- analyzer
- alarms
- cc-error boolean
- non-vid-pid-absent number
- pat-repetition
- poa number
- qos number
- tnc number
- pat-syntax boolean
- pcr-repetition
- poa number
- qos number
- tnc number
- pid-pmt-unref boolean
- pmt-repetition
- poa number
- qos number
- tnc number
- pmt-syntax boolean
- report-alarm
- severity keyword
- tei-set boolean
- ts-sync-loss boolean
- vid-pid-absent number
- description string
- fcc-channel-type keyword
- fcc-min-duration number
- fcc-server keyword
- local-rt-server keyword
- reorder-audio number
- rt-buffer-size number

```

---

 configure multicast-management multicast-info-policy bundle channel source-override video rt-server

```

    - rt-server
      - ip-address string
      - port number
      - rt-state keyword
    - stream-selection
      - intf1 string
      - intf2 string
      - source1 string
      - source2 string
      - video-group (number | keyword)
  - video
    - analyzer
      - alarms
        - cc-error boolean
        - non-vid-pid-absent number
        - pat-repetition
          - poa number
          - qos number
          - tnc number
        - pat-syntax boolean
        - pcr-repetition
          - poa number
          - qos number
          - tnc number
        - pid-pmt-unref boolean
        - pmt-repetition
          - poa number
          - qos number
          - tnc number
        - pmt-syntax boolean
        - report-alarm
          - severity keyword
        - tei-set boolean
        - ts-sync-loss boolean
        - vid-pid-absent number
      - description string
      - fcc-channel-type keyword
      - fcc-min-duration number
      - fcc-server keyword
      - local-rt-server keyword
      - reorder-audio number
      - rt-buffer-size number
      - rt-server
        - ip-address string
        - port number
        - rt-state keyword
      - stream-selection
        - intf1 string
        - intf2 string
        - source1 string
        - source2 string
        - video-group (number | keyword)
    - cong-priority-threshold number
    - description string
    - ecmp-opt-threshold number
    - explicit-sf-path keyword
    - keepalive-override number
    - preference number
    - primary-tunnel-interface
      - ldp-p2mp number
      - rsvp-p2mp string
      - sender string
    - video
      - analyzer

```

configure multicast-management multicast-info-policy bundle video analyzer alarms

```

- alarms
- cc-error boolean
- non-vid-pid-absent number
- pat-repetition
-   poa number
-   qos number
-   tnc number
- pat-syntax boolean
- pcr-repetition
-   poa number
-   qos number
-   tnc number
- pid-pmt-unref boolean
- pmt-repetition
-   poa number
-   qos number
-   tnc number
- pmt-syntax boolean
- report-alarm
-   severity keyword
- tei-set boolean
- ts-sync-loss boolean
- vid-pid-absent number
- description string
- fcc-channel-type keyword
- fcc-min-duration number
- fcc-server boolean
- local-fcc-port number
- local-rt-port number
- local-rt-server boolean
- reorder-audio number
- rt-buffer-size number
- rt-server
-   ip-address string
-   port number
- stream-selection
-   intf1 string
-   intf2 string
-   source1 string
-   source2 string
-   video-group number
- description string
- video-policy
-   video-interface string
-   apply-groups reference
-   apply-groups-exclude reference
-   extended-unicast boolean
-   fcc-session-timeout number
-   hd
-     apply-groups reference
-     apply-groups-exclude reference
-     dent-threshold number
-     fcc-burst number
-     fcc-server
-       mode keyword
-     local-rt-server boolean
-     mc-handover number
-     rt-rate number
-   max-igmp-latency number
-   max-sessions number
-   pip
-     apply-groups reference
-     apply-groups-exclude reference
-     dent-threshold number

```

---

configure multicast-management multicast-info-policy video-policy video-interface pip fcc-burst

```
    - fcc-burst number
    - fcc-server
      - mode keyword
    - local-rt-server boolean
    - mc-handover number
    - rt-rate number
  - ret-session-timeout number
  - rt-payload-type number
  - rt-rate number
  - sd
    - apply-groups reference
    - apply-groups-exclude reference
    - dent-threshold number
    - fcc-burst number
    - fcc-server
      - mode keyword
    - local-rt-server boolean
    - mc-handover number
    - rt-rate number
    - subscriber-bw-limit number
- multicast-reporting-destination string
  - address string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - maximum-transmission-delay number
  - udp-port number
```



### 3.27.1 multicast-management command descriptions

#### multicast-management

Synopsis	Enter the <b>multicast-management</b> context
Context	<b>configure</b> <a href="#">multicast-management</a>
Tree	<a href="#">multicast-management</a>
Introduced	16.0.R1
Platforms	All

#### bandwidth-policy [[policy-name](#)] *string*

Synopsis	Enter the <b>bandwidth-policy</b> list instance
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">bandwidth-policy</a> <i>string</i>
Tree	<a href="#">bandwidth-policy</a>
Max. Instances	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

#### [\[policy-name\]](#) *string*

Synopsis	Bandwidth policy name
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">bandwidth-policy</a> <i>string</i>
Tree	<a href="#">bandwidth-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

#### admin-bw-threshold *number*

Synopsis	Administrative bandwidth threshold
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">bandwidth-policy</a> <i>string</i> <a href="#">admin-bw-threshold</a> <i>number</i>

Tree	<a href="#">admin-bw-threshold</a>
Range	1 to 40000000
Units	kilobps
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">multicast-management bandwidth-policy</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### **falling-percent-reset** *number*

Synopsis	Percent of bandwidth that decreases before resetting
Context	<b>configure</b> <a href="#">multicast-management bandwidth-policy</a> <i>string</i> <a href="#">falling-percent-reset</a> <i>number</i>
Tree	<a href="#">falling-percent-reset</a>
Range	1 to 100
Units	percent
Default	50
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### **impm-paths**

Synopsis	Enter the <b>impm-paths</b> context
Context	<b>configure</b> <a href="#">multicast-management bandwidth-policy</a> <i>string</i> <a href="#">impm-paths</a>
Tree	<a href="#">impm-paths</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### primary-path

Synopsis Enter the **primary-path** context

Context **configure** [multicast-management](#) [bandwidth-policy](#) *string* [impm-paths](#) [primary-path](#)

Tree [primary-path](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### queue-parameters

Synopsis Enter the **queue-parameters** context

Context **configure** [multicast-management](#) [bandwidth-policy](#) *string* [impm-paths](#) [primary-path](#) [queue-parameters](#)

Tree [queue-parameters](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### **cbs** *decimal-number*

Synopsis Override for default CBS for single queue for each path

Context **configure** [multicast-management](#) [bandwidth-policy](#) *string* [impm-paths](#) [primary-path](#) [queue-parameters](#) [cbs](#) *decimal-number*

Tree [cbs](#)

Range 0.00 to 100.00

Units percent

Default 5.00

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

## drop-tail

Synopsis	Enter the <b>drop-tail</b> context
Context	<b>configure</b> <a href="#">multicast-management bandwidth-policy</a> <i>string</i> <a href="#">impm-paths primary-path queue-parameters drop-tail</a>
Tree	<a href="#">drop-tail</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

## low

Synopsis	Enter the <b>low</b> context
Context	<b>configure</b> <a href="#">multicast-management bandwidth-policy</a> <i>string</i> <a href="#">impm-paths primary-path queue-parameters drop-tail low</a>
Tree	<a href="#">low</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

## percent-reduction-from-mbs *number*

Synopsis	Low drop-tail percent from MBS that is reduced
Context	<b>configure</b> <a href="#">multicast-management bandwidth-policy</a> <i>string</i> <a href="#">impm-paths primary-path queue-parameters drop-tail low percent-reduction-from-mbs</a> <i>number</i>
Tree	<a href="#">percent-reduction-from-mbs</a>
Range	0 to 100
Units	percent
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

## mbs *decimal-number*

Synopsis	Override for default MBS for single queue for each path
Context	<b>configure</b> <a href="#">multicast-management bandwidth-policy</a> <i>string</i> <a href="#">impm-paths primary-path queue-parameters mbs</a> <i>decimal-number</i>

Tree	<a href="#">mbs</a>
Range	0.00 to 100.00
Units	percent
Default	7.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

## secondary-path

Synopsis	Enter the <b>secondary-path</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">bandwidth-policy</a> <i>string</i> <a href="#">impmpaths</a> <a href="#">secondary-path</a>
Tree	<a href="#">secondary-path</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

## number-paths

Synopsis	Enter the <b>number-paths</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">bandwidth-policy</a> <i>string</i> <a href="#">impmpaths</a> <a href="#">secondary-path</a> <a href="#">number-paths</a>
Tree	<a href="#">number-paths</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

## number-of-paths *number*

Synopsis	Number of secondary paths
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">bandwidth-policy</a> <i>string</i> <a href="#">impmpaths</a> <a href="#">secondary-path</a> <a href="#">number-paths</a> <a href="#">number-of-paths</a> <i>number</i>
Tree	<a href="#">number-of-paths</a>
Range	1 to 15
Default	1
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### **redundant-sfm** *number*

Synopsis Number of secondary paths in redundant SFM mode

Context **configure** [multicast-management bandwidth-policy](#) *string* [impm-paths secondary-path number-paths](#) [redundant-sfm](#) *number*

Tree [redundant-sfm](#)

Range 1 to 15

Default 1

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS, VSR

### **queue-parameters**

Synopsis Enter the **queue-parameters** context

Context **configure** [multicast-management bandwidth-policy](#) *string* [impm-paths secondary-path queue-parameters](#)

Tree [queue-parameters](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### **cbs** *decimal-number*

Synopsis Override for default CBS for single queue for each path

Context **configure** [multicast-management bandwidth-policy](#) *string* [impm-paths secondary-path queue-parameters](#) [cbs](#) *decimal-number*

Tree [cbs](#)

Range 0.00 to 100.00

Units percent

Default 30.00

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

**drop-tail**

Synopsis	Enter the <b>drop-tail</b> context
Context	<b>configure</b> <a href="#">multicast-management bandwidth-policy</a> <i>string</i> <a href="#">impm-paths</a> <a href="#">secondary-path</a> <a href="#">queue-parameters</a> <b>drop-tail</b>
Tree	<a href="#">drop-tail</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

**low**

Synopsis	Enter the <b>low</b> context
Context	<b>configure</b> <a href="#">multicast-management bandwidth-policy</a> <i>string</i> <a href="#">impm-paths</a> <a href="#">secondary-path</a> <a href="#">queue-parameters</a> <b>drop-tail</b> <b>low</b>
Tree	<a href="#">low</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

**percent-reduction-from-mbs** *number*

Synopsis	Low drop-tail percent from MBS that is reduced
Context	<b>configure</b> <a href="#">multicast-management bandwidth-policy</a> <i>string</i> <a href="#">impm-paths</a> <a href="#">secondary-path</a> <a href="#">queue-parameters</a> <b>drop-tail</b> <b>low</b> <b>percent-reduction-from-mbs</b> <i>number</i>
Tree	<a href="#">percent-reduction-from-mbs</a>
Range	0 to 100
Units	percent
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

**mbs** *decimal-number*

Synopsis	Override for default MBS for single queue for each path
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Context	<b>configure</b> <a href="#">multicast-management bandwidth-policy</a> <i>string</i> <a href="#">imp-m-paths</a> <a href="#">secondary-path</a> <a href="#">queue-parameters</a> <a href="#">mbs</a> <i>decimal-number</i>
Tree	<a href="#">mbs</a>
Range	0.00 to 100.00
Units	percent
Default	40.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

## **mcast-pool**

Synopsis	Enter the <b>mcast-pool</b> context
Context	<b>configure</b> <a href="#">multicast-management bandwidth-policy</a> <i>string</i> <a href="#">mcast-pool</a>
Tree	<a href="#">mcast-pool</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

## **percent-of-total** *number*

Synopsis	Percent of ingress buffers assigned to multicast pool
Context	<b>configure</b> <a href="#">multicast-management bandwidth-policy</a> <i>string</i> <a href="#">mcast-pool</a> <a href="#">percent-of-total</a> <i>number</i>
Tree	<a href="#">percent-of-total</a>
Range	1 to 50
Units	percent
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

## **resv-cbs** *number*

Synopsis	Percentage of pool reserved for multicast path queues
Context	<b>configure</b> <a href="#">multicast-management bandwidth-policy</a> <i>string</i> <a href="#">mcast-pool</a> <a href="#">resv-cbs</a> <i>number</i>
Tree	<a href="#">resv-cbs</a>



Range	1 to 100
Units	percent
Default	50
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### **slope-policy** *reference*

Synopsis	Slope policy name
Context	<b>configure</b> <a href="#">multicast-management bandwidth-policy</a> <i>string</i> <a href="#">mcast-pool slope-policy reference</a>
Tree	<a href="#">slope-policy</a>
Reference	<b>configure</b> <a href="#">qos slope-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### **chassis-level**

Synopsis	Enter the <b>chassis-level</b> context
Context	<b>configure</b> <a href="#">multicast-management chassis-level</a>
Tree	<a href="#">chassis-level</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### **mmp-imp-override** *boolean*

Synopsis	Manage MMRP traffic by IMPM
Context	<b>configure</b> <a href="#">multicast-management chassis-level mmp-imp-override</a> <i>boolean</i>
Tree	<a href="#">mmp-imp-override</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

## per-mcast-plane-capacity

Synopsis	Enter the <b>per-mcast-plane-capacity</b> context
Context	<b>configure</b> <a href="#">multicast-management chassis-level per-mcast-plane-capacity</a>
Tree	<a href="#">per-mcast-plane-capacity</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

## mcast-capacity

Synopsis	Enter the <b>mcast-capacity</b> context
Context	<b>configure</b> <a href="#">multicast-management chassis-level per-mcast-plane-capacity mcast-capacity</a>
Tree	<a href="#">mcast-capacity</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

## primary-percentage *decimal-number*

Synopsis	Percent of plane capacity for primary multicast planes
Context	<b>configure</b> <a href="#">multicast-management chassis-level per-mcast-plane-capacity mcast-capacity primary-percentage <i>decimal-number</i></a>
Tree	<a href="#">primary-percentage</a>
Range	0.01 to 100.00
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

## secondary-percentage *decimal-number*

Synopsis	Percent of plane capacity for secondary multicast plane
Context	<b>configure</b> <a href="#">multicast-management chassis-level per-mcast-plane-capacity mcast-capacity secondary-percentage <i>decimal-number</i></a>
Tree	<a href="#">secondary-percentage</a>

Range	0.01 to 100.00
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### redundant-mcast-capacity

Synopsis	Enter the <b>redundant-mcast-capacity</b> context
Context	<b>configure</b> <a href="#">multicast-management chassis-level per-mcast-plane-capacity redundant-mcast-capacity</a>
Tree	<a href="#">redundant-mcast-capacity</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### primary-percentage *decimal-number*

Synopsis	Percent of plane capacity for primary multicast planes
Context	<b>configure</b> <a href="#">multicast-management chassis-level per-mcast-plane-capacity redundant-mcast-capacity primary-percentage <i>decimal-number</i></a>
Tree	<a href="#">primary-percentage</a>
Range	0.01 to 100.00
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### secondary-percentage *decimal-number*

Synopsis	Percent of plane capacity for secondary multicast plane
Context	<b>configure</b> <a href="#">multicast-management chassis-level per-mcast-plane-capacity redundant-mcast-capacity secondary-percentage <i>decimal-number</i></a>
Tree	<a href="#">secondary-percentage</a>
Range	0.01 to 100.00
Units	percent
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### **total-capacity** *keyword*

Synopsis Total multicast plane bandwidth

Context **configure** [multicast-management](#) [chassis-level](#) [per-mcast-plane-capacity](#) **total-capacity** *keyword*

Tree [total-capacity](#)

Units megabps

Options dynamic, 2000, 4000, 5250, 8250, 15000, 17000, 19000, 27000, 42000, 90000

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### **round-robin-inactive-records** *boolean*

Synopsis Redistribute newly populated inactive records

Context **configure** [multicast-management](#) [chassis-level](#) **round-robin-inactive-records** *boolean*

Tree [round-robin-inactive-records](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### **multicast-info-policy** [[policy-name](#)] *string*

Synopsis Enter the **multicast-info-policy** list instance

Context **configure** [multicast-management](#) **multicast-info-policy** *string*

Tree [multicast-info-policy](#)

Max. Instances 32

Introduced 16.0.R1

Platforms All

**[policy-name]** *string*

Synopsis	Multicast information policy name
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i>
Tree	<a href="#">multicast-info-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**bundle** [[bundle-name](#)] *string*

Synopsis	Enter the <b>bundle</b> list instance
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <b>bundle</b> <i>string</i>
Tree	<a href="#">bundle</a>
Max. Instances	32
Introduced	16.0.R1
Platforms	All

**[bundle-name]** *string*

Synopsis	Bundle name
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <b>bundle</b> <i>string</i>
Tree	<a href="#">bundle</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-bw** *number*

Synopsis	Administrative bandwidth
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <b>bundle</b> <i>string</i> <b>admin-bw</b> <i>number</i>
Tree	<a href="#">admin-bw</a>

Range	1 to 40000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

## **bw-activity**

Synopsis	Enter the <b>bw-activity</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">bw-activity</a>
Tree	<a href="#">bw-activity</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

## **black-hole-rate** *number*

Synopsis	Rate that a channel is placed in the blackhole state
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">bw-activity</a> <a href="#">black-hole-rate</a> <i>number</i>
Tree	<a href="#">black-hole-rate</a>
Range	1 to 40000000
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

## **bw-activity-type** *keyword*

Synopsis	Bandwidth required by a multicast channel
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">bw-activity</a> <a href="#">bw-activity-type</a> <i>keyword</i>
Tree	<a href="#">bw-activity-type</a>
Options	use-admin-bw, dynamic
Default	dynamic
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### **falling-delay** *number*

Synopsis Falling delay threshold value until delay time expires

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **bw-activity** **falling-delay** *number*

Tree **falling-delay**

Range 10 to 3600

Units seconds

Default 30

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Enter the **channel** list instance

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree **channel**

Introduced 16.0.R1

Platforms All

### **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Starting IP address for the channel range

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree **channel**

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

**end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Ending IP address for the channel range
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>channel</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-bw** *number*

Synopsis	Administrative bandwidth
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>admin-bw</b> <i>number</i>
Tree	<b>admin-bw</b>
Range	1 to 40000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

**bw-activity**

Synopsis	Enter the <b>bw-activity</b> context
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>bw-activity</b>
Tree	<b>bw-activity</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

**black-hole-rate** *number*

Synopsis	Rate that a channel is placed in the blackhole state
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Context	<b>configure multicast-management multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>bw-activity</b> <b>black-hole-rate</b> <i>number</i>
Tree	<b>black-hole-rate</b>
Range	0 to 40000000
Units	kilobps
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### **bw-activity-type** *keyword*

Synopsis	Bandwidth required by a multicast channel
Context	<b>configure multicast-management multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>bw-activity</b> <b>bw-activity-type</b> <i>keyword</i>
Tree	<b>bw-activity-type</b>
Options	use-admin-bw, dynamic
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### **falling-delay** *number*

Synopsis	Falling delay threshold value until delay time expires
Context	<b>configure multicast-management multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>bw-activity</b> <b>falling-delay</b> <i>number</i>
Tree	<b>falling-delay</b>
Range	10 to 3600
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

**explicit-sf-path** *keyword*

Synopsis	Explicit switch fabric path shared to multicast channel
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>explicit-sf-path</b> <i>keyword</i>
Tree	<b>explicit-sf-path</b>
Options	primary, secondary
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

**keepalive-override** *number*

Synopsis	Keepalive timer override
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>keepalive-override</b> <i>number</i>
Tree	<b>keepalive-override</b>
Range	10 to 86000
Units	seconds
Introduced	16.0.R1
Platforms	All

**preference** *number*

Synopsis	Relative preference level for multicast channels
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>preference</b> <i>number</i>
Tree	<b>preference</b>
Range	1 to 7
Introduced	16.0.R1
Platforms	All

**primary-tunnel-interface**

Synopsis	Enter the <b>primary-tunnel-interface</b> context
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Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">primary-tunnel-interface</a>
Tree	<a href="#">primary-tunnel-interface</a>
Introduced	16.0.R1
Platforms	All

### **ldp-p2mp** *number*

Synopsis	ID for signaling MLDP P2MP LSP
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">primary-tunnel-interface</a> <a href="#">ldp-p2mp</a> <i>number</i>
Tree	<a href="#">ldp-p2mp</a>
Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>ldp-p2mp</b> or <b>rsvp-p2mp</b> .
Introduced	16.0.R1
Platforms	All

### **rsvp-p2mp** *string*

Synopsis	P2MP name for the LDP P2MP
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">primary-tunnel-interface</a> <a href="#">rsvp-p2mp</a> <i>string</i>
Tree	<a href="#">rsvp-p2mp</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>ldp-p2mp</b> or <b>rsvp-p2mp</b> .
Introduced	16.0.R1
Platforms	All

### **sender** *string*

Synopsis	Bundle set to receive from the primary tunnel interface
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">primary-tunnel-interface</a> <a href="#">sender</a> <i>string</i>

Tree	<a href="#">sender</a>
Introduced	16.0.R1
Platforms	All

### **source-override** [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the <b>source-override</b> list instance
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">source-override</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">source-override</a>
Introduced	16.0.R1
Platforms	All

### **[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address for the source override
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">source-override</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">source-override</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-bw** *number*

Synopsis	Administrative bandwidth
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">source-override</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">admin-bw</a> <i>number</i>
Tree	<a href="#">admin-bw</a>
Range	1 to 40000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

## bw-activity

Synopsis	Enter the <b>bw-activity</b> context
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>bw-activity</b>
Tree	<b>bw-activity</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

## black-hole-rate *number*

Synopsis	Rate that a channel is placed in the blackhole state
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>bw-activity</b> <b>black-hole-rate</b> <i>number</i>
Tree	<b>black-hole-rate</b>
Range	0 to 40000000
Units	kilobps
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

## bw-activity-type *keyword*

Synopsis	Bandwidth required by a multicast channel
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>bw-activity</b> <b>bw-activity-type</b> <i>keyword</i>
Tree	<b>bw-activity-type</b>
Options	use-admin-bw, dynamic
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

**falling-delay** *number*

Synopsis	Falling delay threshold value until delay time expires
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>bw-activity</b> <b>falling-delay</b> <i>number</i>
Tree	<b>falling-delay</b>
Range	10 to 3600
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

**explicit-sf-path** *keyword*

Synopsis	Explicit switch fabric path shared to multicast channel
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>explicit-sf-path</b> <i>keyword</i>
Tree	<b>explicit-sf-path</b>
Options	primary, secondary
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

**keepalive-override** *number*

Synopsis	Keepalive timer override
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>keepalive-override</b> <i>number</i>
Tree	<b>keepalive-override</b>
Range	10 to 86000
Units	seconds
Introduced	16.0.R1

Platforms All

### preference *number*

Synopsis Relative preference level for multicast channels

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **preference** *number*

Tree [preference](#)

Range 1 to 7

Introduced 16.0.R1

Platforms All

### primary-tunnel-interface

Synopsis Enter the **primary-tunnel-interface** context

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **primary-tunnel-interface**

Tree [primary-tunnel-interface](#)

Introduced 16.0.R1

Platforms All

### ldp-p2mp *number*

Synopsis ID for signaling MLDP P2MP LSP

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **primary-tunnel-interface** **ldp-p2mp** *number*

Tree [ldp-p2mp](#)

Range 1 to 4294967295

Notes The following elements are part of a choice: **ldp-p2mp** or **rsvp-p2mp**.

Introduced 16.0.R1

Platforms All

**rsvp-p2mp** *string*

Synopsis	P2MP name for the LDP P2MP
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>primary-tunnel-interface</b> <b>rsvp-p2mp</b> <i>string</i>
Tree	<b>rsvp-p2mp</b>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>ldp-p2mp</b> or <b>rsvp-p2mp</b> .
Introduced	16.0.R1
Platforms	All

**sender** *string*

Synopsis	Bundle set to receive from the primary tunnel interface
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>primary-tunnel-interface</b> <b>sender</b> <i>string</i>
Tree	<b>sender</b>
Introduced	16.0.R1
Platforms	All

**video**

Synopsis	Enter the <b>video</b> context
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b>
Tree	<b>video</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**analyzer**

Synopsis	Enable the <b>analyzer</b> context
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Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>analyzer</b>
Tree	<b>analyzer</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## alarms

Synopsis	Enter the <b>alarms</b> context
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>analyzer</b> <b>alarms</b>
Tree	<b>alarms</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## cc-error *boolean*

Synopsis	Check the continuity counter
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>analyzer</b> <b>alarms</b> <b>cc-error</b> <i>boolean</i>
Tree	<b>cc-error</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## non-vid-pid-absent *number*

Synopsis	PID checked within the specified interval
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-</i>

	<a href="#">address-no-zone</a> ) <a href="#">source-override</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">video analyzer alarms non-vid-pid-absent</a> <a href="#">number</a>
Tree	<a href="#">non-vid-pid-absent</a>
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## pat-repetition

Synopsis	Enable the <b>pat-repetition</b> context
Context	<b>configure</b> <a href="#">multicast-management multicast-info-policy</a> <a href="#">string bundle</a> <a href="#">string channel start</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">end</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">source-override</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">video analyzer alarms pat-repetition</a>
Tree	<a href="#">pat-repetition</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## poa number

Synopsis	Time between two PATs for which a POA alarm is raised
Context	<b>configure</b> <a href="#">multicast-management multicast-info-policy</a> <a href="#">string bundle</a> <a href="#">string channel start</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">end</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">source-override</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">video analyzer alarms pat-repetition poa</a> <a href="#">number</a>
Tree	<a href="#">poa</a>
Range	300 to 1000
Units	milliseconds
Default	500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**qos number**

Synopsis	Time between two PATs for which a QoS alarm is raised
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>analyzer</b> <b>alarms</b> <b>pat-repetition</b> <b>qos</b> <i>number</i>
Tree	<b>qos</b>
Range	200 to 900
Units	milliseconds
Default	200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**tnc number**

Synopsis	Time between two PATs for which a TNC alarm is raised
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>analyzer</b> <b>alarms</b> <b>pat-repetition</b> <b>tnc</b> <i>number</i>
Tree	<b>tnc</b>
Range	100 to 800
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**pat-syntax boolean**

Synopsis	Check for PAT syntax errors
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>analyzer</b> <b>alarms</b> <b>pat-syntax</b> <i>boolean</i>
Tree	<b>pat-syntax</b>
Default	false

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## pcr-repetition

Synopsis	Enable the <b>pcr-repetition</b> context
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>analyzer</b> <b>alarms</b> <b>pcr-repetition</b>
Tree	<b>pcr-repetition</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## poa number

Synopsis	Time between two PCRs for which a POA alarm is raised
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>analyzer</b> <b>alarms</b> <b>pcr-repetition</b> <b>poa</b> <i>number</i>
Tree	<b>poa</b>
Range	300 to 1000
Units	milliseconds
Default	500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## qos number

Synopsis	Time between two PCRs for which a QoS alarm is raised
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>analyzer</b> <b>alarms</b> <b>pcr-repetition</b> <b>qos</b> <i>number</i>
Tree	<b>qos</b>

Range	200 to 900
Units	milliseconds
Default	200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **tnc number**

Synopsis	Time between two PCRs for which a TNC alarm is raised
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>analyzer</b> <b>alarms</b> <b>pcr-repetition</b> <b>tnc</b> <b>number</b>
Tree	<b>tnc</b>
Range	100 to 800
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **pid-pmt-unref boolean**

Synopsis	Check for unreferenced PIDs in the PMT
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>analyzer</b> <b>alarms</b> <b>pid-pmt-unref</b> <b>boolean</b>
Tree	<b>pid-pmt-unref</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **pmt-repetition**

Synopsis	Enable the <b>pmt-repetition</b> context
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Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">source-override</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">pmt-repetition</a>
Tree	<a href="#">pmt-repetition</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **poa number**

Synopsis	Time between two PMTs for which a POA alarm is raised
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">source-override</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">pmt-repetition</a> <a href="#">poa</a> <i>number</i>
Tree	<a href="#">poa</a>
Range	300 to 5000
Units	milliseconds
Default	2000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **qos number**

Synopsis	Time between two PMTs for which a QoS alarm is raised
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">source-override</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">pmt-repetition</a> <a href="#">qos</a> <i>number</i>
Tree	<a href="#">qos</a>
Range	200 to 4900
Units	milliseconds
Default	800
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**tnc number**

Synopsis	Time between two PMTs for which a TNC alarm is raised
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">source-override</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">pmt-repetition</a> <b>tnc</b> <i>number</i>
Tree	<a href="#">tnc</a>
Range	100 to 4800
Units	milliseconds
Default	400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**pmt-syntax boolean**

Synopsis	Check for PMT syntax errors
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">source-override</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">pmt-syntax</a> <b>boolean</b>
Tree	<a href="#">pmt-syntax</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**report-alarm**

Synopsis	Enter the <b>report-alarm</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">source-override</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <b>report-alarm</b>
Tree	<a href="#">report-alarm</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**severity** *keyword*

Synopsis	Keyword for the type of alarm
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>analyzer</b> <b>alarms</b> <b>report-alarm</b> <b>severity</b> <i>keyword</i>
Tree	<b>severity</b>
Options	tnc, qos, poa
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**tei-set** *boolean*

Synopsis	Check for TEI set errors
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>analyzer</b> <b>alarms</b> <b>tei-set</b> <i>boolean</i>
Tree	<b>tei-set</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**ts-sync-loss** *boolean*

Synopsis	Check for synchronization loss errors
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>analyzer</b> <b>alarms</b> <b>ts-sync-loss</b> <i>boolean</i>
Tree	<b>ts-sync-loss</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s



**vid-pid-absent** *number*

Synopsis	VID PID checked within the specified time interval
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>analyzer</b> <b>alarms</b> <b>vid-pid-absent</b> <i>number</i>
Tree	<b>vid-pid-absent</b>
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>analyzer</b> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**fcc-channel-type** *keyword*

Synopsis	Channel type for the bundle or channel
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>fcc-channel-type</b> <i>keyword</i>
Tree	<b>fcc-channel-type</b>
Options	hd, sd, pip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**fcc-min-duration** *number*

Synopsis	Minimum duration of the FCC burst
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>fcc-min-duration</b> <i>number</i>
Tree	<b>fcc-min-duration</b>
Range	300 to 8000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**fcc-server** *keyword*

Synopsis	Value to override the parent value of the FCC server
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>fcc-server</b> <i>keyword</i>
Tree	<b>fcc-server</b>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**local-rt-server** *keyword*

Synopsis	Value to override the parent value of local RT server
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>local-rt-server</b> <i>keyword</i>
Tree	<b>local-rt-server</b>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**reorder-audio** *number*

Synopsis	Time the audio packets are reordered in the ad stream
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>reorder-audio</b> <i>number</i>
Tree	<b>reorder-audio</b>
Range	100 to 1000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**rt-buffer-size** *number*

Synopsis	Buffer size to store channel packets
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>rt-buffer-size</b> <i>number</i>
Tree	<b>rt-buffer-size</b>
Range	300 to 8000
Units	milliseconds
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**rt-server**

Synopsis	Enter the <b>rt-server</b> context
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>rt-server</b>
Tree	<b>rt-server</b>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **ip-address** *string*

Synopsis IP address of the upstream retransmission server

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **rt-server** **ip-address** *string*

Tree [ip-address](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **port** *number*

Synopsis UDP port to send RET requests to the upstream RET sever

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **rt-server** **port** *number*

Tree [port](#)

Range 1024 to 5999 | 6251 to 65535

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **rt-state** *keyword*

Synopsis Retransmission server state

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **rt-server** **rt-state** *keyword*

Tree [rt-state](#)

Options false, true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## stream-selection

Synopsis Enter the **stream-selection** context

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **stream-selection**

Tree **stream-selection**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## intf1 *string*

Synopsis Primary interface

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **stream-selection** **intf1** *string*

Tree **intf1**

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## intf2 *string*

Synopsis Secondary interface

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **stream-selection** **intf2** *string*

Tree **intf2**

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **source1** *string*

Synopsis Primary source IP address

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **stream-selection** **source1** *string*

Tree [source1](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **source2** *string*

Synopsis Secondary source IP address

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **stream-selection** **source2** *string*

Tree [source2](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **video-group** (*number* | *keyword*)

Synopsis Video group ID

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **video-group** (*number* | *keyword*)

Tree [video-group](#)

Range 1 to 4

Options none

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## video

Synopsis Enter the **video** context

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video**

Tree **video**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## analyzer

Synopsis Enable the **analyzer** context

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **analyzer**

Tree **analyzer**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## alarms

Synopsis Enter the **alarms** context

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **analyzer** **alarms**

Tree **alarms**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## cc-error boolean

Synopsis Check the continuity counter

Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">cc-error</a> <i>boolean</i>
Tree	<a href="#">cc-error</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **non-vid-pid-absent** *number*

Synopsis	PID checked within the specified interval
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">non-vid-pid-absent</a> <i>number</i>
Tree	<a href="#">non-vid-pid-absent</a>
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **pat-repetition**

Synopsis	Enable the <b>pat-repetition</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">pat-repetition</a>
Tree	<a href="#">pat-repetition</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **poa** *number*

Synopsis	Time between two PATs for which a POA alarm is raised
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">pat-repetition</a> <a href="#">poa</a> <i>number</i>



Tree	<a href="#">poa</a>
Range	300 to 1000
Units	milliseconds
Default	500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **qos number**

Synopsis	Time between two PATs for which a QoS alarm is raised
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video analyzer</a> <a href="#">alarms</a> <a href="#">pat-repetition</a> <a href="#">qos</a> <i>number</i>
Tree	<a href="#">qos</a>
Range	200 to 900
Units	milliseconds
Default	200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **tnc number**

Synopsis	Time between two PATs for which a TNC alarm is raised
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video analyzer</a> <a href="#">alarms</a> <a href="#">pat-repetition</a> <a href="#">tnc</a> <i>number</i>
Tree	<a href="#">tnc</a>
Range	100 to 800
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**pat-syntax** *boolean*

Synopsis	Check for PAT syntax errors
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video analyzer alarms</b> <b>pat-syntax</b> <i>boolean</i>
Tree	<b>pat-syntax</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**pcr-repetition**

Synopsis	Enable the <b>pcr-repetition</b> context
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video analyzer alarms</b> <b>pcr-repetition</b>
Tree	<b>pcr-repetition</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**poa** *number*

Synopsis	Time between two PCRs for which a POA alarm is raised
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video analyzer alarms</b> <b>pcr-repetition</b> <b>poa</b> <i>number</i>
Tree	<b>poa</b>
Range	300 to 1000
Units	milliseconds
Default	500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**qos number**

Synopsis	Time between two PCRs for which a QoS alarm is raised
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video analyzer alarms pcr-repetition qos number</b>
Tree	<b>qos</b>
Range	200 to 900
Units	milliseconds
Default	200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**tnc number**

Synopsis	Time between two PCRs for which a TNC alarm is raised
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video analyzer alarms pcr-repetition tnc number</b>
Tree	<b>tnc</b>
Range	100 to 800
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**pid-pmt-unref boolean**

Synopsis	Check for unreferenced PIDs in the PMT
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video analyzer alarms pid-pmt-unref boolean</b>
Tree	<b>pid-pmt-unref</b>
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## pmt-repetition

Synopsis Enable the **pmt-repetition** context

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **analyzer** **alarms** **pmt-repetition**

Tree **pmt-repetition**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## poa number

Synopsis Time between two PMTs for which a POA alarm is raised

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **analyzer** **alarms** **pmt-repetition** **poa** *number*

Tree **poa**

Range 300 to 5000

Units milliseconds

Default 2000

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## qos number

Synopsis Time between two PMTs for which a QoS alarm is raised

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **analyzer** **alarms** **pmt-repetition** **qos** *number*

Tree **qos**

Range 200 to 4900

Units milliseconds

Default 800

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **tnc number**

Synopsis	Time between two PMTs for which a TNC alarm is raised
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video analyzer alarms</a> <a href="#">pmt-repetition</a> <b>tnc number</b>
Tree	<a href="#">tnc</a>
Range	100 to 4800
Units	milliseconds
Default	400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **pmt-syntax boolean**

Synopsis	Check for PMT syntax errors
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video analyzer alarms</a> <a href="#">pmt-syntax</a> <b>boolean</b>
Tree	<a href="#">pmt-syntax</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **report-alarm**

Synopsis	Enter the <b>report-alarm</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video analyzer alarms</a> <a href="#">report-alarm</a>
Tree	<a href="#">report-alarm</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **severity** *keyword*

Synopsis Keyword for the type of alarm

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video analyzer alarms report-alarm severity** *keyword*

Tree **severity**

Options tnc, qos, poa

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **tei-set** *boolean*

Synopsis Check for TEI set errors

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video analyzer alarms tei-set boolean**

Tree **tei-set**

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **ts-sync-loss** *boolean*

Synopsis Check for synchronization loss errors

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video analyzer alarms ts-sync-loss boolean**

Tree **ts-sync-loss**

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**vid-pid-absent** *number*

Synopsis	VID PID checked within the specified time interval
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>analyzer</b> <b>alarms</b> <b>vid-pid-absent</b> <i>number</i>
Tree	<b>vid-pid-absent</b>
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>analyzer</b> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**fcc-channel-type** *keyword*

Synopsis	Channel type for the bundle or channel
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>fcc-channel-type</b> <i>keyword</i>
Tree	<b>fcc-channel-type</b>
Options	hd, sd, pip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**fcc-min-duration** *number*

Synopsis	Minimum duration of the FCC burst
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>fcc-min-duration</b> <i>number</i>
Tree	<b>fcc-min-duration</b>
Range	300 to 8000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**fcc-server** *keyword*

Synopsis	Value to override the parent value of the FCC server
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>fcc-server</b> <i>keyword</i>
Tree	<b>fcc-server</b>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**local-rt-server** *keyword*

Synopsis	Value to override the parent value of local RT server
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>local-rt-server</b> <i>keyword</i>
Tree	<b>local-rt-server</b>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s



### reorder-audio *number*

Synopsis	Time the audio packets are reordered in the ad stream
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>reorder-audio</b> <i>number</i>
Tree	<b>reorder-audio</b>
Range	100 to 1000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### rt-buffer-size *number*

Synopsis	Buffer size to store channel packets
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>rt-buffer-size</b> <i>number</i>
Tree	<b>rt-buffer-size</b>
Range	300 to 8000
Units	milliseconds
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### rt-server

Synopsis	Enter the <b>rt-server</b> context
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>rt-server</b>
Tree	<b>rt-server</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**ip-address string**

Synopsis	IP address of the upstream retransmission server
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>rt-server</b> <b>ip-address</b> <i>string</i>
Tree	<b>ip-address</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**port number**

Synopsis	UDP port to send RET requests to the upstream RET sever
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>rt-server</b> <b>port</b> <i>number</i>
Tree	<b>port</b>
Range	1024 to 5999   6251 to 65535
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**rt-state keyword**

Synopsis	Retransmission server state
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>rt-server</b> <b>rt-state</b> <i>keyword</i>
Tree	<b>rt-state</b>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**stream-selection**

Synopsis	Enter the <b>stream-selection</b> context
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Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video</a> <a href="#">stream-selection</a>
Tree	<a href="#">stream-selection</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**intf1 string**

Synopsis	Primary interface
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video</a> <a href="#">stream-selection</a> <a href="#">intf1</a> <i>string</i>
Tree	<a href="#">intf1</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**intf2 string**

Synopsis	Secondary interface
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video</a> <a href="#">stream-selection</a> <a href="#">intf2</a> <i>string</i>
Tree	<a href="#">intf2</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**source1 string**

Synopsis	Primary source IP address
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video</a> <a href="#">stream-selection</a> <a href="#">source1</a> <i>string</i>
Tree	<a href="#">source1</a>

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**source2** *string*

Synopsis	Secondary source IP address
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>stream-selection</b> <b>source2</b> <i>string</i>
Tree	<b>source2</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**video-group** (*number* | *keyword*)

Synopsis	Video group ID
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>video-group</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>video-group</b>
Range	1 to 4
Options	none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**cong-priority-threshold** *number*

Synopsis	Preference level threshold from low to high priority
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>cong-priority-threshold</b> <i>number</i>
Tree	<b>cong-priority-threshold</b>
Range	0 to 7
Default	4
Introduced	16.0.R1

Platforms All

### **description** *string*

Synopsis Text description

Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [bundle](#) *string* [description](#) *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

### **ecmp-opt-threshold** *number*

Synopsis ECMP threshold

Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [bundle](#) *string* [ecmp-opt-threshold](#) *number*

Tree [ecmp-opt-threshold](#)

Range 0 to 7

Default 7

Introduced 16.0.R1

Platforms All

### **explicit-sf-path** *keyword*

Synopsis Explicit ingress switch fabric multicast path

Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [bundle](#) *string* [explicit-sf-path](#) *keyword*

Tree [explicit-sf-path](#)

Options primary, secondary

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### **keepalive-override** *number*

Synopsis Keepalive timer override

Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">keepalive-override</a> <i>number</i>
Tree	<a href="#">keepalive-override</a>
Range	10 to 86000
Units	seconds
Introduced	16.0.R1
Platforms	All

### **preference** *number*

Synopsis	Relative preference level for multicast channels
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">preference</a> <i>number</i>
Tree	<a href="#">preference</a>
Range	1 to 7
Introduced	16.0.R1
Platforms	All

### **primary-tunnel-interface**

Synopsis	Enter the <b>primary-tunnel-interface</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">primary-tunnel-interface</a>
Tree	<a href="#">primary-tunnel-interface</a>
Introduced	16.0.R1
Platforms	All

### **ldp-p2mp** *number*

Synopsis	ID for signaling MLDP P2MP LSP
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">primary-tunnel-interface</a> <a href="#">ldp-p2mp</a> <i>number</i>
Tree	<a href="#">ldp-p2mp</a>
Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>ldp-p2mp</b> or <b>rsvp-p2mp</b> .
Introduced	16.0.R1

Platforms All

### **rsvp-p2mp** *string*

Synopsis P2MP name for the LDP P2MP

Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [bundle](#) *string* [primary-tunnel-interface](#) [rsvp-p2mp](#) *string*

Tree [rsvp-p2mp](#)

String Length 1 to 32

Notes The following elements are part of a choice: **ldp-p2mp** or **rsvp-p2mp**.

Introduced 16.0.R1

Platforms All

### **sender** *string*

Synopsis Bundle set to receive from the primary tunnel interface

Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [bundle](#) *string* [primary-tunnel-interface](#) [sender](#) *string*

Tree [sender](#)

Introduced 16.0.R1

Platforms All

### **video**

Synopsis Enter the **video** context

Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [bundle](#) *string* [video](#)

Tree [video](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **analyzer**

Synopsis Enable the **analyzer** context

Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [bundle](#) *string* [video](#) [analyzer](#)

Tree	<a href="#">analyzer</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## alarms

Synopsis	Enter the <b>alarms</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">analyzer</a> <b>alarms</b>
Tree	<a href="#">alarms</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## cc-error *boolean*

Synopsis	Check the continuity counter
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">analyzer</a> <b>alarms</b> <a href="#">cc-error</a> <i>boolean</i>
Tree	<a href="#">cc-error</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## non-vid-pid-absent *number*

Synopsis	PID checked within the specified interval
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">analyzer</a> <b>alarms</b> <a href="#">non-vid-pid-absent</a> <i>number</i>
Tree	<a href="#">non-vid-pid-absent</a>
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s



**pat-repetition**

Synopsis	Enable the <b>pat-repetition</b> context
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>video</b> <b>analyzer</b> <b>alarms</b> <b>pat-repetition</b>
Tree	<b>pat-repetition</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**poa number**

Synopsis	Time between two PATs for which a POA alarm is raised
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>video</b> <b>analyzer</b> <b>alarms</b> <b>pat-repetition</b> <b>poa</b> <i>number</i>
Tree	<b>poa</b>
Range	300 to 1000
Units	milliseconds
Default	500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**qos number**

Synopsis	Time between two PATs for which a QoS alarm is raised
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>video</b> <b>analyzer</b> <b>alarms</b> <b>pat-repetition</b> <b>qos</b> <i>number</i>
Tree	<b>qos</b>
Range	200 to 900
Units	milliseconds
Default	200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**tnc number**

Synopsis	Time between two PATs for which a TNC alarm is raised
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">pat-repetition</a> <a href="#">tnc</a> <i>number</i>
Tree	<a href="#">tnc</a>
Range	100 to 800
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**pat-syntax boolean**

Synopsis	Check for PAT syntax errors
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">pat-syntax</a> <i>boolean</i>
Tree	<a href="#">pat-syntax</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**pcr-repetition**

Synopsis	Enable the <b>pcr-repetition</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">pcr-repetition</a>
Tree	<a href="#">pcr-repetition</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**poa number**

Synopsis	Time between two PCRs for which a POA alarm is raised
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Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video analyzer</a> <a href="#">alarms</a> <a href="#">pcr-repetition</a> <a href="#">poa</a> <i>number</i>
Tree	<a href="#">poa</a>
Range	300 to 1000
Units	milliseconds
Default	500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**qos number**

Synopsis	Time between two PCRs for which a QoS alarm is raised
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video analyzer</a> <a href="#">alarms</a> <a href="#">pcr-repetition</a> <a href="#">qos</a> <i>number</i>
Tree	<a href="#">qos</a>
Range	200 to 900
Units	milliseconds
Default	200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**tnc number**

Synopsis	Time between two PCRs for which a TNC alarm is raised
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video analyzer</a> <a href="#">alarms</a> <a href="#">pcr-repetition</a> <a href="#">tnc</a> <i>number</i>
Tree	<a href="#">tnc</a>
Range	100 to 800
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**pid-pmt-unref** *boolean*

Synopsis	Check for unreferenced PIDs in the PMT
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">pid-pmt-unref</a> <i>boolean</i>
Tree	<a href="#">pid-pmt-unref</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**pmt-repetition**

Synopsis	Enable the <b>pmt-repetition</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">pmt-repetition</a>
Tree	<a href="#">pmt-repetition</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**poa** *number*

Synopsis	Time between two PMTs for which a POA alarm is raised
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">pmt-repetition</a> <a href="#">poa</a> <i>number</i>
Tree	<a href="#">poa</a>
Range	300 to 5000
Units	milliseconds
Default	2000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**qos** *number*

Synopsis	Time between two PMTs for which a QoS alarm is raised
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Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video analyzer</a> <a href="#">alarms</a> <a href="#">pmt-repetition</a> <a href="#">qos</a> <i>number</i>
Tree	<a href="#">qos</a>
Range	200 to 4900
Units	milliseconds
Default	800
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**tnc number**

Synopsis	Time between two PMTs for which a TNC alarm is raised
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video analyzer</a> <a href="#">alarms</a> <a href="#">pmt-repetition</a> <a href="#">tnc</a> <i>number</i>
Tree	<a href="#">tnc</a>
Range	100 to 4800
Units	milliseconds
Default	400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**pmt-syntax boolean**

Synopsis	Check for PMT syntax errors
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video analyzer</a> <a href="#">alarms</a> <a href="#">pmt-syntax</a> <i>boolean</i>
Tree	<a href="#">pmt-syntax</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**report-alarm**

Synopsis	Enter the <b>report-alarm</b> context
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Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video analyzer</a> <a href="#">alarms</a> <a href="#">report-alarm</a>
Tree	<a href="#">report-alarm</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **severity** *keyword*

Synopsis	Keyword for the type of alarm
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video analyzer</a> <a href="#">alarms</a> <a href="#">report-alarm</a> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	tnc, qos, poa
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **tei-set** *boolean*

Synopsis	Check for TEI set errors
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video analyzer</a> <a href="#">alarms</a> <a href="#">tei-set</a> <i>boolean</i>
Tree	<a href="#">tei-set</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **ts-sync-loss** *boolean*

Synopsis	Check for synchronization loss errors
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video analyzer</a> <a href="#">alarms</a> <a href="#">ts-sync-loss</a> <i>boolean</i>
Tree	<a href="#">ts-sync-loss</a>
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **vid-pid-absent** *number*

Synopsis VID PID checked within the specified time interval

Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [bundle](#) *string* [video analyzer](#) [alarms](#) **vid-pid-absent** *number*

Tree [vid-pid-absent](#)

Range 100 to 5000

Units milliseconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **description** *string*

Synopsis Text description

Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [bundle](#) *string* [video analyzer](#) [description](#) *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **fcc-channel-type** *keyword*

Synopsis Channel type for the bundle or channel

Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [bundle](#) *string* [video](#) **fcc-channel-type** *keyword*

Tree [fcc-channel-type](#)

Options hd, sd, pip

Default hd

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**fcc-min-duration** *number*

Synopsis	Minimum duration of the FCC burst
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">fcc-min-duration</a> <i>number</i>
Tree	<a href="#">fcc-min-duration</a>
Range	300 to 8000
Units	milliseconds
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**fcc-server** *boolean*

Synopsis	Enable the FCC server for a multicast bundle
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">fcc-server</a> <i>boolean</i>
Tree	<a href="#">fcc-server</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**local-fcc-port** *number*

Synopsis	Local port for FCC requests
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">local-fcc-port</a> <i>number</i>
Tree	<a href="#">local-fcc-port</a>
Range	1024 to 5999   6251 to 65535
Default	4098
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s



**local-rt-port** *number*

Synopsis	Local port for RET requests
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">local-rt-port</a> <i>number</i>
Tree	<a href="#">local-rt-port</a>
Range	1024 to 5999   6251 to 65535
Default	4096
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**local-rt-server** *boolean*

Synopsis	Enable local retransmission server capability
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">local-rt-server</a> <i>boolean</i>
Tree	<a href="#">local-rt-server</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**reorder-audio** *number*

Synopsis	Time the audio packets are reordered in the ad stream
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">reorder-audio</a> <i>number</i>
Tree	<a href="#">reorder-audio</a>
Range	100 to 1000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**rt-buffer-size** *number*

Synopsis	Buffer size to store channel packets
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Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">rt-buffer-size</a> <i>number</i>
Tree	<a href="#">rt-buffer-size</a>
Range	300 to 8000
Units	milliseconds
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **rt-server**

Synopsis	Enable the <b>rt-server</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">rt-server</a>
Tree	<a href="#">rt-server</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **ip-address** *string*

Synopsis	IP address of the upstream retransmission server
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">rt-server</a> <a href="#">ip-address</a> <i>string</i>
Tree	<a href="#">ip-address</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **port** *number*

Synopsis	RET server port number
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">rt-server</a> <a href="#">port</a> <i>number</i>
Tree	<a href="#">port</a>

Range	1024 to 5999   6251 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## stream-selection

Synopsis	Enter the <b>stream-selection</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">stream-selection</a>
Tree	<a href="#">stream-selection</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## intf1 *string*

Synopsis	Primary interface
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">stream-selection</a> <a href="#">intf1</a> <i>string</i>
Tree	<a href="#">intf1</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## intf2 *string*

Synopsis	Secondary interface
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">stream-selection</a> <a href="#">intf2</a> <i>string</i>
Tree	<a href="#">intf2</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**source1** *string*

Synopsis	Primary source IP address
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">stream-selection</a> <b>source1</b> <i>string</i>
Tree	<a href="#">source1</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**source2** *string*

Synopsis	Secondary source IP address
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">stream-selection</a> <b>source2</b> <i>string</i>
Tree	<a href="#">source2</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**video-group** *number*

Synopsis	Video group for the bundle
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">video-group</a> <i>number</i>
Tree	<a href="#">video-group</a>
Range	1 to 4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80

Introduced	16.0.R1
Platforms	All

## video-policy

Synopsis	Enter the <b>video-policy</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <b>video-policy</b>
Tree	<a href="#">video-policy</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## video-interface [[ip-address](#)] *string*

Synopsis	Enter the <b>video-interface</b> list instance
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <b>video-interface</b> <i>string</i>
Tree	<a href="#">video-interface</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## [\[ip-address\]](#) *string*

Synopsis	IP address of the video interface
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <b>video-interface</b> <i>string</i>
Tree	<a href="#">video-interface</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## extended-unicast *boolean*

Synopsis	Extend video unicast session
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Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <a href="#">extended-unicast</a> <i>boolean</i>
Tree	<a href="#">extended-unicast</a>
Description	<p>When configured to <b>true</b>, video unicast is delayed from switching over to multicast for 5 minutes. The unicast session can be extended further by sending an RTCP extension request, which resets the 5-minute timer. This is ideal for services that require unicast video and end devices that require extended time to switch over from unicast to multicast.</p> <p>When configured to <b>false</b>, the unicast session switches over to multicast 1.5 seconds after the IGMP request is sent. Most Fast Channel Change deployments do not require a time extension.</p>
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **fcc-session-timeout** *number*

Synopsis	FCC session timeout
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <a href="#">fcc-session-timeout</a> <i>number</i>
Tree	<a href="#">fcc-session-timeout</a>
Range	5 to 300
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **hd**

Synopsis	Enter the <b>hd</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <a href="#">hd</a>
Tree	<a href="#">hd</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **dent-threshold** *number*

Synopsis	Threshold below which the FCC server dents unicast data
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <b>hd</b> <b>dent-threshold</b> <i>number</i>
Tree	<a href="#">dent-threshold</a>
Range	1 to 31
Default	16
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **fcc-burst** *number*

Synopsis	Burst rate FCC server sends unicast data to FCC client
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <b>hd</b> <b>fcc-burst</b> <i>number</i>
Tree	<a href="#">fcc-burst</a>
Range	0 to 600
Units	percent
Default	25
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **fcc-server**

Synopsis	Enter the <b>fcc-server</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <b>hd</b> <b>fcc-server</b>
Tree	<a href="#">fcc-server</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**mode** *keyword*

Synopsis	Mode the FCC server sends information to the client
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <a href="#">hd fcc-server</a> <b>mode</b> <i>keyword</i>
Tree	<a href="#">mode</a>
Options	burst, dent, hybrid
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**local-rt-server** *boolean*

Synopsis	Enable local retransmission server capability
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <a href="#">hd local-rt-server</a> <b>boolean</b>
Tree	<a href="#">local-rt-server</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**mc-handover** *number*

Synopsis	Rate the FCC server sends data during the handover
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <a href="#">hd mc-handover</a> <b>number</b>
Tree	<a href="#">mc-handover</a>
Range	0 to 100
Units	percent
Default	25
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**rt-rate** *number*

Synopsis	Rate the RET packets are sent to client
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Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <a href="#">hd</a> <a href="#">rt-rate</a> <i>number</i>
Tree	<a href="#">rt-rate</a>
Range	1 to 100
Units	percent
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **max-igmp-latency** *number*

Synopsis	Maximum IGMP latency per client
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <a href="#">max-igmp-latency</a> <i>number</i>
Tree	<a href="#">max-igmp-latency</a>
Range	10 to 1000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **max-sessions** *number*

Synopsis	Maximum number of sessions per client
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <a href="#">max-sessions</a> <i>number</i>
Tree	<a href="#">max-sessions</a>
Range	1 to 65536
Default	256
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## pip

Synopsis	Enter the <b>pip</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <b>pip</b>
Tree	<a href="#">pip</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## dent-threshold *number*

Synopsis	Threshold below which the FCC server dents unicast data
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <b>pip</b> <b>dent-threshold</b> <i>number</i>
Tree	<a href="#">dent-threshold</a>
Range	1 to 31
Default	16
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## fcc-burst *number*

Synopsis	Burst rate FCC server sends unicast data to FCC client
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <b>pip</b> <b>fcc-burst</b> <i>number</i>
Tree	<a href="#">fcc-burst</a>
Range	0 to 600
Units	percent
Default	25
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## fcc-server

Synopsis	Enter the <b>fcc-server</b> context
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Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <a href="#">pip</a> <a href="#">fcc-server</a>
Tree	<a href="#">fcc-server</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**mode** *keyword*

Synopsis	Mode the FCC server sends information to the client
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <a href="#">pip</a> <a href="#">fcc-server</a> <a href="#">mode</a> <i>keyword</i>
Tree	<a href="#">mode</a>
Options	burst, dent, hybrid
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**local-rt-server** *boolean*

Synopsis	Enable local retransmission server capability
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <a href="#">pip</a> <a href="#">local-rt-server</a> <i>boolean</i>
Tree	<a href="#">local-rt-server</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**mc-handover** *number*

Synopsis	Rate the FCC server sends data during the handover
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <a href="#">pip</a> <a href="#">mc-handover</a> <i>number</i>
Tree	<a href="#">mc-handover</a>
Range	0 to 600
Units	percent

Default	25
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**rt-rate number**

Synopsis	Rate the RET packets are sent to client
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>video-policy</b> <b>video-interface</b> <i>string</i> <b>pip</b> <b>rt-rate</b> <i>number</i>
Tree	<b>rt-rate</b>
Range	1 to 100
Units	percent
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**ret-session-timeout number**

Synopsis	RET session timeout
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>video-policy</b> <b>video-interface</b> <i>string</i> <b>ret-session-timeout</b> <i>number</i>
Tree	<b>ret-session-timeout</b>
Range	5 to 300
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**rt-payload-type number**

Synopsis	Format for the received retransmission packets
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>video-policy</b> <b>video-interface</b> <i>string</i> <b>rt-payload-type</b> <i>number</i>
Tree	<b>rt-payload-type</b>

Range	33   96 to 127
Default	99
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**rt-rate** *number*

Synopsis	Rate the RET packets are sent to client
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <b>rt-rate</b> <i>number</i>
Tree	<a href="#">rt-rate</a>
Range	1 to 100
Units	percent
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**sd**

Synopsis	Enter the <b>sd</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <b>sd</b>
Tree	<a href="#">sd</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**dent-threshold** *number*

Synopsis	Threshold below which the FCC server dents unicast data
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <b>sd</b> <b>dent-threshold</b> <i>number</i>
Tree	<a href="#">dent-threshold</a>
Range	1 to 31
Default	16

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **fcc-burst** *number*

Synopsis	Burst rate FCC server sends unicast data to FCC client
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <b>sd</b> <b>fcc-burst</b> <i>number</i>
Tree	<a href="#">fcc-burst</a>
Range	0 to 600
Units	percent
Default	25
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **fcc-server**

Synopsis	Enter the <b>fcc-server</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <b>sd</b> <b>fcc-server</b>
Tree	<a href="#">fcc-server</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **mode** *keyword*

Synopsis	Mode the FCC server sends information to the client
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <b>sd</b> <b>fcc-server</b> <b>mode</b> <i>keyword</i>
Tree	<a href="#">mode</a>
Options	burst, dent, hybrid
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**local-rt-server** *boolean*

Synopsis	Enable local retransmission server capability
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <a href="#">sd</a> <a href="#">local-rt-server</a> <i>boolean</i>
Tree	<a href="#">local-rt-server</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**mc-handover** *number*

Synopsis	Rate the FCC server sends data during the handover
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <a href="#">sd</a> <a href="#">mc-handover</a> <i>number</i>
Tree	<a href="#">mc-handover</a>
Range	0 to 600
Units	percent
Default	25
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**rt-rate** *number*

Synopsis	Rate the RET packets are sent to client
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <a href="#">sd</a> <a href="#">rt-rate</a> <i>number</i>
Tree	<a href="#">rt-rate</a>
Range	1 to 100
Units	percent
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**subscriber-bw-limit** *number*

Synopsis	Egress bandwidth limit per subscriber
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <b>subscriber-bw-limit</b> <i>number</i>
Tree	<a href="#">subscriber-bw-limit</a>
Range	1 to 4294967295
Units	kilobps
Default	4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**multicast-reporting-destination** [[name](#)] *string*

Synopsis	Enter the <b>multicast-reporting-destination</b> list instance
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-reporting-destination</a> <i>string</i>
Tree	<a href="#">multicast-reporting-destination</a>
Introduced	16.0.R1
Platforms	All

**[name]** *string*

Synopsis	Multicast reporting destination name
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-reporting-destination</a> <i>string</i>
Tree	<a href="#">multicast-reporting-destination</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**address** *string*

Synopsis	IP address of the multicast reporting destination
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-reporting-destination</a> <i>string</i> <a href="#">address</a> <i>string</i>
Tree	<a href="#">address</a>



---

Default	0.0.0.0
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of multicast reporting destination
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-reporting-destination</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-reporting-destination</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**maximum-transmission-delay** *number*

Synopsis	Time delay before packet transmits to the destination
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-reporting-destination</b> <i>string</i> <b>maximum-transmission-delay</b> <i>number</i>
Tree	<a href="#">maximum-transmission-delay</a>
Range	0 to 100
Units	deciseconds
Default	1
Introduced	16.0.R1
Platforms	All

**udp-port** *number*

Synopsis	UDP port where multicast reports are sent
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-reporting-destination</b> <i>string</i> <b>udp-port</b> <i>number</i>
Tree	<b>udp-port</b>
Range	1 to 65535
Default	1037
Introduced	16.0.R1
Platforms	All

## 3.28 multilink-bundle commands

```
configure
- multilink-bundle string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- description string
- fragment-threshold (number | keyword)
- interleave-fragment boolean
- member string
- minimum-links number
- mlppp
- apply-groups reference
- apply-groups-exclude reference
- egress
- qos-profile reference
- endpoint-discriminator
- class keyword
- discriminator-id string
- ingress
- qos-profile reference
- magic-number boolean
- multiclass number
- stateless-aps-switchover boolean
- mrru number
- protect-bundle reference
- red-differential
- action keyword
- delay number
- short-sequence boolean
- working-bundle reference
- yellow-differential-delay number
```

### 3.28.1 multilink-bundle command descriptions

#### **multilink-bundle** [[bundle-id](#)] *string*

Synopsis	Enter the <b>multilink-bundle</b> list instance
Context	<b>configure</b> <a href="#">multilink-bundle</a> <i>string</i>
Tree	<a href="#">multilink-bundle</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

#### **[bundle-id]** *string*

Synopsis	Multilink bundle associated with the IP interface
Context	<b>configure</b> <a href="#">multilink-bundle</a> <i>string</i>
Tree	<a href="#">multilink-bundle</a>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

#### **admin-state** *keyword*

Synopsis	Administrative state of the multilink bundle
Context	<b>configure</b> <a href="#">multilink-bundle</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

#### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">multilink-bundle</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 160

Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e

### **fragment-threshold** (*number* | *keyword*)



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Maximum fragment length transmitted across the bundle  
 Context **configure** [multilink-bundle](#) *string* **fragment-threshold** (*number* | *keyword*)  
 Tree [fragment-threshold](#)  
 Range 128 to 512  
 Units bytes  
 Options unlimited  
 Default 128  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e

### **interleave-fragment** *boolean*

Synopsis Enable LFI on the multilink bundle  
 Context **configure** [multilink-bundle](#) *string* **interleave-fragment** *boolean*  
 Tree [interleave-fragment](#)  
 Default false  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e

### **member** [[channel-id](#)] *string*

Synopsis Add a list entry for **member**  
 Context **configure** [multilink-bundle](#) *string* **member** *string*  
 Tree [member](#)  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e

**[channel-id]** *string*

Synopsis	Multilink bundle member ID
Context	<b>configure</b> <a href="#">multilink-bundle</a> <i>string</i> <a href="#">member</a> <i>string</i>
Tree	<a href="#">member</a>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

**minimum-links** *number*

Synopsis	Minimum links that must be active for an active bundle
Context	<b>configure</b> <a href="#">multilink-bundle</a> <i>string</i> <a href="#">minimum-links</a> <i>number</i>
Tree	<a href="#">minimum-links</a>
Range	1 to 8
Default	1
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

**mlppp**

Synopsis	Enter the <b>mlppp</b> context
Context	<b>configure</b> <a href="#">multilink-bundle</a> <i>string</i> <a href="#">mlppp</a>
Tree	<a href="#">mlppp</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

**egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">multilink-bundle</a> <i>string</i> <a href="#">mlppp</a> <a href="#">egress</a>
Tree	<a href="#">egress</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

### **qos-profile** *reference*

Synopsis	Egress MLPPP QoS profile
Context	<b>configure</b> <a href="#">multilink-bundle</a> <i>string</i> <a href="#">mlppp</a> <a href="#">egress</a> <a href="#">qos-profile</a> <i>reference</i>
Tree	<a href="#">qos-profile</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">mlppp-profile-egress</a> <i>number</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

### **endpoint-discriminator**

Synopsis	Enter the <b>endpoint-discriminator</b> context
Context	<b>configure</b> <a href="#">multilink-bundle</a> <i>string</i> <a href="#">mlppp</a> <a href="#">endpoint-discriminator</a>
Tree	<a href="#">endpoint-discriminator</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

### **class** *keyword*

Synopsis	LCP endpoint discriminator class type
Context	<b>configure</b> <a href="#">multilink-bundle</a> <i>string</i> <a href="#">mlppp</a> <a href="#">endpoint-discriminator</a> <a href="#">class</a> <i>keyword</i>
Tree	<a href="#">class</a>
Options	null, ip-address, global-mac-address
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

### **discriminator-id** *string*

Synopsis	Endpoint discriminator ID
Context	<b>configure</b> <a href="#">multilink-bundle</a> <i>string</i> <a href="#">mlppp</a> <a href="#">endpoint-discriminator</a> <a href="#">discriminator-id</a> <i>string</i>
Tree	<a href="#">discriminator-id</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

## ingress

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">multilink-bundle</a> <i>string</i> <a href="#">mlppp</a> <a href="#">ingress</a>
Tree	<a href="#">ingress</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

## qos-profile *reference*

Synopsis	Ingress MLPPP QoS profile
Context	<b>configure</b> <a href="#">multilink-bundle</a> <i>string</i> <a href="#">mlppp</a> <a href="#">ingress</a> <a href="#">qos-profile</a> <i>reference</i>
Tree	<a href="#">qos-profile</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">mlppp-profile-ingress</a> <i>number</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

## magic-number *boolean*

Synopsis	Allow loopback detection for MLPPP bundles
Context	<b>configure</b> <a href="#">multilink-bundle</a> <i>string</i> <a href="#">mlppp</a> <a href="#">magic-number</a> <i>boolean</i>
Tree	<a href="#">magic-number</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

## multiclass *number*

Synopsis	Multiclass MLPPP bundle index
Context	<b>configure</b> <a href="#">multilink-bundle</a> <i>string</i> <a href="#">mlppp</a> <a href="#">multiclass</a> <i>number</i>
Tree	<a href="#">multiclass</a>
Range	2 to 4
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e



**stateless-aps-switchover** *boolean*

Synopsis	Allow stateless APS swtichovers
Context	<b>configure</b> <b>multilink-bundle</b> <i>string</i> <b>mlppp</b> <b>stateless-aps-switchover</b> <i>boolean</i>
Tree	<b>stateless-aps-switchover</b>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

**mrru** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum Received Reconstructed Unit (MRRU)
Context	<b>configure</b> <b>multilink-bundle</b> <i>string</i> <b>mrru</b> <i>number</i>
Tree	<b>mrru</b>
Range	1500 to 9206
Units	bytes
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

**protect-bundle** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Protection multilink bundle in bundle protection group
Context	<b>configure</b> <b>multilink-bundle</b> <i>string</i> <b>protect-bundle</b> <i>reference</i>
Tree	<b>protect-bundle</b>
Reference	<b>configure</b> <b>multilink-bundle</b> <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

**red-differential**

Synopsis	Enter the <b>red-differential</b> context
Context	<b>configure</b> <a href="#">multilink-bundle</a> <i>string</i> <b>red-differential</b>
Tree	<a href="#">red-differential</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

**action** *keyword*

Synopsis	Action when differential delay exceeds threshold
Context	<b>configure</b> <a href="#">multilink-bundle</a> <i>string</i> <b>red-differential</b> <b>action</b> <i>keyword</i>
Tree	<a href="#">action</a>
Options	down
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

**delay** *number*

Synopsis	Differential delay threshold for individual links
Context	<b>configure</b> <a href="#">multilink-bundle</a> <i>string</i> <b>red-differential</b> <b>delay</b> <i>number</i>
Tree	<a href="#">delay</a>
Range	1 to 50
Units	milliseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

**short-sequence** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use 12-bit sequence numbers for the MLPPP bundle
Context	<b>configure</b> <a href="#">multilink-bundle</a> <i>string</i> <b>short-sequence</b> <i>boolean</i>
Tree	<a href="#">short-sequence</a>
Default	false

Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR-7/12/12e

### **working-bundle** *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Working bundle that is part of the BPG  
Context **configure** [multilink-bundle](#) *string* [working-bundle](#) *reference*  
Tree [working-bundle](#)  
Reference **configure** [multilink-bundle](#) *string*  
Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR-7/12/12e

### **yellow-differential-delay** *number*

Synopsis Yellow warning threshold for the differential delay  
Context **configure** [multilink-bundle](#) *string* [yellow-differential-delay](#) *number*  
Tree [yellow-differential-delay](#)  
Range 1 to 25  
Units milliseconds  
Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR-7/12/12e

## 3.29 oam-pm commands

```

configure
- oam-pm
  - apply-groups reference
  - apply-groups-exclude reference
  - bin-group number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - bin-type keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - bin number
    - apply-groups reference
    - apply-groups-exclude reference
    - lower-bound number
  - delay-event keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - clear-threshold number
    - exclude-lowest-bin number
    - lowest-bin number
    - raise-threshold number
  - exclude-from-avg keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - bins string
  - description string
- session string
  - apply-groups reference
  - apply-groups-exclude reference
  - bin-group reference
  - description string
  - ethernet
    - dest-mac string
  - dmm
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - data-tlv-size number
    - delay-template string
    - interval number
    - test-duration number
    - test-id number
  - lmm
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - availability
      - admin-state keyword
      - flr-threshold number
      - hli-force-count boolean
    - timing
      - chli-threshold number
      - consec-delta-t number
      - frames-per-delta-t number
    - fc-collection boolean
    - interval number
    - loss-events
      - avg-flr-event keyword

```

configure oam-pm session ethernet lmm loss-events avg-flr-event apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- clear-threshold decimal-number
- raise-threshold decimal-number
- chli-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold number
- raise-threshold number
- hli-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold number
- raise-threshold number
- unavailability-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold number
- raise-threshold number
- undet-availability-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold number
- raise-threshold number
- undet-unavailability-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold number
- raise-threshold number
- test-duration number
- test-id number
- priority number
- remote-mep number
- slm
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- data-tlv-size number
- flr-threshold number
- hli-force-count boolean
- interval number
- loss-events
- avg-flr-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold decimal-number
- raise-threshold decimal-number
- chli-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold number
- raise-threshold number
- hli-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold number
- raise-threshold number
- unavailability-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold number
- raise-threshold number
- undet-availability-event keyword
- apply-groups reference

```

configure oam-pm session ethernet slm loss-events undet-availability-event apply-groups-exclude

- **apply-groups-exclude** *reference*
- **clear-threshold** *number*
- **raise-threshold** *number*
- **undet-unavailability-event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **clear-threshold** *number*
  - **raise-threshold** *number*
- **test-duration** *number*
- **test-id** *number*
- **timing**
  - **chli-threshold** *number*
  - **consec-delta-t** *number*
  - **frames-per-delta-t** *number*
- **source**
  - **ma-admin-name** *string*
  - **md-admin-name** *string*
  - **mep** *number*
- **ip**
  - **allow-egress-remark-dscp** *boolean*
  - **destination** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **destination-udp-port** *number*
  - **do-not-fragment** *boolean*
  - **dscp** (*keyword* | *keyword*)
  - **fc** *keyword*
  - **forwarding**
    - **bypass-routing**
    - **interface** *string*
    - **next-hop** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **pattern** (*keyword* | *number*)
  - **profile** *keyword*
  - **router-instance** *string*
  - **source** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **source-udp-port** *number*
  - **ttl** *number*
  - **twamp-light**
    - **admin-state** *keyword*
    - **allow-ipv6-udp-checksum-zero** *boolean*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **delay-template** *string*
    - **interval** *number*
    - **loss**
      - **flr-threshold** *number*
      - **hli-force-count** *boolean*
      - **timing**
        - **chli-threshold** *number*
        - **consec-delta-t** *number*
        - **frames-per-delta-t** *number*
    - **loss-events**
      - **avg-flr-event** *keyword*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **clear-threshold** *decimal-number*
        - **raise-threshold** *decimal-number*
      - **chli-event** *keyword*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **clear-threshold** *number*
        - **raise-threshold** *number*
      - **hli-event** *keyword*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **clear-threshold** *number*

configure oam-pm session ip twamp-light loss-events hli-event raise-threshold

```

    - raise-threshold number
    - unavailability-event keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - clear-threshold number
    - raise-threshold number
    - undet-availability-event keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - clear-threshold number
    - raise-threshold number
    - undet-unavailability-event keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - clear-threshold number
    - raise-threshold number
  - pad-size number
  - record-stats keyword
  - test-duration number
  - test-id number
- measurement-interval keyword
  - accounting-policy reference
  - apply-groups reference
  - apply-groups-exclude reference
  - boundary-type keyword
  - clock-offset number
  - intervals-stored number
  - threshold-cross-alerts
    - admin-state keyword
    - delay-events boolean
    - loss-events boolean
- mpls
  - dm
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - delay-template string
    - interval number
    - pad-tlv-size number
    - reflect-pad boolean
    - test-duration number
    - test-id number
  - dscp keyword
  - fc keyword
  - lsp
    - mpls-tp-static
      - lsp string
    - rsvp
      - lsp string
      - udp-return-object (ipv4-address-no-zone | ipv6-address-no-zone)
    - rsvp-auto
      - from string
      - lsp-template string
      - to string
      - udp-return-object (ipv4-address-no-zone | ipv6-address-no-zone)
  - pattern (keyword | number)
  - profile keyword
  - ttl number
- session-type keyword
- streaming
  - delay-template string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference

```

---

configure oam-pm streaming delay-template description

- **description** *string*
- **fd-avg** *keyword*
- **ifdv-avg** *keyword*
- **sample-window** *number*
- **window-integrity** *number*



### 3.29.1 oam-pm command descriptions

#### **oam-pm**

Synopsis	Enter the <b>oam-pm</b> context
Context	<b>configure oam-pm</b>
Tree	<a href="#">oam-pm</a>
Introduced	16.0.R1
Platforms	All

#### **bin-group** [[bin-group-id](#)] *number*

Synopsis	Enter the <b>bin-group</b> list instance
Context	<b>configure oam-pm bin-group</b> <i>number</i>
Tree	<a href="#">bin-group</a>
Introduced	16.0.R5
Platforms	All

#### **[bin-group-id]** *number*

Synopsis	Bin group ID
Context	<b>configure oam-pm bin-group</b> <i>number</i>
Tree	<a href="#">bin-group</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

#### **admin-state** *keyword*

Synopsis	Administrative state of the bin group
Context	<b>configure oam-pm bin-group</b> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Introduced	16.0.R5

Platforms All

### **bin-type** [bin-metric] *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **bin-type** list instance

Context **configure** *oam-pm bin-group number bin-type keyword*

Tree [bin-type](#)

Introduced 16.0.R5

Platforms All

### **[bin-metric]** *keyword*

Synopsis Delay metric bin structure

Context **configure** *oam-pm bin-group number bin-type keyword*

Tree [bin-type](#)

Options fd, fdr, ifdv

Notes This element is part of a list key.

Introduced 16.0.R5

Platforms All

### **bin** [bin-number] *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **bin** list instance

Context **configure** *oam-pm bin-group number bin-type keyword bin number*

Tree [bin](#)

Introduced 16.0.R5

Platforms All

**[bin-number]** *number*

Synopsis	Bin number
Context	<b>configure</b> <i>oam-pm bin-group number bin-type keyword bin number</i>
Tree	<i>bin</i>
Range	0 to 9
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

**lower-bound** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Lower bound for the bin
Context	<b>configure</b> <i>oam-pm bin-group number bin-type keyword bin number lower-bound number</i>
Tree	<i>lower-bound</i>
Range	0   1 to 4294967295
Units	microseconds
Introduced	16.0.R5
Platforms	All

**delay-event** [*direction*] *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>delay-event</b> list instance
Context	<b>configure</b> <i>oam-pm bin-group number bin-type keyword delay-event keyword</i>
Tree	<i>delay-event</i>
Introduced	16.0.R5
Platforms	All

**[direction]** *keyword*

Synopsis	Traffic flow direction of the OAM-PM test or metric
Context	<b>configure</b> <b>oam-pm bin-group</b> <i>number bin-type keyword delay-event keyword</i>
Tree	<b>delay-event</b>
Options	forward, backward, round-trip
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

**clear-threshold** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	OAM-PM clear threshold for an excessive delay
Context	<b>configure</b> <b>oam-pm bin-group</b> <i>number bin-type keyword delay-event keyword clear-threshold number</i>
Tree	<b>clear-threshold</b>
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

**exclude-lowest-bin** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Lowest bin excluded from the TCA count
Context	<b>configure</b> <b>oam-pm bin-group</b> <i>number bin-type keyword delay-event keyword exclude-lowest-bin number</i>
Tree	<b>exclude-lowest-bin</b>
Range	1 to 9
Introduced	16.0.R5
Platforms	All

## lowest-bin *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Lowest delay bin used when applying a delay threshold
Context	<b>configure</b> <b>oam-pm bin-group</b> <i>number</i> <b>bin-type</b> <i>keyword</i> <b>delay-event</b> <i>keyword</i> <b>lowest-bin</b> <i>number</i>
Tree	<b>lowest-bin</b>
Range	0 to 9
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

## raise-threshold *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Raise threshold for excessive delay
Context	<b>configure</b> <b>oam-pm bin-group</b> <i>number</i> <b>bin-type</b> <i>keyword</i> <b>delay-event</b> <i>keyword</i> <b>raise-threshold</b> <i>number</i>
Tree	<b>raise-threshold</b>
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

## exclude-from-avg [*direction*] *keyword*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>exclude-from-avg</b> list instance
Context	<b>configure</b> <b>oam-pm bin-group</b> <i>number</i> <b>bin-type</b> <i>keyword</i> <b>exclude-from-avg</b> <i>keyword</i>

Tree	<a href="#">exclude-from-avg</a>
Introduced	16.0.R5
Platforms	All

**[direction]** *keyword*

Synopsis	Traffic flow direction of the OAM-PM test or metric
Context	<b>configure</b> <a href="#">oam-pm bin-group number bin-type keyword exclude-from-avg keyword</a>
Tree	<a href="#">exclude-from-avg</a>
Options	forward, backward, round-trip
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

**bins** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Bin numbers excluded from the average calculation
Context	<b>configure</b> <a href="#">oam-pm bin-group number bin-type keyword exclude-from-avg keyword bins string</a>
Tree	<a href="#">bins</a>
String Length	1 to 39
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">oam-pm bin-group number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R5

Platforms All

### **session** [[session-name](#)] *string*

Synopsis Enter the **session** list instance  
 Context **configure** [oam-pm session string](#)  
 Tree [session](#)  
 Introduced 16.0.R5  
 Platforms All

### **[session-name]** *string*

Synopsis OAM-PM session name  
 Context **configure** [oam-pm session string](#)  
 Tree [session](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R5  
 Platforms All

### **bin-group** *reference*

Synopsis Bin group for the session  
 Context **configure** [oam-pm session string bin-group reference](#)  
 Tree [bin-group](#)  
 Reference **configure** [oam-pm bin-group number](#)  
 Introduced 16.0.R5  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [oam-pm session string description string](#)  
 Tree [description](#)  
 String Length 1 to 80

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Introduced	16.0.R5
Platforms	All

## ethernet

Synopsis	Enable the <b>ethernet</b> context
Context	<b>configure</b> <a href="#">oam-pm session string ethernet</a>
Tree	<a href="#">ethernet</a>
Notes	The following elements are part of a mandatory choice: <b>ethernet</b> , <b>ip</b> , or <b>mpls</b> .
Introduced	16.0.R5
Platforms	All

## dest-mac *string*

Synopsis	Destination MAC address for the session
Context	<b>configure</b> <a href="#">oam-pm session string ethernet dest-mac string</a>
Tree	<a href="#">dest-mac</a>
Introduced	16.0.R5
Platforms	All

## dmm

Synopsis	Enable the <b>dmm</b> context
Context	<b>configure</b> <a href="#">oam-pm session string ethernet dmm</a>
Tree	<a href="#">dmm</a>
Introduced	16.0.R5
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of the test
Context	<b>configure</b> <a href="#">oam-pm session string ethernet dmm admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable



Introduced	16.0.R5
Platforms	All

**data-tlv-size** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Size of the pad TLV in the frames sent for the test
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet dmm</b> <b>data-tlv-size</b> <i>number</i>
Tree	<a href="#">data-tlv-size</a>
Range	0   3 to 2000
Units	octets
Default	0
Introduced	16.0.R5
Platforms	All

**delay-template** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reference to a streaming delay template for the test
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet dmm</b> <b>delay-template</b> <i>string</i>
Tree	<a href="#">delay-template</a>
String Length	1 to 64
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**interval** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between transmission PDUs for the session's test
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Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet dmm interval</a> <i>number</i>
Tree	<a href="#">interval</a>
Range	100   1000   10000
Units	milliseconds
Introduced	16.0.R5
Platforms	All

### **test-duration** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Duration of an on-demand test
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet dmm test-duration</a> <i>number</i>
Tree	<a href="#">test-duration</a>
Range	1 to 86400
Units	seconds
Introduced	16.0.R5
Platforms	All

### **test-id** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Test ID
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet dmm test-id</a> <i>number</i>
Tree	<a href="#">test-id</a>
Range	0 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

## Imm

Synopsis	Enable the <b>Imm</b> context
Context	<b>configure</b> <a href="#">oam-pm session string ethernet Imm</a>
Tree	<a href="#">Imm</a>
Introduced	16.0.R5
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the test
Context	<b>configure</b> <a href="#">oam-pm session string ethernet Imm admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R5
Platforms	All

### **availability**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>availability</b> context
Context	<b>configure</b> <a href="#">oam-pm session string ethernet Imm availability</a>
Tree	<a href="#">availability</a>
Introduced	16.0.R5
Platforms	All

### **admin-state** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of availability statistics
Context	<b>configure</b> <a href="#">oam-pm session string ethernet Imm availability admin-state keyword</a>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R5
Platforms	All

### **flr-threshold** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FLR threshold for the test
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm availability flr-threshold</a> <i>number</i>
Tree	<a href="#">flr-threshold</a>
Range	0 to 100
Units	percent
Default	50
Introduced	16.0.R5
Platforms	All

### **hli-force-count** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Increment HLI/CHLI counters regardless of availability
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm availability hli-force-count</a> <i>boolean</i>
Tree	<a href="#">hli-force-count</a>
Default	false
Introduced	16.0.R5
Platforms	All

## timing



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>timing</b> context
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm availability timing</a>
Tree	<a href="#">timing</a>
Introduced	16.0.R5
Platforms	All

## chli-threshold *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	CHLI threshold
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm availability timing chli-threshold</a> <i>number</i>
Tree	<a href="#">chli-threshold</a>
Range	1 to 9
Default	5
Introduced	16.0.R5
Platforms	All

## consec-delta-t *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of consecutive delta-t intervals
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm availability timing consec-delta-t</a> <i>number</i>
Tree	<a href="#">consec-delta-t</a>
Range	2 to 10
Default	10
Introduced	16.0.R5

Platforms All

### **frames-per-delta-t** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Number of frames sent in one delta-t

Context **configure** [oam-pm session](#) *string* [ethernet lmm availability timing frames-per-delta-t](#) *number*

Tree [frames-per-delta-t](#)

Range 1 to 50

Introduced 16.0.R5

Platforms All

### **fc-collection** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable collection of per-forwarding class counters

Context **configure** [oam-pm session](#) *string* [ethernet lmm fc-collection](#) *boolean*

Tree [fc-collection](#)

Default false

Introduced 16.0.R5

Platforms All

### **interval** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Time between transmission PDUs for the session's test

Context **configure** [oam-pm session](#) *string* [ethernet lmm interval](#) *number*

Tree [interval](#)

Range	100   1000   10000
Units	milliseconds
Introduced	16.0.R5
Platforms	All

## loss-events



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>loss-events</b> context
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm</a> <b>loss-events</b>
Tree	<a href="#">loss-events</a>
Introduced	16.0.R5
Platforms	All

## avg-flr-event [[direction](#)] *keyword*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>avg-flr-event</b> list instance
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm</a> <a href="#">loss-events</a> <a href="#">avg-flr-event</a> <i>keyword</i>
Tree	<a href="#">avg-flr-event</a>
Introduced	16.0.R5
Platforms	All

## [\[direction\]](#) *keyword*

Synopsis	Traffic flow direction
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm</a> <a href="#">loss-events</a> <a href="#">avg-flr-event</a> <i>keyword</i>
Tree	<a href="#">avg-flr-event</a>
Options	forward, backward
Notes	This element is part of a list key.
Introduced	16.0.R5

Platforms All

### clear-threshold *decimal-number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear threshold for the average FLR
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet lmm loss-events avg-flr-event</b> <i>keyword</i> <b>clear-threshold</b> <i>decimal-number</i>
Tree	<b>clear-threshold</b>
Range	0.000 to 99.999
Units	percent
Introduced	16.0.R5
Platforms	All

### raise-threshold *decimal-number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Raise threshold for the average FLR
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet lmm loss-events avg-flr-event</b> <i>keyword</i> <b>raise-threshold</b> <i>decimal-number</i>
Tree	<b>raise-threshold</b>
Range	0.000 to 100.000
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All



**chli-event** [*direction*] *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>chli-event</b> list instance
Context	<b>configure</b> <i>oam-pm session string ethernet lmm loss-events chli-event keyword</i>
Tree	<i>chli-event</i>
Introduced	16.0.R5
Platforms	All

**[direction]** *keyword*

Synopsis	Traffic flow direction
Context	<b>configure</b> <i>oam-pm session string ethernet lmm loss-events chli-event keyword</i>
Tree	<i>chli-event</i>
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

**clear-threshold** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear threshold
Context	<b>configure</b> <i>oam-pm session string ethernet lmm loss-events chli-event keyword clear-threshold number</i>
Tree	<i>clear-threshold</i>
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

**raise-threshold** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Rising threshold that determines when to generate event
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm loss-events chli-event</a> <i>keyword</i> <a href="#">raise-threshold</a> <i>number</i>
Tree	<a href="#">raise-threshold</a>
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

**hli-event** [[direction](#)] *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>hli-event</b> list instance
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm loss-events hli-event</a> <i>keyword</i>
Tree	<a href="#">hli-event</a>
Introduced	16.0.R5
Platforms	All

**[direction]** *keyword*

Synopsis	Traffic flow direction
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm loss-events hli-event</a> <i>keyword</i>
Tree	<a href="#">hli-event</a>
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

**clear-threshold** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear threshold
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm loss-events hli-event</a> <i>keyword</i> <a href="#">clear-threshold</a> <i>number</i>
Tree	<a href="#">clear-threshold</a>
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

**raise-threshold** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Rising threshold that determines when to generate event
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm loss-events hli-event</a> <i>keyword</i> <a href="#">raise-threshold</a> <i>number</i>
Tree	<a href="#">raise-threshold</a>
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

**unavailability-event** [[direction](#)] *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>unavailability-event</b> list instance
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm loss-events unavailability-event</a> <i>keyword</i>
Tree	<a href="#">unavailability-event</a>
Introduced	16.0.R5

Platforms All

### [**direction**] *keyword*

Synopsis Traffic flow direction

Context **configure** **oam-pm session** *string* **ethernet lmm loss-events unavailability-event** *keyword*

Tree **unavailability-event**

Options forward, backward, aggregate

Notes This element is part of a list key.

Introduced 16.0.R5

Platforms All

### **clear-threshold** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Clear threshold

Context **configure** **oam-pm session** *string* **ethernet lmm loss-events unavailability-event** *keyword* **clear-threshold** *number*

Tree **clear-threshold**

Range 0 to 863999

Introduced 16.0.R5

Platforms All

### **raise-threshold** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Rising threshold that determines when to generate event

Context **configure** **oam-pm session** *string* **ethernet lmm loss-events unavailability-event** *keyword* **raise-threshold** *number*

Tree **raise-threshold**

Range 1 to 864000

Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

### **undet-availability-event** [[direction](#)] *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>undet-availability-event</b> list instance
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm loss-events undet-availability-event</a> <i>keyword</i>
Tree	<a href="#">undet-availability-event</a>
Introduced	16.0.R5
Platforms	All

### **[direction]** *keyword*

Synopsis	Traffic flow direction
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm loss-events undet-availability-event</a> <i>keyword</i>
Tree	<a href="#">undet-availability-event</a>
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

### **clear-threshold** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear threshold
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm loss-events undet-availability-event</a> <i>keyword</i> <a href="#">clear-threshold</a> <i>number</i>

Tree	<a href="#">clear-threshold</a>
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

### **raise-threshold** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Rising threshold that determines when to generate event
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm loss-events undet-availability-event</a> <i>keyword</i> <a href="#">raise-threshold</a> <i>number</i>
Tree	<a href="#">raise-threshold</a>
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

### **undet-unavailability-event** [[direction](#)] *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>undet-unavailability-event</b> list instance
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm loss-events undet-unavailability-event</a> <i>keyword</i>
Tree	<a href="#">undet-unavailability-event</a>
Introduced	16.0.R5
Platforms	All

### **[direction]** *keyword*

Synopsis	Traffic flow direction
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm loss-events undet-unavailability-event</a> <i>keyword</i>

Tree	<a href="#">undet-unavailability-event</a>
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

### **clear-threshold** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear threshold
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm loss-events undet-unavailability-event</a> <i>keyword</i> <a href="#">clear-threshold</a> <i>number</i>
Tree	<a href="#">clear-threshold</a>
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

### **raise-threshold** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Rising threshold that determines when to generate event
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm loss-events undet-unavailability-event</a> <i>keyword</i> <a href="#">raise-threshold</a> <i>number</i>
Tree	<a href="#">raise-threshold</a>
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

**test-duration** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Duration of an on-demand test
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm test-duration</a> <i>number</i>
Tree	<a href="#">test-duration</a>
Range	1 to 86400
Units	seconds
Introduced	16.0.R5
Platforms	All

**test-id** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Test ID
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm test-id</a> <i>number</i>
Tree	<a href="#">test-id</a>
Range	0 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

**priority** *number*

Synopsis	Priority and forwarding class for the session
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet priority</a> <i>number</i>
Tree	<a href="#">priority</a>
Range	0 to 7
Default	0
Introduced	16.0.R5
Platforms	All



**remote-mep** *number*

Synopsis	Remote MEP for the session
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet remote-mep</a> <i>number</i>
Tree	<a href="#">remote-mep</a>
Range	1 to 8191
Introduced	16.0.R5
Platforms	All

**slm**

Synopsis	Enable the <b>slm</b> context
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet slm</a>
Tree	<a href="#">slm</a>
Introduced	16.0.R5
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the test
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet slm admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R5
Platforms	All

**data-tlv-size** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Size of the pad TLV in the frames sent for the test
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet slm data-tlv-size</a> <i>number</i>
Tree	<a href="#">data-tlv-size</a>

Range	0   3 to 2000
Units	octets
Default	0
Introduced	16.0.R5
Platforms	All

### **flr-threshold** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FLR threshold for the test
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet slm flr-threshold</b> <i>number</i>
Tree	<b>flr-threshold</b>
Range	0 to 100
Units	percent
Default	50
Introduced	16.0.R5
Platforms	All

### **hli-force-count** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Increment HLI/CHLI counters regardless of availability
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet slm hli-force-count</b> <i>boolean</i>
Tree	<b>hli-force-count</b>
Default	false
Introduced	16.0.R5
Platforms	All

## interval *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between transmission PDUs for the session's test
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet slm interval</a> <i>number</i>
Tree	<a href="#">interval</a>
Range	100   1000
Units	milliseconds
Introduced	16.0.R5
Platforms	All

## loss-events

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>loss-events</b> context
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet slm loss-events</a>
Tree	<a href="#">loss-events</a>
Introduced	16.0.R5
Platforms	All

## avg-flr-event [[direction](#)] *keyword*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>avg-flr-event</b> list instance
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet slm loss-events avg-flr-event</a> <i>keyword</i>
Tree	<a href="#">avg-flr-event</a>
Introduced	16.0.R5
Platforms	All

**[direction]** *keyword*

Synopsis	Traffic flow direction
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet slm loss-events avg-flr-event</b> <i>keyword</i>
Tree	<b>avg-flr-event</b>
Options	forward, backward
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

**clear-threshold** *decimal-number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear threshold for the average FLR
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet slm loss-events avg-flr-event</b> <i>keyword</i> <b>clear-threshold</b> <i>decimal-number</i>
Tree	<b>clear-threshold</b>
Range	0.000 to 99.999
Units	percent
Introduced	16.0.R5
Platforms	All

**raise-threshold** *decimal-number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Raise threshold for the average FLR
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet slm loss-events avg-flr-event</b> <i>keyword</i> <b>raise-threshold</b> <i>decimal-number</i>
Tree	<b>raise-threshold</b>
Range	0.000 to 100.000
Units	percent
Notes	This element is mandatory.

Introduced 16.0.R5  
 Platforms All

### **chli-event** [[direction](#)] *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **chli-event** list instance  
 Context **configure** [oam-pm session](#) *string* [ethernet slm loss-events chli-event](#) *keyword*  
 Tree [chli-event](#)  
 Introduced 16.0.R5  
 Platforms All

### **[direction]** *keyword*

Synopsis Traffic flow direction  
 Context **configure** [oam-pm session](#) *string* [ethernet slm loss-events chli-event](#) *keyword*  
 Tree [chli-event](#)  
 Options forward, backward, aggregate  
 Notes This element is part of a list key.  
 Introduced 16.0.R5  
 Platforms All

### **clear-threshold** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Clear threshold  
 Context **configure** [oam-pm session](#) *string* [ethernet slm loss-events chli-event](#) *keyword* [clear-threshold](#) *number*  
 Tree [clear-threshold](#)  
 Range 0 to 863999  
 Introduced 16.0.R5

Platforms All

### raise-threshold *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Rising threshold that determines when to generate event
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet slm loss-events chli-event</b> <i>keyword</i> <b>raise-threshold</b> <i>number</i>
Tree	<b>raise-threshold</b>
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

### hli-event [*direction*] *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>hli-event</b> list instance
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet slm loss-events hli-event</b> <i>keyword</i>
Tree	<b>hli-event</b>
Introduced	16.0.R5
Platforms	All

### [*direction*] *keyword*

Synopsis	Traffic flow direction
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet slm loss-events hli-event</b> <i>keyword</i>
Tree	<b>hli-event</b>
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5

Platforms All

### clear-threshold *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Clear threshold

Context **configure** **oam-pm session** *string* **ethernet slm loss-events hli-event** *keyword* **clear-threshold** *number*

Tree **clear-threshold**

Range 0 to 863999

Introduced 16.0.R5

Platforms All

### raise-threshold *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Rising threshold that determines when to generate event

Context **configure** **oam-pm session** *string* **ethernet slm loss-events hli-event** *keyword* **raise-threshold** *number*

Tree **raise-threshold**

Range 1 to 864000

Notes This element is mandatory.

Introduced 16.0.R5

Platforms All

### unavailability-event [*direction*] *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **unavailability-event** list instance

Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet slm loss-events unavailability-event</b> <i>keyword</i>
Tree	<b>unavailability-event</b>
Introduced	16.0.R5
Platforms	All

### **[direction]** *keyword*

Synopsis	Traffic flow direction
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet slm loss-events unavailability-event</b> <i>keyword</i>
Tree	<b>unavailability-event</b>
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

### **clear-threshold** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear threshold
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet slm loss-events unavailability-event</b> <i>keyword</i> <b>clear-threshold</b> <i>number</i>
Tree	<b>clear-threshold</b>
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

### **raise-threshold** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Rising threshold that determines when to generate event
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Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet slm loss-events unavailability-event</a> <i>keyword</i> <a href="#">raise-threshold</a> <i>number</i>
Tree	<a href="#">raise-threshold</a>
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

### **undet-availability-event** [[direction](#)] *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>undet-availability-event</b> list instance
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet slm loss-events undet-availability-event</a> <i>keyword</i>
Tree	<a href="#">undet-availability-event</a>
Introduced	16.0.R5
Platforms	All

### **[direction]** *keyword*

Synopsis	Traffic flow direction
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet slm loss-events undet-availability-event</a> <i>keyword</i>
Tree	<a href="#">undet-availability-event</a>
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

**clear-threshold** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear threshold
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet slm loss-events undet-availability-event</a> <i>keyword</i> <a href="#">clear-threshold</a> <i>number</i>
Tree	<a href="#">clear-threshold</a>
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

**raise-threshold** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Rising threshold that determines when to generate event
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet slm loss-events undet-availability-event</a> <i>keyword</i> <a href="#">raise-threshold</a> <i>number</i>
Tree	<a href="#">raise-threshold</a>
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

**undet-unavailability-event** [[direction](#)] *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>undet-unavailability-event</b> list instance
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet slm loss-events undet-unavailability-event</a> <i>keyword</i>
Tree	<a href="#">undet-unavailability-event</a>

Introduced 16.0.R5  
 Platforms All

### [**direction**] *keyword*

Synopsis Traffic flow direction  
 Context **configure** [oam-pm session](#) *string* [ethernet slm loss-events undet-unavailability-event](#)  
*keyword*  
 Tree [undet-unavailability-event](#)  
 Options forward, backward, aggregate  
 Notes This element is part of a list key.  
 Introduced 16.0.R5  
 Platforms All

### **clear-threshold** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Clear threshold  
 Context **configure** [oam-pm session](#) *string* [ethernet slm loss-events undet-unavailability-event](#)  
*keyword* [clear-threshold](#) *number*  
 Tree [clear-threshold](#)  
 Range 0 to 863999  
 Introduced 16.0.R5  
 Platforms All

### **raise-threshold** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Rising threshold that determines when to generate event  
 Context **configure** [oam-pm session](#) *string* [ethernet slm loss-events undet-unavailability-event](#)  
*keyword* [raise-threshold](#) *number*  
 Tree [raise-threshold](#)

Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

### **test-duration** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Duration of an on-demand test
Context	<b>configure</b> <b>oam-pm session</b> <i>string ethernet slm test-duration number</i>
Tree	<b>test-duration</b>
Range	1 to 86400
Units	seconds
Introduced	16.0.R5
Platforms	All

### **test-id** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Test ID
Context	<b>configure</b> <b>oam-pm session</b> <i>string ethernet slm test-id number</i>
Tree	<b>test-id</b>
Range	0 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

## timing



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>timing</b> context
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet slm timing</a>
Tree	<a href="#">timing</a>
Introduced	16.0.R5
Platforms	All

## chli-threshold *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	CHLI threshold
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet slm timing chli-threshold</a> <i>number</i>
Tree	<a href="#">chli-threshold</a>
Range	1 to 9
Default	5
Introduced	16.0.R5
Platforms	All

## consec-delta-t *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of consecutive delta-t intervals
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet slm timing consec-delta-t</a> <i>number</i>
Tree	<a href="#">consec-delta-t</a>
Range	2 to 10
Default	10
Introduced	16.0.R5

Platforms All

### **frames-per-delta-t** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Number of frames sent in one delta-t

Context **configure** [oam-pm session](#) *string* [ethernet slm timing frames-per-delta-t](#) *number*

Tree [frames-per-delta-t](#)

Range 1 to 50

Introduced 16.0.R5

Platforms All

### **source**

Synopsis Enable the **source** context

Context **configure** [oam-pm session](#) *string* [ethernet source](#)

Tree [source](#)

Introduced 16.0.R5

Platforms All

### **ma-admin-name** *string*

Synopsis Source Ethernet MA name

Context **configure** [oam-pm session](#) *string* [ethernet source ma-admin-name](#) *string*

Tree [ma-admin-name](#)

String Length 1 to 64

Notes This element is mandatory.

Introduced 16.0.R5

Platforms All

### **md-admin-name** *string*

Synopsis Source Ethernet MD name

Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet source md-admin-name</a> <i>string</i>
Tree	<a href="#">md-admin-name</a>
String Length	1 to 64
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

### **mep** *number*

Synopsis	Source Ethernet MEP ID
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet source mep</a> <i>number</i>
Tree	<a href="#">mep</a>
Range	1 to 8191
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

### **ip**

Synopsis	Enable the <b>ip</b> context
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ip</a>
Tree	<a href="#">ip</a>
Notes	The following elements are part of a mandatory choice: <b>ethernet</b> , <b>ip</b> , or <b>mpls</b> .
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **allow-egress-remark-dscp** *boolean*

Synopsis	Allow DSCP modification by the egress QoS policy
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ip allow-egress-remark-dscp</a> <i>boolean</i>
Tree	<a href="#">allow-egress-remark-dscp</a>
Default	false
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**destination** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Destination IP address for the session
Context	<b>configure</b> <b>oam-pm session</b> <i>string ip destination</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">destination</a>
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**destination-udp-port** *number*

Synopsis	Destination UDP port for the session
Context	<b>configure</b> <b>oam-pm session</b> <i>string ip destination-udp-port number</i>
Tree	<a href="#">destination-udp-port</a>
Range	1 to 65535
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**do-not-fragment** *boolean*

Synopsis	Do not allow packet fragmentation in the IPv4 header
Context	<b>configure</b> <b>oam-pm session</b> <i>string ip do-not-fragment boolean</i>
Tree	<a href="#">do-not-fragment</a>
Default	false
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**dscp** (*keyword* | *keyword*)

Synopsis	DSCP value configured to the DSCP name
Context	<b>configure</b> <b>oam-pm session</b> <i>string ip dscp</i> ( <i>keyword</i>   <i>keyword</i> )
Tree	<a href="#">dscp</a>
Description	This command allows for the explicit setting of the DSCP rather than deriving the DSCP value from the egress network QoS policy 1 using the <b>fc</b> and <b>profile</b> values.



Although disconnected from the **fc** and **profile** settings unless required, the three parameters should be aligned to ensure proper treatment within the node and along the path.

Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Options	resolve
Default	resolve
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fc keyword**

Synopsis	Forwarding class for the session
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string ip fc keyword</i>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Default	be
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **forwarding**

Synopsis	Enable the <b>forwarding</b> context
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string ip forwarding</i>
Tree	<a href="#">forwarding</a>
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **bypass-routing**

Synopsis	Bypass the routing table when sending test packets
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string ip forwarding bypass-routing</i>
Tree	<a href="#">bypass-routing</a>

Notes	The following elements are part of a mandatory choice: <b>bypass-routing</b> , <b>interface</b> , or <b>next-hop</b> .
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **interface** *string*

Synopsis	Interface name
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ip forwarding</b> <b>interface</b> <i>string</i>
Tree	<a href="#">interface</a>
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: <b>bypass-routing</b> , <b>interface</b> , or <b>next-hop</b> .
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **next-hop** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address for forwarding
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ip forwarding</b> <b>next-hop</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">next-hop</a>
Notes	The following elements are part of a mandatory choice: <b>bypass-routing</b> , <b>interface</b> , or <b>next-hop</b> .
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **pattern** (*keyword | number*)

Synopsis	Pattern used to fill the packet padding field
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ip pattern</b> ( <i>keyword   number</i> )
Tree	<a href="#">pattern</a>
Range	0 to 65535
Options	sequential
Default	0
Introduced	16.0.R5

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **profile** *keyword*

Synopsis Profile type for the session

Context **configure** **oam-pm session** *string ip profile keyword*

Tree [profile](#)

Options in, out

Default out

Introduced 16.0.R5

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **router-instance** *string*

Synopsis Router instance for the session

Context **configure** **oam-pm session** *string ip router-instance string*

Tree [router-instance](#)

Default Base

Introduced 16.0.R5

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **source** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis Source IP address for the session

Context **configure** **oam-pm session** *string ip source (ipv4-address-no-zone | ipv6-address-no-zone)*

Tree [source](#)

Introduced 16.0.R5

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **source-udp-port** *number*

Synopsis Source UDP port for the session

Context **configure** **oam-pm session** *string ip source-udp-port number*

Tree [source-udp-port](#)

Range 64374 to 64383

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Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **tll** *number*

Synopsis	TTL value for the session
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string ip tll number</i>
Tree	<a href="#">tll</a>
Range	1 to 255
Default	255
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **twamp-light**

Synopsis	Enable the <b>twamp-light</b> context
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string ip twamp-light</i>
Tree	<a href="#">twamp-light</a>
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **admin-state** *keyword*

Synopsis	Administrative state of the test
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string ip twamp-light admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**allow-ipv6-udp-checksum-zero** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Process IPv6 packets with a zero UDP checksum
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ip twamp-light</b> <b>allow-ipv6-udp-checksum-zero</b> <i>boolean</i>
Tree	<a href="#">allow-ipv6-udp-checksum-zero</a>
Description	<p>When configured to <b>true</b>, this command configures the acceptance of IPv6 packets with UDP checksums of 0. This optional configuration allows the router to process arriving IPv6 TWAMP Test packets that contain IPv6 UDP checksum of 0x0000. The UDP port specific to this TWAMP Light test bypasses the default discard IPv6 UDP checksum 0x0000. If this optional command is not configured, IPv6 UDP checksum 0x0000 arriving packets are discarded.</p> <p>When configured to <b>false</b>, packets that arrive with an IPv6 UDP checksum of 0x0000 are discarded.</p>
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**delay-template** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reference to a streaming delay template for the test
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ip twamp-light</b> <b>delay-template</b> <i>string</i>
Tree	<a href="#">delay-template</a>
String Length	1 to 64
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**interval** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between transmission PDUs for the session's test
Context	<b>configure</b> <b>oam-pm session</b> <i>string ip twamp-light interval number</i>
Tree	<a href="#">interval</a>
Range	100   1000   10000
Units	milliseconds
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## loss



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>loss</b> context
Context	<b>configure</b> <b>oam-pm session</b> <i>string ip twamp-light loss</i>
Tree	<a href="#">loss</a>
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## flr-threshold *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FLR threshold for the test
Context	<b>configure</b> <b>oam-pm session</b> <i>string ip twamp-light loss flr-threshold number</i>
Tree	<a href="#">flr-threshold</a>
Range	0 to 100
Units	percent
Default	50
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## hli-force-count *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Increment HLI/CHLI counters regardless of availability
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string ip twamp-light loss hli-force-count boolean</i>
Tree	<a href="#">hli-force-count</a>
Default	false
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## timing

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>timing</b> context
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string ip twamp-light loss timing</i>
Tree	<a href="#">timing</a>
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## chli-threshold *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	CHLI threshold
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string ip twamp-light loss timing chli-threshold number</i>
Tree	<a href="#">chli-threshold</a>
Range	1 to 9
Default	5
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**consec-delta-t** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of consecutive delta-t intervals
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ip twamp-light loss timing consec-delta-t</a> <i>number</i>
Tree	<a href="#">consec-delta-t</a>
Range	2 to 10
Default	10
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**frames-per-delta-t** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of frames sent in one delta-t
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ip twamp-light loss timing frames-per-delta-t</a> <i>number</i>
Tree	<a href="#">frames-per-delta-t</a>
Range	1 to 50
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**loss-events****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>loss-events</b> context
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ip twamp-light loss-events</a>
Tree	<a href="#">loss-events</a>
Introduced	16.0.R5



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **avg-flr-event** [*direction*] *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **avg-flr-event** list instance

Context **configure** **oam-pm session** *string ip twamp-light loss-events avg-flr-event keyword*

Tree [avg-flr-event](#)

Introduced 16.0.R5

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[direction]** *keyword*

Synopsis Traffic flow direction

Context **configure** **oam-pm session** *string ip twamp-light loss-events avg-flr-event keyword*

Tree [avg-flr-event](#)

Options forward, backward

Notes This element is part of a list key.

Introduced 16.0.R5

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **clear-threshold** *decimal-number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Clear threshold for the average FLR

Context **configure** **oam-pm session** *string ip twamp-light loss-events avg-flr-event keyword clear-threshold decimal-number*

Tree [clear-threshold](#)

Range 0.000 to 99.999

Units percent

Introduced 16.0.R5

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### raise-threshold *decimal-number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Raise threshold for the average FLR

Context **configure** **oam-pm session** *string ip twamp-light loss-events avg-flr-event keyword*  
**raise-threshold** *decimal-number*

Tree **raise-threshold**

Range 0.000 to 100.000

Units percent

Notes This element is mandatory.

Introduced 16.0.R5

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### chli-event [*direction*] *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **chli-event** list instance

Context **configure** **oam-pm session** *string ip twamp-light loss-events chli-event keyword*

Tree **chli-event**

Introduced 16.0.R5

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### [*direction*] *keyword*

Synopsis Traffic flow direction

Context **configure** **oam-pm session** *string ip twamp-light loss-events chli-event keyword*

Tree **chli-event**

Options forward, backward, aggregate

Notes This element is part of a list key.

Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### clear-threshold *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear threshold
Context	<b>configure</b> <b>oam-pm session</b> <i>string ip twamp-light loss-events chli-event</i> <i>keyword clear-threshold number</i>
Tree	<a href="#">clear-threshold</a>
Range	0 to 863999
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### raise-threshold *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Rising threshold that determines when to generate event
Context	<b>configure</b> <b>oam-pm session</b> <i>string ip twamp-light loss-events chli-event</i> <i>keyword raise-threshold number</i>
Tree	<a href="#">raise-threshold</a>
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### hli-event [[direction](#)] *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>hli-event</b> list instance
Context	<b>configure</b> <b>oam-pm session</b> <i>string ip twamp-light loss-events hli-event keyword</i>
Tree	<a href="#">hli-event</a>
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[direction]** *keyword*

Synopsis	Traffic flow direction
Context	<b>configure</b> <b>oam-pm session</b> <i>string ip twamp-light loss-events hli-event keyword</i>
Tree	<a href="#">hli-event</a>
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**clear-threshold** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear threshold
Context	<b>configure</b> <b>oam-pm session</b> <i>string ip twamp-light loss-events hli-event keyword clear-threshold number</i>
Tree	<a href="#">clear-threshold</a>
Range	0 to 863999
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**raise-threshold** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Rising threshold that determines when to generate event
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Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ip twamp-light loss-events hli-event</b> <i>keyword</i> <b>raise-threshold</b> <i>number</i>
Tree	<b>raise-threshold</b>
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **unavailability-event** [**direction**] *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>unavailability-event</b> list instance
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ip twamp-light loss-events unavailability-event</b> <i>keyword</i>
Tree	<b>unavailability-event</b>
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[direction]** *keyword*

Synopsis	Traffic flow direction
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ip twamp-light loss-events unavailability-event</b> <i>keyword</i>
Tree	<b>unavailability-event</b>
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**clear-threshold** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear threshold
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ip twamp-light loss-events unavailability-event</a> <i>keyword</i> <a href="#">clear-threshold</a> <i>number</i>
Tree	<a href="#">clear-threshold</a>
Range	0 to 863999
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**raise-threshold** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Rising threshold that determines when to generate event
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ip twamp-light loss-events unavailability-event</a> <i>keyword</i> <a href="#">raise-threshold</a> <i>number</i>
Tree	<a href="#">raise-threshold</a>
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**undet-availability-event** [[direction](#)] *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>undet-availability-event</b> list instance
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ip twamp-light loss-events undet-availability-event</a> <i>keyword</i>
Tree	<a href="#">undet-availability-event</a>

Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[direction]** *keyword*

Synopsis	Traffic flow direction
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ip twamp-light loss-events undet-availability-event</a> <i>keyword</i>
Tree	<a href="#">undet-availability-event</a>
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **clear-threshold** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear threshold
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ip twamp-light loss-events undet-availability-event</a> <i>keyword</i> <a href="#">clear-threshold</a> <i>number</i>
Tree	<a href="#">clear-threshold</a>
Range	0 to 863999
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **raise-threshold** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Rising threshold that determines when to generate event
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ip twamp-light loss-events undet-availability-event</a> <i>keyword</i> <a href="#">raise-threshold</a> <i>number</i>
Tree	<a href="#">raise-threshold</a>

Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **undet-unavailability-event** [[direction](#)] *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>undet-unavailability-event</b> list instance
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ip twamp-light loss-events undet-unavailability-event</a> <i>keyword</i>
Tree	<a href="#">undet-unavailability-event</a>
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[direction]** *keyword*

Synopsis	Traffic flow direction
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ip twamp-light loss-events undet-unavailability-event</a> <i>keyword</i>
Tree	<a href="#">undet-unavailability-event</a>
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **clear-threshold** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear threshold
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Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ip twamp-light loss-events undet-unavailability-event</b> <i>keyword</i> <b>clear-threshold</b> <i>number</i>
Tree	<b>clear-threshold</b>
Range	0 to 863999
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **raise-threshold** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Rising threshold that determines when to generate event
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ip twamp-light loss-events undet-unavailability-event</b> <i>keyword</i> <b>raise-threshold</b> <i>number</i>
Tree	<b>raise-threshold</b>
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **pad-size** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Amount of packet padding sent for the TWAMP-Light test
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ip twamp-light pad-size</b> <i>number</i>
Tree	<b>pad-size</b>
Range	0 to 2000
Units	octets
Default	0
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**record-stats** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Type of statistics recorded for the TWAMP-Light test
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ip twamp-light record-stats</a> <i>keyword</i>
Tree	<a href="#">record-stats</a>
Options	delay, loss, delay-and-loss
Default	delay
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**test-duration** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Duration of an on-demand test
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ip twamp-light test-duration</a> <i>number</i>
Tree	<a href="#">test-duration</a>
Range	1 to 86400
Units	seconds
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**test-id** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Test ID
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ip twamp-light test-id</a> <i>number</i>
Tree	<a href="#">test-id</a>

---

Range	0 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **measurement-interval** [[duration](#)] *keyword*

Synopsis	Enter the <b>measurement-interval</b> list instance
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <a href="#">measurement-interval</a> <i>keyword</i>
Tree	<a href="#">measurement-interval</a>
Introduced	16.0.R5
Platforms	All

### **[duration]** *keyword*

Synopsis	Duration of the measurement interval
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <a href="#">measurement-interval</a> <i>keyword</i>
Tree	<a href="#">measurement-interval</a>
Options	15-mins, 1-hour, 1-day, 5-mins
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

### **accounting-policy** *reference*

Synopsis	Accounting policy for the measurement interval
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <a href="#">measurement-interval</a> <i>keyword</i> <a href="#">accounting-policy</a> <i>reference</i>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <b>log</b> <a href="#">accounting-policy</a> <i>number</i>
Introduced	16.0.R5
Platforms	All

**boundary-type** *keyword*

Synopsis	Alignment of the start of the measurement interval
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>measurement-interval</b> <i>keyword</i> <b>boundary-type</b> <i>keyword</i>
Tree	<a href="#">boundary-type</a>
Options	clock-aligned, test-relative
Default	clock-aligned
Introduced	16.0.R5
Platforms	All

**clock-offset** *number*

Synopsis	Offset for a clock-aligned measurement interval
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>measurement-interval</b> <i>keyword</i> <b>clock-offset</b> <i>number</i>
Tree	<a href="#">clock-offset</a>
Range	0 to 86399
Units	seconds
Default	0
Introduced	16.0.R5
Platforms	All

**intervals-stored** *number*

Synopsis	Maximum number of measurement intervals stored
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>measurement-interval</b> <i>keyword</i> <b>intervals-stored</b> <i>number</i>
Tree	<a href="#">intervals-stored</a>
Range	1 to 96
Introduced	16.0.R5
Platforms	All

**threshold-cross-alerts**

Synopsis	Enter the <b>threshold-cross-alerts</b> context
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>measurement-interval</b> <i>keyword</i> <b>threshold-cross-alerts</b>

---

Tree	<a href="#">threshold-cross-alerts</a>
Introduced	16.0.R5
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of TCAs for measurement interval
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">measurement-interval</a> <i>keyword</i> <a href="#">threshold-cross-alerts</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R5
Platforms	All

**delay-events** *boolean*

Synopsis	Enable delay TCAs for the measurement interval
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">measurement-interval</a> <i>keyword</i> <a href="#">threshold-cross-alerts</a> <a href="#">delay-events</a> <i>boolean</i>
Tree	<a href="#">delay-events</a>
Default	false
Introduced	16.0.R5
Platforms	All

**loss-events** *boolean*

Synopsis	Enable loss TCAs for the measurement interval
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">measurement-interval</a> <i>keyword</i> <a href="#">threshold-cross-alerts</a> <a href="#">loss-events</a> <i>boolean</i>
Tree	<a href="#">loss-events</a>
Default	false
Introduced	16.0.R5
Platforms	All

## mpls

Synopsis	Enable the <b>mpls</b> context
Context	<b>configure</b> <a href="#">oam-pm session string mpls</a>
Tree	<a href="#">mpls</a>
Notes	The following elements are part of a mandatory choice: <b>ethernet</b> , <b>ip</b> , or <b>mpls</b> .
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## dm

Synopsis	Enable the <b>dm</b> context
Context	<b>configure</b> <a href="#">oam-pm session string mpls dm</a>
Tree	<a href="#">dm</a>
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## admin-state *keyword*

Synopsis	Administrative state of the MPLS DM test
Context	<b>configure</b> <a href="#">oam-pm session string mpls dm admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## delay-template *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reference to a streaming delay template for the test
Context	<b>configure</b> <a href="#">oam-pm session string mpls dm delay-template string</a>
Tree	<a href="#">delay-template</a>
String Length	1 to 64

Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **interval** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Elapsed time between query messages sent for the test
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>mpls dm interval</b> <i>number</i>
Tree	<b>interval</b>
Range	1000   2000   3000   4000   5000   6000   7000   8000   9000   10000
Units	milliseconds
Default	1000
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **pad-tlv-size** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Size of the pad TLV in query messages sent for the test
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>mpls dm pad-tlv-size</b> <i>number</i>
Tree	<b>pad-tlv-size</b>
Range	0   2 to 257
Units	octets
Default	0
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**reflect-pad** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Copy the pad TLV in each query to the response
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">mpls dm reflect-pad</a> <i>boolean</i>
Tree	<a href="#">reflect-pad</a>
Default	false
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**test-duration** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Duration of an on-demand test
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">mpls dm test-duration</a> <i>number</i>
Tree	<a href="#">test-duration</a>
Range	1 to 86400
Units	seconds
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**test-id** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Test ID for query and response messages
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">mpls dm test-id</a> <i>number</i>
Tree	<a href="#">test-id</a>
Range	0 to 67108863
Notes	This element is mandatory.



Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **dscp keyword**

Synopsis	DSCP value for the session
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>mpls dscp keyword</b>
Tree	<b>dscp</b>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Default	be
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fc keyword**

Synopsis	Forwarding class for the session
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>mpls fc keyword</b>
Tree	<b>fc</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Default	be
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **lsp**

Synopsis	Enter the <b>lsp</b> context
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>mpls lsp</b>
Tree	<b>lsp</b>
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## mpls-tp-static

Synopsis	Enable the <b>mpls-tp-static</b> context
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>mpls lsp mpls-tp-static</b>
Tree	<b>mpls-tp-static</b>
Notes	The following elements are part of a choice: <b>mpls-tp-static</b> , <b>rsvp</b> , or <b>rsvp-auto</b> .
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## lsp string

Synopsis	LSP to be tested
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>mpls lsp mpls-tp-static lsp string</b>
Tree	<b>lsp</b>
String Length	1 to 64
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## rsvp

Synopsis	Enable the <b>rsvp</b> context
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>mpls lsp rsvp</b>
Tree	<b>rsvp</b>
Notes	The following elements are part of a choice: <b>mpls-tp-static</b> , <b>rsvp</b> , or <b>rsvp-auto</b> .
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## lsp string

Synopsis	LSP to be tested
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>mpls lsp rsvp lsp string</b>
Tree	<b>lsp</b>
String Length	1 to 64
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**udp-return-object** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address used by far end of the test to send response
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>mpls lsp rsvp udp-return-object</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">udp-return-object</a>
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**rsvp-auto**

Synopsis	Enable the <b>rsvp-auto</b> context
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>mpls lsp rsvp-auto</b>
Tree	<a href="#">rsvp-auto</a>
Notes	The following elements are part of a choice: <b>mpls-tp-static</b> , <b>rsvp</b> , or <b>rsvp-auto</b> .
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**from** *string*

Synopsis	IPv4 address used to identify the LSP to be tested
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>mpls lsp rsvp-auto from</b> <i>string</i>
Tree	<a href="#">from</a>
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**lsp-template** *string*

Synopsis	LSP template used to identify the LSP to be tested
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>mpls lsp rsvp-auto lsp-template</b> <i>string</i>
Tree	<a href="#">lsp-template</a>
String Length	1 to 32
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**to string**

Synopsis	IPv4 address used to identify the LSP to be tested
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>mpls lsp rsvp-auto to</b> <i>string</i>
Tree	<b>to</b>
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**udp-return-object** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address used by far end of the test to send response
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>mpls lsp rsvp-auto udp-return-object</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>udp-return-object</b>
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**pattern** (*keyword* | *number*)

Synopsis	Pattern value repeated to fill padding field of packet
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>mpls pattern</b> ( <i>keyword</i>   <i>number</i> )
Tree	<b>pattern</b>
Range	0 to 65535
Options	sequential
Default	0
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**profile** *keyword*

Synopsis	QoS profile for the session
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>mpls profile</b> <i>keyword</i>
Tree	<b>profile</b>
Options	in, out
Default	out
Introduced	16.0.R6

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **t**tl *number*

Synopsis MPLS TTL value for the session  
 Context **configure** [oam-pm session](#) *string* [mpls ttl](#) *number*  
 Tree [ttl](#)  
 Range 1 to 255  
 Default 255  
 Introduced 16.0.R6  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **session-type** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Session type  
 Context **configure** [oam-pm session](#) *string* [session-type](#) *keyword*  
 Tree [session-type](#)  
 Options proactive, on-demand  
 Default proactive  
 Introduced 16.0.R5  
 Platforms All

### **s**treaming

Synopsis Enter the **streaming** context  
 Context **configure** [oam-pm streaming](#)  
 Tree [streaming](#)  
 Introduced 19.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**delay-template** [[delay-template-name](#)] *string*

Synopsis	Enter the <b>delay-template</b> list instance
Context	<b>configure</b> <a href="#">oam-pm streaming delay-template</a> <i>string</i>
Tree	<a href="#">delay-template</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[delay-template-name]** *string*

Synopsis	Streaming delay template name
Context	<b>configure</b> <a href="#">oam-pm streaming delay-template</a> <i>string</i>
Tree	<a href="#">delay-template</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**admin-state** *keyword*

Synopsis	Administrative state of the delay template
Context	<b>configure</b> <a href="#">oam-pm streaming delay-template</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">oam-pm streaming delay-template</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**fd-avg** [[direction](#)] *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Add a list entry for <b>fd-avg</b>
Context	<b>configure</b> <a href="#">oam-pm streaming delay-template</a> <i>string</i> <a href="#">fd-avg</a> <i>keyword</i>
Tree	<a href="#">fd-avg</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[direction]** *keyword*

Synopsis	Traffic flow direction of the OAM-PM test or metric
Context	<b>configure</b> <a href="#">oam-pm streaming delay-template</a> <i>string</i> <a href="#">fd-avg</a> <i>keyword</i>
Tree	<a href="#">fd-avg</a>
Options	forward, backward, round-trip
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ifdv-avg** [[direction](#)] *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Add a list entry for <b>ifdv-avg</b>
Context	<b>configure</b> <a href="#">oam-pm streaming delay-template</a> <i>string</i> <a href="#">ifdv-avg</a> <i>keyword</i>
Tree	<a href="#">ifdv-avg</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[direction]** *keyword*

Synopsis	Traffic flow direction of the OAM-PM test or metric
----------	---

Context	<b>configure</b> <a href="#">oam-pm streaming delay-template</a> <i>string</i> <a href="#">ifdv-avg</a> <i>keyword</i>
Tree	<a href="#">ifdv-avg</a>
Options	forward, backward, round-trip
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **sample-window** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Sample window duration for the template
Context	<b>configure</b> <a href="#">oam-pm streaming delay-template</a> <i>string</i> <a href="#">sample-window</a> <i>number</i>
Tree	<a href="#">sample-window</a>
Range	10 to 60
Units	seconds
Default	60
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **window-integrity** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Measurements for the sample window validity
Context	<b>configure</b> <a href="#">oam-pm streaming delay-template</a> <i>string</i> <a href="#">window-integrity</a> <i>number</i>
Tree	<a href="#">window-integrity</a>
Range	1 to 100
Units	percent
Default	50
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS



### 3.30 openflow commands

```

configure
- openflow
  - apply-groups reference
  - apply-groups-exclude reference
  - of-controller number
    - address string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - echo-interval number
    - echo-multiple number
    - ipv6-address string
    - role keyword
    - tls-server-profile reference
    - version keyword
  - of-switch string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - aux-channel boolean
    - controller (ipv4-address-no-zone | ipv6-address-no-zone) port number
      - apply-groups reference
      - apply-groups-exclude reference
      - ofc-loopback (ipv4-address-no-zone | ipv6-address-no-zone)
      - service-name string
      - tls-client-profile reference
    - description string
    - echo-interval number
    - echo-multiple number
    - flowtable number
      - apply-groups reference
      - apply-groups-exclude reference
      - max-size number
      - mismatch-action keyword
      - switch-defined-cookie boolean
    - logical-port-status keyword
    - ofs-id number

```

### 3.30.1 openflow command descriptions

#### openflow

Synopsis	Enter the <b>openflow</b> context
Context	<b>configure</b> <a href="#">openflow</a>
Tree	<a href="#">openflow</a>
Introduced	16.0.R4
Platforms	All

#### of-controller [[controller-id](#)] *number*

Synopsis	Enter the <b>of-controller</b> list instance
Context	<b>configure</b> <a href="#">openflow of-controller</a> <i>number</i>
Tree	<a href="#">of-controller</a>
Max. Instances	1
Introduced	16.0.R4
Platforms	VSR-NRC

#### [[controller-id](#)] *number*

Synopsis	OpenFlow controller ID
Context	<b>configure</b> <a href="#">openflow of-controller</a> <i>number</i>
Tree	<a href="#">of-controller</a>
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	VSR-NRC

#### address *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IPv4 address for the OpenFlow controller
Context	<b>configure</b> <a href="#">openflow of-controller</a> <i>number</i> <a href="#">address</a> <i>string</i>
Tree	<a href="#">address</a>
Introduced	16.0.R4
Platforms	VSR-NRC

### **admin-state** *keyword*

Synopsis	Administrative state of OpenFlow controller instance
Context	<b>configure</b> <a href="#">openflow of-controller</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	VSR-NRC

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">openflow of-controller</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	VSR-NRC

### **echo-interval** *number*

Synopsis	Interval for monitoring OpenFlow control channels
Context	<b>configure</b> <a href="#">openflow of-controller</a> <i>number</i> <a href="#">echo-interval</a> <i>number</i>
Tree	<a href="#">echo-interval</a>
Range	10 to 3600
Units	seconds
Default	10
Introduced	16.0.R4
Platforms	VSR-NRC

**echo-multiple** *number*

Synopsis	Consecutive lost messages before channel declared down
Context	<b>configure</b> <a href="#">openflow of-controller</a> <i>number</i> <a href="#">echo-multiple</a> <i>number</i>
Tree	<a href="#">echo-multiple</a>
Range	3 to 100
Default	3
Introduced	16.0.R4
Platforms	VSR-NRC

**ipv6-address** *string*

Synopsis	IPv6 address for the OpenFlow channel to the controller
Context	<b>configure</b> <a href="#">openflow of-controller</a> <i>number</i> <a href="#">ipv6-address</a> <i>string</i>
Tree	<a href="#">ipv6-address</a>
Introduced	19.10.R1
Platforms	VSR-NRC

**role** *keyword*

Synopsis	Role when multiple controllers connected to OF switch
Context	<b>configure</b> <a href="#">openflow of-controller</a> <i>number</i> <a href="#">role</a> <i>keyword</i>
Tree	<a href="#">role</a>
Options	equal
Default	equal
Introduced	16.0.R4
Platforms	VSR-NRC

**tls-server-profile** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Profile name used by the controller
Context	<b>configure</b> <a href="#">openflow of-controller</a> <i>number</i> <a href="#">tls-server-profile</a> <i>reference</i>

Tree	<a href="#">tls-server-profile</a>
Reference	<b>configure</b> <a href="#">system security tls server-tls-profile</a> <i>string</i>
Introduced	16.0.R4
Platforms	VSR-NRC

### **version** *keyword*

Synopsis	Version negotiated between OF controller and switch
Context	<b>configure</b> <a href="#">openflow of-controller</a> <i>number</i> <a href="#">version</a> <i>keyword</i>
Tree	<a href="#">version</a>
Options	version-1-3-1
Default	version-1-3-1
Introduced	16.0.R4
Platforms	VSR-NRC

### **of-switch** [[name](#)] *string*

Synopsis	Enter the <b>of-switch</b> list instance
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string</i>
Tree	<a href="#">of-switch</a>
Max. Instances	8
Introduced	16.0.R4
Platforms	All

### **[name]** *string*

Synopsis	OpenFlow switch name
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string</i>
Tree	<a href="#">of-switch</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the OpenFlow switch instance
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

**aux-channel** *boolean*

Synopsis	Enable the auxiliary connection for the H-OFS instance
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string</i> <b>aux-channel</b> <i>boolean</i>
Tree	<a href="#">aux-channel</a>
Default	false
Introduced	16.0.R4
Platforms	All

**controller** [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [port](#) *number*

Synopsis	Enter the <b>controller</b> list instance
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string</i> <b>controller</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">port</a> <i>number</i>
Tree	<a href="#">controller</a>
Max. Instances	2
Introduced	16.0.R4
Platforms	All

**[address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the OpenFlow channel to the controller
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string</i> <b>controller</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">port</a> <i>number</i>
Tree	<a href="#">controller</a>

Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **port number**

Synopsis	Controller port ID
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string controller (ipv4-address-no-zone   ipv6-address-no-zone)</i> <b>port number</b>
Tree	<a href="#">controller</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **ofc-loopback** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Loopback IP address in the VPRN
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string controller (ipv4-address-no-zone   ipv6-address-no-zone)</i> <b>port number ofc-loopback</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">ofc-loopback</a>
Introduced	16.0.R4
Platforms	All

### **service-name** *string*

Synopsis	Administrative service name
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string controller (ipv4-address-no-zone   ipv6-address-no-zone)</i> <b>port number service-name</b> <i>string</i>
Tree	<a href="#">service-name</a>
String Length	1 to 64
Introduced	16.0.R4
Platforms	All

**tls-client-profile** *reference*

Synopsis	TLS profile name for use on the control channel
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string</i> <a href="#">controller</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">port</a> <i>number</i> <b>tls-client-profile</b> <i>reference</i>
Tree	<a href="#">tls-client-profile</a>
Reference	<b>configure</b> <a href="#">system security</a> <a href="#">tls client-tls-profile</a> <i>string</i>
Introduced	16.0.R4
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 255
Introduced	16.0.R4
Platforms	All

**echo-interval** *number*

Synopsis	Interval for monitoring OpenFlow control channels
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string</i> <a href="#">echo-interval</a> <i>number</i>
Tree	<a href="#">echo-interval</a>
Range	1 to 3600
Units	seconds
Default	10
Introduced	16.0.R4
Platforms	All

**echo-multiple** *number*

Synopsis	Consecutive lost messages before channel declared down
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string</i> <a href="#">echo-multiple</a> <i>number</i>
Tree	<a href="#">echo-multiple</a>
Range	3 to 100



Default	3
Introduced	16.0.R4
Platforms	All

### **flowtable** [[table-id](#)] *number*

Synopsis	Enter the <b>flowtable</b> list instance
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string</i> <a href="#">flowtable</a> <i>number</i>
Tree	<a href="#">flowtable</a>
Max. Instances	1
Introduced	16.0.R4
Platforms	All

### **[table-id]** *number*

Synopsis	OpenFlow table ID
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string</i> <a href="#">flowtable</a> <i>number</i>
Tree	<a href="#">flowtable</a>
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **max-size** *number*

Synopsis	Maximum size of the flow table
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string</i> <a href="#">flowtable</a> <i>number</i> <a href="#">max-size</a> <i>number</i>
Tree	<a href="#">max-size</a>
Range	1 to 524288
Default	1000
Introduced	16.0.R4
Platforms	All

**mismatch-action** *keyword*

Synopsis	Action taken when no match entries found in flow table
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string</i> <a href="#">flowtable</a> <i>number</i> <b>mismatch-action</b> <i>keyword</i>
Tree	<a href="#">mismatch-action</a>
Options	drop, fall-through, packet-in
Default	fall-through
Introduced	16.0.R4
Platforms	All

**switch-defined-cookie** *boolean*

Synopsis	Enable switch-defined cookie encoding
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string</i> <a href="#">flowtable</a> <i>number</i> <b>switch-defined-cookie</b> <i>boolean</i>
Tree	<a href="#">switch-defined-cookie</a>
Default	false
Introduced	16.0.R4
Platforms	All

**logical-port-status** *keyword*

Synopsis	Logical port type for status change reporting
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string</i> <b>logical-port-status</b> <i>keyword</i>
Tree	<a href="#">logical-port-status</a>
Options	rsvp-te, mpls-tp, sr-te
Max. Instances	3
Introduced	16.0.R4
Platforms	All

**ofs-id** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	OFS switch ID
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Context	<b>configure openflow of-switch</b> <i>string ofs-id number</i>
Tree	<i>ofs-id</i>
Range	1 to 8
Introduced	16.0.R6
Platforms	All

### 3.31 policy-options commands

```

configure
- policy-options
  - apply-groups reference
  - apply-groups-exclude reference
  - as-path string
    - apply-groups reference
    - apply-groups-exclude reference
    - expression string
  - as-path-group string
    - apply-groups reference
    - apply-groups-exclude reference
    - entry number
      - apply-groups reference
      - apply-groups-exclude reference
      - expression string
  - community string
    - apply-groups reference
    - apply-groups-exclude reference
    - expression
      - apply-groups reference
      - apply-groups-exclude reference
      - exact boolean
      - expr string
    - member string
  - damping string
    - apply-groups reference
    - apply-groups-exclude reference
    - half-life number
    - max-suppress number
    - reuse number
    - suppress number
  - global-variables
    - name string
      - address (ipv4-address-no-zone | ipv6-address-no-zone)
      - apply-groups reference
      - apply-groups-exclude reference
      - decimal decimal-number
      - number number
      - value string
  - policy-statement string
    - apply-groups reference
    - apply-groups-exclude reference
    - default-action
      - action-type keyword
      - add-paths-send-limit (number | keyword)
      - admin-tag-policy (param-midstring-64 | string)
      - advertise-label keyword
      - aigp-metric
        - add (number | string)
        - set (keyword | number | string)
      - apply-groups reference
      - apply-groups-exclude reference
      - as-path
        - add (param-midstring | string)
        - replace (param-midstring | string)
      - as-path-prepend
        - as-path (number | string | keyword)
        - repeat (number | string)
      - bgp-high-priority boolean

```

configure policy-options policy-statement default-action bgp-leak

```

- bgp-leak boolean
- bgp-med
  - adjust string
  - set (keyword | number | string)
- bgp-tunnel-metric
  - prefer-aigp boolean
  - value (string | number)
- community
  - add (param-midstring-64 | string)
  - apply-groups reference
  - apply-groups-exclude reference
  - remove (param-midstring-64 | string)
  - replace (param-midstring-64 | string)
- create-mpls-tunnel boolean
- create-udp-tunnel boolean
- damping (keyword | param-midstring | string)
- dest-class number
- egress-statistics boolean
- flex-algo (string | number)
- ingress-statistics boolean
- install-backup-path boolean
- local-preference (number | string)
- metric
  - add (number | string)
  - set (number | string)
  - subtract (number | string)
- multicast-redirect
  - fwd-service string
  - ip-int-name string
- nat-policy (param-midstring | string)
- next-hop (keyword | ipv4-address-no-zone | ipv6-address-no-zone | string)
- origin (keyword | string)
- origin-validation-state (keyword | string)
- preference (number | string)
- resolve-static boolean
- route-table-install boolean
- source-class number
- sr-label-index
  - prefer-igp boolean
  - value (string | number)
- sr-maintenance-policy (param-midstring | string)
- sticky-ecmp boolean
- tag (number | string)
- type (number | string)
- description string
- entry number
- action
  - action-type keyword
  - add-paths-send-limit (number | keyword)
  - admin-tag-policy (param-midstring-64 | string)
  - advertise-label keyword
  - aigp-metric
    - add (number | string)
    - set (keyword | number | string)
  - apply-groups reference
  - apply-groups-exclude reference
  - as-path
    - add (param-midstring | string)
    - replace (param-midstring | string)
  - as-path-prepend
    - as-path (number | string | keyword)
    - repeat (number | string)
  - bgp-high-priority boolean
  - bgp-leak boolean

```

configure policy-options policy-statement entry action bgp-med

```

- bgp-med
  - adjust string
  - set (keyword | number | string)
- bgp-tunnel-metric
  - prefer-aigp boolean
  - value (string | number)
- community
  - add (param-midstring-64 | string)
  - apply-groups reference
  - apply-groups-exclude reference
  - remove (param-midstring-64 | string)
  - replace (param-midstring-64 | string)
- create-mpls-tunnel boolean
- create-udp-tunnel boolean
- damping (keyword | param-midstring | string)
- dest-class number
- egress-statistics boolean
- flex-algo (string | number)
- forwarding-class
  - fc keyword
  - priority keyword
- ingress-statistics boolean
- install-backup-path boolean
- local-preference (number | string)
- metric
  - add (number | string)
  - set (number | string)
  - subtract (number | string)
- multicast-redirect
  - fwd-service string
  - ip-int-name string
- nat-policy (param-midstring | string)
- next-hop (keyword | ipv4-address-no-zone | ipv6-address-no-zone | string)
- origin (keyword | string)
- origin-validation-state (keyword | string)
- preference (number | string)
- resolve-static boolean
- route-table-install boolean
- source-class number
- sr-label-index
  - prefer-igp boolean
  - value (string | number)
- sr-maintenance-policy (param-midstring | string)
- sticky-ecmp boolean
- tag (number | string)
- type (number | string)
- apply-groups reference
- apply-groups-exclude reference
- conditional-expression
  - apply-groups reference
  - apply-groups-exclude reference
  - route-exists string
- description string
- from
  - aggregate-contributor boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - area string
- as-path
  - group (param-midstring | string)
  - length
    - qualifier keyword
    - unique boolean
    - value (number | string)

```

configure policy-options policy-statement entry from as-path name

```

- name (param-midstring | string)
- cluster-id
- ip-address string
- none-cluster-list boolean
- color number
- community
- count
  - qualifier keyword
  - type keyword
  - value (number | string)
- expression string
- name (param-midstring-64 | string)
- distinguisher number
- endpoint (ipv4-address-no-zone | ipv6-address-no-zone)
- evpn-type keyword
- external boolean
- family keyword
- flowspec
  - dest (param-midstring | string)
  - source (param-midstring | string)
- group-address (param-midstring | string)
- host-ip (param-midstring | string)
- interface (named-item | interface-name | interface-name | interface-name)
- interface-subnets
  - ip-int-name string
  - service string
- level number
- local-preference
  - qualifier keyword
  - value (number | string)
- metric
  - qualifier keyword
  - value (number | string)
- mvpn-type keyword
- neighbor
  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-
with-zone | ipv6-address-with-zone)
  - prefix-list (param-midstring | string)
- next-hop
  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - prefix-list (param-midstring | string)
- origin keyword
- origin-validation-state keyword
- ospf-type number
- path-type keyword
- policy (string | string)
- policy-variables
  - name string
  - address (ipv4-address-no-zone | ipv6-address-no-zone)
  - apply-groups reference
  - apply-groups-exclude reference
  - decimal decimal-number
  - number number
  - value string
- prefix-list (param-midstring | string)
- protocol
  - instance (keyword | number)
  - name keyword
- source-address
  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - prefix-list (param-midstring | string)
- state keyword
- tag (number | keyword)
- to

```

configure policy-options policy-statement entry to apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- level number
- neighbor
  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-
with-zone | ipv6-address-with-zone)
  - prefix-list (param-midstring | string)
- prefix-list (param-midstring | string)
- protocol
  - instance (keyword | number)
  - name keyword
- entry-type keyword
- named-entry string
- action
  - action-type keyword
  - add-paths-send-limit (number | keyword)
  - admin-tag-policy (param-midstring-64 | string)
  - advertise-label keyword
  - aigp-metric
    - add (number | string)
    - set (keyword | number | string)
  - apply-groups reference
  - apply-groups-exclude reference
  - as-path
    - add (param-midstring | string)
    - replace (param-midstring | string)
  - as-path-prepend
    - as-path (number | string | keyword)
    - repeat (number | string)
  - bgp-high-priority boolean
  - bgp-leak boolean
  - bgp-med
    - adjust string
    - set (keyword | number | string)
  - bgp-tunnel-metric
    - prefer-aigp boolean
    - value (string | number)
  - community
    - add (param-midstring-64 | string)
    - apply-groups reference
    - apply-groups-exclude reference
    - remove (param-midstring-64 | string)
    - replace (param-midstring-64 | string)
  - create-mpls-tunnel boolean
  - create-udp-tunnel boolean
  - damping (keyword | param-midstring | string)
  - dest-class number
  - egress-statistics boolean
  - flex-algo (string | number)
  - forwarding-class
    - fc keyword
    - priority keyword
  - ingress-statistics boolean
  - install-backup-path boolean
  - local-preference (number | string)
  - metric
    - add (number | string)
    - set (number | string)
    - subtract (number | string)
  - multicast-redirection
    - fwd-service string
    - ip-int-name string
  - nat-policy (param-midstring | string)
  - next-hop (keyword | ipv4-address-no-zone | ipv6-address-no-zone | string)

```



configure policy-options policy-statement named-entry action origin

```

- origin (keyword | string)
- origin-validation-state (keyword | string)
- preference (number | string)
- resolve-static boolean
- route-table-install boolean
- source-class number
- sr-label-index
  - prefer-igp boolean
  - value (string | number)
- sr-maintenance-policy (param-midstring | string)
- sticky-ecmp boolean
- tag (number | string)
- type (number | string)
- apply-groups reference
- apply-groups-exclude reference
- conditional-expression
  - apply-groups reference
  - apply-groups-exclude reference
  - route-exists string
- description string
- from
  - aggregate-contributor boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - area string
  - as-path
    - group (param-midstring | string)
    - length
      - qualifier keyword
      - unique boolean
      - value (number | string)
    - name (param-midstring | string)
  - cluster-id
    - ip-address string
    - none-cluster-list boolean
  - color number
  - community
    - count
      - qualifier keyword
      - type keyword
      - value (number | string)
    - expression string
    - name (param-midstring-64 | string)
  - distinguisher number
  - endpoint (ipv4-address-no-zone | ipv6-address-no-zone)
  - evpn-type keyword
  - external boolean
  - family keyword
  - flowspec
    - dest (param-midstring | string)
    - source (param-midstring | string)
  - group-address (param-midstring | string)
  - host-ip (param-midstring | string)
  - interface (named-item | interface-name | interface-name | interface-name)
  - interface-subnets
    - ip-int-name string
    - service string
  - level number
  - local-preference
    - qualifier keyword
    - value (number | string)
  - metric
    - qualifier keyword
    - value (number | string)

```

configure policy-options policy-statement named-entry from mvpn-type

```

- mvpn-type keyword
- neighbor
  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-
with-zone | ipv6-address-with-zone)
  - prefix-list (param-midstring | string)
- next-hop
  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - prefix-list (param-midstring | string)
- origin keyword
- origin-validation-state keyword
- ospf-type number
- path-type keyword
- policy (string | string)
- policy-variables
  - name string
  - address (ipv4-address-no-zone | ipv6-address-no-zone)
  - apply-groups reference
  - apply-groups-exclude reference
  - decimal decimal-number
  - number number
  - value string
- prefix-list (param-midstring | string)
- protocol
  - instance (keyword | number)
  - name keyword
- source-address
  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - prefix-list (param-midstring | string)
- state keyword
- tag (number | keyword)
- to
  - apply-groups reference
  - apply-groups-exclude reference
  - level number
  - neighbor
  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-
with-zone | ipv6-address-with-zone)
  - prefix-list (param-midstring | string)
  - prefix-list (param-midstring | string)
  - protocol
  - instance (keyword | number)
  - name keyword
- prefix-list string
  - apply-groups reference
  - apply-groups-exclude reference
  - prefix (ipv4-prefix | ipv6-prefix) type keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - end-length number
  - mask-pattern (ipv4-address-no-zone | ipv6-address-no-zone)
  - start-length number
  - through-length number
  - to-prefix (ipv4-prefix | ipv6-prefix)

```

### 3.31.1 policy-options command descriptions

#### policy-options

Synopsis	Enter the <b>policy-options</b> context
Context	<b>configure</b> <a href="#">policy-options</a>
Tree	<a href="#">policy-options</a>
Introduced	16.0.R1
Platforms	All

#### as-path [[name](#)] *string*

Synopsis	Enter the <b>as-path</b> list instance
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">as-path</a> <i>string</i>
Tree	<a href="#">as-path</a>
Introduced	16.0.R1
Platforms	All

#### [\[name\]](#) *string*

Synopsis	AS path name
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">as-path</a> <i>string</i>
Tree	<a href="#">as-path</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

#### expression *string*

Synopsis	Regular expression string
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">as-path</a> <i>string</i> <a href="#">expression</a> <i>string</i>
Tree	<a href="#">expression</a>
String Length	1 to 255
Introduced	16.0.R1

Platforms All

### **as-path-group** [[name](#)] *string*

Synopsis Enter the **as-path-group** list instance  
Context **configure** [policy-options as-path-group](#) *string*  
Tree [as-path-group](#)  
Introduced 16.0.R1  
Platforms All

### **[name]** *string*

Synopsis AS path group name  
Context **configure** [policy-options as-path-group](#) *string*  
Tree [as-path-group](#)  
String Length 1 to 32  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms All

### **entry** [[entry](#)] *number*

Synopsis Enter the **entry** list instance  
Context **configure** [policy-options as-path-group](#) *string entry number*  
Tree [entry](#)  
Introduced 16.0.R1  
Platforms All

### **[entry]** *number*

Synopsis AS path entry ID  
Context **configure** [policy-options as-path-group](#) *string entry number*  
Tree [entry](#)  
Range 1 to 128  
Notes This element is part of a list key.

Introduced 16.0.R1  
 Platforms All

### **expression** *string*

Synopsis Regular expression string  
 Context **configure** [policy-options](#) [as-path-group](#) *string* [entry](#) *number* [expression](#) *string*  
 Tree [expression](#)  
 String Length 1 to 255  
 Notes This element is mandatory.  
 Introduced 16.0.R1  
 Platforms All

### **community** [[name](#)] *string*

Synopsis Enter the **community** list instance  
 Context **configure** [policy-options](#) [community](#) *string*  
 Tree [community](#)  
 Introduced 16.0.R1  
 Platforms All

### **[name]** *string*

Synopsis Community name  
 Context **configure** [policy-options](#) [community](#) *string*  
 Tree [community](#)  
 Description This command configures a route policy community name.  
 String values must be composed of printable, 7-bit ASCII characters. If the string contains special characters (<#>, [\\$](#), spaces, and so on), the entire string must be enclosed within double quotes.  
 String Length 1 to 64  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

## expression

Synopsis	Enable the <b>expression</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">community</a> <i>string</i> <b>expression</b>
Tree	<a href="#">expression</a>
Introduced	16.0.R1
Platforms	All

## exact *boolean*

Synopsis	Match exactly for the specified expression
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">community</a> <i>string</i> <b>expression</b> <b>exact</b> <i>boolean</i>
Tree	<a href="#">exact</a>
Default	false
Introduced	16.0.R1
Platforms	All

## expr *string*

Synopsis	Community expression value
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">community</a> <i>string</i> <b>expression</b> <b>expr</b> <i>string</i>
Tree	<a href="#">expr</a>
String Length	1 to 900
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## member [[member](#)] *string*

Synopsis	Add a list entry for <b>member</b>
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">community</a> <i>string</i> <b>member</b> <i>string</i>
Tree	<a href="#">member</a>
Introduced	16.0.R1
Platforms	All

**[member]** *string*

Synopsis	Community member value
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">community</a> <i>string</i> <a href="#">member</a> <i>string</i>
Tree	<a href="#">member</a>
String Length	1 to 72
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**damping** [[name](#)] *string*

Synopsis	Enter the <b>damping</b> list instance
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">damping</a> <i>string</i>
Tree	<a href="#">damping</a>
Introduced	16.0.R1
Platforms	All

**[name]** *string*

Synopsis	Damping profile name
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">damping</a> <i>string</i>
Tree	<a href="#">damping</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**half-life** *number*

Synopsis	Time after the FOM value is halved
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">damping</a> <i>string</i> <a href="#">half-life</a> <i>number</i>
Tree	<a href="#">half-life</a>
Range	1 to 45
Units	minutes
Introduced	16.0.R1

Platforms All

### **max-suppress** *number*

Synopsis Maximum time for a route to remain suppressed  
Context **configure** [policy-options](#) [damping](#) *string max-suppress number*  
Tree [max-suppress](#)  
Range 1 to 720  
Units minutes  
Introduced 16.0.R1  
Platforms All

### **reuse** *number*

Synopsis Value below which a suppressed route can be used again  
Context **configure** [policy-options](#) [damping](#) *string reuse number*  
Tree [reuse](#)  
Range 1 to 20000  
Introduced 16.0.R1  
Platforms All

### **suppress** *number*

Synopsis Value above which a route is suppressed  
Context **configure** [policy-options](#) [damping](#) *string suppress number*  
Tree [suppress](#)  
Range 1 to 20000  
Introduced 16.0.R1  
Platforms All

### **global-variables**

Synopsis Enter the **global-variables** context  
Context **configure** [policy-options](#) [global-variables](#)  
Tree [global-variables](#)



Introduced 16.0.R4  
Platforms All

### **name** [[variable-name](#)] *string*

Synopsis Enter the **name** list instance  
Context **configure** [policy-options](#) [global-variables](#) [name](#) *string*  
Tree [name](#)  
Max. Instances 1000  
Introduced 16.0.R4  
Platforms All

### **[variable-name]** *string*

Synopsis Global variable name used to reference policy functions  
Context **configure** [policy-options](#) [global-variables](#) [name](#) *string*  
Tree [name](#)  
String Length 1 to 32  
Notes This element is part of a list key.  
Introduced 16.0.R4  
Platforms All

### **address** ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#))

Synopsis IP address of the policy variable  
Context **configure** [policy-options](#) [global-variables](#) [name](#) *string* [address](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#))  
Tree [address](#)  
Notes The following elements are part of a mandatory choice: **address**, **decimal**, **number**, or **value**.  
Introduced 16.0.R4  
Platforms All

**decimal** *decimal-number*

Synopsis	Attribute decimal to which variable name is resolved
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">global-variables</a> <a href="#">name</a> <i>string</i> <a href="#">decimal</a> <i>decimal-number</i>
Tree	<a href="#">decimal</a>
Range	0.000 to 4294967295.000
Notes	The following elements are part of a mandatory choice: <b>address</b> , <b>decimal</b> , <b>number</b> , or <b>value</b> .
Introduced	19.7.R1
Platforms	All

**number** *number*

Synopsis	Numerical value of the policy variable
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">global-variables</a> <a href="#">name</a> <i>string</i> <a href="#">number</a> <i>number</i>
Tree	<a href="#">number</a>
Range	0 to 4294967295
Notes	The following elements are part of a mandatory choice: <b>address</b> , <b>decimal</b> , <b>number</b> , or <b>value</b> .
Introduced	16.0.R4
Platforms	All

**value** *string*

Synopsis	Policy variable value
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">global-variables</a> <a href="#">name</a> <i>string</i> <a href="#">value</a> <i>string</i>
Tree	<a href="#">value</a>
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: <b>address</b> , <b>decimal</b> , <b>number</b> , or <b>value</b> .
Introduced	16.0.R4
Platforms	All

**policy-statement** [[name](#)] *string*

Synopsis	Enter the <b>policy-statement</b> list instance
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Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Tree	<a href="#">policy-statement</a>
Max. Instances	65535
Introduced	16.0.R1
Platforms	All

**[name]** *string*

Synopsis	Route policy statement name
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Tree	<a href="#">policy-statement</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**default-action**

Synopsis	Enable the <b>default-action</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <b>default-action</b>
Tree	<a href="#">default-action</a>
Introduced	16.0.R1
Platforms	All

**action-type** *keyword*

Synopsis	Action type for routes matching the route policy entry
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <b>default-action</b> <a href="#">action-type</a> <i>keyword</i>
Tree	<a href="#">action-type</a>
Options	accept, reject, next-entry, next-policy
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**add-paths-send-limit** (*number* | *keyword*)

Synopsis	BGP Add-Paths send limit applied for routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">add-paths-send-limit</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">add-paths-send-limit</a>
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

**admin-tag-policy** (*param-midstring-64* | *string*)

Synopsis	Administrative tag policy name
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">admin-tag-policy</a> ( <i>param-midstring-64</i>   <i>string</i> )
Tree	<a href="#">admin-tag-policy</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

**advertise-label** *keyword*

Synopsis	Label allocation for matched BGP routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">advertise-label</a> <i>keyword</i>
Tree	<a href="#">advertise-label</a>
Description	This command configures the label allocation method for advertised routes. The effect of this command depends on the context where the associated policy is applied.
Options	per-prefix, pop, pop-and-forward
Introduced	16.0.R1
Platforms	All

**aigp-metric**

Synopsis	Enter the <b>aigp-metric</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">aigp-metric</a>

Tree	<a href="#">aigp-metric</a>
Introduced	16.0.R1
Platforms	All

**add** (*number* | *string*)

Synopsis	AIGP metric to add
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">aigp-metric</a> <b>add</b> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">add</a>
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: <b>add</b> or <b>set</b> .
Introduced	16.0.R1
Platforms	All

**set** (*keyword* | *number* | *string*)

Synopsis	AIGP metric
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">aigp-metric</a> <b>set</b> ( <i>keyword</i>   <i>number</i>   <i>string</i> )
Tree	<a href="#">set</a>
String Length	1 to 32
Range	0 to 4294967295
Options	igp
Notes	The following elements are part of a choice: <b>add</b> or <b>set</b> .
Introduced	16.0.R1
Platforms	All

**as-path**

Synopsis	Enter the <b>as-path</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <b>as-path</b>
Tree	<a href="#">as-path</a>
Introduced	16.0.R1

Platforms All

### **add** (*param-midstring* | *string*)

Synopsis AS path to add

Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [as-path](#) **add** (*param-midstring* | *string*)

Tree [add](#)

String Length 1 to 32

Notes The following elements are part of a choice: **add** or **replace**.

Introduced 16.0.R1

Platforms All

### **replace** (*param-midstring* | *string*)

Synopsis AS path to replace

Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [as-path](#) **replace** (*param-midstring* | *string*)

Tree [replace](#)

String Length 1 to 32

Notes The following elements are part of a choice: **add** or **replace**.

Introduced 16.0.R1

Platforms All

### **as-path-prepend**

Synopsis Enter the **as-path-prepend** context

Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [as-path-prepend](#)

Tree [as-path-prepend](#)

Introduced 16.0.R1

Platforms All

### **as-path** (*number* | *string* | *keyword*)

Synopsis AS number to prepend to the AS path attribute

Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">as-path-prepend</a> <a href="#">as-path</a> ( <i>number</i>   <i>string</i>   <i>keyword</i> )
Tree	<a href="#">as-path</a>
String Length	1 to 32
Range	1 to 4294967295
Options	most-recent
Introduced	16.0.R1
Platforms	All

### **repeat** (*number* | *string*)

Synopsis	Number of times to prepend the specified AS number
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">as-path-prepend</a> <a href="#">repeat</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">repeat</a>
String Length	1 to 32
Range	1 to 50
Default	1
Introduced	16.0.R1
Platforms	All

### **bgp-high-priority** *boolean*

Synopsis	Tag routes as high priority for fast table updates
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">bgp-high-priority</a> <i>boolean</i>
Tree	<a href="#">bgp-high-priority</a>
Description	<p>When configured to <b>true</b>, eligible BGP routes matched by the policy entry or policy default-action are tagged as needing faster route table updates.</p> <p>This action applies only when the policy is applied as a BGP import policy to a base router BGP peer or VPRN BGP peer and applies only to the following route types:</p> <ul style="list-style-type: none"> <li>• IPv4</li> <li>• label-IPv4</li> <li>• IPv6</li> <li>• label-IPv6</li> </ul> <p>This command is useful when the BGP RIB contains a large number of routes and quick routing table updates are needed for a small subset of these routes. The effectiveness of this command decreases as the subset becomes a larger proportion of the total RIB.</p>

When configured to **false**, no routes are tagged for faster route table updates.

Default	false
Introduced	20.5.R1
Platforms	All

### **bgp-leak** *boolean*

Synopsis	Allow leaking for BGP routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">bgp-leak</a> <i>boolean</i>
Tree	<a href="#">bgp-leak</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **bgp-med**

Synopsis	Enter the <b>bgp-med</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">bgp-med</a>
Tree	<a href="#">bgp-med</a>
Introduced	19.7.R1
Platforms	All

### **adjust** *string*

Synopsis	BGP-MED adjustment
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">bgp-med</a> <a href="#">adjust</a> <i>string</i>
Tree	<a href="#">adjust</a>
String Length	1 to 64
Notes	The following elements are part of a choice: <b>adjust</b> or <b>set</b> .
Introduced	19.7.R1
Platforms	All

### **set** (*keyword* | *number* | *string*)

Synopsis	BGP-MED assignment
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Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">bgp-med</a> <a href="#">set</a> ( <i>keyword</i>   <i>number</i>   <i>string</i> )
Tree	<a href="#">set</a>
String Length	1 to 32
Range	0 to 4294967295
Options	igp, min-igp
Notes	The following elements are part of a choice: <b>adjust</b> or <b>set</b> .
Introduced	19.7.R1
Platforms	All

### bgp-tunnel-metric

Synopsis	Enter the <b>bgp-tunnel-metric</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">bgp-tunnel-metric</a>
Tree	<a href="#">bgp-tunnel-metric</a>
Description	Commands in this context configure the tunnel-table metrics associated with BGP label unicast routes that pass through to the default action of the policy.
Introduced	20.5.R1
Platforms	All

### prefer-aigp *boolean*

Synopsis	Use AIGP attribute as tunnel metric when present
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">bgp-tunnel-metric</a> <a href="#">prefer-aigp</a> <i>boolean</i>
Tree	<a href="#">prefer-aigp</a>
Description	<p>When configured to <b>true</b>, and a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy. The TTM metric of the tunnel is set to the AIGP metric value of the BGP-LU route plus the IGP cost to reach the BGP next-hop if it has the AIGP path attribute, otherwise it is set to the value implied by the value leaf.</p> <p>When configured to <b>false</b>, the AIGP attribute is removed from the advertised routes and is ignored if present in the received routes.</p>
Default	false
Introduced	20.5.R1
Platforms	All

**value** (*string* | *number*)

Synopsis	BGP tunnel table metric value
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">bgp-tunnel-metric</a> <i>value</i> ( <i>string</i>   <i>number</i> )
Tree	<a href="#">value</a>
Description	<p>This command configures a BGP tunnel metric is assigned to routes that do not match any entry.</p> <p>If a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy, the TTM metric of the associated tunnel is set to this value (or the value associated with the parameter name) if either:</p> <ul style="list-style-type: none"> <li>the prefer-aigp option is set to false</li> <li>the prefer-aigp option is set to true but the BGP-LU route does not have an AIGP attribute</li> </ul>
String Length	1 to 32
Range	0 to 4294967295
Introduced	20.5.R1
Platforms	All

**community**

Synopsis	Enter the <b>community</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">community</a>
Tree	<a href="#">community</a>
Introduced	16.0.R1
Platforms	All

**add** (*param-midstring-64* | *string*)

Synopsis	List of community names to add
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">community</a> <b>add</b> ( <i>param-midstring-64</i>   <i>string</i> )
Tree	<a href="#">add</a>
String Length	1 to 64
Max. Instances	28
Notes	<p>The following elements are part of a choice: (<b>add</b> and <b>remove</b>) or <b>replace</b>.</p> <p>This element is ordered by the user.</p>

Introduced 16.0.R1  
 Platforms All

### **remove** (*param-midstring-64* | *string*)

Synopsis List of community names to remove  
 Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [community](#) [remove](#) (*param-midstring-64* | *string*)  
 Tree [remove](#)  
 String Length 1 to 64  
 Max. Instances 28  
 Notes The following elements are part of a choice: (**add** and **remove**) or **replace**.  
 This element is ordered by the user.  
 Introduced 16.0.R1  
 Platforms All

### **replace** (*param-midstring-64* | *string*)

Synopsis List of community names to replace  
 Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [community](#) [replace](#) (*param-midstring-64* | *string*)  
 Tree [replace](#)  
 String Length 1 to 64  
 Max. Instances 28  
 Notes The following elements are part of a choice: (**add** and **remove**) or **replace**.  
 This element is ordered by the user.  
 Introduced 16.0.R1  
 Platforms All

### **create-mpls-tunnel** *boolean*

Synopsis Create an MPLS tunnel  
 Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [create-mpls-tunnel](#) *boolean*

Tree	<a href="#">create-mpls-tunnel</a>
Description	When configured to <b>true</b> , the router creates an MPLS tunnel. This command is supported for only the following address families: <ul style="list-style-type: none"> <li>• evpn</li> <li>• ipv4</li> <li>• ipv6</li> <li>• label-ipv4</li> <li>• label-ipv6</li> <li>• vpn-ipv4</li> <li>• vpn-ipv6</li> </ul>
Default	false
Introduced	21.10.R1
Platforms	All

### **create-udp-tunnel** *boolean*

Synopsis	Create an MPLS-over-UDP tunnel
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">create-udp-tunnel</a> <i>boolean</i>
Tree	<a href="#">create-udp-tunnel</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **damping** (*keyword* | *param-midstring* | *string*)

Synopsis	Damping profile used for routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">damping</a> ( <i>keyword</i>   <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">damping</a>
String Length	1 to 32
Options	none
Introduced	16.0.R1
Platforms	All

**dest-class** *number*

Synopsis	Default destination class for the policy statement
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">dest-class</a> <i>number</i>
Tree	<a href="#">dest-class</a>
Description	This command specifies the policy accounting destination class index to associate with matched routes.
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**egress-statistics** *boolean*

Synopsis	Enable egress statistics for BGP-LU routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">egress-statistics</a> <i>boolean</i>
Tree	<a href="#">egress-statistics</a>
Description	When configured to <b>true</b> , this command enables the allocation of statistical indexes to BGP labeled unicast route entries that are programmed on egress data paths.  When configured to <b>false</b> , this command disables the allocation of statistical indexes to BGP-LU route entries.
Default	false
Introduced	20.10.R1
Platforms	All

**flex-algo** (*string* | *number*)

Synopsis	Flexible algorithm for BGP next-hop autobind operation
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">flex-algo</a> ( <i>string</i>   <i>number</i> )
Tree	<a href="#">flex-algo</a>
Description	This command configures the Flex-Algorithm for use in the BGP next-hop automatic bind operation in a BGP import policy. A Flex-Algorithm aware autobind of the BGP next-hop is enabled when the route is matched by the policy statement entry.  Flex-Algorithm aware next-hop lookup is supported for unicast BGP, VPRN, and BGP-LU.  This command is not supported for multicast address families.
String Length	1 to 32
Range	128 to 255

Introduced	20.10.R1
Platforms	All

### **ingress-statistics** *boolean*

Synopsis	Enable ingress statistics for BGP-LU routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">ingress-statistics</a> <i>boolean</i>
Tree	<a href="#">ingress-statistics</a>
Description	When configured to <b>true</b> , this command enables the allocation of statistical indexes to BGP labeled unicast route entries that are programmed on ingress data paths. For effective operation, a prefix must be advertised with a label per prefix for ILM statistics.  When configured to <b>false</b> , this command disables the allocation of statistical indexes to BGP-LU route entries.
Default	false
Introduced	20.10.R1
Platforms	All

### **install-backup-path** *boolean*

Synopsis	Install a preprogrammed backup path for the prefix
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">install-backup-path</a> <i>boolean</i>
Tree	<a href="#">install-backup-path</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **local-preference** (*number* | *string*)

Synopsis	BGP local preference for routes not matching any entry
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">local-preference</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">local-preference</a>
String Length	1 to 32
Range	0 to 4294967295
Introduced	16.0.R1

Platforms All

## metric

Synopsis Enter the **metric** context  
 Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [metric](#)  
 Tree [metric](#)  
 Introduced 16.0.R1  
 Platforms All

## add (*number* | *string*)

Synopsis Metric to add  
 Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [metric](#) [add](#) (*number* | *string*)  
 Tree [add](#)  
 String Length 1 to 32  
 Range 0 to 4294967295  
 Notes The following elements are part of a choice: **add**, **set**, or **subtract**.  
 Introduced 16.0.R1  
 Platforms All

## set (*number* | *string*)

Synopsis Metric to assign  
 Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [metric](#) [set](#) (*number* | *string*)  
 Tree [set](#)  
 String Length 1 to 32  
 Range 0 to 4294967295  
 Notes The following elements are part of a choice: **add**, **set**, or **subtract**.  
 Introduced 16.0.R1  
 Platforms All

**subtract** (*number* | *string*)

Synopsis	Metric to subtract
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">metric</a> <b>subtract</b> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">subtract</a>
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: <b>add</b> , <b>set</b> , or <b>subtract</b> .
Introduced	16.0.R1
Platforms	All

**multicast-redirect**

Synopsis	Enter the <b>multicast-redirect</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">multicast-redirect</a>
Tree	<a href="#">multicast-redirect</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**fwd-service** *string*

Synopsis	Service ID for multicast redirection
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">multicast-redirect</a> <a href="#">fwd-service</a> <i>string</i>
Tree	<a href="#">fwd-service</a>
Default	Base
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ip-int-name** *string*

Synopsis	Alternate interface where IGMP messages are redirected
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">multicast-redirect</a> <a href="#">ip-int-name</a> <i>string</i>
Tree	<a href="#">ip-int-name</a>
String Length	1 to 32



Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **nat-policy** (*param-midstring* | *string*)

Synopsis	BGP-VPN imported route and a NAT policy association
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">nat-policy</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">nat-policy</a>
Description	<p>This command assigns a NAT policy to the matched routes that do not have a more specific NAT policy configured under action.</p> <p>A dynamic route obtained by BGP-VPN can be imported into an inside (private side) routing context in NAT environment. This route must be associated with a NAT policy that maps traffic into a NAT pool and outside routing context. If the NAT policy is not specified within the route policy entry, the imported NAT route is, by default, associated with the default NAT policy defined in the NAT inside routing context.</p> <p>All BGP-VPN routes that are destined to be imported into the NAT inside routing context must have action-type <b>accept</b> regardless of whether the NAT policy is configured in the action.</p>
String Length	1 to 32
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **next-hop** (*keyword* | *ipv4-address-no-zone* | *ipv6-address-no-zone* | *string*)

Synopsis	Next-hop IP address applied to routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">next-hop</a> ( <i>keyword</i>   <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>   <i>string</i> )
Tree	<a href="#">next-hop</a>
String Length	1 to 32
Options	peer-address, self
Introduced	16.0.R1
Platforms	All

### **origin** (*keyword* | *string*)

Synopsis	BGP origin for routes that are exported into BGP
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">origin</a> ( <i>keyword</i>   <i>string</i> )

Tree	<a href="#">origin</a>
String Length	1 to 32
Options	igp, egp, incomplete
Introduced	16.0.R1
Platforms	All

### **origin-validation-state** (*keyword | string*)

Synopsis	Origin validation state for routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">origin-validation-state</a> ( <i>keyword   string</i> )
Tree	<a href="#">origin-validation-state</a>
String Length	1 to 32
Options	valid, not-found, invalid
Introduced	16.0.R1
Platforms	All

### **preference** (*number | string*)

Synopsis	Route preference applied to routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">preference</a> ( <i>number   string</i> )
Tree	<a href="#">preference</a>
String Length	1 to 32
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **resolve-static** *boolean*

Synopsis	Resolve next hop of a static route for the BGP next hop
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">resolve-static</a> <i>boolean</i>
Tree	<a href="#">resolve-static</a>
Default	false
Introduced	16.0.R1

Platforms All

### **route-table-install** *boolean*

Synopsis Allow BGP route installation in the route table

Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [route-table-install](#) *boolean*

Tree [route-table-install](#)

Default true

Introduced 19.10.R1

Platforms All

### **source-class** *number*

Synopsis Default source class for the policy statement

Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [source-class](#) *number*

Tree [source-class](#)

Description This command specifies the policy accounting source class index to associate with matched routes.

Range 1 to 255

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **sr-label-index**

Synopsis Enter the **sr-label-index** context

Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [sr-label-index](#)

Tree [sr-label-index](#)

Description Commands in this context configure the policy action to associate a BGP segment-routing label index value with all /32 BGP labeled IPv4 routes.

The use of this action in a policy entry that matches more than one /32 labeled IPv4 route may create SID conflicts.

This action only takes effect in BGP peer import policies (and only on received /32 labeled IPv4 routes) and in route table import policies associated with the labeled IPv4 RIB.

When this action occurs in a policy applied as a peer import policy, a prefix SID attribute can be added to a received /32 labeled IPv4 route that was not sent with this attribute, or the received prefix SID attribute can be replaced with a new one.

Introduced	19.10.R1
Platforms	All

### **prefer-igp** *boolean*

Synopsis	Use the SR label index from the IGP route when present
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">sr-label-index</a> <a href="#">prefer-igp</a> <i>boolean</i>
Tree	<a href="#">prefer-igp</a>
Description	<p>When configured to <b>true</b>, BGP obtains the SID index from the IGP route (if a SID index is present) and the <b>configure router bgp segment-routing prefix-sid-range global</b> command is set to <b>true</b>.</p> <p>This command applies only to route table import policies.</p> <p>When configured to <b>false</b>, or the SID index is not present in the IGP route, or the <b>configure router bgp segment-routing prefix-sid-range global</b> command is not set to <b>true</b>, BGP obtains the label index value from the <b>value</b> command.</p>
Default	false
Introduced	19.10.R1
Platforms	All

### **value** (*string* | *number*)

Synopsis	BGP SR label index associated with routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">sr-label-index</a> <a href="#">value</a> ( <i>string</i>   <i>number</i> )
Tree	<a href="#">value</a>
Description	<p>This command specifies the BGP SR label index value to be associated with a route or routes.</p> <p>If this command specifies an index value that causes a SID conflict with another BGP route, all conflicting BGP routes are re-advertised with label values based on dynamic allocation rather than SID-based allocation.</p> <p>If this command specifies an index value that causes a SID conflict with an IGP route, the BGP route is re-advertised with a label value based on dynamic allocation rather than SID-based allocation.</p>
String Length	1 to 32
Range	0 to 524287
Introduced	19.10.R1
Platforms	All

**sr-maintenance-policy** (*param-midstring* | *string*)

Synopsis	SR maintenance policy as an action
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">sr-maintenance-policy</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">sr-maintenance-policy</a>
Description	This command applies a named segment routing maintenance policy as an action for route policies. It is only used for SR policy routes.
String Length	1 to 32
Introduced	20.10.R1
Platforms	All

**sticky-ecmp** *boolean*

Synopsis	Specify the sticky ECMP flag for BGP ECMP routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">sticky-ecmp</a> <i>boolean</i>
Tree	<a href="#">sticky-ecmp</a>
Default	false
Introduced	16.0.R1
Platforms	All

**tag** (*number* | *string*)

Synopsis	OSPF RIP or IS-IS tag applied to routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">tag</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">tag</a>
String Length	1 to 32
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

**type** (*number* | *string*)

Synopsis	OSPF metric type applied to routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">type</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">type</a>

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String Length	1 to 32
Range	1 to 2
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [[entry-id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[entry-id]** *number*

Synopsis	Entry ID for a route policy entry
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**action**

Synopsis	Enable the <b>action</b> context
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Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a>
Tree	<a href="#">action</a>
Introduced	16.0.R1
Platforms	All

### **action-type** *keyword*

Synopsis	Action type for routes matching the route policy entry
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">action-type</a> <i>keyword</i>
Tree	<a href="#">action-type</a>
Options	accept, reject, next-entry, next-policy
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **add-paths-send-limit** (*number* | *keyword*)

Synopsis	BGP Add-Paths send limit applied for routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">add-paths-send-limit</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">add-paths-send-limit</a>
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

### **admin-tag-policy** (*param-midstring-64* | *string*)

Synopsis	Administrative tag policy name
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">admin-tag-policy</a> ( <i>param-midstring-64</i>   <i>string</i> )
Tree	<a href="#">admin-tag-policy</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

**advertise-label** *keyword*

Synopsis	Label allocation for matched BGP routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">advertise-label</a> <i>keyword</i>
Tree	<a href="#">advertise-label</a>
Description	This command configures the label allocation method for advertised routes. The effect of this command depends on the context where the associated policy is applied.
Options	per-prefix, pop, pop-and-forward
Introduced	16.0.R1
Platforms	All

**aigp-metric**

Synopsis	Enter the <b>aigp-metric</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">aigp-metric</a>
Tree	<a href="#">aigp-metric</a>
Introduced	16.0.R1
Platforms	All

**add** (*number* | *string*)

Synopsis	AIGP metric to add
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">aigp-metric</a> <a href="#">add</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">add</a>
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: <b>add</b> or <b>set</b> .
Introduced	16.0.R1
Platforms	All

**set** (*keyword* | *number* | *string*)

Synopsis	AIGP metric
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Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">aigp-metric</a> <a href="#">set</a> ( <i>keyword</i>   <i>number</i>   <i>string</i> )
Tree	<a href="#">set</a>
String Length	1 to 32
Range	0 to 4294967295
Options	igp
Notes	The following elements are part of a choice: <b>add</b> or <b>set</b> .
Introduced	16.0.R1
Platforms	All

### as-path

Synopsis	Enter the <b>as-path</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">as-path</a>
Tree	<a href="#">as-path</a>
Introduced	16.0.R1
Platforms	All

### add (*param-midstring* | *string*)

Synopsis	AS path to add
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">as-path</a> <a href="#">add</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">add</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>add</b> or <b>replace</b> .
Introduced	16.0.R1
Platforms	All

### replace (*param-midstring* | *string*)

Synopsis	AS path to replace
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">as-path</a> <a href="#">replace</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">replace</a>
String Length	1 to 32

Notes	The following elements are part of a choice: <b>add</b> or <b>replace</b> .
Introduced	16.0.R1
Platforms	All

## as-path-prepend

Synopsis	Enter the <b>as-path-prepend</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">as-path-prepend</a>
Tree	<a href="#">as-path-prepend</a>
Introduced	16.0.R1
Platforms	All

## as-path (*number* | *string* | *keyword*)

Synopsis	AS number to prepend to the AS path attribute
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">as-path-prepend</a> <a href="#">as-path</a> ( <i>number</i>   <i>string</i>   <i>keyword</i> )
Tree	<a href="#">as-path</a>
String Length	1 to 32
Range	1 to 4294967295
Options	most-recent
Introduced	16.0.R1
Platforms	All

## repeat (*number* | *string*)

Synopsis	Number of times to prepend the specified AS number
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">as-path-prepend</a> <a href="#">repeat</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">repeat</a>
String Length	1 to 32
Range	1 to 50
Default	1
Introduced	16.0.R1
Platforms	All

**bgp-high-priority** *boolean*

Synopsis	Tag routes as high priority for fast table updates
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">bgp-high-priority</a> <i>boolean</i>
Tree	<a href="#">bgp-high-priority</a>
Description	<p>When configured to <b>true</b>, eligible BGP routes matched by the policy entry or policy default-action are tagged as needing faster route table updates.</p> <p>This action applies only when the policy is applied as a BGP import policy to a base router BGP peer or VPRN BGP peer and applies only to the following route types:</p> <ul style="list-style-type: none"> <li>• IPv4</li> <li>• label-IPv4</li> <li>• IPv6</li> <li>• label-IPv6</li> </ul> <p>This command is useful when the BGP RIB contains a large number of routes and quick routing table updates are needed for a small subset of these routes. The effectiveness of this command decreases as the subset becomes a larger proportion of the total RIB.</p> <p>When configured to <b>false</b>, no routes are tagged for faster route table updates.</p>
Default	false
Introduced	20.5.R1
Platforms	All

**bgp-leak** *boolean*

Synopsis	Allow leaking for BGP routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">bgp-leak</a> <i>boolean</i>
Tree	<a href="#">bgp-leak</a>
Default	false
Introduced	16.0.R1
Platforms	All

**bgp-med**

Synopsis	Enter the <b>bgp-med</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">bgp-med</a>
Tree	<a href="#">bgp-med</a>
Introduced	19.7.R1

Platforms All

### **adjust** *string*

Synopsis BGP-MED adjustment

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [bgp-med](#) [adjust](#) *string*

Tree [adjust](#)

String Length 1 to 64

Notes The following elements are part of a choice: **adjust** or **set**.

Introduced 19.7.R1

Platforms All

### **set** (*keyword* | *number* | *string*)

Synopsis BGP-MED assignment

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [bgp-med](#) [set](#) (*keyword* | *number* | *string*)

Tree [set](#)

String Length 1 to 32

Range 0 to 4294967295

Options [igp](#), [min-igp](#)

Notes The following elements are part of a choice: **adjust** or **set**.

Introduced 19.7.R1

Platforms All

### **bgp-tunnel-metric**

Synopsis Enter the **bgp-tunnel-metric** context

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [bgp-tunnel-metric](#)

Tree [bgp-tunnel-metric](#)

Description Commands in this context configure the tunnel-table metrics associated with BGP label unicast routes that pass through to the default action of the policy.

Introduced 20.5.R1

Platforms All

**prefer-aigp** *boolean*

Synopsis	Use AIGP attribute as tunnel metric when present
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">bgp-tunnel-metric</a> <a href="#">prefer-aigp</a> <i>boolean</i>
Tree	<a href="#">prefer-aigp</a>
Description	<p>When configured to <b>true</b>, and a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy. The TTM metric of the tunnel is set to the AIGP metric value of the BGP-LU route plus the IGP cost to reach the BGP next-hop if it has the AIGP path attribute, otherwise it is set to the value implied by the value leaf.</p> <p>When configured to <b>false</b>, the AIGP attribute is removed from the advertised routes and is ignored if present in the received routes.</p>
Default	false
Introduced	20.5.R1
Platforms	All

**value** (*string* | *number*)

Synopsis	BGP tunnel table metric value
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">bgp-tunnel-metric</a> <a href="#">value</a> ( <i>string</i>   <i>number</i> )
Tree	<a href="#">value</a>
Description	<p>This command configures a BGP tunnel metric is assigned to routes that do not match any entry.</p> <p>If a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy, the TTM metric of the associated tunnel is set to this value (or the value associated with the parameter name) if either:</p> <ul style="list-style-type: none"> <li>the prefer-aigp option is set to false</li> <li>the prefer-aigp option is set to true but the BGP-LU route does not have an AIGP attribute</li> </ul>
String Length	1 to 32
Range	0 to 4294967295
Introduced	20.5.R1
Platforms	All

**community**

Synopsis	Enter the <b>community</b> context
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Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">community</a>
Tree	<a href="#">community</a>
Introduced	16.0.R1
Platforms	All

### **add** (*param-midstring-64* | *string*)

Synopsis	List of community names to add
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">community</a> <b>add</b> ( <i>param-midstring-64</i>   <i>string</i> )
Tree	<a href="#">add</a>
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: ( <b>add</b> and <b>remove</b> ) or <b>replace</b> . This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **remove** (*param-midstring-64* | *string*)

Synopsis	List of community names to remove
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">community</a> <b>remove</b> ( <i>param-midstring-64</i>   <i>string</i> )
Tree	<a href="#">remove</a>
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: ( <b>add</b> and <b>remove</b> ) or <b>replace</b> . This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **replace** (*param-midstring-64* | *string*)

Synopsis	List of community names to replace
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Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">community</a> <a href="#">replace</a> ( <i>param-midstring-64</i>   <i>string</i> )
Tree	<a href="#">replace</a>
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: ( <b>add</b> and <b>remove</b> ) or <b>replace</b> . This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **create-mpls-tunnel** *boolean*

Synopsis	Create an MPLS tunnel
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">create-mpls-tunnel</a> <i>boolean</i>
Tree	<a href="#">create-mpls-tunnel</a>
Description	When configured to <b>true</b> , the router creates an MPLS tunnel. This command is supported for only the following address families: <ul style="list-style-type: none"> <li>• evpn</li> <li>• ipv4</li> <li>• ipv6</li> <li>• label-ipv4</li> <li>• label-ipv6</li> <li>• vpn-ipv4</li> <li>• vpn-ipv6</li> </ul>
Default	false
Introduced	21.10.R1
Platforms	All

### **create-udp-tunnel** *boolean*

Synopsis	Create an MPLS-over-UDP tunnel
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">create-udp-tunnel</a> <i>boolean</i>
Tree	<a href="#">create-udp-tunnel</a>

Default	false
Introduced	16.0.R1
Platforms	All

### **damping** (*keyword | param-midstring | string*)

Synopsis	Damping profile used for routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">damping</a> ( <i>keyword   param-midstring   string</i> )
Tree	<a href="#">damping</a>
String Length	1 to 32
Options	none
Introduced	16.0.R1
Platforms	All

### **dest-class** *number*

Synopsis	Default destination class for the policy statement
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">dest-class</a> <i>number</i>
Tree	<a href="#">dest-class</a>
Description	This command specifies the policy accounting destination class index to associate with matched routes.
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **egress-statistics** *boolean*

Synopsis	Enable egress statistics for BGP-LU routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">egress-statistics</a> <i>boolean</i>
Tree	<a href="#">egress-statistics</a>
Description	When configured to <b>true</b> , this command enables the allocation of statistical indexes to BGP labeled unicast route entries that are programmed on egress data paths.  When configured to <b>false</b> , this command disables the allocation of statistical indexes to BGP-LU route entries.



Default	false
Introduced	20.10.R1
Platforms	All

### **flex-algo** (*string* | *number*)

Synopsis	Flexible algorithm for BGP next-hop autobind operation
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">flex-algo</a> ( <i>string</i>   <i>number</i> )
Tree	<a href="#">flex-algo</a>
Description	This command configures the Flex-Algorithm for use in the BGP next-hop automatic bind operation in a BGP import policy. A Flex-Algorithm aware autobind of the BGP next-hop is enabled when the route is matched by the policy statement entry.  Flex-Algorithm aware next-hop lookup is supported for unicast BGP, VPRN, and BGP-LU.  This command is not supported for multicast address families.
String Length	1 to 32
Range	128 to 255
Introduced	20.10.R1
Platforms	All

### **forwarding-class**

Synopsis	Enter the <b>forwarding-class</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forwarding-class</a>
Tree	<a href="#">forwarding-class</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fc** *keyword*

Synopsis	Forwarding class associated with the route
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forwarding-class</a> <a href="#">fc</a> <i>keyword</i>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **priority** *keyword*

Synopsis Route priority

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [forwarding-class](#) [priority](#) *keyword*

Tree [priority](#)

Options low, high

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ingress-statistics** *boolean*

Synopsis Enable ingress statistics for BGP-LU routes

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [ingress-statistics](#) *boolean*

Tree [ingress-statistics](#)

Description When configured to **true**, this command enables the allocation of statistical indexes to BGP labeled unicast route entries that are programmed on ingress data paths. For effective operation, a prefix must be advertised with a label per prefix for ILM statistics.

When configured to **false**, this command disables the allocation of statistical indexes to BGP-LU route entries.

Default false

Introduced 20.10.R1

Platforms All

### **install-backup-path** *boolean*

Synopsis Install a preprogrammed backup path for the prefix

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [install-backup-path](#) *boolean*

Tree [install-backup-path](#)

Default false

Introduced 16.0.R1

Platforms All

**local-preference** (*number* | *string*)

Synopsis	BGP local preference for routes not matching any entry
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">local-preference</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">local-preference</a>
String Length	1 to 32
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

**metric**

Synopsis	Enter the <b>metric</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">metric</a>
Tree	<a href="#">metric</a>
Introduced	16.0.R1
Platforms	All

**add** (*number* | *string*)

Synopsis	Metric to add
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">metric</a> <a href="#">add</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">add</a>
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: <b>add</b> , <b>set</b> , or <b>subtract</b> .
Introduced	16.0.R1
Platforms	All

**set** (*number* | *string*)

Synopsis	Metric to assign
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">metric</a> <a href="#">set</a> ( <i>number</i>   <i>string</i> )

Tree	<a href="#">set</a>
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: <b>add</b> , <b>set</b> , or <b>subtract</b> .
Introduced	16.0.R1
Platforms	All

### **subtract** (*number* | *string*)

Synopsis	Metric to subtract
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">metric</a> <a href="#">subtract</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">subtract</a>
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: <b>add</b> , <b>set</b> , or <b>subtract</b> .
Introduced	16.0.R1
Platforms	All

### **multicast-redirect**

Synopsis	Enter the <b>multicast-redirect</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">multicast-redirect</a>
Tree	<a href="#">multicast-redirect</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **fwd-service** *string*

Synopsis	Service ID for multicast redirection
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">multicast-redirect</a> <a href="#">fwd-service</a> <i>string</i>
Tree	<a href="#">fwd-service</a>
Default	Base
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ip-int-name** *string*

Synopsis Alternate interface where IGMP messages are redirected

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [multicast-redirect](#) [ip-int-name](#) *string*

Tree [ip-int-name](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **nat-policy** (*param-midstring* | *string*)

Synopsis BGP-VPN imported route and a NAT policy association

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [nat-policy](#) (*param-midstring* | *string*)

Tree [nat-policy](#)

Description This command assigns a NAT policy to the matched routes that do not have a more specific NAT policy configured under action.

A dynamic route obtained by BGP-VPN can be imported into an inside (private side) routing context in NAT environment. This route must be associated with a NAT policy that maps traffic into a NAT pool and outside routing context. If the NAT policy is not specified within the route policy entry, the imported NAT route is, by default, associated with the default NAT policy defined in the NAT inside routing context.

All BGP-VPN routes that are destined to be imported into the NAT inside routing context must have action-type **accept** regardless of whether the NAT policy is configured in the action.

String Length 1 to 32

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **next-hop** (*keyword* | *ipv4-address-no-zone* | *ipv6-address-no-zone* | *string*)

Synopsis Next-hop IP address applied to routes

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [next-hop](#) (*keyword* | *ipv4-address-no-zone* | *ipv6-address-no-zone* | *string*)

Tree [next-hop](#)

String Length	1 to 32
Options	peer-address, self
Introduced	16.0.R1
Platforms	All

### **origin** (*keyword* | *string*)

Synopsis	BGP origin for routes that are exported into BGP
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <b>origin</b> ( <i>keyword</i>   <i>string</i> )
Tree	<a href="#">origin</a>
String Length	1 to 32
Options	igp, egp, incomplete
Introduced	16.0.R1
Platforms	All

### **origin-validation-state** (*keyword* | *string*)

Synopsis	Origin validation state for routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <b>origin-validation-state</b> ( <i>keyword</i>   <i>string</i> )
Tree	<a href="#">origin-validation-state</a>
String Length	1 to 32
Options	valid, not-found, invalid
Introduced	16.0.R1
Platforms	All

### **preference** (*number* | *string*)

Synopsis	Route preference applied to routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <b>preference</b> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">preference</a>
String Length	1 to 32
Range	1 to 255
Introduced	16.0.R1

Platforms All

### **resolve-static** *boolean*

Synopsis Resolve next hop of a static route for the BGP next hop

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [resolve-static](#) *boolean*

Tree [resolve-static](#)

Default false

Introduced 16.0.R1

Platforms All

### **route-table-install** *boolean*

Synopsis Allow BGP route installation in the route table

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [route-table-install](#) *boolean*

Tree [route-table-install](#)

Default true

Introduced 19.10.R1

Platforms All

### **source-class** *number*

Synopsis Default source class for the policy statement

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [source-class](#) *number*

Tree [source-class](#)

Description This command specifies the policy accounting source class index to associate with matched routes.

Range 1 to 255

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## sr-label-index

Synopsis	Enter the <b>sr-label-index</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">sr-label-index</a>
Tree	<a href="#">sr-label-index</a>
Description	<p>Commands in this context configure the policy action to associate a BGP segment-routing label index value with all /32 BGP labeled IPv4 routes.</p> <p>The use of this action in a policy entry that matches more than one /32 labeled IPv4 route may create SID conflicts.</p> <p>This action only takes effect in BGP peer import policies (and only on received /32 labeled IPv4 routes) and in route table import policies associated with the labeled IPv4 RIB.</p> <p>When this action occurs in a policy applied as a peer import policy, a prefix SID attribute can be added to a received /32 labeled IPv4 route that was not sent with this attribute, or the received prefix SID attribute can be replaced with a new one.</p>
Introduced	19.10.R1
Platforms	All

## prefer-igp *boolean*

Synopsis	Use the SR label index from the IGP route when present
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">sr-label-index</a> <a href="#">prefer-igp</a> <i>boolean</i>
Tree	<a href="#">prefer-igp</a>
Description	<p>When configured to <b>true</b>, BGP obtains the SID index from the IGP route (if a SID index is present) and the <b>configure router bgp segment-routing prefix-sid-range global</b> command is set to <b>true</b>.</p> <p>This command applies only to route table import policies.</p> <p>When configured to <b>false</b>, or the SID index is not present in the IGP route, or the <b>configure router bgp segment-routing prefix-sid-range global</b> command is not set to <b>true</b>, BGP obtains the label index value from the <b>value</b> command.</p>
Default	false
Introduced	19.10.R1
Platforms	All

## value (*string* | *number*)

Synopsis	BGP SR label index associated with routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">sr-label-index</a> <a href="#">value</a> ( <i>string</i>   <i>number</i> )



Tree	<a href="#">value</a>
Description	<p>This command specifies the BGP SR label index value to be associated with a route or routes.</p> <p>If this command specifies an index value that causes a SID conflict with another BGP route, all conflicting BGP routes are re-advertised with label values based on dynamic allocation rather than SID-based allocation.</p> <p>If this command specifies an index value that causes a SID conflict with an IGP route, the BGP route is re-advertised with a label value based on dynamic allocation rather than SID-based allocation.</p>
String Length	1 to 32
Range	0 to 524287
Introduced	19.10.R1
Platforms	All

### **sr-maintenance-policy** (*param-midstring* | *string*)

Synopsis	SR maintenance policy as an action
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">sr-maintenance-policy</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">sr-maintenance-policy</a>
Description	This command applies a named segment routing maintenance policy as an action for route policies. It is only used for SR policy routes.
String Length	1 to 32
Introduced	20.10.R1
Platforms	All

### **sticky-ecmp** *boolean*

Synopsis	Specify the sticky ECMP flag for BGP ECMP routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">sticky-ecmp</a> <i>boolean</i>
Tree	<a href="#">sticky-ecmp</a>
Default	false
Introduced	16.0.R1
Platforms	All

**tag** (*number* | *string*)

Synopsis	OSPF RIP or IS-IS tag applied to routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">tag</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">tag</a>
String Length	1 to 32
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

**type** (*number* | *string*)

Synopsis	OSPF metric type applied to routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">type</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">type</a>
String Length	1 to 32
Range	1 to 2
Introduced	16.0.R1
Platforms	All

**conditional-expression**

Synopsis	Enable the <b>conditional-expression</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">conditional-expression</a>
Tree	<a href="#">conditional-expression</a>
Introduced	16.0.R1
Platforms	All

**route-exists** *string*

Synopsis	Conditional expression to test route existence
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">conditional-expression</a> <a href="#">route-exists</a> <i>string</i>
Tree	<a href="#">route-exists</a>
String Length	1 to 255

Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **from**

Synopsis	Enable the <b>from</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a>
Tree	<a href="#">from</a>
Description	Commands in this context configure policy match criteria based on the route's source or the protocol from which it is received. If conditions are not specified, all route sources are considered to match.
Introduced	16.0.R1
Platforms	All

### **aggregate-contributor** *boolean*

Synopsis	Enable aggregate route match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">aggregate-contributor</a> <i>boolean</i>
Tree	<a href="#">aggregate-contributor</a>
Description	<p>When configured to <b>true</b>, matches all routes (BGP and non-BGP) that have contributed to an active aggregate route. If the prefix tree above a particular route includes no active aggregate routes or the most specific active aggregate route in the prefix tree above this route has a policy that rejects the route, then it is not considered as an aggregate-contributor.</p> <p>This match condition is only supported when used in a BGP export policy. If it is used in an entry of a BGP import policy, <b>vrf-export</b> policy or <b>vrf-import</b> policy, no routes are matched by that entry.</p>

When configured to **false**, no routes (BGP and non-BGP) that have contributed to an active aggregate route are matched.

Default	false
Introduced	20.10.R1
Platforms	All

### **area string**

Synopsis	OSPF area as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">area</a> <i>string</i>
Tree	<a href="#">area</a>
Introduced	16.0.R1
Platforms	All

### **as-path**

Synopsis	Enter the <b>as-path</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">as-path</a>
Tree	<a href="#">as-path</a>
Introduced	16.0.R1
Platforms	All

### **group (param-midstring | string)**

Synopsis	AS path group as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">as-path</a> <a href="#">group</a> ( <a href="#">param-midstring</a>   <a href="#">string</a> )
Tree	<a href="#">group</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>group</b> or <b>name</b> .
Introduced	16.0.R1
Platforms	All

### **length**

Synopsis	Enter the <b>length</b> context
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Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from as-path</a> <a href="#">length</a>
Tree	<a href="#">length</a>
Introduced	16.0.R1
Platforms	All

### **qualifier** *keyword*

Synopsis	Higher or lower values to be accepted as match criteria
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from as-path</a> <a href="#">length</a> <a href="#">qualifier</a> <i>keyword</i>
Tree	<a href="#">qualifier</a>
Options	equal, or-higher, or-lower
Default	equal
Introduced	16.0.R1
Platforms	All

### **unique** *boolean*

Synopsis	Use unique AS numbers as matching criteria
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from as-path</a> <a href="#">length</a> <a href="#">unique</a> <i>boolean</i>
Tree	<a href="#">unique</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **value** (*number* | *string*)

Synopsis	AS numbers in the AS path that match on the BGP route
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from as-path</a> <a href="#">length</a> <a href="#">value</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">value</a>
String Length	1 to 32
Range	0 to 255
Introduced	16.0.R1
Platforms	All

**name** (*param-midstring* | *string*)

Synopsis	AS path name to match
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from as-path</a> <i>name</i> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">name</a>
Description	This command specifies an AS path regular expression name for the route policy entry. Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@", "start@variable@end", "@variable@end", or "start@variable@".
String Length	1 to 32
Notes	The following elements are part of a choice: <b>group</b> or <b>name</b> .
Introduced	16.0.R1
Platforms	All

**cluster-id**

Synopsis	Enter the <b>cluster-id</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from cluster-id</a>
Tree	<a href="#">cluster-id</a>
Introduced	16.0.R1
Platforms	All

**ip-address** *string*

Synopsis	Cluster list attribute IP addresses for route matching
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from cluster-id</a> <a href="#">ip-address</a> <i>string</i>
Tree	<a href="#">ip-address</a>
Max. Instances	5
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>none-cluster-list</b> . This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **none-cluster-list** *boolean*

Synopsis	Specify matching BGP routes without a cluster ID
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from cluster-id</a> <b>none-cluster-list</b> <i>boolean</i>
Tree	<a href="#">none-cluster-list</a>
Default	false
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>none-cluster-list</b> .
Introduced	16.0.R1
Platforms	All

### **color** *number*

Synopsis	Color ID as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from color</a> <i>number</i>
Tree	<a href="#">color</a>
Description	This command configures an SR Policy color ID as a route policy match criterion. This match criterion is only used in import policies.
Range	0 to 4294967295
Introduced	20.10.R1
Platforms	All

### **community**

Synopsis	Enter the <b>community</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from community</a>
Tree	<a href="#">community</a>
Introduced	16.0.R1
Platforms	All

### **count**

Synopsis	Enter the <b>count</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from community</a> <b>count</b>
Tree	<a href="#">count</a>
Introduced	16.0.R1

Platforms All

### **qualifier** *keyword*

Synopsis Higher or lower values to be accepted as match criteria

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from](#) [community](#) [count](#) **qualifier** *keyword*

Tree [qualifier](#)

Options equal, or-higher, or-lower

Default equal

Introduced 16.0.R1

Platforms All

### **type** *keyword*

Synopsis Community count to match the community count criteria

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from](#) [community](#) [count](#) **type** *keyword*

Tree [type](#)

Options standard, extended, large

Introduced 16.0.R1

Platforms All

### **value** (*number* | *string*)

Synopsis Number of BGP communities to match the BGP route

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from](#) [community](#) [count](#) **value** (*number* | *string*)

Tree [value](#)

String Length 1 to 32

Range 0 to 1024

Introduced 16.0.R1

Platforms All



**expression string**

Synopsis	Community expression name as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">community</a> <a href="#">expression</a> <i>string</i>
Tree	<a href="#">expression</a>
String Length	1 to 900
Notes	The following elements are part of a choice: <b>expression</b> or <b>name</b> .
Introduced	16.0.R1
Platforms	All

**name** (*param-midstring-64* | *string*)

Synopsis	Community list name
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">community</a> <a href="#">name</a> ( <i>param-midstring-64</i>   <i>string</i> )
Tree	<a href="#">name</a>
String Length	1 to 64
Notes	The following elements are part of a choice: <b>expression</b> or <b>name</b> .
Introduced	16.0.R1
Platforms	All

**distinguisher number**

Synopsis	SR policy distinguisher as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">distinguisher</a> <i>number</i>
Tree	<a href="#">distinguisher</a>
Description	This command configures an SR Policy distinguisher as a route policy match criterion. This match criterion is only used in import policies.
Range	0 to 4294967295
Introduced	20.10.R1
Platforms	All

**endpoint** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	SR policy endpoint address as a match criterion
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Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">endpoint</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">endpoint</a>
Description	This command configures an SR Policy endpoint address as a route policy match criterion. This match criterion is only used in import policies.
Introduced	20.10.R1
Platforms	All

### **evpn-type** *keyword*

Synopsis	EVPN type as a match criterion for the entry
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">evpn-type</a> <i>keyword</i>
Tree	<a href="#">evpn-type</a>
Options	ethernet-auto-discovery, mac-ip-advertisement, inclusive-multicast, ethernet-segment, ip-prefix, selective-multicast, multicast-join-sync, multicast-leave-sync
Introduced	16.0.R4
Platforms	All

### **external** *boolean*

Synopsis	Specify the external IS-IS route as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">external</a> <i>boolean</i>
Tree	<a href="#">external</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **family** *keyword*

Synopsis	Address family as the match condition
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">family</a> <i>keyword</i>
Tree	<a href="#">family</a>
Options	ipv4, vpn-ipv4, ipv6, mcast-ipv4, vpn-ipv6, l2-vpn, mvpn-ipv4, mdt-safi, ms-pw, flow-ipv4, route-target, mcast-vpn-ipv4, mvpn-ipv6, flow-ipv6, evpn, mcast-ipv6, label-ipv4, label-ipv6, bgp-ls, mcast-vpn-ipv6, sr-policy-ipv4, sr-policy-ipv6, flow-vpn-ipv4, flow-vpn-ipv6

Max. Instances	20
Introduced	16.0.R1
Platforms	All

## flowspec

Synopsis	Enter the <b>flowspec</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">flowspec</a>
Tree	<a href="#">flowspec</a>
Introduced	16.0.R4
Platforms	All

## dest (*param-midstring* | *string*)

Synopsis	BGP FlowSpec route matches per destination IP prefix
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">flowspec</a> <a href="#">dest</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">dest</a>
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

## source (*param-midstring* | *string*)

Synopsis	BGP FlowSpec route matches per the source IP prefix
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">flowspec</a> <a href="#">source</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">source</a>
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

## group-address (*param-midstring* | *string*)

Synopsis	Prefix list of multicast group addresses for mathcing
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Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">group-address</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">group-address</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

### **host-ip** (*param-midstring* | *string*)

Synopsis	Prefix list of IGMP host IP addresses for matching
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">host-ip</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">host-ip</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

### **interface** (*named-item* | *interface-name* | *interface-name* | *interface-name*)

Synopsis	Interface name as match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">interface</a> ( <i>named-item</i>   <i>interface-name</i>   <i>interface-name</i>   <i>interface-name</i> )
Tree	<a href="#">interface</a>
String Length	1 to 32
Max. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **interface-subnets**

Synopsis	Enter the <b>interface-subnets</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">interface-subnets</a>
Tree	<a href="#">interface-subnets</a>

Description	<p>Commands in this context configure the applied router instance and interfaces that are used as the matching condition within each policy statement entry when exporting the IP address of the associated interface to a routing protocol.</p> <p>The interface subnet policy statement match criterion is applied to the following unicast use case contexts:</p> <ul style="list-style-type: none"> <li>• <b>export</b>, when used with OSPFv2, OSPFv3, IS-IS, RIP, RIPng, and BGP</li> <li>• <b>route-table-import</b>, when used with BGP</li> <li>• <b>vrf-export</b>, when used with MP-BGP</li> </ul>
Introduced	21.2.R1
Platforms	All

### **ip-int-name** *string*

Synopsis	Interface name as the match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">interface-subnets</a> <a href="#">ip-int-name</a> <i>string</i>
Tree	<a href="#">ip-int-name</a>
Description	This command specifies the interface name to match when exporting the IP address of the associated interface to a routing protocol.
String Length	1 to 32
Max. Instances	10
Notes	This element is ordered by the user.
Introduced	21.2.R1
Platforms	All

### **service** *string*

Synopsis	Service ID of the interface subnets
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">interface-subnets</a> <a href="#">service</a> <i>string</i>
Tree	<a href="#">service</a>
Default	Base
Introduced	21.2.R1
Platforms	All

**level number**

Synopsis	IS-IS route level as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">level</a> <i>number</i>
Tree	<a href="#">level</a>
Range	1 to 2
Introduced	16.0.R1
Platforms	All

**local-preference**

Synopsis	Enter the <b>local-preference</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">local-preference</a>
Tree	<a href="#">local-preference</a>
Introduced	16.0.R1
Platforms	All

**qualifier keyword**

Synopsis	Higher or lower values to be accepted as match criteria
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">local-preference</a> <a href="#">qualifier</a> <i>keyword</i>
Tree	<a href="#">qualifier</a>
Options	equal, or-higher, or-lower
Default	equal
Introduced	16.0.R1
Platforms	All

**value (number | string)**

Synopsis	BGP routes per local preference value or variable name
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">local-preference</a> <a href="#">value</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">value</a>
String Length	1 to 32
Range	0 to 4294967295

Introduced	16.0.R1
Platforms	All

## **metric**

Synopsis	Enter the <b>metric</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">metric</a>
Tree	<a href="#">metric</a>
Introduced	16.0.R1
Platforms	All

## **qualifier** *keyword*

Synopsis	Higher or lower values to be accepted as match criteria
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">metric</a> <a href="#">qualifier</a> <i>keyword</i>
Tree	<a href="#">qualifier</a>
Options	equal, or-higher, or-lower
Default	equal
Introduced	16.0.R1
Platforms	All

## **value** (*number* | *string*)

Synopsis	Local preference value or variable name
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">metric</a> <a href="#">value</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">value</a>
String Length	1 to 32
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

## **mvpn-type** *keyword*

Synopsis	MVPN type as a match criterion for the entry
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Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">mvpn-type</a> <i>keyword</i>
Tree	<a href="#">mvpn-type</a>
Options	intra-as-ipmsi-auto-discovery, inter-as-ipmsi-auto-discovery, s-pmsi-auto-discovery, intra-as-segment-leaf-auto-discovery, source-active-auto-discovery, shared-tree-join, source-tree-join
Introduced	16.0.R1
Platforms	All

## neighbor

Synopsis	Enter the <b>neighbor</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">neighbor</a>
Tree	<a href="#">neighbor</a>
Introduced	16.0.R1
Platforms	All

## ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	IP address to match the neighbor
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">neighbor</a> <a href="#">ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>   <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> )
Tree	<a href="#">ip-address</a>
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>prefix-list</b> .
Introduced	16.0.R1
Platforms	All

## prefix-list (*param-midstring* | *string*)

Synopsis	Name to match the neighbor prefix list
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">neighbor</a> <a href="#">prefix-list</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">prefix-list</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>prefix-list</b> .
Introduced	16.0.R1



Platforms All

## next-hop

Synopsis Enter the **next-hop** context

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from next-hop](#)

Tree [next-hop](#)

Introduced 16.0.R1

Platforms All

## ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP address of the next hop to match

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from next-hop ip-address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [ip-address](#)

Notes The following elements are part of a choice: **ip-address** or **prefix-list**.

Introduced 16.0.R1

Platforms All

## prefix-list (*param-midstring* | *string*)

Synopsis Name of a next hop prefix list to match

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from next-hop prefix-list](#) (*param-midstring* | *string*)

Tree [prefix-list](#)

String Length 1 to 32

Notes The following elements are part of a choice: **ip-address** or **prefix-list**.

Introduced 16.0.R1

Platforms All

## origin *keyword*

Synopsis Route origin match criteria

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from origin](#) *keyword*

Tree [origin](#)

Description	<p>This command configures a match criteria for the origin attribute of the route. The origin attribute is applicable to BGP routes and to the following subscriber-management routes:</p> <p>Host routes (for example, IPv4 /32 address, or IPv6 SLAAC prefix) carry the origin attribute with AAA, dynamic, or static values, depending on the address assignment method. For CUPS hosts, the origin attribute is always PFCP. Host routes can also be distinguished using the <b>sub-mgmt</b> option for the <b>protocol</b> command.</p> <p>Dynamically provisioned prefixes or loopback addresses use AAA or PFCP origin values, depending on the protocol that provides the prefix and address. Dynamic routes can also be distinguished using the <b>direct</b> option for the <b>protocol</b> command.</p> <p>Statically configured prefixes under the subscriber interface do not have an origin attribute. These routes can be distinguished using the <b>direct</b> option for the <b>protocol</b> command.</p> <p>Framed routes for non-CUPS hosts do not have an origin attribute. Framed routes for CUPS hosts use PFCP for the origin attribute. Alternatively, framed routes can be distinguished using the <b>managed</b> option for the <b>protocol</b> command.</p> <p>The values that are specific to subscriber-management routes are never carried in BGP updates as part of the BGP origin attribute and are not visible within the BGP process.</p>
Options	igp, egp, incomplete, any, aaa, dynamic, static, bonding, pfcp
Introduced	16.0.R1
Platforms	All

### **origin-validation-state** *keyword*

Synopsis	Origin validation state used for match criteria
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry number</a> <a href="#">from origin-validation-state</a> <i>keyword</i>
Tree	<a href="#">origin-validation-state</a>
Description	This command specifies a validation state that is used to match BGP routes based on their origin validation state.
Options	valid, not-found, invalid
Introduced	16.0.R1
Platforms	All

### **ospf-type** *number*

Synopsis	OSPF type metric applied to unmatching route entries
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry number</a> <a href="#">from ospf-type</a> <i>number</i>
Tree	<a href="#">ospf-type</a>

Range	1 to 2
Introduced	16.0.R1
Platforms	All

### **path-type** *keyword*

Synopsis	Path type as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">path-type</a> <i>keyword</i>
Tree	<a href="#">path-type</a>
Options	ibgp, ebgp
Introduced	16.0.R1
Platforms	All

### **policy** (*string* | *string*)

Synopsis	Policy statement as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">policy</a> ( <i>string</i>   <i>string</i> )
Tree	<a href="#">policy</a>
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

### **policy-variables**

Synopsis	Enter the <b>policy-variables</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">policy-variables</a>
Tree	<a href="#">policy-variables</a>
Introduced	16.0.R1
Platforms	All

### **name** [[variable-name](#)] *string*

Synopsis	Enter the <b>name</b> list instance
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">policy-variables</a> <a href="#">name</a> <i>string</i>

Tree	<a href="#">name</a>
Max. Instances	10
Introduced	16.0.R1
Platforms	All

### **[variable-name]** *string*

Synopsis	Global variable name used to reference policy functions
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from policy-variables</a> <a href="#">name</a> <i>string</i>
Tree	<a href="#">name</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the policy variable
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from policy-variables</a> <a href="#">name</a> <i>string</i> <a href="#">address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">address</a>
Notes	The following elements are part of a mandatory choice: <b>address</b> , <b>decimal</b> , <b>number</b> , or <b>value</b> .
Introduced	16.0.R1
Platforms	All

### **decimal** *decimal-number*

Synopsis	Attribute decimal to which variable name is resolved
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from policy-variables</a> <a href="#">name</a> <i>string</i> <a href="#">decimal</a> <i>decimal-number</i>
Tree	<a href="#">decimal</a>
Range	0.000 to 4294967295.000
Notes	The following elements are part of a mandatory choice: <b>address</b> , <b>decimal</b> , <b>number</b> , or <b>value</b> .

Introduced	19.7.R1
Platforms	All

**number** *number*

Synopsis	Numerical value of the policy variable
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">policy-variables</a> <a href="#">name</a> <i>string</i> <b>number</b> <i>number</i>
Tree	<a href="#">number</a>
Range	0 to 4294967295
Notes	The following elements are part of a mandatory choice: <b>address</b> , <b>decimal</b> , <b>number</b> , or <b>value</b> .
Introduced	16.0.R1
Platforms	All

**value** *string*

Synopsis	Policy variable value
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">policy-variables</a> <a href="#">name</a> <i>string</i> <b>value</b> <i>string</i>
Tree	<a href="#">value</a>
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: <b>address</b> , <b>decimal</b> , <b>number</b> , or <b>value</b> .
Introduced	16.0.R1
Platforms	All

**prefix-list** (*param-midstring* | *string*)

Synopsis	Prefix list as match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">prefix-list</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">prefix-list</a>
String Length	1 to 32
Max. Instances	28
Notes	This element is ordered by the user.

Introduced	16.0.R1
Platforms	All

## protocol

Synopsis	Enter the <b>protocol</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">protocol</a>
Tree	<a href="#">protocol</a>
Description	Commands in this context configure the match criterion based on protocols for a route policy statement entry and may be used for both import and export policies.
Introduced	16.0.R1
Platforms	All

## instance (*keyword* | *number*)

Synopsis	Instance for protocol IS-IS, OSPF, or OSPFv3 to match
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">protocol</a> <a href="#">instance</a> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">instance</a>
Description	This command specifies the OSPF, OSPFv3, or IS-IS instance to be used as the match criterion.  When this command is explicitly configured, the <b>name</b> command must be configured to identify the protocol (OSPF, OSPFv3, or IS-IS).
Range	0 to 127
Options	all
Default	0
Introduced	16.0.R1
Platforms	All

## name *keyword*

Synopsis	List of protocol names as the match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">protocol</a> <a href="#">name</a> <i>keyword</i>
Tree	<a href="#">name</a>
Description	This command specifies a protocol list for the match criterion. If multiple protocols are specified, the protocol names must belong to the following protocol set:

- direct
- static
- isis
- aggregate
- bgp
- bgp-label
- direct-interface

If multiple protocols are specified, the **instance** command cannot be explicitly configured.

The protocol **direct-interface** route type matches the specific direct interface host IPv4 / 32 and IPv6 /128 routes.

Options	direct, static, bgp, isis, ospf, rip, aggregate, bgp-vpn, igmp, pim, ospf3, ldp, sub-mgmt, mld, managed, vpn-leak, nat, periodic, ipsec, dhcpv6-pd, dhcpv6-na, dhcpv6-ta, dhcpv6-pd-excl, ripng, bgp-label, direct-interface, arp-nd, rib-api, dhcp-client, evpn-ifl, srv6, video
Max. Instances	5
Introduced	16.0.R1
Platforms	All

## source-address

Synopsis	Enter the <b>source-address</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">source-address</a>
Tree	<a href="#">source-address</a>
Introduced	16.0.R1
Platforms	All

## ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source IP address to match
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">source-address</a> <a href="#">ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">ip-address</a>
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>prefix-list</b> .
Introduced	16.0.R1
Platforms	All

**prefix-list** (*param-midstring* | *string*)

Synopsis	Name of a source address prefix list to match
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">source-address</a> <a href="#">prefix-list</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">prefix-list</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>prefix-list</b> .
Introduced	16.0.R1
Platforms	All

**state** *keyword*

Synopsis	State used as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">state</a> <i>keyword</i>
Tree	<a href="#">state</a>
Description	This command configures a criterion that identifies in resilient gateways which routes are associated with an active context and which routes are associated with a standby context.
Options	srrp-master, srrp-non-master, ipsec-master-with-peer, ipsec-master-without-peer, ipsec-non-master, fsg-active, fsg-standby
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**tag** (*number* | *keyword*)

Synopsis	Route tag used as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">tag</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">tag</a>
Range	1 to 4294967295
Options	no-tag
Introduced	16.0.R1
Platforms	All



**to**

Synopsis	Enable the <b>to</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <b>to</b>
Tree	<a href="#">to</a>
Introduced	16.0.R1
Platforms	All

**level number**

Synopsis	IS-IS route level as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <b>to</b> <a href="#">level</a> <i>number</i>
Tree	<a href="#">level</a>
Range	1 to 2
Introduced	16.0.R1
Platforms	All

**neighbor**

Synopsis	Enter the <b>neighbor</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <b>to</b> <a href="#">neighbor</a>
Tree	<a href="#">neighbor</a>
Introduced	16.0.R1
Platforms	All

**ip-address** (*ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-with-zone | ipv6-address-with-zone*)

Synopsis	IP address to match the neighbor
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <b>to</b> <a href="#">neighbor</a> <a href="#">ip-address</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone   ipv4-address-with-zone   ipv6-address-with-zone</i> )
Tree	<a href="#">ip-address</a>
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>prefix-list</b> .
Introduced	16.0.R1
Platforms	All

**prefix-list** (*param-midstring* | *string*)

Synopsis	Name to match the neighbor prefix list
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">to neighbor prefix-list</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">prefix-list</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>prefix-list</b> .
Introduced	16.0.R1
Platforms	All

**prefix-list** (*param-midstring* | *string*)

Synopsis	Prefix list as match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">to prefix-list</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">prefix-list</a>
String Length	1 to 32
Max. Instances	28
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

**protocol**

Synopsis	Enter the <b>protocol</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">to protocol</a>
Tree	<a href="#">protocol</a>
Introduced	16.0.R1
Platforms	All

**instance** (*keyword* | *number*)

Synopsis	Instance for the IS-IS, OSPF, or OSPF3 protocol
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Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> to protocol instance ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">instance</a>
Range	0 to 127
Options	all
Default	0
Introduced	16.0.R1
Platforms	All

**name** *keyword*

Synopsis	Protocol name to match
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> to protocol name <i>keyword</i>
Tree	<a href="#">name</a>
Options	bgp, isis, ospf, rip, bgp-vpn, ospf3, ldp, vpn-leak, ripng, bgp-label, evpn-ift
Max. Instances	2
Introduced	16.0.R1
Platforms	All

**entry-type** *keyword*

Synopsis	The entry type for a route policy entry
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry-type</a> <i>keyword</i>
Tree	<a href="#">entry-type</a>
Options	numbered, named
Default	numbered
Introduced	19.10.R1
Platforms	All

**named-entry** [[entry-name](#)] *string*

Synopsis	Enter the <b>named-entry</b> list instance
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i>
Tree	<a href="#">named-entry</a>

Max. Instances	16384
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

### [entry-name] *string*

Synopsis	Route policy entry name
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i>
Tree	<a href="#">named-entry</a>
String Length	1 to 255
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

### action

Synopsis	Enable the <b>action</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <b>action</b>
Tree	<a href="#">action</a>
Introduced	19.10.R1
Platforms	All

### action-type *keyword*

Synopsis	Action type for routes matching the route policy entry
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <b>action</b> <a href="#">action-type</a> <i>keyword</i>
Tree	<a href="#">action-type</a>
Options	accept, reject, next-entry, next-policy
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

**add-paths-send-limit** (*number* | *keyword*)

Synopsis	BGP Add-Paths send limit applied for routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">add-paths-send-limit</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">add-paths-send-limit</a>
Range	1 to 16
Options	multipaths
Introduced	19.10.R1
Platforms	All

**admin-tag-policy** (*param-midstring-64* | *string*)

Synopsis	Administrative tag policy name
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">admin-tag-policy</a> ( <i>param-midstring-64</i>   <i>string</i> )
Tree	<a href="#">admin-tag-policy</a>
String Length	1 to 64
Introduced	19.10.R1
Platforms	All

**advertise-label** *keyword*

Synopsis	Label allocation for matched BGP routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">advertise-label</a> <i>keyword</i>
Tree	<a href="#">advertise-label</a>
Description	This command configures the label allocation method for advertised routes. The effect of this command depends on the context where the associated policy is applied.
Options	per-prefix, pop, pop-and-forward
Introduced	19.10.R1
Platforms	All

**aigp-metric**

Synopsis	Enter the <b>aigp-metric</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">aigp-metric</a>

Tree	<a href="#">aigp-metric</a>
Introduced	19.10.R1
Platforms	All

**add** (*number* | *string*)

Synopsis	AIGP metric to add
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">aigp-metric</a> <a href="#">add</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">add</a>
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: <b>add</b> or <b>set</b> .
Introduced	19.10.R1
Platforms	All

**set** (*keyword* | *number* | *string*)

Synopsis	AIGP metric
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">aigp-metric</a> <a href="#">set</a> ( <i>keyword</i>   <i>number</i>   <i>string</i> )
Tree	<a href="#">set</a>
String Length	1 to 32
Range	0 to 4294967295
Options	igp
Notes	The following elements are part of a choice: <b>add</b> or <b>set</b> .
Introduced	19.10.R1
Platforms	All

**as-path**

Synopsis	Enter the <b>as-path</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">as-path</a>
Tree	<a href="#">as-path</a>
Introduced	19.10.R1

Platforms All

### **add** (*param-midstring* | *string*)

Synopsis AS path to add

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [action](#) [as-path](#) [add](#) (*param-midstring* | *string*)

Tree [add](#)

String Length 1 to 32

Notes The following elements are part of a choice: **add** or **replace**.

Introduced 19.10.R1

Platforms All

### **replace** (*param-midstring* | *string*)

Synopsis AS path to replace

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [action](#) [as-path](#) [replace](#) (*param-midstring* | *string*)

Tree [replace](#)

String Length 1 to 32

Notes The following elements are part of a choice: **add** or **replace**.

Introduced 19.10.R1

Platforms All

### **as-path-prepend**

Synopsis Enter the **as-path-prepend** context

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [action](#) [as-path-prepend](#)

Tree [as-path-prepend](#)

Introduced 19.10.R1

Platforms All

### **as-path** (*number* | *string* | *keyword*)

Synopsis AS number to prepend to the AS path attribute

Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">as-path-prepend</a> <a href="#">as-path</a> ( <i>number</i>   <i>string</i>   <i>keyword</i> )
Tree	<a href="#">as-path</a>
String Length	1 to 32
Range	1 to 4294967295
Options	most-recent
Introduced	19.10.R1
Platforms	All

### **repeat** (*number* | *string*)

Synopsis	Number of times to prepend the specified AS number
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">as-path-prepend</a> <a href="#">repeat</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">repeat</a>
String Length	1 to 32
Range	1 to 50
Default	1
Introduced	19.10.R1
Platforms	All

### **bgp-high-priority** *boolean*

Synopsis	Tag routes as high priority for fast table updates
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">bgp-high-priority</a> <i>boolean</i>
Tree	<a href="#">bgp-high-priority</a>
Description	<p>When configured to <b>true</b>, eligible BGP routes matched by the policy entry or policy default-action are tagged as needing faster route table updates.</p> <p>This action applies only when the policy is applied as a BGP import policy to a base router BGP peer or VPRN BGP peer and applies only to the following route types:</p> <ul style="list-style-type: none"> <li>• IPv4</li> <li>• label-IPv4</li> <li>• IPv6</li> <li>• label-IPv6</li> </ul>



This command is useful when the BGP RIB contains a large number of routes and quick routing table updates are needed for a small subset of these routes. The effectiveness of this command decreases as the subset becomes a larger proportion of the total RIB.

When configured to **false**, no routes are tagged for faster route table updates.

Default	false
Introduced	20.5.R1
Platforms	All

### **bgp-leak** *boolean*

Synopsis	Allow leaking for BGP routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">bgp-leak</a> <i>boolean</i>
Tree	<a href="#">bgp-leak</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **bgp-med**

Synopsis	Enter the <b>bgp-med</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">bgp-med</a>
Tree	<a href="#">bgp-med</a>
Introduced	19.10.R1
Platforms	All

### **adjust** *string*

Synopsis	BGP-MED adjustment
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">bgp-med</a> <a href="#">adjust</a> <i>string</i>
Tree	<a href="#">adjust</a>
String Length	1 to 64
Notes	The following elements are part of a choice: <b>adjust</b> or <b>set</b> .
Introduced	19.10.R1
Platforms	All

**set** (*keyword* | *number* | *string*)

Synopsis	BGP-MED assignment
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">bgp-med</a> <a href="#">set</a> ( <i>keyword</i>   <i>number</i>   <i>string</i> )
Tree	<a href="#">set</a>
String Length	1 to 32
Range	0 to 4294967295
Options	igp, min-igp
Notes	The following elements are part of a choice: <b>adjust</b> or <b>set</b> .
Introduced	19.10.R1
Platforms	All

**bgp-tunnel-metric**

Synopsis	Enter the <b>bgp-tunnel-metric</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">bgp-tunnel-metric</a>
Tree	<a href="#">bgp-tunnel-metric</a>
Description	Commands in this context configure the tunnel-table metrics associated with BGP label unicast routes that pass through to the default action of the policy.
Introduced	20.5.R1
Platforms	All

**prefer-aigp** *boolean*

Synopsis	Use AIGP attribute as tunnel metric when present
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">bgp-tunnel-metric</a> <a href="#">prefer-aigp</a> <i>boolean</i>
Tree	<a href="#">prefer-aigp</a>
Description	<p>When configured to <b>true</b>, and a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy. The TTM metric of the tunnel is set to the AIGP metric value of the BGP-LU route plus the IGP cost to reach the BGP next-hop if it has the AIGP path attribute, otherwise it is set to the value implied by the value leaf.</p> <p>When configured to <b>false</b>, the AIGP attribute is removed from the advertised routes and is ignored if present in the received routes.</p>
Default	false

Introduced	20.5.R1
Platforms	All

**value** (*string* | *number*)

Synopsis	BGP tunnel table metric value
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">bgp-tunnel-metric value</a> ( <i>string</i>   <i>number</i> )
Tree	<a href="#">value</a>
Description	<p>This command configures a BGP tunnel metric is assigned to routes that do not match any entry.</p> <p>If a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy, the TTM metric of the associated tunnel is set to this value (or the value associated with the parameter name) if either:</p> <ul style="list-style-type: none"> <li>• the prefer-aigp option is set to false</li> <li>• the prefer-aigp option is set to true but the BGP-LU route does not have an AIGP attribute</li> </ul>
String Length	1 to 32
Range	0 to 4294967295
Introduced	20.5.R1
Platforms	All

**community**

Synopsis	Enter the <b>community</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">community</a>
Tree	<a href="#">community</a>
Introduced	19.10.R1
Platforms	All

**add** (*param-midstring-64* | *string*)

Synopsis	List of community names to add
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">community</a> <a href="#">add</a> ( <i>param-midstring-64</i>   <i>string</i> )
Tree	<a href="#">add</a>
String Length	1 to 64

Max. Instances	28
Notes	The following elements are part of a choice: ( <b>add</b> and <b>remove</b> ) or <b>replace</b> . This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

### **remove** (*param-midstring-64* | *string*)

Synopsis	List of community names to remove
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">community</a> <b>remove</b> ( <i>param-midstring-64</i>   <i>string</i> )
Tree	<a href="#">remove</a>
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: ( <b>add</b> and <b>remove</b> ) or <b>replace</b> . This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

### **replace** (*param-midstring-64* | *string*)

Synopsis	List of community names to replace
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">community</a> <b>replace</b> ( <i>param-midstring-64</i>   <i>string</i> )
Tree	<a href="#">replace</a>
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: ( <b>add</b> and <b>remove</b> ) or <b>replace</b> . This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

**create-mpls-tunnel** *boolean*

Synopsis	Create an MPLS tunnel
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">create-mpls-tunnel</a> <i>boolean</i>
Tree	<a href="#">create-mpls-tunnel</a>
Description	When configured to <b>true</b> , the router creates an MPLS tunnel. This command is supported for only the following address families: <ul style="list-style-type: none"> <li>• evpn</li> <li>• ipv4</li> <li>• ipv6</li> <li>• label-ipv4</li> <li>• label-ipv6</li> <li>• vpn-ipv4</li> <li>• vpn-ipv6</li> </ul>
Default	false
Introduced	21.10.R1
Platforms	All

**create-udp-tunnel** *boolean*

Synopsis	Create an MPLS-over-UDP tunnel
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">create-udp-tunnel</a> <i>boolean</i>
Tree	<a href="#">create-udp-tunnel</a>
Default	false
Introduced	19.10.R1
Platforms	All

**damping** (*keyword* | *param-midstring* | *string*)

Synopsis	Damping profile used for routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">damping</a> ( <i>keyword</i>   <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">damping</a>
String Length	1 to 32
Options	none

Introduced	19.10.R1
Platforms	All

**dest-class** *number*

Synopsis	Default destination class for the policy statement
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">dest-class</a> <i>number</i>
Tree	<a href="#">dest-class</a>
Description	This command specifies the policy accounting destination class index to associate with matched routes.
Range	1 to 255
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**egress-statistics** *boolean*

Synopsis	Enable egress statistics for BGP-LU routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">egress-statistics</a> <i>boolean</i>
Tree	<a href="#">egress-statistics</a>
Description	When configured to <b>true</b> , this command enables the allocation of statistical indexes to BGP labeled unicast route entries that are programmed on egress data paths.  When configured to <b>false</b> , this command disables the allocation of statistical indexes to BGP-LU route entries.
Default	false
Introduced	20.10.R1
Platforms	All

**flex-algo** (*string* | *number*)

Synopsis	Flexible algorithm for BGP next-hop autobind operation
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">flex-algo</a> ( <i>string</i>   <i>number</i> )
Tree	<a href="#">flex-algo</a>
Description	This command configures the Flex-Algorithm for use in the BGP next-hop automatic bind operation in a BGP import policy. A Flex-Algorithm aware autobind of the BGP next-hop is enabled when the route is matched by the policy statement entry.

Flex-Algorithm aware next-hop lookup is supported for unicast BGP, VPRN, and BGP-LU.

This command is not supported for multicast address families.

String Length	1 to 32
Range	128 to 255
Introduced	20.10.R1
Platforms	All

## forwarding-class

Synopsis	Enter the <b>forwarding-class</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">forwarding-class</a>
Tree	<a href="#">forwarding-class</a>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## fc keyword

Synopsis	Forwarding class associated with the route
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">forwarding-class</a> <b>fc</b> <i>keyword</i>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## priority keyword

Synopsis	Route priority
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">forwarding-class</a> <b>priority</b> <i>keyword</i>
Tree	<a href="#">priority</a>
Options	low, high
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ingress-statistics** *boolean*

Synopsis	Enable ingress statistics for BGP-LU routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">ingress-statistics</a> <i>boolean</i>
Tree	<a href="#">ingress-statistics</a>
Description	When configured to <b>true</b> , this command enables the allocation of statistical indexes to BGP labeled unicast route entries that are programmed on ingress data paths. For effective operation, a prefix must be advertised with a label per prefix for ILM statistics.  When configured to <b>false</b> , this command disables the allocation of statistical indexes to BGP-LU route entries.
Default	false
Introduced	20.10.R1
Platforms	All

**install-backup-path** *boolean*

Synopsis	Install a preprogrammed backup path for the prefix
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">install-backup-path</a> <i>boolean</i>
Tree	<a href="#">install-backup-path</a>
Default	false
Introduced	19.10.R1
Platforms	All

**local-preference** (*number* | *string*)

Synopsis	BGP local preference for routes not matching any entry
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">local-preference</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">local-preference</a>
String Length	1 to 32
Range	0 to 4294967295
Introduced	19.10.R1
Platforms	All



**metric**

Synopsis	Enter the <b>metric</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">metric</a>
Tree	<a href="#">metric</a>
Introduced	19.10.R1
Platforms	All

**add** (*number* | *string*)

Synopsis	Metric to add
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">metric</a> <a href="#">add</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">add</a>
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: <b>add</b> , <b>set</b> , or <b>subtract</b> .
Introduced	19.10.R1
Platforms	All

**set** (*number* | *string*)

Synopsis	Metric to assign
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">metric</a> <a href="#">set</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">set</a>
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: <b>add</b> , <b>set</b> , or <b>subtract</b> .
Introduced	19.10.R1
Platforms	All

**subtract** (*number* | *string*)

Synopsis	Metric to subtract
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">metric</a> <a href="#">subtract</a> ( <i>number</i>   <i>string</i> )

Tree	<a href="#">subtract</a>
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: <b>add</b> , <b>set</b> , or <b>subtract</b> .
Introduced	19.10.R1
Platforms	All

## multicast-redirectation

Synopsis	Enter the <b>multicast-redirectation</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">multicast-redirectation</a>
Tree	<a href="#">multicast-redirectation</a>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## fwd-service *string*

Synopsis	Service ID for multicast redirection
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">multicast-redirectation</a> <a href="#">fwd-service</a> <i>string</i>
Tree	<a href="#">fwd-service</a>
Default	Base
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ip-int-name *string*

Synopsis	Alternate interface where IGMP messages are redirected
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">multicast-redirectation</a> <a href="#">ip-int-name</a> <i>string</i>
Tree	<a href="#">ip-int-name</a>
String Length	1 to 32
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**nat-policy** (*param-midstring* | *string*)

Synopsis	BGP-VPN imported route and a NAT policy association
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">nat-policy</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">nat-policy</a>
Description	<p>This command assigns a NAT policy to the matched routes that do not have a more specific NAT policy configured under action.</p> <p>A dynamic route obtained by BGP-VPN can be imported into an inside (private side) routing context in NAT environment. This route must be associated with a NAT policy that maps traffic into a NAT pool and outside routing context. If the NAT policy is not specified within the route policy entry, the imported NAT route is, by default, associated with the default NAT policy defined in the NAT inside routing context.</p> <p>All BGP-VPN routes that are destined to be imported into the NAT inside routing context must have action-type <b>accept</b> regardless of whether the NAT policy is configured in the action.</p>
String Length	1 to 32
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**next-hop** (*keyword* | *ipv4-address-no-zone* | *ipv6-address-no-zone* | *string*)

Synopsis	Next-hop IP address applied to routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">next-hop</a> ( <i>keyword</i>   <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>   <i>string</i> )
Tree	<a href="#">next-hop</a>
String Length	1 to 32
Options	peer-address, self
Introduced	19.10.R1
Platforms	All

**origin** (*keyword* | *string*)

Synopsis	BGP origin for routes that are exported into BGP
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">origin</a> ( <i>keyword</i>   <i>string</i> )
Tree	<a href="#">origin</a>
String Length	1 to 32

Options	igp, egp, incomplete
Introduced	19.10.R1
Platforms	All

### **origin-validation-state** (*keyword | string*)

Synopsis	Origin validation state for routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">origin-validation-state</a> ( <i>keyword   string</i> )
Tree	<a href="#">origin-validation-state</a>
String Length	1 to 32
Options	valid, not-found, invalid
Introduced	19.10.R1
Platforms	All

### **preference** (*number | string*)

Synopsis	Route preference applied to routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">preference</a> ( <i>number   string</i> )
Tree	<a href="#">preference</a>
String Length	1 to 32
Range	1 to 255
Introduced	19.10.R1
Platforms	All

### **resolve-static** *boolean*

Synopsis	Resolve next hop of a static route for the BGP next hop
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">resolve-static</a> <i>boolean</i>
Tree	<a href="#">resolve-static</a>
Default	false
Introduced	19.10.R1
Platforms	All

**route-table-install** *boolean*

Synopsis	Allow BGP route installation in the route table
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">route-table-install</a> <i>boolean</i>
Tree	<a href="#">route-table-install</a>
Default	true
Introduced	19.10.R1
Platforms	All

**source-class** *number*

Synopsis	Default source class for the policy statement
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">source-class</a> <i>number</i>
Tree	<a href="#">source-class</a>
Description	This command specifies the policy accounting source class index to associate with matched routes.
Range	1 to 255
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**sr-label-index**

Synopsis	Enter the <b>sr-label-index</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">sr-label-index</a>
Tree	<a href="#">sr-label-index</a>
Description	<p>Commands in this context configure the policy action to associate a BGP segment-routing label index value with all /32 BGP labeled IPv4 routes.</p> <p>The use of this action in a policy entry that matches more than one /32 labeled IPv4 route may create SID conflicts.</p> <p>This action only takes effect in BGP peer import policies (and only on received /32 labeled IPv4 routes) and in route table import policies associated with the labeled IPv4 RIB.</p> <p>When this action occurs in a policy applied as a peer import policy, a prefix SID attribute can be added to a received /32 labeled IPv4 route that was not sent with this attribute, or the received prefix SID attribute can be replaced with a new one.</p>
Introduced	19.10.R1

Platforms All

### **prefer-igp** *boolean*

Synopsis	Use the SR label index from the IGP route when present
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">sr-label-index</a> <b>prefer-igp</b> <i>boolean</i>
Tree	<a href="#">prefer-igp</a>
Description	<p>When configured to <b>true</b>, BGP obtains the SID index from the IGP route (if a SID index is present) and the <b>configure router bgp segment-routing prefix-sid-range global</b> command is set to <b>true</b>.</p> <p>This command applies only to route table import policies.</p> <p>When configured to <b>false</b>, or the SID index is not present in the IGP route, or the <b>configure router bgp segment-routing prefix-sid-range global</b> command is not set to <b>true</b>, BGP obtains the label index value from the <b>value</b> command.</p>
Default	false
Introduced	19.10.R1
Platforms	All

### **value** (*string* | *number*)

Synopsis	BGP SR label index associated with routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">sr-label-index</a> <b>value</b> ( <i>string</i>   <i>number</i> )
Tree	<a href="#">value</a>
Description	<p>This command specifies the BGP SR label index value to be associated with a route or routes.</p> <p>If this command specifies an index value that causes a SID conflict with another BGP route, all conflicting BGP routes are re-advertised with label values based on dynamic allocation rather than SID-based allocation.</p> <p>If this command specifies an index value that causes a SID conflict with an IGP route, the BGP route is re-advertised with a label value based on dynamic allocation rather than SID-based allocation.</p>
String Length	1 to 32
Range	0 to 524287
Introduced	19.10.R1
Platforms	All

**sr-maintenance-policy** (*param-midstring* | *string*)

Synopsis	SR maintenance policy as an action
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">sr-maintenance-policy</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">sr-maintenance-policy</a>
Description	This command applies a named segment routing maintenance policy as an action for route policies. It is only used for SR policy routes.
String Length	1 to 32
Introduced	20.10.R1
Platforms	All

**sticky-ecmp** *boolean*

Synopsis	Specify the sticky ECMP flag for BGP ECMP routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">sticky-ecmp</a> <i>boolean</i>
Tree	<a href="#">sticky-ecmp</a>
Default	false
Introduced	19.10.R1
Platforms	All

**tag** (*number* | *string*)

Synopsis	OSPF RIP or IS-IS tag applied to routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">tag</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">tag</a>
String Length	1 to 32
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

**type** (*number* | *string*)

Synopsis	OSPF metric type applied to routes
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Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <i>type</i> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">type</a>
String Length	1 to 32
Range	1 to 2
Introduced	19.10.R1
Platforms	All

### conditional-expression

Synopsis	Enable the <b>conditional-expression</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">conditional-expression</a>
Tree	<a href="#">conditional-expression</a>
Introduced	19.10.R1
Platforms	All

### route-exists *string*

Synopsis	Conditional expression to test route existence
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">conditional-expression</a> <a href="#">route-exists</a> <i>string</i>
Tree	<a href="#">route-exists</a>
String Length	1 to 255
Introduced	19.10.R1
Platforms	All

### description *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	19.10.R1
Platforms	All



**from**

Synopsis	Enable the <b>from</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <b>from</b>
Tree	<a href="#">from</a>
Introduced	19.10.R1
Platforms	All

**aggregate-contributor** *boolean*

Synopsis	Enable aggregate route match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <b>from</b> <a href="#">aggregate-contributor</a> <i>boolean</i>
Tree	<a href="#">aggregate-contributor</a>
Description	<p>When configured to <b>true</b>, matches all routes (BGP and non-BGP) that have contributed to an active aggregate route. If the prefix tree above a particular route includes no active aggregate routes or the most specific active aggregate route in the prefix tree above this route has a policy that rejects the route, then it is not considered as an aggregate-contributor.</p> <p>This match condition is only supported when used in a BGP export policy. If it is used in an entry of a BGP import policy, <b>vrf-export</b> policy or <b>vrf-import</b> policy, no routes are matched by that entry.</p> <p>When configured to <b>false</b>, no routes (BGP and non-BGP) that have contributed to an active aggregate route are matched.</p>
Default	false
Introduced	20.10.R1
Platforms	All

**area** *string*

Synopsis	OSPF area as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <b>from</b> <a href="#">area</a> <i>string</i>
Tree	<a href="#">area</a>
Introduced	19.10.R1
Platforms	All

## as-path

Synopsis	Enter the <b>as-path</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from as-path</a>
Tree	<a href="#">as-path</a>
Introduced	19.10.R1
Platforms	All

## group (*param-midstring* | *string*)

Synopsis	AS path group as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from as-path</a> <a href="#">group</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">group</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>group</b> or <b>name</b> .
Introduced	19.10.R1
Platforms	All

## length

Synopsis	Enter the <b>length</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from as-path</a> <a href="#">length</a>
Tree	<a href="#">length</a>
Introduced	19.10.R1
Platforms	All

## qualifier *keyword*

Synopsis	Higher or lower values to be accepted as match criteria
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from as-path</a> <a href="#">length</a> <a href="#">qualifier</a> <i>keyword</i>
Tree	<a href="#">qualifier</a>
Options	equal, or-higher, or-lower
Default	equal
Introduced	19.10.R1

Platforms All

### **unique** *boolean*

Synopsis Use unique AS numbers as matching criteria

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from as-path](#) [length](#) [unique](#) *boolean*

Tree [unique](#)

Default false

Introduced 19.10.R1

Platforms All

### **value** (*number* | *string*)

Synopsis AS numbers in the AS path that match on the BGP route

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from as-path](#) [length](#) [value](#) (*number* | *string*)

Tree [value](#)

String Length 1 to 32

Range 0 to 255

Introduced 19.10.R1

Platforms All

### **name** (*param-midstring* | *string*)

Synopsis AS path name to match

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from as-path](#) [name](#) (*param-midstring* | *string*)

Tree [name](#)

Description This command specifies an AS path regular expression name for the route policy entry. Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@", "start@variable@end", "@variable@end", or "start@variable@".

String Length 1 to 32

Notes The following elements are part of a choice: **group** or **name**.

Introduced 19.10.R1

Platforms All

## cluster-id

Synopsis	Enter the <b>cluster-id</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from cluster-id</a>
Tree	<a href="#">cluster-id</a>
Introduced	19.10.R1
Platforms	All

## ip-address *string*

Synopsis	Cluster list attribute IP addresses for route matching
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from cluster-id</a> <a href="#">ip-address</a> <i>string</i>
Tree	<a href="#">ip-address</a>
Max. Instances	5
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>none-cluster-list</b> . This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

## none-cluster-list *boolean*

Synopsis	Specify matching BGP routes without a cluster ID
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from cluster-id</a> <a href="#">none-cluster-list</a> <i>boolean</i>
Tree	<a href="#">none-cluster-list</a>
Default	false
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>none-cluster-list</b> .
Introduced	19.10.R1
Platforms	All

## color *number*

Synopsis	Color ID as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from color</a> <i>number</i>

Tree	<a href="#">color</a>
Description	This command configures an SR Policy color ID as a route policy match criterion. This match criterion is only used in import policies.
Range	0 to 4294967295
Introduced	20.10.R1
Platforms	All

## community

Synopsis	Enter the <b>community</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from community</a>
Tree	<a href="#">community</a>
Introduced	19.10.R1
Platforms	All

## count

Synopsis	Enter the <b>count</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from community</a> <a href="#">count</a>
Tree	<a href="#">count</a>
Introduced	19.10.R1
Platforms	All

## qualifier *keyword*

Synopsis	Higher or lower values to be accepted as match criteria
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from community</a> <a href="#">count</a> <a href="#">qualifier</a> <i>keyword</i>
Tree	<a href="#">qualifier</a>
Options	equal, or-higher, or-lower
Default	equal
Introduced	19.10.R1
Platforms	All

**type keyword**

Synopsis	Community count to match the community count criteria
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from community count type keyword</a>
Tree	<a href="#">type</a>
Options	standard, extended, large
Introduced	19.10.R1
Platforms	All

**value (number | string)**

Synopsis	Number of BGP communities to match the BGP route
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from community count value (number   string)</a>
Tree	<a href="#">value</a>
String Length	1 to 32
Range	0 to 1024
Introduced	19.10.R1
Platforms	All

**expression string**

Synopsis	Community expression name as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from community expression string</a>
Tree	<a href="#">expression</a>
String Length	1 to 900
Notes	The following elements are part of a choice: <b>expression</b> or <b>name</b> .
Introduced	19.10.R1
Platforms	All

**name (param-midstring-64 | string)**

Synopsis	Community list name
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from community name (param-midstring-64   string)</a>

Tree	<a href="#">name</a>
String Length	1 to 64
Notes	The following elements are part of a choice: <b>expression</b> or <b>name</b> .
Introduced	19.10.R1
Platforms	All

### **distinguisher** *number*

Synopsis	SR policy distinguisher as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from</a> <a href="#">distinguisher</a> <i>number</i>
Tree	<a href="#">distinguisher</a>
Description	This command configures an SR Policy distinguisher as a route policy match criterion. This match criterion is only used in import policies.
Range	0 to 4294967295
Introduced	20.10.R1
Platforms	All

### **endpoint** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	SR policy endpoint address as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from</a> <a href="#">endpoint</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">endpoint</a>
Description	This command configures an SR Policy endpoint address as a route policy match criterion. This match criterion is only used in import policies.
Introduced	20.10.R1
Platforms	All

### **evpn-type** *keyword*

Synopsis	EVPN type as a match criterion for the entry
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from</a> <a href="#">evpn-type</a> <i>keyword</i>
Tree	<a href="#">evpn-type</a>
Options	ethernet-auto-discovery, mac-ip-advertisement, inclusive-multicast, ethernet-segment, ip-prefix, selective-multicast, multicast-join-sync, multicast-leave-sync

Introduced	19.10.R1
Platforms	All

### **external** *boolean*

Synopsis	Specify the external IS-IS route as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from external</a> <i>boolean</i>
Tree	<a href="#">external</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **family** *keyword*

Synopsis	Address family as the match condition
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from family</a> <i>keyword</i>
Tree	<a href="#">family</a>
Options	ipv4, vpn-ipv4, ipv6, mcast-ipv4, vpn-ipv6, l2-vpn, mvpn-ipv4, mdt-safi, ms-pw, flow-ipv4, route-target, mcast-vpn-ipv4, mvpn-ipv6, flow-ipv6, evpn, mcast-ipv6, label-ipv4, label-ipv6, bgp-ls, mcast-vpn-ipv6, sr-policy-ipv4, sr-policy-ipv6, flow-vpn-ipv4, flow-vpn-ipv6
Max. Instances	20
Introduced	19.10.R1
Platforms	All

### **flowspec**

Synopsis	Enter the <b>flowspec</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from flowspec</a>
Tree	<a href="#">flowspec</a>
Introduced	19.10.R1
Platforms	All



**dest** (*param-midstring* | *string*)

Synopsis	BGP FlowSpec route matches per destination IP prefix
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from flowspec</a> <a href="#">dest</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">dest</a>
String Length	1 to 32
Introduced	19.10.R1
Platforms	All

**source** (*param-midstring* | *string*)

Synopsis	BGP FlowSpec route matches per the source IP prefix
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from flowspec</a> <a href="#">source</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">source</a>
String Length	1 to 32
Introduced	19.10.R1
Platforms	All

**group-address** (*param-midstring* | *string*)

Synopsis	Prefix list of multicast group addresses for mathcing
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from group-address</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">group-address</a>
String Length	1 to 32
Introduced	19.10.R1
Platforms	All

**host-ip** (*param-midstring* | *string*)

Synopsis	Prefix list of IGMP host IP addresses for matching
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from host-ip</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">host-ip</a>
String Length	1 to 32

Introduced	19.10.R1
Platforms	All

### **interface** (*named-item* | *interface-name* | *interface-name* | *interface-name*)

Synopsis	Interface name as match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from interface</a> ( <i>named-item</i>   <i>interface-name</i>   <i>interface-name</i>   <i>interface-name</i> )
Tree	<a href="#">interface</a>
String Length	1 to 32
Max. Instances	1
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

### **interface-subnets**

Synopsis	Enter the <b>interface-subnets</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from interface-subnets</a>
Tree	<a href="#">interface-subnets</a>
Description	<p>Commands in this context configure the applied router instance and interfaces that are used as the matching condition within each policy statement entry when exporting the IP address of the associated interface to a routing protocol.</p> <p>The interface subnet policy statement match criterion is applied to the following unicast use case contexts:</p> <ul style="list-style-type: none"> <li>• <b>export</b>, when used with OSPFv2, OSPFv3, IS-IS, RIP, RIPng, and BGP</li> <li>• <b>route-table-import</b>, when used with BGP</li> <li>• <b>vrf-export</b>, when used with MP-BGP</li> </ul>
Introduced	21.2.R1
Platforms	All

### **ip-int-name** *string*

Synopsis	Interface name as the match criterion
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Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from interface-subnets</a> <a href="#">ip-int-name</a> <i>string</i>
Tree	<a href="#">ip-int-name</a>
Description	This command specifies the interface name to match when exporting the IP address of the associated interface to a routing protocol.
String Length	1 to 32
Max. Instances	10
Notes	This element is ordered by the user.
Introduced	21.2.R1
Platforms	All

### **service** *string*

Synopsis	Service ID of the interface subnets
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from interface-subnets</a> <a href="#">service</a> <i>string</i>
Tree	<a href="#">service</a>
Default	Base
Introduced	21.2.R1
Platforms	All

### **level** *number*

Synopsis	IS-IS route level as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from level</a> <i>number</i>
Tree	<a href="#">level</a>
Range	1 to 2
Introduced	19.10.R1
Platforms	All

### **local-preference**

Synopsis	Enter the <b>local-preference</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from local-preference</a>

Tree	<a href="#">local-preference</a>
Introduced	19.10.R1
Platforms	All

**qualifier** *keyword*

Synopsis	Higher or lower values to be accepted as match criteria
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from local-preference</a> <a href="#">qualifier</a> <i>keyword</i>
Tree	<a href="#">qualifier</a>
Options	equal, or-higher, or-lower
Default	equal
Introduced	19.10.R1
Platforms	All

**value** (*number* | *string*)

Synopsis	BGP routes per local preference value or variable name
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from local-preference</a> <a href="#">value</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">value</a>
String Length	1 to 32
Range	0 to 4294967295
Introduced	19.10.R1
Platforms	All

**metric**

Synopsis	Enter the <b>metric</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from metric</a>
Tree	<a href="#">metric</a>
Introduced	19.10.R1
Platforms	All

**qualifier keyword**

Synopsis	Higher or lower values to be accepted as match criteria
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from metric</a> <a href="#">qualifier</a> <i>keyword</i>
Tree	<a href="#">qualifier</a>
Options	equal, or-higher, or-lower
Default	equal
Introduced	19.10.R1
Platforms	All

**value (number | string)**

Synopsis	Local preference value or variable name
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from metric</a> <a href="#">value</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">value</a>
String Length	1 to 32
Range	0 to 4294967295
Introduced	19.10.R1
Platforms	All

**mvpn-type keyword**

Synopsis	MVPN type as a match criterion for the entry
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from mvpn-type</a> <i>keyword</i>
Tree	<a href="#">mvpn-type</a>
Options	intra-as-ipmsi-auto-discovery, inter-as-ipmsi-auto-discovery, s-pmsi-auto-discovery, intra-as-segment-leaf-auto-discovery, source-active-auto-discovery, shared-tree-join, source-tree-join
Introduced	19.10.R1
Platforms	All

**neighbor**

Synopsis	Enter the <b>neighbor</b> context
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Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from neighbor</a>
Tree	<a href="#">neighbor</a>
Introduced	19.10.R1
Platforms	All

### **ip-address** (*ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-with-zone | ipv6-address-with-zone*)

Synopsis	IP address to match the neighbor
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from neighbor</a> <a href="#">ip-address</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone   ipv4-address-with-zone   ipv6-address-with-zone</i> )
Tree	<a href="#">ip-address</a>
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>prefix-list</b> .
Introduced	19.10.R1
Platforms	All

### **prefix-list** (*param-midstring | string*)

Synopsis	Name to match the neighbor prefix list
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from neighbor</a> <a href="#">prefix-list</a> ( <i>param-midstring   string</i> )
Tree	<a href="#">prefix-list</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>prefix-list</b> .
Introduced	19.10.R1
Platforms	All

### **next-hop**

Synopsis	Enter the <b>next-hop</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from next-hop</a>
Tree	<a href="#">next-hop</a>
Introduced	19.10.R1
Platforms	All

**ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the next hop to match
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from next-hop ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">ip-address</a>
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>prefix-list</b> .
Introduced	19.10.R1
Platforms	All

**prefix-list** (*param-midstring* | *string*)

Synopsis	Name of a next hop prefix list to match
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from next-hop prefix-list</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">prefix-list</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>prefix-list</b> .
Introduced	19.10.R1
Platforms	All

**origin** *keyword*

Synopsis	Route origin match criteria
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from origin</a> <i>keyword</i>
Tree	<a href="#">origin</a>
Description	<p>This command configures a match criteria for the origin attribute of the route. The origin attribute is applicable to BGP routes and to the following subscriber-management routes:</p> <p>Host routes (for example, IPv4 /32 address, or IPv6 SLAAC prefix) carry the origin attribute with AAA, dynamic, or static values, depending on the address assignment method. For CUPS hosts, the origin attribute is always PFCP. Host routes can also be distinguished using the <b>sub-mgmt</b> option for the <b>protocol</b> command.</p> <p>Dynamically provisioned prefixes or loopback addresses use AAA or PFCP origin values, depending on the protocol that provides the prefix and address. Dynamic routes can also be distinguished using the <b>direct</b> option for the <b>protocol</b> command.</p>

Statically configured prefixes under the subscriber interface do not have an origin attribute. These routes can be distinguished using the **direct** option for the **protocol** command.

Framed routes for non-CUPS hosts do not have an origin attribute. Framed routes for CUPS hosts use PFCP for the origin attribute. Alternatively, framed routes can be distinguished using the **managed** option for the **protocol** command.

The values that are specific to subscriber-management routes are never carried in BGP updates as part of the BGP origin attribute and are not visible within the BGP process.

Options	igp, egp, incomplete, any, aaa, dynamic, static, bonding, pfcp
Introduced	19.10.R1
Platforms	All

### **origin-validation-state** *keyword*

Synopsis	Origin validation state used for match criteria
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from origin-validation-state</a> <i>keyword</i>
Tree	<a href="#">origin-validation-state</a>
Description	This command specifies a validation state that is used to match BGP routes based on their origin validation state.
Options	valid, not-found, invalid
Introduced	19.10.R1
Platforms	All

### **ospf-type** *number*

Synopsis	OSPF type metric applied to unmatching route entries
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from ospf-type</a> <i>number</i>
Tree	<a href="#">ospf-type</a>
Range	1 to 2
Introduced	19.10.R1
Platforms	All

### **path-type** *keyword*

Synopsis	Path type as a match criterion
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Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from path-type</a> <i>keyword</i>
Tree	<a href="#">path-type</a>
Options	ibgp, ebgp
Introduced	19.10.R1
Platforms	All

### **policy** (*string* | *string*)

Synopsis	Policy statement as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from policy</a> ( <i>string</i>   <i>string</i> )
Tree	<a href="#">policy</a>
String Length	1 to 255
Introduced	19.10.R1
Platforms	All

### **policy-variables**

Synopsis	Enter the <b>policy-variables</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from policy-variables</a> <a href="#">variables</a>
Tree	<a href="#">policy-variables</a>
Introduced	19.10.R1
Platforms	All

### **name** [[variable-name](#)] *string*

Synopsis	Enter the <b>name</b> list instance
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from policy-variables</a> <a href="#">name</a> <i>string</i>
Tree	<a href="#">name</a>
Description	Commands in this context configure global variables for use across BGP peers of a common type (transit, peer, customer, and so on).
Max. Instances	10
Introduced	19.10.R1

Platforms All

### **[variable-name]** *string*

Synopsis Global variable name used to reference policy functions

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from policy-variables](#) [name](#) *string*

Tree [name](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 19.10.R1

Platforms All

### **address** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis IP address of the policy variable

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from policy-variables](#) [name](#) *string* [address](#) (*ipv4-address-no-zone | ipv6-address-no-zone*)

Tree [address](#)

Notes The following elements are part of a mandatory choice: **address**, **decimal**, **number**, or **value**.

Introduced 19.10.R1

Platforms All

### **decimal** *decimal-number*

Synopsis Attribute decimal to which variable name is resolved

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from policy-variables](#) [name](#) *string* [decimal](#) *decimal-number*

Tree [decimal](#)

Range 0.000 to 4294967295.000

Notes The following elements are part of a mandatory choice: **address**, **decimal**, **number**, or **value**.

Introduced 19.10.R1

Platforms All

**number** *number*

Synopsis	Numerical value of the policy variable
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from policy-variables</a> <i>name string number number</i>
Tree	<a href="#">number</a>
Range	0 to 4294967295
Notes	The following elements are part of a mandatory choice: <b>address</b> , <b>decimal</b> , <b>number</b> , or <b>value</b> .
Introduced	19.10.R1
Platforms	All

**value** *string*

Synopsis	Policy variable value
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from policy-variables</a> <i>name string value string</i>
Tree	<a href="#">value</a>
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: <b>address</b> , <b>decimal</b> , <b>number</b> , or <b>value</b> .
Introduced	19.10.R1
Platforms	All

**prefix-list** (*param-midstring* | *string*)

Synopsis	Prefix list as match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from prefix-list</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">prefix-list</a>
String Length	1 to 32
Max. Instances	28
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

**protocol**

Synopsis	Enter the <b>protocol</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from protocol</a>
Tree	<a href="#">protocol</a>
Description	Commands in this context configure the match criterion based on protocols for a route policy statement entry and may be used for both import and export policies.
Introduced	19.10.R1
Platforms	All

**instance** (*keyword* | *number*)

Synopsis	Instance for protocol IS-IS, OSPF, or OSPFv3 to match
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from protocol</a> <a href="#">instance</a> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">instance</a>
Description	This command specifies the OSPF, OSPFv3, or IS-IS instance to be used as the match criterion.  When this command is explicitly configured, the <b>name</b> command must be configured to identify the protocol (OSPF, OSPFv3, or IS-IS).
Range	0 to 127
Options	all
Default	0
Introduced	19.10.R1
Platforms	All

**name** *keyword*

Synopsis	List of protocol names as the match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from protocol</a> <a href="#">name</a> <a href="#">keyword</a>
Tree	<a href="#">name</a>
Description	This command specifies a protocol list for the match criterion. If multiple protocols are specified, the protocol names must belong to the following protocol set: <ul style="list-style-type: none"> <li>• direct</li> <li>• static</li> <li>• isis</li> <li>• aggregate</li> </ul>

- bgp
- bgp-label
- direct-interface

If multiple protocols are specified, the **instance** command cannot be explicitly configured.

The protocol **direct-interface** route type matches the specific direct interface host IPv4 / 32 and IPv6 /128 routes.

Options	direct, static, bgp, isis, ospf, rip, aggregate, bgp-vpn, igmp, pim, ospf3, ldp, sub-mgmt, mld, managed, vpn-leak, nat, periodic, ipsec, dhcpv6-pd, dhcpv6-na, dhcpv6-ta, dhcpv6-pd-excl, ripng, bgp-label, direct-interface, arp-nd, rib-api, dhcp-client, evpn-ift, srv6, video
Max. Instances	5
Introduced	19.10.R1
Platforms	All

## source-address

Synopsis	Enter the <b>source-address</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from source-address</a>
Tree	<a href="#">source-address</a>
Introduced	19.10.R1
Platforms	All

## ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source IP address to match
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from source-address</a> <a href="#">ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">ip-address</a>
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>prefix-list</b> .
Introduced	19.10.R1
Platforms	All

## prefix-list (*param-midstring* | *string*)

Synopsis	Name of a source address prefix list to match
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Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from</a> <a href="#">source-address</a> <a href="#">prefix-list</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">prefix-list</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>prefix-list</b> .
Introduced	19.10.R1
Platforms	All

### **state** *keyword*

Synopsis	State used as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from</a> <i>state</i> <i>keyword</i>
Tree	<a href="#">state</a>
Description	This command configures a criterion that identifies in resilient gateways which routes are associated with an active context and which routes are associated with a standby context.
Options	srrp-master, srrp-non-master, ipsec-master-with-peer, ipsec-master-without-peer, ipsec-non-master, fsg-active, fsg-standby
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **tag** (*number* | *keyword*)

Synopsis	Route tag used as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from</a> <i>tag</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">tag</a>
Range	1 to 4294967295
Options	no-tag
Introduced	19.10.R1
Platforms	All

### **to**

Synopsis	Enable the <b>to</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <i>to</i>

Tree	<a href="#">to</a>
Introduced	19.10.R1
Platforms	All

**level number**

Synopsis	IS-IS route level as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">to level</a> <i>number</i>
Tree	<a href="#">level</a>
Range	1 to 2
Introduced	19.10.R1
Platforms	All

**neighbor**

Synopsis	Enter the <b>neighbor</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">to neighbor</a>
Tree	<a href="#">neighbor</a>
Introduced	19.10.R1
Platforms	All

**ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	IP address to match the neighbor
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">to neighbor</a> <a href="#">ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>   <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> )
Tree	<a href="#">ip-address</a>
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>prefix-list</b> .
Introduced	19.10.R1
Platforms	All

**prefix-list** (*param-midstring* | *string*)

Synopsis	Name to match the neighbor prefix list
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Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">to neighbor</a> <a href="#">prefix-list</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">prefix-list</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>prefix-list</b> .
Introduced	19.10.R1
Platforms	All

### **prefix-list** (*param-midstring* | *string*)

Synopsis	Prefix list as match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">to prefix-list</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">prefix-list</a>
String Length	1 to 32
Max. Instances	28
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

### **protocol**

Synopsis	Enter the <b>protocol</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">to protocol</a>
Tree	<a href="#">protocol</a>
Introduced	19.10.R1
Platforms	All

### **instance** (*keyword* | *number*)

Synopsis	Instance for the IS-IS, OSPF, or OSPF3 protocol
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">to protocol</a> <a href="#">instance</a> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">instance</a>
Range	0 to 127



Options	all
Default	0
Introduced	19.10.R1
Platforms	All

**name** *keyword*

Synopsis	Protocol name to match
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> to protocol name <i>keyword</i>
Tree	<a href="#">name</a>
Options	bgp, isis, ospf, rip, bgp-vpn, ospf3, ldp, vpn-leak, ripng, bgp-label, evpn-ift
Max. Instances	2
Introduced	19.10.R1
Platforms	All

**prefix-list** [[name](#)] *string*

Synopsis	Enter the <b>prefix-list</b> list instance
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">prefix-list</a> <i>string</i>
Tree	<a href="#">prefix-list</a>
Introduced	16.0.R1
Platforms	All

**[name]** *string*

Synopsis	Prefix list name
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">prefix-list</a> <i>string</i>
Tree	<a href="#">prefix-list</a>
Description	This command specifies the name for a prefix list. Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@", "start@variable@end", "@variable@end", or "start@variable@".
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **prefix** [*ip-prefix*] (*ipv4-prefix* | *ipv6-prefix*) *type keyword*

Synopsis Enter the **prefix** list instance

Context **configure** *policy-options prefix-list string prefix* (*ipv4-prefix* | *ipv6-prefix*) *type keyword*

Tree *prefix*

Introduced 16.0.R1

Platforms All

### **[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis IP prefix associated with the prefix length

Context **configure** *policy-options prefix-list string prefix* (*ipv4-prefix* | *ipv6-prefix*) *type keyword*

Tree *prefix*

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **type keyword**

Synopsis Prefix list match type

Context **configure** *policy-options prefix-list string prefix* (*ipv4-prefix* | *ipv6-prefix*) *type keyword*

Tree *prefix*

Options exact, longer, through, range, to, address-mask

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **end-length number**

Synopsis Prefix range end length

Context **configure** *policy-options prefix-list string prefix* (*ipv4-prefix* | *ipv6-prefix*) *type keyword end-length number*

Tree *end-length*

Range	0 to 128
Notes	The following elements are part of a choice: <b>mask-pattern</b> , ( <b>end-length</b> and <b>start-length</b> ), <b>through-length</b> , or <b>to-prefix</b> .
Introduced	16.0.R1
Platforms	All

### **mask-pattern** [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Add a list entry for <b>mask-pattern</b>
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">prefix-list</a> <i>string</i> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">type</a> <i>keyword</i> <a href="#">mask-pattern</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">mask-pattern</a>
Notes	The following elements are part of a choice: <b>mask-pattern</b> , ( <b>end-length</b> and <b>start-length</b> ), <b>through-length</b> , or <b>to-prefix</b> .
Introduced	20.7.R1
Platforms	All

### [\[address\]](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Address mask for matching routes to the prefix entry
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">prefix-list</a> <i>string</i> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">type</a> <i>keyword</i> <a href="#">mask-pattern</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">mask-pattern</a>
Description	<p>This command specifies the address mask to compare against the prefix entry to determine whether the route is considered a match.</p> <p>A route matches the prefix entry if the following conditions are met.</p> <ul style="list-style-type: none"> <li>• The bitwise logical AND of the prefix address and its mask matches the bitwise logical AND of the route address and its mask.</li> <li>• The prefix length of the prefix entry matches the prefix length of the route.</li> </ul> <p>For example, for a prefix entry of 17.1.0.0/32, routes with an address 17.1.x.0 (where x can be 0 through 255) and a prefix length of 32 match the entry.</p>
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

### **start-length** *number*

Synopsis	Start in the prefix range length
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">prefix-list</a> <i>string</i> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">type</a> <i>keyword</i> <a href="#">start-length</a> <i>number</i>
Tree	<a href="#">start-length</a>
Range	0 to 128
Notes	The following elements are part of a choice: <b>mask-pattern</b> , ( <b>end-length</b> and <b>start-length</b> ), <b>through-length</b> , or <b>to-prefix</b> .
Introduced	16.0.R1
Platforms	All

### **through-length** *number*

Synopsis	Prefix through length
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">prefix-list</a> <i>string</i> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">type</a> <i>keyword</i> <a href="#">through-length</a> <i>number</i>
Tree	<a href="#">through-length</a>
Range	0 to 128
Notes	The following elements are part of a choice: <b>mask-pattern</b> , ( <b>end-length</b> and <b>start-length</b> ), <b>through-length</b> , or <b>to-prefix</b> .
Introduced	16.0.R1
Platforms	All

### **to-prefix** [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Add a list entry for <b>to-prefix</b>
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">prefix-list</a> <i>string</i> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">type</a> <i>keyword</i> <a href="#">to-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">to-prefix</a>
Notes	The following elements are part of a choice: <b>mask-pattern</b> , ( <b>end-length</b> and <b>start-length</b> ), <b>through-length</b> , or <b>to-prefix</b> .
Introduced	20.7.R1
Platforms	All

**[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix for "to" match type
Context	<b>configure</b> <b>policy-options</b> <b>prefix-list</b> <i>string</i> <b>prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>type</b> <i>keyword</i> <b>to-prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<b>to-prefix</b>
Description	<p>This command configures an IP prefix to use in a route policy prefix list for the to match type. If the prefix entry is in the format <i>prefix1/length1</i>, and this command is configured in the format <i>prefix2/length2</i>, a route matches the prefix entry if the following conditions are met.</p> <ul style="list-style-type: none"><li>• The route shares the same most-significant bits (specified by <i>length1</i>) with the prefix entry</li><li>• The route shares the same most-significant bits (specified by <i>length2</i>) with this IP prefix value</li><li>• The prefix length of the route is in the range of <i>length1</i> to <i>length2</i> (inclusive)</li></ul> <p>For example, for a prefix entry of 10.0.0.8 with a to IP prefix value of 10.0.0.0/32, routes 10.0.0.0/8, 10.0.0.0/9, 10.0.0.0/10, and so on, to 10.0.0.0/32 are considered matches for the prefix entry.</p>
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

## 3.32 port commands

```

configure
- port string
- access
- apply-groups reference
- apply-groups-exclude reference
- egress
- pool string
- amber-alarm-threshold number
- apply-groups reference
- apply-groups-exclude reference
- red-alarm-threshold number
- resv-cbs
- amber-alarm-action
- max number
- step number
- cbs (number | keyword)
- slope-policy reference
- ingress
- pool string
- amber-alarm-threshold number
- apply-groups reference
- apply-groups-exclude reference
- red-alarm-threshold number
- resv-cbs
- amber-alarm-action
- max number
- step number
- cbs (number | keyword)
- slope-policy reference
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- connector
- apply-groups reference
- apply-groups-exclude reference
- breakout keyword
- rs-fec-mode keyword
- ddm-events boolean
- description string
- dist-cpu-protection
- policy reference
- dwdm
- apply-groups reference
- apply-groups-exclude reference
- coherent
- apply-groups reference
- apply-groups-exclude reference
- compatibility keyword
- cpr-window-size number
- dispersion number
- mode keyword
- report-alarm
- hosttx boolean
- mod boolean
- modflt boolean
- netrx boolean
- nettx boolean
- rx-los-reaction keyword
- rx-los-thresh decimal-number

```

## configure port dwdm coherent sweep

```

- sweep
  - end number
  - start number
  - target-power decimal-number
- frequency number
- ethernet
- access
  - apply-groups reference
  - apply-groups-exclude reference
  - bandwidth number
  - booking-factor number
  - egress
    - queue-group reference instance-id number
      - accounting-policy reference
      - aggregate-rate
        - limit-unused-bandwidth boolean
        - queue-frame-based-accounting boolean
        - rate (number | keyword)
      - apply-groups reference
      - apply-groups-exclude reference
      - collect-stats boolean
      - description string
      - host-match
        - int-dest-id string
      - hs-turbo boolean
      - queue-overrides
        - queue reference
          - adaptation-rule
            - cir keyword
            - pir keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - burst-limit (number | keyword)
          - cbs (number | keyword)
          - drop-tail
            - low
              - percent-reduction-from-mbs (number | keyword)
          - mbs (number | keyword)
          - monitor-queue-depth
            - fast-polling boolean
            - violation-threshold decimal-number
        - parent
          - cir-weight number
          - weight number
        - percent-rate
          - cir decimal-number
          - pir decimal-number
        - rate
          - cir (number | keyword)
          - pir (number | keyword)
      - scheduler-policy
        - overrides
          - scheduler string
          - apply-groups reference
          - apply-groups-exclude reference
          - parent
            - cir-weight number
            - weight number
          - rate
            - cir (number | keyword)
            - pir (number | keyword)
        - policy-name reference
    - virtual-port string
      - aggregate-rate

```

configure port ethernet access egress virtual-port aggregate-rate limit-unused-bandwidth

```

    - limit-unused-bandwidth boolean
    - rate (number | keyword)
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - host-match
    - int-dest-id string
    - hw-agg-shaper-scheduler-policy reference
    - lag-per-link-hash
    - class number
    - weight number
    - monitor-hw-agg-shaper-scheduler boolean
    - monitor-port-scheduler boolean
    - multicast-hqos-adjustment boolean
    - port-scheduler-policy reference
    - scheduler-policy
    - policy-name reference
- ingress
  - queue-group reference
  - accounting-policy reference
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-stats boolean
  - description string
  - queue-overrides
  - queue reference
  - adaptation-rule
  - cir keyword
  - pir keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - cbs (number | keyword)
  - drop-tail
  - low
  - percent-reduction-from-mbs (number | keyword)
  - mbs (number | keyword)
  - monitor-queue-depth
  - fast-polling boolean
  - rate
  - cir (number | keyword)
  - pir (number | keyword)
  - scheduler-policy
  - overrides
  - scheduler string
  - apply-groups reference
  - apply-groups-exclude reference
  - parent
  - cir-weight number
  - weight number
  - rate
  - cir (number | keyword)
  - pir (number | keyword)
  - policy-name reference
- accounting-policy reference
- apply-groups reference
- apply-groups-exclude reference
- autonegotiate keyword
- collect-stats boolean
- crc-monitor
- signal-degrade
- multiplier number
- threshold number
- signal-failure
- multiplier number

```



configure port ethernet crc-monitor signal-failure threshold

```

    - threshold number
    - window-size number
  - dampening
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - half-life number
    - max-suppress-time number
    - reuse-threshold number
    - suppress-threshold number
  - discard-rx-pause-frames boolean
  - dot1q-etype string
  - dot1x
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - macsec
    - apply-groups reference
    - apply-groups-exclude reference
    - exclude-mac-policy reference
    - exclude-protocol
      - cdp boolean
      - eapol-start boolean
      - efm-oam boolean
      - eth-cfm boolean
      - lacp boolean
      - lldp boolean
      - ptp boolean
      - ubfd boolean
    - rx-must-be-encrypted boolean
  - sub-port number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - ca-name reference
    - eapol-destination-address string
    - encap-match
      - all-match boolean
      - double-tag string
      - single-tag string
      - untagged boolean
      - max-peers number
  - max-authentication-requests number
  - per-host-authentication
    - admin-state keyword
    - allowed-source-macs
      - mac-address string
    - authenticator-init boolean
  - port-control keyword
  - quiet-period number
  - radius-policy reference
  - radius-server-policy reference
  - radius-server-policy-acct reference
  - radius-server-policy-auth reference
  - re-authentication
    - period number
  - server-timeout number
  - supplicant-timeout number
  - transmit-period number
  - tunnel-dot1q boolean
  - tunnel-qinq boolean
  - tunneling boolean
  - down-on-internal-error
    - tx-laser keyword

```

## configure port ethernet down-when-looped

- **down-when-looped**
  - **admin-state** *keyword*
  - **keep-alive** *number*
  - **retry-timeout** *number*
  - **use-broadcast-address** *boolean*
- **duplex** *keyword*
- **efm-oam**
  - **accept-remote-loopback** *boolean*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **discovery**
    - **advertise-capabilities**
      - **link-monitoring** *boolean*
  - **dying-gasp-tx-on-reset** *boolean*
  - **grace-tx** *boolean*
  - **grace-vendor-oui** *string*
  - **hold-time** *number*
  - **ignore-efm-state** *boolean*
- **link-monitoring**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **errored-frame**
    - **admin-state** *keyword*
    - **event-notification** *boolean*
    - **sd-threshold** *number*
    - **sf-threshold** *number*
    - **window** *number*
  - **errored-frame-period**
    - **admin-state** *keyword*
    - **event-notification** *boolean*
    - **sd-threshold** *number*
    - **sf-threshold** *number*
    - **window** *number*
  - **errored-frame-seconds**
    - **admin-state** *keyword*
    - **event-notification** *boolean*
    - **sd-threshold** *number*
    - **sf-threshold** *number*
    - **window** *number*
  - **errored-symbols**
    - **admin-state** *keyword*
    - **event-notification** *boolean*
    - **sd-threshold** *number*
    - **sf-threshold** *number*
    - **window** *number*
  - **local-sf-action**
    - **event-notification-burst** *number*
    - **info-notification**
      - **critical-event** *boolean*
      - **dying-gasp** *boolean*
      - **local-port-action** *keyword*
- **mode** *keyword*
- **multiplier** *number*
- **peer-rdi-rx**
  - **critical-event** *keyword*
  - **dying-gasp** *keyword*
  - **event-notification** *keyword*
  - **link-fault** *keyword*
- **transmit-interval** *number*
- **trigger-fault** *keyword*
- **tunneling** *boolean*
- **egress**

## configure port ethernet egress apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **eth-bn-rate-changes** *boolean*
- **hs-port-pool-policy** *reference*
- **hs-scheduler-policy**
  - **overrides**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **group** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **rate** (*number* | *keyword*)
    - **max-rate** (*number* | *keyword*)
    - **scheduling-class** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **rate** (*number* | *keyword*)
      - **weight** *number*
  - **policy-name** *reference*
- **hs-secondary-shaper** *string*
  - **aggregate**
    - **low-burst-max-class** *number*
    - **rate** (*number* | *keyword*)
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **class** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **rate** (*number* | *keyword*)
  - **description** *string*
- **hw-agg-shaper-scheduler**
  - **monitor** *boolean*
  - **policy-name** *reference*
- **monitor-port-scheduler** *boolean*
- **port-scheduler-policy**
  - **overrides**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **level** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
    - **percent-rate**
      - **cir** *decimal-number*
      - **pir** *decimal-number*
    - **rate**
      - **cir** (*number* | *keyword*)
      - **pir** (*number* | *keyword*)
    - **max-rate**
      - **percent-rate** *decimal-number*
      - **rate** (*number* | *keyword*)
  - **policy-name** *reference*
  - **rate** *number*
- **elmi**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **mode** *keyword*
  - **n393** *number*
  - **t391** *number*
  - **t392** *number*
- **encap-type** *keyword*
- **eth-cfm**
  - **mep** *md-admin-name* *reference* *ma-admin-name* *reference* **mep-id** *number*
    - **admin-state** *keyword*
    - **ais**

configure port ethernet eth-cfm mep ais client-meg-level

```

- client-meg-level number
- interface-support boolean
- interval number
- low-priority-defect keyword
- priority number
- alarm-notification
- fng-alarm-time number
- fng-reset-time number
- apply-groups reference
- apply-groups-exclude reference
- ccm boolean
- ccm-ltm-priority number
- ccm-padding-size number
- ccm-tlv-ignore keyword
- collect-lmm-stats boolean
- csf
- multiplier decimal-number
- description string
- eth-bn
- receive boolean
- rx-update-pacing number
- eth-test
- bit-error-threshold number
- test-pattern
- crc-tlv boolean
- pattern keyword
- facility-fault boolean
- grace
- eth-ed
- max-rx-defect-window number
- priority number
- rx-eth-ed boolean
- tx-eth-ed boolean
- eth-vsm-grace
- rx-eth-vsm-grace boolean
- tx-eth-vsm-grace boolean
- low-priority-defect keyword
- mac-address string
- one-way-delay-threshold number
- vlan (number | keyword)
- hold-time
- down number
- units keyword
- up number
- ingress
- rate number
- lACP-tunnel boolean
- lldp
- apply-groups reference
- apply-groups-exclude reference
- dest-mac keyword
- apply-groups reference
- apply-groups-exclude reference
- notification boolean
- port-id-subtype keyword
- receive boolean
- transmit boolean
- tunnel-nearest-bridge boolean
- tx-mgmt-address keyword
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- tx-tlvs
- port-desc boolean

```

configure port ethernet lldp dest-mac tx-tlvs sys-cap

```

    - sys-cap boolean
    - sys-desc boolean
    - sys-name boolean
- load-balancing-algorithm keyword
- mac-address string
- min-frame-length number
- mode keyword
- mtu number
- network
  - accounting-policy reference
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-stats boolean
  - egress
    - port-queues
      - overrides
        - queue number
          - apply-groups reference
          - apply-groups-exclude reference
          - monitor-queue-depth
            - fast-polling boolean
            - violation-threshold decimal-number
        - queue-group reference instance-id number
          - accounting-policy reference
          - aggregate-rate
            - limit-unused-bandwidth boolean
            - queue-frame-based-accounting boolean
            - rate (number | keyword)
          - apply-groups reference
          - apply-groups-exclude reference
          - collect-stats boolean
          - description string
          - hs-turbo boolean
          - policer-control-policy reference
          - queue-overrides
            - queue reference
              - adaptation-rule
                - cir keyword
                - pir keyword
              - apply-groups reference
              - apply-groups-exclude reference
              - cbs (number | keyword)
              - drop-tail
                - low
                  - percent-reduction-from-mbs (number | keyword)
                - mbs (number | keyword)
              - monitor-queue-depth
                - fast-polling boolean
                - violation-threshold decimal-number
              - percent-rate
                - cir decimal-number
                - pir decimal-number
              - rate
                - cir (number | keyword)
                - pir (number | keyword)
            - scheduler-policy
              - policy-name reference
            - queue-policy reference
          - pbbs-etype string
          - ptp-asymmetry number
          - qinq-etype string
          - report-alarm
            - alignment-marker-not-locked boolean
            - block-not-locked boolean

```

configure port ethernet report-alarm duplicate-lane

- **duplicate-lane** *boolean*
- **frame-not-locked** *boolean*
- **high-ber** *boolean*
- **local** *boolean*
- **remote** *boolean*
- **signal-fail** *boolean*
- **rs-fec-mode** *keyword*
- **single-fiber** *boolean*
- **speed** *number*
- **ssm**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **code-type** *keyword*
  - **esmc-tunnel** *boolean*
  - **tx-dus** *boolean*
- **symbol-monitor**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **signal-degrade**
    - **multiplier** *number*
    - **threshold** *number*
  - **signal-failure**
    - **multiplier** *number*
    - **threshold** *number*
  - **window-size** *number*
- **util-stats-interval** *number*
- **xgig** *keyword*
- **gnss**
  - **antenna-cable-delay** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **constellation**
    - **galileo** *boolean*
    - **glonass** *boolean*
    - **gps** *boolean*
  - **elevation-mask-angle** *number*
- **hybrid-buffer-allocation**
  - **egress-weight**
    - **access** *number*
    - **network** *number*
  - **ingress-weight**
    - **access** *number*
    - **network** *number*
- **modify-buffer-allocation**
  - **percentage-of-rate**
    - **egress** *number*
    - **ingress** *number*
- **monitor-agg-egress-queue-stats** *boolean*
- **monitor-oper-group** *reference*
- **network**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **egress**
    - **pool** *string*
      - **amber-alarm-threshold** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **red-alarm-threshold** *number*
      - **resv-cbs**
        - **amber-alarm-action**
          - **max** *number*
          - **step** *number*

configure port network egress pool resv-cbs cbs

```

    - cbs (number | keyword)
    - slope-policy reference
- oper-group reference
- otu
  - apply-groups reference
  - apply-groups-exclude reference
  - async-mapping boolean
  - fec keyword
  - fine-granularity-ber
    - signal-degrade
      - clear
        - multiplier number
        - threshold number
      - raise
        - multiplier number
        - threshold number
    - signal-failure
      - clear
        - multiplier number
        - threshold number
      - raise
        - multiplier number
        - threshold number
  - otu2-lan-data-rate keyword
  - path-monitoring
    - trail-trace-identifier
      - expected
        - auto-generated
        - bytes string
        - string string
      - mismatch-reaction keyword
      - transmit
        - auto-generated
        - bytes string
        - string string
    - payload-structure-identifier
      - payload
        - expected keyword
        - mismatch-reaction keyword
        - transmit keyword
  - report-alarm
    - fec-fail boolean
    - fec-sd boolean
    - fec-sf boolean
    - fec-uncorr boolean
    - loc boolean
    - lof boolean
    - lom boolean
    - los boolean
    - odu-ais boolean
    - odu-bdi boolean
    - odu-lck boolean
    - odu-oci boolean
    - odu-tim boolean
    - opu-plm boolean
    - otu-ais boolean
    - otu-bdi boolean
    - otu-ber-sd boolean
    - otu-ber-sf boolean
    - otu-biae boolean
    - otu-iae boolean
    - otu-tim boolean
  - sd-threshold number
  - section-monitoring

```

configure port otu section-monitoring trail-trace-identifier

```

- trail-trace-identifier
  - expected
    - auto-generated
    - bytes string
    - string string
  - mismatch-reaction keyword
  - transmit
    - auto-generated
    - bytes string
    - string string
- sf-sd-method keyword
- sf-threshold number
- sonet-sdh
- apply-groups reference
- apply-groups-exclude reference
- clock-source keyword
- framing keyword
- group string
  - apply-groups reference
  - apply-groups-exclude reference
  - payload keyword
- hold-time
  - down number
  - up number
- loopback keyword
- path string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - crc number
  - description string
  - egress
    - port-scheduler-policy
      - overrides
        - apply-groups reference
        - apply-groups-exclude reference
        - level number
          - apply-groups reference
          - apply-groups-exclude reference
        - percent-rate
          - cir decimal-number
          - pir decimal-number
        - rate
          - cir (number | keyword)
          - pir (number | keyword)
      - max-rate
        - percent-rate decimal-number
        - rate (number | keyword)
    - policy-name reference
  - encap-type keyword
  - load-balancing-algorithm keyword
  - mac-address string
  - mode keyword
  - mtu number
  - network
    - accounting-policy reference
    - apply-groups reference
    - apply-groups-exclude reference
    - collect-stats boolean
    - queue-policy reference
  - payload keyword
- ppp
  - apply-groups reference
  - apply-groups-exclude reference

```



configure port sonet-sdh path ppp keepalive

```

- keepalive
  - drop-count number
  - interval (number | keyword)
- report-alarm
  - pais boolean
  - plcd boolean
  - plop boolean
  - pplm boolean
  - prdi boolean
  - prei boolean
  - puneq boolean
- scramble boolean
- signal-label string
- trace-string (keyword | string)
- report-alarm
  - lais boolean
  - lb2er-sd boolean
  - lb2er-sf boolean
  - loc boolean
  - lrldi boolean
  - lrei boolean
  - slof boolean
  - slos boolean
  - sslf boolean
- sd-threshold number
- section-trace
  - byte string
  - increment-z0
  - string string
- sf-threshold number
- single-fiber boolean
- speed keyword
- suppress-low-order-alarms boolean
- tx-dus boolean
- tdm
  - apply-groups reference
  - apply-groups-exclude reference
  - buildout keyword
  - dsl string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - ber-threshold
    - signal-degrade number
    - signal-failure number
  - channel-group number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - crc number
    - description string
    - egress
      - port-scheduler-policy
        - overrides
          - apply-groups reference
          - apply-groups-exclude reference
          - level number
          - apply-groups reference
          - apply-groups-exclude reference
          - percent-rate
            - cir decimal-number
            - pir decimal-number
          - rate
            - cir (number | keyword)

```

configure port tdm ds1 channel-group egress port-scheduler-policy overrides level rate pir

```

    - pir (number | keyword)
      - max-rate
      - percent-rate decimal-number
      - rate (number | keyword)
      - policy-name reference
  - encap-type keyword
  - idle-cycle-flag keyword
  - idle-payload-fill
    - all-ones
    - pattern number
  - idle-signal-fill
    - all-ones
    - pattern number
  - load-balancing-algorithm keyword
  - mac-address string
  - mode keyword
  - mtu number
  - network
    - accounting-policy reference
    - apply-groups reference
    - apply-groups-exclude reference
    - collect-stats boolean
    - queue-policy reference
  - ppp
    - apply-groups reference
    - apply-groups-exclude reference
    - ber-sf-link-down boolean
    - compress
      - acfc boolean
      - pfc boolean
    - keepalive
      - drop-count number
      - interval (number | keyword)
  - speed number
  - timeslot number
  - clock-source keyword
  - framing keyword
  - loopback keyword
  - remote-loop-respond boolean
  - report-alarm
    - ais boolean
    - ber-sd boolean
    - ber-sf boolean
    - looped boolean
    - los boolean
    - oof boolean
    - rai boolean
  - signal-mode keyword
  - ds3 string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - channelized keyword
    - clock-source keyword
    - crc number
    - description string
  - egress
    - port-scheduler-policy
      - overrides
        - apply-groups reference
        - apply-groups-exclude reference
        - level number
        - apply-groups reference
        - apply-groups-exclude reference

```

configure port tdm ds3 egress port-scheduler-policy overrides level percent-rate

```

    - percent-rate
      - cir decimal-number
      - pir decimal-number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - max-rate
      - percent-rate decimal-number
      - rate (number | keyword)
    - policy-name reference
  - encap-type keyword
  - feac-loop-respond boolean
  - framing keyword
  - idle-cycle-flag keyword
  - load-balancing-algorithm keyword
  - loopback keyword
  - mac-address string
  - maintenance-data-link
    - equipment-id-code string
    - facility-id-code string
    - frame-id-code string
    - generator-string string
    - location-id-code string
    - port-string string
    - transmit-message-type
      - idle-signal boolean
      - path boolean
      - test-signal boolean
    - unit-id-code string
  - mode keyword
  - mtu number
  - network
    - accounting-policy reference
    - apply-groups reference
    - apply-groups-exclude reference
    - collect-stats boolean
    - queue-policy reference
  - ppp
    - apply-groups reference
    - apply-groups-exclude reference
    - keepalive
      - drop-count number
      - interval (number | keyword)
  - report-alarm
    - ais boolean
    - looped boolean
    - los boolean
    - oof boolean
    - rai boolean
  - scramble boolean
  - subrate
    - csu-mode keyword
    - rate-step number
  - e1 string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - ber-threshold
      - signal-degrade number
      - signal-failure number
  - channel-group number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference

```

## configure port tdm e1 channel-group crc

- **circ** *number*
- **description** *string*
- **egress**
  - **port-scheduler-policy**
    - **overrides**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **level** *number*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **percent-rate**
          - **cir** *decimal-number*
          - **pir** *decimal-number*
        - **rate**
          - **cir** (*number* | *keyword*)
          - **pir** (*number* | *keyword*)
      - **max-rate**
        - **percent-rate** *decimal-number*
        - **rate** (*number* | *keyword*)
    - **policy-name** *reference*
- **encap-type** *keyword*
- **idle-cycle-flag** *keyword*
- **idle-payload-fill**
  - **all-ones**
  - **pattern** *number*
- **idle-signal-fill**
  - **all-ones**
  - **pattern** *number*
- **load-balancing-algorithm** *keyword*
- **mac-address** *string*
- **mode** *keyword*
- **mtu** *number*
- **network**
  - **accounting-policy** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **collect-stats** *boolean*
  - **queue-policy** *reference*
- **ppp**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **ber-sf-link-down** *boolean*
  - **compress**
    - **acfc** *boolean*
    - **pfc** *boolean*
  - **keepalive**
    - **drop-count** *number*
    - **interval** (*number* | *keyword*)
- **speed** *number*
- **timeslot** *number*
- **clock-source** *keyword*
- **framing** *keyword*
- **loopback** *keyword*
- **national-bits**
  - **sa4** *boolean*
  - **sa5** *boolean*
  - **sa6** *boolean*
  - **sa7** *boolean*
  - **sa8** *boolean*
- **report-alarm**
  - **ais** *boolean*
  - **ber-sd** *boolean*
  - **ber-sf** *boolean*
  - **looped** *boolean*

## configure port tdm e1 report-alarm los

```

    - los boolean
    - oof boolean
    - rai boolean
  - signal-mode keyword
- e3 string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - clock-source keyword
  - crc number
  - description string
  - egress
    - port-scheduler-policy
      - overrides
        - apply-groups reference
        - apply-groups-exclude reference
        - level number
          - apply-groups reference
          - apply-groups-exclude reference
        - percent-rate
          - cir decimal-number
          - pir decimal-number
        - rate
          - cir (number | keyword)
          - pir (number | keyword)
      - max-rate
        - percent-rate decimal-number
        - rate (number | keyword)
    - policy-name reference
  - encap-type keyword
  - framing keyword
  - idle-cycle-flag keyword
  - load-balancing-algorithm keyword
  - loopback keyword
  - mac-address string
  - mode keyword
  - mtu number
  - network
    - accounting-policy reference
    - apply-groups reference
    - apply-groups-exclude reference
    - collect-stats boolean
    - queue-policy reference
  - ppp
    - apply-groups reference
    - apply-groups-exclude reference
    - keepalive
      - drop-count number
      - interval (number | keyword)
  - report-alarm
    - ais boolean
    - looped boolean
    - los boolean
    - oof boolean
    - rai boolean
  - scramble boolean
- hold-time
  - down number
  - up number
- transceiver
  - apply-groups reference
  - apply-groups-exclude reference
  - digital-coherent-optics boolean

```

### 3.32.1 port command descriptions

#### **port** [[port-id](#)] *string*

Synopsis	Enter the <b>port</b> list instance
Context	<b>configure port string</b>
Tree	<a href="#">port</a>
Introduced	16.0.R1
Platforms	All

#### **[port-id]** *string*

Synopsis	Port ID
Context	<b>configure port string</b>
Tree	<a href="#">port</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

#### **access**

Synopsis	Enter the <b>access</b> context
Context	<b>configure port string access</b>
Tree	<a href="#">access</a>
Description	Commands in this context configure egress and ingress pool policy commands.
Introduced	16.0.R1
Platforms	All

#### **egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure port string access egress</b>
Tree	<a href="#">egress</a>

Description	Commands in this context specify the configuration of access egress buffer pools to determine how a CBS-reserved space is handled and the strategy for utilizing the shared buffer space.
Introduced	16.0.R1
Platforms	All

### **pool** [*name*] *string*

Synopsis	Enter the <b>pool</b> list instance
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">access</a> <a href="#">egress</a> <a href="#">pool</a> <i>string</i>
Tree	<a href="#">pool</a>
Description	Commands in this context configure pool policies for the pool instance.
Introduced	16.0.R1
Platforms	All

### **[name]** *string*

Synopsis	Pool name for the access port
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">access</a> <a href="#">egress</a> <a href="#">pool</a> <i>string</i>
Tree	<a href="#">pool</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **amber-alarm-threshold** *number*

Synopsis	Threshold for the amber alarm on oversubscription
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">access</a> <a href="#">egress</a> <a href="#">pool</a> <i>string</i> <b>amber-alarm-threshold</b> <i>number</i>
Tree	<a href="#">amber-alarm-threshold</a>
Range	1 to 1000
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**red-alarm-threshold** *number*

Synopsis	Threshold for the red alarm on oversubscription
Context	<b>configure</b> port <i>string</i> access egress pool <i>string</i> red-alarm-threshold <i>number</i>
Tree	red-alarm-threshold
Range	1 to 1000
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**resv-cbs**

Synopsis	Enter the <b>resv-cbs</b> context
Context	<b>configure</b> port <i>string</i> access egress pool <i>string</i> resv-cbs
Tree	resv-cbs
Introduced	16.0.R1
Platforms	All

**amber-alarm-action**

Synopsis	Enter the <b>amber-alarm-action</b> context
Context	<b>configure</b> port <i>string</i> access egress pool <i>string</i> resv-cbs amber-alarm-action
Tree	amber-alarm-action
Introduced	16.0.R1
Platforms	All

**max** *number*

Synopsis	Maximum percentage for reserved CBS of the pool
Context	<b>configure</b> port <i>string</i> access egress pool <i>string</i> resv-cbs amber-alarm-action max <i>number</i>
Tree	max
Description	<p>This command specifies the maximum percentage for the reserved CBS of the pool. The maximum reserved CBS must not be less than the value of the reserved CBS.</p> <p>To enable adaptive CBS sizing the <b>max</b>, <b>step</b>, and <b>cbs</b> commands must be configured. The <b>cbs</b> command must also be configured to a percentage other than the default value.</p>



	When unconfigured, CBS adaptive sizing is not enabled.
Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

**step number**

Synopsis	Step-size percentage for reserved CBS of the pool
Context	<b>configure</b> <a href="#">port string</a> <a href="#">access egress pool string</a> <a href="#">resv-cbs amber-alarm-action step number</a>
Tree	<a href="#">step</a>
Description	This command specifies the step-size percentage for the reserved CBS of the pool. To enable adaptive CBS sizing the <b>max</b> , <b>step</b> , and <b>cbs</b> commands must be configured. The <b>cbs</b> command must also be configured to a percentage other than the default value. When unconfigured, CBS adaptive sizing is not enabled.
Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

**cbs (number | keyword)**

Synopsis	Percentage of the pool buffer space reserved for CBS
Context	<b>configure</b> <a href="#">port string</a> <a href="#">access egress pool string</a> <a href="#">resv-cbs cbs (number   keyword)</a>
Tree	<a href="#">cbs</a>
Range	0 to 100
Units	percent
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

## **slope-policy** *reference*

Synopsis	Policy for the RED slope and TAF values
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">access</a> <a href="#">egress</a> <a href="#">pool</a> <i>string</i> <b>slope-policy</b> <i>reference</i>
Tree	<a href="#">slope-policy</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">slope-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

## **ingress**

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">access</a> <b>ingress</b>
Tree	<a href="#">ingress</a>
Introduced	16.0.R1
Platforms	All

## **pool** [[name](#)] *string*

Synopsis	Enter the <b>pool</b> list instance
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">access</a> <a href="#">ingress</a> <a href="#">pool</a> <i>string</i>
Tree	<a href="#">pool</a>
Introduced	16.0.R1
Platforms	All

## [[name](#)] *string*

Synopsis	Pool name for the access port
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">access</a> <a href="#">ingress</a> <a href="#">pool</a> <i>string</i>
Tree	<a href="#">pool</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **amber-alarm-threshold** *number*

Synopsis	Threshold for the amber alarm on oversubscription
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">access</a> <a href="#">ingress</a> <a href="#">pool</a> <i>string</i> <b>amber-alarm-threshold</b> <i>number</i>
Tree	<a href="#">amber-alarm-threshold</a>
Range	1 to 1000
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **red-alarm-threshold** *number*

Synopsis	Threshold for the red alarm on oversubscription
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">access</a> <a href="#">ingress</a> <a href="#">pool</a> <i>string</i> <b>red-alarm-threshold</b> <i>number</i>
Tree	<a href="#">red-alarm-threshold</a>
Range	1 to 1000
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **resv-cbs**

Synopsis	Enter the <b>resv-cbs</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">access</a> <a href="#">ingress</a> <a href="#">pool</a> <i>string</i> <b>resv-cbs</b>
Tree	<a href="#">resv-cbs</a>
Introduced	16.0.R1
Platforms	All

### **amber-alarm-action**

Synopsis	Enter the <b>amber-alarm-action</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">access</a> <a href="#">ingress</a> <a href="#">pool</a> <i>string</i> <a href="#">resv-cbs</a> <b>amber-alarm-action</b>
Tree	<a href="#">amber-alarm-action</a>
Introduced	16.0.R1
Platforms	All

**max number**

Synopsis	Maximum percentage for reserved CBS of the pool
Context	<b>configure</b> port string access ingress pool string resv-cbs amber-alarm-action max number
Tree	max
Description	<p>This command specifies the maximum percentage for the reserved CBS of the pool. The maximum reserved CBS must not be less than the value of the reserved CBS.</p> <p>To enable adaptive CBS sizing the <b>max</b>, <b>step</b>, and <b>cbs</b> commands must be configured. The <b>cbs</b> command must also be configured to a percentage other than the default value.</p> <p>When unconfigured, CBS adaptive sizing is not enabled.</p>
Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

**step number**

Synopsis	Step-size percentage for reserved CBS of the pool
Context	<b>configure</b> port string access ingress pool string resv-cbs amber-alarm-action step number
Tree	step
Description	<p>This command specifies the step-size percentage for the reserved CBS of the pool.</p> <p>To enable adaptive CBS sizing the <b>max</b>, <b>step</b>, and <b>cbs</b> commands must be configured. The <b>cbs</b> command must also be configured to a percentage other than the default value.</p> <p>When unconfigured, CBS adaptive sizing is not enabled.</p>
Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

**cbs (number | keyword)**

Synopsis	Percentage of the pool buffer space reserved for CBS
Context	<b>configure</b> port string access ingress pool string resv-cbs cbs (number   keyword)

Tree	<a href="#">cbs</a>
Range	0 to 100
Units	percent
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

### **slope-policy** *reference*

Synopsis	Policy for the RED slope and TAF values
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">access ingress pool</a> <i>string</i> <a href="#">slope-policy</a> <i>reference</i>
Tree	<a href="#">slope-policy</a>
Reference	<b>configure</b> <a href="#">qos slope-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the port
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Introduced	16.0.R1
Platforms	All

### **connector**

Synopsis	Enter the <b>connector</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">connector</a>
Tree	<a href="#">connector</a>
Description	Commands in this context configure connector ports and modes.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**breakout keyword****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Port breakout of the transceiver used in the connector
Context	<b>configure</b> port <i>string</i> connector breakout keyword
Tree	breakout
Description	<p>This command defines the port breakout of the transceiver used in the connector. Specifying the type triggers the creation of the ports that will be accessible under the connector.</p> <p>When a QSFP28 connector uses an SFP+ optical module with the QSFP28-to-SFP+/SFP28 adapter, set this command to c1-10g. This value indicates the presence of the adapter.</p> <p>For some connectors (for example, QSPFDD), there can be overlap in the breakout for different host interfaces. The same port breakout can be supported on an optical modules that uses a host interface of CAUI-4 as another optical module that uses 100GAUI-2. To distinguish from the CAUI-4 host interface, the '-aui2' suffix is used on some breakout options. This is only necessary where there is overlap. In other situations, the SR OS will set the host interface correctly without requiring the distinction in the breakout option.</p>
Options	c1-40g, c4-10g, c1-100g, c4-25g, c10-10g, c1-400g, c2-100g, c4-100g, c1-10g, c1-25g, c1-50g, c8-50g, c1-800g, c3-100g, c8-100g, c2-400g, c1-1g, c1-100g-aui2, c2-100g-aui2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**rs-fec-mode keyword**

Synopsis	RS-FEC mode for the Ethernet connector
Context	<b>configure</b> port <i>string</i> connector rs-fec-mode keyword
Tree	rs-fec-mode
Description	<p>This command specifies the RS-FEC (Reed-Solomon Forward Error Correction) mode on the Ethernet connector.</p> <p>See "Forward Error Correction" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Interface Configuration Guide</i> for more information about FEC settings.</p>
Options	cl91-514-528, cl91-514-544
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ddm-events** *boolean*

Synopsis	Enable Digital Diagnostic Monitoring (DDM) events
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ddm-events</a> <i>boolean</i>
Tree	<a href="#">ddm-events</a>
Default	true
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

**dist-cpu-protection**

Synopsis	Enter the <b>dist-cpu-protection</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">dist-cpu-protection</a>
Tree	<a href="#">dist-cpu-protection</a>
Introduced	21.5.R1
Platforms	All

**policy** *reference*

Synopsis	Distributed CPU protection policy name
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">dist-cpu-protection</a> <a href="#">policy</a> <i>reference</i>
Tree	<a href="#">policy</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dist-cpu-protection</a> <a href="#">policy</a> <i>string</i>
Introduced	21.5.R1
Platforms	All

## dwdm

Synopsis	Enter the <b>dwdm</b> context
Context	<b>configure port string dwdm</b>
Tree	<a href="#">dwdm</a>
Description	Commands in this context configure the Dense Wavelength Division Multiplexing (DWDM) parameters for the port.
Introduced	16.0.R1
Platforms	All

## coherent

Synopsis	Enter the <b>coherent</b> context
Context	<b>configure port string dwdm coherent</b>
Tree	<a href="#">coherent</a>
Description	Commands in this context configure the coherent optical module.
Introduced	16.0.R1
Platforms	All

## compatibility *keyword*

Synopsis	Optical mode and rate of operation
Context	<b>configure port string dwdm coherent compatibility keyword</b>
Tree	<a href="#">compatibility</a>
Options	long-haul, metro, access, interop, interop2, interop3, long-haul-non-differential
Default	long-haul
Introduced	16.0.R1
Platforms	All

## cpr-window-size *number*

Synopsis	Window size for the carrier phase recovery
Context	<b>configure port string dwdm coherent cpr-window-size number</b>
Tree	<a href="#">cpr-window-size</a>
Description	This command configures the window size for the carrier phase recovery.



When this command is changed, the link bounces because the receiver needs to be reconfigured.

Range	2   4   8   16   32   64
Units	symbols
Default	32
Introduced	16.0.R1
Platforms	All

### **dispersion** *number*

Synopsis	Residual chromatic dispersion compensation
Context	<b>configure</b> port <i>string</i> <b>dwdm coherent dispersion</b> <i>number</i>
Tree	<b>dispersion</b>
Description	This command specifies the residual chromatic dispersion compensation when the coherent receiver is operating in manual dispersion control mode.
Range	-50000 to 50000
Units	picoseconds per nanometer
Introduced	16.0.R1
Platforms	All

### **mode** *keyword*

Synopsis	Mode used to compensate for chromatic dispersion
Context	<b>configure</b> port <i>string</i> <b>dwdm coherent mode</b> <i>keyword</i>
Tree	<b>mode</b>
Options	automatic, manual
Default	automatic
Introduced	16.0.R1
Platforms	All

### **report-alarm**

Synopsis	Enter the <b>report-alarm</b> context
Context	<b>configure</b> port <i>string</i> <b>dwdm coherent report-alarm</b>
Tree	<b>report-alarm</b>

---

Description	Commands in this context configure the alarms reported for the coherent module.
Introduced	16.0.R1
Platforms	All

### **hosttx** *boolean*

Synopsis	Report the host (electrical side) transmit alarm
Context	<b>configure</b> port string <i>dwdm coherent report-alarm hosttx boolean</i>
Tree	<a href="#">hosttx</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **mod** *boolean*

Synopsis	Report the module alarm
Context	<b>configure</b> port string <i>dwdm coherent report-alarm mod boolean</i>
Tree	<a href="#">mod</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **modflt** *boolean*

Synopsis	Report the module fault alarm
Context	<b>configure</b> port string <i>dwdm coherent report-alarm modflt boolean</i>
Tree	<a href="#">modflt</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **netrx** *boolean*

Synopsis	Report the network (optical side) receive alarm
Context	<b>configure</b> port string <i>dwdm coherent report-alarm netrx boolean</i>

Tree	<a href="#">netrx</a>
Default	true
Introduced	16.0.R1
Platforms	All

**nettx boolean**

Synopsis	Report the network (optical side) transmit alarm
Context	<b>configure</b> <a href="#">port string</a> <a href="#">dwdm coherent report-alarm nettx boolean</a>
Tree	<a href="#">nettx</a>
Default	true
Introduced	16.0.R1
Platforms	All

**rx-los-reaction keyword**

Synopsis	Reaction to an RX LOS
Context	<b>configure</b> <a href="#">port string</a> <a href="#">dwdm coherent rx-los-reaction keyword</a>
Tree	<a href="#">rx-los-reaction</a>
Description	This command configures the reaction to an RX LOS.  <b>Note:</b> If this command is disabled for some coherent DWDM transceivers, the transceiver only reports local fault alarms when an RX LOS condition occurs; however, the port returns to service faster after the LOS condition is cleared. For these transceivers, if this command is enabled, there is better visibility of individual alarms (for example, signal-fail, local fault, no-am-lock), but the port takes longer to service after the LOS condition is cleared.
Options	none, squelch
Default	squelch
Introduced	16.0.R1
Platforms	All

**rx-los-thresh decimal-number**

Synopsis	Average input power LOS threshold
Context	<b>configure</b> <a href="#">port string</a> <a href="#">dwdm coherent rx-los-thresh decimal-number</a>
Tree	<a href="#">rx-los-thresh</a>
Range	-30 to -13

Units	decibel-milliwatts
Default	-23
Introduced	16.0.R1
Platforms	All

## sweep

Synopsis	Enter the <b>sweep</b> context
Context	<b>configure</b> <a href="#">port string</a> <a href="#">dwdm coherent sweep</a>
Tree	<a href="#">sweep</a>
Description	Commands in this context allow users to configure the dispersion sweep <b>start</b> and <b>end</b> values for the automatic mode of coherent control. If the user knows the approximate or theoretical residual dispersion of the link, these commands can be used to limit the range of sweeping for the automatic control mode and therefore achieve a faster link up.
Introduced	16.0.R1
Platforms	All

## end number

Synopsis	Upper bound of the dispersion compensation range
Context	<b>configure</b> <a href="#">port string</a> <a href="#">dwdm coherent sweep end number</a>
Tree	<a href="#">end</a>
Range	-50000 to 50000
Units	picoseconds per nanometer
Default	2000
Introduced	16.0.R1
Platforms	All

## start number

Synopsis	Lower bound of the dispersion compensation range
Context	<b>configure</b> <a href="#">port string</a> <a href="#">dwdm coherent sweep start number</a>
Tree	<a href="#">start</a>
Range	-50000 to 50000
Units	picoseconds per nanometer
Default	-25500

Introduced	16.0.R1
Platforms	All

### **target-power** *decimal-number*

Synopsis	Average output power target for the port
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">dwdm coherent</a> <b>target-power</b> <i>decimal-number</i>
Tree	<a href="#">target-power</a>
Range	-20 to 3
Units	decibel-milliwatts
Default	1
Introduced	16.0.R1
Platforms	All

### **frequency** *number*

Synopsis	Center frequency for tunable DWDM optical interface
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">dwdm</a> <b>frequency</b> <i>number</i>
Tree	<a href="#">frequency</a>
Description	<p>This command configures the center frequency to use for a tunable DWDM optical interface. This command can be used to specify any frequency in the C band.</p> <p>To set the DWDM frequency, the port must be a physical port and the provisioned MDA type must have DWDM tunable optics (for example, p1-100g-tun-b), or the MDA must support the option of tunable DWDM optic modules.</p> <p>This command replaces the <b>configure port dwdm channel</b> command.</p>
Range	191100000 to 196150000
Units	megahertz
Introduced	21.10.R3
Platforms	All

### **ethernet**

Synopsis	Enter the <b>ethernet</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <b>ethernet</b>
Tree	<a href="#">ethernet</a>
Description	Commands in this context configure Ethernet port attributes.

This context can only be used when configuring Fast Ethernet, Gigabit, or 10-Gb Ethernet LAN ports on an appropriate MDA.

Introduced	16.0.R1
Platforms	All

## **access**

Synopsis	Enter the <b>access</b> context
Context	<b>configure port string ethernet access</b>
Tree	<a href="#">access</a>
Description	Commands in this context configure Ethernet access port commands.
Introduced	16.0.R1
Platforms	All

## **bandwidth number**

Synopsis	Administrative bandwidth assigned to Ethernet ports
Context	<b>configure port string ethernet access bandwidth number</b>
Tree	<a href="#">bandwidth</a>
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

## **booking-factor number**

Synopsis	Booking factor applied to the Ethernet port
Context	<b>configure port string ethernet access booking-factor number</b>
Tree	<a href="#">booking-factor</a>
Range	1 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

**egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a>
Tree	<a href="#">egress</a>
Description	Commands in this context configure Ethernet access egress port commands.
Introduced	16.0.R1
Platforms	All

**queue-group** [[queue-group-name](#)] *reference* [instance-id](#) *number*

Synopsis	Enter the <b>queue-group</b> list instance
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i>
Tree	<a href="#">queue-group</a>
Introduced	16.0.R1
Platforms	All

**[queue-group-name]** *reference*

Synopsis	Queue group name
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i>
Tree	<a href="#">queue-group</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**instance-id** *number*

Synopsis	Instance ID for the egress queue group
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i>
Tree	<a href="#">queue-group</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **accounting-policy** *reference*

Synopsis Accounting policy for the Ethernet port

Context **configure** port *string* ethernet access egress queue-group *reference* instance-id *number* accounting-policy *reference*

Tree accounting-policy

Reference **configure** log accounting-policy *number*

Introduced 16.0.R1

Platforms All

### **aggregate-rate**

Synopsis Enter the **aggregate-rate** context

Context **configure** port *string* ethernet access egress queue-group *reference* instance-id *number* aggregate-rate

Tree aggregate-rate

Introduced 16.0.R1

Platforms All

### **limit-unused-bandwidth** *boolean*

Synopsis Control unused bandwidth

Context **configure** port *string* ethernet access egress queue-group *reference* instance-id *number* aggregate-rate limit-unused-bandwidth *boolean*

Tree limit-unused-bandwidth

Default false

Introduced 16.0.R1

Platforms All

### **queue-frame-based-accounting** *boolean*

Synopsis Enable frame-based accounting on policers and queues

Context **configure** port *string* ethernet access egress queue-group *reference* instance-id *number* aggregate-rate queue-frame-based-accounting *boolean*



Tree	<a href="#">queue-frame-based-accounting</a>
Default	false
Introduced	16.0.R1
Platforms	All

**rate** (*number* | *keyword*)

Synopsis	Aggregate rate for all queues
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i> <a href="#">aggregate-rate</a> <b>rate</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">rate</a>
Range	1 to 3200000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

**collect-stats** *boolean*

Synopsis	Collect accounting and statistical data
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i> <a href="#">collect-stats</a> <i>boolean</i>
Tree	<a href="#">collect-stats</a>
Default	false
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1

Platforms All

## host-match

Synopsis Enter the **host-match** context

Context **configure** port *string* ethernet access egress queue-group *reference* instance-id *number*  
host-match

Tree [host-match](#)

Introduced 16.0.R1

Platforms All

## int-dest-id [[destination-string](#)] *string*

Synopsis Add a list entry for **int-dest-id**

Context **configure** port *string* ethernet access egress queue-group *reference* instance-id *number*  
host-match int-dest-id *string*

Tree [int-dest-id](#)

Introduced 16.0.R1

Platforms All

## [\[destination-string\]](#) *string*

Synopsis Host match destination ID

Context **configure** port *string* ethernet access egress queue-group *reference* instance-id *number*  
host-match int-dest-id *string*

Tree [int-dest-id](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

## hs-turbo *boolean*

Synopsis Enable HS turbo queues for higher throughput

Context **configure** port *string* ethernet access egress queue-group *reference* instance-id *number*  
hs-turbo *boolean*

Tree	<a href="#">hs-turbo</a>
Description	<p>When configured to <b>true</b>, this command enables HS turbo queues that allow the corresponding HSQ queue group queues to achieve a higher throughput.</p> <p>This command is not applicable to 10G ports and is ignored when it is configured under a queue group instance on a 10G port.</p> <p>When configured to <b>false</b>, HS turbo queues are disabled.</p>
Default	false
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

## queue-overrides

Synopsis	Enter the <b>queue-overrides</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet access egress queue-group reference</a> <a href="#">instance-id</a> <i>number</i> <a href="#">queue-overrides</a>
Tree	<a href="#">queue-overrides</a>
Introduced	16.0.R1
Platforms	All

## queue [[queue-id](#)] *reference*

Synopsis	Enter the <b>queue</b> list instance
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet access egress queue-group reference</a> <a href="#">instance-id</a> <i>number</i> <a href="#">queue-overrides</a> <a href="#">queue</a> <i>reference</i>
Tree	<a href="#">queue</a>
Introduced	16.0.R1
Platforms	All

## [[queue-id](#)] *reference*

Synopsis	Queue ID
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet access egress queue-group reference</a> <a href="#">instance-id</a> <i>number</i> <a href="#">queue-overrides</a> <a href="#">queue</a> <i>reference</i>
Tree	<a href="#">queue</a>
Reference	<b>configure</b> <a href="#">qos queue-group-templates egress queue-group</a> <i>string</i> <a href="#">queue</a> <i>number</i>
Notes	This element is part of a list key.

Introduced	16.0.R1
Platforms	All

## adaptation-rule

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">instance-id</a> <a href="#">number</a> <a href="#">queue-overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">adaptation-rule</a>
Tree	<a href="#">adaptation-rule</a>
Introduced	16.0.R1
Platforms	All

## cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">instance-id</a> <a href="#">number</a> <a href="#">queue-overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">adaptation-rule</a> <a href="#">cir</a> <a href="#">keyword</a>
Tree	<a href="#">cir</a>
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

## pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">instance-id</a> <a href="#">number</a> <a href="#">queue-overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">adaptation-rule</a> <a href="#">pir</a> <a href="#">keyword</a>
Tree	<a href="#">pir</a>
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

## burst-limit (*number* | *keyword*)

Synopsis	Override for the shaping burst size for the queue
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">instance-id</a> <a href="#">number</a> <a href="#">queue-overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">burst-limit</a> ( <i>number</i>   <i>keyword</i> )

Tree	<a href="#">burst-limit</a>
Range	1 to 14000000
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

### **cbs** (*number* | *keyword*)

Synopsis	CBS for the template queue
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i> <a href="#">queue-overrides</a> <a href="#">queue</a> <i>reference</i> <b>cbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cbs</a>
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

### **drop-tail**

Synopsis	Enter the <b>drop-tail</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i> <a href="#">queue-overrides</a> <a href="#">queue</a> <i>reference</i> <b>drop-tail</b>
Tree	<a href="#">drop-tail</a>
Description	Commands in this context configure queue drop tail commands.
Introduced	16.0.R1
Platforms	All

### **low**

Synopsis	Enter the <b>low</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i> <a href="#">queue-overrides</a> <a href="#">queue</a> <i>reference</i> <b>drop-tail</b> <b>low</b>
Tree	<a href="#">low</a>

Description	Commands in this context configure the queue low drop tail commands. The low drop tail defines the queue depth beyond which the out-of-profile packets are not accepted into the queue and discarded.
Introduced	16.0.R1
Platforms	All

### **percent-reduction-from-mbs** (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i> <a href="#">queue-overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">drop-tail</a> <a href="#">low</a> <a href="#">percent-reduction-from-mbs</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">percent-reduction-from-mbs</a>
Description	This command overrides the low queue drop tail as a percentage reduction from the MBS of the queue. For example, if a queue has an MBS of 600 kbytes and this percentage is configured to be 30% for the low drop tail, then the low drop tail is set to 420 kbytes and the out-of-profile packets are not accepted into the queue if its depth is greater than this value, and is therefore discarded.
Range	0 to 100
Options	auto
Introduced	16.0.R1
Platforms	All

### **mbs** (*number* | *keyword*)

Synopsis	MBS for the template queue
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i> <a href="#">queue-overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">mbs</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs</a>
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

### **monitor-queue-depth**

Synopsis	Enable the <b>monitor-queue-depth</b> context
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Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id number queue-overrides queue <i>reference</i> monitor-queue-depth
Tree	monitor-queue-depth
Introduced	20.10.R1
Platforms	All

### **fast-polling** *boolean*

Synopsis	Enable fast polling of the queue depth
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id number queue-overrides queue <i>reference</i> monitor-queue-depth fast-polling <i>boolean</i>
Tree	fast-polling
Description	When configured to <b>true</b> , this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth. When configured to <b>false</b> , fast queue polling is not enabled.
Default	false
Introduced	20.10.R1
Platforms	All

### **violation-threshold** *decimal-number*

Synopsis	Threshold for queue depth before violation is raised
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id number queue-overrides queue <i>reference</i> monitor-queue-depth violation-threshold <i>decimal-number</i>
Tree	violation-threshold
Description	This command specifies threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.
Range	0.01 to 99.99
Introduced	20.10.R1
Platforms	All

### **parent**

Synopsis	Enter the <b>parent</b> context
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id number queue-overrides queue <i>reference</i> parent

Tree	<a href="#">parent</a>
Description	<p>Commands in this context define the weight of the queue treatment by the parent scheduler that further governs the available bandwidth given to the queue, aside from the queue PIR setting.</p> <p>When multiple schedulers or queues share a child status with the parent scheduler, the weight or level commands define how the queue contends with the other children for the parent bandwidth.</p>
Introduced	16.0.R1
Platforms	All

### **cir-weight** *number*

Synopsis	CIR that overrides the parent for the queue group
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i> <a href="#">queue-overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">parent</a> <a href="#">cir-weight</a> <i>number</i>
Tree	<a href="#">cir-weight</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

### **weight** *number*

Synopsis	PIR that overrides the parent for the queue group
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i> <a href="#">queue-overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">parent</a> <a href="#">weight</a> <i>number</i>
Tree	<a href="#">weight</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

### **percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i> <a href="#">queue-overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">percent-rate</a>
Tree	<a href="#">percent-rate</a>
Description	Commands in this context specify percent rates.



This command is ignored for egress HSQ queue group queues, which are attached to an HS WRR group within an associated HS attachment policy. In this case, the configuration of the percent rate is performed under the **hs-wrr-group** command within the egress queue group template.

Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

### **cir** *decimal-number*

Synopsis	CIR for the queue
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> percent-rate cir <i>decimal-number</i>
Tree	<a href="#">cir</a>
Range	0.00 to 100.00
Units	percent
Introduced	16.0.R1
Platforms	All

### **pir** *decimal-number*

Synopsis	PIR for the queue
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> percent-rate pir <i>decimal-number</i>
Tree	<a href="#">pir</a>
Range	0.01 to 100.00
Units	percent
Introduced	16.0.R1
Platforms	All

### **rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> rate
Tree	<a href="#">rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .

Introduced	16.0.R1
Platforms	All

### **cir** (*number* | *keyword*)

Synopsis	CIR for the queue
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> rate cir ( <i>number</i>   <i>keyword</i> )
Tree	cir
Description	<p>This command specifies the administrative CIR used by the queue. When the <b>rate</b> command is executed, a CIR setting is optional. Fractional values are not allowed and must be given as a positive integer.</p> <p>The CIR defines the rate at which the system prioritizes the queue over other queues competing for the same bandwidth. In-profile then out-of-profile packets are preferentially queued by the system at egress and at subsequent next hop nodes where the packet can traverse. To be properly handled throughout the network, the packets must be marked accordingly for profiling at each hop.</p> <p>The CIR can be used by the queue's parent <b>cir-level</b> and <b>cir-weight</b> commands to define the amount of bandwidth considered to be committed for the child queue during bandwidth allocation by the parent scheduler.</p>
Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

### **pir** (*number* | *keyword*)

Synopsis	PIR for the queue
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> rate pir ( <i>number</i>   <i>keyword</i> )
Tree	pir
Description	<p>This command specifies the administrative PIR used by the queue. When the <b>rate</b> command is executed, a valid PIR setting must be explicitly defined. Fractional values are not allowed and must be given as a positive integer. The actual PIR rate is dependent on the queue's <b>adaptation-rule</b> commands and the actual hardware where the queue is provisioned.</p> <p>The PIR defines the maximum rate that the queue can transmit packets out an egress interface (for SAP egress queues). Defining a PIR does not necessarily guarantee that</p>

the queue can transmit at the intended rate. The actual rate sustained by the queue can be limited by oversubscription factors or available egress bandwidth.

Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

## scheduler-policy

Synopsis	Enter the <b>scheduler-policy</b> context
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy
Tree	scheduler-policy
Description	Commands in this context configure a scheduler policy for the egress queue group.
Introduced	16.0.R1
Platforms	All

## overrides

Synopsis	Enter the <b>overrides</b> context
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	All

## scheduler [*scheduler-name*] *string*

Synopsis	Enter the <b>scheduler</b> list instance
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy overrides scheduler <i>string</i>
Tree	scheduler
Description	Commands in this context are used to override specific attributes of the specified scheduler name. A scheduler defines bandwidth controls that limit each child (other schedulers and queues) associated with the scheduler. Scheduler objects are created within the hierarchical tiers of the policy. It is assumed that each scheduler created has

queues or other schedulers defined as child associations. The scheduler can be a child which takes bandwidth from a scheduler in a higher tier.

A total of 32 schedulers can be created within a single scheduler policy with no restriction on the distribution between the tiers. The scheduler name must exist in the applied scheduler policy.

Introduced	16.0.R1
Platforms	All

### [scheduler-name] *string*

Synopsis	Scheduler name
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy overrides scheduler <i>string</i>
Tree	<a href="#">scheduler</a>
Description	This command specifies the scheduler name. Valid names consist of any string composed of printable, 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### parent

Synopsis	Enter the <b>parent</b> context
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy overrides scheduler <i>string</i> parent
Tree	<a href="#">parent</a>
Description	<p>Commands in this context are used to override the scheduler's parent weight and CIR weight. The weights apply to the associated level or CIR level configured in the applied scheduler policy.</p> <p>The override weights are ignored if the scheduler does not have a parent command configured in the scheduler policy. This allows the parent of the scheduler to be removed from the scheduler policy without having to remove all of the queue group overrides. If the parent scheduler does not exist, causing the configured scheduler to be fostered on an egress port scheduler, then the override weights are ignored.</p>
Introduced	16.0.R1
Platforms	All

**cir-weight** *number*

Synopsis	CIR that overrides the parent
Context	<b>configure</b> <i>port string ethernet access egress queue-group reference instance-id number scheduler-policy overrides scheduler string parent cir-weight number</i>
Tree	<i>cir-weight</i>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

**weight** *number*

Synopsis	PIR that overrides the parent
Context	<b>configure</b> <i>port string ethernet access egress queue-group reference instance-id number scheduler-policy overrides scheduler string parent weight number</i>
Tree	<i>weight</i>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <i>port string ethernet access egress queue-group reference instance-id number scheduler-policy overrides scheduler string rate</i>
Tree	<i>rate</i>
Description	Commands in this context override specific attributes of the specified scheduler rate. The actual operating rate of the scheduler is limited by bandwidth constraints other than its maximum rate. The scheduler's parent scheduler may not have the available bandwidth to meet the scheduler's needs. The bandwidth available to the parent scheduler could be allocated to other child schedulers or the child queues on the parent scheduler may be based on a higher priority. The children of the scheduler may not need the maximum rate available to the scheduler due to an insufficient offered load or limits to their own maximum rates.
Introduced	16.0.R1
Platforms	All

**cir** (*number* | *keyword*)

Synopsis	CIR for the scheduler
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy overrides scheduler <i>string</i> rate cir ( <i>number</i>   <i>keyword</i> )
Tree	cir
Description	This command specifies the CIR. When a parent is associated with the scheduler, this command provides the amount of bandwidth to be considered during the parent scheduler's within-cir distribution phase. When the <b>rate</b> command is executed, a valid PIR setting must be explicitly defined before specifying the CIR. If the CIR is set to <b>max</b> , the CIR rate is set to infinity.  The <b>sum</b> keyword specifies that the CIR be used as the summed CIR values of the children schedulers, policers, or queues.
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	All

**pir** (*number* | *keyword*)

Synopsis	PIR for the scheduler
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy overrides scheduler <i>string</i> rate pir ( <i>number</i>   <i>keyword</i> )
Tree	pir
Description	This command specifies the PIR. When the <b>rate</b> command is executed, a valid PIR setting must be explicitly defined. Any other value will result in an error without modifying the current PIR rate.
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

**policy-name** *reference*

Synopsis	Scheduler policy name
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy policy-name <i>reference</i>

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Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos scheduler-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **virtual-port** [[vport-name](#)] *string*

Synopsis	Enter the <b>virtual-port</b> list instance
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet access egress virtual-port</a> <i>string</i>
Tree	<a href="#">virtual-port</a>
Introduced	16.0.R4
Platforms	All

### **[vport-name]** *string*

Synopsis	Vport scheduling node name
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet access egress virtual-port</a> <i>string</i>
Tree	<a href="#">virtual-port</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **aggregate-rate**

Synopsis	Enter the <b>aggregate-rate</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet access egress virtual-port</a> <i>string</i> <b>aggregate-rate</b>
Tree	<a href="#">aggregate-rate</a>
Introduced	16.0.R4
Platforms	All

### **limit-unused-bandwidth** *boolean*

Synopsis	Control unused bandwidth
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Context	<b>configure</b> port <i>string</i> ethernet access egress virtual-port <i>string</i> aggregate-rate limit-unused-bandwidth <i>boolean</i>
Tree	limit-unused-bandwidth
Default	false
Introduced	16.0.R4
Platforms	All

### **rate** (*number* | *keyword*)

Synopsis	Enforced aggregate rate for the queue
Context	<b>configure</b> port <i>string</i> ethernet access egress virtual-port <i>string</i> aggregate-rate rate ( <i>number</i>   <i>keyword</i> )
Tree	rate
Range	1 to 6400000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R4
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> port <i>string</i> ethernet access egress virtual-port <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

### **host-match**

Synopsis	Enter the <b>host-match</b> context
Context	<b>configure</b> port <i>string</i> ethernet access egress virtual-port <i>string</i> host-match
Tree	host-match
Introduced	16.0.R4



Platforms All

### **int-dest-id** [[destination-string](#)] *string*

Synopsis Add a list entry for **int-dest-id**

Context **configure** [port](#) *string* [ethernet access egress virtual-port](#) *string* [host-match int-dest-id](#) *string*

Tree [int-dest-id](#)

Introduced 16.0.R4

Platforms All

### **[destination-string]** *string*

Synopsis Host match destination ID

Context **configure** [port](#) *string* [ethernet access egress virtual-port](#) *string* [host-match int-dest-id](#) *string*

Tree [int-dest-id](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms All

### **hw-agg-shaper-scheduler-policy** *reference*

Synopsis Hardware aggregate shaper scheduler policy to apply

Context **configure** [port](#) *string* [ethernet access egress virtual-port](#) *string* [hw-agg-shaper-scheduler-policy](#) *reference*

Tree [hw-agg-shaper-scheduler-policy](#)

Reference **configure** [qos hw-agg-shaper-scheduler-policy](#) *string*

Introduced 21.7.R1

Platforms 7750 SR-1, 7750 SR-s

### **lag-per-link-hash**

Synopsis Enter the **lag-per-link-hash** context

Context **configure** [port](#) *string* [ethernet access egress virtual-port](#) *string* [lag-per-link-hash](#)

Tree	<a href="#">lag-per-link-hash</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**class number**

Synopsis	Class used on LAG egress using weighted per-link-hash
Context	<b>configure</b> <a href="#">port string ethernet access egress virtual-port string lag-per-link-hash class number</a>
Tree	<a href="#">class</a>
Range	1 to 3
Default	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**weight number**

Synopsis	Weight used on LAG egress using weighted per-link-hash
Context	<b>configure</b> <a href="#">port string ethernet access egress virtual-port string lag-per-link-hash weight number</a>
Tree	<a href="#">weight</a>
Range	1 to 1024
Default	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**monitor-hw-agg-shaper-scheduler boolean**

Synopsis	Enable monitoring hardware aggregate shaper scheduler
Context	<b>configure</b> <a href="#">port string ethernet access egress virtual-port string monitor-hw-agg-shaper-scheduler boolean</a>
Tree	<a href="#">monitor-hw-agg-shaper-scheduler</a>
Description	When configured to <b>true</b> , enables congestion monitoring of the hardware aggregate shaper scheduler on the specified vport.
Default	false
Introduced	21.7.R1

Platforms 7750 SR-1, 7750 SR-s

### **monitor-port-scheduler** *boolean*

Synopsis Enable congestion monitoring on egress port scheduler

Context **configure** *port string* *ethernet access egress virtual-port string* **monitor-port-scheduler** *boolean*

Tree [monitor-port-scheduler](#)

Description The command enables congestion monitoring on an EPS that is applied to a Vport. Congestion monitoring must be further configured under the port-scheduler CLI hierarchy. Once the congestion monitoring is in effect, the offered rate (incoming traffic) is compared to the configured port-scheduler congestion threshold. The results of these measurements are stored as the number of samples representing the number of times the offered rates exceeded the configured congestion threshold since the last clearing of the stats. Therefore, the results represent the number of times that the port-scheduler that is applied to a Vport was congested since the last reset of the stats using a **clear** command.

Default false

Introduced 16.0.R4

Platforms All

### **multicast-hqos-adjustment** *boolean*

Synopsis Apply HQoS Adjustment (egress rate modification)

Context **configure** *port string* *ethernet access egress virtual-port string* **multicast-hqos-adjustment** *boolean*

Tree [multicast-hqos-adjustment](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **port-scheduler-policy** *reference*

Synopsis Port scheduler policy name

Context **configure** *port string* *ethernet access egress virtual-port string* **port-scheduler-policy** *reference*

Tree [port-scheduler-policy](#)

Reference **configure** *qos port-scheduler-policy string*

Introduced 16.0.R4  
Platforms All

### **scheduler-policy**

Synopsis Enter the **scheduler-policy** context  
Context **configure** [port string ethernet access egress virtual-port string scheduler-policy](#)  
Tree [scheduler-policy](#)  
Introduced 16.0.R4  
Platforms All

### **policy-name** *reference*

Synopsis Egress scheduler policy  
Context **configure** [port string ethernet access egress virtual-port string scheduler-policy policy-name reference](#)  
Tree [policy-name](#)  
Reference **configure** [qos scheduler-policy string](#)  
Introduced 22.2.R1  
Platforms All

### **ingress**

Synopsis Enter the **ingress** context  
Context **configure** [port string ethernet access ingress](#)  
Tree [ingress](#)  
Description Commands in this context configure Ethernet access ingress port commands.  
Introduced 16.0.R1  
Platforms All

### **queue-group** [[queue-group-name](#)] *reference*

Synopsis Enter the **queue-group** list instance  
Context **configure** [port string ethernet access ingress queue-group reference](#)  
Tree [queue-group](#)

Description	<p>Commands in this context create an ingress queue group on the Ethernet port. Queue groups created on access ports are used as an alternative queue destination for SAPs.</p> <p>Queue groups can be created on both access and network oriented ports. When the port is in access mode, the queue groups must be created within the port access node. Access ingress queue groups can only be used by ingress SAP forwarding classes and only a single ingress queue group per port is supported. When the queue group is created in an ingress port context, the queue group name must be an existing ingress queue group template. Two ingress queue groups with the same name cannot be created on the same port.</p> <p>When creating a queue group, the system will attempt to allocate queue resources based on the queues defined in the queue group template. If the appropriate queue resources do not currently exist, the queue group will not be created. Ingress port queue groups do not support shared-queuing or multipoint shared queuing behavior.</p> <p>A port queue group cannot be removed from the port when a forwarding class is currently redirected to the group. All forwarding class redirections must first be removed prior to removing the queue group.</p>
Introduced	16.0.R1
Platforms	All

### **[queue-group-name] reference**

Synopsis	Queue group name
Context	<b>configure</b> port string ethernet access ingress queue-group reference
Tree	queue-group
Description	This command specifies the queue group name. The specified queue group name must exist as an ingress or egress queue group template depending on the ingress or egress context of the port queue group. Only a single queue group may be created on an ingress port.
Reference	<b>configure</b> qos queue-group-templates ingress queue-group string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **accounting-policy reference**

Synopsis	Accounting policy for the Ethernet port
Context	<b>configure</b> port string ethernet access ingress queue-group reference accounting-policy reference
Tree	accounting-policy
Reference	<b>configure</b> log accounting-policy number

Introduced 16.0.R1  
Platforms All

### **collect-stats** *boolean*

Synopsis Collect accounting and statistical data  
Context **configure** [port string](#) [ethernet access ingress queue-group](#) *reference* [collect-stats](#) *boolean*  
Tree [collect-stats](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **description** *string*

Synopsis Text description  
Context **configure** [port string](#) [ethernet access ingress queue-group](#) *reference* [description](#) *string*  
Tree [description](#)  
String Length 1 to 80  
Introduced 16.0.R1  
Platforms All

### **queue-overrides**

Synopsis Enter the **queue-overrides** context  
Context **configure** [port string](#) [ethernet access ingress queue-group](#) *reference* [queue-overrides](#)  
Tree [queue-overrides](#)  
Description Commands in this context define queue command overrides for each queue within the queue group.  
Introduced 16.0.R1  
Platforms All

### **queue** [[queue-id](#)] *reference*

Synopsis Enter the **queue** list instance

Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">ingress</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">queue-overrides</a> <a href="#">queue</a> <a href="#">reference</a>
Tree	<a href="#">queue</a>
Description	Commands in this context associate a queue for use in a queue group template. The template queue is created on each queue group object that is created with the queue group template name. Each queue is identified within the template by a queue ID number. The template ensures that all queue groups created with the template's name have the same queue IDs, providing a uniform structure for the forwarding class redirection commands in the SAP egress QoS policies. The queue commands can be individually changed for each queue in each queue group using per queue overrides.
Introduced	16.0.R1
Platforms	All

### **[queue-id] reference**

Synopsis	Queue ID for the queue group template
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">ingress</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">queue-overrides</a> <a href="#">queue</a> <a href="#">reference</a>
Tree	<a href="#">queue</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">ingress</a> <a href="#">queue-group</a> <a href="#">string</a> <a href="#">queue</a> <a href="#">number</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **adaptation-rule**

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">ingress</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">queue-overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">adaptation-rule</a>
Tree	<a href="#">adaptation-rule</a>
Introduced	16.0.R1
Platforms	All

### **cir keyword**

Synopsis	Constraint used when deriving the operational CIR value
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">ingress</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">queue-overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">adaptation-rule</a> <a href="#">cir</a> <a href="#">keyword</a>

Tree	<a href="#">cir</a>
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

### **pir** *keyword*

Synopsis	Constraint used when deriving the operational PIR value
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">ingress</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">queue-overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">adaptation-rule</a> <a href="#">pir</a> <i>keyword</i>
Tree	<a href="#">pir</a>
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

### **cbs** (*number* | *keyword*)

Synopsis	CBS for the template queue
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">ingress</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">queue-overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">cbs</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cbs</a>
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

### **drop-tail**

Synopsis	Enter the <b>drop-tail</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">ingress</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">queue-overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">drop-tail</a>
Tree	<a href="#">drop-tail</a>
Introduced	16.0.R1
Platforms	All



**low**

Synopsis	Enter the <b>low</b> context
Context	<b>configure</b> port <i>string</i> ethernet access ingress queue-group <i>reference</i> queue-overrides queue <i>reference</i> drop-tail low
Tree	low
Description	Commands in this context configure the queue low drop tail commands. The low drop tail defines the queue depth beyond which out-of-profile packets are accepted into the queue and discarded.
Introduced	16.0.R1
Platforms	All

**percent-reduction-from-mbs** (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	<b>configure</b> port <i>string</i> ethernet access ingress queue-group <i>reference</i> queue-overrides queue <i>reference</i> drop-tail low percent-reduction-from-mbs ( <i>number</i>   <i>keyword</i> )
Tree	percent-reduction-from-mbs
Description	This command overrides the low queue drop tail as a percentage reduction from the MBS of the queue. For example, if a queue has an MBS of 600 kbytes and this percentage is configured to be 30% for the low drop tail, then the low drop tail is set to 420 kbytes and the out-of-profile packets are not accepted into the queue if its depth is greater than this value, and is therefore discarded.
Range	0 to 100
Options	auto
Introduced	16.0.R1
Platforms	All

**mbs** (*number* | *keyword*)

Synopsis	MBS for the template queue
Context	<b>configure</b> port <i>string</i> ethernet access ingress queue-group <i>reference</i> queue-overrides queue <i>reference</i> mbs ( <i>number</i>   <i>keyword</i> )
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto

Introduced 16.0.R1  
 Platforms All

### monitor-queue-depth

Synopsis Enable the **monitor-queue-depth** context  
 Context **configure** [port](#) [string](#) [ethernet](#) [access](#) [ingress](#) [queue-group](#) [reference](#) [queue-overrides](#) [queue](#) [reference](#) [monitor-queue-depth](#)  
 Tree [monitor-queue-depth](#)  
 Introduced 21.7.R1  
 Platforms All

### fast-polling *boolean*

Synopsis Enable fast polling of the queue depth  
 Context **configure** [port](#) [string](#) [ethernet](#) [access](#) [ingress](#) [queue-group](#) [reference](#) [queue-overrides](#) [queue](#) [reference](#) [monitor-queue-depth](#) [fast-polling](#) *boolean*  
 Tree [fast-polling](#)  
 Default false  
 Introduced 21.7.R1  
 Platforms All

### rate

Synopsis Enter the **rate** context  
 Context **configure** [port](#) [string](#) [ethernet](#) [access](#) [ingress](#) [queue-group](#) [reference](#) [queue-overrides](#) [queue](#) [reference](#) [rate](#)  
 Tree [rate](#)  
 Introduced 16.0.R1  
 Platforms All

### cir (*number* | *keyword*)

Synopsis CIR for the queue  
 Context **configure** [port](#) [string](#) [ethernet](#) [access](#) [ingress](#) [queue-group](#) [reference](#) [queue-overrides](#) [queue](#) [reference](#) [rate](#) [cir](#) (*number* | *keyword*)  
 Tree [cir](#)

Description	<p>This command specifies the administrative CIR used by the queue. When the <b>rate</b> command is executed, a CIR setting is optional. Fractional values are not allowed and must be given as a positive integer.</p> <p>The CIR defines the rate at which the system prioritizes the queue over other queues competing for the same bandwidth. In-profile then out-of-profile packets are preferentially queued by the system at egress and at subsequent next hop nodes where the packet can traverse. To be properly handled throughout the network, the packets must be marked accordingly for profiling at each hop.</p> <p>The CIR can be used by the queue's parent <b>cir-level</b> and <b>cir-weight</b> commands to define the amount of bandwidth considered to be committed for the child queue during bandwidth allocation by the parent scheduler.</p>
Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

### **pir** (*number* | *keyword*)

Synopsis	PIR for the queue
Context	<b>configure</b> <a href="#">port string</a> <a href="#">ethernet access ingress queue-group reference</a> <a href="#">queue-overrides queue reference</a> <a href="#">rate</a> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Description	<p>This command specifies the administrative PIR used by the queue. When the <b>rate</b> command is executed, a valid PIR setting must be explicitly defined. Fractional values are not allowed and must be given as a positive integer. The actual PIR rate is dependent on the queue's <b>adaptation-rule</b> commands and the actual hardware where the queue is provisioned.</p> <p>The PIR defines the maximum rate that the queue can transmit packets out an egress interface (for SAP egress queues). Defining a PIR does not necessarily guarantee that the queue can transmit at the intended rate. The actual rate sustained by the queue can be limited by oversubscription factors or available egress bandwidth.</p>
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

## scheduler-policy

Synopsis	Enter the <b>scheduler-policy</b> context
Context	<b>configure</b> port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy
Tree	<a href="#">scheduler-policy</a>
Description	Commands in this context configure a scheduler policy for the ingress queue group.
Introduced	16.0.R1
Platforms	All

## overrides

Synopsis	Enter the <b>overrides</b> context
Context	<b>configure</b> port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy <a href="#">overrides</a>
Tree	<a href="#">overrides</a>
Description	Commands in this context specify the set of attributes specifying values specific to the given queue-group instance.
Introduced	16.0.R1
Platforms	All

## scheduler [[scheduler-name](#)] *string*

Synopsis	Enter the <b>scheduler</b> list instance
Context	<b>configure</b> port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy <a href="#">overrides</a> scheduler <i>string</i>
Tree	<a href="#">scheduler</a>
Description	<p>Commands in this context are used to override specific attributes of the specified scheduler name. A scheduler defines bandwidth controls that limit each child (other schedulers and queues) associated with the scheduler. Scheduler objects are created within the hierarchical tiers of the policy. It is assumed that each scheduler created has queues or other schedulers defined as child associations. The scheduler can be a child which takes bandwidth from a scheduler in a higher tier.</p> <p>A total of 32 schedulers can be created within a single scheduler policy with no restriction on the distribution between the tiers. The scheduler name must exist in the applied scheduler policy.</p>
Introduced	16.0.R1
Platforms	All

**[scheduler-name]** *string*

Synopsis	Scheduler name
Context	<b>configure</b> port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy overrides scheduler <i>string</i>
Tree	<a href="#">scheduler</a>
Description	This command specifies the scheduler name. Valid names consist of any string composed of printable, 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**parent**

Synopsis	Enter the <b>parent</b> context
Context	<b>configure</b> port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy overrides scheduler <i>string</i> parent
Tree	<a href="#">parent</a>
Description	<p>Commands in this context are used to override the scheduler's parent weight and CIR weight. The weights apply to the associated level or CIR level configured in the applied scheduler policy.</p> <p>The override weights are ignored if the scheduler does not have a parent command configured in the scheduler policy. This allows the parent of the scheduler to be removed from the scheduler policy without having to remove all of the queue group overrides. If the parent scheduler does not exist, causing the configured scheduler to be fostered on an egress port scheduler, then the override weights are ignored.</p>
Introduced	16.0.R1
Platforms	All

**cir-weight** *number*

Synopsis	CIR that overrides the parent
Context	<b>configure</b> port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy overrides scheduler <i>string</i> parent cir-weight <i>number</i>
Tree	<a href="#">cir-weight</a>
Range	0 to 100
Introduced	16.0.R1

Platforms All

### **weight** *number*

Synopsis PIR that overrides the parent

Context **configure** [port](#) *string* [ethernet access ingress queue-group](#) *reference* [scheduler-policy overrides scheduler](#) *string* **parent** **weight** *number*

Tree [weight](#)

Range 0 to 100

Introduced 16.0.R1

Platforms All

### **rate**

Synopsis Enter the **rate** context

Context **configure** [port](#) *string* [ethernet access ingress queue-group](#) *reference* [scheduler-policy overrides scheduler](#) *string* **rate**

Tree [rate](#)

Description Commands in this context override specific attributes of the specified scheduler rate. The actual operating rate of the scheduler is limited by bandwidth constraints other than its maximum rate. The scheduler's parent scheduler may not have the available bandwidth to meet the scheduler's needs. The bandwidth available to the parent scheduler could be allocated to other child schedulers or the child queues on the parent scheduler may be based on a higher priority. The children of the scheduler may not need the maximum rate available to the scheduler due to an insufficient offered load or limits to their own maximum rates.

Introduced 16.0.R1

Platforms All

### **cir** (*number* | *keyword*)

Synopsis CIR for the scheduler

Context **configure** [port](#) *string* [ethernet access ingress queue-group](#) *reference* [scheduler-policy overrides scheduler](#) *string* **rate** **cir** (*number* | *keyword*)

Tree [cir](#)

Description This command specifies the CIR. When a parent is associated with the scheduler, this command provides the amount of bandwidth to be considered during the parent scheduler's within-cir distribution phase. When the **rate** command is executed, a valid PIR setting must be explicitly defined before specifying the CIR. If the CIR is set to **max**, the CIR rate is set to infinity.

The **sum** keyword specifies that the CIR be used as the summed CIR values of the children schedulers, policers, or queues.

Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	All

### **pir** (*number* | *keyword*)

Synopsis	PIR for the scheduler
Context	<b>configure</b> port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy overrides scheduler <i>string</i> rate pir ( <i>number</i>   <i>keyword</i> )
Tree	pir
Description	This command specifies the PIR. When the <b>rate</b> command is executed, a valid PIR setting must be explicitly defined. Any other value will result in an error without modifying the current PIR rate.
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

### **policy-name** *reference*

Synopsis	Scheduler policy name
Context	<b>configure</b> port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy <i>policy-name</i> <i>reference</i>
Tree	policy-name
Reference	<b>configure</b> qos scheduler-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

### **accounting-policy** *reference*

Synopsis	Accounting policy for the Ethernet port
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Context	<b>configure port string ethernet accounting-policy reference</b>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure log accounting-policy number</b>
Introduced	16.0.R1
Platforms	All

### **autonegotiate** *keyword*

Synopsis	Speed and duplex autonegotiation on the Ethernet port
Context	<b>configure port string ethernet autonegotiate keyword</b>
Tree	<a href="#">autonegotiate</a>
Description	<p>This command enables speed and duplex autonegotiation on Fast Ethernet ports and enables far-end fault indicator support on Gb ports. When autonegotiation is enabled on a port, the link attempts to automatically negotiate the link <b>speed</b> and <b>duplex</b> commands. If autonegotiation is enabled, the configured <b>duplex</b> and <b>speed</b> commands are ignored.</p> <p>When autonegotiation is disabled on a port, the port does not attempt to autonegotiate and will only operate at the <b>speed</b> and <b>duplex</b> command settings configured for the port. Note that disabling autonegotiation on Gb ports is not allowed as the IEEE 802.3 specification for Gb Ethernet requires autonegotiation be enabled for far end fault indication.</p> <p>It is required for autonegotiation to be limited for ports in a LAG to guarantee a specific port speed.</p>
Options	true, false, limited
Introduced	16.0.R1
Platforms	All

### **collect-stats** *boolean*

Synopsis	Collect accounting and statistical data
Context	<b>configure port string ethernet collect-stats boolean</b>
Tree	<a href="#">collect-stats</a>
Default	false
Introduced	16.0.R1
Platforms	All



**crc-monitor**

Synopsis	Enter the <b>crc-monitor</b> context
Context	<b>configure</b> port <i>string</i> ethernet <b>crc-monitor</b>
Tree	<b>crc-monitor</b>
Description	Commands in this context configure Ethernet Cyclic Redundancy Check (CRC) monitoring.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**signal-degrade**

Synopsis	Enter the <b>signal-degrade</b> context
Context	<b>configure</b> port <i>string</i> ethernet <b>crc-monitor</b> <b>signal-degrade</b>
Tree	<b>signal-degrade</b>
Description	Commands in this context specify the error rate at which to declare the Signal Degrade (SD) condition on an Ethernet interface. The value represents $M \cdot 10^E - N$ , which is the ratio of errored frames over the total frames received over $W$ seconds of the sliding window. The CRC errors on the interface are sampled once per second.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**multiplier** *number*

Synopsis	SD multiplier
Context	<b>configure</b> port <i>string</i> ethernet <b>crc-monitor</b> <b>signal-degrade</b> <b>multiplier</b> <i>number</i>
Tree	<b>multiplier</b>
Range	1 to 9
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**threshold** *number*

Synopsis	SD threshold
Context	<b>configure</b> port <i>string</i> ethernet <b>crc-monitor</b> <b>signal-degrade</b> <b>threshold</b> <i>number</i>
Tree	<b>threshold</b>

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Range	1 to 9
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## signal-failure

Synopsis	Enter the <b>signal-failure</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">crc-monitor</a> <a href="#">signal-failure</a>
Tree	<a href="#">signal-failure</a>
Description	Commands in this context specify the error rate at which to declare the Signal Fail (SF) condition on an Ethernet interface. The value represents M*10E-N errored frames over total frames received over W seconds of the sliding window. The CRC errors on the interface are sampled once per second.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## multiplier *number*

Synopsis	SF multiplier
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">crc-monitor</a> <a href="#">signal-failure</a> <a href="#">multiplier</a> <i>number</i>
Tree	<a href="#">multiplier</a>
Range	1 to 9
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## threshold *number*

Synopsis	SF threshold
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">crc-monitor</a> <a href="#">signal-failure</a> <a href="#">threshold</a> <i>number</i>
Tree	<a href="#">threshold</a>
Range	1 to 9
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**window-size** *number*

Synopsis	Sliding window size over which errors are measured
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">crc-monitor</a> <a href="#">window-size</a> <i>number</i>
Tree	<a href="#">window-size</a>
Description	This command specifies the sliding window size over which the Ethernet frames are sampled to detect SF or SD conditions. The command is used jointly with the <b>signal-failure</b> and the <b>signal-degrade</b> commands to configure the sliding window size.
Range	5 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**dampening**

Synopsis	Enter the <b>dampening</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">dampening</a>
Tree	<a href="#">dampening</a>
Description	Commands in this context configure Exponential Port Dampening (EPD) for the Ethernet port.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of exponential port dampening
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">dampening</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**half-life** *number*

Synopsis	Half-life decay time
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Context	<b>configure port string ethernet dampening half-life number</b>
Tree	<a href="#">half-life</a>
Description	This command specifies the time that must pass before penalties decay to one-half the initial amount. The half-life and maximum suppression time values must be set at the same time and the ratio of the maximum suppression time and half-life must be less than or equal to 49 and greater than or equal to one.
Range	1 to 2000
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	All

### **max-suppress-time number**

Synopsis	Maximum suppression time
Context	<b>configure port string ethernet dampening max-suppress-time number</b>
Tree	<a href="#">max-suppress-time</a>
Description	<p>This command specifies the maximum suppression time, which is the time it can take after the physical link comes up before the worst case accumulated penalties have decayed to the reuse threshold. The maximum penalty is derived from the maximum suppression time, half life, and reuse threshold, using the following equation:</p> $\text{maximum penalty} = (\text{reuse threshold})^2 \exp(-(\text{maximum suppression time}/\text{half life})$ <p>The half life and maximum suppression time values must be set at the same time and the ratio of the maximum suppression time and half life must be less than or equal to 49 and greater than or equal to one.</p>
Range	1 to 43200
Units	seconds
Default	20
Introduced	16.0.R1
Platforms	All

### **reuse-threshold number**

Synopsis	Threshold which port-up state is no longer suppressed
Context	<b>configure port string ethernet dampening reuse-threshold number</b>
Tree	<a href="#">reuse-threshold</a>
Description	This command specifies the threshold at which the port-up state is no longer suppressed, after the port has been in a suppressed state and the accumulated

	penalties decay drops below this threshold. The reuse threshold value must be less than the suppress threshold value.
Range	1 to 20000
Units	penalties
Default	1000
Introduced	16.0.R1
Platforms	All

### **suppress-threshold** *number*

Synopsis	Threshold at which the port-up state is suppressed
Context	<b>configure</b> port <i>string</i> ethernet dampening suppress-threshold <i>number</i>
Tree	suppress-threshold
Description	This command specifies the threshold at which the port-up state is suppressed until the accumulated penalties drop below the reuse threshold. The reuse threshold value must be less than the suppress threshold value.
Range	1 to 20000
Units	penalties
Default	2000
Introduced	16.0.R1
Platforms	All

### **discard-rx-pause-frames** *boolean*

Synopsis	Discard received pause frames
Context	<b>configure</b> port <i>string</i> ethernet discard-rx-pause-frames <i>boolean</i>
Tree	discard-rx-pause-frames
Description	When configured to <b>true</b> , the router discards received pause frames. Pause frames are used for local link flow control.  When configured to <b>false</b> , pause frames are processed upon reception and the transmit side of the receiving port pauses in its transmissions.
Default	false
Introduced	20.10.R1
Platforms	All

**dot1q-etype** *string*

Synopsis	Ethertype expected if port encapsulation type is dot1q
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">dot1q-etype</a> <i>string</i>
Tree	<a href="#">dot1q-etype</a>
Description	This command specifies the Ether type expected when the port encapsulation type is dot1q. Dot1q encapsulation is supported only on Ethernet interfaces.
Default	33024
Introduced	16.0.R1
Platforms	All

**dot1x**

Synopsis	Enter the <b>dot1x</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">dot1x</a>
Tree	<a href="#">dot1x</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of dot1x packet extraction to CPM
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">dot1x</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	21.10.R1
Platforms	All

**macsec**

Synopsis	Enter the <b>macsec</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">dot1x</a> <a href="#">macsec</a>
Tree	<a href="#">macsec</a>
Description	Commands in this context configure Media Access Control Security (MACsec) under the port.

Introduced 16.0.R1  
Platforms All

### **exclude-mac-policy** *reference*

Synopsis MAC policy excluded from MACsec encryption  
Context **configure** port string ethernet dot1x macsec exclude-mac-policy *reference*  
Tree [exclude-mac-policy](#)  
Reference **configure** macsec mac-policy number  
Introduced 16.0.R5  
Platforms All

### **exclude-protocol**

Synopsis Enter the **exclude-protocol** context  
Context **configure** port string ethernet dot1x macsec exclude-protocol  
Tree [exclude-protocol](#)  
Introduced 16.0.R1  
Platforms All

### **cdp** *boolean*

Synopsis Disable MACsec for all packets on the link for CDP  
Context **configure** port string ethernet dot1x macsec exclude-protocol cdp *boolean*  
Tree [cdp](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **eapol-start** *boolean*

Synopsis Disable MACsec for all packets on the link for EAPOL  
Context **configure** port string ethernet dot1x macsec exclude-protocol eapol-start *boolean*  
Tree [eapol-start](#)  
Default false

Introduced 16.0.R1  
Platforms All

### **efm-oam** *boolean*

Synopsis Disable MACsec for all packets on the link for EFM-OAM  
Context **configure** port string ethernet dot1x macsec exclude-protocol efm-oam *boolean*  
Tree [efm-oam](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **eth-cfm** *boolean*

Synopsis Disable MACsec for all packets on the link for ETH-CFM  
Context **configure** port string ethernet dot1x macsec exclude-protocol eth-cfm *boolean*  
Tree [eth-cfm](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **lACP** *boolean*

Synopsis Disable MACsec for all packets on the link for LACP  
Context **configure** port string ethernet dot1x macsec exclude-protocol lACP *boolean*  
Tree [lACP](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **lldp** *boolean*

Synopsis Disable MACsec for all packets on the link for LLDP  
Context **configure** port string ethernet dot1x macsec exclude-protocol lldp *boolean*  
Tree [lldp](#)



Default	false
Introduced	16.0.R1
Platforms	All

**ptp** *boolean*

Synopsis	Disable MACsec for all packets on the link for PTP
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet dot1x macsec exclude-protocol ptp</a> <i>boolean</i>
Tree	<a href="#">ptp</a>
Default	false
Introduced	19.5.R1
Platforms	All

**ubfd** *boolean*

Synopsis	Disable MACsec for all packets on the link for uBFD
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet dot1x macsec exclude-protocol ubfd</a> <i>boolean</i>
Tree	<a href="#">ubfd</a>
Default	false
Introduced	19.5.R1
Platforms	All

**rx-must-be-encrypted** *boolean*

Synopsis	Drop all port traffic that is not MACsec-secured
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet dot1x macsec rx-must-be-encrypted</a> <i>boolean</i>
Tree	<a href="#">rx-must-be-encrypted</a>
Default	false
Introduced	16.0.R1
Platforms	All

**sub-port** [[sub-port-id](#)] *number*

Synopsis	Enter the <b>sub-port</b> list instance
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet dot1x macsec sub-port</a> <i>number</i>

Tree	<a href="#">sub-port</a>
Introduced	16.0.R1
Platforms	All

**[sub-port-id]** *number*

Synopsis	Sub-port ID
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet dot1x macsec sub-port</a> <i>number</i>
Tree	<a href="#">sub-port</a>
Range	1 to 1023
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of MACsec on the port
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet dot1x macsec sub-port</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**ca-name** *reference*

Synopsis	Connectivity association linked to the MACsec sub-port
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet dot1x macsec sub-port</a> <i>number</i> <a href="#">ca-name</a> <i>reference</i>
Tree	<a href="#">ca-name</a>
Reference	<b>configure</b> <a href="#">macsec connectivity-association</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**eapol-destination-address** *string*

Synopsis	EAPOL destination MAC address
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet dot1x macsec sub-port</a> <a href="#">number</a> <a href="#">eapol-destination-address</a> <a href="#">string</a>
Tree	<a href="#">eapol-destination-address</a>
Introduced	16.0.R1
Platforms	All

**encap-match**

Synopsis	Enter the <b>encap-match</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet dot1x macsec sub-port</a> <a href="#">number</a> <a href="#">encap-match</a>
Tree	<a href="#">encap-match</a>
Introduced	19.5.R1
Platforms	All

**all-match** *boolean*

Synopsis	Match and encrypt all traffic patterns
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet dot1x macsec sub-port</a> <a href="#">number</a> <a href="#">encap-match</a> <a href="#">all-match</a> <a href="#">boolean</a>
Tree	<a href="#">all-match</a>
Default	true
Notes	The following elements are part of a choice: <b>all-match</b> , <b>double-tag</b> , <b>single-tag</b> , or <b>untagged</b> .
Introduced	19.5.R1
Platforms	All

**double-tag** *string*

Synopsis	QinQ double tag traffic pattern to match
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet dot1x macsec sub-port</a> <a href="#">number</a> <a href="#">encap-match</a> <a href="#">double-tag</a> <a href="#">string</a>
Tree	<a href="#">double-tag</a>
String Length	1 to 11

Notes	The following elements are part of a choice: <b>all-match</b> , <b>double-tag</b> , <b>single-tag</b> , or <b>untagged</b> .
Introduced	19.5.R1
Platforms	All

### **single-tag** *string*

Synopsis	Dot1q single tag traffic pattern to match
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">dot1x</a> <a href="#">macsec</a> <a href="#">sub-port</a> <a href="#">number</a> <a href="#">encap-match</a> <a href="#">single-tag</a> <a href="#">string</a>
Tree	<a href="#">single-tag</a>
String Length	1 to 11
Notes	The following elements are part of a choice: <b>all-match</b> , <b>double-tag</b> , <b>single-tag</b> , or <b>untagged</b> .
Introduced	19.5.R1
Platforms	All

### **untagged** *boolean*

Synopsis	Match and encrypt untagged traffic only
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">dot1x</a> <a href="#">macsec</a> <a href="#">sub-port</a> <a href="#">number</a> <a href="#">encap-match</a> <a href="#">untagged</a> <a href="#">boolean</a>
Tree	<a href="#">untagged</a>
Notes	The following elements are part of a choice: <b>all-match</b> , <b>double-tag</b> , <b>single-tag</b> , or <b>untagged</b> .
Introduced	19.5.R1
Platforms	All

### **max-peers** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of peers supported on the port
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">dot1x</a> <a href="#">macsec</a> <a href="#">sub-port</a> <a href="#">number</a> <a href="#">max-peers</a> <a href="#">number</a>
Tree	<a href="#">max-peers</a>

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Range	1 to 32
Introduced	16.0.R1
Platforms	All

### **max-authentication-requests** *number*

Synopsis	Maximum number of RADIUS retries
Context	<b>configure</b> <a href="#">port string ethernet dot1x max-authentication-requests</a> <i>number</i>
Tree	<a href="#">max-authentication-requests</a>
Range	1 to 10
Default	2
Introduced	16.0.R1
Platforms	All

### **per-host-authentication**

Synopsis	Enter the <b>per-host-authentication</b> context
Context	<b>configure</b> <a href="#">port string ethernet dot1x per-host-authentication</a>
Tree	<a href="#">per-host-authentication</a>
Introduced	20.7.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of per-host authentication
Context	<b>configure</b> <a href="#">port string ethernet dot1x per-host-authentication admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.2.R1
Platforms	All

### **allowed-source-macs**

Synopsis	Enter the <b>allowed-source-macs</b> context
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Context	<b>configure</b> port <i>string</i> ethernet dot1x per-host-authentication allowed-source-macs
Tree	allowed-source-macs
Introduced	20.7.R1
Platforms	All

### **mac-address** [*mac*] *string*

Synopsis	Add a list entry for <b>mac-address</b>
Context	<b>configure</b> port <i>string</i> ethernet dot1x per-host-authentication allowed-source-macs mac-address <i>string</i>
Tree	mac-address
Introduced	20.7.R1
Platforms	All

### **[mac]** *string*

Synopsis	Source MAC address of a host selected for authentication
Context	<b>configure</b> port <i>string</i> ethernet dot1x per-host-authentication allowed-source-macs mac-address <i>string</i>
Tree	mac-address
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

### **authenticator-init** *boolean*

Synopsis	Initiate per-host authentication
Context	<b>configure</b> port <i>string</i> ethernet dot1x per-host-authentication authenticator-init <i>boolean</i>
Tree	authenticator-init
Default	true
Introduced	21.2.R1
Platforms	All

### **port-control** *keyword*

Synopsis	802.1x authentication mode
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Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet dot1x</a> <a href="#">port-control</a> <i>keyword</i>
Tree	<a href="#">port-control</a>
Options	force-unauthorized, auto, force-authorized
Default	force-authorized
Introduced	16.0.R1
Platforms	All

### **quiet-period** *number*

Synopsis	Time between two sessions when no EAPOL frames are sent
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet dot1x</a> <a href="#">quiet-period</a> <i>number</i>
Tree	<a href="#">quiet-period</a>
Range	1 to 3600
Units	seconds
Default	60
Introduced	16.0.R1
Platforms	All

### **radius-policy** *reference*

Synopsis	RADIUS policy used for 802.1x authentication
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet dot1x</a> <a href="#">radius-policy</a> <i>reference</i>
Tree	<a href="#">radius-policy</a>
Reference	<b>configure</b> <a href="#">system security dot1x</a> <a href="#">radius-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **radius-server-policy** *reference*

Synopsis	RADIUS server policy name
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet dot1x</a> <a href="#">radius-server-policy</a> <i>reference</i>
Tree	<a href="#">radius-server-policy</a>
Reference	<b>configure</b> <a href="#">aaa radius</a> <a href="#">server-policy</a> <i>string</i>
Notes	The following elements are part of a choice: <b>radius-server-policy</b> or ( <b>radius-server-policy-acct</b> and <b>radius-server-policy-auth</b> ).

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Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-server-policy-acct** *reference*

Synopsis	RADIUS server policy name for accounting
Context	<b>configure</b> <a href="#">port string ethernet dot1x radius-server-policy-acct reference</a>
Tree	<a href="#">radius-server-policy-acct</a>
Reference	<b>configure</b> <a href="#">aaa radius server-policy string</a>
Notes	The following elements are part of a choice: <b>radius-server-policy</b> or ( <b>radius-server-policy-acct</b> and <b>radius-server-policy-auth</b> ).
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-server-policy-auth** *reference*

Synopsis	RADIUS server policy name for authentication
Context	<b>configure</b> <a href="#">port string ethernet dot1x radius-server-policy-auth reference</a>
Tree	<a href="#">radius-server-policy-auth</a>
Reference	<b>configure</b> <a href="#">aaa radius server-policy string</a>
Notes	The following elements are part of a choice: <b>radius-server-policy</b> or ( <b>radius-server-policy-acct</b> and <b>radius-server-policy-auth</b> ).
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **re-authentication**

Synopsis	Enable the <b>re-authentication</b> context
Context	<b>configure</b> <a href="#">port string ethernet dot1x re-authentication</a>
Tree	<a href="#">re-authentication</a>
Introduced	16.0.R1
Platforms	All



**period** *number*

Synopsis	Delay before re-authentication is performed
Context	<b>configure</b> port <i>string</i> ethernet dot1x re-authentication period <i>number</i>
Tree	period
Range	1 to 9000
Units	seconds
Default	3600
Introduced	16.0.R1
Platforms	All

**server-timeout** *number*

Synopsis	Wait time for a response from the RADIUS server
Context	<b>configure</b> port <i>string</i> ethernet dot1x server-timeout <i>number</i>
Tree	server-timeout
Range	1 to 300
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	All

**supplicant-timeout** *number*

Synopsis	Wait time for a response to EAPOL messages
Context	<b>configure</b> port <i>string</i> ethernet dot1x supplicant-timeout <i>number</i>
Tree	supplicant-timeout
Range	1 to 300
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	All

**transmit-period** *number*

Synopsis	Time after which a new EAPOL request message is sent
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Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet dot1x</a> <a href="#">transmit-period</a> <i>number</i>
Tree	<a href="#">transmit-period</a>
Range	1 to 3600
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	All

### **tunnel-dot1q** *boolean*

Synopsis	Enable dot1x tunneling for 802.1q tagged packets
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet dot1x</a> <a href="#">tunnel-dot1q</a> <i>boolean</i>
Tree	<a href="#">tunnel-dot1q</a>
Default	true
Introduced	21.2.R1
Platforms	All

### **tunnel-qinq** *boolean*

Synopsis	Enable dot1x tunneling for QinQ tagged packets
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet dot1x</a> <a href="#">tunnel-qinq</a> <i>boolean</i>
Tree	<a href="#">tunnel-qinq</a>
Default	true
Introduced	21.2.R1
Platforms	All

### **tunneling** *boolean*

Synopsis	Allow tunneling of untagged 802.1x frames
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet dot1x</a> <a href="#">tunneling</a> <i>boolean</i>
Tree	<a href="#">tunneling</a>
Default	false
Introduced	16.0.R1
Platforms	All

## down-on-internal-error

Synopsis	Enable the <b>down-on-internal-error</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">down-on-internal-error</a>
Tree	<a href="#">down-on-internal-error</a>
Introduced	16.0.R1
Platforms	All

## tx-laser *keyword*

Synopsis	Remote laser state on internal MAC transmit error
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">down-on-internal-error</a> <a href="#">tx-laser</a> <i>keyword</i>
Tree	<a href="#">tx-laser</a>
Options	off, on
Default	on
Introduced	16.0.R1
Platforms	All

## down-when-looped

Synopsis	Enter the <b>down-when-looped</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">down-when-looped</a>
Tree	<a href="#">down-when-looped</a>
Description	Commands in this context configure Ethernet loop detection.
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of Ethernet loop detection
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">down-when-looped</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1

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Platforms All

### **keep-alive** *number*

Synopsis Time interval between keep-alive PDUs

Context **configure** [port](#) [string](#) [ethernet](#) [down-when-looped](#) [keep-alive](#) *number*

Tree [keep-alive](#)

Range 1 to 120

Units seconds

Default 10

Introduced 16.0.R1

Platforms All

### **retry-timeout** *number*

Synopsis Wait time before re-enabling port after loop detection

Context **configure** [port](#) [string](#) [ethernet](#) [down-when-looped](#) [retry-timeout](#) *number*

Tree [retry-timeout](#)

Range 0 | 10 to 160

Units seconds

Default 120

Introduced 16.0.R1

Platforms All

### **use-broadcast-address** *boolean*

Synopsis Use broadcast MAC address for destination MAC address

Context **configure** [port](#) [string](#) [ethernet](#) [down-when-looped](#) [use-broadcast-address](#) *boolean*

Tree [use-broadcast-address](#)

Default false

Introduced 16.0.R1

Platforms All

**duplex** *keyword*

Synopsis	Duplex type for the fast Ethernet port
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">duplex</a> <i>keyword</i>
Tree	<a href="#">duplex</a>
Description	This command configures the duplex of a Fast Ethernet port when autonegotiation is disabled. This command setting is ignored if autonegotiation is enabled for the port.
Options	full, half
Introduced	16.0.R1
Platforms	All

**efm-oam**

Synopsis	Enter the <b>efm-oam</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">efm-oam</a>
Tree	<a href="#">efm-oam</a>
Introduced	16.0.R1
Platforms	All

**accept-remote-loopback** *boolean*

Synopsis	Enable reactions to loopback control OAMPDUs from peers
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">efm-oam</a> <a href="#">accept-remote-loopback</a> <i>boolean</i>
Tree	<a href="#">accept-remote-loopback</a>
Default	false
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EFM OAM operation
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">efm-oam</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable

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Introduced	16.0.R1
Platforms	All

## discovery

Synopsis	Enter the <b>discovery</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">efm-oam</a> <a href="#">discovery</a>
Tree	<a href="#">discovery</a>
Introduced	16.0.R1
Platforms	All

## advertise-capabilities

Synopsis	Enter the <b>advertise-capabilities</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">efm-oam</a> <a href="#">discovery</a> <a href="#">advertise-capabilities</a>
Tree	<a href="#">advertise-capabilities</a>
Description	Commands in this context specify settings that enable the advertisement of specific capabilities.
Introduced	16.0.R1
Platforms	All

## link-monitoring *boolean*

Synopsis	Advertise link monitoring capabilities to peer
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">efm-oam</a> <a href="#">discovery</a> <a href="#">advertise-capabilities</a> <a href="#">link-monitoring</a> <i>boolean</i>
Tree	<a href="#">link-monitoring</a>
Description	When configured to <b>true</b> , the link monitoring capability is advertised to the peer through the EFM-OAM protocol. When configured to <b>false</b> , this command suppresses the advertisement of capabilities to a remote peer.
Default	true
Introduced	16.0.R1
Platforms	All

**dying-gasp-tx-on-reset** *boolean*

Synopsis	Enable generation of the Information OAMPDU off-cycle
Context	<b>configure</b> port <i>string</i> ethernet efm-oam dying-gasp-tx-on-reset <i>boolean</i>
Tree	dying-gasp-tx-on-reset
Description	<p>When configured to <b>true</b>, this command enables the generation of the Information OAMPDU off-cycle when the soft reset notification is received by the EFM application.</p> <p>The local port state remains under the control of the soft reset application and does not change based on the EFM function. If the port is operationally up, then the local node will continue to consider the port as available for service data and forwarding. If the upstream node requires a notification to route around the local node undergoing the soft reset, then a notification must be sent to those nodes. This is a disruptive function.</p> <p>When both the <b>grace-tx</b> and <b>dying-gasp-tx-on-reset</b> commands are active on the same port, the <b>grace-tx</b> command takes precedence when a soft reset is invoked if the peer vendor OUI being received is 00:16:4D or the configured <b>grace-vendor-oui</b> value.</p> <p>When configured to <b>false</b>, the generation of the Information OAMPDU off-cycle is disabled.</p>
Default	true
Introduced	16.0.R1
Platforms	All

**grace-tx** *boolean*

Synopsis	Enable the sending of Grace TLV for EFM-OAM
Context	<b>configure</b> port <i>string</i> ethernet efm-oam grace-tx <i>boolean</i>
Tree	grace-tx
Description	<p>When configured to <b>true</b>, the system sends the Nokia Vendor specific Grace TLV in the information PDU after an ISSU or a soft reset. The Grace TLV informs a remote peer to ignore the negotiated interval and multiplier and instead use the new timeout interval.</p> <p>By default, the command is disabled at the system level and enabled at the port level. Both the system and port level must be enabled to support grace on a specific port. When configured to <b>true</b>, the EFM-OAM protocol does not enter a non-operational state when both nodes acknowledge the grace function. This feature minimizes service interruption by giving the restarting router time to become operationally and administratively up within the grace period.</p> <p>The peer receiving the Grace TLV must be able to parse and process the vendor-specific messaging. Do not configure grace if the Nokia Vendor Specific Grace TLV is not supported on the remote peer.</p> <p>When configured to <b>false</b>, the Nokia Vendor Specific Grace TLV is not sent.</p>
Introduced	16.0.R1
Platforms	All

**grace-vendor-oui** *string*

Synopsis	Peer vendor OUI to support grace function
Context	<b>configure</b> port <i>string</i> ethernet efm-oam grace-vendor-oui <i>string</i>
Tree	grace-vendor-oui
Default	00:16:4D
Introduced	16.0.R1
Platforms	All

**hold-time** *number*

Synopsis	Wait time before protocol returns to operational state
Context	<b>configure</b> port <i>string</i> ethernet efm-oam hold-time <i>number</i>
Tree	hold-time
Range	1 to 50
Units	seconds
Introduced	16.0.R1
Platforms	All

**ignore-efm-state** *boolean*

Synopsis	Suppress port state changes for EFM-OAM faults
Context	<b>configure</b> port <i>string</i> ethernet efm-oam ignore-efm-state <i>boolean</i>
Tree	ignore-efm-state
Description	When configured to <b>true</b> , the ETH-OAM protocol does not impact the state of the port when there is a failure in the protocol state machine (discovery, configuration, timeout, loops, and so on). There is only a protocol warning message on the port. When configured to <b>false</b> , the port state is affected by any existing EFM-OAM protocol fault condition.
Default	false
Introduced	16.0.R1
Platforms	All

**link-monitoring**

Synopsis	Enter the <b>link-monitoring</b> context
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Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring
Tree	link-monitoring
Introduced	16.0.R4
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of link monitoring on the port
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

### **errored-frame**

Synopsis	Enter the <b>errored-frame</b> context
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring errored-frame
Tree	errored-frame
Introduced	16.0.R4
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of link monitoring on the port
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring errored-frame admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

**event-notification** *boolean*

Synopsis	Transmit Event Notification OAMPDU with link event TLV
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring errored-frame event-notification <i>boolean</i>
Tree	<a href="#">event-notification</a>
Default	true
Introduced	16.0.R4
Platforms	All

**sd-threshold** *number*

Synopsis	SD threshold
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring errored-frame sd-threshold <i>number</i>
Tree	<a href="#">sd-threshold</a>
Range	1 to 1000000
Introduced	16.0.R4
Platforms	All

**sf-threshold** *number*

Synopsis	SF threshold
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring errored-frame sf-threshold <i>number</i>
Tree	<a href="#">sf-threshold</a>
Range	1 to 1000000
Default	1
Introduced	16.0.R4
Platforms	All

**window** *number*

Synopsis	Window size
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring errored-frame window <i>number</i>
Tree	<a href="#">window</a>
Range	10 to 600

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Units	deciseconds
Default	10
Introduced	16.0.R4
Platforms	All

### **errored-frame-period**

Synopsis	Enter the <b>errored-frame-period</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">efm-oam</a> <a href="#">link-monitoring</a> <a href="#">errored-frame-period</a>
Tree	<a href="#">errored-frame-period</a>
Introduced	16.0.R4
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of link monitoring on the port
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">efm-oam</a> <a href="#">link-monitoring</a> <a href="#">errored-frame-period</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

### **event-notification** *boolean*

Synopsis	Transmit Event Notification OAMPDU with link event TLV
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">efm-oam</a> <a href="#">link-monitoring</a> <a href="#">errored-frame-period</a> <a href="#">event-notification</a> <i>boolean</i>
Tree	<a href="#">event-notification</a>
Default	true
Introduced	16.0.R4
Platforms	All

**sd-threshold** *number*

Synopsis	SD threshold
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring errored-frame-period sd-threshold <i>number</i>
Tree	sd-threshold
Range	1 to 1000000
Introduced	16.0.R4
Platforms	All

**sf-threshold** *number*

Synopsis	SF threshold
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring errored-frame-period sf-threshold <i>number</i>
Tree	sf-threshold
Range	1 to 1000000
Default	1
Introduced	16.0.R4
Platforms	All

**window** *number*

Synopsis	Window size
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring errored-frame-period window <i>number</i>
Tree	window
Range	1 to 4294967295
Units	packets
Default	1488095
Introduced	16.0.R4
Platforms	All

**errored-frame-seconds**

Synopsis	Enter the <b>errored-frame-seconds</b> context
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring errored-frame-seconds

Tree	<a href="#">errored-frame-seconds</a>
Introduced	16.0.R4
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of link monitoring on the port
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">efm-oam</a> <a href="#">link-monitoring</a> <a href="#">errored-frame-seconds</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

**event-notification** *boolean*

Synopsis	Transmit Event Notification OAMPDU with link event TLV
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">efm-oam</a> <a href="#">link-monitoring</a> <a href="#">errored-frame-seconds</a> <a href="#">event-notification</a> <i>boolean</i>
Tree	<a href="#">event-notification</a>
Default	true
Introduced	16.0.R4
Platforms	All

**sd-threshold** *number*

Synopsis	SD threshold
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">efm-oam</a> <a href="#">link-monitoring</a> <a href="#">errored-frame-seconds</a> <a href="#">sd-threshold</a> <i>number</i>
Tree	<a href="#">sd-threshold</a>
Range	1 to 900
Introduced	16.0.R4
Platforms	All

**sf-threshold** *number*

Synopsis	SF threshold
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring errored-frame-seconds sf-threshold <i>number</i>
Tree	sf-threshold
Range	1 to 900
Default	1
Introduced	16.0.R4
Platforms	All

**window** *number*

Synopsis	Window size
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring errored-frame-seconds window <i>number</i>
Tree	window
Range	100 to 9000
Units	deciseconds
Default	600
Introduced	16.0.R4
Platforms	All

**errored-symbols**

Synopsis	Enter the <b>errored-symbols</b> context
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring errored-symbols
Tree	errored-symbols
Introduced	16.0.R4
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of link monitoring on the port
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring errored-symbols admin-state <i>keyword</i>
Tree	admin-state

Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

### **event-notification** *boolean*

Synopsis	Transmit Event Notification OAMPDU with link event TLV
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring errored-symbols event-notification <i>boolean</i>
Tree	<a href="#">event-notification</a>
Default	true
Introduced	16.0.R4
Platforms	All

### **sd-threshold** *number*

Synopsis	SD threshold
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring errored-symbols sd-threshold <i>number</i>
Tree	<a href="#">sd-threshold</a>
Range	1 to 1000000
Introduced	16.0.R4
Platforms	All

### **sf-threshold** *number*

Synopsis	SF threshold
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring errored-symbols sf-threshold <i>number</i>
Tree	<a href="#">sf-threshold</a>
Range	1 to 1000000
Default	1
Introduced	16.0.R4
Platforms	All

### **window** *number*

Synopsis	Window size
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">efm-oam</a> <a href="#">link-monitoring</a> <a href="#">errored-symbols</a> <a href="#">window</a> <i>number</i>
Tree	<a href="#">window</a>
Range	10 to 600
Units	deciseconds
Default	10
Introduced	16.0.R4
Platforms	All

### **local-sf-action**

Synopsis	Enter the <b>local-sf-action</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">efm-oam</a> <a href="#">link-monitoring</a> <a href="#">local-sf-action</a>
Tree	<a href="#">local-sf-action</a>
Introduced	16.0.R4
Platforms	All

### **event-notification-burst** *number*

Synopsis	Number of OAMPDUs to send when SF threshold is reached
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">efm-oam</a> <a href="#">link-monitoring</a> <a href="#">local-sf-action</a> <a href="#">event-notification-burst</a> <i>number</i>
Tree	<a href="#">event-notification-burst</a>
Range	1 to 5
Units	packets
Default	1
Introduced	16.0.R4
Platforms	All

### **info-notification**

Synopsis	Enter the <b>info-notification</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">efm-oam</a> <a href="#">link-monitoring</a> <a href="#">local-sf-action</a> <a href="#">info-notification</a>



Tree	<a href="#">info-notification</a>
Introduced	16.0.R4
Platforms	All

**critical-event** *boolean*

Synopsis	Set critical event flag when SF threshold is reached
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">efm-oam</a> <a href="#">link-monitoring</a> <a href="#">local-sf-action</a> <a href="#">info-notification</a> <a href="#">critical-event</a> <i>boolean</i>
Tree	<a href="#">critical-event</a>
Default	false
Introduced	16.0.R4
Platforms	All

**dying-gasp** *boolean*

Synopsis	Set dying gasp flag when SF threshold is reached
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">efm-oam</a> <a href="#">link-monitoring</a> <a href="#">local-sf-action</a> <a href="#">info-notification</a> <a href="#">dying-gasp</a> <i>boolean</i>
Tree	<a href="#">dying-gasp</a>
Default	false
Introduced	16.0.R4
Platforms	All

**local-port-action** *keyword*

Synopsis	Local port action when SF threshold is reached
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">efm-oam</a> <a href="#">link-monitoring</a> <a href="#">local-sf-action</a> <a href="#">local-port-action</a> <i>keyword</i>
Tree	<a href="#">local-port-action</a>
Options	log-only, port-out-of-service
Default	port-out-of-service
Introduced	16.0.R4
Platforms	All

**mode** *keyword*

Synopsis	Mode of OAM operation for the Ethernet port
Context	<b>configure</b> port <i>string</i> ethernet efm-oam mode <i>keyword</i>
Tree	mode
Options	passive, active
Default	active
Introduced	16.0.R1
Platforms	All

**multiplier** *number*

Synopsis	Multiplier for the transmit interval of OAMPDUs
Context	<b>configure</b> port <i>string</i> ethernet efm-oam multiplier <i>number</i>
Tree	multiplier
Range	2 to 5
Default	5
Introduced	16.0.R1
Platforms	All

**peer-rdi-rx**

Synopsis	Enter the <b>peer-rdi-rx</b> context
Context	<b>configure</b> port <i>string</i> ethernet efm-oam peer-rdi-rx
Tree	peer-rdi-rx
Introduced	16.0.R1
Platforms	All

**critical-event** *keyword*

Synopsis	Action taken upon receipt of critical event flag
Context	<b>configure</b> port <i>string</i> ethernet efm-oam peer-rdi-rx critical-event <i>keyword</i>
Tree	critical-event
Options	log-only, port-out-of-service
Default	port-out-of-service
Introduced	16.0.R1

Platforms All

### **dying-gasp** *keyword*

Synopsis Action taken upon receipt of dying gasp flag

Context **configure** [port](#) [string](#) [ethernet](#) [efm-oam](#) [peer-rdi-rx](#) **dying-gasp** *keyword*

Tree [dying-gasp](#)

Options log-only, port-out-of-service

Default port-out-of-service

Introduced 16.0.R1

Platforms All

### **event-notification** *keyword*

Synopsis Action taken upon receipt of event TLVs

Context **configure** [port](#) [string](#) [ethernet](#) [efm-oam](#) [peer-rdi-rx](#) **event-notification** *keyword*

Tree [event-notification](#)

Options log-only, port-out-of-service

Default log-only

Introduced 16.0.R1

Platforms All

### **link-fault** *keyword*

Synopsis Action taken upon receipt of link fault flag

Context **configure** [port](#) [string](#) [ethernet](#) [efm-oam](#) [peer-rdi-rx](#) **link-fault** *keyword*

Tree [link-fault](#)

Options log-only, port-out-of-service

Default port-out-of-service

Introduced 16.0.R1

Platforms All

### **transmit-interval** *number*

Synopsis Transmit interval of OAMPDUs

Context	<b>configure</b> port <i>string</i> ethernet efm-oam transmit-interval <i>number</i>
Tree	transmit-interval
Range	1 to 600
Units	deciseconds
Default	10
Introduced	16.0.R1
Platforms	All

### **trigger-fault** *keyword*

Synopsis	Flag setting in the information OAMPDU
Context	<b>configure</b> port <i>string</i> ethernet efm-oam trigger-fault <i>keyword</i>
Tree	trigger-fault
Options	dying-gasp, critical-event
Introduced	16.0.R1
Platforms	All

### **tunneling** *boolean*

Synopsis	Enable EFM-OAM PDU tunneling
Context	<b>configure</b> port <i>string</i> ethernet efm-oam tunneling <i>boolean</i>
Tree	tunneling
Default	false
Introduced	16.0.R1
Platforms	All

### **egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> port <i>string</i> ethernet egress
Tree	egress
Introduced	16.0.R1
Platforms	All

**eth-bn-rate-changes** *boolean*

Synopsis	Allow rate changes in ETH-BN messages on port-based MEP
Context	<b>configure</b> port <i>string</i> ethernet egress eth-bn-rate-changes <i>boolean</i>
Tree	<a href="#">eth-bn-rate-changes</a>
Description	When configured to <b>true</b> , this command allows rate changes received in ETH-BN messages on a port-based MEP to update the egress rate used on the port. This command is not supported for all MDA types. When configured to <b>false</b> , rate changes in ETH-BN messages are denied.
Default	false
Introduced	16.0.R1
Platforms	All

**hs-port-pool-policy** *reference*

Synopsis	HS port pool policy
Context	<b>configure</b> port <i>string</i> ethernet egress hs-port-pool-policy <i>reference</i>
Tree	<a href="#">hs-port-pool-policy</a>
Reference	<b>configure</b> qos hs-port-pool-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**hs-scheduler-policy**

Synopsis	Enter the <b>hs-scheduler-policy</b> context
Context	<b>configure</b> port <i>string</i> ethernet egress hs-scheduler-policy
Tree	<a href="#">hs-scheduler-policy</a>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**overrides**

Synopsis	Enable the <b>overrides</b> context
Context	<b>configure</b> port <i>string</i> ethernet egress hs-scheduler-policy overrides
Tree	<a href="#">overrides</a>
Introduced	19.10.R1

Platforms 7750 SR-7/12/12e

### **group** [group-id] *number*

Synopsis Enter the **group** list instance

Context **configure** port *string* ethernet egress hs-scheduler-policy overrides group *number*

Tree [group](#)

Introduced 19.10.R1

Platforms 7750 SR-7/12/12e

### **[group-id]** *number*

Synopsis Group ID

Context **configure** port *string* ethernet egress hs-scheduler-policy overrides group *number*

Tree [group](#)

Range 1

Notes This element is part of a list key.

Introduced 19.10.R1

Platforms 7750 SR-7/12/12e

### **rate** (*number* | *keyword*)

Synopsis Maximum rate

Context **configure** port *string* ethernet egress hs-scheduler-policy overrides group *number* rate (*number* | *keyword*)

Tree [rate](#)

Range 1 to 100000

Units megabps

Options max

Introduced 19.10.R1

Platforms 7750 SR-7/12/12e

### **max-rate** (*number* | *keyword*)

Synopsis Maximum frame-based bandwidth limit

Context	<b>configure</b> port string ethernet egress hs-scheduler-policy overrides max-rate (number   keyword)
Tree	max-rate
Range	1 to 100000
Units	megabps
Options	max
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

### **scheduling-class** [class-number] number

Synopsis	Enter the <b>scheduling-class</b> list instance
Context	<b>configure</b> port string ethernet egress hs-scheduler-policy overrides scheduling-class number
Tree	scheduling-class
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

### **[class-number]** number

Synopsis	Scheduling class value
Context	<b>configure</b> port string ethernet egress hs-scheduler-policy overrides scheduling-class number
Tree	scheduling-class
Range	1 to 6
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

### **rate** (number | keyword)

Synopsis	Maximum frame-based bandwidth limit
Context	<b>configure</b> port string ethernet egress hs-scheduler-policy overrides scheduling-class number rate (number   keyword)
Tree	rate
Range	1 to 100000

Units	megabps
Options	max
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

**weight number**

Synopsis	Weight of the scheduling class within the group
Context	<b>configure</b> port <i>string</i> ethernet egress hs-scheduler-policy overrides scheduling-class number weight number
Tree	weight
Range	1 to 127
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

**policy-name reference**

Synopsis	HS scheduler policy name
Context	<b>configure</b> port <i>string</i> ethernet egress hs-scheduler-policy policy-name reference
Tree	policy-name
Reference	<b>configure</b> qos hs-scheduler-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**hs-secondary-shaper [secondary-shaper-name] string**

Synopsis	Enter the <b>hs-secondary-shaper</b> list instance
Context	<b>configure</b> port <i>string</i> ethernet egress hs-secondary-shaper <i>string</i>
Tree	hs-secondary-shaper
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

**[secondary-shaper-name] string**

Synopsis	Secondary shaper name
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Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">egress</a> <a href="#">hs-secondary-shaper</a> <i>string</i>
Tree	<a href="#">hs-secondary-shaper</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

## aggregate

Synopsis	Enter the <b>aggregate</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">egress</a> <a href="#">hs-secondary-shaper</a> <i>string</i> <a href="#">aggregate</a>
Tree	<a href="#">aggregate</a>
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

## low-burst-max-class *number*

Synopsis	Highest scheduling class mapped to the low burst limit
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">egress</a> <a href="#">hs-secondary-shaper</a> <i>string</i> <a href="#">aggregate</a> <a href="#">low-burst-max-class</a> <i>number</i>
Tree	<a href="#">low-burst-max-class</a>
Range	1 to 6
Default	6
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

## rate (*number* | *keyword*)

Synopsis	Rate allowed for the HS secondary shaper aggregate
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">egress</a> <a href="#">hs-secondary-shaper</a> <i>string</i> <a href="#">aggregate</a> <a href="#">rate</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">rate</a>
Range	1 to 100000000
Units	kilobps
Options	max

Default	max
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

**class** [*class-number*] *number*

Synopsis	Enter the <b>class</b> list instance
Context	<b>configure</b> <i>port string ethernet egress hs-secondary-shaper string class number</i>
Tree	<i>class</i>
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

**[class-number]** *number*

Synopsis	HS secondary shaper class ID
Context	<b>configure</b> <i>port string ethernet egress hs-secondary-shaper string class number</i>
Tree	<i>class</i>
Range	1 to 6
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

**rate** (*number* | *keyword*)

Synopsis	Rate allowed for the HS secondary shaper class
Context	<b>configure</b> <i>port string ethernet egress hs-secondary-shaper string class number rate (number   keyword)</i>
Tree	<i>rate</i>
Range	1 to 100000000
Units	kilobps
Options	max
Default	max
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

**description** *string*

Synopsis	Text description
Context	<b>configure</b> port <i>string</i> ethernet egress hs-secondary-shaper <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

**hw-aggr-shaper-scheduler**

Synopsis	Enter the <b>hw-aggr-shaper-scheduler</b> context
Context	<b>configure</b> port <i>string</i> ethernet egress hw-aggr-shaper-scheduler
Tree	hw-aggr-shaper-scheduler
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

**monitor** *boolean*

Synopsis	Allow monitoring of the HW aggregate shaper scheduler
Context	<b>configure</b> port <i>string</i> ethernet egress hw-aggr-shaper-scheduler monitor <i>boolean</i>
Tree	monitor
Default	false
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

**policy-name** *reference*

Synopsis	Name of HW aggregate shaper scheduler policy
Context	<b>configure</b> port <i>string</i> ethernet egress hw-aggr-shaper-scheduler policy-name <i>reference</i>
Tree	policy-name
Reference	<b>configure</b> qos hw-aggr-shaper-scheduler-policy <i>string</i>
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

### **monitor-port-scheduler** *boolean*

Synopsis	Enable monitoring of egress scheduler
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">egress</a> <a href="#">monitor-port-scheduler</a> <i>boolean</i>
Tree	<a href="#">monitor-port-scheduler</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **port-scheduler-policy**

Synopsis	Enter the <b>port-scheduler-policy</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">egress</a> <a href="#">port-scheduler-policy</a>
Tree	<a href="#">port-scheduler-policy</a>
Introduced	16.0.R1
Platforms	All

### **overrides**

Synopsis	Enable the <b>overrides</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">egress</a> <a href="#">port-scheduler-policy</a> <a href="#">overrides</a>
Tree	<a href="#">overrides</a>
Description	Commands in this context configure egress scheduler overrides.
Introduced	16.0.R4
Platforms	All

### **level** [[priority-level](#)] *number*

Synopsis	Enter the <b>level</b> list instance
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">egress</a> <a href="#">port-scheduler-policy</a> <a href="#">overrides</a> <a href="#">level</a> <i>number</i>
Tree	<a href="#">level</a>
Introduced	16.0.R4
Platforms	All

**[priority-level] number**

Synopsis	Port priority level to be overridden
Context	<b>configure</b> port <i>string</i> ethernet egress port-scheduler-policy overrides level <i>number</i>
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure</b> port <i>string</i> ethernet egress port-scheduler-policy overrides level <i>number</i> percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R4
Platforms	All

**cir decimal-number**

Synopsis	CIR for the port scheduler policy
Context	<b>configure</b> port <i>string</i> ethernet egress port-scheduler-policy overrides level <i>number</i> percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Units	percent
Introduced	16.0.R4
Platforms	All

**pir decimal-number**

Synopsis	PIR for the the port scheduler policy
Context	<b>configure</b> port <i>string</i> ethernet egress port-scheduler-policy overrides level <i>number</i> percent-rate pir <i>decimal-number</i>
Tree	pir

Range	0.01 to 100.00
Units	percent
Introduced	16.0.R4
Platforms	All

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> port string ethernet egress port-scheduler-policy overrides level number rate
Tree	rate
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R4
Platforms	All

**cir** (*number* | *keyword*)

Synopsis	CIR
Context	<b>configure</b> port string ethernet egress port-scheduler-policy overrides level number rate cir ( <i>number</i>   <i>keyword</i> )
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R4
Platforms	All

**pir** (*number* | *keyword*)

Synopsis	PIR
Context	<b>configure</b> port string ethernet egress port-scheduler-policy overrides level number rate pir ( <i>number</i>   <i>keyword</i> )
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max

Introduced	16.0.R4
Platforms	All

**max-rate**

Synopsis	Enter the <b>max-rate</b> context
Context	<b>configure</b> <a href="#">port string ethernet egress port-scheduler-policy overrides max-rate</a>
Tree	<a href="#">max-rate</a>
Description	Commands in this context override the <b>max-rate</b> command found in the port scheduler policy associated with the port. When a maximum rate is defined at the port or channel level, the port scheduler's policy <b>max-rate</b> command is ignored.
Introduced	16.0.R4
Platforms	All

**percent-rate** *decimal-number*

Synopsis	PIR rate
Context	<b>configure</b> <a href="#">port string ethernet egress port-scheduler-policy overrides max-rate percent-rate decimal-number</a>
Tree	<a href="#">percent-rate</a>
Range	0.01 to 100
Units	percent
Default	100
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R4
Platforms	All

**rate** (*number* | *keyword*)

Synopsis	PIR rate
Context	<b>configure</b> <a href="#">port string ethernet egress port-scheduler-policy overrides max-rate rate (number   keyword)</a>
Tree	<a href="#">rate</a>
Range	1 to 6400000000
Units	kilobps
Options	max

Default	max
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R4
Platforms	All

### **policy-name** *reference*

Synopsis	Egress scheduler policy name
Context	<b>configure</b> port <i>string</i> ethernet egress port-scheduler-policy <i>policy-name reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> qos port-scheduler-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

### **rate** *number*

Synopsis	Rate of egress traffic
Context	<b>configure</b> port <i>string</i> ethernet egress rate <i>number</i>
Tree	<a href="#">rate</a>
Description	This command configures the rate of traffic leaving the network. An event log is generated each time the egress rate is modified unless the port is part of a LAG. This command is not supported for all MDA types.
Max. Range	-2147483648 to 2147483647
Units	kilobps
Introduced	16.0.R1
Platforms	All

### **elmi**

Synopsis	Enter the <b>elmi</b> context
Context	<b>configure</b> port <i>string</i> ethernet <b>elmi</b>
Tree	<a href="#">elmi</a>
Introduced	16.0.R4
Platforms	All



**mode keyword**

Synopsis	Ethernet LMI mode
Context	<b>configure</b> port string ethernet elmi mode keyword
Tree	mode
Options	uni-n
Introduced	16.0.R4
Platforms	All

**n393 number**

Synopsis	Monitored count of consecutive errors
Context	<b>configure</b> port string ethernet elmi n393 number
Tree	n393
Range	2 to 10
Default	4
Introduced	16.0.R4
Platforms	All

**t391 number**

Synopsis	Polling timer for UNI-C
Context	<b>configure</b> port string ethernet elmi t391 number
Tree	t391
Range	5 to 30
Units	seconds
Default	10
Introduced	16.0.R4
Platforms	All

**t392 number**

Synopsis	Polling verification timer for UNI-N
Context	<b>configure</b> port string ethernet elmi t392 number
Tree	t392

Range	5 to 30
Units	seconds
Default	15
Introduced	16.0.R4
Platforms	All

### **encap-type** *keyword*

Synopsis	Encapsulation method for the Ethernet port
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">encap-type</a> <i>keyword</i>
Tree	<a href="#">encap-type</a>
Options	null, dot1q, qinq
Introduced	16.0.R1
Platforms	All

### **eth-cfm**

Synopsis	Enter the <b>eth-cfm</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">eth-cfm</a>
Tree	<a href="#">eth-cfm</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mep** [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number*

Synopsis	Enter the <b>mep</b> list instance
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i>
Tree	<a href="#">mep</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **md-admin-name** *reference*

Synopsis	Maintenance Domain (MD) name
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Context	<b>configure</b> port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number
Tree	<a href="#">mep</a>
Reference	<b>configure</b> eth-cfm domain <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ma-admin-name** *reference*

Synopsis	Maintenance Association (MA) name
Context	<b>configure</b> port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number
Tree	<a href="#">mep</a>
Reference	<b>configure</b> eth-cfm domain <i>string</i> association <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mep-id** *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	<b>configure</b> port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number
Tree	<a href="#">mep</a>
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **admin-state** *keyword*

Synopsis	Administrative state of the MEP
Context	<b>configure</b> port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number admin-state <i>keyword</i>
Tree	<a href="#">admin-state</a>

Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ais

Synopsis	Enable the <b>ais</b> context
Context	<b>configure</b> port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number <b>ais</b>
Tree	<b>ais</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## client-meg-level *number*

Synopsis	Client MEG level for AIS message generation
Context	<b>configure</b> port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number <b>ais</b> client-meg-level <i>number</i>
Tree	<b>client-meg-level</b>
Range	1 to 7
Max.	7
Instances	
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## interface-support *boolean*

Synopsis	Enable generation of AIS PDUs based on endpoint state
Context	<b>configure</b> port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number <b>ais</b> interface-support <i>boolean</i>
Tree	<b>interface-support</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**interval number**

Synopsis	Transmission interval for AIS messages
Context	<b>configure</b> port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais interval number
Tree	interval
Range	1   60
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**low-priority-defect keyword**

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure</b> port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais low-priority-defect keyword
Tree	low-priority-defect
Options	all-def, mac-rem-err-xcon
Default	all-def
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**priority number**

Synopsis	Priority of the AIS messages generated by the node
Context	<b>configure</b> port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais priority number
Tree	priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**alarm-notification**

Synopsis	Enter the <b>alarm-notification</b> context
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Context	<b>configure</b> port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number alarm-notification
Tree	alarm-notification
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fng-alarm-time** *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	<b>configure</b> port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number alarm-notification fng-alarm-time <i>number</i>
Tree	fng-alarm-time
Range	250   500   1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fng-reset-time** *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	<b>configure</b> port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number alarm-notification fng-reset-time <i>number</i>
Tree	fng-reset-time
Range	250   500   1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm** *boolean*

Synopsis	Generate CCM messages
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Context	<b>configure</b> port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm boolean
Tree	ccm
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm-ltm-priority** number

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	<b>configure</b> port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-ltm-priority number
Tree	ccm-ltm-priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm-padding-size** number

Synopsis	Number of octets of padding to insert in CCM packets
Context	<b>configure</b> port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-padding-size number
Tree	ccm-padding-size
Description	<p>This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.</p> <p>This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through <b>configure eth-cfm domain association ccm-interval</b>) is less than 1 second.</p>
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm-tlv-ignore** keyword

Synopsis	TLV to ignore on reception
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Context	<b>configure</b> port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number ccm-tlv-ignore <i>keyword</i>
Tree	ccm-tlv-ignore
Description	This command configures the receiving MEP to ignore the specified TLVs in the CCM PDU. The ignored TLVs are reported as absent and have no impact on the MEP state machine.  When unconfigured, the MEP processes all the recognized TLVs.
Options	interface-status, port-status
Max. Instances	2
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### collect-lmm-stats *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	<b>configure</b> port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number collect-lmm-stats <i>boolean</i>
Tree	collect-lmm-stats
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### csf

Synopsis	Enable the <b>csf</b> context
Context	<b>configure</b> port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number csf
Tree	csf
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### multiplier *decimal-number*

Synopsis	Multiplication factor used to clear the CSF condition
Context	<b>configure</b> port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number csf multiplier <i>decimal-number</i>



Tree	<a href="#">multiplier</a>
Range	0.0   2.0 to 30.0
Default	3.5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **eth-bn**

Synopsis	Enter the <b>eth-bn</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-bn</a>
Tree	<a href="#">eth-bn</a>
Description	Commands in this context configure Ethernet Bandwidth Notification (ETH-BN) message handling.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **receive** *boolean*

Synopsis	Enable the reception and processing of ETH-BN messages
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-bn</a> <a href="#">receive</a> <i>boolean</i>
Tree	<a href="#">receive</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**rx-update-pacing** *number*

Synopsis	Pace of messages to and from ETH-CFM to QoS subsystems
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">eth-bn</a> <b>rx-update-pacing</b> <i>number</i>
Tree	<a href="#">rx-update-pacing</a>
Range	1 to 600
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**eth-test**

Synopsis	Enable the <b>eth-test</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <b>eth-test</b>
Tree	<a href="#">eth-test</a>
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the <b>oam eth-cfm eth-test</b> command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**bit-error-threshold** *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">eth-test</a> <b>bit-error-threshold</b> <i>number</i>
Tree	<a href="#">bit-error-threshold</a>
Range	0 to 11840
Units	bit errors
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**test-pattern**

Synopsis	Enter the <b>test-pattern</b> context
Context	<b>configure</b> port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**crc-tlv boolean**

Synopsis	Generate a CRC checksum
Context	<b>configure</b> port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number eth-test test-pattern crc-tlv boolean
Tree	crc-tlv
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**pattern keyword**

Synopsis	Test pattern for Ethernet Test frames
Context	<b>configure</b> port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number eth-test test-pattern pattern keyword
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**facility-fault boolean**

Synopsis	Allow the facility MEP to generate a network action
----------	---

Context	<b>configure</b> port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number facility-fault boolean
Tree	facility-fault
Description	When configured to <b>true</b> , the system facility MEP responds to a fault with a network-actionable function instead of just reporting the defect condition. When configured to <b>false</b> , the system monitors transmissions and reports fault conditions.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## grace

Synopsis	Enter the <b>grace</b> context
Context	<b>configure</b> port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace
Tree	grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## eth-ed

Synopsis	Enter the <b>eth-ed</b> context
Context	<b>configure</b> port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed
Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## max-rx-defect-window number

Synopsis	Maximum received ETH-ED expected defect window duration
Context	<b>configure</b> port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed max-rx-defect-window number

Tree	<a href="#">max-rx-defect-window</a>
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **priority number**

Synopsis	Transmission priority for ETH-ED PDUs
Context	<b>configure</b> <a href="#">port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed priority number</a>
Tree	<a href="#">priority</a>
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **rx-eth-ed boolean**

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	<b>configure</b> <a href="#">port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed rx-eth-ed boolean</a>
Tree	<a href="#">rx-eth-ed</a>
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **tx-eth-ed boolean**

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	<b>configure</b> <a href="#">port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed tx-eth-ed boolean</a>
Tree	<a href="#">tx-eth-ed</a>
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## eth-vsm-grace

Synopsis Enter the **eth-vsm-grace** context

Context **configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace

Tree [eth-vsm-grace](#)

Description Commands in this context configure the Nokia ETH-CFM Grace function.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## rx-eth-vsm-grace *boolean*

Synopsis Receive and process Nokia ETH-CFM Grace PDU on the MEP

Context **configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace rx-eth-vsm-grace *boolean*

Tree [rx-eth-vsm-grace](#)

Description When configured to **true**, the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

When configured to **false**, the router disables the Nokia Grace function.

Default true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## tx-eth-vsm-grace *boolean*

Synopsis Transmit ETH-ED PDUs from the MEP

Context **configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace tx-eth-vsm-grace *boolean*

Tree [tx-eth-vsm-grace](#)

Description When configured to **true**, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.

The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

The operator must configure the **configure system eth-cfm grace** command to instruct the system that the node is capable of transmitting expected-defect windows to peers.

The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).

When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.

Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **low-priority-defect** *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure</b> port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number low-priority-defect <i>keyword</i>
Tree	<a href="#">low-priority-defect</a>
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mac-address** *string*

Synopsis	MAC address of the MEP
Context	<b>configure</b> port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number mac-address <i>string</i>
Tree	<a href="#">mac-address</a>
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **one-way-delay-threshold** *number*

Synopsis	Threshold time limit for the one-way delay test
Context	<b>configure</b> port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number one-way-delay-threshold <i>number</i>
Tree	<a href="#">one-way-delay-threshold</a>

Range	0 to 600
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **vlan** (*number* | *keyword*)



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Outer VLAN ID of the tunnel
Context	<b>configure</b> port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number vlan ( <i>number</i>   <i>keyword</i> )
Tree	vlan
Range	1 to 4094
Options	none
Default	none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **hold-time**

Synopsis	Enter the <b>hold-time</b> context
Context	<b>configure</b> port <i>string</i> ethernet hold-time
Tree	hold-time
Introduced	16.0.R1
Platforms	All

### **down** *number*

Synopsis	Delay after interface goes from up state to down state
Context	<b>configure</b> port <i>string</i> ethernet hold-time down <i>number</i>
Tree	down
Description	This command specifies the delay to notify the upper layers after an interface transitions from an up state to a down state.



When an interface transitions from an up state to a down state, it is immediately advertised to the rest of the system if the down interval is zero, but if the down interval is greater than zero, interface down transitions are not advertised to upper layers until the down interval has expired.

Range	1 to 3600000
Introduced	16.0.R1
Platforms	All

### **units** keyword

Synopsis	Hold time units
Context	<b>configure</b> port string ethernet hold-time units keyword
Tree	units
Options	seconds, centiseconds
Default	seconds
Introduced	16.0.R1
Platforms	All

### **up** number

Synopsis	Delay after interface goes from down state to up state
Context	<b>configure</b> port string ethernet hold-time up number
Tree	up
Description	This command specifies the delay to notify the upper layers after an interface transitions from a down state to an up state.  When an interface transitions from a down state to an up state, it is immediately advertised as up to the rest of the system if the up interval is zero, but if the up interval is greater than zero, up transitions are not advertised until the up interval has expired.
Range	1 to 3600000
Introduced	16.0.R1
Platforms	All

### **ingress**

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> port string ethernet ingress
Tree	ingress

Introduced	16.0.R1
Platforms	All

**rate number**

Synopsis	Maximum ingress bandwidth
Context	<b>configure</b> <a href="#">port string ethernet ingress rate number</a>
Tree	<a href="#">rate</a>
Max. Range	-2147483648 to 2147483647
Units	megabps
Introduced	16.0.R1
Platforms	All

**lACP-tunnel boolean**

Synopsis	Enable LACP packet tunneling for the Ethernet port
Context	<b>configure</b> <a href="#">port string ethernet lACP-tunnel boolean</a>
Tree	<a href="#">lACP-tunnel</a>
Default	false
Introduced	16.0.R1
Platforms	All

**lldp**

Synopsis	Enter the <b>lldp</b> context
Context	<b>configure</b> <a href="#">port string ethernet lldp</a>
Tree	<a href="#">lldp</a>
Description	Commands in this context configure the Link Layer Discovery Protocol (LLDP) on the port.
Introduced	16.0.R1
Platforms	All

**dest-mac [mac-type] keyword**

Synopsis	Enter the <b>dest-mac</b> list instance
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Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">lldp</a> <a href="#">dest-mac</a> <i>keyword</i>
Tree	<a href="#">dest-mac</a>
Description	Commands in this context configure destination MAC address commands.
Introduced	16.0.R1
Platforms	All

### **[mac-type]** *keyword*

Synopsis	Destination MAC address type
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">lldp</a> <a href="#">dest-mac</a> <i>keyword</i>
Tree	<a href="#">dest-mac</a>
Options	nearest-bridge, nearest-non-tpmr, nearest-customer
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **notification** *boolean*

Synopsis	Enable LLDP notifications
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">lldp</a> <a href="#">dest-mac</a> <i>keyword</i> <a href="#">notification</a> <i>boolean</i>
Tree	<a href="#">notification</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **port-id-subtype** *keyword*

Synopsis	Port ID TLV encoding method for transmission to peer
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">lldp</a> <a href="#">dest-mac</a> <i>keyword</i> <a href="#">port-id-subtype</a> <i>keyword</i>
Tree	<a href="#">port-id-subtype</a>
Options	tx-if-alias, tx-if-name, tx-local
Default	tx-local
Introduced	16.0.R1
Platforms	All

**receive** *boolean*

Synopsis	Enable LLDP agent to receive but not transmit frames
Context	<b>configure</b> <i>port string ethernet lldp dest-mac keyword receive boolean</i>
Tree	<a href="#">receive</a>
Default	false
Introduced	16.0.R1
Platforms	All

**transmit** *boolean*

Synopsis	Enable the LLDP agent to transmit frames
Context	<b>configure</b> <i>port string ethernet lldp dest-mac keyword transmit boolean</i>
Tree	<a href="#">transmit</a>
Default	false
Introduced	16.0.R1
Platforms	All

**tunnel-nearest-bridge** *boolean*

Synopsis	Allow received LLDP packets to be tunneled
Context	<b>configure</b> <i>port string ethernet lldp dest-mac keyword tunnel-nearest-bridge boolean</i>
Tree	<a href="#">tunnel-nearest-bridge</a>
Default	false
Introduced	16.0.R1
Platforms	All

**tx-mgmt-address** [[mgmt-address-system-type](#)] *keyword*

Synopsis	Enter the <b>tx-mgmt-address</b> list instance
Context	<b>configure</b> <i>port string ethernet lldp dest-mac keyword tx-mgmt-address keyword</i>
Tree	<a href="#">tx-mgmt-address</a>
Introduced	16.0.R1
Platforms	All

**[mgmt-address-system-type] keyword**

Synopsis	Management address to transmit
Context	<b>configure</b> port string ethernet lldp dest-mac keyword tx-mgmt-address keyword
Tree	tx-mgmt-address
Options	oob, system, system-ipv6, oob-ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of transmitting management address
Context	<b>configure</b> port string ethernet lldp dest-mac keyword tx-mgmt-address keyword admin-state keyword
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**tx-tlvs**

Synopsis	Enter the <b>tx-tlvs</b> context
Context	<b>configure</b> port string ethernet lldp dest-mac keyword tx-tlvs
Tree	tx-tlvs
Introduced	16.0.R1
Platforms	All

**port-desc boolean**

Synopsis	Transmit port description TLVs
Context	<b>configure</b> port string ethernet lldp dest-mac keyword tx-tlvs port-desc boolean
Tree	port-desc
Default	false

Introduced 16.0.R1  
Platforms All

### **sys-cap** *boolean*

Synopsis Transmit system capabilities TLVs  
Context **configure** port *string* ethernet lldp dest-mac keyword tx-tlvs sys-cap *boolean*  
Tree [sys-cap](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **sys-desc** *boolean*

Synopsis Transmit system description TLVs  
Context **configure** port *string* ethernet lldp dest-mac keyword tx-tlvs sys-desc *boolean*  
Tree [sys-desc](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **sys-name** *boolean*

Synopsis Transmit system name TLVs  
Context **configure** port *string* ethernet lldp dest-mac keyword tx-tlvs sys-name *boolean*  
Tree [sys-name](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **load-balancing-algorithm** *keyword*

Synopsis Load balancing algorithm for the Ethernet port  
Context **configure** port *string* ethernet load-balancing-algorithm *keyword*  
Tree [load-balancing-algorithm](#)

Options	default, include-l4, exclude-l4
Introduced	16.0.R1
Platforms	All

### **mac-address** *string*

Synopsis	MAC address of the Ethernet port
Context	<b>configure</b> <a href="#">port string ethernet mac-address string</a>
Tree	<a href="#">mac-address</a>
Description	This command specifies the MAC address of the Ethernet port. Allowed values are any non-broadcast, non-multicast MAC, and non-IEEE reserved MAC addresses. The default value indicates that an operation MAC address is to be assigned from the chassis MAC address pool.
Default	00:00:00:00:00:00
Introduced	16.0.R1
Platforms	All

### **min-frame-length** *number*

Synopsis	Minimum transmitted frame length
Context	<b>configure</b> <a href="#">port string ethernet min-frame-length number</a>
Tree	<a href="#">min-frame-length</a>
Description	This command configures the minimum transmitted frame length.
Range	64   68   72
Units	bytes
Default	64
Introduced	16.0.R1
Platforms	All

### **mode** *keyword*

Synopsis	Operation mode for the Ethernet port
Context	<b>configure</b> <a href="#">port string ethernet mode keyword</a>
Tree	<a href="#">mode</a>
Options	access, network, hybrid

Introduced	16.0.R1
Platforms	All

### **mtu number**

Synopsis	Maximum payload MTU size for the Ethernet port
Context	<b>configure</b> <a href="#">port string ethernet mtu number</a>
Tree	<a href="#">mtu</a>
Description	<p>This command configures the maximum payload MTU size for the Ethernet port. This command indirectly defines the largest physical packet the port can transmit or the far-end Ethernet port can receive. Packets that cannot be fragmented at egress and exceed the MTU size are discarded.</p> <p>The MTU size includes the destination MAC address, source MAC address, the Ethertype or length field, and the complete Ethernet payload. This value does not include the preamble, start of frame delimiter, or the trailing CRC.</p>
Range	512 to 9800
Units	bytes
Introduced	16.0.R1
Platforms	All

### **network**

Synopsis	Enter the <b>network</b> context
Context	<b>configure</b> <a href="#">port string ethernet network</a>
Tree	<a href="#">network</a>
Introduced	16.0.R1
Platforms	All

### **accounting-policy reference**

Synopsis	Accounting policy that applies to the network port
Context	<b>configure</b> <a href="#">port string ethernet network accounting-policy reference</a>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log accounting-policy number</a>
Introduced	16.0.R1
Platforms	All



## collect-stats *boolean*

Synopsis	Collect accounting and statistical data
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">network</a> <b>collect-stats</b> <i>boolean</i>
Tree	<a href="#">collect-stats</a>
Description	<p>When configured to <b>true</b>, this command enables the collection of accounting and statistical data for the network interface. When applying accounting policies, by default the data is collected in the appropriate records and written to the designated billing file.</p> <p>When configured to <b>false</b>, the statistics are still accumulated by the XCM or IOM cards. However, the CPU does not obtain the results and write them to the billing file.</p>
Default	false
Introduced	16.0.R1
Platforms	All

## egress

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">network</a> <b>egress</b>
Tree	<a href="#">egress</a>
Introduced	16.0.R1
Platforms	All

## port-queues

Synopsis	Enter the <b>port-queues</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">network</a> <b>egress</b> <b>port-queues</b>
Tree	<a href="#">port-queues</a>
Introduced	20.10.R1
Platforms	All

## overrides

Synopsis	Enter the <b>overrides</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">network</a> <b>egress</b> <b>port-queues</b> <b>overrides</b>
Tree	<a href="#">overrides</a>

Description	Commands in this context configure Ethernet network egress port queue override parameters.
Introduced	20.10.R1
Platforms	All

### **queue** [[queue-id](#)] *number*

Synopsis	Enter the <b>queue</b> list instance
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet network egress port-queues overrides queue</a> <i>number</i>
Tree	<a href="#">queue</a>
Description	Commands in this context configure an Ethernet network queue.
Introduced	20.10.R1
Platforms	All

### **[queue-id]** *number*

Synopsis	Queue ID
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet network egress port-queues overrides queue</a> <i>number</i>
Tree	<a href="#">queue</a>
Range	1 to 16
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

### **monitor-queue-depth**

Synopsis	Enable the <b>monitor-queue-depth</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet network egress port-queues overrides queue</a> <i>number</i> <a href="#">monitor-queue-depth</a>
Tree	<a href="#">monitor-queue-depth</a>
Introduced	20.10.R1
Platforms	All

### **fast-polling** *boolean*

Synopsis	Enable fast polling of the queue depth
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Context	<b>configure</b> port <i>string</i> ethernet network egress port-queues overrides queue <i>number</i> monitor-queue-depth fast-polling <i>boolean</i>
Tree	fast-polling
Description	When configured to <b>true</b> , this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth. When configured to <b>false</b> , fast queue polling is not enabled.
Default	false
Introduced	20.10.R1
Platforms	All

### violation-threshold *decimal-number*

Synopsis	Threshold for queue depth before violation is raised
Context	<b>configure</b> port <i>string</i> ethernet network egress port-queues overrides queue <i>number</i> monitor-queue-depth violation-threshold <i>decimal-number</i>
Tree	violation-threshold
Description	This command specifies threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.
Range	0.01 to 99.99
Introduced	20.10.R1
Platforms	All

### queue-group [*queue-group-name*] *reference* instance-id *number*

Synopsis	Enter the <b>queue-group</b> list instance
Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i>
Tree	queue-group
Introduced	16.0.R1
Platforms	All

### [*queue-group-name*] *reference*

Synopsis	Queue group name
Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i>
Tree	queue-group

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Reference	<b>configure</b> <a href="#">qos queue-group-templates egress queue-group string</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **instance-id** *number*

Synopsis	Instance ID for the egress queue group
Context	<b>configure</b> <a href="#">port string ethernet network egress queue-group reference instance-id number</a>
Tree	<a href="#">queue-group</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **accounting-policy** *reference*

Synopsis	Accounting policy for the Ethernet port
Context	<b>configure</b> <a href="#">port string ethernet network egress queue-group reference instance-id number accounting-policy reference</a>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log accounting-policy number</a>
Introduced	16.0.R1
Platforms	All

### **aggregate-rate**

Synopsis	Enter the <b>aggregate-rate</b> context
Context	<b>configure</b> <a href="#">port string ethernet network egress queue-group reference instance-id number aggregate-rate</a>
Tree	<a href="#">aggregate-rate</a>
Introduced	16.0.R1
Platforms	All

**limit-unused-bandwidth** *boolean*

Synopsis	Control unused bandwidth
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">network</a> <a href="#">egress</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">instance-id</a> <a href="#">number</a> <a href="#">aggregate-rate</a> <a href="#">limit-unused-bandwidth</a> <i>boolean</i>
Tree	<a href="#">limit-unused-bandwidth</a>
Default	false
Introduced	16.0.R1
Platforms	All

**queue-frame-based-accounting** *boolean*

Synopsis	Enable frame-based accounting on policers and queues
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">network</a> <a href="#">egress</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">instance-id</a> <a href="#">number</a> <a href="#">aggregate-rate</a> <a href="#">queue-frame-based-accounting</a> <i>boolean</i>
Tree	<a href="#">queue-frame-based-accounting</a>
Default	false
Introduced	16.0.R1
Platforms	All

**rate** (*number* | *keyword*)

Synopsis	Aggregate rate for all queues
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">network</a> <a href="#">egress</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">instance-id</a> <a href="#">number</a> <a href="#">aggregate-rate</a> <a href="#">rate</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">rate</a>
Range	1 to 3200000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

**collect-stats** *boolean*

Synopsis	Collect accounting and statistical data
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Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id number collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	All

### description *string*

Synopsis	Text description
Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id number description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### hs-turbo *boolean*

Synopsis	Enable HS turbo queues for higher throughput
Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id number hs-turbo <i>boolean</i>
Tree	hs-turbo
Description	<p>When configured to <b>true</b>, this command enables HS turbo queues that allow the corresponding HSQ queue group queues to achieve a higher throughput.</p> <p>This command is not applicable to 10G ports and is ignored when it is configured under a queue group instance on a 10G port.</p> <p>When configured to <b>false</b>, HS turbo queues are disabled.</p>
Default	false
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### policer-control-policy *reference*

Synopsis	Policer control policy for the QoS egress queue group
Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id number <i>policer-control-policy</i> <i>reference</i>

Tree	<a href="#">policer-control-policy</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">policer-control-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## queue-overrides

Synopsis	Enter the <b>queue-overrides</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">network</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i> <a href="#">queue-overrides</a>
Tree	<a href="#">queue-overrides</a>
Description	Commands in this context define queue command overrides for each queue within the queue group.
Introduced	16.0.R1
Platforms	All

## queue [[queue-id](#)] *reference*

Synopsis	Enter the <b>queue</b> list instance
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">network</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i> <a href="#">queue-overrides</a> <a href="#">queue</a> <i>reference</i>
Tree	<a href="#">queue</a>
Introduced	16.0.R1
Platforms	All

## [[queue-id](#)] *reference*

Synopsis	Queue ID
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">network</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i> <a href="#">queue-overrides</a> <a href="#">queue</a> <i>reference</i>
Tree	<a href="#">queue</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>string</i> <a href="#">queue</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## adaptation-rule

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> adaptation-rule
Tree	adaptation-rule
Description	<p>Commands in this context specify the method used by the system to derive the operational CIR and PIR settings when the queue is provisioned in hardware. For the CIR and PIR commands individually, the system attempts to find the best operational rate depending on the defined constraint.</p> <p>Commands in this context are ignored for egress HSQ queue group queues that are attached to an HS WRR group within an associated HS attachment policy. In this case, the configuration of the adaptation rule is performed under the <b>hs-wrr-group</b> command within the egress queue group template.</p>
Introduced	16.0.R1
Platforms	All

## cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> adaptation-rule cir keyword
Tree	cir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

## pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> adaptation-rule pir keyword
Tree	pir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All



**cbs** (*number* | *keyword*)

Synopsis	CBS for the template queue
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">network</a> <a href="#">egress</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">instance-id</a> <a href="#">number</a> <a href="#">queue-overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>cbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cbs</a>
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

**drop-tail**

Synopsis	Enter the <b>drop-tail</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">network</a> <a href="#">egress</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">instance-id</a> <a href="#">number</a> <a href="#">queue-overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>drop-tail</b>
Tree	<a href="#">drop-tail</a>
Description	Commands in this context configure queue drop tail commands.
Introduced	16.0.R1
Platforms	All

**low**

Synopsis	Enter the <b>low</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">network</a> <a href="#">egress</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">instance-id</a> <a href="#">number</a> <a href="#">queue-overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>drop-tail</b> <b>low</b>
Tree	<a href="#">low</a>
Description	Commands in this context configure the queue low drop tail commands. The low drop tail defines the queue depth beyond which the out-of-profile packets are not accepted into the queue and discarded.
Introduced	16.0.R1
Platforms	All

**percent-reduction-from-mbs** (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
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Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> drop-tail low percent-reduction-from-mbs ( <i>number</i>   <i>keyword</i> )
Tree	percent-reduction-from-mbs
Description	This command overrides the low queue drop tail as a percentage reduction from the MBS of the queue. For example, if a queue has an MBS of 600 kbytes and this percentage is configured to be 30% for the low drop tail, then the low drop tail is set to 420 kbytes and the out-of-profile packets are not accepted into the queue if its depth is greater than this value, and is therefore discarded.
Range	0 to 100
Options	auto
Introduced	16.0.R1
Platforms	All

### **mbs** (*number* | *keyword*)

Synopsis	MBS for the template queue
Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> mbs ( <i>number</i>   <i>keyword</i> )
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

### **monitor-queue-depth**

Synopsis	Enable the <b>monitor-queue-depth</b> context
Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> monitor-queue-depth
Tree	monitor-queue-depth
Introduced	20.10.R1
Platforms	All

**fast-polling** *boolean*

Synopsis	Enable fast polling of the queue depth
Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> monitor-queue-depth fast-polling <i>boolean</i>
Tree	fast-polling
Description	When configured to <b>true</b> , this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth. When configured to <b>false</b> , fast queue polling is not enabled.
Default	false
Introduced	20.10.R1
Platforms	All

**violation-threshold** *decimal-number*

Synopsis	Threshold for queue depth before violation is raised
Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> monitor-queue-depth violation-threshold <i>decimal-number</i>
Tree	violation-threshold
Description	This command specifies threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.
Range	0.01 to 99.99
Introduced	20.10.R1
Platforms	All

**percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> percent-rate
Tree	percent-rate
Description	Commands in this context specify percent rates. This command is ignored for egress HSQ queue group queues, which are attached to an HS WRR group within an associated HS attachment policy. In this case, the configuration of the percent rate is performed under the <b>hs-wrr-group</b> command within the egress queue group template.
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .

Introduced	16.0.R1
Platforms	All

### **cir** *decimal-number*

Synopsis	CIR for the queue
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">network</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i> <a href="#">queue-overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">percent-rate</a> <b>cir</b> <i>decimal-number</i>
Tree	<a href="#">cir</a>
Range	0.00 to 100.00
Units	percent
Introduced	16.0.R1
Platforms	All

### **pir** *decimal-number*

Synopsis	PIR for the queue
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">network</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i> <a href="#">queue-overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">percent-rate</a> <b>pir</b> <i>decimal-number</i>
Tree	<a href="#">pir</a>
Range	0.01 to 100.00
Units	percent
Introduced	16.0.R1
Platforms	All

### **rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">network</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i> <a href="#">queue-overrides</a> <a href="#">queue</a> <i>reference</i> <b>rate</b>
Tree	<a href="#">rate</a>
Description	<p>Commands in this context specify the administrative PIR and CIR for the queue. Defining a PIR does not necessarily guarantee that the queue can transmit at the intended rate. The actual rate sustained by the queue can be limited by oversubscription factors or available egress bandwidth.</p> <p>This command can be executed at anytime, altering the PIR and CIR rates for all queues created through the association of the SAP egress QoS policy with the queue ID.</p>

This command is ignored for egress HSQ queue group queues, which are attached to an HS WRR group within an associated HS attachment policy. In this case, the configuration of the rate is performed under the **hs-wrr-group** command within the egress queue group template.

Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

### **cir** (*number* | *keyword*)

Synopsis	CIR for the queue
Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> rate cir ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Description	<p>This command specifies the administrative CIR used by the queue. When the <b>rate</b> command is executed, a CIR setting is optional. Fractional values are not allowed and must be given as a positive integer.</p> <p>The CIR defines the rate at which the system prioritizes the queue over other queues competing for the same bandwidth. In-profile then out-of-profile packets are preferentially queued by the system at egress and at subsequent next hop nodes where the packet can traverse. To be properly handled throughout the network, the packets must be marked accordingly for profiling at each hop.</p> <p>The CIR can be used by the queue's parent <b>cir-level</b> and <b>cir-weight</b> commands to define the amount of bandwidth considered to be committed for the child queue during bandwidth allocation by the parent scheduler.</p>
Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

### **pir** (*number* | *keyword*)

Synopsis	PIR for the queue
Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> rate pir ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Description	<p>This command specifies the administrative PIR used by the queue. When the <b>rate</b> command is executed, a valid PIR setting must be explicitly defined. Fractional values are not allowed and must be given as a positive integer. The actual PIR rate is</p>

dependent on the queue's **adaptation-rule** commands and the actual hardware where the queue is provisioned.

The PIR defines the maximum rate that the queue can transmit packets out an egress interface (for SAP egress queues). Defining a PIR does not necessarily guarantee that the queue can transmit at the intended rate. The actual rate sustained by the queue can be limited by oversubscription factors or available egress bandwidth.

Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

## **scheduler-policy**

Synopsis	Enter the <b>scheduler-policy</b> context
Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy
Tree	<a href="#">scheduler-policy</a>
Introduced	16.0.R1
Platforms	All

## **policy-name** *reference*

Synopsis	Scheduler policy for the QoS egress queue group
Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy <i>policy-name</i> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> qos scheduler-policy <i>string</i>
Introduced	22.2.R1
Platforms	All

## **queue-policy** *reference*

Synopsis	Network queue policy
Context	<b>configure</b> port <i>string</i> ethernet network egress queue-policy <i>reference</i>
Tree	<a href="#">queue-policy</a>
Reference	<b>configure</b> qos network-queue <i>string</i>

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Introduced	16.0.R1
Platforms	All

### **pbb-etype** *string*

Synopsis	Ethertype for PBB encapsulation
Context	<b>configure</b> <i>port string ethernet pbb-etype string</i>
Tree	<a href="#">pbb-etype</a>
Default	35047
Introduced	16.0.R1
Platforms	All

### **ptp-asymmetry** *number*

Synopsis	PTP asymmetry delay on the Ethernet port
Context	<b>configure</b> <i>port string ethernet ptp-asymmetry number</i>
Tree	<a href="#">ptp-asymmetry</a>
Description	This command configures the PTP asymmetry delay on the Ethernet port. This command is used to correct known asymmetry as part of time of day or phase recovery using PTP packets on both local and downstream PTP clocks.
Max. Range	-2147483648 to 2147483647
Units	nanoseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **qinq-etype** *string*

Synopsis	Ethertype for QinQ encapsulation
Context	<b>configure</b> <i>port string ethernet qinq-etype string</i>
Tree	<a href="#">qinq-etype</a>
Default	33024
Introduced	16.0.R1
Platforms	All

## report-alarm

Synopsis	Enter the <b>report-alarm</b> context
Context	<b>configure port string ethernet report-alarm</b>
Tree	<a href="#">report-alarm</a>
Description	Commands in this context specify the settings for alarm generation and alarm clear notifications for the port. <b>Note:</b> For some DWDM transceivers, if the <b>configure port dwdm coherent rx-los-reaction squelch</b> command is disabled, the signal-fail and no-am-lock alarm conditions are not reported when the media side of the transceiver has an RX LOS condition.
Introduced	16.0.R1
Platforms	All

## alignment-marker-not-locked *boolean*

Synopsis	Report 40G/100G PCS Alignment Marker Loss of Lock
Context	<b>configure port string ethernet report-alarm alignment-marker-not-locked boolean</b>
Tree	<a href="#">alignment-marker-not-locked</a>
Description	When configured to <b>true</b> , Alignment Marker Loss of Lock alarms are reported for this port.
Introduced	16.0.R2
Platforms	All

## block-not-locked *boolean*

Synopsis	Report 40G/100G PCS Lanes Not Block Locked
Context	<b>configure port string ethernet report-alarm block-not-locked boolean</b>
Tree	<a href="#">block-not-locked</a>
Introduced	16.0.R2
Platforms	All

## duplicate-lane *boolean*

Synopsis	Report 40G/100G PCS Duplicate Lane Marker alarm
Context	<b>configure port string ethernet report-alarm duplicate-lane boolean</b>
Tree	<a href="#">duplicate-lane</a>
Introduced	16.0.R1



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Platforms All

### **frame-not-locked** *boolean*

Synopsis Report "not locked on the Ethernet framing sequence"

Context **configure** port string ethernet report-alarm frame-not-locked boolean

Tree [frame-not-locked](#)

Introduced 16.0.R2

Platforms All

### **high-ber** *boolean*

Synopsis Report High Bit Error Rate

Context **configure** port string ethernet report-alarm high-ber boolean

Tree [high-ber](#)

Introduced 16.0.R1

Platforms All

### **local** *boolean*

Synopsis Report local faults

Context **configure** port string ethernet report-alarm local boolean

Tree [local](#)

Introduced 16.0.R1

Platforms All

### **remote** *boolean*

Synopsis Report remote faults

Context **configure** port string ethernet report-alarm remote boolean

Tree [remote](#)

Introduced 16.0.R1

Platforms All

**signal-fail** *boolean*

Synopsis	Report Ethernet signal lost alarm
Context	<b>configure</b> port <i>string</i> ethernet report-alarm signal-fail <i>boolean</i>
Tree	signal-fail
Introduced	16.0.R1
Platforms	All

**rs-fec-mode** *keyword*

Synopsis	RS-FEC mode on the Ethernet port
Context	<b>configure</b> port <i>string</i> ethernet rs-fec-mode <i>keyword</i>
Tree	rs-fec-mode
Description	This command specifies the RS-FEC (Reed-Solomon Forward Error Correction) mode on the Ethernet port.  See "Forward Error Correction" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Interface Configuration Guide</i> for more information about FEC settings.
Options	cl91-514-528, cl74, cl108
Introduced	16.0.R1
Platforms	All

**single-fiber** *boolean*

Synopsis	Enable packet gathering from a single fiber port
Context	<b>configure</b> port <i>string</i> ethernet single-fiber <i>boolean</i>
Tree	single-fiber
Description	When configured to <b>true</b> , this command enables packet gathering and redirection of IP packets from a single fiber (Rx) port of the Ethernet or SONET/SDH interface and redistributes packets to other interfaces through static routes or policy-based forwarding. Traffic is no longer transmitted out of the port.  When configured to <b>false</b> , packet gathering is disabled.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**speed number**

Synopsis	Ethernet port speed
Context	<b>configure port string ethernet speed number</b>
Tree	<a href="#">speed</a>
Description	<p>This command configures the port speed for ports that support multiple speeds. This applies to the following:</p> <ul style="list-style-type: none"> <li>• Fast Ethernet when autonegotiation is not enabled</li> <li>• 10/100/1000 Mb/s Ethernet when autonegotiation is not enabled</li> <li>• 10/1G ports supporting 10G SFP+ or 1G SFP</li> <li>• 40/100G ports supporting QSFP28s on non connector-based MDAs</li> </ul> <p>If autonegotiation is enabled for the port, this command setting is ignored. Speed cannot be configured for ports that are part of a LAG.</p>
Range	10   100   1000   10000   25000   40000   50000   100000
Units	megabps
Introduced	16.0.R1
Platforms	All

**ssm**

Synopsis	Enter the <b>ssm</b> context
Context	<b>configure port string ethernet ssm</b>
Tree	<a href="#">ssm</a>
Description	<p>Commands in this context configure the Ethernet Synchronization Messaging Channel (ESMC) for the Ethernet port. The ESMC carries the Synchronization Status Message (SSM) code representing the quality level of the source of the frequency of the central clock of the node.</p>
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the ESMC for the Ethernet port
Context	<b>configure port string ethernet ssm admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable

Introduced	16.0.R1
Platforms	All

### **code-type** *keyword*

Synopsis	Encoding of synchronization status messages
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">ssm</a> <a href="#">code-type</a> <i>keyword</i>
Tree	<a href="#">code-type</a>
Options	sonet, sdh
Default	sdh
Introduced	16.0.R1
Platforms	All

### **esmc-tunnel** *boolean*

Synopsis	Tunnel ESMC frames in Epipe or VPLS services
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">ssm</a> <a href="#">esmc-tunnel</a> <i>boolean</i>
Tree	<a href="#">esmc-tunnel</a>
Description	<p>When configured to <b>true</b>, ESMC frames that are received into the Ethernet port can be tunneled in an Epipe or VPLS service. This is not recommended because it breaks the concepts inherent in Synchronous Ethernet, however it is required for compliance to MEF 6.1.1 EPL Option 2.</p> <p>When configured to <b>false</b>, ESMC frames are extracted upon reception by the port and are not tunneled through the service.</p>
Default	false
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **tx-dus** *boolean*

Synopsis	Force QL value transmitted be set to QL-DNU or QL-DUS
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">ssm</a> <a href="#">tx-dus</a> <i>boolean</i>
Tree	<a href="#">tx-dus</a>
Introduced	16.0.R1
Platforms	All

## symbol-monitor

Synopsis	Enter the <b>symbol-monitor</b> context
Context	<b>configure</b> port <i>string</i> ethernet symbol-monitor
Tree	symbol-monitor
Description	Commands in this context configure Ethernet symbol monitoring. Support for symbol monitoring is hardware dependent. An error message indicating that the port setting cannot be modified is presented when attempting to enable the feature or configure the individual commands on unsupported hardware.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## admin-state *keyword*

Synopsis	Administrative state of symbol monitoring on the port
Context	<b>configure</b> port <i>string</i> ethernet symbol-monitor admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## signal-degrade

Synopsis	Enter the <b>signal-degrade</b> context
Context	<b>configure</b> port <i>string</i> ethernet symbol-monitor signal-degrade
Tree	signal-degrade
Description	Commands in this context specify the error rate at which to declare the SD condition on an Ethernet interface. The value represents $M \cdot 10^E - N$ , which is the ratio of errored frames over the total frames received over the sliding window interval. The symbol errors on the interface are sampled once per second.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## multiplier *number*

Synopsis	SD multiplier used to scale the symbol error ratio
Context	<b>configure</b> port <i>string</i> ethernet symbol-monitor signal-degrade multiplier <i>number</i>

Tree	<a href="#">multiplier</a>
Range	1 to 9
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **threshold** *number*

Synopsis	SD threshold for symbol errors
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">symbol-monitor</a> <a href="#">signal-degrade</a> <b>threshold</b> <i>number</i>
Tree	<a href="#">threshold</a>
Range	1 to 9
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **signal-failure**

Synopsis	Enter the <b>signal-failure</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">symbol-monitor</a> <b>signal-failure</b>
Tree	<a href="#">signal-failure</a>
Description	Commands in this context specify the error rate at which to declare the SF condition on an Ethernet interface. The value represents $M \cdot 10E-N$ , which is the ratio of errored frames over the total frames received over the sliding window interval. The symbol errors on the interface are sampled once per second.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **multiplier** *number*

Synopsis	SF multiplier used to scale the symbol error ratio
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">symbol-monitor</a> <a href="#">signal-failure</a> <b>multiplier</b> <i>number</i>
Tree	<a href="#">multiplier</a>
Range	1 to 9
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**threshold** *number*

Synopsis	SF threshold for symbol errors
Context	<b>configure</b> port <i>string</i> ethernet symbol-monitor signal-failure threshold <i>number</i>
Tree	threshold
Range	1 to 9
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**window-size** *number*

Synopsis	Sliding window size over which errors are measured
Context	<b>configure</b> port <i>string</i> ethernet symbol-monitor window-size <i>number</i>
Tree	window-size
Description	This command specifies the sliding window size over which the symbols are sampled to detect SF or SD conditions.
Range	5 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**util-stats-interval** *number*

Synopsis	Interval to calculate utilization statistics
Context	<b>configure</b> port <i>string</i> ethernet util-stats-interval <i>number</i>
Tree	util-stats-interval
Description	<p>This command configures the interval used to calculate the utilization statistics.</p> <p>Port utilization statistics are only available for physical Ethernet ports on a host system. These statistics are not available for the following:</p> <ul style="list-style-type: none"><li>• Ethernet ports on an Ethernet satellite</li><li>• Ethernet ports on a VSR</li><li>• PXC ports</li><li>• vsm-cca-xp ports</li></ul>
Range	30 to 600

Units	seconds
Default	300
Introduced	16.0.R1
Platforms	All

### **xgig** keyword

Synopsis	Ethernet port mode
Context	<b>configure</b> port string ethernet xgig keyword
Tree	xgig
Description	This command configures a 10 Gb/s interface to be in LAN or WAN mode.  When configuring the port to be in WAN mode, certain SONET/SDH commands can be changed to reflect the SONET/SDH requirements for the port. When configuring the port to be in LAN mode, all SONET/SDH commands are pre-determined and not configurable.
Options	lan, wan
Introduced	16.0.R1
Platforms	All

### **gnss**

Synopsis	Enter the <b>gnss</b> context
Context	<b>configure</b> port string gnss
Tree	gnss
Description	Commands in this context configure GNSS port attributes.
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

### **antenna-cable-delay** number

Synopsis	Signal delay resulting from GNSS antenna cable length
Context	<b>configure</b> port string gnss antenna-cable-delay number
Tree	antenna-cable-delay
Description	This command configures the expected signal delay resulting from the length of the GNSS antenna cable.



**Note:** 7750 SR FP5 GNSS platforms support a value range of 0 to 1000.

Range	0 to 32767
Units	nanoseconds
Default	0
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

## constellation

Synopsis	Enter the <b>constellation</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">gnss</a> <a href="#">constellation</a>
Tree	<a href="#">constellation</a>
Description	Commands in this context configure the GNSS systems that are used by the GNSS receiver.
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

## galileo *boolean*

Synopsis	Enable GNSS receiver to use GALILEO constellation type
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">gnss</a> <a href="#">constellation</a> <a href="#">galileo</a> <i>boolean</i>
Tree	<a href="#">galileo</a>
Description	When configured to <b>true</b> , this command enables the use of the European Galileo GNSS system.
Default	false
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

## glonass *boolean*

Synopsis	Enable GNSS receiver to use GLONASS constellation type
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">gnss</a> <a href="#">constellation</a> <a href="#">glonass</a> <i>boolean</i>
Tree	<a href="#">glonass</a>

Description	When configured to <b>true</b> , the system enables the use of the Russian GLONASS GNSS system. <b>Note:</b> The <b>glonass</b> command is currently not supported.
Default	false
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

**gps boolean**

Synopsis	Enable GNSS receiver to use GPS constellation type
Context	<b>configure</b> port string gns constellation gps boolean
Tree	gps
Description	When configured to <b>true</b> , this command enables the use of the American GPS GNSS system.  When configured to <b>false</b> , this command disables the use of the American GPS GNSS system.
Default	true
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

**elevation-mask-angle number**

Synopsis	Minimum elevation mask angle
Context	<b>configure</b> port string gns elevation-mask-angle number
Tree	elevation-mask-angle
Description	This command configures the elevation mask angle, which provides a method of filtering satellites used by the system.  Satellites with low elevation may provide degraded accuracy because of the long signal path through the atmosphere. Signals from satellites below the configured minimum satellite elevation are not used.  Nokia does not recommend configuring an elevation mask angle below 10.
Range	0 to 89
Units	degrees angle
Default	10
Introduced	22.10.R1

Platforms 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

## hybrid-buffer-allocation

Synopsis Enter the **hybrid-buffer-allocation** context  
Context **configure** port *string* hybrid-buffer-allocation  
Tree [hybrid-buffer-allocation](#)  
Introduced 16.0.R1  
Platforms All

## egress-weight

Synopsis Enter the **egress-weight** context  
Context **configure** port *string* hybrid-buffer-allocation egress-weight  
Tree [egress-weight](#)  
Introduced 16.0.R1  
Platforms All

## access number

Synopsis Access weight for the hybrid port  
Context **configure** port *string* hybrid-buffer-allocation egress-weight access *number*  
Tree [access](#)  
Range 0 to 100  
Default 50  
Introduced 16.0.R1  
Platforms All

## network number

Synopsis Access weight for the hybrid port  
Context **configure** port *string* hybrid-buffer-allocation egress-weight network *number*  
Tree [network](#)  
Range 0 to 100  
Default 50

Introduced 16.0.R1  
Platforms All

## **ingress-weight**

Synopsis Enter the **ingress-weight** context  
Context **configure** [port](#) *string* [hybrid-buffer-allocation](#) [ingress-weight](#)  
Tree [ingress-weight](#)  
Introduced 16.0.R1  
Platforms All

## **access number**

Synopsis Access weight for the hybrid port  
Context **configure** [port](#) *string* [hybrid-buffer-allocation](#) [ingress-weight](#) [access](#) *number*  
Tree [access](#)  
Range 0 to 100  
Default 50  
Introduced 16.0.R1  
Platforms All

## **network number**

Synopsis Access weight for the hybrid port  
Context **configure** [port](#) *string* [hybrid-buffer-allocation](#) [ingress-weight](#) [network](#) *number*  
Tree [network](#)  
Range 0 to 100  
Default 50  
Introduced 16.0.R1  
Platforms All

## **modify-buffer-allocation**

Synopsis Enter the **modify-buffer-allocation** context  
Context **configure** [port](#) *string* [modify-buffer-allocation](#)

Tree	<a href="#">modify-buffer-allocation</a>
Description	Commands in this context to configure ingress and egress percentage of rate commands. These commands only apply to physical ports (for example, it does not work on APS or similar logical ports). The percentage of rate commands are used to define a percentage value that affects the amount of buffers used by ingress and egress port managed buffer space.
Introduced	16.0.R1
Platforms	All

### percentage-of-rate

Synopsis	Enter the <b>percentage-of-rate</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">modify-buffer-allocation</a> <a href="#">percentage-of-rate</a>
Tree	<a href="#">percentage-of-rate</a>
Description	Commands in this context increase or decrease the active bandwidth associated with the egress or ingress port that affects the amount of egress or ingress buffer space managed by the port. Changing a ports active bandwidth using the commands in this context are an effective means of artificially lowering the buffers managed by one egress or ingress port and giving them to the other egress or ingress ports on the same MDA.
Introduced	16.0.R1
Platforms	All

### egress *number*

Synopsis	Egress rate percentage
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">modify-buffer-allocation</a> <a href="#">percentage-of-rate</a> <a href="#">egress</a> <i>number</i>
Tree	<a href="#">egress</a>
Range	1 to 1000
Introduced	16.0.R1
Platforms	All

### ingress *number*

Synopsis	Ingress rate percentage
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">modify-buffer-allocation</a> <a href="#">percentage-of-rate</a> <a href="#">ingress</a> <i>number</i>
Tree	<a href="#">ingress</a>
Range	1 to 1000

Default	100
Introduced	16.0.R1
Platforms	All

### **monitor-agg-egress-queue-stats** *boolean*

Synopsis	Monitor aggregate queue statistics
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <b>monitor-agg-egress-queue-stats</b> <i>boolean</i>
Tree	<a href="#">monitor-agg-egress-queue-stats</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **monitor-oper-group** *reference*

Synopsis	Operational group to monitor
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <b>monitor-oper-group</b> <i>reference</i>
Tree	<a href="#">monitor-oper-group</a>
Description	This command configures the operational group to monitor the operational group state. The state of the operational group affects the state of this port. When the operational group is inactive, the state of the port goes down and powers off the port to signal to the CE that the connected port is not available.
Reference	<b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <i>string</i>
Introduced	22.7.R1
Platforms	All

### **network**

Synopsis	Enter the <b>network</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <b>network</b>
Tree	<a href="#">network</a>
Introduced	16.0.R1
Platforms	All

## egress

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">network</a> <a href="#">egress</a>
Tree	<a href="#">egress</a>
Introduced	16.0.R1
Platforms	All

## pool [[name](#)] *string*

Synopsis	Enter the <b>pool</b> list instance
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">network</a> <a href="#">egress</a> <a href="#">pool</a> <i>string</i>
Tree	<a href="#">pool</a>
Introduced	16.0.R1
Platforms	All

## [\[name\]](#) *string*

Synopsis	Pool name
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">network</a> <a href="#">egress</a> <a href="#">pool</a> <i>string</i>
Tree	<a href="#">pool</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## amber-alarm-threshold *number*

Synopsis	Threshold for the amber alarm on oversubscription
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">network</a> <a href="#">egress</a> <a href="#">pool</a> <i>string</i> <a href="#">amber-alarm-threshold</a> <i>number</i>
Tree	<a href="#">amber-alarm-threshold</a>
Range	1 to 1000
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**red-alarm-threshold** *number*

Synopsis	Threshold for the red alarm on oversubscription
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">network</a> <a href="#">egress</a> <a href="#">pool</a> <a href="#">string</a> <b>red-alarm-threshold</b> <i>number</i>
Tree	<a href="#">red-alarm-threshold</a>
Range	1 to 1000
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**resv-cbs**

Synopsis	Enter the <b>resv-cbs</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">network</a> <a href="#">egress</a> <a href="#">pool</a> <a href="#">string</a> <b>resv-cbs</b>
Tree	<a href="#">resv-cbs</a>
Introduced	16.0.R1
Platforms	All

**amber-alarm-action**

Synopsis	Enter the <b>amber-alarm-action</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">network</a> <a href="#">egress</a> <a href="#">pool</a> <a href="#">string</a> <b>resv-cbs</b> <b>amber-alarm-action</b>
Tree	<a href="#">amber-alarm-action</a>
Introduced	16.0.R1
Platforms	All

**max** *number*

Synopsis	Maximum percentage for reserved CBS of the pool
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">network</a> <a href="#">egress</a> <a href="#">pool</a> <a href="#">string</a> <b>resv-cbs</b> <b>amber-alarm-action</b> <b>max</b> <i>number</i>
Tree	<a href="#">max</a>
Description	This command specifies the maximum percentage for the reserved CBS of the pool. The maximum reserved CBS must not be less than the value of the reserved CBS.  To enable adaptive CBS sizing the <b>max</b> , <b>step</b> , and <b>cbs</b> commands must be configured. The <b>cbs</b> command must also be configured to a percentage other than the default value.



When unconfigured, CBS adaptive sizing is not enabled.

Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

### **step number**

Synopsis	Step-size percentage for reserved CBS of the pool
Context	<b>configure</b> <a href="#">port string network egress pool string resv-cbs amber-alarm-action step number</a>
Tree	<a href="#">step</a>
Description	This command specifies the step-size percentage for the reserved CBS of the pool. To enable adaptive CBS sizing the <b>max</b> , <b>step</b> , and <b>cbs</b> commands must be configured. The <b>cbs</b> command must also be configured to a percentage other than the default value. When unconfigured, CBS adaptive sizing is not enabled.

Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

### **cbs (number | keyword)**

Synopsis	Percentage of the pool buffer space reserved for CBS
Context	<b>configure</b> <a href="#">port string network egress pool string resv-cbs cbs (number   keyword)</a>
Tree	<a href="#">cbs</a>
Range	0 to 100
Units	percent
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

### **slope-policy** *reference*

Synopsis	Policy for the RED slope and TAF values
Context	<b>configure</b> port <i>string</i> network egress pool <i>string</i> slope-policy <i>reference</i>
Tree	slope-policy
Reference	<b>configure</b> qos slope-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

### **oper-group** *reference*

Synopsis	Operational group ID
Context	<b>configure</b> port <i>string</i> oper-group <i>reference</i>
Tree	oper-group
Reference	<b>configure</b> service oper-group <i>string</i>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **otu**

Synopsis	Enable the <b>otu</b> context
Context	<b>configure</b> port <i>string</i> otu
Tree	otu
Introduced	16.0.R1
Platforms	All

### **async-mapping** *boolean*

Synopsis	Allow asynchronous mapping of the payload inside OTU
Context	<b>configure</b> port <i>string</i> otu async-mapping <i>boolean</i>
Tree	async-mapping
Introduced	16.0.R1
Platforms	All

### **fec** *keyword*

Synopsis	Forwarding Error Correction (FEC) encapsulation on port
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">fec</a> <i>keyword</i>
Tree	<a href="#">fec</a>
Options	none, g709, enhanced
Introduced	16.0.R1
Platforms	All

### **fine-granularity-ber**

Synopsis	Enter the <b>fine-granularity-ber</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">fine-granularity-ber</a>
Tree	<a href="#">fine-granularity-ber</a>
Introduced	16.0.R1
Platforms	All

### **signal-degrade**

Synopsis	Enter the <b>signal-degrade</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">fine-granularity-ber</a> <a href="#">signal-degrade</a>
Tree	<a href="#">signal-degrade</a>
Introduced	16.0.R1
Platforms	All

### **clear**

Synopsis	Enter the <b>clear</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">fine-granularity-ber</a> <a href="#">signal-degrade</a> <a href="#">clear</a>
Tree	<a href="#">clear</a>
Introduced	16.0.R1
Platforms	All

### **multiplier** *number*

Synopsis	Multiplier of the SD clear threshold
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Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">fine-granularity-ber</a> <a href="#">signal-degrade</a> <a href="#">clear</a> <a href="#">multiplier</a> <i>number</i>
Tree	<a href="#">multiplier</a>
Range	10 to 99
Default	10
Introduced	16.0.R1
Platforms	All

### **threshold** *number*

Synopsis	SD clear threshold
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">fine-granularity-ber</a> <a href="#">signal-degrade</a> <a href="#">clear</a> <a href="#">threshold</a> <i>number</i>
Tree	<a href="#">threshold</a>
Range	3 to 10
Default	8
Introduced	16.0.R1
Platforms	All

### **raise**

Synopsis	Enter the <b>raise</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">fine-granularity-ber</a> <a href="#">signal-degrade</a> <a href="#">raise</a>
Tree	<a href="#">raise</a>
Introduced	16.0.R1
Platforms	All

### **multiplier** *number*

Synopsis	Multiplier of the SD raise threshold
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">fine-granularity-ber</a> <a href="#">signal-degrade</a> <a href="#">raise</a> <a href="#">multiplier</a> <i>number</i>
Tree	<a href="#">multiplier</a>
Range	10 to 99
Default	10
Introduced	16.0.R1
Platforms	All

**threshold** *number*

Synopsis	SD raise threshold
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">fine-granularity-ber</a> <a href="#">signal-degrade</a> <a href="#">raise</a> <b>threshold</b> <i>number</i>
Tree	<a href="#">threshold</a>
Range	3 to 9
Default	7
Introduced	16.0.R1
Platforms	All

**signal-failure**

Synopsis	Enter the <b>signal-failure</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">fine-granularity-ber</a> <b>signal-failure</b>
Tree	<a href="#">signal-failure</a>
Introduced	16.0.R1
Platforms	All

**clear**

Synopsis	Enter the <b>clear</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">fine-granularity-ber</a> <a href="#">signal-failure</a> <b>clear</b>
Tree	<a href="#">clear</a>
Introduced	16.0.R1
Platforms	All

**multiplier** *number*

Synopsis	Threshold for the Multiplier of SD clear
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">fine-granularity-ber</a> <a href="#">signal-failure</a> <a href="#">clear</a> <b>multiplier</b> <i>number</i>
Tree	<a href="#">multiplier</a>
Range	10 to 99
Default	10
Introduced	16.0.R1
Platforms	All

**threshold** *number*

Synopsis	Threshold for the Multiplier of SD clear
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">fine-granularity-ber</a> <a href="#">signal-failure</a> <a href="#">clear</a> <b>threshold</b> <i>number</i>
Tree	<a href="#">threshold</a>
Range	3 to 9
Default	6
Introduced	16.0.R1
Platforms	All

**raise**

Synopsis	Enter the <b>raise</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">fine-granularity-ber</a> <a href="#">signal-failure</a> <b>raise</b>
Tree	<a href="#">raise</a>
Introduced	16.0.R1
Platforms	All

**multiplier** *number*

Synopsis	SF raise threshold
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">fine-granularity-ber</a> <a href="#">signal-failure</a> <a href="#">raise</a> <b>multiplier</b> <i>number</i>
Tree	<a href="#">multiplier</a>
Range	10 to 99
Default	10
Introduced	16.0.R1
Platforms	All

**threshold** *number*

Synopsis	SF raise threshold
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">fine-granularity-ber</a> <a href="#">signal-failure</a> <a href="#">raise</a> <b>threshold</b> <i>number</i>
Tree	<a href="#">threshold</a>
Range	3 to 8
Default	5

---

Introduced	16.0.R1
Platforms	All

### **otu2-lan-data-rate** *keyword*

Synopsis	Data rate for 10GE LAN OTU2 on the port
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">otu</a> <a href="#">otu2-lan-data-rate</a> <i>keyword</i>
Tree	<a href="#">otu2-lan-data-rate</a>
Units	gigabps
Options	11.049, 11.096
Introduced	16.0.R1
Platforms	All

### **path-monitoring**

Synopsis	Enter the <b>path-monitoring</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">otu</a> <a href="#">path-monitoring</a>
Tree	<a href="#">path-monitoring</a>
Introduced	16.0.R4
Platforms	All

### **trail-trace-identifier**

Synopsis	Enter the <b>trail-trace-identifier</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">otu</a> <a href="#">path-monitoring</a> <a href="#">trail-trace-identifier</a>
Tree	<a href="#">trail-trace-identifier</a>
Introduced	16.0.R4
Platforms	All

### **expected**

Synopsis	Enter the <b>expected</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">otu</a> <a href="#">path-monitoring</a> <a href="#">trail-trace-identifier</a> <a href="#">expected</a>
Tree	<a href="#">expected</a>
Introduced	16.0.R4

Platforms All

### auto-generated

Synopsis Use the system generated TTI

Context **configure** [port](#) [string](#) [otu](#) [path-monitoring](#) [trail-trace-identifier](#) [expected](#) [auto-generated](#)

Tree [auto-generated](#)

Notes The following elements are part of a choice: **auto-generated**, **bytes**, or **string**.

Introduced 16.0.R4

Platforms All

### bytes *string*

Synopsis TTI as a sequence of bytes

Context **configure** [port](#) [string](#) [otu](#) [path-monitoring](#) [trail-trace-identifier](#) [expected](#) [bytes](#) [string](#)

Tree [bytes](#)

String Length 0 to 192

Notes The following elements are part of a choice: **auto-generated**, **bytes**, or **string**.

Introduced 16.0.R4

Platforms All

### string *string*

Synopsis TTI as a sequence of printable ASCII

Context **configure** [port](#) [string](#) [otu](#) [path-monitoring](#) [trail-trace-identifier](#) [expected](#) [string](#) [string](#)

Tree [string](#)

String Length 0 to 64

Notes The following elements are part of a choice: **auto-generated**, **bytes**, or **string**.

Introduced 16.0.R4

Platforms All

### mismatch-reaction *keyword*

Synopsis Reaction to a mismatched TTI



Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">path-monitoring</a> <a href="#">trail-trace-identifier</a> <a href="#">mismatch-reaction</a> <i>keyword</i>
Tree	<a href="#">mismatch-reaction</a>
Options	squelch-rx
Introduced	16.0.R4
Platforms	All

## transmit

Synopsis	Enter the <b>transmit</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">path-monitoring</a> <a href="#">trail-trace-identifier</a> <b>transmit</b>
Tree	<a href="#">transmit</a>
Introduced	16.0.R4
Platforms	All

## auto-generated

Synopsis	Use the system generated TTI
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">path-monitoring</a> <a href="#">trail-trace-identifier</a> <a href="#">transmit</a> <b>auto-generated</b>
Tree	<a href="#">auto-generated</a>
Notes	The following elements are part of a choice: <b>auto-generated</b> , <b>bytes</b> , or <b>string</b> .
Introduced	16.0.R4
Platforms	All

## bytes *string*

Synopsis	TTI as a sequence of bytes
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">path-monitoring</a> <a href="#">trail-trace-identifier</a> <a href="#">transmit</a> <b>bytes</b> <i>string</i>
Tree	<a href="#">bytes</a>
String Length	0 to 192
Notes	The following elements are part of a choice: <b>auto-generated</b> , <b>bytes</b> , or <b>string</b> .
Introduced	16.0.R4
Platforms	All

**string** *string*

Synopsis	TTI as a sequence of printable ASCII
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">path-monitoring</a> <a href="#">trail-trace-identifier</a> <a href="#">transmit</a> <a href="#">string</a> <a href="#">string</a>
Tree	<a href="#">string</a>
String Length	0 to 64
Notes	The following elements are part of a choice: <b>auto-generated</b> , <b>bytes</b> , or <b>string</b> .
Introduced	16.0.R4
Platforms	All

**payload-structure-identifier**

Synopsis	Enter the <b>payload-structure-identifier</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">payload-structure-identifier</a>
Tree	<a href="#">payload-structure-identifier</a>
Introduced	16.0.R4
Platforms	All

**payload**

Synopsis	Enter the <b>payload</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">payload-structure-identifier</a> <a href="#">payload</a>
Tree	<a href="#">payload</a>
Introduced	16.0.R4
Platforms	All

**expected** *keyword*

Synopsis	Configure the port's PSI payload expected parameters.
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">payload-structure-identifier</a> <a href="#">payload</a> <a href="#">expected</a> <a href="#">keyword</a>
Tree	<a href="#">expected</a>
Options	auto, experimental, asynchronous-cbr, bit-synchronous-cbr, atm, gfp, vcat, gmp, bit-stream-octet, bit-stream-non-octet, odu-mux, reserved-80, reserved-81, reserved-82, reserved-83, reserved-84, reserved-85, reserved-86, reserved-87, reserved-88, reserved-89, reserved-8a, reserved-8b, reserved-8c, reserved-8d, reserved-8e, reserved-8f, null-test, prbs-test
Default	auto

Introduced 16.0.R4  
Platforms All

### **mismatch-reaction** *keyword*

Synopsis Reaction to a mismatched payload  
Context **configure** port *string* otu payload-structure-identifier payload mismatch-reaction *keyword*  
Tree [mismatch-reaction](#)  
Options squelch-rx  
Introduced 16.0.R4  
Platforms All

### **transmit** *keyword*

Synopsis Transmit payload type  
Context **configure** port *string* otu payload-structure-identifier payload transmit *keyword*  
Tree [transmit](#)  
Options auto, experimental, asynchronous-cbr, bit-synchronous-cbr, atm, gfp, vcat, gmp, bit-stream-octet, bit-stream-non-octet, odu-mux, reserved-80, reserved-81, reserved-82, reserved-83, reserved-84, reserved-85, reserved-86, reserved-87, reserved-88, reserved-89, reserved-8a, reserved-8b, reserved-8c, reserved-8d, reserved-8e, reserved-8f, null-test, prbs-test  
Default auto  
Introduced 16.0.R4  
Platforms All

### **report-alarm**

Synopsis Enter the **report-alarm** context  
Context **configure** port *string* otu report-alarm  
Tree [report-alarm](#)  
Introduced 16.0.R1  
Platforms All

**fec-fail boolean**

Synopsis	Report FEC mode mismatch alarm
Context	<b>configure</b> port string otu report-alarm fec-fail boolean
Tree	fec-fail
Default	false
Introduced	16.0.R1
Platforms	All

**fec-sd boolean**

Synopsis	Report Signal Degrade alarm
Context	<b>configure</b> port string otu report-alarm fec-sd boolean
Tree	fec-sd
Default	false
Introduced	16.0.R1
Platforms	All

**fec-sf boolean**

Synopsis	Report Signal Fail alarm
Context	<b>configure</b> port string otu report-alarm fec-sf boolean
Tree	fec-sf
Default	true
Introduced	16.0.R1
Platforms	All

**fec-uncorr boolean**

Synopsis	Report one or more Uncorrectable FEC errors alarm
Context	<b>configure</b> port string otu report-alarm fec-uncorr boolean
Tree	fec-uncorr
Default	false
Introduced	16.0.R1
Platforms	All

**loc boolean**

Synopsis	Report OTU alarm for loss of clock
Context	<b>configure port string otu report-alarm loc boolean</b>
Tree	<b>loc</b>
Default	true
Introduced	16.0.R1
Platforms	All

**lof boolean**

Synopsis	Report alarm for the loss of OTU framing
Context	<b>configure port string otu report-alarm lof boolean</b>
Tree	<b>lof</b>
Default	true
Introduced	16.0.R1
Platforms	All

**lom boolean**

Synopsis	Report alarm for the loss of multi-frame
Context	<b>configure port string otu report-alarm lom boolean</b>
Tree	<b>lom</b>
Default	true
Introduced	16.0.R1
Platforms	All

**los boolean**

Synopsis	Report alarm for the loss of signal transitions on data
Context	<b>configure port string otu report-alarm los boolean</b>
Tree	<b>los</b>
Default	true
Introduced	16.0.R1
Platforms	All

**odu-ais** *boolean*

Synopsis	Report ODU Alarm Indication Signal alarm
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">report-alarm</a> <a href="#">odu-ais</a> <i>boolean</i>
Tree	<a href="#">odu-ais</a>
Default	false
Introduced	16.0.R1
Platforms	All

**odu-bdi** *boolean*

Synopsis	Report PM Backward Defect Indication alarm
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">report-alarm</a> <a href="#">odu-bdi</a> <i>boolean</i>
Tree	<a href="#">odu-bdi</a>
Default	false
Introduced	16.0.R1
Platforms	All

**odu-lck** *boolean*

Synopsis	Report ODU Locked alarm
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">report-alarm</a> <a href="#">odu-lck</a> <i>boolean</i>
Tree	<a href="#">odu-lck</a>
Default	false
Introduced	16.0.R1
Platforms	All

**odu-oci** *boolean*

Synopsis	Report ODU Open Connection Indication alarm
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">report-alarm</a> <a href="#">odu-oci</a> <i>boolean</i>
Tree	<a href="#">odu-oci</a>
Default	false
Introduced	16.0.R1
Platforms	All

**odu-tim** *boolean*

Synopsis	Report PM Trace ID Mismatch alarm
Context	<b>configure</b> port string otu report-alarm odu-tim boolean
Tree	odu-tim
Default	false
Introduced	16.0.R1
Platforms	All

**opu-plm** *boolean*

Synopsis	Report PSI Payload Type Mismatch alarm
Context	<b>configure</b> port string otu report-alarm opu-plm boolean
Tree	opu-plm
Default	false
Introduced	16.0.R1
Platforms	All

**otu-ais** *boolean*

Synopsis	Report OTU Alarm Indication Signal alarm
Context	<b>configure</b> port string otu report-alarm otu-ais boolean
Tree	otu-ais
Default	false
Introduced	16.0.R1
Platforms	All

**otu-bdi** *boolean*

Synopsis	Report SM Backward Defect Indication alarm
Context	<b>configure</b> port string otu report-alarm otu-bdi boolean
Tree	otu-bdi
Default	true
Introduced	16.0.R1
Platforms	All

**otu-ber-sd** *boolean*

Synopsis	Report SM Signal Degrade alarm
Context	<b>configure</b> port string otu report-alarm otu-ber-sd <i>boolean</i>
Tree	<a href="#">otu-ber-sd</a>
Default	false
Introduced	16.0.R1
Platforms	All

**otu-ber-sf** *boolean*

Synopsis	Report SM Signal Fail alarm
Context	<b>configure</b> port string otu report-alarm otu-ber-sf <i>boolean</i>
Tree	<a href="#">otu-ber-sf</a>
Default	true
Introduced	16.0.R1
Platforms	All

**otu-biae** *boolean*

Synopsis	Report SM Backward Incoming Alignment Error alarm
Context	<b>configure</b> port string otu report-alarm otu-biae <i>boolean</i>
Tree	<a href="#">otu-biae</a>
Default	false
Introduced	16.0.R1
Platforms	All

**otu-iae** *boolean*

Synopsis	Report SM Incoming Alignment Error alarm
Context	<b>configure</b> port string otu report-alarm otu-iae <i>boolean</i>
Tree	<a href="#">otu-iae</a>
Default	false
Introduced	16.0.R1
Platforms	All



**otu-tim** *boolean*

Synopsis	Report SM Trace ID Mismatch alarm
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">report-alarm</a> <a href="#">otu-tim</a> <i>boolean</i>
Tree	<a href="#">otu-tim</a>
Default	false
Introduced	16.0.R1
Platforms	All

**sd-threshold** *number*

Synopsis	Error rate at which to declare signal degrade condition
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">sd-threshold</a> <i>number</i>
Tree	<a href="#">sd-threshold</a>
Range	5 to 9
Default	7
Introduced	16.0.R1
Platforms	All

**section-monitoring**

Synopsis	Enter the <b>section-monitoring</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">section-monitoring</a>
Tree	<a href="#">section-monitoring</a>
Introduced	16.0.R4
Platforms	All

**trail-trace-identifier**

Synopsis	Enter the <b>trail-trace-identifier</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">section-monitoring</a> <a href="#">trail-trace-identifier</a>
Tree	<a href="#">trail-trace-identifier</a>
Introduced	16.0.R4
Platforms	All

## expected

Synopsis	Enter the <b>expected</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">section-monitoring</a> <a href="#">trail-trace-identifier</a> <b>expected</b>
Tree	<a href="#">expected</a>
Introduced	16.0.R4
Platforms	All

## auto-generated

Synopsis	Use the system generated TTI
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">section-monitoring</a> <a href="#">trail-trace-identifier</a> <b>expected</b> <a href="#">auto-generated</a>
Tree	<a href="#">auto-generated</a>
Notes	The following elements are part of a choice: <b>auto-generated</b> , <b>bytes</b> , or <b>string</b> .
Introduced	16.0.R4
Platforms	All

## bytes *string*

Synopsis	TTI as a sequence of bytes
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">section-monitoring</a> <a href="#">trail-trace-identifier</a> <b>expected</b> <a href="#">bytes</a> <i>string</i>
Tree	<a href="#">bytes</a>
String Length	0 to 192
Notes	The following elements are part of a choice: <b>auto-generated</b> , <b>bytes</b> , or <b>string</b> .
Introduced	16.0.R4
Platforms	All

## string *string*

Synopsis	TTI as a sequence of printable ASCII
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">section-monitoring</a> <a href="#">trail-trace-identifier</a> <b>expected</b> <a href="#">string</a> <i>string</i>
Tree	<a href="#">string</a>
String Length	0 to 64
Notes	The following elements are part of a choice: <b>auto-generated</b> , <b>bytes</b> , or <b>string</b> .

Introduced 16.0.R4  
Platforms All

### **mismatch-reaction** *keyword*

Synopsis Reaction to a mismatched TTI  
Context **configure** [port](#) [string](#) [otu](#) [section-monitoring](#) [trail-trace-identifier](#) [mismatch-reaction](#) *keyword*  
Tree [mismatch-reaction](#)  
Options [squelch-rx](#)  
Introduced 16.0.R4  
Platforms All

### **transmit**

Synopsis Enter the **transmit** context  
Context **configure** [port](#) [string](#) [otu](#) [section-monitoring](#) [trail-trace-identifier](#) [transmit](#)  
Tree [transmit](#)  
Introduced 16.0.R4  
Platforms All

### **auto-generated**

Synopsis Use the system generated TTI  
Context **configure** [port](#) [string](#) [otu](#) [section-monitoring](#) [trail-trace-identifier](#) [transmit](#) [auto-generated](#)  
Tree [auto-generated](#)  
Notes The following elements are part of a choice: **auto-generated**, **bytes**, or **string**.  
Introduced 16.0.R4  
Platforms All

### **bytes** *string*

Synopsis TTI as a sequence of bytes  
Context **configure** [port](#) [string](#) [otu](#) [section-monitoring](#) [trail-trace-identifier](#) [transmit](#) [bytes](#) *string*  
Tree [bytes](#)

String Length	0 to 192
Notes	The following elements are part of a choice: <b>auto-generated</b> , <b>bytes</b> , or <b>string</b> .
Introduced	16.0.R4
Platforms	All

**string** *string*

Synopsis	TTI as a sequence of printable ASCII
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">section-monitoring</a> <a href="#">trail-trace-identifier</a> <a href="#">transmit</a> <a href="#">string</a> <i>string</i>
Tree	<a href="#">string</a>
String Length	0 to 64
Notes	The following elements are part of a choice: <b>auto-generated</b> , <b>bytes</b> , or <b>string</b> .
Introduced	16.0.R4
Platforms	All

**sf-sd-method** *keyword*

Synopsis	Method used to determine the SF and SD alarms
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">sf-sd-method</a> <i>keyword</i>
Tree	<a href="#">sf-sd-method</a>
Options	fec, bip8
Default	fec
Introduced	16.0.R1
Platforms	All

**sf-threshold** *number*

Synopsis	Error rate at which to declare signal fail condition
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">sf-threshold</a> <i>number</i>
Tree	<a href="#">sf-threshold</a>
Range	3 to 6
Default	5
Introduced	16.0.R1
Platforms	All

**sonet-sdh**

Synopsis	Enter the <b>sonet-sdh</b> context
Context	<b>configure port string sonet-sdh</b>
Tree	<a href="#">sonet-sdh</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**clock-source** *keyword*

Synopsis	Clock used for transmitted data
Context	<b>configure port string sonet-sdh clock-source keyword</b>
Tree	<a href="#">clock-source</a>
Options	loop-timed, node-timed
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**framing** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SONET or SDH framing
Context	<b>configure port string sonet-sdh framing keyword</b>
Tree	<a href="#">framing</a>
Options	sonet, sdh
Default	sonet
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**group** [[group-index](#)] *string*

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure port string sonet-sdh group string</b>
Tree	<a href="#">group</a>

Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[group-index]** *string*

Synopsis Components making up the specified SONET/SDH path  
 Context **configure** *port string sonet-sdh group string*  
 Tree *group*  
 Notes This element is part of a list key.  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **payload** *keyword*

Synopsis SONET/SDH group payload  
 Context **configure** *port string sonet-sdh group string payload keyword*  
 Tree *payload*  
 Options vt15, vt2, tu3  
 Default tu3  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **hold-time**

Synopsis Enter the **hold-time** context  
 Context **configure** *port string sonet-sdh hold-time*  
 Tree *hold-time*  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **down** *number*

Synopsis Hold timer for link down event dampening  
 Context **configure** *port string sonet-sdh hold-time down number*  
 Tree *down*

---

Range	0 to 100
Units	deciseconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **up** *number*

Synopsis	Hold timer for link up event dampening
Context	<b>configure</b> <i>port string sonet-sdh hold-time up number</i>
Tree	<i>up</i>
Range	0 to 100
Units	deciseconds
Default	5
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **loopback** *keyword*

Synopsis	Loopback to activate on SONET port
Context	<b>configure</b> <i>port string sonet-sdh loopback keyword</i>
Tree	<i>loopback</i>
Options	line, internal
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **path** [*path-index*] *string*

Synopsis	Enter the <b>path</b> list instance
Context	<b>configure</b> <i>port string sonet-sdh path string</i>
Tree	<i>path</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[path-index] string**

Synopsis	SONET/SDH path index
Context	<b>configure</b> port string sonet-sdh path string
Tree	path
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**admin-state keyword**

Synopsis	Administrative state of the SONET/SDH path
Context	<b>configure</b> port string sonet-sdh path string admin-state keyword
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**crc number**

Synopsis	Cyclic redundancy check
Context	<b>configure</b> port string sonet-sdh path string crc number
Tree	crc
Range	16   32
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**description string**

Synopsis	Text description
Context	<b>configure</b> port string sonet-sdh path string description string
Tree	description
String Length	1 to 160
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS



## egress

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">port string sonet-sdh path string egress</a>
Tree	<a href="#">egress</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## port-scheduler-policy

Synopsis	Enter the <b>port-scheduler-policy</b> context
Context	<b>configure</b> <a href="#">port string sonet-sdh path string egress port-scheduler-policy</a>
Tree	<a href="#">port-scheduler-policy</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## overrides

Synopsis	Enable the <b>overrides</b> context
Context	<b>configure</b> <a href="#">port string sonet-sdh path string egress port-scheduler-policy overrides</a>
Tree	<a href="#">overrides</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## level [[priority-level](#)] *number*

Synopsis	Enter the <b>level</b> list instance
Context	<b>configure</b> <a href="#">port string sonet-sdh path string egress port-scheduler-policy overrides level number</a>
Tree	<a href="#">level</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## [[priority-level](#)] *number*

Synopsis	Port priority levels override
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Context	<b>configure port string sonet-sdh path string egress port-scheduler-policy overrides level number</b>
Tree	<a href="#">level</a>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure port string sonet-sdh path string egress port-scheduler-policy overrides level number percent-rate</b>
Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **cir decimal-number**

Synopsis	CIR for the priority level
Context	<b>configure port string sonet-sdh path string egress port-scheduler-policy overrides level number percent-rate cir decimal-number</b>
Tree	<a href="#">cir</a>
Range	0 to 100
Units	percent
Default	100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **pir decimal-number**

Synopsis	PIR for the priority level
Context	<b>configure port string sonet-sdh path string egress port-scheduler-policy overrides level number percent-rate pir decimal-number</b>
Tree	<a href="#">pir</a>

Range	0.01 to 100
Units	percent
Default	100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## rate

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> port <i>string</i> sonet-sdh path <i>string</i> egress port-scheduler-policy overrides level <i>number</i> <b>rate</b>
Tree	<b>rate</b>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## cir (*number* | *keyword*)

Synopsis	CIR for the priority level
Context	<b>configure</b> port <i>string</i> sonet-sdh path <i>string</i> egress port-scheduler-policy overrides level <i>number</i> <b>rate</b> <b>cir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>cir</b>
Range	0 to 3200000000
Units	kilobps
Options	sum, max
Default	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## pir (*number* | *keyword*)

Synopsis	PIR for the priority level
Context	<b>configure</b> port <i>string</i> sonet-sdh path <i>string</i> egress port-scheduler-policy overrides level <i>number</i> <b>rate</b> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>pir</b>
Range	1 to 3200000000

Units	kilobps
Options	max
Default	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**max-rate**

Synopsis	Enter the <b>max-rate</b> context
Context	<b>configure</b> <a href="#">port string sonet-sdh path string egress port-scheduler-policy overrides max-rate</a>
Tree	<a href="#">max-rate</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**percent-rate** *decimal-number*

Synopsis	PIR
Context	<b>configure</b> <a href="#">port string sonet-sdh path string egress port-scheduler-policy overrides max-rate percent-rate decimal-number</a>
Tree	<a href="#">percent-rate</a>
Range	0.01 to 100
Units	percent
Default	100
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**rate** (*number* | *keyword*)

Synopsis	PIR
Context	<b>configure</b> <a href="#">port string sonet-sdh path string egress port-scheduler-policy overrides max-rate rate (number   keyword)</a>
Tree	<a href="#">rate</a>
Range	1 to 3200000000
Units	kilobps

Options	max
Default	max
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **policy-name** *reference*

Synopsis	Port egress scheduler policy name
Context	<b>configure</b> port <i>string</i> sonet-sdh path <i>string</i> egress port-scheduler-policy policy-name <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> qos port-scheduler-policy <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **encap-type** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure an encap method.
Context	<b>configure</b> port <i>string</i> sonet-sdh path <i>string</i> encap-type <i>keyword</i>
Tree	<a href="#">encap-type</a>
Options	bcp-null, bcp-dot1q, ipcp, ppp-auto, wan-mirror, cem
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **load-balancing-algorithm** *keyword*

Synopsis	Load balancing algorithm
Context	<b>configure</b> port <i>string</i> sonet-sdh path <i>string</i> load-balancing-algorithm <i>keyword</i>
Tree	<a href="#">load-balancing-algorithm</a>
Options	default, include-l4, exclude-l4
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mac-address** *string*

Synopsis MAC address for the SONET/SDH path  
 Context **configure** *port string sonet-sdh path string mac-address string*  
 Tree [mac-address](#)  
 Default 00:00:00:00:00:00  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mode** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Operation port mode for the SONET/SDH path  
 Context **configure** *port string sonet-sdh path string mode keyword*  
 Tree [mode](#)  
 Options access, network  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mtu** *number*

Synopsis Maximum payload MTU size  
 Context **configure** *port string sonet-sdh path string mtu number*  
 Tree [mtu](#)  
 Range 512 to 9208  
 Units bytes  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## network

Synopsis	Enter the <b>network</b> context
Context	<b>configure</b> <a href="#">port string sonet-sdh path string network</a>
Tree	<a href="#">network</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## accounting-policy *reference*

Synopsis	Accounting policy
Context	<b>configure</b> <a href="#">port string sonet-sdh path string network accounting-policy reference</a>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log accounting-policy number</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## collect-stats *boolean*

Synopsis	Collect accounting and statistical data
Context	<b>configure</b> <a href="#">port string sonet-sdh path string network collect-stats boolean</a>
Tree	<a href="#">collect-stats</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## queue-policy *reference*

Synopsis	Queue policy on the SONET/SDH network path
Context	<b>configure</b> <a href="#">port string sonet-sdh path string network queue-policy reference</a>
Tree	<a href="#">queue-policy</a>
Reference	<b>configure</b> <a href="#">qos network-queue string</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**payload** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SONET/SDH path payload
Context	<b>configure</b> port string sonet-sdh path string payload keyword
Tree	payload
Options	sts3, tug3, vt15, vt2, ds3, e3, ds1, e1
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ppp**

Synopsis	Enter the <b>ppp</b> context
Context	<b>configure</b> port string sonet-sdh path string ppp
Tree	ppp
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**keepalive**

Synopsis	Enter the <b>keepalive</b> context
Context	<b>configure</b> port string sonet-sdh path string ppp keepalive
Tree	keepalive
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**drop-count** *number*

Synopsis	Consecutive missed keepalives before port is taken down
Context	<b>configure</b> port string sonet-sdh path string ppp keepalive drop-count number
Tree	drop-count
Range	1 to 255
Default	3
Introduced	20.10.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **interval** (*number* | *keyword*)

Synopsis Interval at which keepalive messages are issued

Context **configure** *port string sonet-sdh path string ppp keepalive interval* (*number* | *keyword*)

Tree [interval](#)

Range 1 to 60

Units seconds

Options none

Default 10

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **report-alarm**

Synopsis Enter the **report-alarm** context

Context **configure** *port string sonet-sdh path string report-alarm*

Tree [report-alarm](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **pais** *boolean*

Synopsis Report path alarm indication signal errors

Context **configure** *port string sonet-sdh path string report-alarm pais boolean*

Tree [pais](#)

Default false

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **plcd** *boolean*

Synopsis Report path loss of code group delineation errors

Context **configure** *port string sonet-sdh path string report-alarm plcd boolean*

Tree	<a href="#">plcd</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**plop** *boolean*

Synopsis	Report path loss of pointer errors as a trap
Context	<b>configure</b> <a href="#">port string</a> <a href="#">sonet-sdh path string</a> <a href="#">report-alarm</a> <a href="#">plop</a> <i>boolean</i>
Tree	<a href="#">plop</a>
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**pplm** *boolean*

Synopsis	Report a path payload mismatch trap
Context	<b>configure</b> <a href="#">port string</a> <a href="#">sonet-sdh path string</a> <a href="#">report-alarm</a> <a href="#">pplm</a> <i>boolean</i>
Tree	<a href="#">pplm</a>
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**prdi** *boolean*

Synopsis	Report path remote defect indication errors
Context	<b>configure</b> <a href="#">port string</a> <a href="#">sonet-sdh path string</a> <a href="#">report-alarm</a> <a href="#">prdi</a> <i>boolean</i>
Tree	<a href="#">prdi</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**prei** *boolean*

Synopsis	Report a path error condition as a result of b3 error
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Context	<b>configure</b> <a href="#">port string sonet-sdh path string report-alarm prei</a> <i>boolean</i>
Tree	<a href="#">prei</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **puneq** *boolean*

Synopsis	Report path unequipped errors
Context	<b>configure</b> <a href="#">port string sonet-sdh path string report-alarm puneq</a> <i>boolean</i>
Tree	<a href="#">puneq</a>
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **scramble** *boolean*

Synopsis	Enable SONET/SDH payload scrambling
Context	<b>configure</b> <a href="#">port string sonet-sdh path string scramble</a> <i>boolean</i>
Tree	<a href="#">scramble</a>
Description	<p>When configured to <b>true</b>, the SONET/SDH frame carries randomized patterns of 1s and 0s, which prevents continuous strings of all 1s or all 0s. This meets the needs of physical layer protocols that rely on sufficient transitions between 1s and 0s to maintain clocking.</p> <p>When configured to <b>false</b>, the strings of all 1s or all 0s are continuous.</p>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **signal-label** *string*

Synopsis	C2 byte value that communicates the payload type
Context	<b>configure</b> <a href="#">port string sonet-sdh path string signal-label</a> <i>string</i>
Tree	<a href="#">signal-label</a>
String Length	1 to 4
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**trace-string** (*keyword | string*)

Synopsis	J1 path-trace string that identifies the circuit
Context	<b>configure</b> port string sonet-sdh path string trace-string ( <i>keyword   string</i> )
Tree	trace-string
String Length	0 to 62
Options	zeros
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**report-alarm**

Synopsis	Enter the <b>report-alarm</b> context
Context	<b>configure</b> port string sonet-sdh report-alarm
Tree	report-alarm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**lais** *boolean*

Synopsis	Report Line Indication Signal Errors alarm
Context	<b>configure</b> port string sonet-sdh report-alarm lais <i>boolean</i>
Tree	lais
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**lb2er-sd** *boolean*

Synopsis	Report line and section alarms for SONET/SDH ports
Context	<b>configure</b> port string sonet-sdh report-alarm lb2er-sd <i>boolean</i>
Tree	lb2er-sd
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**lb2er-sf** *boolean*

Synopsis	Report alarm line signal failure BER errors
Context	<b>configure</b> <i>port string sonet-sdh report-alarm lb2er-sf boolean</i>
Tree	<a href="#">lb2er-sf</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**loc** *boolean*

Synopsis	Report alarm for a loss of clock
Context	<b>configure</b> <i>port string sonet-sdh report-alarm loc boolean</i>
Tree	<a href="#">loc</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**lrdi** *boolean*

Synopsis	Report Line Remote Defect Indication Errors alarm
Context	<b>configure</b> <i>port string sonet-sdh report-alarm lrdi boolean</i>
Tree	<a href="#">lrdi</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**lrei** *boolean*

Synopsis	Report alarm for a line error condition
Context	<b>configure</b> <i>port string sonet-sdh report-alarm lrei boolean</i>
Tree	<a href="#">lrei</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**slof** *boolean*

Synopsis	Report alarm for section loss of frame errors
Context	<b>configure</b> <i>port string sonet-sdh report-alarm slof boolean</i>
Tree	<a href="#">slof</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**slos** *boolean*

Synopsis	Report alarm for section loss of signal error on send
Context	<b>configure</b> <i>port string sonet-sdh report-alarm slos boolean</i>
Tree	<a href="#">slos</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ss1f** *boolean*

Synopsis	Report alarm for section synchronization failure
Context	<b>configure</b> <i>port string sonet-sdh report-alarm ss1f boolean</i>
Tree	<a href="#">ss1f</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**sd-threshold** *number*

Synopsis	Threshold for line signal failure BER
Context	<b>configure</b> <i>port string sonet-sdh sd-threshold number</i>
Tree	<a href="#">sd-threshold</a>
Range	3 to 9
Default	6
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## section-trace

Synopsis Enter the **section-trace** context  
 Context **configure** [port string sonet-sdh section-trace](#)  
 Tree [section-trace](#)  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## byte string

Synopsis Section trace bytes in the SONET section header  
 Context **configure** [port string sonet-sdh section-trace byte string](#)  
 Tree [byte](#)  
 String Length 1 to 4  
 Default 1  
 Notes The following elements are part of a choice: **byte**, **increment-z0**, or **string**.  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## increment-z0

Synopsis Configure incrementing STM ID instead of a static value  
 Context **configure** [port string sonet-sdh section-trace increment-z0](#)  
 Tree [increment-z0](#)  
 Notes The following elements are part of a choice: **byte**, **increment-z0**, or **string**.  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## string string

Synopsis Text string that identifies the section  
 Context **configure** [port string sonet-sdh section-trace string string](#)  
 Tree [string](#)

String Length	0 to 16
Notes	The following elements are part of a choice: <b>byte</b> , <b>increment-z0</b> , or <b>string</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **sf-threshold** *number*

Synopsis	Threshold for line signal failure BER
Context	<b>configure</b> port string sonet-sdh sf-threshold number
Tree	sf-threshold
Range	3 to 6
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **single-fiber** *boolean*

Synopsis	Allow packet gathering and redirection from single port
Context	<b>configure</b> port string sonet-sdh single-fiber boolean
Tree	single-fiber
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **speed** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SONET/SDH port speed
Context	<b>configure</b> port string sonet-sdh speed keyword
Tree	speed
Options	oc3, oc12, oc48, oc192, oc768, oc1
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS



**suppress-low-order-alarms** *boolean*

Synopsis	Suppress low order alarms
Context	<b>configure</b> <i>port string sonet-sdh suppress-low-order-alarms boolean</i>
Tree	<a href="#">suppress-low-order-alarms</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**tx-dus** *boolean*

Synopsis	Force the QL value to be set to QL-DUS/QL-DNU
Context	<b>configure</b> <i>port string sonet-sdh tx-dus boolean</i>
Tree	<a href="#">tx-dus</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**tdm**

Synopsis	Enter the <b>tdm</b> context
Context	<b>configure</b> <i>port string tdm</i>
Tree	<a href="#">tdm</a>
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**buildout** *keyword*

Synopsis	Line buildout for physical DS1/DS3 ports
Context	<b>configure</b> <i>port string tdm buildout keyword</i>
Tree	<a href="#">buildout</a>
Options	short, long
Default	short
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**ds1** [[ds1-index](#)] *string*

Synopsis	Enter the <b>ds1</b> list instance
Context	<b>configure port string tdm ds1 string</b>
Tree	<a href="#">ds1</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**[ds1-index]** *string*

Synopsis	DS-1 channel ID
Context	<b>configure port string tdm ds1 string</b>
Tree	<a href="#">ds1</a>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**admin-state** *keyword*

Synopsis	Administrative state of the DS1 channel
Context	<b>configure port string tdm ds1 string admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**ber-threshold**

Synopsis	Enter the <b>ber-threshold</b> context
Context	<b>configure port string tdm ds1 string ber-threshold</b>
Tree	<a href="#">ber-threshold</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**signal-degrade** *number*

Synopsis	BER signal degradation threshold
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm ds1</a> <i>string</i> <a href="#">ber-threshold</a> <a href="#">signal-degrade</a> <i>number</i>
Tree	<a href="#">signal-degrade</a>
Range	1   5   10   50   100
Default	5
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**signal-failure** *number*

Synopsis	BER signal failure threshold
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm ds1</a> <i>string</i> <a href="#">ber-threshold</a> <a href="#">signal-failure</a> <i>number</i>
Tree	<a href="#">signal-failure</a>
Range	1   5   10   50   100
Default	50
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**channel-group** [[ds0-index](#)] *number*

Synopsis	Enter the <b>channel-group</b> list instance
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm ds1</a> <i>string</i> <a href="#">channel-group</a> <i>number</i>
Tree	<a href="#">channel-group</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**[ds0-index]** *number*

Synopsis	Channel group ID
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm ds1</a> <i>string</i> <a href="#">channel-group</a> <i>number</i>
Tree	<a href="#">channel-group</a>
Range	1 to 24
Notes	This element is part of a list key.

Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **admin-state** *keyword*

Synopsis Administrative state of the DS1 channel group  
 Context **configure** *port string tdm ds1 string channel-group number admin-state keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **crc** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Precision of the CRC  
 Context **configure** *port string tdm ds1 string channel-group number crc number*  
 Tree [crc](#)  
 Range 16 | 32  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **description** *string*

Synopsis Text description  
 Context **configure** *port string tdm ds1 string channel-group number description string*  
 Tree [description](#)  
 String Length 1 to 160  
 Default DS0GRP  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## egress

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">port string tdm ds1 string channel-group number egress</a>
Tree	<a href="#">egress</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## port-scheduler-policy

Synopsis	Enter the <b>port-scheduler-policy</b> context
Context	<b>configure</b> <a href="#">port string tdm ds1 string channel-group number egress port-scheduler-policy</a>
Tree	<a href="#">port-scheduler-policy</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## overrides

Synopsis	Enable the <b>overrides</b> context
Context	<b>configure</b> <a href="#">port string tdm ds1 string channel-group number egress port-scheduler-policy overrides</a>
Tree	<a href="#">overrides</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## level [[priority-level](#)] *number*

Synopsis	Enter the <b>level</b> list instance
Context	<b>configure</b> <a href="#">port string tdm ds1 string channel-group number egress port-scheduler-policy overrides level number</a>
Tree	<a href="#">level</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**[priority-level] number**

Synopsis	Port priority levels override
Context	<b>configure port string tdm ds1 string channel-group number egress port-scheduler-policy overrides level number</b>
Tree	<a href="#">level</a>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure port string tdm ds1 string channel-group number egress port-scheduler-policy overrides level number percent-rate</b>
Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**cir decimal-number**

Synopsis	CIR for the priority level
Context	<b>configure port string tdm ds1 string channel-group number egress port-scheduler-policy overrides level number percent-rate cir decimal-number</b>
Tree	<a href="#">cir</a>
Range	0 to 100
Units	percent
Default	100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**pir decimal-number**

Synopsis	PIR for the priority level
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Context	<b>configure</b> <a href="#">port string tdm ds1 string channel-group number egress port-scheduler-policy overrides level number percent-rate pir decimal-number</a>
Tree	<a href="#">pir</a>
Range	0.01 to 100
Units	percent
Default	100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## rate

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">port string tdm ds1 string channel-group number egress port-scheduler-policy overrides level number rate</a>
Tree	<a href="#">rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## cir (*number* | *keyword*)

Synopsis	CIR for the priority level
Context	<b>configure</b> <a href="#">port string tdm ds1 string channel-group number egress port-scheduler-policy overrides level number rate cir (<i>number</i>   <i>keyword</i>)</a>
Tree	<a href="#">cir</a>
Range	0 to 3200000000
Units	kilobps
Options	sum, max
Default	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## pir (*number* | *keyword*)

Synopsis	PIR for the priority level
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Context	<b>configure port string tdm ds1 string channel-group number egress port-scheduler-policy overrides level number rate pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 3200000000
Units	kilobps
Options	max
Default	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**max-rate**

Synopsis	Enter the <b>max-rate</b> context
Context	<b>configure port string tdm ds1 string channel-group number egress port-scheduler-policy overrides max-rate</b>
Tree	<a href="#">max-rate</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**percent-rate decimal-number**

Synopsis	PIR
Context	<b>configure port string tdm ds1 string channel-group number egress port-scheduler-policy overrides max-rate percent-rate decimal-number</b>
Tree	<a href="#">percent-rate</a>
Range	0.01 to 100
Units	percent
Default	100
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**rate (number | keyword)**

Synopsis	PIR
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Context	<b>configure port string tdm ds1 string channel-group number egress port-scheduler-policy overrides max-rate rate</b> ( <i>number   keyword</i> )
Tree	<a href="#">rate</a>
Range	1 to 3200000000
Units	kilobps
Options	max
Default	max
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **policy-name** *reference*

Synopsis	Port egress scheduler policy name
Context	<b>configure port string tdm ds1 string channel-group number egress port-scheduler-policy policy-name reference</b>
Tree	<a href="#">policy-name</a>
Reference	<b>configure qos port-scheduler-policy string</b>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **encap-type** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Encapsulation method
Context	<b>configure port string tdm ds1 string channel-group number encap-type keyword</b>
Tree	<a href="#">encap-type</a>
Options	bcp-null, bcp-dot1q, ipcp, ppp-auto, wan-mirror, cem
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **idle-cycle-flag** *keyword*

Synopsis	Value transmitted during idle cycles
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> idle-cycle-flag <i>keyword</i>
Tree	idle-cycle-flag
Options	flags, ones
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **idle-payload-fill**

Synopsis	Enter the <b>idle-payload-fill</b> context
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> idle-payload-fill
Tree	idle-payload-fill
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **all-ones**

Synopsis	Define the 8 bit value to be transmitted as 11111111
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> idle-payload-fill all-ones
Tree	all-ones
Notes	The following elements are part of a choice: <b>all-ones</b> or <b>pattern</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **pattern** *number*

Synopsis	User-defined pattern to be transmitted
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> idle-payload-fill pattern <i>number</i>
Tree	pattern
Range	0 to 255
Notes	The following elements are part of a choice: <b>all-ones</b> or <b>pattern</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## idle-signal-fill

Synopsis	Enter the <b>idle-signal-fill</b> context
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> idle-signal-fill
Tree	idle-signal-fill
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## all-ones

Synopsis	Define the 8-bit value to be transmitted as 11111111
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> idle-signal-fill all-ones
Tree	all-ones
Notes	The following elements are part of a choice: <b>all-ones</b> or <b>pattern</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## pattern *number*

Synopsis	User-defined pattern to be transmitted
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> idle-signal-fill <i>pattern number</i>
Tree	pattern
Range	0 to 15
Notes	The following elements are part of a choice: <b>all-ones</b> or <b>pattern</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## load-balancing-algorithm *keyword*

Synopsis	Load balancing algorithm to be used on the port
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> load-balancing-algorithm <i>keyword</i>
Tree	load-balancing-algorithm
Options	default, include-l4, exclude-l4

Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **mac-address** *string*

Synopsis MAC address for the port  
 Context **configure** *port string tdm ds1 string channel-group number mac-address string*  
 Tree [mac-address](#)  
 Default 00:00:00:00:00:00  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **mode** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Operation mode for the TDM channel group  
 Context **configure** *port string tdm ds1 string channel-group number mode keyword*  
 Tree [mode](#)  
 Options access, network  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **mtu** *number*

Synopsis Maximum payload MTU size for the port  
 Context **configure** *port string tdm ds1 string channel-group number mtu number*  
 Tree [mtu](#)  
 Range 512 to 9208  
 Units bytes  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## network

Synopsis	Enter the <b>network</b> context
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> network
Tree	<a href="#">network</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## accounting-policy *reference*

Synopsis	Accounting policy
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> network accounting-policy <i>reference</i>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> log accounting-policy <i>number</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## collect-stats *boolean*

Synopsis	Collect accounting and statistical data
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> network collect-stats <i>boolean</i>
Tree	<a href="#">collect-stats</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## queue-policy *reference*

Synopsis	Queue policy on the TDM DS0 network channel group
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> network queue-policy <i>reference</i>
Tree	<a href="#">queue-policy</a>
Reference	<b>configure</b> qos network-queue <i>string</i>
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## ppp

Synopsis Enter the **ppp** context

Context **configure** [port string tdm ds1 string channel-group number ppp](#)

Tree [ppp](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## ber-sf-link-down *boolean*

Synopsis Set link out-of-service on BER-SF alarm

Context **configure** [port string tdm ds1 string channel-group number ppp ber-sf-link-down boolean](#)

Tree [ber-sf-link-down](#)

Default false

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## compress

Synopsis Enter the **compress** context

Context **configure** [port string tdm ds1 string channel-group number ppp compress](#)

Tree [compress](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## acfc *boolean*

Synopsis Enable Address Control Field Compression (ACFC)

Context **configure** [port string tdm ds1 string channel-group number ppp compress acfc boolean](#)

Tree [acfc](#)

Default false

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **pfc** *boolean*

Synopsis Enable Protocol Field Compression (PFC)  
 Context **configure** *port string tdm ds1 string channel-group number ppp compress pfc boolean*  
 Tree [pfc](#)  
 Default false  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **keepalive**

Synopsis Enter the **keepalive** context  
 Context **configure** *port string tdm ds1 string channel-group number ppp keepalive*  
 Tree [keepalive](#)  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **drop-count** *number*

Synopsis Consecutive missed keepalives before port is taken down  
 Context **configure** *port string tdm ds1 string channel-group number ppp keepalive drop-count number*  
 Tree [drop-count](#)  
 Range 1 to 255  
 Default 3  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **interval** (*number* | *keyword*)

Synopsis Interval at which keepalive messages are issued  
 Context **configure** *port string tdm ds1 string channel-group number ppp keepalive interval (number | keyword)*  
 Tree [interval](#)

Range	1 to 60
Units	seconds
Options	none
Default	10
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **speed** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Speed of the DS0 channels in the channel group
Context	<b>configure</b> <i>port string tdm ds1 string channel-group number speed number</i>
Tree	<i>speed</i>
Range	56   64
Default	64
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **timeslot** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Timeslot for the channel group
Context	<b>configure</b> <i>port string tdm ds1 string channel-group number timeslot number</i>
Tree	<i>timeslot</i>
Range	1 to 24
Max. Instances	24
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e



**clock-source** *keyword*

Synopsis	Clock for data transmission
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm ds1</a> <i>string</i> <b>clock-source</b> <i>keyword</i>
Tree	<a href="#">clock-source</a>
Options	loop-timed, node-timed, adaptive, differential
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**framing** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Framing for the DS1 channel
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm ds1</a> <i>string</i> <b>framing</b> <i>keyword</i>
Tree	<a href="#">framing</a>
Options	extended-super-frame, super-frame, ds1-unframed
Default	extended-super-frame
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**loopback** *keyword*

Synopsis	Loopback mode for the port
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm ds1</a> <i>string</i> <b>loopback</b> <i>keyword</i>
Tree	<a href="#">loopback</a>
Options	line, internal, fdl-ansi, fdl-bellcore, payload-ansi, inband-ansi, inband-bellcore
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**remote-loop-respond** *boolean*

Synopsis	Respond to requests for remote loopbacks
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm ds1</a> <i>string</i> <b>remote-loop-respond</b> <i>boolean</i>
Tree	<a href="#">remote-loop-respond</a>

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Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **report-alarm**

Synopsis	Enter the <b>report-alarm</b> context
Context	<b>configure</b> port string tdm ds1 string report-alarm
Tree	report-alarm
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **ais boolean**

Synopsis	Report alarm indication signal errors
Context	<b>configure</b> port string tdm ds1 string report-alarm ais boolean
Tree	ais
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **ber-sd boolean**

Synopsis	Report the BER that specifies signal degradation
Context	<b>configure</b> port string tdm ds1 string report-alarm ber-sd boolean
Tree	ber-sd
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **ber-sf boolean**

Synopsis	Report the BER that species signal failure
Context	<b>configure</b> port string tdm ds1 string report-alarm ber-sf boolean
Tree	ber-sf

Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **looped** *boolean*

Synopsis	Report looped packet errors
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm ds1</a> <i>string</i> <a href="#">report-alarm</a> <a href="#">looped</a> <i>boolean</i>
Tree	<a href="#">looped</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **los** *boolean*

Synopsis	Report loss of signal errors
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm ds1</a> <i>string</i> <a href="#">report-alarm</a> <a href="#">los</a> <i>boolean</i>
Tree	<a href="#">los</a>
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **oof** *boolean*

Synopsis	Report out-of-frame errors
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm ds1</a> <i>string</i> <a href="#">report-alarm</a> <a href="#">oof</a> <i>boolean</i>
Tree	<a href="#">oof</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **rai** *boolean*

Synopsis	Report resource availability indicator events
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm ds1</a> <i>string</i> <a href="#">report-alarm</a> <a href="#">rai</a> <i>boolean</i>

Tree	<a href="#">rai</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **signal-mode** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Signal mode on the channel
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm ds1</a> <i>string</i> <b>signal-mode</b> <i>keyword</i>
Tree	<a href="#">signal-mode</a>
Options	channel-associated-signaling
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **ds3** [[ds3-index](#)] *string*

Synopsis	Enter the <b>ds3</b> list instance
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm ds3</a> <i>string</i>
Tree	<a href="#">ds3</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **[ds3-index]** *string*

Synopsis	TDM DS3 index
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm ds3</a> <i>string</i>
Tree	<a href="#">ds3</a>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**admin-state** *keyword*

Synopsis	Administrative state of the DS3 port
Context	<b>configure</b> port string tdm ds3 string admin-state keyword
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**channelized** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Channelization of the DS3
Context	<b>configure</b> port string tdm ds3 string channelized keyword
Tree	channelized
Options	ds1, e1
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**clock-source** *keyword*

Synopsis	Clock for data transmission
Context	<b>configure</b> port string tdm ds3 string clock-source keyword
Tree	clock-source
Options	loop-timed, node-timed
Default	node-timed
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**crc number****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Precision of the cyclic redundancy check (CRC)
Context	<b>configure port string tdm ds3 string crc number</b>
Tree	<a href="#">crc</a>
Range	16   32
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**description string**

Synopsis	Text description
Context	<b>configure port string tdm ds3 string description string</b>
Tree	<a href="#">description</a>
String Length	1 to 160
Default	DS3
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure port string tdm ds3 string egress</b>
Tree	<a href="#">egress</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**port-scheduler-policy**

Synopsis	Enter the <b>port-scheduler-policy</b> context
Context	<b>configure port string tdm ds3 string egress port-scheduler-policy</b>
Tree	<a href="#">port-scheduler-policy</a>
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## overrides

Synopsis Enable the **overrides** context

Context **configure** [port string](#) [tdm ds3 string](#) [egress port-scheduler-policy overrides](#)

Tree [overrides](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## level [[priority-level](#)] *number*

Synopsis Enter the **level** list instance

Context **configure** [port string](#) [tdm ds3 string](#) [egress port-scheduler-policy overrides level](#) *number*

Tree [level](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## [\[priority-level\]](#) *number*

Synopsis Port priority levels override

Context **configure** [port string](#) [tdm ds3 string](#) [egress port-scheduler-policy overrides level](#) *number*

Tree [level](#)

Range 1 to 8

Notes This element is part of a list key.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## percent-rate

Synopsis Enter the **percent-rate** context

Context **configure** [port string](#) [tdm ds3 string](#) [egress port-scheduler-policy overrides level](#) *number* [percent-rate](#)

Tree [percent-rate](#)

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **cir** *decimal-number*

Synopsis	CIR for the priority level
Context	<b>configure</b> port <i>string</i> tdm ds3 <i>string</i> egress port-scheduler-policy overrides level <i>number</i> percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0 to 100
Units	percent
Default	100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **pir** *decimal-number*

Synopsis	PIR for the priority level
Context	<b>configure</b> port <i>string</i> tdm ds3 <i>string</i> egress port-scheduler-policy overrides level <i>number</i> percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100
Units	percent
Default	100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> port <i>string</i> tdm ds3 <i>string</i> egress port-scheduler-policy overrides level <i>number</i> rate
Tree	rate
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e



**cir** (*number* | *keyword*)

Synopsis	CIR for the priority level
Context	<b>configure</b> <i>port string tdm ds3 string egress port-scheduler-policy overrides level number rate cir</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 3200000000
Units	kilobps
Options	sum, max
Default	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**pir** (*number* | *keyword*)

Synopsis	PIR for the priority level
Context	<b>configure</b> <i>port string tdm ds3 string egress port-scheduler-policy overrides level number rate pir</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 3200000000
Units	kilobps
Options	max
Default	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**max-rate**

Synopsis	Enter the <b>max-rate</b> context
Context	<b>configure</b> <i>port string tdm ds3 string egress port-scheduler-policy overrides max-rate</i>
Tree	<a href="#">max-rate</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**percent-rate** *decimal-number*

Synopsis	PIR
Context	<b>configure</b> port <i>string</i> tdm ds3 <i>string</i> egress port-scheduler-policy overrides max-rate percent-rate <i>decimal-number</i>
Tree	percent-rate
Range	0.01 to 100
Units	percent
Default	100
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**rate** (*number* | *keyword*)

Synopsis	PIR
Context	<b>configure</b> port <i>string</i> tdm ds3 <i>string</i> egress port-scheduler-policy overrides max-rate rate ( <i>number</i>   <i>keyword</i> )
Tree	rate
Range	1 to 3200000000
Units	kilobps
Options	max
Default	max
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**policy-name** *reference*

Synopsis	Port egress scheduler policy name
Context	<b>configure</b> port <i>string</i> tdm ds3 <i>string</i> egress port-scheduler-policy policy-name <i>reference</i>
Tree	policy-name
Reference	<b>configure</b> qos port-scheduler-policy <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**encap-type** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Encapsulation method
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm ds3</a> <i>string</i> <a href="#">encap-type</a> <i>keyword</i>
Tree	<a href="#">encap-type</a>
Options	bcp-null, bcp-dot1q, ipcp, ppp-auto, wan-mirror, cem
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**feac-loop-respond** *boolean*

Synopsis	Enable DS-3 interface to respond to remote loop signals
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm ds3</a> <i>string</i> <a href="#">feac-loop-respond</a> <i>boolean</i>
Tree	<a href="#">feac-loop-respond</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**framing** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Framing for the DS3 channel
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm ds3</a> <i>string</i> <a href="#">framing</a> <i>keyword</i>
Tree	<a href="#">framing</a>
Options	c-bit, m23, ds3-unframed
Default	c-bit
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**idle-cycle-flag** *keyword*

Synopsis	Value transmitted during idle cycles
Context	<b>configure</b> port <i>string</i> tdm ds3 <i>string</i> idle-cycle-flag <i>keyword</i>
Tree	idle-cycle-flag
Options	flags, ones
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**load-balancing-algorithm** *keyword*

Synopsis	Load balancing algorithm to be used on the port
Context	<b>configure</b> port <i>string</i> tdm ds3 <i>string</i> load-balancing-algorithm <i>keyword</i>
Tree	load-balancing-algorithm
Options	default, include-l4, exclude-l4
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**loopback** *keyword*

Synopsis	Loopback mode on the channel
Context	<b>configure</b> port <i>string</i> tdm ds3 <i>string</i> loopback <i>keyword</i>
Tree	loopback
Options	line, internal, remote
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**mac-address** *string*

Synopsis	MAC address for the port
Context	<b>configure</b> port <i>string</i> tdm ds3 <i>string</i> mac-address <i>string</i>
Tree	mac-address
Default	00:00:00:00:00:00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## **maintenance-data-link**

Synopsis	Enter the <b>maintenance-data-link</b> context
Context	<b>configure port string tdm ds3 string maintenance-data-link</b>
Tree	<a href="#">maintenance-data-link</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## **equipment-id-code string**

Synopsis	Equipment ID Code (EIC) of the MDL
Context	<b>configure port string tdm ds3 string maintenance-data-link equipment-id-code string</b>
Tree	<a href="#">equipment-id-code</a>
String Length	0 to 10
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## **facility-id-code string**

Synopsis	Facility ID Code sent in the MDL Path message
Context	<b>configure port string tdm ds3 string maintenance-data-link facility-id-code string</b>
Tree	<a href="#">facility-id-code</a>
String Length	0 to 38
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## **frame-id-code string**

Synopsis	Frame ID Code (FIC) of the MDL
Context	<b>configure port string tdm ds3 string maintenance-data-link frame-id-code string</b>
Tree	<a href="#">frame-id-code</a>
String Length	0 to 10
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **generator-string** *string*

Synopsis	Generator number string sent in MDL test signal message
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">tdm ds3</a> <a href="#">string</a> <a href="#">maintenance-data-link</a> <a href="#">generator-string</a> <a href="#">string</a>
Tree	<a href="#">generator-string</a>
String Length	0 to 38
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **location-id-code** *string*

Synopsis	Location ID Code (LIC) of the MDL
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">tdm ds3</a> <a href="#">string</a> <a href="#">maintenance-data-link</a> <a href="#">location-id-code</a> <a href="#">string</a>
Tree	<a href="#">location-id-code</a>
String Length	0 to 11
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **port-string** *string*

Synopsis	Port number string sent in the MDL idle signal message
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">tdm ds3</a> <a href="#">string</a> <a href="#">maintenance-data-link</a> <a href="#">port-string</a> <a href="#">string</a>
Tree	<a href="#">port-string</a>
String Length	0 to 38
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **transmit-message-type**

Synopsis	Enter the <b>transmit-message-type</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">tdm ds3</a> <a href="#">string</a> <a href="#">maintenance-data-link</a> <a href="#">transmit-message-type</a>
Tree	<a href="#">transmit-message-type</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**idle-signal** *boolean*

Synopsis	Enable transmission of MDL idle signal messages
Context	<b>configure</b> port <i>string</i> tdm ds3 <i>string</i> maintenance-data-link transmit-message-type idle-signal <i>boolean</i>
Tree	idle-signal
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**path** *boolean*

Synopsis	Enable transmission of MDL path messages
Context	<b>configure</b> port <i>string</i> tdm ds3 <i>string</i> maintenance-data-link transmit-message-type path <i>boolean</i>
Tree	path
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**test-signal** *boolean*

Synopsis	Enable transmission of MDL test signal messages
Context	<b>configure</b> port <i>string</i> tdm ds3 <i>string</i> maintenance-data-link transmit-message-type test-signal <i>boolean</i>
Tree	test-signal
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**unit-id-code** *string*

Synopsis	Unit ID Code (UIC) of the MDL
Context	<b>configure</b> port <i>string</i> tdm ds3 <i>string</i> maintenance-data-link unit-id-code <i>string</i>
Tree	unit-id-code
String Length	0 to 6

Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **mode** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Operation mode
Context	<b>configure</b> <i>port string tdm ds3 string mode keyword</i>
Tree	<i>mode</i>
Options	access, network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **mtu** *number*

Synopsis	Maximum payload MTU size for the port
Context	<b>configure</b> <i>port string tdm ds3 string mtu number</i>
Tree	<i>mtu</i>
Range	512 to 9208
Units	bytes
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **network**

Synopsis	Enter the <b>network</b> context
Context	<b>configure</b> <i>port string tdm ds3 string network</i>
Tree	<i>network</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e



### **accounting-policy** *reference*

Synopsis	Accounting policy
Context	<b>configure</b> port string tdm ds3 string network accounting-policy reference
Tree	accounting-policy
Reference	<b>configure</b> log accounting-policy number
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **collect-stats** *boolean*

Synopsis	Collect accounting and statistical data
Context	<b>configure</b> port string tdm ds3 string network collect-stats boolean
Tree	collect-stats
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **queue-policy** *reference*

Synopsis	Queue policy on the TDM DS3 network channel
Context	<b>configure</b> port string tdm ds3 string network queue-policy reference
Tree	queue-policy
Reference	<b>configure</b> qos network-queue string
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **ppp**

Synopsis	Enter the <b>ppp</b> context
Context	<b>configure</b> port string tdm ds3 string ppp
Tree	ppp
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## keepalive

Synopsis	Enter the <b>keepalive</b> context
Context	<b>configure port string tdm ds3 string ppp keepalive</b>
Tree	<a href="#">keepalive</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## drop-count *number*

Synopsis	Consecutive missed keepalives before port is taken down
Context	<b>configure port string tdm ds3 string ppp keepalive drop-count number</b>
Tree	<a href="#">drop-count</a>
Range	1 to 255
Default	3
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## interval (*number* | *keyword*)

Synopsis	Interval at which keepalive messages are issued
Context	<b>configure port string tdm ds3 string ppp keepalive interval (number   keyword)</b>
Tree	<a href="#">interval</a>
Range	1 to 60
Units	seconds
Options	none
Default	10
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## report-alarm

Synopsis	Enter the <b>report-alarm</b> context
Context	<b>configure port string tdm ds3 string report-alarm</b>
Tree	<a href="#">report-alarm</a>
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **ais** *boolean*

Synopsis Report alarm indication signal errors  
Context **configure** [port](#) [string](#) [tdm ds3](#) [string](#) [report-alarm](#) [ais](#) *boolean*  
Tree [ais](#)  
Default true  
Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **looped** *boolean*

Synopsis Report looped packet errors  
Context **configure** [port](#) [string](#) [tdm ds3](#) [string](#) [report-alarm](#) [looped](#) *boolean*  
Tree [looped](#)  
Default false  
Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **los** *boolean*

Synopsis Report loss of signal errors  
Context **configure** [port](#) [string](#) [tdm ds3](#) [string](#) [report-alarm](#) [los](#) *boolean*  
Tree [los](#)  
Default true  
Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **oof** *boolean*

Synopsis Report out-of-frame errors  
Context **configure** [port](#) [string](#) [tdm ds3](#) [string](#) [report-alarm](#) [oof](#) *boolean*  
Tree [oof](#)  
Default false

Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **rai** *boolean*

Synopsis Report resource availability indicator events  
Context **configure** port string tdm ds3 string report-alarm rai boolean  
Tree rai  
Default false  
Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **scramble** *boolean*

Synopsis Enable TDM DS3 payload scrambling  
Context **configure** port string tdm ds3 string scramble boolean  
Tree scramble  
Description When configured to **true**, the TDM DS3 frame carries randomized patterns of 1s and 0s, which prevents continuous strings of all 1s or all 0s. This meets the needs of physical layer protocols that rely on sufficient transitions between 1s and 0s to maintain clocking.  
When configured to **false**, the strings of all 1s or all 0s are continuous.  
Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **subrate**

Synopsis Enter the **subrate** context  
Context **configure** port string tdm ds3 string subrate  
Tree subrate  
Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**csu-mode** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Channel Service Unit (CSU) compatibility mode
Context	<b>configure</b> port <i>string</i> tdm ds3 <i>string</i> subrate csu-mode <i>keyword</i>
Tree	csu-mode
Options	digital-link, larscom
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**rate-step** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Subrate for the associated DS3
Context	<b>configure</b> port <i>string</i> tdm ds3 <i>string</i> subrate rate-step <i>number</i>
Tree	rate-step
Range	0 to 147
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**e1** [*e1-index*] *string*

Synopsis	Enter the <b>e1</b> list instance
Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i>
Tree	e1
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**[e1-index]** *string*

Synopsis	E-1 channel
Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i>

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Tree	<a href="#">e1</a>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **admin-state** *keyword*

Synopsis	Administrative state of the E1 channel
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">tdm e1</a> <a href="#">string</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **ber-threshold**

Synopsis	Enter the <b>ber-threshold</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">tdm e1</a> <a href="#">string</a> <b>ber-threshold</b>
Tree	<a href="#">ber-threshold</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **signal-degrade** *number*

Synopsis	BER signal degradation threshold
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">tdm e1</a> <a href="#">string</a> <b>ber-threshold</b> <b>signal-degrade</b> <i>number</i>
Tree	<a href="#">signal-degrade</a>
Range	1   5   10   50   100
Default	5
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**signal-failure** *number*

Synopsis	BER signal failure threshold
Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i> ber-threshold signal-failure <i>number</i>
Tree	signal-failure
Range	1   5   10   50   100
Default	50
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**channel-group** [*ds0-index*] *number*

Synopsis	Enter the <b>channel-group</b> list instance
Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i>
Tree	channel-group
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**[ds0-index]** *number*

Synopsis	DS0 channel group in a channelized DS1 or E1 circuit
Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i>
Tree	channel-group
Range	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**admin-state** *keyword*

Synopsis	Administrative state of the E1 channel group
Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **crc number**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Precision of the Cyclic Redundancy Check (CRC)  
 Context **configure** port string tdm e1 string channel-group number crc number  
 Tree [crc](#)  
 Range 16 | 32  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **description string**

Synopsis Text description  
 Context **configure** port string tdm e1 string channel-group number description string  
 Tree [description](#)  
 String Length 1 to 160  
 Default DS0GRP  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **egress**

Synopsis Enter the **egress** context  
 Context **configure** port string tdm e1 string channel-group number egress  
 Tree [egress](#)  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **port-scheduler-policy**

Synopsis Enter the **port-scheduler-policy** context



Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm e1</a> <i>string</i> <a href="#">channel-group</a> <i>number</i> <a href="#">egress</a> <a href="#">port-scheduler-policy</a>
Tree	<a href="#">port-scheduler-policy</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## overrides

Synopsis	Enable the <b>overrides</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm e1</a> <i>string</i> <a href="#">channel-group</a> <i>number</i> <a href="#">egress</a> <a href="#">port-scheduler-policy</a> <a href="#">overrides</a>
Tree	<a href="#">overrides</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## level [[priority-level](#)] *number*

Synopsis	Enter the <b>level</b> list instance
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm e1</a> <i>string</i> <a href="#">channel-group</a> <i>number</i> <a href="#">egress</a> <a href="#">port-scheduler-policy</a> <a href="#">overrides</a> <a href="#">level</a> <i>number</i>
Tree	<a href="#">level</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## [[priority-level](#)] *number*

Synopsis	Port priority levels override
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm e1</a> <i>string</i> <a href="#">channel-group</a> <i>number</i> <a href="#">egress</a> <a href="#">port-scheduler-policy</a> <a href="#">overrides</a> <a href="#">level</a> <i>number</i>
Tree	<a href="#">level</a>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i> percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**cir decimal-number**

Synopsis	CIR for the priority level
Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i> percent-rate cir decimal-number
Tree	cir
Range	0 to 100
Units	percent
Default	100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**pir decimal-number**

Synopsis	PIR for the priority level
Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i> percent-rate pir decimal-number
Tree	pir
Range	0.01 to 100
Units	percent
Default	100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**rate**

Synopsis	Enter the <b>rate</b> context
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Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i> rate
Tree	rate
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **cir** (*number* | *keyword*)

Synopsis	CIR for the priority level
Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i> rate cir ( <i>number</i>   <i>keyword</i> )
Tree	cir
Range	0 to 3200000000
Units	kilobps
Options	sum, max
Default	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **pir** (*number* | *keyword*)

Synopsis	PIR for the priority level
Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i> rate pir ( <i>number</i>   <i>keyword</i> )
Tree	pir
Range	1 to 3200000000
Units	kilobps
Options	max
Default	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **max-rate**

Synopsis	Enter the <b>max-rate</b> context
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Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides max-rate
Tree	max-rate
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **percent-rate** *decimal-number*

Synopsis	PIR
Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides max-rate percent-rate <i>decimal-number</i>
Tree	percent-rate
Range	0.01 to 100
Units	percent
Default	100
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **rate** (*number* | *keyword*)

Synopsis	PIR
Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides max-rate rate ( <i>number</i>   <i>keyword</i> )
Tree	rate
Range	1 to 3200000000
Units	kilobps
Options	max
Default	max
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **policy-name** *reference*

Synopsis	Port egress scheduler policy name
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Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy <i>policy-name</i> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> qos port-scheduler-policy <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### encap-type *keyword*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Encapsulation method used on a port, path, or channel
Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> encap-type <i>keyword</i>
Tree	<a href="#">encap-type</a>
Options	bcp-null, bcp-dot1q, ipcp, ppp-auto, wan-mirror, cem
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### idle-cycle-flag *keyword*

Synopsis	Value transmitted by channel group during idle cycle
Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> idle-cycle-flag <i>keyword</i>
Tree	<a href="#">idle-cycle-flag</a>
Options	flags, ones
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### idle-payload-fill

Synopsis	Enter the <b>idle-payload-fill</b> context
Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> idle-payload-fill
Tree	<a href="#">idle-payload-fill</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## all-ones

Synopsis	Define the 8 bit value to be transmitted as 11111111
Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> idle-payload-fill all-ones
Tree	<a href="#">all-ones</a>
Notes	The following elements are part of a choice: <b>all-ones</b> or <b>pattern</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## pattern number

Synopsis	User-defined pattern to be transmitted
Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> idle-payload-fill pattern <i>number</i>
Tree	<a href="#">pattern</a>
Range	0 to 255
Notes	The following elements are part of a choice: <b>all-ones</b> or <b>pattern</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## idle-signal-fill

Synopsis	Enter the <b>idle-signal-fill</b> context
Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> idle-signal-fill
Tree	<a href="#">idle-signal-fill</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## all-ones

Synopsis	Define the 8-bit value to be transmitted as 11111111
Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> idle-signal-fill all-ones
Tree	<a href="#">all-ones</a>
Notes	The following elements are part of a choice: <b>all-ones</b> or <b>pattern</b> .
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **pattern** *number*

Synopsis User-defined pattern to be transmitted

Context **configure** [port string tdm e1 string channel-group number idle-signal-fill](#) [pattern number](#)

Tree [pattern](#)

Range 0 to 15

Notes The following elements are part of a choice: **all-ones** or **pattern**.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **load-balancing-algorithm** *keyword*

Synopsis Load balancing algorithm to be used on this port

Context **configure** [port string tdm e1 string channel-group number load-balancing-algorithm keyword](#)

Tree [load-balancing-algorithm](#)

Options default, include-l4, exclude-l4

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **mac-address** *string*

Synopsis MAC address for the port

Context **configure** [port string tdm e1 string channel-group number mac-address string](#)

Tree [mac-address](#)

Default 00:00:00:00:00:00

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**mode** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Operation mode
Context	<b>configure</b> port string tdm e1 string channel-group number mode keyword
Tree	mode
Options	access, network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**mtu** *number*

Synopsis	Maximum payload MTU
Context	<b>configure</b> port string tdm e1 string channel-group number mtu number
Tree	mtu
Range	512 to 9208
Units	bytes
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**network**

Synopsis	Enter the <b>network</b> context
Context	<b>configure</b> port string tdm e1 string channel-group number network
Tree	network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**accounting-policy** *reference*

Synopsis	Accounting policy
Context	<b>configure</b> port string tdm e1 string channel-group number network accounting-policy reference
Tree	accounting-policy



Reference	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **collect-stats** *boolean*

Synopsis	Collect accounting and statistical data
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm e1</a> <i>string</i> <a href="#">channel-group</a> <i>number</i> <a href="#">network</a> <b>collect-stats</b> <i>boolean</i>
Tree	<a href="#">collect-stats</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **queue-policy** *reference*

Synopsis	Network queue policy on TDM E0 network channel group
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm e1</a> <i>string</i> <a href="#">channel-group</a> <i>number</i> <a href="#">network</a> <b>queue-policy</b> <i>reference</i>
Tree	<a href="#">queue-policy</a>
Reference	<b>configure</b> <a href="#">qos network-queue</a> <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **ppp**

Synopsis	Enter the <b>ppp</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm e1</a> <i>string</i> <a href="#">channel-group</a> <i>number</i> <b>ppp</b>
Tree	<a href="#">ppp</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **ber-sf-link-down** *boolean*

Synopsis	Set link out-of-service on BER-SF alarm
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm e1</a> <i>string</i> <a href="#">channel-group</a> <i>number</i> <b>ppp</b> <b>ber-sf-link-down</b> <i>boolean</i>

Tree	<a href="#">ber-sf-link-down</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## compress

Synopsis	Enter the <b>compress</b> context
Context	<b>configure</b> <a href="#">port string tdm e1 string channel-group number ppp compress</a>
Tree	<a href="#">compress</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## acfc *boolean*

Synopsis	Enable Address Control Field Compression (ACFC)
Context	<b>configure</b> <a href="#">port string tdm e1 string channel-group number ppp compress acfc boolean</a>
Tree	<a href="#">acfc</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## pfc *boolean*

Synopsis	Enable Protocol Field Compression (PFC)
Context	<b>configure</b> <a href="#">port string tdm e1 string channel-group number ppp compress pfc boolean</a>
Tree	<a href="#">pfc</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## keepalive

Synopsis	Enter the <b>keepalive</b> context
Context	<b>configure</b> <a href="#">port string tdm e1 string channel-group number ppp keepalive</a>

Tree	<a href="#">keepalive</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **drop-count** *number*

Synopsis	Consecutive missed keepalives before port is taken down
Context	<b>configure</b> <a href="#">port string</a> <a href="#">tdm e1 string</a> <a href="#">channel-group number</a> <a href="#">ppp keepalive drop-count number</a>
Tree	<a href="#">drop-count</a>
Range	1 to 255
Default	3
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **interval** (*number* | *keyword*)

Synopsis	Interval at which keepalive messages are issued
Context	<b>configure</b> <a href="#">port string</a> <a href="#">tdm e1 string</a> <a href="#">channel-group number</a> <a href="#">ppp keepalive interval (number   keyword)</a>
Tree	<a href="#">interval</a>
Range	1 to 60
Units	seconds
Options	none
Default	10
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **speed** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Speed of the E0 channels in this channel group
Context	<b>configure</b> <a href="#">port string</a> <a href="#">tdm e1 string</a> <a href="#">channel-group number</a> <a href="#">speed number</a>

Tree	<a href="#">speed</a>
Range	56   64
Default	64
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### timeslot *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure timeslot for this channel group.
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm e1</a> <i>string</i> <a href="#">channel-group</a> <i>number</i> <a href="#">timeslot</a> <i>number</i>
Tree	<a href="#">timeslot</a>
Range	1 to 32
Max.	32
Instances	
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### clock-source *keyword*

Synopsis	Clock for data transmission
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm e1</a> <i>string</i> <a href="#">clock-source</a> <i>keyword</i>
Tree	<a href="#">clock-source</a>
Options	loop-timed, node-timed, adaptive, differential
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### framing *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Framing on the E1 channel
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Context	<b>configure</b> port string tdm e1 string framing keyword
Tree	framing
Options	no-crc-g704, g704, e1-unframed
Default	g704
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **loopback** keyword

Synopsis	Loopback mode
Context	<b>configure</b> port string tdm e1 string loopback keyword
Tree	loopback
Options	line, internal
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **national-bits**

Synopsis	Enter the <b>national-bits</b> context
Context	<b>configure</b> port string tdm e1 string national-bits
Tree	national-bits
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **sa4** boolean

Synopsis	Enable bit Sa4
Context	<b>configure</b> port string tdm e1 string national-bits sa4 boolean
Tree	sa4
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**sa5 boolean**

Synopsis	Enable bit Sa5
Context	<b>configure port string tdm e1 string national-bits sa5 boolean</b>
Tree	<a href="#">sa5</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**sa6 boolean**

Synopsis	Enable bit Sa6
Context	<b>configure port string tdm e1 string national-bits sa6 boolean</b>
Tree	<a href="#">sa6</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**sa7 boolean**

Synopsis	Enable bit Sa7
Context	<b>configure port string tdm e1 string national-bits sa7 boolean</b>
Tree	<a href="#">sa7</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**sa8 boolean**

Synopsis	Enable bit Sa8
Context	<b>configure port string tdm e1 string national-bits sa8 boolean</b>
Tree	<a href="#">sa8</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## report-alarm

Synopsis	Enter the <b>report-alarm</b> context
Context	<b>configure</b> port string tdm e1 string report-alarm
Tree	report-alarm
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## ais boolean

Synopsis	Report alarm indication signal errors
Context	<b>configure</b> port string tdm e1 string report-alarm ais boolean
Tree	ais
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## ber-sd boolean

Synopsis	Enable/disable ber-sd alarm.
Context	<b>configure</b> port string tdm e1 string report-alarm ber-sd boolean
Tree	ber-sd
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## ber-sf boolean

Synopsis	Enable/disable ber-sf alarm.
Context	<b>configure</b> port string tdm e1 string report-alarm ber-sf boolean
Tree	ber-sf
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **looped** *boolean*

Synopsis	Report looped packet errors
Context	<b>configure</b> port string tdm e1 string report-alarm looped boolean
Tree	looped
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **los** *boolean*

Synopsis	Report loss of signal errors
Context	<b>configure</b> port string tdm e1 string report-alarm los boolean
Tree	los
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **oof** *boolean*

Synopsis	Report out-of-frame errors
Context	<b>configure</b> port string tdm e1 string report-alarm oof boolean
Tree	oof
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **rai** *boolean*

Synopsis	Report resource availability indicator events
Context	<b>configure</b> port string tdm e1 string report-alarm rai boolean
Tree	rai
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e



**signal-mode** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Signal mode on the channel
Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i> signal-mode <i>keyword</i>
Tree	signal-mode
Options	channel-associated-signaling
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**e3** [[e3-index](#)] *string*

Synopsis	Enter the <b>e3</b> list instance
Context	<b>configure</b> port <i>string</i> tdm e3 <i>string</i>
Tree	e3
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**[e3-index]** *string*

Synopsis	Components making up the SONET/SDH Path
Context	<b>configure</b> port <i>string</i> tdm e3 <i>string</i>
Tree	e3
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**admin-state** *keyword*

Synopsis	Administrative state of the E3 channel
Context	<b>configure</b> port <i>string</i> tdm e3 <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable

Default	disable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **clock-source** *keyword*

Synopsis	Clock for data transmission
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm e3</a> <i>string</i> <b>clock-source</b> <i>keyword</i>
Tree	<a href="#">clock-source</a>
Options	loop-timed, node-timed
Default	node-timed
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **crc** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Precision of the CRC
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm e3</a> <i>string</i> <b>crc</b> <i>number</i>
Tree	<a href="#">crc</a>
Range	16   32
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm e3</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 160
Default	E3
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">port string tdm e3 string egress</a>
Tree	<a href="#">egress</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**port-scheduler-policy**

Synopsis	Enter the <b>port-scheduler-policy</b> context
Context	<b>configure</b> <a href="#">port string tdm e3 string egress port-scheduler-policy</a>
Tree	<a href="#">port-scheduler-policy</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**overrides**

Synopsis	Enable the <b>overrides</b> context
Context	<b>configure</b> <a href="#">port string tdm e3 string egress port-scheduler-policy overrides</a>
Tree	<a href="#">overrides</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**level** [\[priority-level\]](#) *number*

Synopsis	Enter the <b>level</b> list instance
Context	<b>configure</b> <a href="#">port string tdm e3 string egress port-scheduler-policy overrides level</a> <i>number</i>
Tree	<a href="#">level</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**[priority-level]** *number*

Synopsis	Port priority levels override
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Context	<b>configure</b> <a href="#">port string tdm e3 string egress port-scheduler-policy overrides level number</a>
Tree	<a href="#">level</a>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure</b> <a href="#">port string tdm e3 string egress port-scheduler-policy overrides level number percent-rate</a>
Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **cir decimal-number**

Synopsis	CIR for the priority level
Context	<b>configure</b> <a href="#">port string tdm e3 string egress port-scheduler-policy overrides level number percent-rate cir decimal-number</a>
Tree	<a href="#">cir</a>
Range	0 to 100
Units	percent
Default	100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **pir decimal-number**

Synopsis	PIR for the priority level
Context	<b>configure</b> <a href="#">port string tdm e3 string egress port-scheduler-policy overrides level number percent-rate pir decimal-number</a>
Tree	<a href="#">pir</a>
Range	0.01 to 100

Units	percent
Default	100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> port string tdm e3 string egress port-scheduler-policy overrides level number rate
Tree	rate
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**cir** (*number* | *keyword*)

Synopsis	CIR for the priority level
Context	<b>configure</b> port string tdm e3 string egress port-scheduler-policy overrides level number rate cir ( <i>number</i>   <i>keyword</i> )
Tree	cir
Range	0 to 3200000000
Units	kilobps
Options	sum, max
Default	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**pir** (*number* | *keyword*)

Synopsis	PIR for the priority level
Context	<b>configure</b> port string tdm e3 string egress port-scheduler-policy overrides level number rate pir ( <i>number</i>   <i>keyword</i> )
Tree	pir
Range	1 to 3200000000
Units	kilobps

Options	max
Default	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**max-rate**

Synopsis	Enter the <b>max-rate</b> context
Context	<b>configure</b> port <i>string</i> tdm e3 <i>string</i> egress port-scheduler-policy overrides max-rate
Tree	<a href="#">max-rate</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**percent-rate** *decimal-number*

Synopsis	PIR
Context	<b>configure</b> port <i>string</i> tdm e3 <i>string</i> egress port-scheduler-policy overrides max-rate <a href="#">percent-rate</a> <i>decimal-number</i>
Tree	<a href="#">percent-rate</a>
Range	0.01 to 100
Units	percent
Default	100
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**rate** (*number* | *keyword*)

Synopsis	PIR
Context	<b>configure</b> port <i>string</i> tdm e3 <i>string</i> egress port-scheduler-policy overrides max-rate <a href="#">rate</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">rate</a>
Range	1 to 3200000000
Units	kilobps
Options	max

Default	max
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **policy-name** *reference*

Synopsis	Port egress scheduler policy name
Context	<b>configure</b> port string tdm e3 string egress port-scheduler-policy policy-name <i>reference</i>
Tree	policy-name
Reference	<b>configure</b> qos port-scheduler-policy string
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **encap-type** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Encapsulation method used on a port, path, or channel
Context	<b>configure</b> port string tdm e3 string encap-type keyword
Tree	encap-type
Options	bcp-null, bcp-dot1q, ipcp, ppp-auto, wan-mirror, cem
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **framing** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Framing for the E3 channel
Context	<b>configure</b> port string tdm e3 string framing keyword
Tree	framing

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Options	g751, g832, e3-unframed
Default	g751
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **idle-cycle-flag** *keyword*

Synopsis	Value transmitted by channel group during idle cycle
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm e3</a> <i>string</i> <b>idle-cycle-flag</b> <i>keyword</i>
Tree	<a href="#">idle-cycle-flag</a>
Options	flags, ones
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **load-balancing-algorithm** *keyword*

Synopsis	Load balancing algorithm to be used on this port
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm e3</a> <i>string</i> <b>load-balancing-algorithm</b> <i>keyword</i>
Tree	<a href="#">load-balancing-algorithm</a>
Options	default, include-l4, exclude-l4
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **loopback** *keyword*

Synopsis	Loopback mode
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm e3</a> <i>string</i> <b>loopback</b> <i>keyword</i>
Tree	<a href="#">loopback</a>
Options	line, internal
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **mac-address** *string*

Synopsis	MAC address for the port
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Context	<b>configure</b> port string tdm e3 string mac-address string
Tree	mac-address
Default	00:00:00:00:00:00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### mode keyword



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Operation mode
Context	<b>configure</b> port string tdm e3 string mode keyword
Tree	mode
Options	access, network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### mtu number

Synopsis	Maximum payload MTU size
Context	<b>configure</b> port string tdm e3 string mtu number
Tree	mtu
Range	512 to 9208
Units	bytes
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### network

Synopsis	Enter the <b>network</b> context
Context	<b>configure</b> port string tdm e3 string network
Tree	network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **accounting-policy** *reference*

Synopsis	Accounting policy
Context	<b>configure</b> <a href="#">port string tdm e3 string network accounting-policy reference</a>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log accounting-policy number</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **collect-stats** *boolean*

Synopsis	Collect accounting and statistical data
Context	<b>configure</b> <a href="#">port string tdm e3 string network collect-stats boolean</a>
Tree	<a href="#">collect-stats</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **queue-policy** *reference*

Synopsis	Queue policy on the TDM E3 network channel
Context	<b>configure</b> <a href="#">port string tdm e3 string network queue-policy reference</a>
Tree	<a href="#">queue-policy</a>
Reference	<b>configure</b> <a href="#">qos network-queue string</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **ppp**

Synopsis	Enter the <b>ppp</b> context
Context	<b>configure</b> <a href="#">port string tdm e3 string ppp</a>
Tree	<a href="#">ppp</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## keepalive

Synopsis	Enter the <b>keepalive</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm e3</a> <i>string</i> <a href="#">ppp</a> <a href="#">keepalive</a>
Tree	<a href="#">keepalive</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## drop-count *number*

Synopsis	Consecutive missed keepalives before port is taken down
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm e3</a> <i>string</i> <a href="#">ppp</a> <a href="#">keepalive</a> <a href="#">drop-count</a> <i>number</i>
Tree	<a href="#">drop-count</a>
Range	1 to 255
Default	3
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## interval (*number* | *keyword*)

Synopsis	Interval at which keepalive messages are issued
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm e3</a> <i>string</i> <a href="#">ppp</a> <a href="#">keepalive</a> <a href="#">interval</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">interval</a>
Range	1 to 60
Units	seconds
Options	none
Default	10
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## report-alarm

Synopsis	Enter the <b>report-alarm</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm e3</a> <i>string</i> <a href="#">report-alarm</a>
Tree	<a href="#">report-alarm</a>

Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **ais** *boolean*

Synopsis Report alarm indication signal errors  
Context **configure** port string tdm e3 string report-alarm ais boolean  
Tree ais  
Default true  
Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **looped** *boolean*

Synopsis Report looped packet errors  
Context **configure** port string tdm e3 string report-alarm looped boolean  
Tree looped  
Default false  
Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **los** *boolean*

Synopsis Report loss of signal errors  
Context **configure** port string tdm e3 string report-alarm los boolean  
Tree los  
Default true  
Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **oof** *boolean*

Synopsis Report out-of-frame errors  
Context **configure** port string tdm e3 string report-alarm oof boolean  
Tree oof

Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**rai** *boolean*

Synopsis	Report resource availability indicator events
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm e3</a> <i>string</i> <a href="#">report-alarm</a> <b>rai</b> <i>boolean</i>
Tree	<a href="#">rai</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**scramble** *boolean*

Synopsis	Enable TDM E3 payload scrambling
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm e3</a> <i>string</i> <a href="#">scramble</a> <i>boolean</i>
Tree	<a href="#">scramble</a>
Description	When configured to <b>true</b> , the TDM E3 frame carries randomized patterns of 1s and 0s, which prevents continuous strings of all 1s or all 0s. This meets the needs of physical layer protocols that rely on sufficient transitions between 1s and 0s to maintain clocking. When configured to <b>false</b> , the strings of all 1s or all 0s are continuous.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**hold-time**

Synopsis	Enter the <b>hold-time</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm</a> <b>hold-time</b>
Tree	<a href="#">hold-time</a>
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**down** *number*

Synopsis	Hold timer for link down event dampening
----------	--

Context	<b>configure port string tdm hold-time down number</b>
Tree	<b>down</b>
Range	0 to 100
Default	5
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **up number**

Synopsis	Hold timer for link up event dampening
Context	<b>configure port string tdm hold-time up number</b>
Tree	<b>up</b>
Range	1 to 100
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **transceiver**

Synopsis	Enter the <b>transceiver</b> context
Context	<b>configure port string transceiver</b>
Tree	<b>transceiver</b>
Introduced	16.0.R4
Platforms	All

### **digital-coherent-optics boolean**

Synopsis	Enable digital coherent optics module for transceiver
Context	<b>configure port string transceiver digital-coherent-optics boolean</b>
Tree	<b>digital-coherent-optics</b>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### 3.33 port-policy commands

```
configure
- port-policy string
- apply-groups reference
- apply-groups-exclude reference
- description string
- egress-port-scheduler-policy reference
```

### 3.33.1 port-policy command descriptions

#### **port-policy** [[name](#)] *string*

Synopsis	Enter the <b>port-policy</b> list instance
Context	<b>configure</b> <a href="#">port-policy</a> <i>string</i>
Tree	<a href="#">port-policy</a>
Max. Instances	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

#### **[name]** *string*

Synopsis	Port policy name
Context	<b>configure</b> <a href="#">port-policy</a> <i>string</i>
Tree	<a href="#">port-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

#### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">port-policy</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

#### **egress-port-scheduler-policy** *reference*

Synopsis	Policy for egress port scheduler
Context	<b>configure</b> <a href="#">port-policy</a> <i>string</i> <a href="#">egress-port-scheduler-policy</a> <i>reference</i>



---

Tree	<a href="#">egress-port-scheduler-policy</a>
Reference	<b>configure</b> <a href="#">qos port-scheduler-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## 3.34 port-xc commands

```
configure
- port-xc
  - apply-groups reference
  - apply-groups-exclude reference
  - pxc number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - port-id reference
```

### 3.34.1 port-xc command descriptions

#### port-xc

Synopsis	Enter the <b>port-xc</b> context
Context	<b>configure port-xc</b>
Tree	<a href="#">port-xc</a>
Description	Commands in this context configure port cross-connect (PXC) functionality.
Introduced	16.0.R1
Platforms	All

#### pxc [[pxc-id](#)] *number*

Synopsis	Enter the <b>pxc</b> list instance
Context	<b>configure port-xc pxc number</b>
Tree	<a href="#">pxc</a>
Description	Commands in this context configure port cross-connect (PXC) information.
Introduced	16.0.R1
Platforms	All

#### [\[pxc-id\]](#) *number*

Synopsis	PXC ID
Context	<b>configure port-xc pxc number</b>
Tree	<a href="#">pxc</a>
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

#### **admin-state** *keyword*

Synopsis	Administrative state of the PXC
Context	<b>configure port-xc pxc number admin-state keyword</b>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">port-xc pxc number</a> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **port-id** *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	PXC port ID
Context	<b>configure</b> <a href="#">port-xc pxc number</a> <a href="#">port-id reference</a>
Tree	<a href="#">port-id</a>
Reference	<b>configure</b> <a href="#">port string</a>
Introduced	16.0.R1
Platforms	All

### 3.35 pw-port commands

```

configure
- pw-port number
- apply-groups reference
- apply-groups-exclude reference
- description string
- dot1q-etype string
- encap-type keyword
- epipe reference
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- down-on-peer-tldp-pw-status-faults boolean
- egress
- shaper
  - intermediate-destination-id string
  - virtual-port string
- fpe-id reference
- monitor-oper-group reference
- oper-up-on-mh-standby boolean
- oper-group reference
- qinq-etype string
- sdp reference
- admin-state keyword
- adv-service-mtu number
- apply-groups reference
- apply-groups-exclude reference
- control-word boolean
- egress
- shaper
  - intermediate-destination-id string
  - pw-sap-secondary-shaper string
  - virtual-port string
- vc-label number
- entropy-label boolean
- ingress
- vc-label number
- monitor-oper-group reference
- vc-id number
- vc-type keyword
- vlan-vc-tag number

```

### 3.35.1 pw-port command descriptions

#### **pw-port** [*pw-port-id*] *number*

Synopsis	Enter the <b>pw-port</b> list instance
Context	<b>configure</b> <i>pw-port number</i>
Tree	<i>pw-port</i>
Introduced	16.0.R4
Platforms	All

#### **[pw-port-id]** *number*

Synopsis	Pseudowire port ID
Context	<b>configure</b> <i>pw-port number</i>
Tree	<i>pw-port</i>
Range	1 to 32767
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

#### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <i>pw-port number description string</i>
Tree	<i>description</i>
String Length	1 to 255
Default	PW Port
Introduced	16.0.R4
Platforms	All

#### **dot1q-etype** *string*

Synopsis	Dot1q Ethertype on the PW port
Context	<b>configure</b> <i>pw-port number dot1q-etype string</i>
Tree	<i>dot1q-etype</i>

Default	33024
Introduced	16.0.R4
Platforms	All

### **encap-type** *keyword*

Synopsis	Encap type of the pseudo-wire port
Context	<b>configure</b> <a href="#">pw-port number</a> <a href="#">encap-type keyword</a>
Tree	<a href="#">encap-type</a>
Options	dot1q, qinq
Default	dot1q
Introduced	16.0.R4
Platforms	All

### **epipe** [[service-name](#)] *reference*

Synopsis	Enter the <b>epipe</b> list instance
Context	<b>configure</b> <a href="#">pw-port number</a> <a href="#">epipe reference</a>
Tree	<a href="#">epipe</a>
Max. Instances	1
Notes	The following elements are part of a choice: <b>epipe</b> or <b>sdp</b> .
Introduced	16.0.R4
Platforms	All

### **[service-name]** *reference*

Synopsis	Administrative service name
Context	<b>configure</b> <a href="#">pw-port number</a> <a href="#">epipe reference</a>
Tree	<a href="#">epipe</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">epipe string</a>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the pseudowire port
Context	<b>configure</b> <a href="#">pw-port</a> <i>number</i> <a href="#">epipe</a> <i>reference</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

**down-on-peer-tldp-pw-status-faults** *boolean*

Synopsis	Force PW port to go down for certain PW status bits
Context	<b>configure</b> <a href="#">pw-port</a> <i>number</i> <a href="#">epipe</a> <i>reference</i> <b>down-on-peer-tldp-pw-status-faults</b> <i>boolean</i>
Tree	<a href="#">down-on-peer-tldp-pw-status-faults</a>
Description	<p>When configured to <b>true</b>, the router causes the PW port configured on an Epipe to go locally operationally down if any of the following status bits are received on a mate spoke SDP across an FPE:</p> <ul style="list-style-type: none"> <li>• 0x00000001 - Pseudowire Not Forwarding</li> <li>• 0x00000002 - Local Attachment Circuit (ingress) Receive Fault</li> <li>• 0x00000004 - Local Attachment Circuit (egress) Transmit Fault</li> <li>• 0x00000008 - Local PSN-facing PW (ingress) Receive Fault</li> <li>• 0x00000010 - Local PSN-facing PW (egress) Transmit Fault</li> </ul> <p>When configured to <b>false</b>, the mate PW status fault bits are not taken into account in the operational state of the PW port.</p>
Default	false
Introduced	22.2.R1
Platforms	All

**egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">pw-port</a> <i>number</i> <a href="#">epipe</a> <i>reference</i> <b>egress</b>
Tree	<a href="#">egress</a>
Introduced	16.0.R4
Platforms	All



## shaper

Synopsis	Enter the <b>shaper</b> context
Context	<b>configure</b> <a href="#">pw-port number</a> <a href="#">epipe reference</a> <a href="#">egress shaper</a>
Tree	<a href="#">shaper</a>
Introduced	16.0.R4
Platforms	All

## intermediate-destination-id *string*

Synopsis	Intermediate destination ID for ESM PW SAPs
Context	<b>configure</b> <a href="#">pw-port number</a> <a href="#">epipe reference</a> <a href="#">egress shaper intermediate-destination-id string</a>
Tree	<a href="#">intermediate-destination-id</a>
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

## virtual-port *string*

Synopsis	Virtual port name of the egress shaper
Context	<b>configure</b> <a href="#">pw-port number</a> <a href="#">epipe reference</a> <a href="#">egress shaper virtual-port string</a>
Tree	<a href="#">virtual-port</a>
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

## fpe-id *reference*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Forwarding Path Extension ID
Context	<b>configure</b> <a href="#">pw-port number</a> <a href="#">epipe reference</a> <a href="#">fpe-id reference</a>
Tree	<a href="#">fpe-id</a>

Reference	<b>configure fwd-path-ext fpe number</b>
Introduced	16.0.R4
Platforms	All

### **monitor-oper-group reference**

Synopsis	Name of the operational group to monitor
Context	<b>configure pw-port number epipe reference monitor-oper-group reference</b>
Tree	<a href="#">monitor-oper-group</a>
Reference	<b>configure service oper-group string</b>
Introduced	16.0.R4
Platforms	All

### **oper-up-on-mh-standby boolean**

Synopsis	Sets PW port to operationally up on MH standby
Context	<b>configure pw-port number epipe reference oper-up-on-mh-standby boolean</b>
Tree	<a href="#">oper-up-on-mh-standby</a>
Description	<p>When configured to <b>true</b>, this command allows the PW port to remain operationally up on the non-DF PE and all the PW SAPs contained in the PW port.</p> <p>The PW port status shows operationally up status with a flag MH Standby.</p> <p>When configured to <b>false</b>, this command causes the PW port to remain operationally down on the non-DF PE and all the PW SAPs contained in the PW port.</p>
Default	false
Introduced	22.2.R1
Platforms	All

### **oper-group reference**

Synopsis	Operational group ID
Context	<b>configure pw-port number oper-group reference</b>
Tree	<a href="#">oper-group</a>
Reference	<b>configure service oper-group string</b>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**qinq-etype** *string*

Synopsis	QinQ Ethertype encapsulation on the PW port
Context	<b>configure</b> <i>pw-port number qinq-etype string</i>
Tree	<a href="#">qinq-etype</a>
Default	33024
Introduced	16.0.R4
Platforms	All

**sdp** [[sdp-id](#)] *reference*

Synopsis	Enter the <b>sdp</b> list instance
Context	<b>configure</b> <i>pw-port number sdp reference</i>
Tree	<a href="#">sdp</a>
Max. Instances	1
Notes	The following elements are part of a choice: <b>epipe</b> or <b>sdp</b> .
Introduced	16.0.R4
Platforms	All

**[sdp-id]** *reference*

Synopsis	SDP ID
Context	<b>configure</b> <i>pw-port number sdp reference</i>
Tree	<a href="#">sdp</a>
Reference	<b>configure</b> <i>service sdp number</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the pseudowire port
Context	<b>configure</b> <i>pw-port number sdp reference admin-state keyword</i>
Tree	<a href="#">admin-state</a>

---

Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

### **adv-service-mtu** *number*

Synopsis	Service MTU size to be used
Context	<b>configure</b> <a href="#">pw-port number sdp reference</a> <a href="#">adv-service-mtu number</a>
Tree	<a href="#">adv-service-mtu</a>
Range	0 to 9782
Units	bytes
Introduced	21.7.R1
Platforms	All

### **control-word** *boolean*

Synopsis	Allow control word bit setting in the label message
Context	<b>configure</b> <a href="#">pw-port number sdp reference</a> <a href="#">control-word boolean</a>
Tree	<a href="#">control-word</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">pw-port number sdp reference</a> <a href="#">egress</a>
Tree	<a href="#">egress</a>
Introduced	16.0.R4
Platforms	All

### **shaper**

Synopsis	Enter the <b>shaper</b> context
----------	---------------------------------

---

Context	<b>configure</b> <a href="#">pw-port number sdp reference egress shaper</a>
Tree	<a href="#">shaper</a>
Introduced	16.0.R4
Platforms	All

### **intermediate-destination-id** *string*

Synopsis	Intermediate destination ID applicable to ESM PW SAPs
Context	<b>configure</b> <a href="#">pw-port number sdp reference egress shaper intermediate-destination-id string</a>
Tree	<a href="#">intermediate-destination-id</a>
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

### **pw-sap-secondary-shaper** *string*

Synopsis	Secondary shaper applicable to PW SAPs
Context	<b>configure</b> <a href="#">pw-port number sdp reference egress shaper pw-sap-secondary-shaper string</a>
Tree	<a href="#">pw-sap-secondary-shaper</a>
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

### **virtual-port** *string*

Synopsis	Virtual port applicable to all PW SAPs
Context	<b>configure</b> <a href="#">pw-port number sdp reference egress shaper virtual-port string</a>
Tree	<a href="#">virtual-port</a>
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

**vc-label** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress VC label representing the PW port
Context	<b>configure</b> <a href="#">pw-port number</a> <a href="#">sdp reference</a> <a href="#">egress vc-label number</a>
Tree	<a href="#">vc-label</a>
Range	16 to 1048575
Introduced	16.0.R4
Platforms	All

**entropy-label** *boolean*

Synopsis	Enable entropy level insertion on the PW port
Context	<b>configure</b> <a href="#">pw-port number</a> <a href="#">sdp reference</a> <a href="#">entropy-label boolean</a>
Tree	<a href="#">entropy-label</a>
Description	<p>When configured to <b>true</b>, the entropy label and ELI are inserted in packets for which at least one LSP in the stack for the far-end of the tunnel used by the service has advertised entropy label capability.</p> <ul style="list-style-type: none"> <li>For RSVP or SR-TE tunnels, the <b>entropy-label</b> command must be set to <b>true</b> under the <b>configure router mpls</b> or <b>configure router mpls lsp</b> context.</li> <li>For SR-ISIS, SR-OSPF, or SR-TE tunnels, the <b>override-tunnel-elic</b> command must be set to <b>true</b> under the <b>configure router isis entropy-label</b> or <b>configure router ospf entropy-label</b> context.</li> <li>For LDP tunnels, the <b>entropy-label-capability</b> command must be set to <b>true</b> under the <b>configure router ldp</b> context.</li> </ul> <p>When configured to <b>false</b>, entropy label insertion on the PW port is not allowed.</p> <p>The entropy label is only applicable to PW ports bound to a static port; it is not applicable to ports using an FPE.</p>
Default	false
Introduced	21.5.R1
Platforms	All

**ingress**

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">pw-port number</a> <a href="#">sdp reference</a> <a href="#">ingress</a>

Tree	<a href="#">ingress</a>
Introduced	16.0.R4
Platforms	All

**vc-label** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ingress VC label representing the PW-port
Context	<b>configure</b> <a href="#">pw-port</a> <i>number</i> <a href="#">sdp</a> <i>reference</i> <a href="#">ingress</a> <a href="#">vc-label</a> <i>number</i>
Tree	<a href="#">vc-label</a>
Range	1 to 1048575
Introduced	16.0.R4
Platforms	All

**monitor-oper-group** *reference*

Synopsis	Name of the operational group to monitor
Context	<b>configure</b> <a href="#">pw-port</a> <i>number</i> <a href="#">sdp</a> <i>reference</i> <a href="#">monitor-oper-group</a> <i>reference</i>
Tree	<a href="#">monitor-oper-group</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <i>string</i>
Introduced	16.0.R4
Platforms	All

**vc-id** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Virtual Circuit ID signaled to the peer
Context	<b>configure</b> <a href="#">pw-port</a> <i>number</i> <a href="#">sdp</a> <i>reference</i> <a href="#">vc-id</a> <i>number</i>
Tree	<a href="#">vc-id</a>
Range	1 to 4294967295

---

Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **vc-type** *keyword*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Forwarding mode for the PW-port
Context	<b>configure</b> <a href="#">pw-port number sdp reference</a> <a href="#">vc-type keyword</a>
Tree	<a href="#">vc-type</a>
Options	ether, vlan
Default	ether
Introduced	16.0.R4
Platforms	All

### **vlan-vc-tag** *number*

Synopsis	VLAN VC tag
Context	<b>configure</b> <a href="#">pw-port number sdp reference</a> <a href="#">vlan-vc-tag number</a>
Tree	<a href="#">vlan-vc-tag</a>
Range	0 to 4094
Introduced	16.0.R4
Platforms	All



### 3.36 python commands

```

configure
- python
  - apply-groups reference
  - apply-groups-exclude reference
  - python-policy string
    - apply-groups reference
    - apply-groups-exclude reference
  - cache
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - entry-size number
    - max-entries number
    - max-entry-lifetime number
    - mcs-peer
      - apply-groups reference
      - apply-groups-exclude reference
      - ip-address reference
      - sync-tag string
    - minimum-lifetimes
      - high-availability number
      - multi-chassis-redundancy number
      - persistence number
    - persistence boolean
  - description string
  - dhcp keyword direction keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - script reference
  - dhcp6 keyword direction keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - script reference
  - diameter keyword direction keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - script reference
  - gtpv1-c keyword direction keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - script reference
  - gtpv2-c keyword direction keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - script reference
  - nat-group reference
  - pfc keyword direction keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - script reference
  - pppoe keyword direction keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - script reference
  - radius keyword direction keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - script reference
  - syslog

```

---

configure python python-policy syslog apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **script** *reference*
- **vsd**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **script** *reference*
- **wlan-gw-group** *reference*
- **python-script** *string*
  - **action-on-fail** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **protection**
    - **hmac-sha256** *string*
  - **run-as-user** *string*
  - **urls** *string*
  - **version** *keyword*

### 3.36.1 python command descriptions

#### python

Synopsis	Enter the <b>python</b> context
Context	<b>configure</b> <a href="#">python</a>
Tree	<a href="#">python</a>
Introduced	16.0.R1
Platforms	All

#### python-policy [[name](#)] *string*

Synopsis	Enter the <b>python-policy</b> list instance
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i>
Tree	<a href="#">python-policy</a>
Max. Instances	64
Introduced	16.0.R1
Platforms	All

#### [[name](#)] *string*

Synopsis	Python policy name
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i>
Tree	<a href="#">python-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

#### cache

Synopsis	Enable the <b>cache</b> context
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">cache</a>
Tree	<a href="#">cache</a>

Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the Python cache
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">cache</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **entry-size** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum data structure size for Python cache entry
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">cache</a> <b>entry-size</b> <i>number</i>
Tree	<a href="#">entry-size</a>
Range	32 to 2048
Units	bytes
Default	256
Introduced	16.0.R1
Platforms	All

### **max-entries** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of Python cache entries to be stored
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">cache</a> <b>max-entries</b> <i>number</i>
Tree	<a href="#">max-entries</a>

Range	1 to 1000000
Default	128000
Introduced	16.0.R1
Platforms	All

### **max-entry-lifetime** *number*

Synopsis	Maximum lifetime for each Python cache entry
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">cache</a> <a href="#">max-entry-lifetime</a> <i>number</i>
Tree	<a href="#">max-entry-lifetime</a>
Range	1 to 604800
Units	seconds
Default	86400
Introduced	16.0.R1
Platforms	All

### **mcs-peer**

Synopsis	Enable the <b>mcs-peer</b> context
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">cache</a> <a href="#">mcs-peer</a>
Tree	<a href="#">mcs-peer</a>
Introduced	16.0.R1
Platforms	All

### **ip-address** *reference*

Synopsis	IP address of the MCS peer
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">cache</a> <a href="#">mcs-peer</a> <a href="#">ip-address</a> <i>reference</i>
Tree	<a href="#">ip-address</a>
Reference	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **sync-tag** *string*

Synopsis	Tag to synchronize the cached entries in the policy
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">cache</a> <a href="#">mcs-peer</a> <b>sync-tag</b> <i>string</i>
Tree	<a href="#">sync-tag</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **minimum-lifetimes**

Synopsis	Enter the <b>minimum-lifetimes</b> context
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">cache</a> <b>minimum-lifetimes</b>
Tree	<a href="#">minimum-lifetimes</a>
Introduced	16.0.R1
Platforms	All

### **high-availability** *number*

Synopsis	Minimum lifetime of a cache entry to be synced with CPM
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">cache</a> <b>minimum-lifetimes</b> <b>high-availability</b> <i>number</i>
Tree	<a href="#">high-availability</a>
Range	1 to 600
Units	seconds
Introduced	16.0.R1
Platforms	All

### **multi-chassis-redundancy** *number*

Synopsis	Minimum lifetime for synchronization with the MCS peer
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">cache</a> <b>minimum-lifetimes</b> <b>multi-chassis-redundancy</b> <i>number</i>
Tree	<a href="#">multi-chassis-redundancy</a>
Range	1 to 600

Units	seconds
Introduced	16.0.R1
Platforms	All

### **persistence** *number*

Synopsis	Minimum lifetime for cache entry to be made persistent
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">cache</a> <a href="#">minimum-lifetimes</a> <a href="#">persistence</a> <i>number</i>
Tree	<a href="#">persistence</a>
Range	1 to 1800
Units	seconds
Introduced	16.0.R1
Platforms	All

### **persistence** *boolean*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow persistence for cached entries
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">cache</a> <a href="#">persistence</a> <i>boolean</i>
Tree	<a href="#">persistence</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**dhcp** [*message-type*] *keyword direction keyword*

Synopsis	Enter the <b>dhcp</b> list instance
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <b>dhcp</b> <i>keyword direction keyword</i>
Tree	<a href="#">dhcp</a>
Introduced	16.0.R1
Platforms	All

**[message-type]** *keyword*

Synopsis	DHCP message type
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <b>dhcp</b> <i>keyword direction keyword</i>
Tree	<a href="#">dhcp</a>
Options	discover, offer, request, decline, ack, nak, release, inform, force-renew, lease-query, lease-unassigned, lease-unknown, lease-active
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**direction** *keyword*

Synopsis	Event that is either incoming or outgoing
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <b>dhcp</b> <i>keyword direction keyword</i>
Tree	<a href="#">dhcp</a>
Options	ingress, egress
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**script** *reference*

Synopsis	Python script to handle the message
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <b>dhcp</b> <i>keyword direction keyword</i> <a href="#">script</a> <i>reference</i>
Tree	<a href="#">script</a>
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-script</a> <i>string</i>



Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **dhcp6** [[message-type](#)] *keyword direction keyword*

Synopsis	Enter the <b>dhcp6</b> list instance
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">dhcp6</a> <i>keyword direction keyword</i>
Tree	<a href="#">dhcp6</a>
Introduced	16.0.R1
Platforms	All

### **[message-type]** *keyword*

Synopsis	DHCPv6 message type
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">dhcp6</a> <i>keyword direction keyword</i>
Tree	<a href="#">dhcp6</a>
Options	solicit, advertise, request, confirm, renew, rebind, reply, release, decline, reconfigure, info-request, relay-forward, relay-reply
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **direction** *keyword*

Synopsis	Event that is either incoming or outgoing
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">dhcp6</a> <i>keyword direction keyword</i>
Tree	<a href="#">dhcp6</a>
Options	ingress, egress
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**script** *reference*

Synopsis	Python script to handle the message
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">dhcp6</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i> <a href="#">script</a> <i>reference</i>
Tree	<a href="#">script</a>
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-script</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**diameter** [[message-type](#)] *keyword* [direction](#) *keyword*

Synopsis	Enter the <b>diameter</b> list instance
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">diameter</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">diameter</a>
Introduced	16.0.R1
Platforms	All

**[message-type]** *keyword*

Synopsis	Diameter message type
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">diameter</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">diameter</a>
Options	ccr, cca, rar, raa, cer, cea, dwr, dwa, dpr, dpa, asr, asa, aar, aaa
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**direction** *keyword*

Synopsis	Event that is either incoming or outgoing
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">diameter</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">diameter</a>
Options	ingress, egress
Notes	This element is part of a list key.

Introduced	16.0.R1
Platforms	All

### **script** *reference*

Synopsis	Python script to handle the message
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">diameter</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i> <a href="#">script</a> <i>reference</i>
Tree	<a href="#">script</a>
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-script</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **gtpv1-c** [[message-type](#)] *keyword* [direction](#) *keyword*

Synopsis	Enter the <b>gtpv1-c</b> list instance
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">gtpv1-c</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">gtpv1-c</a>
Introduced	16.0.R1
Platforms	All

### **[message-type]** *keyword*

Synopsis	GTPv1-C message type
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">gtpv1-c</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">gtpv1-c</a>
Options	echo-request, echo-response, version-not-supported, create-pdp-context-request, create-pdp-context-response, delete-pdp-context-request, delete-pdp-context-response, error-indication, end-marker
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**direction** *keyword*

Synopsis	Event that is either incoming or outgoing
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">gtpv1-c</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">gtpv1-c</a>
Options	ingress, egress
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**script** *reference*

Synopsis	Python script to handle the message
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">gtpv1-c</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i> <a href="#">script</a> <i>reference</i>
Tree	<a href="#">script</a>
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-script</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**gtpv2-c** [[message-type](#)] *keyword* [direction](#) *keyword*

Synopsis	Enter the <b>gtpv2-c</b> list instance
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">gtpv2-c</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">gtpv2-c</a>
Introduced	16.0.R1
Platforms	All

**[message-type]** *keyword*

Synopsis	GTPv2-C message type
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">gtpv2-c</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">gtpv2-c</a>
Options	echo-request, echo-response, version-not-supported, create-session-request, create-session-response, modify-bearer-request, modify-bearer-response, delete-session-request, delete-session-response, delete-bearer-request,

delete-bearer-response, release-access-bearers-request, release-access-bearers-response, downlink-data-notification, downlink-data-notification-ack, change-notification-request, change-notification-response, stop-paging-indication

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **direction** *keyword*

Synopsis	Event that is either incoming or outgoing
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">gtpv2-c</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">gtpv2-c</a>
Options	ingress, egress
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **script** *reference*

Synopsis	Python script to handle the message
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">gtpv2-c</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i> <a href="#">script</a> <i>reference</i>
Tree	<a href="#">script</a>
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-script</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **nat-group** *reference*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT ISA group for this Python policy
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">nat-group</a> <i>reference</i>

Tree	<a href="#">nat-group</a>
Reference	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i>
Notes	The following elements are part of a choice: <b>nat-group</b> or <b>wlan-gw-group</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **pfcp** [[message-type](#)] *keyword direction keyword*

Synopsis	Enter the <b>pfcp</b> list instance
Context	<b>configure</b> <a href="#">python python-policy</a> <i>string pfcp keyword direction keyword</i>
Tree	<a href="#">pfcp</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[message-type]** *keyword*

Synopsis	Message type applied to the script
Context	<b>configure</b> <a href="#">python python-policy</a> <i>string pfcp keyword direction keyword</i>
Tree	<a href="#">pfcp</a>
Options	heartbeat-request, heartbeat-response, association-setup-request, association-setup-response, association-update-request, association-update-response, association-release-request, association-release-response, node-report-request, node-report-response, session-estab-request, session-estab-response, session-mod-request, session-mod-response, session-del-request, session-del-response, session-report-request, session-report-response
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **direction** *keyword*

Synopsis	Event that is either incoming or outgoing
Context	<b>configure</b> <a href="#">python python-policy</a> <i>string pfcp keyword direction keyword</i>
Tree	<a href="#">pfcp</a>
Options	ingress, egress
Notes	This element is part of a list key.

Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**script** *reference*

Synopsis	Python script to handle the message
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">pfc</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i> <a href="#">script</a> <i>reference</i>
Tree	<a href="#">script</a>
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-script</a> <i>string</i>
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pppoe** [[message-type](#)] *keyword* [direction](#) *keyword*

Synopsis	Enter the <b>pppoe</b> list instance
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">pppoe</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">pppoe</a>
Introduced	16.0.R1
Platforms	All

**[message-type]** *keyword*

Synopsis	PPPoE message type
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">pppoe</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">pppoe</a>
Options	session-lcp, session-pap, session-chap, session-ipcp, session-ip6cp, pado, padi, padr, pads, padt
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**direction** *keyword*

Synopsis	Event that is either incoming or outgoing
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Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">pppoe</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">pppoe</a>
Options	ingress, egress
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **script** *reference*

Synopsis	Python script to handle the message
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">pppoe</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i> <a href="#">script</a> <i>reference</i>
Tree	<a href="#">script</a>
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-script</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **radius** [[message-type](#)] *keyword* [direction](#) *keyword*

Synopsis	Enter the <b>radius</b> list instance
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">radius</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">radius</a>
Introduced	16.0.R1
Platforms	All

### **[message-type]** *keyword*

Synopsis	RADIUS message type
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">radius</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">radius</a>
Options	access-request, access-accept, access-reject, accounting-request, accounting-response, access-challenge, disconnect-request, change-of-authorization-request
Notes	This element is part of a list key.
Introduced	16.0.R1



Platforms All

### **direction** *keyword*

Synopsis Event that is either incoming or outgoing

Context **configure** [python](#) [python-policy](#) *string* [radius](#) *keyword* **direction** *keyword*

Tree [radius](#)

Options ingress, egress

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **script** *reference*

Synopsis Python script to handle the message

Context **configure** [python](#) [python-policy](#) *string* [radius](#) *keyword* **direction** *keyword* **script** *reference*

Tree [script](#)

Reference **configure** [python](#) [python-script](#) *string*

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

### **syslog**

Synopsis Enable the **syslog** context

Context **configure** [python](#) [python-policy](#) *string* **syslog**

Tree [syslog](#)

Introduced 16.0.R1

Platforms All

### **script** *reference*

Synopsis Python script name for outgoing syslog messages

Context **configure** [python](#) [python-policy](#) *string* **syslog** **script** *reference*

Tree [script](#)

Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-script</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## **vsd**

Synopsis	Enable the <b>vsd</b> context
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">vsd</a>
Tree	<a href="#">vsd</a>
Introduced	16.0.R1
Platforms	All

## **script** *reference*

Synopsis	Python script name for the received XMPP Service-Config response messages
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">vsd</a> <a href="#">script</a> <i>reference</i>
Tree	<a href="#">script</a>
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-script</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## **wlan-gw-group** *reference*



### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	WLAN ISA group for this Python policy
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">wlan-gw-group</a> <i>reference</i>
Tree	<a href="#">wlan-gw-group</a>
Reference	<b>configure</b> <a href="#">isa</a> <a href="#">wlan-gw-group</a> <i>number</i>
Notes	The following elements are part of a choice: <b>nat-group</b> or <b>wlan-gw-group</b> .
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s

### **python-script** [[name](#)] *string*

Synopsis Enter the **python-script** list instance  
 Context **configure** [python](#) [python-script](#) *string*  
 Tree [python-script](#)  
 Max. Instances 256  
 Introduced 16.0.R1  
 Platforms All

### **[name]** *string*

Synopsis Python script policy name  
 Context **configure** [python](#) [python-script](#) *string*  
 Tree [python-script](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **action-on-fail** *keyword*

Synopsis Action taken when the Python execution fails  
 Context **configure** [python](#) [python-script](#) *string* **action-on-fail** *keyword*  
 Tree [action-on-fail](#)  
 Options passthrough, drop  
 Default drop  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the Python script

---

Context	<b>configure</b> <a href="#">python</a> <a href="#">python-script</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-script</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **protection**

Synopsis	Enter the <b>protection</b> context
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-script</a> <i>string</i> <a href="#">protection</a>
Tree	<a href="#">protection</a>
Introduced	16.0.R1
Platforms	All

### **hmac-sha256** *string*

Synopsis	Hash value to include as first line in Python script
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-script</a> <i>string</i> <a href="#">protection</a> <a href="#">hmac-sha256</a> <i>string</i>
Tree	<a href="#">hmac-sha256</a>
String Length	1 to 199
Introduced	16.0.R1
Platforms	All

**run-as-user** *string*

Synopsis	User authenticated for scripts
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-script</a> <i>string</i> <b>run-as-user</b> <i>string</i>
Tree	<a href="#">run-as-user</a>
Description	This command configures a user that is different from the current user of the session. Script authentication, authorization, accounting, and any activity within the script, is run as the specified user.  If this command is not configured, the current user of the session is used.
String Length	1 to 32
Introduced	22.10.R1
Platforms	All

**urls** *string*

Synopsis	Script location in URL format
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-script</a> <i>string</i> <b>urls</b> <i>string</i>
Tree	<a href="#">urls</a>
String Length	1 to 180
Max. Instances	3
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

**version** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Python version the script is written for
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-script</a> <i>string</i> <b>version</b> <i>keyword</i>
Tree	<a href="#">version</a>
Options	python2, python3
Default	python2
Introduced	21.2.R1

Platforms    All

### 3.37 qos commands

```

configure
- qos
  - adv-config-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - child-control
    - bandwidth-distribution
      - above-offered-allowance
        - delta-consumed-agg-rate
          - percent decimal-number
        - delta-consumed-higher-tier-rate
          - percent decimal-number
        - unconsumed-agg-rate
          - percent decimal-number
        - unconsumed-higher-tier-rate
          - percent decimal-number
      - above-offered-cap
        - percent decimal-number
        - rate (number | keyword)
      - enqueue-on-pir-zero boolean
      - granularity
        - percent decimal-number
        - rate number
      - internal-scheduler-weight-mode keyword
      - limit-pir-zero-drain boolean
      - lub-init-min-pir boolean
    - offered-measurement
      - add
        - active-min-only boolean
        - min-only boolean
        - percent decimal-number
        - rate number
        - fast-start boolean
        - fast-stop boolean
        - granularity
          - percent decimal-number
          - rate number
        - hold-time
          - active-min-only boolean
          - high-rate number
        - max-decrement
          - percent decimal-number
          - rate number
        - sample-interval number
        - time-average-factor
          - dec-only boolean
          - weighting-factor number
      - description string
      - apply-groups reference
      - apply-groups-exclude reference
    - atm-td-profile number
      - apply-groups reference
      - apply-groups-exclude reference
      - clp-tagging boolean
      - description string
      - descriptor-type keyword
      - policing boolean
      - service-category keyword
      - shaping boolean

```

## configure qos atm-td-profile traffic

- **traffic**
  - **cdvt** *number*
  - **mbs** *number*
  - **mir** *number*
  - **pir** *number*
  - **sir** *number*
  - **weight** *number*
- **fp-resource-policy** *string*
  - **aggregate-shapers**
    - **auto-creation** *boolean*
    - **hw-agg-shapers**
      - **saps** *boolean*
      - **subscribers** *boolean*
  - **queue-sets**
    - **default-size**
      - **queue-groups** (*number* | *keyword*)
      - **saps** (*number* | *keyword*)
      - **subscribers** (*number* | *keyword*)
    - **size** *number*
      - **allocation-weight** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
  - **reserved-non-shaper-queues** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **ports**
    - **hqos-mode** *keyword*
  - **queues**
    - **ingress-percent-of-total** *decimal-number*
- **hs-attachment-policy** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **low-burst-max-class** *number*
  - **queue** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **sched-class** *number*
    - **unattached**
    - **wrr-group** *number*
  - **wrr-group** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **sched-class** *number*
    - **unattached**
- **hs-pool-policy** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **mid-tier**
    - **mid-pool** *number*
      - **allocation-percent** *decimal-number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **parent-root-pool**
        - **none**
        - **pool-id** *reference*
      - **port-bw-oversubscription-factor** *number*
      - **slope-policy** *reference*
  - **root-tier**
    - **root-pool** *number*
      - **allocation-weight** *number*
      - **apply-groups** *reference*



configure qos hs-pool-policy root-tier root-pool apply-groups-exclude

- **apply-groups-exclude** *reference*
- **slope-policy** *reference*
- **system-reserve** *decimal-number*
- **hs-port-pool-policy** *string*
- **alt-port-class-pools**
  - **class-pool** *number*
  - **allocation**
    - **explicit-percent** *decimal-number*
    - **port-bw-weight** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **parent-mid-pool**
    - **none**
    - **pool-id** *number*
  - **slope-policy** *reference*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **std-port-class-pools**
  - **class-pool** *number*
  - **allocation**
    - **explicit-percent** *decimal-number*
    - **port-bw-weight** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **parent-mid-pool**
    - **none**
    - **pool-id** *number*
  - **slope-policy** *reference*
- **hs-scheduler-policy** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **group** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **rate** (*number* | *keyword*)
- **max-rate** (*number* | *keyword*)
- **scheduling-class** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **group**
  - **group-id** *number*
  - **weight** *number*
  - **rate** (*number* | *keyword*)
- **hw-agg-shaper-scheduler-policy** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **congestion-threshold** *number*
- **description** *string*
- **group** *string*
- **max-percent-rate** *decimal-number*
- **max-rate** (*number* | *keyword*)
- **monitor-threshold** *number*
- **sched-class** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **group** *reference*
- **weight** *number*
- **match-list**
  - **ip-prefix-list** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*

## configure qos match-list ip-prefix-list prefix

- **prefix** *string*
- **ipv6-prefix-list** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **prefix** *string*
- **port-list** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **port** *number*
- **range** *number end number*
- **mc-fr-profile-egress** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **class** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **max-queue-size** *number*
- **mir** *number*
- **weight** *number*
- **description** *string*
- **mc-fr-profile-ingress** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **class** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **reassembly-timeout** *number*
- **description** *string*
- **md-auto-id**
- **qos-policy-id-range**
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **end** *number*
- **start** *number*
- **mlppp-profile-egress** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **class** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **max-queue-size** *number*
- **mir** *number*
- **weight** *number*
- **description** *string*
- **fc** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **mlppp-class** *number*
- **mlppp-profile-ingress** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **class** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **reassembly-timeout** *number*
- **description** *string*
- **network** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **egress**
- **dscp** *keyword*

## configure qos network egress dscp apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **fc** *keyword*
- **profile** *keyword*
- **fc** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **de-mark**
  - **force** *number*
- **dot1p-in-profile** *number*
- **dot1p-out-profile** *number*
- **dscp-in-profile** *keyword*
- **dscp-out-profile** *keyword*
- **lsp-exp-in-profile** *number*
- **lsp-exp-out-profile** *number*
- **port-redirect-group**
  - **policer** *number*
  - **queue** *number*
- **ip-criteria**
  - **entry** *number*
    - **action**
      - **fc** *keyword*
      - **port-redirect-group**
        - **policer** *number*
        - **queue** *number*
      - **profile** *keyword*
      - **type** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **match**
      - **dscp** *keyword*
      - **dst-ip**
        - **address** (*ipv4-address* | *ipv4-prefix-with-host-bits*)
        - **mask** *string*
      - **dst-port**
        - **eq** *number*
        - **gt** *number*
        - **lt** *number*
        - **port-list** *reference*
        - **range**
          - **end** *number*
          - **start** *number*
      - **fragment** *keyword*
      - **icmp-type** *number*
      - **protocol** (*number* | *keyword*)
      - **src-ip**
        - **address** (*ipv4-address* | *ipv4-prefix-with-host-bits*)
        - **mask** *string*
      - **src-port**
        - **eq** *number*
        - **gt** *number*
        - **lt** *number*
        - **port-list** *reference*
        - **range**
          - **end** *number*
          - **start** *number*
  - **ipv6-criteria**
    - **entry** *number*
      - **action**
        - **fc** *keyword*
        - **port-redirect-group**
          - **policer** *number*
          - **queue** *number*

## configure qos network egress ipv6-criteria entry action profile

- **profile** *keyword*
- **type** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **match**
  - **dscp** *keyword*
  - **dst-ip**
    - **address** (*ipv6-address* | *ipv6-prefix-with-host-bits*)
    - **mask** *string*
  - **dst-port**
    - **eq** *number*
    - **gt** *number*
    - **lt** *number*
    - **port-list** *reference*
    - **range**
      - **end** *number*
      - **start** *number*
  - **fragment** *keyword*
  - **icmp-type** *number*
  - **next-header** (*number* | *keyword*)
  - **src-ip**
    - **address** (*ipv6-address* | *ipv6-prefix-with-host-bits*)
    - **mask** *string*
  - **src-port**
    - **eq** *number*
    - **gt** *number*
    - **lt** *number*
    - **port-list** *reference*
    - **range**
      - **end** *number*
      - **start** *number*
- **prec** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **fc** *keyword*
- **profile** *keyword*
- **remark-trusted**
  - **force-egress-marking** *boolean*
- **ingress**
  - **default-action**
    - **fc** *keyword*
    - **profile** *keyword*
  - **dot1p** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **fc** *keyword*
    - **profile** *keyword*
  - **dscp** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **fc** *keyword*
    - **profile** *keyword*
  - **fc** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **fp-redirect-group**
      - **broadcast-policer** *number*
      - **multicast-policer** *number*
      - **policer** *number*
      - **unknown-policer** *number*
- **ip-criteria**
  - **entry** *number*
  - **action**

configure qos network ingress ip-criteria entry action fc

```

- fc keyword
- profile keyword
- type keyword
- apply-groups reference
- apply-groups-exclude reference
- description string
- match
- dscp keyword
- dst-ip
  - address (ipv4-address | ipv4-prefix-with-host-bits)
  - ip-prefix-list reference
  - mask string
- dst-port
  - eq number
  - gt number
  - lt number
  - port-list reference
  - range
    - end number
    - start number
- fragment keyword
- protocol (number | keyword)
- src-ip
  - address (ipv4-address | ipv4-prefix-with-host-bits)
  - ip-prefix-list reference
  - mask string
- src-port
  - eq number
  - gt number
  - lt number
  - port-list reference
  - range
    - end number
    - start number
- ipv6-criteria
- entry number
  - action
    - fc keyword
    - profile keyword
    - type keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - match
    - dscp keyword
  - dst-ip
    - address (ipv6-address | ipv6-prefix-with-host-bits)
    - ipv6-prefix-list reference
    - mask string
  - dst-port
    - eq number
    - gt number
    - lt number
    - port-list reference
    - range
      - end number
      - start number
  - fragment keyword
  - next-header (number | keyword)
  - src-ip
    - address (ipv6-address | ipv6-prefix-with-host-bits)
    - ipv6-prefix-list reference
    - mask string
  - src-port

```

configure qos network ingress ipv6-criteria entry match src-port eq

```

    - eq number
    - gt number
    - lt number
    - port-list reference
    - range
      - end number
      - start number
  - lsr-use-dscp boolean
  - lsp-exp number
    - apply-groups reference
    - apply-groups-exclude reference
    - fc keyword
    - profile keyword
- policy-id number
- scope keyword
- network-queue string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - fc keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - multicast-queue reference
    - queue reference
  - hs-attachment-policy reference
  - hs-wrr-group number
    - adaptation-rule
      - pir keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - hs-class-weight number
    - rate number
  - queue number
    - adaptation-rule
      - cir keyword
      - fir keyword
      - pir keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - avg-frame-overhead decimal-number
    - cbs decimal-number
    - drop-tail
      - low
      - percent-reduction-from-mbs (number | keyword)
  - hs-alt-port-class-pool boolean
  - hs-class-weight number
  - hs-mbs decimal-number
  - hs-wred-queue
    - policy reference
  - hs-wrr-weight number
  - mbs decimal-number
  - multipoint boolean
  - port-parent
    - cir-level number
    - cir-weight number
    - level number
    - weight number
  - queue-type keyword
  - rate
    - cir number
    - fir number
    - pir number
- policer-control-policy string
  - apply-groups reference

```

configure qos policer-control-policy apply-groups-exclude

- **apply-groups-exclude** *reference*
- **description** *string*
- **root**
  - **max-percent-rate** *decimal-number*
  - **max-rate** (*number* | *keyword*)
  - **priority-mbs-thresholds**
    - **min-thresh-separation** (*number* | *keyword*)
    - **priority** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **fixed-mbs** *boolean*
      - **mbs-contribution** (*number* | *keyword*)
    - **profile-preferred** *boolean*
- **tier** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **arbiter** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **arbiter-parent**
      - **arbiter-name** *string*
      - **level** *number*
      - **weight** *number*
    - **description** *string*
    - **percent-rate** *decimal-number*
    - **rate** (*number* | *keyword*)
    - **reference-rate** *keyword*
- **port-scheduler-policy** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **dist-lag-rate-shared** *boolean*
  - **group** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **monitor-threshold** *number*
    - **percent-rate**
      - **cir** *decimal-number*
      - **pir** *decimal-number*
    - **rate**
      - **cir** (*number* | *keyword*)
      - **pir** (*number* | *keyword*)
- **hqos-algorithm** *keyword*
- **level** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **group** *reference*
  - **monitor-threshold** *number*
  - **percent-rate**
    - **cir** *decimal-number*
    - **pir** *decimal-number*
  - **rate**
    - **cir** (*number* | *keyword*)
    - **pir** (*number* | *keyword*)
  - **weight** *number*
- **max-percent-rate** *decimal-number*
- **max-rate** (*number* | *keyword*)
- **monitor-threshold** *number*
- **orphan-overrides**
  - **cir-level** *number*
  - **cir-weight** *number*
  - **level** *number*
  - **weight** *number*
- **post-policer-mapping** *string*

## configure qos post-policer-mapping apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **fc** *keyword* **profile** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **maps-to**
  - **fc** *keyword*
  - **profile** *keyword*
- **queue-group-redirect-list** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **match** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **instance** *number*
- **type** *keyword*
- **queue-group-templates**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **egress**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **queue-group** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **fc** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **queue**
    - **none**
    - **queue-id** *reference*
- **hs-attachment-policy** *reference*
- **hs-wrr-group** *number*
  - **adaptation-rule**
    - **pir** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **hs-class-weight** *number*
  - **percent-rate** *decimal-number*
  - **rate** (*number* | *keyword*)
- **policer** *number*
  - **adaptation-rule**
    - **cir** *keyword*
    - **pir** *keyword*
  - **adv-config-policy** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **arbiter-parent**
    - **arbiter-name** *string*
    - **level** *number*
    - **weight** *number*
  - **cbs** (*number* | *keyword*)
  - **description** *string*
  - **exceed-pir** *boolean*
  - **high-prio-only** (*number* | *keyword*)
  - **mbs** (*number* | *keyword*)
  - **packet-byte-offset** *number*
  - **percent-rate**
    - **cir** *decimal-number*
    - **pir** *decimal-number*
    - **reference-rate** *keyword*
  - **profile-capped** *boolean*



configure qos queue-group-templates egress queue-group policer rate

```

- rate
  - cir (number | keyword)
  - pir (number | keyword)
- stat-mode keyword
- queue number
  - adaptation-rule
    - cir keyword
    - pir keyword
  - adv-config-policy reference
  - apply-groups reference
  - apply-groups-exclude reference
  - burst-limit (number | keyword)
  - cbs (number | keyword)
  - drop-tail
    - exceed
      - percent-reduction-from-mbs (number | keyword)
    - high
      - percent-reduction-from-mbs (number | keyword)
    - highplus
      - percent-reduction-from-mbs (number | keyword)
    - low
      - percent-reduction-from-mbs (number | keyword)
  - dynamic-mbs boolean
  - hs-alt-port-class-pool boolean
  - hs-class-weight number
  - hs-wred-queue
    - policy reference
  - hs-wrr-weight number
  - mbs (number | keyword)
  - packet-byte-offset number
  - percent-rate
    - cir decimal-number
    - pir decimal-number
    - reference-rate keyword
  - port-parent
    - cir-level number
    - cir-weight number
    - level number
    - weight number
  - queue-delay number
  - queue-type keyword
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
  - scheduler-parent
    - cir-level number
    - cir-weight number
    - level number
    - scheduler-name string
    - weight number
  - wred-queue
    - mode keyword
    - policy reference
    - usage keyword
- queues-hqos-manageable boolean
- ingress
  - apply-groups reference
  - apply-groups-exclude reference
  - queue-group string
    - apply-groups reference
    - apply-groups-exclude reference
  - description string
  - policer number
    - adaptation-rule

```

configure qos queue-group-templates ingress queue-group policer adaptation-rule cir

```

    - cir keyword
    - pir keyword
    - adv-config-policy reference
    - apply-groups reference
    - apply-groups-exclude reference
    - arbiter-parent
      - arbiter-name string
      - level number
      - weight number
    - cbs (number | keyword)
    - description string
    - high-prio-only (number | keyword)
    - mbs (number | keyword)
    - packet-byte-offset number
    - percent-rate
      - cir decimal-number
      - pir decimal-number
    - profile-capped boolean
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - stat-mode keyword
  - queue number
    - adaptation-rule
      - cir keyword
      - fir keyword
      - pir keyword
      - adv-config-policy reference
      - apply-groups reference
      - apply-groups-exclude reference
      - burst-limit (number | keyword)
      - cbs (number | keyword)
      - cir-non-profiling boolean
      - drop-tail
        - low
          - percent-reduction-from-mbs (number | keyword)
      - mbs (number | keyword)
      - multipoint boolean
      - packet-byte-offset number
      - percent-rate
        - cir decimal-number
        - fir decimal-number
        - pir decimal-number
        - police
          - reference-rate keyword
      - queue-mode keyword
      - queue-type keyword
      - rate
        - cir (number | keyword)
        - fir (number | keyword)
        - pir (number | keyword)
        - police
          - scheduler-parent
            - cir-level number
            - cir-weight number
            - level number
            - scheduler-name string
            - weight number
    - sap-egress string
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - dot1p number
      - apply-groups reference

```

configure qos sap-egress dot1p apply-groups-exclude

- **apply-groups-exclude** *reference*
- **fc** *keyword*
- **profile** *keyword*
- **dscp** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **fc** *keyword*
  - **profile** *keyword*
- **ethernet-ctag** *boolean*
- **fc** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **de-mark**
    - **force** *number*
  - **de-mark-inner**
    - **force** *number*
  - **de-mark-outer**
    - **force** *number*
- **dot1p**
  - **exceed-profile** *number*
  - **in-profile** *number*
  - **out-profile** *number*
- **dot1p-inner**
  - **in-profile** *number*
  - **out-profile** *number*
- **dot1p-outer**
  - **exceed-profile** *number*
  - **in-profile** *number*
  - **out-profile** *number*
- **dscp**
  - **exceed-profile** *keyword*
  - **in-profile** *keyword*
  - **out-profile** *keyword*
- **policer** *reference*
- **port-redirect-group-queue**
  - **queue** *number*
- **prec**
  - **exceed-profile** *number*
  - **in-profile** *number*
  - **out-profile** *number*
- **queue** *reference*
- **queue-group-queue**
  - **instance** *number*
  - **queue** *reference*
  - **queue-group-name** *reference*
- **hs-attachment-policy** *reference*
- **hs-wrr-group** *number*
  - **adaptation-rule**
    - **pir** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **hs-class-weight** *number*
  - **percent-rate** *decimal-number*
  - **rate** (*number* | *keyword*)
- **ip-criteria**
  - **entry** *number*
    - **action**
      - **fc** *keyword*
      - **policer** *reference*
      - **port-redirect-group-queue** *boolean*
      - **profile** *keyword*
      - **queue** *number*
      - **type** *keyword*
      - **use-fc-mapped-queue** *boolean*

configure qos sap-egress ip-criteria entry apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **match**
  - **dscp** *keyword*
  - **dst-ip**
    - **address** (*ipv4-address | ipv4-prefix-with-host-bits*)
    - **ip-prefix-list** *reference*
    - **mask** *string*
  - **dst-port**
    - **eq** *number*
    - **gt** *number*
    - **lt** *number*
    - **range**
      - **end** *number*
      - **start** *number*
  - **fragment** *keyword*
  - **protocol** (*number | keyword*)
  - **src-ip**
    - **address** (*ipv4-address | ipv4-prefix-with-host-bits*)
    - **ip-prefix-list** *reference*
    - **mask** *string*
  - **src-port**
    - **eq** *number*
    - **gt** *number*
    - **lt** *number*
    - **range**
      - **end** *number*
      - **start** *number*
- **ipv6-criteria**
  - **entry** *number*
  - **action**
    - **fc** *keyword*
    - **policer** *reference*
    - **port-redirect-group-queue** *boolean*
    - **profile** *keyword*
    - **queue** *number*
    - **type** *keyword*
    - **use-fc-mapped-queue** *boolean*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **match**
    - **dscp** *keyword*
    - **dst-ip**
      - **address** (*ipv6-address | ipv6-prefix-with-host-bits*)
      - **ipv6-prefix-list** *reference*
      - **mask** *string*
    - **dst-port**
      - **eq** *number*
      - **gt** *number*
      - **lt** *number*
      - **range**
        - **end** *number*
        - **start** *number*
    - **next-header** (*number | keyword*)
    - **src-ip**
      - **address** (*ipv6-address | ipv6-prefix-with-host-bits*)
      - **ipv6-prefix-list** *reference*
      - **mask** *string*
    - **src-port**
      - **eq** *number*
      - **gt** *number*
      - **lt** *number*

configure qos sap-egress ipv6-criteria entry match src-port range

```

    - range
      - end number
      - start number
- parent-location keyword
- policer number
  - adaptation-rule
    - cir keyword
    - pir keyword
  - adv-config-policy reference
  - apply-groups reference
  - apply-groups-exclude reference
  - arbiter-parent
    - arbiter-name string
    - level number
    - weight number
  - cbs (number | keyword)
  - description string
  - dscp-prec-remarking boolean
  - exceed-pir boolean
  - high-prio-only (number | keyword)
  - mbs (number | keyword)
  - packet-byte-offset number
  - percent-rate
    - cir decimal-number
    - pir decimal-number
    - reference-rate keyword
  - port-parent
    - cir-level number
    - cir-weight number
    - level number
    - weight number
  - profile-capped boolean
  - profile-out-preserve boolean
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
  - scheduler-parent
    - cir-level number
    - cir-weight number
    - level number
    - scheduler-name string
    - weight number
    - stat-mode keyword
  - policers-hqos-manageable boolean
  - policy-id number
  - post-policer-mapping reference
  - prec number
    - apply-groups reference
    - apply-groups-exclude reference
    - fc keyword
    - profile keyword
  - queue number
    - adaptation-rule
      - cir keyword
      - pir keyword
    - adv-config-policy reference
    - agg-shaper-weight number
    - apply-groups reference
    - apply-groups-exclude reference
    - avg-frame-overhead decimal-number
    - burst-limit (number | keyword)
    - cbs (number | keyword)
    - drop-tail
      - exceed

```

configure qos sap-egress queue drop-tail exceed percent-reduction-from-mbs

```

- percent-reduction-from-mbs (number | keyword)
- high
- percent-reduction-from-mbs (number | keyword)
- highplus
- percent-reduction-from-mbs (number | keyword)
- low
- percent-reduction-from-mbs (number | keyword)
- fir-burst-limit (number | keyword)
- hs-alt-port-class-pool boolean
- hs-class-weight number
- hs-wred-queue
- policy reference
- hs-wrr-weight number
- mbs (number | keyword)
- packet-byte-offset number
- percent-rate
- cir decimal-number
- pir decimal-number
- reference-rate keyword
- port-parent
- cir-level number
- cir-weight number
- level number
- weight number
- queue-type keyword
- rate
- cir (number | keyword)
- pir (number | keyword)
- sched-class (number | keyword)
- scheduler-parent
- cir-level number
- cir-weight number
- level number
- scheduler-name string
- weight number
- wred-queue
- mode keyword
- policy reference
- usage keyword
- sched-class-elevation
- sched-class number
- apply-groups reference
- apply-groups-exclude reference
- weight number
- scope keyword
- subscriber-mgmt
- dynamic-policer
- arbiter-parent
- arbiter-name string
- level number
- weight number
- cbs (number | keyword)
- mbs (number | keyword)
- packet-byte-offset number
- policer-id-range
- end number
- start number
- stat-mode keyword
- pcc-rule-entry
- range
- end number
- start number
- sap-ingress string
- apply-groups reference

```

configure qos sap-ingress apply-groups-exclude

```

- apply-groups-exclude reference
- default-fc string
- default-priority keyword
- description string
- dot1p number
  - apply-groups reference
  - apply-groups-exclude reference
  - fc string
  - priority keyword
- dscp keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - fc string
  - priority keyword
- fc string
  - apply-groups reference
  - apply-groups-exclude reference
  - broadcast-policer number
  - broadcast-queue reference
  - broadcast-queue-group-queue
    - queue reference
    - queue-group-name reference
  - de-1-out-profile boolean
  - egress-fc keyword
  - fp-redirect-group-broadcast-policer
  - fp-redirect-group-multicast-policer
  - fp-redirect-group-policer
  - fp-redirect-group-unknown-policer
  - in-remark
    - dscp keyword
    - prec number
  - multicast-policer number
  - multicast-queue reference
  - multicast-queue-group-queue
    - queue reference
    - queue-group-name reference
  - out-remark
    - dscp keyword
    - prec number
  - policer number
  - profile keyword
  - queue reference
  - queue-group-queue
    - queue reference
    - queue-group-name reference
  - unknown-policer number
  - unknown-queue reference
  - unknown-queue-group-queue
    - queue reference
    - queue-group-name reference
- ip-criteria
  - entry number
    - action
      - fc string
      - policer reference
      - priority keyword
      - type keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - match
      - dscp keyword
      - dst-ip
        - address (ipv4-address | ipv4-prefix-with-host-bits)

```

configure qos sap-ingress ip-criteria entry match dst-ip ip-prefix-list

```

    - ip-prefix-list reference
    - mask string
  - dst-port
    - eq number
    - gt number
    - lt number
    - range
      - end number
      - start number
  - fragment keyword
  - protocol (number | keyword)
  - src-ip
    - address (ipv4-address | ipv4-prefix-with-host-bits)
    - ip-prefix-list reference
    - mask string
  - src-port
    - eq number
    - gt number
    - lt number
    - range
      - end number
      - start number
  - vxlan-vni
    - eq number
    - range
      - end number
      - start number
  - tag number
  - type keyword
- ipv6-criteria
  - entry number
    - action
      - fc string
      - policer reference
      - priority keyword
      - type keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
  - match
    - dscp keyword
    - dst-ip
      - address (ipv6-address | ipv6-prefix-with-host-bits)
      - ipv6-prefix-list reference
      - mask string
    - dst-port
      - eq number
      - gt number
      - lt number
      - range
        - end number
        - start number
    - fragment keyword
    - next-header (number | keyword)
    - src-ip
      - address (ipv6-address | ipv6-prefix-with-host-bits)
      - ipv6-prefix-list reference
      - mask string
    - src-port
      - eq number
      - gt number
      - lt number
      - range
        - end number

```



configure qos sap-ingress ipv6-criteria entry match src-port range start

```

    - start number
  - vxlan-vni
    - eq number
    - range
      - end number
      - start number
  - tag number
  - type keyword
- lsp-exp number
- apply-groups reference
- apply-groups-exclude reference
- fc string
- priority keyword
- mac-criteria
  - entry number
    - action
      - fc string
      - policer reference
      - priority keyword
      - type keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - match
      - atm-vci number
      - dot1p
        - mask number
        - priority number
      - dst-mac
        - address string
        - mask string
      - etype string
      - frame-type keyword
      - inner-tag
        - mask number
        - vlan number
      - llc-dsap
        - dsap number
        - mask number
      - llc-ssap
        - mask number
        - ssap number
      - outer-tag
        - mask number
        - vlan number
      - snap-oui keyword
      - snap-pid number
      - src-mac
        - address string
        - mask string
    - type keyword
- policer number
- adaptation-rule
  - cir keyword
  - pir keyword
- adv-config-policy reference
- apply-groups reference
- apply-groups-exclude reference
- arbiter-parent
  - arbiter-name string
  - level number
  - weight number
- cbs (number | keyword)
- description string

```

configure qos sap-ingress policer high-prio-only

```

- high-prio-only (number | keyword)
- mbs (number | keyword)
- packet-byte-offset number
- percent-rate
  - cir decimal-number
  - pir decimal-number
  - reference-rate keyword
- profile-capped boolean
- rate
  - cir (number | keyword)
  - pir (number | keyword)
- scheduler-parent
  - cir-level number
  - cir-weight number
  - level number
  - scheduler-name string
  - weight number
- stat-mode keyword
- policers-hqos-manageable boolean
- policy-id number
- prec number
  - apply-groups reference
  - apply-groups-exclude reference
  - fc string
  - priority keyword
- queue number
  - adaptation-rule
    - cir keyword
    - fir keyword
    - pir keyword
  - adv-config-policy reference
  - apply-groups reference
  - apply-groups-exclude reference
  - burst-limit (number | keyword)
  - cbs (number | keyword)
  - cir-non-profiling boolean
  - drop-tail
    - low
      - percent-reduction-from-mbs (number | keyword)
  - mbs (number | keyword)
  - multipoint boolean
  - packet-byte-offset number
  - percent-rate
    - cir decimal-number
    - fir decimal-number
    - pir decimal-number
    - police
      - reference-rate keyword
  - queue-mode keyword
  - queue-type keyword
  - rate
    - cir (number | keyword)
    - fir (number | keyword)
    - pir (number | keyword)
    - police
  - scheduler-parent
    - cir-level number
    - cir-weight number
    - level number
    - scheduler-name string
    - weight number
- scope keyword
- subscriber-mgmt
- dynamic-policer

```

configure qos sap-ingress subscriber-mgmt dynamic-policer arbiter-parent

- **arbiter-parent**
  - **arbiter-name** *string*
  - **level** *number*
  - **weight** *number*
- **cbs** (*number | keyword*)
- **mbs** (*number | keyword*)
- **packet-byte-offset** *number*
- **policer-id-range**
  - **end** *number*
  - **start** *number*
- **stat-mode** *keyword*
- **pcc-rule-entry**
  - **range**
    - **end** *number*
    - **start** *number*
- **scheduler-policy** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **frame-based-accounting** *boolean*
  - **tier** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **parent-location** *keyword*
  - **scheduler** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **limit-unused-bandwidth** *boolean*
    - **percent-rate**
      - **cir** (*keyword | decimal-number*)
      - **pir** *decimal-number*
      - **reference-rate** *keyword*
  - **port-parent**
    - **cir-level** *number*
    - **cir-weight** *number*
    - **level** *number*
    - **weight** *number*
  - **rate**
    - **cir** (*number | keyword*)
    - **pir** (*number | keyword*)
  - **scheduler-parent**
    - **cir-level** *number*
    - **cir-weight** *number*
    - **level** *number*
    - **scheduler-name** *string*
    - **weight** *number*
- **shared-queue** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **fc** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **broadcast-queue** *number*
    - **multicast-queue** *number*
    - **queue** *number*
    - **unknown-queue** *number*
- **queue** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **cbs** *number*
  - **drop-tail**
    - **low**

---

configure qos shared-queue queue drop-tail low percent-reduction-from-mbs

- **percent-reduction-from-mbs** (*number* | *keyword*)
- **mbs** *number*
- **multipoint** *boolean*
- **queue-type** *keyword*
- **rate**
  - **cir** *number*
  - **fir** *number*
  - **pir** *number*
- **slope-policy** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **exceed-slope**
    - **admin-state** *keyword*
    - **max-avg** *number*
    - **max-prob** *number*
    - **start-avg** *number*
  - **high-slope**
    - **admin-state** *keyword*
    - **max-avg** *number*
    - **max-prob** *number*
    - **start-avg** *number*
  - **highplus-slope**
    - **admin-state** *keyword*
    - **max-avg** *number*
    - **max-prob** *number*
    - **start-avg** *number*
  - **low-slope**
    - **admin-state** *keyword*
    - **max-avg** *number*
    - **max-prob** *number*
    - **start-avg** *number*
- **time-average-factor** *number*

### 3.37.1 qos command descriptions

#### qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure qos</b>
Tree	<a href="#">qos</a>
Introduced	16.0.R1
Platforms	All

#### **adv-config-policy** [[adv-config-policy-name](#)] *string*

Synopsis	Enter the <b>adv-config-policy</b> list instance
Context	<b>configure qos</b> <a href="#">adv-config-policy</a> <i>string</i>
Tree	<a href="#">adv-config-policy</a>
Max. Instances	255
Introduced	16.0.R1
Platforms	All

#### [[adv-config-policy-name](#)] *string*

Synopsis	Advanced QoS policy name
Context	<b>configure qos</b> <a href="#">adv-config-policy</a> <i>string</i>
Tree	<a href="#">adv-config-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

#### child-control

Synopsis	Enter the <b>child-control</b> context
Context	<b>configure qos</b> <a href="#">adv-config-policy</a> <i>string</i> <b>child-control</b>
Tree	<a href="#">child-control</a>

Introduced 16.0.R1  
 Platforms All

### **bandwidth-distribution**

Synopsis Enter the **bandwidth-distribution** context  
 Context **configure qos adv-config-policy** *string* *child-control* *bandwidth-distribution*  
 Tree [bandwidth-distribution](#)  
 Introduced 16.0.R1  
 Platforms All

### **above-offered-allowance**

Synopsis Enter the **above-offered-allowance** context  
 Context **configure qos adv-config-policy** *string* *child-control* *bandwidth-distribution* *above-offered-allowance*  
 Tree [above-offered-allowance](#)  
 Description Commands in this context control the child's above offered allowance bandwidth. The configuration is only applicable when the port scheduler is configured to use the **above-offered-allowance-control** algorithm (specified via the **configure qos port-scheduler-policy hqos-algorithm** command).  
 Introduced 19.10.R2  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **delta-consumed-agg-rate**

Synopsis Enter the **delta-consumed-agg-rate** context  
 Context **configure qos adv-config-policy** *string* *child-control* *bandwidth-distribution* *above-offered-allowance* *delta-consumed-agg-rate*  
 Tree [delta-consumed-agg-rate](#)  
 Introduced 19.10.R2  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **percent** *decimal-number*

Synopsis Percentage of the delta consumed aggregate rate

Context	<b>configure qos adv-config-policy</b> <i>string</i> <b>child-control bandwidth-distribution above-offered-allowance delta-consumed-agg-rate percent</b> <i>decimal-number</i>
Tree	<b>percent</b>
Description	This command configures the percentage of the delta (from the beginning to the end of the current H-QoS below CIR or above CIR pass) of the aggregate rate consumed by other members that can be given to a queue at the end of an H-QoS below CIR pass and above CIR pass.  This command is only applicable when the port scheduler is configured to use the <b>above-offered-allowance-control</b> algorithm; otherwise it is ignored.
Range	0.00 to 100.00
Default	20.00
Introduced	19.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### delta-consumed-higher-tier-rate

Synopsis	Enter the <b>delta-consumed-higher-tier-rate</b> context
Context	<b>configure qos adv-config-policy</b> <i>string</i> <b>child-control bandwidth-distribution above-offered-allowance delta-consumed-higher-tier-rate</b>
Tree	<b>delta-consumed-higher-tier-rate</b>
Introduced	19.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### percent *decimal-number*

Synopsis	Percentage of the delta consumed higher-tier rate
Context	<b>configure qos adv-config-policy</b> <i>string</i> <b>child-control bandwidth-distribution above-offered-allowance delta-consumed-higher-tier-rate percent</b> <i>decimal-number</i>
Tree	<b>percent</b>
Description	This command configures the percentage of the delta (from the beginning to the end of the current H-QoS below CIR or above CIR pass) of the higher-tier rate consumed by its other members that can be given to a queue at the end of an H-QoS below CIR pass and above CIR pass. Higher tier refers to the Vport aggregate rate and port scheduler level, group, and maximum rates.  This command is only applicable when the port scheduler is configured to use the <b>above-offered-allowance-control</b> algorithm; otherwise it is ignored.
Range	0.00 to 100.00
Default	5.00
Introduced	19.10.R2

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### unconsumed-agg-rate

Synopsis Enter the **unconsumed-agg-rate** context

Context **configure** qos adv-config-policy *string* child-control bandwidth-distribution above-offered-allowance unconsumed-agg-rate

Tree [unconsumed-agg-rate](#)

Introduced 19.10.R2

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### percent *decimal-number*

Synopsis Percentage of the unconsumed aggregate rate

Context **configure** qos adv-config-policy *string* child-control bandwidth-distribution above-offered-allowance unconsumed-agg-rate percent *decimal-number*

Tree [percent](#)

Description This command configures the percentage of the unconsumed aggregate rate that can be given to a queue at the end of an H-QoS below CIR pass and above CIR pass.  
This command is only applicable when the port scheduler is configured to use the **above-offered-allowance-control** algorithm; otherwise it is ignored.

Range 0.00 to 100.00

Default 100.00

Introduced 19.10.R2

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### unconsumed-higher-tier-rate

Synopsis Enter the **unconsumed-higher-tier-rate** context

Context **configure** qos adv-config-policy *string* child-control bandwidth-distribution above-offered-allowance unconsumed-higher-tier-rate

Tree [unconsumed-higher-tier-rate](#)

Introduced 19.10.R2

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS



**percent** *decimal-number*

Synopsis	Percentage of the unconsumed higher-tier rate
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control bandwidth-distribution above-offered-allowance unconsumed-higher-tier-rate percent <i>decimal-number</i>
Tree	<a href="#">percent</a>
Description	This command configures the percentage of the unconsumed higher tier rate that can be given to a queue at the end of an H-QoS below CIR pass and above CIR pass. Higher tier refers to the Vport aggregate rate and port scheduler level, group, and maximum rates.  This command is only applicable when the port scheduler is configured to use the <b>above-offered-allowance-control</b> algorithm; otherwise it is ignored.
Range	0.00 to 100.00
Default	100.00
Introduced	19.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**above-offered-cap**

Synopsis	Enter the <b>above-offered-cap</b> context
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control bandwidth-distribution above-offered-cap
Tree	<a href="#">above-offered-cap</a>
Introduced	16.0.R1
Platforms	All

**percent** *decimal-number*

Synopsis	Percentage of PIR used as the fair share increase limit
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control bandwidth-distribution above-offered-cap percent <i>decimal-number</i>
Tree	<a href="#">percent</a>
Range	0.00 to 100.00
Notes	The following elements are part of a choice: <b>percent</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

**rate** (*number* | *keyword*)

Synopsis	Explicit rate as the fair share increase limit
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control bandwidth-distribution above-offered-cap rate ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">rate</a>
Range	0 to 100000000
Options	max
Notes	The following elements are part of a choice: <b>percent</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

**enqueue-on-pir-zero** *boolean*

Synopsis	Queue packets when bandwidth distribution set to zero
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control bandwidth-distribution enqueue-on-pir-zero <i>boolean</i>
Tree	<a href="#">enqueue-on-pir-zero</a>
Default	false
Introduced	16.0.R1
Platforms	All

**granularity**

Synopsis	Enter the <b>granularity</b> context
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control bandwidth-distribution granularity
Tree	<a href="#">granularity</a>
Introduced	16.0.R1
Platforms	All

**percent** *decimal-number*

Synopsis	Rounding percentage value for administrative PIR
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control bandwidth-distribution granularity <i>percent</i> <i>decimal-number</i>
Tree	<a href="#">percent</a>
Range	0.00 to 100.00

---

Notes	The following elements are part of a choice: <b>percent</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

### **rate number**

Synopsis	Rounding rate step value
Context	<b>configure</b> <a href="#">qos adv-config-policy string</a> <a href="#">child-control bandwidth-distribution granularity rate number</a>
Tree	<a href="#">rate</a>
Range	0 to 100000000
Notes	The following elements are part of a choice: <b>percent</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

### **internal-scheduler-weight-mode keyword**

Synopsis	Weight mode applied to this advanced QoS policy
Context	<b>configure</b> <a href="#">qos adv-config-policy string</a> <a href="#">child-control bandwidth-distribution internal-scheduler-weight-mode keyword</a>
Tree	<a href="#">internal-scheduler-weight-mode</a>
Options	auto, force-equal, offered-load, capped-offered-load
Introduced	16.0.R1
Platforms	All

### **limit-pir-zero-drain boolean**

Synopsis	Throttle draining when operational PIR set to zero
Context	<b>configure</b> <a href="#">qos adv-config-policy string</a> <a href="#">child-control bandwidth-distribution limit-pir-zero-drain boolean</a>
Tree	<a href="#">limit-pir-zero-drain</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **lub-init-min-pir** *boolean*

Synopsis	Apply minimal PIR for new queues when LUB is enabled
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control bandwidth-distribution lub-init-min-pir <i>boolean</i>
Tree	lub-init-min-pir
Default	false
Introduced	16.0.R1
Platforms	All

### **offered-measurement**

Synopsis	Enter the <b>offered-measurement</b> context
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control offered-measurement
Tree	offered-measurement
Introduced	16.0.R1
Platforms	All

### **add**

Synopsis	Enter the <b>add</b> context
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control offered-measurement add
Tree	add
Introduced	16.0.R1
Platforms	All

### **active-min-only** *boolean*

Synopsis	Use minimum offered rate for active queues or policers
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control offered-measurement add active-min-only <i>boolean</i>
Tree	active-min-only
Default	false
Introduced	16.0.R1
Platforms	All

**min-only** *boolean*

Synopsis	Use increase in operational PIR as minimum offered rate
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control offered-measurement add min-only <i>boolean</i>
Tree	<a href="#">min-only</a>
Default	false
Introduced	16.0.R1
Platforms	All

**percent** *decimal-number*

Synopsis	Percentage of child PIR to add to offered rate
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control offered-measurement add percent <i>decimal-number</i>
Tree	<a href="#">percent</a>
Range	0.00 to 100.00
Notes	The following elements are part of a choice: <b>percent</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

**rate** *number*

Synopsis	Rate value to add to child's offered rate
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control offered-measurement add rate <i>number</i>
Tree	<a href="#">rate</a>
Range	0 to 100000000
Notes	The following elements are part of a choice: <b>percent</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

**fast-start** *boolean*

Synopsis	Allow fast detection of initial bandwidth
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control offered-measurement fast-start <i>boolean</i>

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Tree	<a href="#">fast-start</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **fast-stop** *boolean*

Synopsis	Allow fast detection of lack of offered rate
Context	<b>configure</b> <a href="#">qos adv-config-policy</a> <i>string</i> <a href="#">child-control</a> <a href="#">offered-measurement</a> <a href="#">fast-stop</a> <i>boolean</i>
Tree	<a href="#">fast-stop</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **granularity**

Synopsis	Enter the <b>granularity</b> context
Context	<b>configure</b> <a href="#">qos adv-config-policy</a> <i>string</i> <a href="#">child-control</a> <a href="#">offered-measurement</a> <a href="#">granularity</a>
Tree	<a href="#">granularity</a>
Introduced	16.0.R1
Platforms	All

### **percent** *decimal-number*

Synopsis	Percentage of PIR used as threshold sensitivity to offered rate change
Context	<b>configure</b> <a href="#">qos adv-config-policy</a> <i>string</i> <a href="#">child-control</a> <a href="#">offered-measurement</a> <a href="#">granularity</a> <a href="#">percent</a> <i>decimal-number</i>
Tree	<a href="#">percent</a>
Range	0.00 to 100.00
Notes	The following elements are part of a choice: <b>percent</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

### **rate** *number*

Synopsis	Rate as child's offered rate change sensitivity value
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control offered-measurement granularity <b>rate</b> <i>number</i>
Tree	<a href="#">rate</a>
Range	0 to 100000000
Notes	The following elements are part of a choice: <b>percent</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

### **hold-time**

Synopsis	Enter the <b>hold-time</b> context
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control offered-measurement hold-time
Tree	<a href="#">hold-time</a>
Introduced	16.0.R1
Platforms	All

### **active-min-only** *boolean*

Synopsis	Use minimum offered rate for active queues or policers
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control offered-measurement hold-time <b>active-min-only</b> <i>boolean</i>
Tree	<a href="#">active-min-only</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **high-rate** *number*

Synopsis	Time to maintain current offered rate
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control offered-measurement hold-time <b>high-rate</b> <i>number</i>
Tree	<a href="#">high-rate</a>
Range	0 to 60
Default	0

Introduced 16.0.R1  
Platforms All

### **max-decrement**

Synopsis Enter the **max-decrement** context  
Context **configure** qos adv-config-policy *string* child-control offered-measurement max-decrement  
Tree [max-decrement](#)  
Introduced 16.0.R1  
Platforms All

### **percent** *decimal-number*

Synopsis percentage as decrement limit to offered rate change  
Context **configure** qos adv-config-policy *string* child-control offered-measurement max-decrement percent *decimal-number*  
Tree [percent](#)  
Range 0.00 to 100.00  
Notes The following elements are part of a choice: **percent** or **rate**.  
Introduced 16.0.R1  
Platforms All

### **rate** *number*

Synopsis Value to use as decrement limit to offered rate change  
Context **configure** qos adv-config-policy *string* child-control offered-measurement max-decrement rate *number*  
Tree [rate](#)  
Range 0 to 100000000  
Notes The following elements are part of a choice: **percent** or **rate**.  
Introduced 16.0.R1  
Platforms All



**sample-interval** *number*

Synopsis	Interval for sampling the child's offered rate
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control offered-measurement sample-interval <i>number</i>
Tree	sample-interval
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

**time-average-factor**

Synopsis	Enter the <b>time-average-factor</b> context
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control offered-measurement time-average-factor
Tree	time-average-factor
Introduced	16.0.R1
Platforms	All

**dec-only** *boolean*

Synopsis	Apply time adjustment when the offered rate decreases
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control offered-measurement time-average-factor dec-only <i>boolean</i>
Tree	dec-only
Default	false
Introduced	16.0.R1
Platforms	All

**weighting-factor** *number*

Synopsis	New offered rate with a sample of the previous offered rate
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control offered-measurement time-average-factor weighting-factor <i>number</i>
Tree	weighting-factor
Range	0 to 64

Default	0
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> qos adv-config-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**atm-td-profile** [*atm-td-profile-id*] *number*

Synopsis	Enter the <b>atm-td-profile</b> list instance
Context	<b>configure</b> qos atm-td-profile <i>number</i>
Tree	atm-td-profile
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

**[atm-td-profile-id]** *number*

Synopsis	ATM traffic descriptor ID
Context	<b>configure</b> qos atm-td-profile <i>number</i>
Tree	atm-td-profile
Range	1 to 1000
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

**clp-tagging** *boolean*

Synopsis	Control the setting of CLP bit in the ATM cell header
Context	<b>configure</b> qos atm-td-profile <i>number</i> clp-tagging <i>boolean</i>

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Tree	<a href="#">clp-tagging</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">qos atm-td-profile</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

### **descriptor-type** *keyword*

Synopsis	ATM traffic descriptor type
Context	<b>configure</b> <a href="#">qos atm-td-profile</a> <i>number</i> <a href="#">descriptor-type</a> <i>keyword</i>
Tree	<a href="#">descriptor-type</a>
Options	p01, p01-and-s01, p01-and-s0, p01-and-s0-tag
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

### **policing** *boolean*

Synopsis	Allow ingress traffic policing
Context	<b>configure</b> <a href="#">qos atm-td-profile</a> <i>number</i> <a href="#">policing</a> <i>boolean</i>
Tree	<a href="#">policing</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

### **service-category** *keyword*

Synopsis	ATM service category
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Context	<b>configure qos atm-td-profile</b> <i>number</i> <i>service-category</i> <i>keyword</i>
Tree	<i>service-category</i>
Options	cbr, rt-vbr, nrt-vbr, ubr
Default	ubr
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

### **shaping** *boolean*

Synopsis	Enable egress shaping
Context	<b>configure qos atm-td-profile</b> <i>number</i> <i>shaping</i> <i>boolean</i>
Tree	<i>shaping</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

### **traffic**

Synopsis	Enter the <b>traffic</b> context
Context	<b>configure qos atm-td-profile</b> <i>number</i> <i>traffic</i>
Tree	<i>traffic</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

### **cdvt** *number*

Synopsis	Cell Delay Variation Tolerance
Context	<b>configure qos atm-td-profile</b> <i>number</i> <i>traffic</i> <i>cdvt</i> <i>number</i>
Tree	<i>cdvt</i>
Max. Range	0 to 4294967295
Units	microseconds
Default	250
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

**mbs number**

Synopsis	Maximum burst size in cell
Context	<b>configure qos atm-td-profile number traffic mbs number</b>
Tree	<b>mbs</b>
Max. Range	0 to 4294967295
Units	bytes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

**mir number**

Synopsis	Minimum information rate
Context	<b>configure qos atm-td-profile number traffic mir number</b>
Tree	<b>mir</b>
Max. Range	0 to 4294967295
Units	kilobps
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

**pir number**

Synopsis	Peak information rate
Context	<b>configure qos atm-td-profile number traffic pir number</b>
Tree	<b>pir</b>
Max. Range	0 to 4294967295
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

**sir number**

Synopsis	Sustained information rate
Context	<b>configure qos atm-td-profile number traffic sir number</b>
Tree	<b>sir</b>

Max. Range	0 to 4294967295
Units	kilobps
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

### **weight** *number*

Synopsis	Relative weight for the ATM traffic descriptor based on ATM VP shaper scheduling
Context	<b>configure qos atm-td-profile</b> <i>number weight number</i>
Tree	<a href="#">weight</a>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

### **fp-resource-policy** [[fp-resource-policy-name](#)] *string*

Synopsis	Enter the <b>fp-resource-policy</b> list instance
Context	<b>configure qos fp-resource-policy</b> <i>string</i>
Tree	<a href="#">fp-resource-policy</a>
Max. Instances	15
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **[fp-resource-policy-name]** *string*

Synopsis	FP resource policy name
Context	<b>configure qos fp-resource-policy</b> <i>string</i>
Tree	<a href="#">fp-resource-policy</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## aggregate-shapers

Synopsis	Enter the <b>aggregate-shapers</b> context
Context	<b>configure</b> qos fp-resource-policy <i>string</i> aggregate-shapers
Tree	aggregate-shapers
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

## auto-creation *boolean*



### WARNING:

Modifying this element resets the associated cards/XIOMs/MDAs for the new value to take effect. On the 7750 SR-1, the configuration must be saved and the router must be rebooted for the new value to take effect.

Synopsis	Enables auto-creation of hardware aggregate shapers
Context	<b>configure</b> qos fp-resource-policy <i>string</i> aggregate-shapers auto-creation <i>boolean</i>
Tree	auto-creation
Description	When configured to <b>true</b> , enables the auto-creation of hardware aggregate shapers on the specified FP. After enabling, the corresponding FP is rebooted.
Default	false
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

## hw-agg-shapers

Synopsis	Enter the <b>hw-agg-shapers</b> context
Context	<b>configure</b> qos fp-resource-policy <i>string</i> aggregate-shapers hw-agg-shapers
Tree	hw-agg-shapers
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

**saps** *boolean***WARNING:**

Modifying this element resets the associated cards/XIOMs/MDAs for the new value to take effect. On the 7750 SR-1, the configuration must be saved and the router must be rebooted for the new value to take effect.

Synopsis	Enable hardware aggregate shapers for SAPs
Context	<b>configure</b> qos fp-resource-policy <i>string</i> aggregate-shapers hw-agg-shapers saps <i>boolean</i>
Tree	saps
Default	false
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

**subscribers** *boolean***WARNING:**

Modifying this element resets the associated cards/XIOMs/MDAs for the new value to take effect. On the 7750 SR-1, the configuration must be saved and the router must be rebooted for the new value to take effect.

Synopsis	Enables hardware aggregate shapers for subscribers
Context	<b>configure</b> qos fp-resource-policy <i>string</i> aggregate-shapers hw-agg-shapers subscribers <i>boolean</i>
Tree	subscribers
Default	false
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

**queue-sets**

Synopsis	Enter the <b>queue-sets</b> context
Context	<b>configure</b> qos fp-resource-policy <i>string</i> aggregate-shapers queue-sets
Tree	queue-sets
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s



**default-size**

Synopsis	Enter the <b>default-size</b> context
Context	<b>configure</b> qos fp-resource-policy string aggregate-shapers queue-sets default-size
Tree	default-size
Description	Commands in this context configure the default queue-set size for individual object types.
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

**queue-groups** (*number* | *keyword*)

Synopsis	Default size of queue-groups
Context	<b>configure</b> qos fp-resource-policy string aggregate-shapers queue-sets default-size queue-groups ( <i>number</i>   <i>keyword</i> )
Tree	queue-groups
Range	2 to 8
Options	non-shaper-queues
Default	8
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

**saps** (*number* | *keyword*)

Synopsis	Default queue-set size for SAPs
Context	<b>configure</b> qos fp-resource-policy string aggregate-shapers queue-sets default-size saps ( <i>number</i>   <i>keyword</i> )
Tree	saps
Description	This command configures the default queue-set size for SAPs.  When the <b>non-shaper-queues</b> keyword is configured, SAPs do not use hardware aggregate shapers on FPs where the specified FP resource policy is applied.
Range	2 to 8
Options	non-shaper-queues
Default	8
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

**subscribers** (*number* | *keyword*)

Synopsis	Default queue-set size for subscribers
Context	<b>configure</b> qos fp-resource-policy <i>string</i> aggregate-shapers queue-sets default-size subscribers ( <i>number</i>   <i>keyword</i> )
Tree	subscribers
Description	This command configures the default queue-set size for subscribers. When the <b>non-shaper-queues</b> keyword is configured, SAPs do not use hardware aggregate shapers on FPs where the specified FP resource policy is applied.
Range	2 to 8
Options	non-shaper-queues
Default	8
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

**size** [*qset-size*] *number*

Synopsis	Enter the <b>size</b> list instance
Context	<b>configure</b> qos fp-resource-policy <i>string</i> aggregate-shapers queue-sets size <i>number</i>
Tree	size
Description	Commands in this context configure parameters for the specified queue-set size.
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

**[qset-size]** *number*

Synopsis	Size of the queue-sets
Context	<b>configure</b> qos fp-resource-policy <i>string</i> aggregate-shapers queue-sets size <i>number</i>
Tree	size
Range	2 to 8
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

**allocation-weight** *number*

Synopsis	Allocation weight of the queue-set size
Context	<b>configure</b> qos fp-resource-policy <i>string</i> aggregate-shapers queue-sets size <i>number</i> allocation-weight <i>number</i>
Tree	allocation-weight
Description	This command configures the allocation weight for the specified queue-set size. The available queue-sets are distributed based on the allocation weight among different queue-set sizes.
Range	0 to 100
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

**reserved-non-shaper-queues** *number*

Synopsis	Number of queues reserved for non-shaper queues
Context	<b>configure</b> qos fp-resource-policy <i>string</i> aggregate-shapers reserved-non-shaper-queues <i>number</i>
Tree	reserved-non-shaper-queues
Description	This command configures the number of egress queues that will not be used by hardware aggregate shapers.
Range	2048 to 262144
Default	8192
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

**description** *string*

Synopsis	Text description
Context	<b>configure</b> qos fp-resource-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## ports

Synopsis	Enter the <b>ports</b> context
Context	<b>configure qos fp-resource-policy string ports</b>
Tree	<a href="#">ports</a>
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

## hqos-mode *keyword*



### WARNING:

Modifying this element resets the associated cards/XIOMs/MDAs for the new value to take effect. On the 7750 SR-1, the configuration must be saved and the router must be rebooted for the new value to take effect.

Synopsis	Default HQOS mode of the port
Context	<b>configure qos fp-resource-policy string ports hqos-mode keyword</b>
Tree	<a href="#">hqos-mode</a>
Options	port-scheduler, hw-agg-shaping
Default	port-scheduler
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

## queues

Synopsis	Enter the <b>queues</b> context
Context	<b>configure qos fp-resource-policy string queues</b>
Tree	<a href="#">queues</a>
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## ingress-percent-of-total *decimal-number*



### WARNING:

Modifying this element resets the associated cards/XIOMs/MDAs for the new value to take effect. On the 7750 SR-1, the configuration must be saved and the router must be rebooted for the new value to take effect.

Synopsis	Percentage of total ingress queues allocated
Context	<b>configure qos fp-resource-policy</b> <i>string</i> <b>queues ingress-percent-of-total</b> <i>decimal-number</i>
Tree	<b>ingress-percent-of-total</b>
Description	<p>This command configures the percentage of the total number of queues on the FP on which the policy is applied that are allocated to ingress, with the remainder allocated to egress. The ingress and egress buffer pool sizes are not affected by the queue allocation.</p> <p>The allocation is performed in sets of 8192 queues, with a minimum of 8192 queues at ingress and 8192 queues at egress. If the percentage configured results in the queue allocation not being a multiple of 8192, the number of queues at ingress is rounded down to the next 8192 boundary, and consequently the number of queues at egress is rounded up to the next 8192 boundary, both while respecting the minimum at ingress and egress.</p> <p>If the FP resource policy is applied to any FP and the updated allocation is not achievable with the current ingress or egress queue consumption on any of the related FPs, the command fails.</p> <p>The configuration of this command (which includes removing the configuration) causes the router to immediately reset the associated cards, XIOMs and MDAs on all FPs on which the FP resource policy is applied, except on the 7750 SR-1, where the configuration must be saved and the router rebooted, immediately after committing the configuration transaction.</p>
Range	4.00 to 97.00
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **hs-attachment-policy** [*name*] *string*

Synopsis	Enter the <b>hs-attachment-policy</b> list instance
Context	<b>configure qos hs-attachment-policy</b> <i>string</i>
Tree	<b>hs-attachment-policy</b>
Max. Instances	31
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **[name]** *string*

Synopsis	HS attachment policy name
Context	<b>configure qos hs-attachment-policy</b> <i>string</i>
Tree	<b>hs-attachment-policy</b>

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String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> qos hs-attachment-policy <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **low-burst-max-class** *number*

Synopsis	Low priority burst threshold
Context	<b>configure</b> qos hs-attachment-policy <i>string</i> <b>low-burst-max-class</b> <i>number</i>
Tree	<b>low-burst-max-class</b>
Range	1 to 6
Default	6
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **queue** [*queue-id*] *number*

Synopsis	Enter the <b>queue</b> list instance
Context	<b>configure</b> qos hs-attachment-policy <i>string</i> <b>queue</b> <i>number</i>
Tree	<b>queue</b>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **[queue-id]** *number*

Synopsis	Queue identifier for the HS attachment policy
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Context	<b>configure qos hs-attachment-policy</b> <i>string queue number</i>
Tree	<a href="#">queue</a>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **sched-class** *number*

Synopsis	Scheduling class associated with the queue
Context	<b>configure qos hs-attachment-policy</b> <i>string queue number sched-class number</i>
Tree	<a href="#">sched-class</a>
Range	1 to 6
Notes	The following elements are part of a choice: <b>sched-class</b> , <b>unattached</b> , or <b>wrr-group</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **unattached**

Synopsis	Do not attach queue to scheduling class or WRR group
Context	<b>configure qos hs-attachment-policy</b> <i>string queue number unattached</i>
Tree	<a href="#">unattached</a>
Notes	The following elements are part of a choice: <b>sched-class</b> , <b>unattached</b> , or <b>wrr-group</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **wrr-group** *number*

Synopsis	WRR group attached to the queue
Context	<b>configure qos hs-attachment-policy</b> <i>string queue number wrr-group number</i>
Tree	<a href="#">wrr-group</a>
Range	1 to 2
Notes	The following elements are part of a choice: <b>sched-class</b> , <b>unattached</b> , or <b>wrr-group</b> .
Introduced	16.0.R1

Platforms 7750 SR-7/12/12e

### **wrr-group** [[wrr-group-id](#)] *number*

Synopsis Enter the **wrr-group** list instance  
 Context **configure qos hs-attachment-policy** *string wrr-group number*  
 Tree [wrr-group](#)  
 Introduced 16.0.R1  
 Platforms 7750 SR-7/12/12e

### **[wrr-group-id]** *number*

Synopsis WRR group ID for the HS attachment policy  
 Context **configure qos hs-attachment-policy** *string wrr-group number*  
 Tree [wrr-group](#)  
 Range 1 to 2  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7750 SR-7/12/12e

### **sched-class** *number*

Synopsis Scheduling class associated with the WRR group  
 Context **configure qos hs-attachment-policy** *string wrr-group number sched-class number*  
 Tree [sched-class](#)  
 Range 1 to 6  
 Notes The following elements are part of a choice: **sched-class** or **unattached**.  
 Introduced 16.0.R1  
 Platforms 7750 SR-7/12/12e

### **unattached**

Synopsis Do not attach group ID to scheduling class or WRR group  
 Context **configure qos hs-attachment-policy** *string wrr-group number unattached*  
 Tree [unattached](#)



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Notes	The following elements are part of a choice: <b>sched-class</b> or <b>unattached</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **hs-pool-policy** [*name*] *string*

Synopsis	Enter the <b>hs-pool-policy</b> list instance
Context	<b>configure qos hs-pool-policy</b> <i>string</i>
Tree	<a href="#">hs-pool-policy</a>
Max. Instances	63
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### [*name*] *string*

Synopsis	HS pool policy name
Context	<b>configure qos hs-pool-policy</b> <i>string</i>
Tree	<a href="#">hs-pool-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **description** *string*

Synopsis	Text description
Context	<b>configure qos hs-pool-policy</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**mid-tier**

Synopsis	Enter the <b>mid-tier</b> context
Context	<b>configure qos hs-pool-policy</b> <i>string</i> <b>mid-tier</b>
Tree	<b>mid-tier</b>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**mid-pool** [**mid-pool-id**] *number*

Synopsis	Enter the <b>mid-pool</b> list instance
Context	<b>configure qos hs-pool-policy</b> <i>string</i> <b>mid-tier mid-pool</b> <i>number</i>
Tree	<b>mid-pool</b>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**[mid-pool-id]** *number*

Synopsis	Mid-pool identifier for the HS pool policy
Context	<b>configure qos hs-pool-policy</b> <i>string</i> <b>mid-tier mid-pool</b> <i>number</i>
Tree	<b>mid-pool</b>
Range	1 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**allocation-percent** *decimal-number*

Synopsis	Root pool size to derive the mid-pool size
Context	<b>configure qos hs-pool-policy</b> <i>string</i> <b>mid-tier mid-pool</b> <i>number</i> <b>allocation-percent</b> <i>decimal-number</i>
Tree	<b>allocation-percent</b>
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**parent-root-pool**

Synopsis	Enter the <b>parent-root-pool</b> context
Context	<b>configure qos hs-pool-policy</b> <i>string</i> <i>mid-tier</i> <i>mid-pool</i> <i>number</i> <b>parent-root-pool</b>
Tree	<b>parent-root-pool</b>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**none**

Synopsis	Assign no buffers to the mid-tier pool
Context	<b>configure qos hs-pool-policy</b> <i>string</i> <i>mid-tier</i> <i>mid-pool</i> <i>number</i> <b>parent-root-pool none</b>
Tree	<b>none</b>
Notes	The following elements are part of a choice: <b>none</b> or <b>pool-id</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**pool-id reference**

Synopsis	Parent root pool to which the mid-pool is associated
Context	<b>configure qos hs-pool-policy</b> <i>string</i> <i>mid-tier</i> <i>mid-pool</i> <i>number</i> <b>parent-root-pool pool-id reference</b>
Tree	<b>pool-id</b>
Reference	<b>configure qos hs-pool-policy</b> <i>string</i> <i>root-tier</i> <i>root-pool</i> <i>number</i>
Notes	The following elements are part of a choice: <b>none</b> or <b>pool-id</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**port-bw-oversubscription-factor** *number*

Synopsis	Over subscription factor for port-class pool sizes
Context	<b>configure qos hs-pool-policy</b> <i>string</i> <i>mid-tier</i> <i>mid-pool</i> <i>number</i> <b>port-bw-oversubscription-factor</b> <i>number</i>
Tree	<b>port-bw-oversubscription-factor</b>
Description	This command modifies the size of the mid-pool when calculating the port-class pool sizes based on port bandwidth ratios. The over subscription factor for a mid-pool can

be modified at any time, causing the corresponding port-class pool dynamic sizes to be recalculated. A similar behavior can be obtained by increasing the mid-pool's allocation-percent of its parent root-pool. However, the major difference in using this command is that it provides larger port-class pools without allowing the mid-pool to use a higher number of buffers in the root pool.

Range	1 to 10
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **slope-policy** *reference*

Synopsis	Slope policy to define high, low, and exceed slopes
Context	<b>configure qos hs-pool-policy</b> <i>string</i> <b>mid-tier mid-pool</b> <i>number</i> <b>slope-policy</b> <i>reference</i>
Tree	<a href="#">slope-policy</a>
Reference	<b>configure qos slope-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **root-tier**

Synopsis	Enter the <b>root-tier</b> context
Context	<b>configure qos hs-pool-policy</b> <i>string</i> <b>root-tier</b>
Tree	<a href="#">root-tier</a>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **root-pool** [**root-pool-id**] *number*

Synopsis	Enter the <b>root-pool</b> list instance
Context	<b>configure qos hs-pool-policy</b> <i>string</i> <b>root-tier root-pool</b> <i>number</i>
Tree	<a href="#">root-pool</a>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**[root-pool-id]** *number*

Synopsis	Root pool identifier for the HS pool policy
Context	<b>configure</b> qos hs-pool-policy <i>string</i> root-tier root-pool <i>number</i>
Tree	<a href="#">root-pool</a>
Range	1 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**allocation-weight** *number*

Synopsis	Root pool allocation weight used to calculate pool size
Context	<b>configure</b> qos hs-pool-policy <i>string</i> root-tier root-pool <i>number</i> <a href="#">allocation-weight</a> <i>number</i>
Tree	<a href="#">allocation-weight</a>
Description	<p>This command specifies the weight that is applied to the root pool and is divided by the sum of all root pool weights to derive the pool's buffer allocation factor. The amount of buffers remaining after the system-reserve percentage is applied is multiplied by the buffer allocation factor to derive the pool size.</p> <p>A root pool with an allocation weight set to "0" is considered inactive and is not allocated buffers.</p> <p>When a root pool's allocation weight is modified, all root pools, mid-tier pools, and port class pool sizes are reevaluated and modified when necessary.</p>
Range	0 to 100
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**slope-policy** *reference*

Synopsis	Slope policy to define high, low, and exceed slopes
Context	<b>configure</b> qos hs-pool-policy <i>string</i> root-tier root-pool <i>number</i> <a href="#">slope-policy</a> <i>reference</i>
Tree	<a href="#">slope-policy</a>
Reference	<b>configure</b> qos <a href="#">slope-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**system-reserve** *decimal-number*

Synopsis	Percentage of buffers reserved for internal system use
Context	<b>configure qos hs-pool-policy</b> <i>string</i> <b>system-reserve</b> <i>decimal-number</i>
Tree	<a href="#">system-reserve</a>
Range	1.00 to 30.00
Default	5.00
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**hs-port-pool-policy** [*name*] *string*

Synopsis	Enter the <b>hs-port-pool-policy</b> list instance
Context	<b>configure qos hs-port-pool-policy</b> <i>string</i>
Tree	<a href="#">hs-port-pool-policy</a>
Max. Instances	2047
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**[name]** *string*

Synopsis	HS port pool policy name
Context	<b>configure qos hs-port-pool-policy</b> <i>string</i>
Tree	<a href="#">hs-port-pool-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**alt-port-class-pools**

Synopsis	Enter the <b>alt-port-class-pools</b> context
Context	<b>configure qos hs-port-pool-policy</b> <i>string</i> <b>alt-port-class-pools</b>
Tree	<a href="#">alt-port-class-pools</a>
Introduced	16.0.R1

Platforms 7750 SR-7/12/12e

### **class-pool** [[alt-class-pool-id](#)] *number*

Synopsis Enter the **class-pool** list instance

Context **configure qos hs-port-pool-policy** *string* [alt-port-class-pools class-pool number](#)

Tree [class-pool](#)

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

### **[alt-class-pool-id]** *number*

Synopsis Class pool ID

Context **configure qos hs-port-pool-policy** *string* [alt-port-class-pools class-pool number](#)

Tree [class-pool](#)

Range 1 to 6

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

### **allocation**

Synopsis Enter the **allocation** context

Context **configure qos hs-port-pool-policy** *string* [alt-port-class-pools class-pool number allocation](#)

Tree [allocation](#)

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

### **explicit-percent** *decimal-number*

Synopsis Percentage of parent pool to be allocated

Context **configure qos hs-port-pool-policy** *string* [alt-port-class-pools class-pool number allocation explicit-percent decimal-number](#)

Tree [explicit-percent](#)

Range 0.01 to 100.00

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Notes	The following elements are part of a choice: <b>explicit-percent</b> or <b>port-bw-weight</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **port-bw-weight** *number*

Synopsis	Port bandwidth weight to be allocated
Context	<b>configure</b> qos hs-port-pool-policy <i>string</i> alt-port-class-pools class-pool <i>number</i> allocation port-bw-weight <i>number</i>
Tree	port-bw-weight
Range	1 to 100
Default	1
Notes	The following elements are part of a choice: <b>explicit-percent</b> or <b>port-bw-weight</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **parent-mid-pool**

Synopsis	Enter the <b>parent-mid-pool</b> context
Context	<b>configure</b> qos hs-port-pool-policy <i>string</i> alt-port-class-pools class-pool <i>number</i> parent-mid-pool
Tree	parent-mid-pool
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **none**

Synopsis	Deactivate the port-class pool; pool size is zero
Context	<b>configure</b> qos hs-port-pool-policy <i>string</i> alt-port-class-pools class-pool <i>number</i> parent-mid-pool none
Tree	none
Notes	The following elements are part of a choice: <b>none</b> or <b>pool-id</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e



### **pool-id** *number*

Synopsis	Mid-pool ID associated with the port-class pool
Context	<b>configure</b> qos hs-port-pool-policy <i>string</i> alt-port-class-pools class-pool <i>number</i> parent-mid-pool pool-id <i>number</i>
Tree	pool-id
Range	1 to 16
Notes	The following elements are part of a choice: <b>none</b> or <b>pool-id</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **slope-policy** *reference*

Synopsis	Slope policy to define high, low, and exceed slopes
Context	<b>configure</b> qos hs-port-pool-policy <i>string</i> alt-port-class-pools class-pool <i>number</i> slope-policy <i>reference</i>
Tree	slope-policy
Reference	<b>configure</b> qos slope-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> qos hs-port-pool-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **std-port-class-pools**

Synopsis	Enter the <b>std-port-class-pools</b> context
Context	<b>configure</b> qos hs-port-pool-policy <i>string</i> std-port-class-pools
Tree	std-port-class-pools
Introduced	16.0.R1

Platforms 7750 SR-7/12/12e

### **class-pool** [**std-class-pool-id**] *number*

Synopsis Enter the **class-pool** list instance

Context **configure qos hs-port-pool-policy** *string* **std-port-class-pools class-pool number**

Tree **class-pool**

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

### **[std-class-pool-id]** *number*

Synopsis Class pool ID

Context **configure qos hs-port-pool-policy** *string* **std-port-class-pools class-pool number**

Tree **class-pool**

Range 1 to 6

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

### **allocation**

Synopsis Enter the **allocation** context

Context **configure qos hs-port-pool-policy** *string* **std-port-class-pools class-pool number allocation**

Tree **allocation**

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

### **explicit-percent** *decimal-number*

Synopsis Percentage of parent pool to be allocated

Context **configure qos hs-port-pool-policy** *string* **std-port-class-pools class-pool number allocation explicit-percent decimal-number**

Tree **explicit-percent**

Range 0.01 to 100.00

Notes	The following elements are part of a choice: <b>explicit-percent</b> or <b>port-bw-weight</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **port-bw-weight** *number*

Synopsis	Port bandwidth weight to be allocated
Context	<b>configure</b> <a href="#">qos</a> <a href="#">hs-port-pool-policy</a> <i>string</i> <a href="#">std-port-class-pools</a> <a href="#">class-pool</a> <i>number</i> <a href="#">allocation</a> <a href="#">port-bw-weight</a> <i>number</i>
Tree	<a href="#">port-bw-weight</a>
Range	1 to 100
Default	1
Notes	The following elements are part of a choice: <b>explicit-percent</b> or <b>port-bw-weight</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **parent-mid-pool**

Synopsis	Enter the <b>parent-mid-pool</b> context
Context	<b>configure</b> <a href="#">qos</a> <a href="#">hs-port-pool-policy</a> <i>string</i> <a href="#">std-port-class-pools</a> <a href="#">class-pool</a> <i>number</i> <a href="#">parent-mid-pool</a>
Tree	<a href="#">parent-mid-pool</a>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **none**

Synopsis	Deactivate the port-class pool; pool size is zero
Context	<b>configure</b> <a href="#">qos</a> <a href="#">hs-port-pool-policy</a> <i>string</i> <a href="#">std-port-class-pools</a> <a href="#">class-pool</a> <i>number</i> <a href="#">parent-mid-pool</a> <b>none</b>
Tree	<a href="#">none</a>
Notes	The following elements are part of a choice: <b>none</b> or <b>pool-id</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**pool-id** *number*

Synopsis	Mid-pool ID associated with the port-class pool
Context	<b>configure</b> qos hs-port-pool-policy <i>string</i> std-port-class-pools class-pool <i>number</i> parent-mid-pool pool-id <i>number</i>
Tree	pool-id
Range	1 to 16
Notes	The following elements are part of a choice: <b>none</b> or <b>pool-id</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**slope-policy** *reference*

Synopsis	Slope policy to define high, low, and exceed slopes
Context	<b>configure</b> qos hs-port-pool-policy <i>string</i> std-port-class-pools class-pool <i>number</i> slope-policy <i>reference</i>
Tree	slope-policy
Reference	<b>configure</b> qos slope-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**hs-scheduler-policy** [*name*] *string*

Synopsis	Enter the <b>hs-scheduler-policy</b> list instance
Context	<b>configure</b> qos hs-scheduler-policy <i>string</i>
Tree	hs-scheduler-policy
Max. Instances	127
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**[name]** *string*

Synopsis	HS scheduler policy name
Context	<b>configure</b> qos hs-scheduler-policy <i>string</i>
Tree	hs-scheduler-policy
String Length	1 to 32

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **description** *string*

Synopsis	Text description
Context	<b>configure qos hs-scheduler-policy</b> <i>string description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **group** [[group-id](#)] *number*

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure qos hs-scheduler-policy</b> <i>string group number</i>
Tree	<a href="#">group</a>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **[group-id]** *number*

Synopsis	Group ID for the HS scheduler policy
Context	<b>configure qos hs-scheduler-policy</b> <i>string group number</i>
Tree	<a href="#">group</a>
Range	1
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **rate** (*number* | *keyword*)

Synopsis	Group maximum rate
Context	<b>configure qos hs-scheduler-policy</b> <i>string group number rate (number   keyword)</i>

Tree	<a href="#">rate</a>
Range	1 to 100000
Units	megabps
Options	max
Default	max
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **max-rate** (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit for the policy
Context	<b>configure</b> <a href="#">qos</a> <a href="#">hs-scheduler-policy</a> <i>string</i> <a href="#">max-rate</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">max-rate</a>
Range	1 to 100000
Options	max
Default	max
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **scheduling-class** [[class-id](#)] *number*

Synopsis	Enter the <b>scheduling-class</b> list instance
Context	<b>configure</b> <a href="#">qos</a> <a href="#">hs-scheduler-policy</a> <i>string</i> <a href="#">scheduling-class</a> <i>number</i>
Tree	<a href="#">scheduling-class</a>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **[class-id]** *number*

Synopsis	Scheduling class for the HS scheduler policy
Context	<b>configure</b> <a href="#">qos</a> <a href="#">hs-scheduler-policy</a> <i>string</i> <a href="#">scheduling-class</a> <i>number</i>
Tree	<a href="#">scheduling-class</a>
Range	1 to 6
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7750 SR-7/12/12e

## group

Synopsis Enable the **group** context

Context **configure** qos hs-scheduler-policy *string* scheduling-class *number* group

Tree [group](#)

Notes The following elements are part of a choice: **group** or **rate**.

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

## group-id *number*

Synopsis Associated group associated with this scheduling class

Context **configure** qos hs-scheduler-policy *string* scheduling-class *number* group group-id *number*

Tree [group-id](#)

Range 1

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

## weight *number*

Synopsis Weight associated with this scheduling class

Context **configure** qos hs-scheduler-policy *string* scheduling-class *number* group weight *number*

Tree [weight](#)

Range 1 to 127

Default 1

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

## rate (*number* | *keyword*)

Synopsis Maximum frame-based bandwidth limit

Context	<b>configure qos hs-scheduler-policy</b> <i>string scheduling-class number rate (number   keyword)</i>
Tree	<a href="#">rate</a>
Range	1 to 100000
Units	kilobps
Options	max
Default	max
Notes	The following elements are part of a choice: <b>group</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **hw-agg-shaper-scheduler-policy** [[name](#)] *string*

Synopsis	Enter the <b>hw-agg-shaper-scheduler-policy</b> list instance
Context	<b>configure qos hw-agg-shaper-scheduler-policy</b> <i>string</i>
Tree	<a href="#">hw-agg-shaper-scheduler-policy</a>
Description	Commands in this context configure the attributes of a hardware aggregate shaper scheduler policy.
Max. Instances	127
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

### **[name]** *string*

Synopsis	Name of the hardware aggregate shaper scheduler policy
Context	<b>configure qos hw-agg-shaper-scheduler-policy</b> <i>string</i>
Tree	<a href="#">hw-agg-shaper-scheduler-policy</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

### **congestion-threshold** *number*

Synopsis	Congestion threshold of the scheduler
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Context	<b>configure qos hw-agg-shaper-scheduler-policy</b> <i>string</i> <b>congestion-threshold</b> <i>number</i>
Tree	<b>congestion-threshold</b>
Description	This command configures the congestion threshold for the hardware aggregate shaper scheduler policy, which, if exceeded, triggers the hardware aggregate scheduler algorithm. The value is expressed as a percentage of the scheduler rate.
Range	0 to 100
Default	90
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

### **description** *string*

Synopsis	Text description
Context	<b>configure qos hw-agg-shaper-scheduler-policy</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

### **group** [*group-name*] *string*

Synopsis	Add a list entry for <b>group</b>
Context	<b>configure qos hw-agg-shaper-scheduler-policy</b> <i>string</i> <b>group</b> <i>string</i>
Tree	<b>group</b>
Max. Instances	6
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

### **[group-name]** *string*

Synopsis	Name of the HW aggregate shaper scheduler policy group
Context	<b>configure qos hw-agg-shaper-scheduler-policy</b> <i>string</i> <b>group</b> <i>string</i>
Tree	<b>group</b>
String Length	1 to 32
Notes	This element is part of a list key.

Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

### **max-percent-rate** *decimal-number*

Synopsis	Maximum frame-based bandwidth percentage
Context	<b>configure qos hw-aggr-shaper-scheduler-policy</b> <i>string</i> <b>max-percent-rate</b> <i>decimal-number</i>
Tree	<b>max-percent-rate</b>
Description	This command configures the rate of the hardware aggregate shaper scheduler expressed as a percentage of the port rate.
Range	0.01 to 100.00
Notes	The following elements are part of a choice: <b>max-percent-rate</b> or <b>max-rate</b> .
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

### **max-rate** (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	<b>configure qos hw-aggr-shaper-scheduler-policy</b> <i>string</i> <b>max-rate</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>max-rate</b>
Range	1 to 6400000000
Units	kilobps
Options	max
Default	max
Notes	The following elements are part of a choice: <b>max-percent-rate</b> or <b>max-rate</b> .
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

### **monitor-threshold** *number*

Synopsis	Monitor threshold for the scheduler
Context	<b>configure qos hw-aggr-shaper-scheduler-policy</b> <i>string</i> <b>monitor-threshold</b> <i>number</i>
Tree	<b>monitor-threshold</b>
Description	This command configures the monitor threshold for the hardware aggregate shaper scheduler policy, which is used for egress scheduler monitoring. The value is expressed

as a percentage of the scheduler rate, which is considered as a limit for determining congestion.

Range	0 to 100
Default	0
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

### **sched-class** [*class-id*] *number*

Synopsis	Enter the <b>sched-class</b> list instance
Context	<b>configure</b> qos hw-aggr-shaper-scheduler-policy <i>string</i> sched-class <i>number</i>
Tree	sched-class
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

### **[class-id]** *number*

Synopsis	Scheduling class ID for the scheduler policy
Context	<b>configure</b> qos hw-aggr-shaper-scheduler-policy <i>string</i> sched-class <i>number</i>
Tree	sched-class
Range	1 to 6
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

### **group reference**

Synopsis	Group associated with the scheduling class
Context	<b>configure</b> qos hw-aggr-shaper-scheduler-policy <i>string</i> sched-class <i>number</i> group <i>reference</i>
Tree	group
Description	This command assigns the specified scheduling class to a group within a hardware aggregate shaper scheduler policy.
Reference	<b>configure</b> qos hw-aggr-shaper-scheduler-policy <i>string</i> group <i>string</i>
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

**weight** *number*

Synopsis	Weight associated with the scheduling class
Context	<b>configure</b> qos hw-agg-shaper-scheduler-policy <i>string</i> sched-class <i>number</i> weight <i>number</i>
Tree	weight
Range	1 to 8
Default	1
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

**match-list**

Synopsis	Enter the <b>match-list</b> context
Context	<b>configure</b> qos match-list
Tree	match-list
Introduced	16.0.R1
Platforms	All

**ip-prefix-list** [*prefix-list-name*] *string*

Synopsis	Enter the <b>ip-prefix-list</b> list instance
Context	<b>configure</b> qos match-list ip-prefix-list <i>string</i>
Tree	ip-prefix-list
Max. Instances	512
Introduced	16.0.R1
Platforms	All

**[prefix-list-name]** *string*

Synopsis	IP prefix list name
Context	<b>configure</b> qos match-list ip-prefix-list <i>string</i>
Tree	ip-prefix-list
String Length	1 to 32
Notes	This element is part of a list key.

Introduced 16.0.R3  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure qos match-list ip-prefix-list** *string description string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **prefix** [[ip-prefix](#)] *string*

Synopsis Add a list entry for **prefix**  
 Context **configure qos match-list ip-prefix-list** *string prefix string*  
 Tree [prefix](#)  
 Max. Instances 256  
 Introduced 16.0.R1  
 Platforms All

### **[ip-prefix]** *string*

Synopsis IPv4 address prefix  
 Context **configure qos match-list ip-prefix-list** *string prefix string*  
 Tree [prefix](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R3  
 Platforms All

### **ipv6-prefix-list** [[prefix-list-name](#)] *string*

Synopsis Enter the **ipv6-prefix-list** list instance  
 Context **configure qos match-list ipv6-prefix-list** *string*

Tree	<a href="#">ipv6-prefix-list</a>
Max. Instances	128
Introduced	16.0.R4
Platforms	All

**[prefix-list-name] string**

Synopsis	IP prefix list name
Context	<b>configure qos match-list ipv6-prefix-list string</b>
Tree	<a href="#">ipv6-prefix-list</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure qos match-list ipv6-prefix-list string description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

**prefix [ipv6-prefix] string**

Synopsis	Add a list entry for <b>prefix</b>
Context	<b>configure qos match-list ipv6-prefix-list string prefix string</b>
Tree	<a href="#">prefix</a>
Max. Instances	128
Introduced	16.0.R4
Platforms	All

**[ipv6-prefix] string**

Synopsis	Ipv6 address prefix
Context	<b>configure</b> qos match-list ipv6-prefix-list string prefix string
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**port-list [port-list-name] string**

Synopsis	Enter the <b>port-list</b> list instance
Context	<b>configure</b> qos match-list port-list string
Tree	port-list
Max. Instances	16
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[port-list-name] string**

Synopsis	Port list name
Context	<b>configure</b> qos match-list port-list string
Tree	port-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**description string**

Synopsis	Text description
Context	<b>configure</b> qos match-list port-list string description string
Tree	description
String Length	1 to 80
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **port** [*value*] *number*

Synopsis Add a list entry for **port**

Context **configure qos match-list port-list** *string port number*

Tree [port](#)

Description Commands in this context specify ports for a port match list.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[value]** *number*

Synopsis Port number

Context **configure qos match-list port-list** *string port number*

Tree [port](#)

Range 0 to 65535

Notes This element is part of a list key.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **range** [*start*] *number end number*

Synopsis Add a list entry for **range**

Context **configure qos match-list port-list** *string range number end number*

Tree [range](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[start]** *number*

Synopsis Lower bound for the port range

Context **configure qos match-list port-list** *string range number end number*

Tree [range](#)

Range 0 to 65534



Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**end number**

Synopsis	Upper bound for the port range
Context	<b>configure qos match-list port-list string range number end number</b>
Tree	<a href="#">range</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**mc-fr-profile-egress [mc-fr-egress-prof-index] number**

Synopsis	Enter the <b>mc-fr-profile-egress</b> list instance
Context	<b>configure qos mc-fr-profile-egress number</b>
Tree	<a href="#">mc-fr-profile-egress</a>
Max. Instances	128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[mc-fr-egress-prof-index] number**

Synopsis	Egress MultiClass Frame Relay Profile Index
Context	<b>configure qos mc-fr-profile-egress number</b>
Tree	<a href="#">mc-fr-profile-egress</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**class** [*class-id*] *number*

Synopsis	Enter the <b>class</b> list instance
Context	<b>configure qos mc-fr-profile-egress</b> <i>number class number</i>
Tree	<a href="#">class</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[class-id]** *number*

Synopsis	Frame-relay egress class per multi-class frame-relay egress profile
Context	<b>configure qos mc-fr-profile-egress</b> <i>number class number</i>
Tree	<a href="#">class</a>
Range	0 to 3
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**max-queue-size** *number*

Synopsis	Buffer queue size
Context	<b>configure qos mc-fr-profile-egress</b> <i>number class number max-queue-size number</i>
Tree	<a href="#">max-queue-size</a>
Range	1 to 1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**mir** *number*

Synopsis	Minimum information rate (MIR) as percentage
Context	<b>configure qos mc-fr-profile-egress</b> <i>number class number mir number</i>
Tree	<a href="#">mir</a>
Range	1 to 100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**weight** *number*

Synopsis	Weight of this multiclass class as a percentage
Context	<b>configure qos mc-fr-profile-egress</b> <i>number class number weight number</i>
Tree	<a href="#">weight</a>
Range	1 to 100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**description** *string*

Synopsis	Text description
Context	<b>configure qos mc-fr-profile-egress</b> <i>number description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**mc-fr-profile-ingress** [[mc-fr-ingress-prof-index](#)] *number*

Synopsis	Enter the <b>mc-fr-profile-ingress</b> list instance
Context	<b>configure qos mc-fr-profile-ingress</b> <i>number</i>
Tree	<a href="#">mc-fr-profile-ingress</a>
Max. Instances	128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[mc-fr-ingress-prof-index]** *number*

Synopsis	Index of the ingress MultiClass Frame Relay profile
Context	<b>configure qos mc-fr-profile-ingress</b> <i>number</i>
Tree	<a href="#">mc-fr-profile-ingress</a>
Range	1 to 65535
Notes	This element is part of a list key.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **class** [*class-id*] *number*

Synopsis	Enter the <b>class</b> list instance
Context	<b>configure qos mc-fr-profile-ingress</b> <i>number</i> <b>class</b> <i>number</i>
Tree	<b>class</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[class-id]** *number*

Synopsis	Frame-relay ingress class per multi-class frame-relay ingress profile
Context	<b>configure qos mc-fr-profile-ingress</b> <i>number</i> <b>class</b> <i>number</i>
Tree	<b>class</b>
Range	0 to 3
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **reassembly-timeout** *number*

Synopsis	Reassembly timeout for a specific frame-relay multi-class ingress class
Context	<b>configure qos mc-fr-profile-ingress</b> <i>number</i> <b>class</b> <i>number</i> <b>reassembly-timeout</b> <i>number</i>
Tree	<b>reassembly-timeout</b>
Range	1 to 1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **description** *string*

Synopsis	Text description
Context	<b>configure qos mc-fr-profile-ingress</b> <i>number</i> <b>description</b> <i>string</i>
Tree	<b>description</b>

String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### md-auto-id

Synopsis	Enter the <b>md-auto-id</b> context
Context	<b>configure qos md-auto-id</b>
Tree	<a href="#">md-auto-id</a>
Introduced	16.0.R1
Platforms	All

### qos-policy-id-range

Synopsis	Enable the <b>qos-policy-id-range</b> context
Context	<b>configure qos md-auto-id qos-policy-id-range</b>
Tree	<a href="#">qos-policy-id-range</a>
Introduced	16.0.R1
Platforms	All

### end number



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the ID range
Context	<b>configure qos md-auto-id qos-policy-id-range end number</b>
Tree	<a href="#">end</a>
Range	2 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**start** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the ID range
Context	<b>configure</b> qos md-auto-id qos-policy-id-range start <i>number</i>
Tree	start
Range	2 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**mlppp-profile-egress** [[mc-mlppp-egress-prof-index](#)] *number*

Synopsis	Enter the <b>mlppp-profile-egress</b> list instance
Context	<b>configure</b> qos mlppp-profile-egress <i>number</i>
Tree	<a href="#">mlppp-profile-egress</a>
Max. Instances	128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[[mc-mlppp-egress-prof-index](#)]** *number*

Synopsis	Index of the egress MultiClass MLPPP profile
Context	<b>configure</b> qos mlppp-profile-egress <i>number</i>
Tree	<a href="#">mlppp-profile-egress</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**class** [[class-id](#)] *number*

Synopsis	Enter the <b>class</b> list instance
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Context	<b>configure qos mlppp-profile-egress</b> <i>number class number</i>
Tree	<a href="#">class</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[class-id]** *number*

Synopsis	Policy class
Context	<b>configure qos mlppp-profile-egress</b> <i>number class number</i>
Tree	<a href="#">class</a>
Range	0 to 3
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**max-queue-size** *number*

Synopsis	Buffer queue size
Context	<b>configure qos mlppp-profile-egress</b> <i>number class number max-queue-size number</i>
Tree	<a href="#">max-queue-size</a>
Range	1 to 1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**mir** *number*

Synopsis	Minimum information rate (MIR) as percentage
Context	<b>configure qos mlppp-profile-egress</b> <i>number class number mir number</i>
Tree	<a href="#">mir</a>
Range	1 to 100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**weight** *number*

Synopsis	Weight of this multiclass class as a percentage
Context	<b>configure</b> qos mlppp-profile-egress <i>number</i> class <i>number</i> weight <i>number</i>
Tree	weight
Range	1 to 100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**description** *string*

Synopsis	Text description
Context	<b>configure</b> qos mlppp-profile-egress <i>number</i> description <i>string</i>
Tree	description
String Length	0 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**fc** [**fc-name**] *keyword*

Synopsis	Enter the <b>fc</b> list instance
Context	<b>configure</b> qos mlppp-profile-egress <i>number</i> fc <i>keyword</i>
Tree	fc
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[fc-name]** *keyword*

Synopsis	Forwarding class name
Context	<b>configure</b> qos mlppp-profile-egress <i>number</i> fc <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS



**mlppp-class** *number*

Synopsis	Mapping of the system forwarding class to the MLPPP classes
Context	<b>configure</b> qos mlppp-profile-egress <i>number</i> <b>fc</b> keyword mlppp-class <i>number</i>
Tree	mlppp-class
Range	0 to 3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**mlppp-profile-ingress** [**mc-mlppp-ingress-prof-index**] *number*

Synopsis	Enter the <b>mlppp-profile-ingress</b> list instance
Context	<b>configure</b> qos mlppp-profile-ingress <i>number</i>
Tree	mlppp-profile-ingress
Max. Instances	128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[mc-mlppp-ingress-prof-index]** *number*

Synopsis	Index of the ingress MultiClass MLPPP profile
Context	<b>configure</b> qos mlppp-profile-ingress <i>number</i>
Tree	mlppp-profile-ingress
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**class** [**class-id**] *number*

Synopsis	Enter the <b>class</b> list instance
Context	<b>configure</b> qos mlppp-profile-ingress <i>number</i> class <i>number</i>
Tree	class
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[class-id]** *number*

Synopsis Policy class

Context **configure qos mlppp-profile-ingress** *number class number*

Tree [class](#)

Range 0 to 3

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **reassemble-timeout** *number*

Synopsis Reassembly timeout for this policy

Context **configure qos mlppp-profile-ingress** *number class number reassemble-timeout number*

Tree [reassemble-timeout](#)

Range 1 to 1000

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **description** *string*

Synopsis Text description

Context **configure qos mlppp-profile-ingress** *number description string*

Tree [description](#)

String Length 0 to 80

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **network** [[network-policy-name](#)] *string*

Synopsis Enter the **network** list instance

Context **configure qos network** *string*

Tree [network](#)

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Max. Instances	255
Introduced	16.0.R1
Platforms	All

**[network-policy-name] string**

Synopsis	QoS network policy name
Context	<b>configure qos network string</b>
Tree	<a href="#">network</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure qos network string description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure qos network string egress</b>
Tree	<a href="#">egress</a>
Introduced	16.0.R1
Platforms	All

**dscp [dscp-name] keyword**

Synopsis	Enter the <b>dscp</b> list instance
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Context	<b>configure qos network</b> <i>string</i> <b>egress dscp</b> <i>keyword</i>
Tree	<b>dscp</b>
Introduced	16.0.R1
Platforms	All

### **[dscp-name]** *keyword*

Synopsis	DSCP name to perform reclassification actions
Context	<b>configure qos network</b> <i>string</i> <b>egress dscp</b> <i>keyword</i>
Tree	<b>dscp</b>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **fc** *keyword*

Synopsis	Forwarding class
Context	<b>configure qos network</b> <i>string</i> <b>egress dscp</b> <i>keyword</i> <b>fc</b> <i>keyword</i>
Tree	<b>fc</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **profile** *keyword*

Synopsis	Default profile to use for the ingressing traffic
Context	<b>configure qos network</b> <i>string</i> <b>egress dscp</b> <i>keyword</i> <b>profile</b> <i>keyword</i>
Tree	<b>profile</b>
Options	in, out, exceed, inplus
Notes	This element is mandatory.

Introduced 16.0.R1  
Platforms All

### **fc** [*fc-name*] *keyword*

Synopsis Enter the **fc** list instance  
Context **configure qos network** *string egress fc keyword*  
Tree **fc**  
Introduced 16.0.R1  
Platforms All

### **[fc-name]** *keyword*

Synopsis Forwarding class name  
Context **configure qos network** *string egress fc keyword*  
Tree **fc**  
Options be, l2, af, l1, h2, ef, h1, nc  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms All

### **de-mark**

Synopsis Enable the **de-mark** context  
Context **configure qos network** *string egress fc keyword de-mark*  
Tree **de-mark**  
Introduced 16.0.R1  
Platforms All

### **force** *number*

Synopsis DE value  
Context **configure qos network** *string egress fc keyword de-mark force number*  
Tree **force**  
Range 0 to 1

Introduced	16.0.R1
Platforms	All

### **dot1p-in-profile** *number*

Synopsis	Dot1p marking for in-profile marking
Context	<b>configure qos network</b> <i>string egress fc keyword dot1p-in-profile number</i>
Tree	<a href="#">dot1p-in-profile</a>
Range	0 to 7
Introduced	16.0.R1
Platforms	All

### **dot1p-out-profile** *number*

Synopsis	Dot1p marking for out-of-profile marking
Context	<b>configure qos network</b> <i>string egress fc keyword dot1p-out-profile number</i>
Tree	<a href="#">dot1p-out-profile</a>
Range	0 to 7
Introduced	16.0.R1
Platforms	All

### **dscp-in-profile** *keyword*

Synopsis	DSCP marking for in-profile marking
Context	<b>configure qos network</b> <i>string egress fc keyword dscp-in-profile keyword</i>
Tree	<a href="#">dscp-in-profile</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

### **dscp-out-profile** *keyword*

Synopsis	DSCP marking for out-of-profile marking
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Context	<b>configure qos network</b> <i>string</i> <b>egress fc</b> <i>keyword</i> <b>dscp-out-profile</b> <i>keyword</i>
Tree	<a href="#">dscp-out-profile</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

### **lsp-exp-in-profile** *number*

Synopsis	LSP-EXP marking for in-profile marking
Context	<b>configure qos network</b> <i>string</i> <b>egress fc</b> <i>keyword</i> <b>lsp-exp-in-profile</b> <i>number</i>
Tree	<a href="#">lsp-exp-in-profile</a>
Range	0 to 7
Introduced	16.0.R1
Platforms	All

### **lsp-exp-out-profile** *number*

Synopsis	LSP-EXP marking for out-of-profile marking
Context	<b>configure qos network</b> <i>string</i> <b>egress fc</b> <i>keyword</i> <b>lsp-exp-out-profile</b> <i>number</i>
Tree	<a href="#">lsp-exp-out-profile</a>
Range	0 to 7
Introduced	16.0.R1
Platforms	All

### **port-redirect-group**

Synopsis	Enter the <b>port-redirect-group</b> context
Context	<b>configure qos network</b> <i>string</i> <b>egress fc</b> <i>keyword</i> <b>port-redirect-group</b>
Tree	<a href="#">port-redirect-group</a>
Introduced	16.0.R1
Platforms	All

### **policer** *number*

Synopsis	Policer to be used
Context	<b>configure qos network</b> <i>string</i> <b>egress fc keyword</b> <b>port-redirect-group policer</b> <i>number</i>
Tree	<b>policer</b>
Range	1 to 16
Introduced	16.0.R1
Platforms	All

### **queue** *number*

Synopsis	Queue to be used
Context	<b>configure qos network</b> <i>string</i> <b>egress fc keyword</b> <b>port-redirect-group queue</b> <i>number</i>
Tree	<b>queue</b>
Range	1 to 8
Introduced	16.0.R1
Platforms	All

### **ip-criteria**

Synopsis	Enter the <b>ip-criteria</b> context
Context	<b>configure qos network</b> <i>string</i> <b>egress ip-criteria</b>
Tree	<b>ip-criteria</b>
Introduced	16.0.R1
Platforms	All

### **entry** [**entry-id**] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure qos network</b> <i>string</i> <b>egress ip-criteria entry</b> <i>number</i>
Tree	<b>entry</b>
Introduced	16.0.R1
Platforms	All



**[entry-id] number**

Synopsis	Entry ID for match criterion and corresponding action
Context	<b>configure qos network</b> <i>string egress ip-criteria entry number</i>
Tree	<a href="#">entry</a>
Description	This command uniquely identifies a match criterion and the corresponding action. Nokia recommends that multiple entries be given entry IDs in staggered increments. This allows users to insert a new entry in an existing policy without requiring renumbering all of the existing entries.
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**action**

Synopsis	Enter the <b>action</b> context
Context	<b>configure qos network</b> <i>string egress ip-criteria entry number action</i>
Tree	<a href="#">action</a>
Introduced	16.0.R1
Platforms	All

**fc keyword**

Synopsis	Forwarding class
Context	<b>configure qos network</b> <i>string egress ip-criteria entry number action fc keyword</i>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

**port-redirect-group**

Synopsis	Enter the <b>port-redirect-group</b> context
Context	<b>configure qos network</b> <i>string egress ip-criteria entry number action port-redirect-group</i>
Tree	<a href="#">port-redirect-group</a>

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**policer number**

Synopsis	Policer ID to be used for the matched traffic
Context	<b>configure qos network</b> <i>string</i> <b>egress ip-criteria entry number action port-redirect-group</b> <b>policer number</b>
Tree	<b>policer</b>
Range	1 to 16
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**queue number**

Synopsis	Queue to be used for post-policed traffic
Context	<b>configure qos network</b> <i>string</i> <b>egress ip-criteria entry number action port-redirect-group</b> <b>queue number</b>
Tree	<b>queue</b>
Range	1 to 8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**profile keyword**

Synopsis	Profile reclassification action
Context	<b>configure qos network</b> <i>string</i> <b>egress ip-criteria entry number action profile keyword</b>
Tree	<b>profile</b>
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

**type keyword**

Synopsis	Action for criteria entry
Context	<b>configure qos network</b> <i>string</i> <b>egress ip-criteria entry number action type keyword</b>

Tree	<a href="#">type</a>
Options	ignore-match, accept
Default	ignore-match
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">qos network</a> <i>string</i> <a href="#">egress ip-criteria entry</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **match**

Synopsis	Enter the <b>match</b> context
Context	<b>configure</b> <a href="#">qos network</a> <i>string</i> <a href="#">egress ip-criteria entry</a> <i>number</i> <a href="#">match</a>
Tree	<a href="#">match</a>
Introduced	16.0.R1
Platforms	All

### **dscp** *keyword*

Synopsis	DSCP value to match in the packet
Context	<b>configure</b> <a href="#">qos network</a> <i>string</i> <a href="#">egress ip-criteria entry</a> <i>number</i> <a href="#">match dscp</a> <i>keyword</i>
Tree	<a href="#">dscp</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

**dst-ip**

Synopsis	Enter the <b>dst-ip</b> context
Context	<b>configure qos network string egress ip-criteria entry number match dst-ip</b>
Tree	<a href="#">dst-ip</a>
Introduced	16.0.R1
Platforms	All

**address** (*ipv4-address* | *ipv4-prefix-with-host-bits*)

Synopsis	Destination IPv4 address to match
Context	<b>configure qos network string egress ip-criteria entry number match dst-ip address</b> ( <i>ipv4-address</i>   <i>ipv4-prefix-with-host-bits</i> )
Tree	<a href="#">address</a>
Introduced	16.0.R1
Platforms	All

**mask string**

Synopsis	Subnet mask
Context	<b>configure qos network string egress ip-criteria entry number match dst-ip mask string</b>
Tree	<a href="#">mask</a>
Introduced	16.0.R1
Platforms	All

**dst-port**

Synopsis	Enter the <b>dst-port</b> context
Context	<b>configure qos network string egress ip-criteria entry number match dst-port</b>
Tree	<a href="#">dst-port</a>
Introduced	16.0.R1
Platforms	All

**eq number**

Synopsis	Value 'equal to' assigned as match condition
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Context	<b>configure qos network</b> <i>string egress ip-criteria entry number match dst-port eq number</i>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>
Introduced	16.0.R1
Platforms	All

### **gt number**

Synopsis	Value 'greater than' assigned as match condition
Context	<b>configure qos network</b> <i>string egress ip-criteria entry number match dst-port gt number</i>
Tree	<a href="#">gt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>
Introduced	16.0.R1
Platforms	All

### **lt number**

Synopsis	Value 'less than' assigned as match condition
Context	<b>configure qos network</b> <i>string egress ip-criteria entry number match dst-port lt number</i>
Tree	<a href="#">lt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>
Introduced	16.0.R1
Platforms	All

### **port-list reference**

Synopsis	Name of the port list as the match criterion
Context	<b>configure qos network</b> <i>string egress ip-criteria entry number match dst-port port-list reference</i>
Tree	<a href="#">port-list</a>
Reference	<b>configure qos match-list port-list</b> <i>string</i>
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>

Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## range

Synopsis	Enter the <b>range</b> context
Context	<b>configure qos network string egress ip-criteria entry number match dst-port range</b>
Tree	<b>range</b>
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range</b> .
Introduced	16.0.R1
Platforms	All

## end number

Synopsis	Upper bound of port range to match
Context	<b>configure qos network string egress ip-criteria entry number match dst-port range end number</b>
Tree	<b>end</b>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

## start number

Synopsis	Lower bound of port range to match
Context	<b>configure qos network string egress ip-criteria entry number match dst-port range start number</b>
Tree	<b>start</b>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

## fragment keyword

Synopsis	Fragmentation state as the match criterion
Context	<b>configure qos network string egress ip-criteria entry number match fragment keyword</b>

Tree	<a href="#">fragment</a>
Description	This command configures fragmented or non-fragmented IP packets as a network QoS policy match criterion. When unconfigured, all packets match regardless of whether they are fragmented.
Options	false, true
Introduced	16.0.R1
Platforms	All

### **icmp-type** *number*

Synopsis	ICMP type in the ICMP header of IPv4 packet to match
Context	<b>configure</b> <a href="#">qos network</a> <i>string</i> <a href="#">egress ip-criteria entry</a> <i>number</i> <a href="#">match icmp-type</a> <i>number</i>
Tree	<a href="#">icmp-type</a>
Description	This command configures matching on the ICMP type field in the ICMP header of an IPv4 packet as a network QoS match criterion.  An entry containing Layer 4 non-zero match criteria does not match non-initial (second, third, and so on) fragments of a fragmented packet because only the first fragment contains the Layer 4 information. Similarly, an entry containing a match criteria of zero may not match non-initial fragments when the Layer 4 header is not present in a packet fragment and other match criteria are also met.
Range	0 to 255
Introduced	16.0.R1
Platforms	All

### **protocol** (*number* | *keyword*)

Synopsis	IP protocol to match
Context	<b>configure</b> <a href="#">qos network</a> <i>string</i> <a href="#">egress ip-criteria entry</a> <i>number</i> <a href="#">match protocol</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">protocol</a>
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

**src-ip**

Synopsis	Enter the <b>src-ip</b> context
Context	<b>configure qos network string egress ip-criteria entry number match src-ip</b>
Tree	<a href="#">src-ip</a>
Introduced	16.0.R1
Platforms	All

**address** (*ipv4-address* | *ipv4-prefix-with-host-bits*)

Synopsis	Source IPv4 address to match
Context	<b>configure qos network string egress ip-criteria entry number match src-ip address</b> ( <i>ipv4-address</i>   <i>ipv4-prefix-with-host-bits</i> )
Tree	<a href="#">address</a>
Introduced	16.0.R1
Platforms	All

**mask string**

Synopsis	Subnet mask
Context	<b>configure qos network string egress ip-criteria entry number match src-ip mask string</b>
Tree	<a href="#">mask</a>
Introduced	16.0.R1
Platforms	All

**src-port**

Synopsis	Enter the <b>src-port</b> context
Context	<b>configure qos network string egress ip-criteria entry number match src-port</b>
Tree	<a href="#">src-port</a>
Introduced	16.0.R1
Platforms	All

**eq number**

Synopsis	Value 'equal to' assigned as match condition
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Context	<b>configure qos network</b> <i>string egress ip-criteria entry number match src-port eq number</i>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>
Introduced	16.0.R1
Platforms	All

### **gt number**

Synopsis	Value 'greater than' assigned as match condition
Context	<b>configure qos network</b> <i>string egress ip-criteria entry number match src-port gt number</i>
Tree	<a href="#">gt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>
Introduced	16.0.R1
Platforms	All

### **lt number**

Synopsis	Value 'less than' assigned as match condition
Context	<b>configure qos network</b> <i>string egress ip-criteria entry number match src-port lt number</i>
Tree	<a href="#">lt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>
Introduced	16.0.R1
Platforms	All

### **port-list reference**

Synopsis	Name of the port list as the match criterion
Context	<b>configure qos network</b> <i>string egress ip-criteria entry number match src-port port-list reference</i>
Tree	<a href="#">port-list</a>
Reference	<b>configure qos match-list port-list</b> <i>string</i>
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>

Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## range

Synopsis	Enter the <b>range</b> context
Context	<b>configure qos network string egress ip-criteria entry number match src-port range</b>
Tree	<b>range</b>
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>
Introduced	16.0.R1
Platforms	All

## end number

Synopsis	Upper bound of port range to match
Context	<b>configure qos network string egress ip-criteria entry number match src-port range end number</b>
Tree	<b>end</b>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

## start number

Synopsis	Lower bound of port range to match
Context	<b>configure qos network string egress ip-criteria entry number match src-port range start number</b>
Tree	<b>start</b>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

## ipv6-criteria

Synopsis	Enter the <b>ipv6-criteria</b> context
Context	<b>configure qos network string egress ipv6-criteria</b>

Tree	<a href="#">ipv6-criteria</a>
Introduced	16.0.R1
Platforms	All

### **entry** [[entry-id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure qos network</b> <i>string</i> <a href="#">egress</a> <a href="#">ipv6-criteria</a> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

### **[entry-id]** *number*

Synopsis	Entry ID for match criterion and corresponding action
Context	<b>configure qos network</b> <i>string</i> <a href="#">egress</a> <a href="#">ipv6-criteria</a> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Description	This command uniquely identifies a match criterion and the corresponding action. Nokia recommends that multiple entries be given entry IDs in staggered increments. This allows users to insert a new entry in an existing policy without requiring renumbering all of the existing entries.
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **action**

Synopsis	Enter the <b>action</b> context
Context	<b>configure qos network</b> <i>string</i> <a href="#">egress</a> <a href="#">ipv6-criteria</a> <a href="#">entry</a> <i>number</i> <a href="#">action</a>
Tree	<a href="#">action</a>
Introduced	16.0.R1
Platforms	All

**fc keyword**

Synopsis	Forwarding class
Context	<b>configure qos network</b> <i>string</i> <i>egress</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>action</i> <b>fc</b> <i>keyword</i>
Tree	<b>fc</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

**port-redirect-group**

Synopsis	Enter the <b>port-redirect-group</b> context
Context	<b>configure qos network</b> <i>string</i> <i>egress</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>action</i> <b>port-redirect-group</b>
Tree	<b>port-redirect-group</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**policer number**

Synopsis	Policer ID to be used for the matched traffic
Context	<b>configure qos network</b> <i>string</i> <i>egress</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>action</i> <b>port-redirect-group</b> <i>policer</i> <i>number</i>
Tree	<b>policer</b>
Range	1 to 16
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**queue number**

Synopsis	Queue to be used for post-policed traffic
Context	<b>configure qos network</b> <i>string</i> <i>egress</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>action</i> <b>port-redirect-group</b> <i>queue</i> <i>number</i>
Tree	<b>queue</b>
Range	1 to 8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**profile** *keyword*

Synopsis	Profile reclassification action
Context	<b>configure qos network</b> <i>string</i> <i>egress</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>action</i> <i>profile</i> <i>keyword</i>
Tree	<a href="#">profile</a>
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

**type** *keyword*

Synopsis	Action for criteria entry
Context	<b>configure qos network</b> <i>string</i> <i>egress</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>action</i> <i>type</i> <i>keyword</i>
Tree	<a href="#">type</a>
Options	ignore-match, accept
Default	ignore-match
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure qos network</b> <i>string</i> <i>egress</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>description</i> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**match**

Synopsis	Enter the <b>match</b> context
Context	<b>configure qos network</b> <i>string</i> <i>egress</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>match</i>
Tree	<a href="#">match</a>
Introduced	16.0.R1
Platforms	All

**dscp keyword**

Synopsis	DSCP value to match in the packet
Context	<b>configure qos network string egress ipv6-criteria entry number match dscp keyword</b>
Tree	<b>dscp</b>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

**dst-ip**

Synopsis	Enter the <b>dst-ip</b> context
Context	<b>configure qos network string egress ipv6-criteria entry number match dst-ip</b>
Tree	<b>dst-ip</b>
Introduced	16.0.R1
Platforms	All

**address (ipv6-address | ipv6-prefix-with-host-bits)**

Synopsis	Destination IPv6 address to match
Context	<b>configure qos network string egress ipv6-criteria entry number match dst-ip address (ipv6-address   ipv6-prefix-with-host-bits)</b>
Tree	<b>address</b>
Introduced	16.0.R1
Platforms	All

**mask string**

Synopsis	Address mask
Context	<b>configure qos network string egress ipv6-criteria entry number match dst-ip mask string</b>
Tree	<b>mask</b>
Introduced	16.0.R1
Platforms	All

## dst-port

Synopsis	Enter the <b>dst-port</b> context
Context	<b>configure qos network string egress ipv6-criteria entry number match dst-port</b>
Tree	<a href="#">dst-port</a>
Introduced	16.0.R1
Platforms	All

## eq number

Synopsis	Value 'equal to' assigned as match condition
Context	<b>configure qos network string egress ipv6-criteria entry number match dst-port eq number</b>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>
Introduced	16.0.R1
Platforms	All

## gt number

Synopsis	Value 'greater than' assigned as match condition
Context	<b>configure qos network string egress ipv6-criteria entry number match dst-port gt number</b>
Tree	<a href="#">gt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>
Introduced	16.0.R1
Platforms	All

## lt number

Synopsis	Value 'less than' assigned as match condition
Context	<b>configure qos network string egress ipv6-criteria entry number match dst-port lt number</b>
Tree	<a href="#">lt</a>

Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **port-list** *reference*

Synopsis	Name of the port list as the match criterion
Context	<b>configure</b> <a href="#">qos network</a> <i>string</i> <a href="#">egress ipv6-criteria entry number match dst-port</a> <a href="#">port-list reference</a>
Tree	<a href="#">port-list</a>
Reference	<b>configure</b> <a href="#">qos match-list</a> <a href="#">port-list</a> <i>string</i>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **range**

Synopsis	Enter the <b>range</b> context
Context	<b>configure</b> <a href="#">qos network</a> <i>string</i> <a href="#">egress ipv6-criteria entry number match dst-port</a> <a href="#">range</a>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **end** *number*

Synopsis	Upper bound of port range to match
Context	<b>configure</b> <a href="#">qos network</a> <i>string</i> <a href="#">egress ipv6-criteria entry number match dst-port</a> <a href="#">range end number</a>
Tree	<a href="#">end</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All



**start number**

Synopsis	Lower bound of port range to match
Context	<b>configure qos network string egress ipv6-criteria entry number match dst-port range start number</b>
Tree	<b>start</b>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

**fragment keyword**

Synopsis	Fragmentation state as the match criterion
Context	<b>configure qos network string egress ipv6-criteria entry number match fragment keyword</b>
Tree	<b>fragment</b>
Description	This command configures fragmented or non-fragmented IPv6 packets as a network QoS policy match criterion.  When unconfigured, all packets match regardless of whether they are fragmented.
Options	false, true, first-only, non-first-only
Introduced	16.0.R1
Platforms	All

**icmp-type number**

Synopsis	ICMPv6 type in ICMPv6 header of IPv6 packet to match
Context	<b>configure qos network string egress ipv6-criteria entry number match icmp-type number</b>
Tree	<b>icmp-type</b>
Description	This command configures matching on the ICMPv6 type field in the ICMPv6 header of an IPv6 packet as a network QoS match criterion.  An entry containing Layer 4 non-zero match criteria does not match non-initial (second, third, and so on) fragments of a fragmented packet because only the first fragment contains the Layer 4 information. Similarly, an entry containing a match criteria of zero may not match non-initial fragments when the Layer 4 header is not present in a packet fragment and other match criteria are also met.
Range	0 to 255
Introduced	16.0.R1
Platforms	All

**next-header** (*number* | *keyword*)

Synopsis	IP protocol to match
Context	<b>configure qos network</b> <i>string</i> <b>egress ipv6-criteria entry</b> <i>number</i> <b>match next-header</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">next-header</a>
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

**src-ip**

Synopsis	Enter the <b>src-ip</b> context
Context	<b>configure qos network</b> <i>string</i> <b>egress ipv6-criteria entry</b> <i>number</i> <b>match src-ip</b>
Tree	<a href="#">src-ip</a>
Introduced	16.0.R1
Platforms	All

**address** (*ipv6-address* | *ipv6-prefix-with-host-bits*)

Synopsis	Source IPv6 address to match
Context	<b>configure qos network</b> <i>string</i> <b>egress ipv6-criteria entry</b> <i>number</i> <b>match src-ip address</b> ( <i>ipv6-address</i>   <i>ipv6-prefix-with-host-bits</i> )
Tree	<a href="#">address</a>
Introduced	16.0.R1
Platforms	All

**mask** *string*

Synopsis	Address mask
Context	<b>configure qos network</b> <i>string</i> <b>egress ipv6-criteria entry</b> <i>number</i> <b>match src-ip mask</b> <i>string</i>
Tree	<a href="#">mask</a>
Introduced	16.0.R1

Platforms All

### src-port

Synopsis Enter the **src-port** context

Context **configure qos network** *string* *egress* *ipv6-criteria* *entry* *number* *match* **src-port**

Tree [src-port](#)

Introduced 16.0.R1

Platforms All

### eq number

Synopsis Value 'equal to' assigned as match condition

Context **configure qos network** *string* *egress* *ipv6-criteria* *entry* *number* *match* **src-port** **eq** *number*

Tree [eq](#)

Range 0 to 65535

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.

Introduced 16.0.R1

Platforms All

### gt number

Synopsis Value 'greater than' assigned as match condition

Context **configure qos network** *string* *egress* *ipv6-criteria* *entry* *number* *match* **src-port** **gt** *number*

Tree [gt](#)

Range 0 to 65535

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.

Introduced 16.0.R1

Platforms All

### lt number

Synopsis Value 'less than' assigned as match condition

Context **configure qos network** *string* *egress* *ipv6-criteria* *entry* *number* *match* **src-port** **lt** *number*

Tree	<a href="#">lt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **port-list** *reference*

Synopsis	Name of the port list as the match criterion
Context	<b>configure</b> <a href="#">qos network</a> <i>string</i> <a href="#">egress ipv6-criteria entry number match src-port</a> <a href="#">port-list reference</a>
Tree	<a href="#">port-list</a>
Reference	<b>configure</b> <a href="#">qos match-list</a> <a href="#">port-list</a> <i>string</i>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **range**

Synopsis	Enter the <b>range</b> context
Context	<b>configure</b> <a href="#">qos network</a> <i>string</i> <a href="#">egress ipv6-criteria entry number match src-port</a> <a href="#">range</a>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **end number**

Synopsis	Upper bound of port range to match
Context	<b>configure</b> <a href="#">qos network</a> <i>string</i> <a href="#">egress ipv6-criteria entry number match src-port</a> <a href="#">range end number</a>
Tree	<a href="#">end</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

**start number**

Synopsis	Lower bound of port range to match
Context	<b>configure qos network</b> <i>string</i> <b>egress ipv6-criteria entry number match src-port range start number</b>
Tree	<b>start</b>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

**prec [prec-value] number**

Synopsis	Enter the <b>prec</b> list instance
Context	<b>configure qos network</b> <i>string</i> <b>egress prec number</b>
Tree	<b>prec</b>
Introduced	16.0.R1
Platforms	All

**[prec-value] number**

Synopsis	Precedence value for which mapping is performed
Context	<b>configure qos network</b> <i>string</i> <b>egress prec number</b>
Tree	<b>prec</b>
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**fc keyword**

Synopsis	Forwarding class
Context	<b>configure qos network</b> <i>string</i> <b>egress prec number fc keyword</b>
Tree	<b>fc</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is mandatory.

Introduced 16.0.R1  
Platforms All

### **profile** *keyword*

Synopsis Default profile to use for the ingressing traffic  
Context **configure qos network** *string egress prec number profile keyword*  
Tree [profile](#)  
Options in, out, exceed, inplus  
Notes This element is mandatory.  
Introduced 16.0.R1  
Platforms All

### **remark-trusted**

Synopsis Enable the **remark-trusted** context  
Context **configure qos network** *string egress remark-trusted*  
Tree [remark-trusted](#)  
Introduced 16.0.R1  
Platforms All

### **force-egress-marking** *boolean*

Synopsis Remark DSCP bits in the internal IP header  
Context **configure qos network** *string egress remark-trusted force-egress-marking boolean*  
Tree [force-egress-marking](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **ingress**

Synopsis Enter the **ingress** context  
Context **configure qos network** *string ingress*  
Tree [ingress](#)

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Introduced	16.0.R1
Platforms	All

### **default-action**

Synopsis	Enter the <b>default-action</b> context
Context	<b>configure qos network</b> <i>string</i> <b>ingress default-action</b>
Tree	<a href="#">default-action</a>
Introduced	16.0.R1
Platforms	All

### **fc keyword**

Synopsis	Forwarding class used when classifying ingress traffic
Context	<b>configure qos network</b> <i>string</i> <b>ingress default-action fc</b> <i>keyword</i>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Default	be
Introduced	16.0.R1
Platforms	All

### **profile keyword**

Synopsis	Default profile for the ingressing traffic
Context	<b>configure qos network</b> <i>string</i> <b>ingress default-action profile</b> <i>keyword</i>
Tree	<a href="#">profile</a>
Options	in, out, exceed, inplus
Default	out
Introduced	16.0.R1
Platforms	All

### **dot1p [dot1p-value] number**

Synopsis	Enter the <b>dot1p</b> list instance
Context	<b>configure qos network</b> <i>string</i> <b>ingress dot1p</b> <i>number</i>

Tree	<a href="#">dot1p</a>
Introduced	16.0.R1
Platforms	All

**[dot1p-value]** *number*

Synopsis	Dot1p value to match in the packet
Context	<b>configure</b> <a href="#">qos network</a> <i>string</i> <a href="#">ingress dot1p</a> <i>number</i>
Tree	<a href="#">dot1p</a>
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**fc** *keyword*

Synopsis	Forwarding class
Context	<b>configure</b> <a href="#">qos network</a> <i>string</i> <a href="#">ingress dot1p</a> <i>number</i> <b>fc</b> <i>keyword</i>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**profile** *keyword*

Synopsis	Default profile to be used for the ingressing traffic
Context	<b>configure</b> <a href="#">qos network</a> <i>string</i> <a href="#">ingress dot1p</a> <i>number</i> <b>profile</b> <i>keyword</i>
Tree	<a href="#">profile</a>
Options	in, out, de, exceed, inplus
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All



**dscp** [*dscp-name*] *keyword*

Synopsis	Enter the <b>dscp</b> list instance
Context	<b>configure qos network</b> <i>string</i> <b>ingress dscp</b> <i>keyword</i>
Tree	<b>dscp</b>
Introduced	16.0.R1
Platforms	All

**[dscp-name]** *keyword*

Synopsis	DSCP associated with the forwarding class
Context	<b>configure qos network</b> <i>string</i> <b>ingress dscp</b> <i>keyword</i>
Tree	<b>dscp</b>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**fc** *keyword*

Synopsis	Forwarding class
Context	<b>configure qos network</b> <i>string</i> <b>ingress dscp</b> <i>keyword</i> <b>fc</b> <i>keyword</i>
Tree	<b>fc</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**profile** *keyword*

Synopsis	Default profile to use for the ingress traffic
Context	<b>configure qos network</b> <i>string</i> <b>ingress dscp</b> <i>keyword</i> <b>profile</b> <i>keyword</i>
Tree	<b>profile</b>

Options	in, out, exceed, inplus
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **fc** [*fc-name*] *keyword*

Synopsis	Enter the <b>fc</b> list instance
Context	<b>configure qos network</b> <i>string</i> <b>ingress fc</b> <i>keyword</i>
Tree	<b>fc</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **[fc-name]** *keyword*

Synopsis	Forwarding class name
Context	<b>configure qos network</b> <i>string</i> <b>ingress fc</b> <i>keyword</i>
Tree	<b>fc</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **fp-redirect-group**

Synopsis	Enter the <b>fp-redirect-group</b> context
Context	<b>configure qos network</b> <i>string</i> <b>ingress fc</b> <i>keyword</i> <b>fp-redirect-group</b>
Tree	<b>fp-redirect-group</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **broadcast-policer** *number*

Synopsis	Policer to be used for broadcast traffic
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Context	<b>configure qos network</b> <i>string</i> <b>ingress fc</b> <i>keyword</i> <b>fp-redirect-group broadcast-policer</b> <i>number</i>
Tree	<a href="#">broadcast-policer</a>
Range	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **multicast-policer** *number*

Synopsis	Policer to be used for multicast traffic
Context	<b>configure qos network</b> <i>string</i> <b>ingress fc</b> <i>keyword</i> <b>fp-redirect-group multicast-policer</b> <i>number</i>
Tree	<a href="#">multicast-policer</a>
Range	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **policer** *number*

Synopsis	Policer to be used for unicast traffic
Context	<b>configure qos network</b> <i>string</i> <b>ingress fc</b> <i>keyword</i> <b>fp-redirect-group policer</b> <i>number</i>
Tree	<a href="#">policer</a>
Range	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **unknown-policer** *number*

Synopsis	Policer to be used for unknown traffic
Context	<b>configure qos network</b> <i>string</i> <b>ingress fc</b> <i>keyword</i> <b>fp-redirect-group unknown-policer</b> <i>number</i>
Tree	<a href="#">unknown-policer</a>
Range	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## ip-criteria

Synopsis	Enter the <b>ip-criteria</b> context
Context	<b>configure qos network string ingress ip-criteria</b>
Tree	<b>ip-criteria</b>
Introduced	16.0.R1
Platforms	All

## entry [entry-id] number

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure qos network string ingress ip-criteria entry number</b>
Tree	<b>entry</b>
Introduced	16.0.R1
Platforms	All

## [entry-id] number

Synopsis	Network Ingress IP Criteria Entry Index
Context	<b>configure qos network string ingress ip-criteria entry number</b>
Tree	<b>entry</b>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## action

Synopsis	Enter the <b>action</b> context
Context	<b>configure qos network string ingress ip-criteria entry number action</b>
Tree	<b>action</b>
Introduced	16.0.R1
Platforms	All

**fc keyword**

Synopsis	Forwarding class
Context	<b>configure qos network</b> <i>string</i> <b>ingress ip-criteria entry</b> <i>number</i> <b>action fc keyword</b>
Tree	<b>fc</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

**profile keyword**

Synopsis	Default profile for the matching traffic
Context	<b>configure qos network</b> <i>string</i> <b>ingress ip-criteria entry</b> <i>number</i> <b>action profile keyword</b>
Tree	<b>profile</b>
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

**type keyword**

Synopsis	Action for criteria entry
Context	<b>configure qos network</b> <i>string</i> <b>ingress ip-criteria entry</b> <i>number</i> <b>action type keyword</b>
Tree	<b>type</b>
Options	ignore-match, accept
Default	ignore-match
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure qos network</b> <i>string</i> <b>ingress ip-criteria entry</b> <i>number</i> <b>description string</b>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**match**

Synopsis	Enter the <b>match</b> context
Context	<b>configure qos network string ingress ip-criteria entry number match</b>
Tree	<b>match</b>
Introduced	16.0.R1
Platforms	All

**dscp keyword**

Synopsis	DSCP to be used as network QoS policy match criterion
Context	<b>configure qos network string ingress ip-criteria entry number match dscp keyword</b>
Tree	<b>dscp</b>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

**dst-ip**

Synopsis	Enter the <b>dst-ip</b> context
Context	<b>configure qos network string ingress ip-criteria entry number match dst-ip</b>
Tree	<b>dst-ip</b>
Introduced	16.0.R1
Platforms	All

**address (ipv4-address | ipv4-prefix-with-host-bits)**

Synopsis	Destination IPv4 address for network QoS policy match
Context	<b>configure qos network string ingress ip-criteria entry number match dst-ip address (ipv4-address   ipv4-prefix-with-host-bits)</b>
Tree	<b>address</b>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1

Platforms All

### **ip-prefix-list** *reference*

Synopsis IPv4 prefix list containing IPv4 prefixes to match

Context **configure qos network** *string* **ingress ip-criteria entry** *number* **match dst-ip ip-prefix-list** *reference*

Tree [ip-prefix-list](#)

Reference **configure qos match-list ip-prefix-list** *string*

Notes The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.

Introduced 16.0.R4

Platforms All

### **mask** *string*

Synopsis IP address to match with source IP of the packet

Context **configure qos network** *string* **ingress ip-criteria entry** *number* **match dst-ip mask** *string*

Tree [mask](#)

Notes The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.

Introduced 16.0.R1

Platforms All

### **dst-port**

Synopsis Enter the **dst-port** context

Context **configure qos network** *string* **ingress ip-criteria entry** *number* **match dst-port**

Tree [dst-port](#)

Introduced 16.0.R1

Platforms All

### **eq** *number*

Synopsis Exact destination port as the match criterion

Context **configure qos network** *string* **ingress ip-criteria entry** *number* **match dst-port eq** *number*

Tree [eq](#)

Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**gt number**

Synopsis	Greater than destination port value as match criterion
Context	<b>configure qos network string ingress ip-criteria entry number match dst-port gt number</b>
Tree	<a href="#">gt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**lt number**

Synopsis	Less than destination port value as the match criterion
Context	<b>configure qos network string ingress ip-criteria entry number match dst-port lt number</b>
Tree	<a href="#">lt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**port-list reference**

Synopsis	Port list used as match criterion
Context	<b>configure qos network string ingress ip-criteria entry number match dst-port port-list reference</b>
Tree	<a href="#">port-list</a>
Description	This command assigns a port list to a matching criteria entry in the network QoS policy. Each entry can use only a single port list. Port lists and prefix lists are mutually exclusive.
Reference	<b>configure qos match-list port-list string</b>



Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## range

Synopsis	Enter the <b>range</b> context
Context	<b>configure qos network string ingress ip-criteria entry number match dst-port range</b>
Tree	<b>range</b>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## end number

Synopsis	Upper bound of port range to match
Context	<b>configure qos network string ingress ip-criteria entry number match dst-port range end number</b>
Tree	<b>end</b>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

## start number

Synopsis	Lower bound of port range to match
Context	<b>configure qos network string ingress ip-criteria entry number match dst-port range start number</b>
Tree	<b>start</b>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

## fragment keyword

Synopsis	Fragmentation state as the match criterion
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Context	<b>configure qos network</b> <i>string</i> <b>ingress ip-criteria entry number match fragment keyword</b>
Tree	<b>fragment</b>
Options	false, true
Introduced	16.0.R1
Platforms	All

### **protocol** (*number* | *keyword*)

Synopsis	IP protocol to match
Context	<b>configure qos network</b> <i>string</i> <b>ingress ip-criteria entry number match protocol</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>protocol</b>
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

### **src-ip**

Synopsis	Enter the <b>src-ip</b> context
Context	<b>configure qos network</b> <i>string</i> <b>ingress ip-criteria entry number match src-ip</b>
Tree	<b>src-ip</b>
Introduced	16.0.R1
Platforms	All

### **address** (*ipv4-address* | *ipv4-prefix-with-host-bits*)

Synopsis	Source IPv4 address for network QoS policy match
Context	<b>configure qos network</b> <i>string</i> <b>ingress ip-criteria entry number match src-ip address</b> ( <i>ipv4-address</i>   <i>ipv4-prefix-with-host-bits</i> )
Tree	<b>address</b>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

**ip-prefix-list** *reference*

Synopsis	IPv4 prefix list containing IPv4 prefixes to match
Context	<b>configure qos network</b> <i>string</i> <a href="#">ingress ip-criteria entry number</a> <a href="#">match src-ip ip-prefix-list reference</a>
Tree	<a href="#">ip-prefix-list</a>
Reference	<b>configure qos match-list ip-prefix-list</b> <i>string</i>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R4
Platforms	All

**mask** *string*

Synopsis	IP address to match with source IP of the packet
Context	<b>configure qos network</b> <i>string</i> <a href="#">ingress ip-criteria entry number</a> <a href="#">match src-ip mask string</a>
Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

**src-port**

Synopsis	Enter the <b>src-port</b> context
Context	<b>configure qos network</b> <i>string</i> <a href="#">ingress ip-criteria entry number</a> <a href="#">match src-port</a>
Tree	<a href="#">src-port</a>
Introduced	16.0.R1
Platforms	All

**eq** *number*

Synopsis	Exact source port as the match criterion
Context	<b>configure qos network</b> <i>string</i> <a href="#">ingress ip-criteria entry number</a> <a href="#">match src-port eq number</a>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .

Introduced	16.0.R1
Platforms	All

**gt number**

Synopsis	Greater than source port value as match criterion
Context	<b>configure qos network string ingress ip-criteria entry number match src-port gt number</b>
Tree	<a href="#">gt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range</b> .
Introduced	16.0.R1
Platforms	All

**lt number**

Synopsis	Less than destination port value as the match criterion
Context	<b>configure qos network string ingress ip-criteria entry number match src-port lt number</b>
Tree	<a href="#">lt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range</b> .
Introduced	16.0.R1
Platforms	All

**port-list reference**

Synopsis	Port list used as match criterion
Context	<b>configure qos network string ingress ip-criteria entry number match src-port port-list reference</b>
Tree	<a href="#">port-list</a>
Description	This command assigns a port list to a matching criteria entry in the network QoS policy. Each entry can use only a single port list. Port lists and prefix lists are mutually exclusive.
Reference	<b>configure qos match-list port-list string</b>
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range</b> .
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## range

Synopsis Enter the **range** context

Context **configure qos network** *string* **ingress ip-criteria entry number match src-port range**

Tree [range](#)

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.

Introduced 16.0.R1

Platforms All

## end number

Synopsis Upper bound of port range to match

Context **configure qos network** *string* **ingress ip-criteria entry number match src-port range end number**

Tree [end](#)

Range 0 to 65535

Introduced 16.0.R1

Platforms All

## start number

Synopsis Lower bound of port range to match

Context **configure qos network** *string* **ingress ip-criteria entry number match src-port range start number**

Tree [start](#)

Range 0 to 65535

Introduced 16.0.R1

Platforms All

## ipv6-criteria

Synopsis Enter the **ipv6-criteria** context

Context **configure qos network** *string* **ingress ipv6-criteria**

Tree [ipv6-criteria](#)

Introduced	16.0.R1
Platforms	All

### **entry** [[entry-id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure qos network</b> <a href="#">string</a> <a href="#">ingress ipv6-criteria</a> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

### **[entry-id]** *number*

Synopsis	Network Ingress IPv6 Criteria Entry Index
Context	<b>configure qos network</b> <a href="#">string</a> <a href="#">ingress ipv6-criteria</a> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **action**

Synopsis	Enter the <b>action</b> context
Context	<b>configure qos network</b> <a href="#">string</a> <a href="#">ingress ipv6-criteria</a> <a href="#">entry</a> <i>number</i> <a href="#">action</a>
Tree	<a href="#">action</a>
Introduced	16.0.R1
Platforms	All

### **fc** *keyword*

Synopsis	Forwarding class
Context	<b>configure qos network</b> <a href="#">string</a> <a href="#">ingress ipv6-criteria</a> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">fc</a> <i>keyword</i>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc

Introduced	16.0.R1
Platforms	All

**profile** *keyword*

Synopsis	Default profile for the matching traffic
Context	<b>configure</b> <a href="#">qos network</a> <i>string</i> <a href="#">ingress ipv6-criteria entry number action profile keyword</a>
Tree	<a href="#">profile</a>
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

**type** *keyword*

Synopsis	Action for criteria entry
Context	<b>configure</b> <a href="#">qos network</a> <i>string</i> <a href="#">ingress ipv6-criteria entry number action type keyword</a>
Tree	<a href="#">type</a>
Options	ignore-match, accept
Default	ignore-match
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">qos network</a> <i>string</i> <a href="#">ingress ipv6-criteria entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**match**

Synopsis	Enter the <b>match</b> context
Context	<b>configure</b> <a href="#">qos network</a> <i>string</i> <a href="#">ingress ipv6-criteria entry number match</a>

Tree	<a href="#">match</a>
Introduced	16.0.R1
Platforms	All

### **dscp keyword**

Synopsis	DSCP value to match in the packet
Context	<b>configure qos network</b> <i>string</i> <a href="#">ingress ipv6-criteria entry number match dscp keyword</a>
Tree	<a href="#">dscp</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

### **dst-ip**

Synopsis	Enter the <b>dst-ip</b> context
Context	<b>configure qos network</b> <i>string</i> <a href="#">ingress ipv6-criteria entry number match dst-ip</a>
Tree	<a href="#">dst-ip</a>
Introduced	16.0.R1
Platforms	All

### **address (ipv6-address | ipv6-prefix-with-host-bits)**

Synopsis	Destination IPv6 address for network QoS policy match
Context	<b>configure qos network</b> <i>string</i> <a href="#">ingress ipv6-criteria entry number match dst-ip address (ipv6-address   ipv6-prefix-with-host-bits)</a>
Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	All



**ipv6-prefix-list** *reference*

Synopsis	IPv6 prefix list containing IPv6 prefixes to match
Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry number match dst-ip</b> <a href="#">ipv6-prefix-list reference</a>
Tree	<a href="#">ipv6-prefix-list</a>
Reference	<b>configure qos match-list</b> <a href="#">ipv6-prefix-list</a> <i>string</i>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R4
Platforms	All

**mask** *string*

Synopsis	IP address to match with source IP of the packet
Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry number match dst-ip</b> <a href="#">mask string</a>
Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

**dst-port**

Synopsis	Enter the <b>dst-port</b> context
Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry number match</b> <a href="#">dst-port</a>
Tree	<a href="#">dst-port</a>
Introduced	16.0.R1
Platforms	All

**eq** *number*

Synopsis	Exact destination port as the match criterion
Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry number match dst-port</b> <a href="#">eq number</a>
Tree	<a href="#">eq</a>
Range	0 to 65535

Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**gt number**

Synopsis	Greater than destination port value as match criterion
Context	<b>configure qos network string ingress ipv6-criteria entry number match dst-port gt number</b>
Tree	<a href="#">gt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**lt number**

Synopsis	Less than destination port value as the match criterion
Context	<b>configure qos network string ingress ipv6-criteria entry number match dst-port lt number</b>
Tree	<a href="#">lt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**port-list reference**

Synopsis	Port list used as match criterion
Context	<b>configure qos network string ingress ipv6-criteria entry number match dst-port port-list reference</b>
Tree	<a href="#">port-list</a>
Description	This command assigns a port list to a matching criteria entry in the network QoS policy. Each entry can use only a single port list. Port lists and prefix lists are mutually exclusive.
Reference	<b>configure qos match-list port-list string</b>

Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## range

Synopsis	Enter the <b>range</b> context
Context	<b>configure qos network string ingress ipv6-criteria entry number match dst-port range</b>
Tree	<b>range</b>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## end number

Synopsis	Upper bound of port range to match
Context	<b>configure qos network string ingress ipv6-criteria entry number match dst-port range end number</b>
Tree	<b>end</b>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

## start number

Synopsis	Lower bound of port range to match
Context	<b>configure qos network string ingress ipv6-criteria entry number match dst-port range start number</b>
Tree	<b>start</b>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

## fragment keyword

Synopsis	Fragmentation state as the match criterion
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Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry number match fragment</b> <i>keyword</i>
Tree	<b>fragment</b>
Options	false, true, first-only, non-first-only
Introduced	16.0.R1
Platforms	All

### **next-header** (*number* | *keyword*)

Synopsis	IP protocol to match
Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry number match next-header</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>next-header</b>
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

### **src-ip**

Synopsis	Enter the <b>src-ip</b> context
Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry number match src-ip</b>
Tree	<b>src-ip</b>
Introduced	16.0.R1
Platforms	All

### **address** (*ipv6-address* | *ipv6-prefix-with-host-bits*)

Synopsis	Source IPv6 address for network QoS policy match
Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry number match src-ip address</b> ( <i>ipv6-address</i>   <i>ipv6-prefix-with-host-bits</i> )
Tree	<b>address</b>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1

Platforms All

### **ipv6-prefix-list** *reference*

Synopsis IPv6 prefix list containing IPv6 prefixes to match

Context **configure qos network** *string* **ingress ipv6-criteria entry** *number* **match src-ip ipv6-prefix-list** *reference*

Tree [ipv6-prefix-list](#)

Reference **configure qos match-list ipv6-prefix-list** *string*

Notes The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.

Introduced 16.0.R4

Platforms All

### **mask** *string*

Synopsis IP address to match with source IP of the packet

Context **configure qos network** *string* **ingress ipv6-criteria entry** *number* **match src-ip mask** *string*

Tree [mask](#)

Notes The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.

Introduced 16.0.R1

Platforms All

### **src-port**

Synopsis Enter the **src-port** context

Context **configure qos network** *string* **ingress ipv6-criteria entry** *number* **match src-port**

Tree [src-port](#)

Introduced 16.0.R1

Platforms All

### **eq** *number*

Synopsis Exact source port as the match criterion

Context **configure qos network** *string* **ingress ipv6-criteria entry** *number* **match src-port eq** *number*

Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**gt number**

Synopsis	Greater than source port value as match criterion
Context	<b>configure</b> <a href="#">qos network string ingress ipv6-criteria entry number match src-port gt number</a>
Tree	<a href="#">gt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**lt number**

Synopsis	Less than destination port value as the match criterion
Context	<b>configure</b> <a href="#">qos network string ingress ipv6-criteria entry number match src-port lt number</a>
Tree	<a href="#">lt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**port-list reference**

Synopsis	Port list used as match criterion
Context	<b>configure</b> <a href="#">qos network string ingress ipv6-criteria entry number match src-port port-list reference</a>
Tree	<a href="#">port-list</a>

Description	This command assigns a port list to a matching criteria entry in the network QoS policy. Each entry can use only a single port list. Port lists and prefix lists are mutually exclusive.
Reference	<b>configure qos match-list port-list</b> <i>string</i>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## range

Synopsis	Enter the <b>range</b> context
Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry</b> <i>number</i> <b>match src-port range</b>
Tree	<b>range</b>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## end number

Synopsis	Upper bound of port range to match
Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry</b> <i>number</i> <b>match src-port range</b>
Tree	<b>end</b>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

## start number

Synopsis	Lower bound of port range to match
Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry</b> <i>number</i> <b>match src-port range</b>
Tree	<b>start</b>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

**ler-use-dscp** *boolean*

Synopsis	Honor the DSCP markings instead of the LSP-EXP bits
Context	<b>configure qos network</b> <i>string</i> <b>ingress</b> <b>ler-use-dscp</b> <i>boolean</i>
Tree	<b>ler-use-dscp</b>
Default	false
Introduced	16.0.R1
Platforms	All

**lsp-exp** [**lsp-exp-value**] *number*

Synopsis	Enter the <b>lsp-exp</b> list instance
Context	<b>configure qos network</b> <i>string</i> <b>ingress</b> <b>lsp-exp</b> <i>number</i>
Tree	<b>lsp-exp</b>
Introduced	16.0.R1
Platforms	All

**[lsp-exp-value]** *number*

Synopsis	LSP EXP value to associate with the forwarding class
Context	<b>configure qos network</b> <i>string</i> <b>ingress</b> <b>lsp-exp</b> <i>number</i>
Tree	<b>lsp-exp</b>
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**fc** *keyword*

Synopsis	Forwarding class
Context	<b>configure qos network</b> <i>string</i> <b>ingress</b> <b>lsp-exp</b> <i>number</i> <b>fc</b> <i>keyword</i>
Tree	<b>fc</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is mandatory.
Introduced	16.0.R1



Platforms All

### **profile** *keyword*

Synopsis Default profile to use for the ingress traffic

Context **configure qos network** *string* **ingress lsp-exp** *number* **profile** *keyword*

Tree [profile](#)

Options in, out, exceed, inplus

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

### **policy-id** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis QoS network policy ID

Context **configure qos network** *string* **policy-id** *number*

Tree [policy-id](#)

Description This command specifies the QoS network policy ID and uniquely identifies the policy on the router.

Network **policy-id 1** exists as the default policy that is applied to all network interfaces by default. The network policy-id 1 cannot be modified or deleted. It defines the default DSCP-to-FC mapping and MPLS EXP-to-FC mapping for the ingress. For the egress, it defines forwarding classes that represent individual queues and the packet marking criteria.

Network **policy-id 1** exists as the default policy that is applied to all network ports by default. This default policy cannot be modified or deleted. It defines the default DSCP-to-FC mapping and default unicast meters for ingress IP traffic. For the egress, it defines the forwarding class to dot1p and DSCP values and the packet marking criteria.

If a new network policy is created (for instance, **policy-id 3**), only the default action and egress forwarding class parameters are identical to the default policy. A new network policy does not contain the default DSCP-to-FC and MPLS-EXP-to-FC mapping for network QoS policy of type **ip-interface** or the DSCP-to-FC mapping (for network QoS policy of type **port**). The default network policy can be copied to create a new network policy that includes the default ingress DSCP-to-FC and MPLS EXP-to-FC mapping (as appropriate).

Range 1 to 65535

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Introduced	16.0.R1
Platforms	All

**scope** *keyword*

Synopsis	Scope of the policy
Context	<b>configure qos network</b> <i>string scope keyword</i>
Tree	<a href="#">scope</a>
Options	exclusive, template
Default	template
Introduced	16.0.R1
Platforms	All

**network-queue** [[network-queue-policy](#)] *string*

Synopsis	Enter the <b>network-queue</b> list instance
Context	<b>configure qos network-queue</b> <i>string</i>
Tree	<a href="#">network-queue</a>
Max. Instances	255
Introduced	16.0.R1
Platforms	All

**[network-queue-policy]** *string*

Synopsis	Name for network queue policy
Context	<b>configure qos network-queue</b> <i>string</i>
Tree	<a href="#">network-queue</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">qos network-queue</a> <i>string description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**fc** [[fc-name](#)] *keyword*

Synopsis	Enter the <b>fc</b> list instance
Context	<b>configure</b> <a href="#">qos network-queue</a> <i>string fc keyword</i>
Tree	<a href="#">fc</a>
Introduced	16.0.R1
Platforms	All

**[fc-name]** *keyword*

Synopsis	Forwarding class name
Context	<b>configure</b> <a href="#">qos network-queue</a> <i>string fc keyword</i>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**multicast-queue** *reference*

Synopsis	Multicast queue for packets in this forwarding class
Context	<b>configure</b> <a href="#">qos network-queue</a> <i>string fc keyword multicast-queue reference</i>
Tree	<a href="#">multicast-queue</a>
Reference	<b>configure</b> <a href="#">qos network-queue</a> <i>string queue number</i>
Introduced	16.0.R1
Platforms	All

### **queue** *reference*

Synopsis	Queue for packets in this forwarding class
Context	<b>configure qos network-queue</b> <i>string fc keyword queue reference</i>
Tree	<a href="#">queue</a>
Reference	<b>configure qos network-queue</b> <i>string queue number</i>
Introduced	16.0.R1
Platforms	All

### **hs-attachment-policy** *reference*

Synopsis	HS attachment policy applied
Context	<b>configure qos network-queue</b> <i>string hs-attachment-policy reference</i>
Tree	<a href="#">hs-attachment-policy</a>
Reference	<b>configure qos hs-attachment-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **hs-wrr-group** [[group-id](#)] *number*

Synopsis	Enter the <b>hs-wrr-group</b> list instance
Context	<b>configure qos network-queue</b> <i>string hs-wrr-group number</i>
Tree	<a href="#">hs-wrr-group</a>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### [[group-id](#)] *number*

Synopsis	HS WRR group identifier
Context	<b>configure qos network-queue</b> <i>string hs-wrr-group number</i>
Tree	<a href="#">hs-wrr-group</a>
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

## adaptation-rule

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure qos network-queue</b> <i>string</i> <b>hs-wrr-group</b> <i>number</i> <b>adaptation-rule</b>
Tree	<b>adaptation-rule</b>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

## pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	<b>configure qos network-queue</b> <i>string</i> <b>hs-wrr-group</b> <i>number</i> <b>adaptation-rule</b> <b>pir</b> <i>keyword</i>
Tree	<b>pir</b>
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

## hs-class-weight *number*

Synopsis	Weight of scheduling class
Context	<b>configure qos network-queue</b> <i>string</i> <b>hs-wrr-group</b> <i>number</i> <b>hs-class-weight</b> <i>number</i>
Tree	<b>hs-class-weight</b>
Range	1   2   4   8
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

## rate *number*

Synopsis	PIR rate
Context	<b>configure qos network-queue</b> <i>string</i> <b>hs-wrr-group</b> <i>number</i> <b>rate</b> <i>number</i>
Tree	<b>rate</b>
Range	1 to 100
Units	kilobps

Default	100
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **queue** [queue-id] *number*

Synopsis	Enter the <b>queue</b> list instance
Context	<b>configure qos network-queue</b> <i>string queue number</i>
Tree	<a href="#">queue</a>
Introduced	16.0.R1
Platforms	All

### **[queue-id]** *number*

Synopsis	Queue identifier
Context	<b>configure qos network-queue</b> <i>string queue number</i>
Tree	<a href="#">queue</a>
Range	1 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **adaptation-rule**

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure qos network-queue</b> <i>string queue number adaptation-rule</i>
Tree	<a href="#">adaptation-rule</a>
Introduced	16.0.R1
Platforms	All

### **cir** *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	<b>configure qos network-queue</b> <i>string queue number adaptation-rule cir keyword</i>
Tree	<a href="#">cir</a>

Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	All

**fir keyword**

Synopsis	Constraint used when deriving the operational FIR value
Context	<b>configure qos network-queue</b> <i>string queue number adaptation-rule fir keyword</i>
Tree	<a href="#">fir</a>
Options	max, min, closest
Default	closest
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**pir keyword**

Synopsis	Constraint used when deriving the operational PIR value
Context	<b>configure qos network-queue</b> <i>string queue number adaptation-rule pir keyword</i>
Tree	<a href="#">pir</a>
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	All

**avg-frame-overhead decimal-number**

Synopsis	Average packet-to-frame encapsulation overhead
Context	<b>configure qos network-queue</b> <i>string queue number avg-frame-overhead decimal-number</i>
Tree	<a href="#">avg-frame-overhead</a>
Range	0.00 to 100.00
Default	0.00
Introduced	16.0.R1
Platforms	All

**cbs** *decimal-number*

Synopsis	Reserved buffer space for the queue
Context	<b>configure qos network-queue</b> <i>string queue number cbs decimal-number</i>
Tree	<a href="#">cbs</a>
Range	0.00 to 100.00
Units	centipercen
Introduced	16.0.R1
Platforms	All

**drop-tail**

Synopsis	Enter the <b>drop-tail</b> context
Context	<b>configure qos network-queue</b> <i>string queue number drop-tail</i>
Tree	<a href="#">drop-tail</a>
Introduced	16.0.R1
Platforms	All

**low**

Synopsis	Enter the <b>low</b> context
Context	<b>configure qos network-queue</b> <i>string queue number drop-tail low</i>
Tree	<a href="#">low</a>
Introduced	16.0.R1
Platforms	All

**percent-reduction-from-mbs** (*number* | *keyword*)

Synopsis	Low drop-tail percent from MBS that is reduced
Context	<b>configure qos network-queue</b> <i>string queue number drop-tail low percent-reduction-from-mbs</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">percent-reduction-from-mbs</a>
Range	0 to 100
Options	auto
Default	auto



Introduced 16.0.R1  
Platforms All

### **hs-alt-port-class-pool** *boolean*

Synopsis Use HS alternate class port pool buffer for traffic  
Context **configure qos network-queue** *string queue number hs-alt-port-class-pool boolean*  
Tree [hs-alt-port-class-pool](#)  
Default false  
Introduced 16.0.R1  
Platforms 7750 SR-7/12/12e

### **hs-class-weight** *number*

Synopsis Scheduling class weight  
Context **configure qos network-queue** *string queue number hs-class-weight number*  
Tree [hs-class-weight](#)  
Range 1 | 2 | 4 | 8  
Default 1  
Introduced 16.0.R1  
Platforms 7750 SR-7/12/12e

### **hs-mbs** *decimal-number*

Synopsis Percentage of buffer space allowed for the HS queue  
Context **configure qos network-queue** *string queue number hs-mbs decimal-number*  
Tree [hs-mbs](#)  
Range 0.00 to 100.00  
Default 100.00  
Introduced 16.0.R1  
Platforms 7750 SR-7/12/12e

### **hs-wred-queue**

Synopsis Enter the **hs-wred-queue** context

Context	<b>configure qos network-queue</b> <i>string queue number hs-wred-queue</i>
Tree	<a href="#">hs-wred-queue</a>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **policy reference**

Synopsis	Slope policy name
Context	<b>configure qos network-queue</b> <i>string queue number hs-wred-queue policy reference</i>
Tree	<a href="#">policy</a>
Reference	<b>configure qos slope-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **hs-wrr-weight number**

Synopsis	WRR weight with which queue parents into the scheduler
Context	<b>configure qos network-queue</b> <i>string queue number hs-wrr-weight number</i>
Tree	<a href="#">hs-wrr-weight</a>
Range	1 to 127
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **mbs decimal-number**

Synopsis	Percentage of buffer space allowed for the queue
Context	<b>configure qos network-queue</b> <i>string queue number mbs decimal-number</i>
Tree	<a href="#">mbs</a>
Range	0.00 to 100.00
Units	centipercen
Introduced	16.0.R1
Platforms	All

## **multipoint** *boolean*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Apply as a multicast queue
Context	<b>configure qos network-queue</b> <i>string queue number multipoint boolean</i>
Tree	<a href="#">multipoint</a>
Introduced	16.0.R1
Platforms	All

## **port-parent**

Synopsis	Enable the <b>port-parent</b> context
Context	<b>configure qos network-queue</b> <i>string queue number port-parent</i>
Tree	<a href="#">port-parent</a>
Introduced	16.0.R1
Platforms	All

## **cir-level** *number*

Synopsis	Port priority to receive bandwidth for within-CIR pass
Context	<b>configure qos network-queue</b> <i>string queue number port-parent cir-level number</i>
Tree	<a href="#">cir-level</a>
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	All

## **cir-weight** *number*

Synopsis	Weight to receive bandwidth at the within-CIR level
Context	<b>configure qos network-queue</b> <i>string queue number port-parent cir-weight number</i>
Tree	<a href="#">cir-weight</a>
Range	0 to 100
Default	0

Introduced	16.0.R1
Platforms	All

**level number**

Synopsis	Port priority level for above-CIR behavior
Context	<b>configure qos network-queue</b> <i>string queue number port-parent level number</i>
Tree	<a href="#">level</a>
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

**weight number**

Synopsis	Weight used at the within-CIR port priority level
Context	<b>configure qos network-queue</b> <i>string queue number port-parent weight number</i>
Tree	<a href="#">weight</a>
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

**queue-type keyword****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Priority that this queue receives from the hardware level schedulers
Context	<b>configure qos network-queue</b> <i>string queue number queue-type keyword</i>
Tree	<a href="#">queue-type</a>
Options	expedited, auto-expedited, best-effort
Default	auto-expedited
Introduced	16.0.R1
Platforms	All

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure qos network-queue</b> <i>string queue number rate</i>
Tree	<b>rate</b>
Introduced	16.0.R1
Platforms	All

**cir number**

Synopsis	CIR percentage rate
Context	<b>configure qos network-queue</b> <i>string queue number rate cir number</i>
Tree	<b>cir</b>
Range	0 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

**fir number**

Synopsis	FIR percentage
Context	<b>configure qos network-queue</b> <i>string queue number rate fir number</i>
Tree	<b>fir</b>
Description	This command defines an additional percentage at which the system prioritizes the queue over other queues competing for the same bandwidth above that used by the CIR percentage.
Range	0 to 100
Units	percent
Default	0
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**pir number**

Synopsis	PIR percentage rate
Context	<b>configure qos network-queue</b> <i>string queue number rate pir number</i>

Tree	<a href="#">pir</a>
Range	1 to 100
Units	percent
Default	100
Introduced	16.0.R1
Platforms	All

### **policer-control-policy** [[policer-control-policy-name](#)] *string*

Synopsis	Enter the <b>policer-control-policy</b> list instance
Context	<b>configure</b> <a href="#">qos</a> <a href="#">policer-control-policy</a> <i>string</i>
Tree	<a href="#">policer-control-policy</a>
Max. Instances	2047
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **[policer-control-policy-name]** *string*

Synopsis	Policer control policy name
Context	<b>configure</b> <a href="#">qos</a> <a href="#">policer-control-policy</a> <i>string</i>
Tree	<a href="#">policer-control-policy</a>
Description	This command specifies the policer control policy name. Each policer control policy must be created with a unique policy name.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">qos</a> <a href="#">policer-control-policy</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## root

Synopsis	Enter the <b>root</b> context
Context	<b>configure qos policer-control-policy string root</b>
Tree	<b>root</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## max-percent-rate *decimal-number*

Synopsis	Maximum rate of the arbiter
Context	<b>configure qos policer-control-policy string root max-percent-rate decimal-number</b>
Tree	<b>max-percent-rate</b>
Range	0.01 to 100.00
Notes	The following elements are part of a choice: <b>max-percent-rate</b> or <b>max-rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## max-rate (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit of the arbiter
Context	<b>configure qos policer-control-policy string root max-rate (number   keyword)</b>
Tree	<b>max-rate</b>
Range	1 to 6400000000
Options	max
Default	max
Notes	The following elements are part of a choice: <b>max-percent-rate</b> or <b>max-rate</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## priority-mbs-thresholds

Synopsis	Enter the <b>priority-mbs-thresholds</b> context
Context	<b>configure</b> qos policer-control-policy <i>string</i> root priority-mbs-thresholds
Tree	<a href="#">priority-mbs-thresholds</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## min-thresh-separation (*number* | *keyword*)

Synopsis	Minimum separation between policer discard thresholds
Context	<b>configure</b> qos policer-control-policy <i>string</i> root priority-mbs-thresholds min-thresh-separation ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">min-thresh-separation</a>
Range	0 to 16777216
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## priority [[priority-level](#)] *number*

Synopsis	Enter the <b>priority</b> list instance
Context	<b>configure</b> qos policer-control-policy <i>string</i> root priority-mbs-thresholds priority <i>number</i>
Tree	<a href="#">priority</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## [[priority-level](#)] *number*

Synopsis	Priority level
Context	<b>configure</b> qos policer-control-policy <i>string</i> root priority-mbs-thresholds priority <i>number</i>
Tree	<a href="#">priority</a>
Range	1 to 8
Notes	This element is part of a list key.



Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **fixed-mbs** *boolean*

Synopsis Consider cumulative buffer space to be fixed  
 Context **configure** qos policer-control-policy *string* root priority-mbs-thresholds priority *number*  
 fixed-mbs *boolean*  
 Tree [fixed-mbs](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **mbs-contribution** (*number* | *keyword*)

Synopsis Minimum amount of cumulative buffer space  
 Context **configure** qos policer-control-policy *string* root priority-mbs-thresholds priority *number*  
 mbs-contribution (*number* | *keyword*)  
 Tree [mbs-contribution](#)  
 Range 0 to 16777216  
 Units bytes  
 Options auto  
 Default auto  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **profile-preferred** *boolean*

Synopsis Provide a preference to consume PIR bucket tokens  
 Context **configure** qos policer-control-policy *string* root profile-preferred *boolean*  
 Tree [profile-preferred](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**tier** [*tier-id*] *number*

Synopsis	Enter the <b>tier</b> list instance
Context	<b>configure qos policer-control-policy</b> <i>string tier number</i>
Tree	<i>tier</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**[tier-id]** *number*

Synopsis	Tier for policer control policer arbiter
Context	<b>configure qos policer-control-policy</b> <i>string tier number</i>
Tree	<i>tier</i>
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**arbiter** [*arbiter-name*] *string*

Synopsis	Enter the <b>arbiter</b> list instance
Context	<b>configure qos policer-control-policy</b> <i>string tier number arbiter string</i>
Tree	<i>arbiter</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**[arbiter-name]** *string*

Synopsis	Arbiter name
Context	<b>configure qos policer-control-policy</b> <i>string tier number arbiter string</i>
Tree	<i>arbiter</i>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**arbiter-parent**

Synopsis	Enter the <b>arbiter-parent</b> context
Context	<b>configure qos policer-control-policy string tier number arbiter string arbiter-parent</b>
Tree	<b>arbiter-parent</b>
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**arbiter-name string**

Synopsis	Arbiter name
Context	<b>configure qos policer-control-policy string tier number arbiter string arbiter-parent arbiter-name string</b>
Tree	<b>arbiter-name</b>
Description	This command specifies the arbiter name. In tier 1, the arbiter name is not allowed and only the system reversed name "root" is accepted. The specified arbiter name must exist within the policer control policy at tier 1 or the parent command fails. When a tiered arbiter is acting as a parent for another tiered arbiter, the parent arbiter cannot be removed from the policy. The child arbiter receives all bandwidth directly from its parent arbiter (that receives bandwidth from the root arbiter).
String Length	1 to 32
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**level number**

Synopsis	Level the child arbiter uses on its parent
Context	<b>configure qos policer-control-policy string tier number arbiter string arbiter-parent level number</b>
Tree	<b>level</b>
Range	1 to 8
Default	1
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**weight** *number*

Synopsis	Weight attribute at parent level applied to children
Context	<b>configure</b> qos policer-control-policy <i>string</i> tier <i>number</i> arbiter <i>string</i> arbiter-parent <b>weight</b> <i>number</i>
Tree	<b>weight</b>
Description	This command defines how multiple children at the same parent strict level compete when insufficient bandwidth exists on the parent for that level. Each child's weight is divided by the sum of the active children's weights and the result is multiplied by the available bandwidth. If a child cannot receive its entire weighted fair share of bandwidth due to a defined child rate limit, the remainder of its bandwidth is distributed between the other children based on their weights.
Range	1 to 100
Default	1
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> qos policer-control-policy <i>string</i> tier <i>number</i> arbiter <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**percent-rate** *decimal-number*

Synopsis	Maximum rate of the arbiter
Context	<b>configure</b> qos policer-control-policy <i>string</i> tier <i>number</i> arbiter <i>string</i> <b>percent-rate</b> <i>decimal-number</i>
Tree	<b>percent-rate</b>
Range	0.01 to 100.00
Notes	The following elements are part of a choice: ( <b>percent-rate</b> and <b>reference-rate</b> ) or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**rate** (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	<b>configure</b> qos policer-control-policy <i>string</i> tier <i>number</i> arbiter <i>string</i> rate ( <i>number</i>   <i>keyword</i> )
Tree	rate
Range	1 to 6400000000
Options	max
Default	max
Notes	The following elements are part of a choice: ( <b>percent-rate</b> and <b>reference-rate</b> ) or <b>rate</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**reference-rate** *keyword*

Synopsis	Reference rate
Context	<b>configure</b> qos policer-control-policy <i>string</i> tier <i>number</i> arbiter <i>string</i> reference-rate <i>keyword</i>
Tree	reference-rate
Options	local-limit, reference-port-limit
Default	local-limit
Notes	The following elements are part of a choice: ( <b>percent-rate</b> and <b>reference-rate</b> ) or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**port-scheduler-policy** [*name*] *string*

Synopsis	Enter the <b>port-scheduler-policy</b> list instance
Context	<b>configure</b> qos port-scheduler-policy <i>string</i>
Tree	port-scheduler-policy
Max. Instances	1023
Introduced	16.0.R1
Platforms	All

**[name]** *string*

Synopsis	Port scheduler policy name
Context	<b>configure</b> <a href="#">qos</a> <a href="#">port-scheduler-policy</a> <i>string</i>
Tree	<a href="#">port-scheduler-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">qos</a> <a href="#">port-scheduler-policy</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**dist-lag-rate-shared** *boolean*

Synopsis	Share rates when port is part of LAG in distribute mode
Context	<b>configure</b> <a href="#">qos</a> <a href="#">port-scheduler-policy</a> <i>string</i> <a href="#">dist-lag-rate-shared</a> <i>boolean</i>
Tree	<a href="#">dist-lag-rate-shared</a>
Default	false
Introduced	16.0.R1
Platforms	All

**group** [[group-name](#)] *string*

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure</b> <a href="#">qos</a> <a href="#">port-scheduler-policy</a> <i>string</i> <a href="#">group</a> <i>string</i>
Tree	<a href="#">group</a>
Max. Instances	8
Introduced	16.0.R1

Platforms All

### **[group-name]** *string*

Synopsis Weighted scheduler group name

Context **configure** qos port-scheduler-policy *string* group *string*

Tree [group](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **monitor-threshold** *number*

Synopsis Congestion monitoring threshold

Context **configure** qos port-scheduler-policy *string* group *string* monitor-threshold *number*

Tree [monitor-threshold](#)

Description This command defines the congestion monitoring threshold for the desired monitoring entity under the port scheduler for per aggregate port scheduler rate, per individual level, and per group that is aggregating multiple levels.

The congestion threshold is specified as a percentage of the configured PIR for the entity for which congestion monitoring is desired. For example, if the configured PIR for level 1 is 100000 kb/s, and the monitoring threshold is set to 90%, an event where the offered rate is greater than 90,000 kb/s is recorded. This event is shown as part of the cumulative count of congestion threshold exceeds since the last clearing of the counters.

Range 0 to 100

Default 0

Introduced 16.0.R1

Platforms All

### **percent-rate**

Synopsis Enter the **percent-rate** context

Context **configure** qos port-scheduler-policy *string* group *string* percent-rate

Tree [percent-rate](#)

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 16.0.R1  
 Platforms All

### **cir** *decimal-number*

Synopsis Administrative CIR percent  
 Context **configure qos port-scheduler-policy** *string group string percent-rate cir decimal-number*  
 Tree [cir](#)  
 Range 0.00 to 100.00  
 Default 100.00  
 Introduced 16.0.R1  
 Platforms All

### **pir** *decimal-number*

Synopsis Administrative PIR percent  
 Context **configure qos port-scheduler-policy** *string group string percent-rate pir decimal-number*  
 Tree [pir](#)  
 Range 0.01 to 100.00  
 Introduced 16.0.R1  
 Platforms All

### **rate**

Synopsis Enter the **rate** context  
 Context **configure qos port-scheduler-policy** *string group string rate*  
 Tree [rate](#)  
 Notes The following elements are part of a choice: **percent-rate** or **rate**.  
 Introduced 16.0.R1  
 Platforms All

### **cir** (*number* | *keyword*)

Synopsis Administrative CIR  
 Context **configure qos port-scheduler-policy** *string group string rate cir (number | keyword)*



Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

### **pir** (*number* | *keyword*)

Synopsis	Administrative PIR
Context	<b>configure</b> <a href="#">qos port-scheduler-policy</a> <i>string</i> <a href="#">group</a> <i>string</i> <a href="#">rate</a> <a href="#">pir</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 6400000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

### **hqos-algorithm** *keyword*

Synopsis	Port scheduler H-QoS algorithm
Context	<b>configure</b> <a href="#">qos port-scheduler-policy</a> <i>string</i> <a href="#">hqos-algorithm</a> <i>keyword</i>
Tree	<a href="#">hqos-algorithm</a>
Description	This command configures the port scheduler H-QoS algorithm used to calculate the operational rates for the children connected to the port scheduler.
Options	default, above-offered-allowance-control
Default	default
Introduced	19.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **level** [[level-id](#)] *number*

Synopsis	Enter the <b>level</b> list instance
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Context	<b>configure qos port-scheduler-policy</b> <i>string level number</i>
Tree	<a href="#">level</a>
Introduced	16.0.R1
Platforms	All

### **[level-id]** *number*

Synopsis	Priority level this port scheduler policy
Context	<b>configure qos port-scheduler-policy</b> <i>string level number</i>
Tree	<a href="#">level</a>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **group** *reference*

Synopsis	Associated group
Context	<b>configure qos port-scheduler-policy</b> <i>string level number group reference</i>
Tree	<a href="#">group</a>
Reference	<b>configure qos port-scheduler-policy</b> <i>string group string</i>
Introduced	16.0.R1
Platforms	All

### **monitor-threshold** *number*

Synopsis	Monitoring threshold of the configured rate
Context	<b>configure qos port-scheduler-policy</b> <i>string level number monitor-threshold number</i>
Tree	<a href="#">monitor-threshold</a>
Description	This command specifies the configured rate as a percentage. If the offered rate exceeds the configured threshold, a counter monitoring the threshold is increased.
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

## percent-rate

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure qos port-scheduler-policy</b> <i>string level number percent-rate</i>
Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

## cir *decimal-number*

Synopsis	Administrative CIR percent
Context	<b>configure qos port-scheduler-policy</b> <i>string level number percent-rate cir decimal-number</i>
Tree	<a href="#">cir</a>
Range	0.00 to 100.00
Default	100.00
Introduced	16.0.R1
Platforms	All

## pir *decimal-number*

Synopsis	Administrative PIR percent
Context	<b>configure qos port-scheduler-policy</b> <i>string level number percent-rate pir decimal-number</i>
Tree	<a href="#">pir</a>
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

## rate

Synopsis	Enter the <b>rate</b> context
Context	<b>configure qos port-scheduler-policy</b> <i>string level number rate</i>
Tree	<a href="#">rate</a>

Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

**cir** (*number* | *keyword*)

Synopsis	Administrative CIR
Context	<b>configure</b> qos port-scheduler-policy <i>string</i> level <i>number</i> rate cir ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

**pir** (*number* | *keyword*)

Synopsis	Administrative PIR
Context	<b>configure</b> qos port-scheduler-policy <i>string</i> level <i>number</i> rate pir ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 6400000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

**weight** *number*

Synopsis	Weight of the level in the weighted scheduler group
Context	<b>configure</b> qos port-scheduler-policy <i>string</i> level <i>number</i> weight <i>number</i>
Tree	<a href="#">weight</a>
Range	1 to 100
Default	1

Introduced	16.0.R1
Platforms	All

### **max-percent-rate** *decimal-number*

Synopsis	Maximum frame-based bandwidth limit
Context	<b>configure qos port-scheduler-policy</b> <i>string</i> <b>max-percent-rate</b> <i>decimal-number</i>
Tree	<b>max-percent-rate</b>
Range	0.01 to 100.00
Notes	The following elements are part of a choice: <b>max-percent-rate</b> or <b>max-rate</b> .
Introduced	16.0.R1
Platforms	All

### **max-rate** (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	<b>configure qos port-scheduler-policy</b> <i>string</i> <b>max-rate</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>max-rate</b>
Range	1 to 6400000000
Options	max
Default	max
Notes	The following elements are part of a choice: <b>max-percent-rate</b> or <b>max-rate</b> .
Introduced	16.0.R1
Platforms	All

### **monitor-threshold** *number*

Synopsis	Congestion monitoring threshold
Context	<b>configure qos port-scheduler-policy</b> <i>string</i> <b>monitor-threshold</b> <i>number</i>
Tree	<b>monitor-threshold</b>
Description	<p>This command defines the congestion monitoring threshold for the desired monitoring entity under the port-scheduler for per aggregate port scheduler rate, per individual level, and per group that is aggregating multiple levels.</p> <p>The congestion threshold is specified as a percentage of the configured PIR rate for the entity for which congestion monitoring is desired. For example, if the configured PIR rate for level 1 is 1000,000 kb/s, and the monitoring threshold is set to 90%, an event where the offered rate is &gt;90,000 kb/s is recorded. This event is shown as part</p>

of the cumulative count of congestion threshold exceeds since the last clearing of the counters.

Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

## orphan-overrides

Synopsis	Enter the <b>orphan-overrides</b> context
Context	<b>configure qos port-scheduler-policy string orphan-overrides</b>
Tree	<a href="#">orphan-overrides</a>
Introduced	16.0.R1
Platforms	All

## cir-level *number*

Synopsis	Port priority level for within-CIR orphan behavior
Context	<b>configure qos port-scheduler-policy string orphan-overrides cir-level <i>number</i></b>
Tree	<a href="#">cir-level</a>
Description	This command defines the port priority that the orphan queues and schedulers use to receive bandwidth for their within-CIR offered-load. If the <b>cir-weight</b> command is set to the default value, the orphan queues and schedulers do not receive bandwidth during the port scheduler's within-CIR pass and this command setting is ignored.
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	All

## cir-weight *number*

Synopsis	Weight to use in the within-CIR port priority level
Context	<b>configure qos port-scheduler-policy string orphan-overrides cir-weight <i>number</i></b>
Tree	<a href="#">cir-weight</a>
Description	This command defines the weight the orphan queues and schedulers will use in the within-CIR port priority level. When this command is set to the default value, the orphan

queues and schedulers do not receive bandwidth during the port scheduler's within-CIR pass and the **cir-level** command is ignored.

Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

### **level number**

Synopsis	Port priority level for above-CIR orphan behavior
Context	<b>configure qos port-scheduler-policy</b> <i>string</i> <b>orphan-overrides</b> <i>level number</i>
Tree	<a href="#">level</a>
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

### **weight number**

Synopsis	Weight to use in the above-CIR port priority level
Context	<b>configure qos port-scheduler-policy</b> <i>string</i> <b>orphan-overrides</b> <i>weight number</i>
Tree	<a href="#">weight</a>
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

### **post-policer-mapping** [[name](#)] *string*

Synopsis	Enter the <b>post-policer-mapping</b> list instance
Context	<b>configure qos post-policer-mapping</b> <i>string</i>
Tree	<a href="#">post-policer-mapping</a>
Max. Instances	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**[name]** *string*

Synopsis	Post-policer mapping policy name
Context	<b>configure qos post-policer-mapping string</b>
Tree	<a href="#">post-policer-mapping</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure qos post-policer-mapping string description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**fc** [[fc-name](#)] *keyword profile keyword*

Synopsis	Enter the <b>fc</b> list instance
Context	<b>configure qos post-policer-mapping string fc keyword profile keyword</b>
Tree	<a href="#">fc</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**[fc-name]** *keyword*

Synopsis	Forwarding class remapping
Context	<b>configure qos post-policer-mapping string fc keyword profile keyword</b>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **profile** *keyword*

Synopsis Egress packet profile remapping

Context **configure** qos post-policer-mapping *string* fc *keyword* profile *keyword*

Tree fc

Options in, out, exceed, inplus

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **maps-to**

Synopsis Enter the **maps-to** context

Context **configure** qos post-policer-mapping *string* fc *keyword* profile *keyword* maps-to

Tree maps-to

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **fc** *keyword*

Synopsis Forwarding class remapping

Context **configure** qos post-policer-mapping *string* fc *keyword* profile *keyword* maps-to fc *keyword*

Tree fc

Options be, l2, af, l1, h2, ef, h1, nc

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **profile** *keyword*

Synopsis Egress packet profile remapping

Context **configure** qos post-policer-mapping *string* fc *keyword* profile *keyword* maps-to profile *keyword*

Tree profile

Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **queue-group-redirect-list** [*name*] *string*

Synopsis	Enter the <b>queue-group-redirect-list</b> list instance
Context	<b>configure qos queue-group-redirect-list</b> <i>string</i>
Tree	<a href="#">queue-group-redirect-list</a>
Max. Instances	2047
Introduced	16.0.R1
Platforms	All

### **[name]** *string*

Synopsis	Queue group redirect list name
Context	<b>configure qos queue-group-redirect-list</b> <i>string</i>
Tree	<a href="#">queue-group-redirect-list</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **match** [*field-value*] *number*

Synopsis	Enter the <b>match</b> list instance
Context	<b>configure qos queue-group-redirect-list</b> <i>string match number</i>
Tree	<a href="#">match</a>
Max. Instances	16
Introduced	16.0.R1
Platforms	All

**[field-value] number**

Synopsis	Field value in the ingress or egress packet to match
Context	<b>configure qos queue-group-redirect-list string match number</b>
Tree	<b>match</b>
Description	This command specifies the value of the field in the ingress or egress packet. When there is a match, the packet is redirected to the specified queue group instance. The field must be a valid VXLAN VNI.
Range	1 to 16777215
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**instance number**

Synopsis	Queue group instance for traffic redirection
Context	<b>configure qos queue-group-redirect-list string match number instance number</b>
Tree	<b>instance</b>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**type keyword**

Synopsis	Type for queue-group redirect list
Context	<b>configure qos queue-group-redirect-list string type keyword</b>
Tree	<b>type</b>
Options	vxlan-vni
Default	vxlan-vni
Introduced	16.0.R1
Platforms	All

**queue-group-templates**

Synopsis	Enter the <b>queue-group-templates</b> context
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Context	<b>configure qos queue-group-templates</b>
Tree	<a href="#">queue-group-templates</a>
Introduced	16.0.R1
Platforms	All

## egress

Synopsis	Enter the <b>egress</b> context
Context	<b>configure qos queue-group-templates egress</b>
Tree	<a href="#">egress</a>
Introduced	16.0.R1
Platforms	All

## queue-group [[egress-queue-group-name](#)] *string*

Synopsis	Enter the <b>queue-group</b> list instance
Context	<b>configure qos queue-group-templates egress queue-group <i>string</i></b>
Tree	<a href="#">queue-group</a>
Introduced	16.0.R1
Platforms	All

## [\[egress-queue-group-name\]](#) *string*

Synopsis	Egress queue group template name
Context	<b>configure qos queue-group-templates egress queue-group <i>string</i></b>
Tree	<a href="#">queue-group</a>
Description	This command specifies the name of the egress queue group template. Each ingress queue group template must be uniquely named within the system. Multiple ingress queue group templates may not share the same name. An ingress and egress queue group template may share the same name.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	0 to 80
Introduced	16.0.R1
Platforms	All

**fc** [*fc-name*] *keyword*

Synopsis	Enter the <b>fc</b> list instance
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> <b>fc</b> <i>keyword</i>
Tree	<b>fc</b>
Introduced	16.0.R1
Platforms	All

**[fc-name]** *keyword*

Synopsis	Forwarding class name
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> <b>fc</b> <i>keyword</i>
Tree	<b>fc</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**queue**

Synopsis	Enter the <b>queue</b> context
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> <b>fc</b> <i>keyword</i> <b>queue</b>
Tree	<b>queue</b>
Introduced	16.0.R1
Platforms	All

**none**

Synopsis	No mid-pool is associated with this parent-pool
Context	<b>configure</b> qos queue-group-templates egress queue-group string fc keyword queue none
Tree	none
Notes	The following elements are part of a choice: <b>none</b> or <b>queue-id</b> .
Introduced	16.0.R1
Platforms	All

**queue-id** *reference*

Synopsis	Queue defined in forwarding class mapping
Context	<b>configure</b> qos queue-group-templates egress queue-group string fc keyword queue queue-id <i>reference</i>
Tree	queue-id
Reference	<b>configure</b> qos queue-group-templates egress queue-group string queue number
Notes	The following elements are part of a choice: <b>none</b> or <b>queue-id</b> .
Introduced	16.0.R1
Platforms	All

**hs-attachment-policy** *reference*

Synopsis	HS attachment policy applied
Context	<b>configure</b> qos queue-group-templates egress queue-group string hs-attachment-policy <i>reference</i>
Tree	hs-attachment-policy
Reference	<b>configure</b> qos hs-attachment-policy string
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**hs-wrr-group** [group-id] *number*

Synopsis	Enter the <b>hs-wrr-group</b> list instance
Context	<b>configure</b> qos queue-group-templates egress queue-group string hs-wrr-group <i>number</i>
Tree	hs-wrr-group

Introduced 16.0.R1  
 Platforms 7750 SR-7/12/12e

### **[group-id]** *number*

Synopsis HS WRR group identifier  
 Context **configure** qos queue-group-templates egress queue-group *string* hs-wrr-group *number*  
 Tree [hs-wrr-group](#)  
 Range 1 to 2  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7750 SR-7/12/12e

### **adaptation-rule**

Synopsis Enter the **adaptation-rule** context  
 Context **configure** qos queue-group-templates egress queue-group *string* hs-wrr-group *number* [adaptation-rule](#)  
 Tree [adaptation-rule](#)  
 Introduced 16.0.R1  
 Platforms 7750 SR-7/12/12e

### **pir** *keyword*

Synopsis Constraint used when deriving the operational PIR value  
 Context **configure** qos queue-group-templates egress queue-group *string* hs-wrr-group *number* [adaptation-rule](#) *pir* *keyword*  
 Tree [pir](#)  
 Options max, min, closest  
 Default closest  
 Introduced 16.0.R1  
 Platforms 7750 SR-7/12/12e

### **hs-class-weight** *number*

Synopsis Weight of scheduling class

Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> hs-wrr-group <i>number</i> hs-class-weight <i>number</i>
Tree	hs-class-weight
Range	1   2   4   8
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **percent-rate** *decimal-number*

Synopsis	Administrative PIR percent
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> hs-wrr-group <i>number</i> percent-rate <i>decimal-number</i>
Tree	percent-rate
Range	0.01 to 100.00
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **rate** (*number* | *keyword*)

Synopsis	Administrative PIR
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> hs-wrr-group <i>number</i> rate ( <i>number</i>   <i>keyword</i> )
Tree	rate
Range	1 to 2000000000
Units	kilobps
Options	max
Default	max
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **policer** [*policer-id*] *number*

Synopsis	Enter the <b>policer</b> list instance
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Context	<b>configure qos queue-group-templates egress queue-group</b> <i>string policer number</i>
Tree	<a href="#">policer</a>
Description	Commands in this context configure a QoS egress queue-group policer.
Introduced	16.0.R1
Platforms	All

### **[policer-id]** *number*

Synopsis	Egress queue-group policer ID
Context	<b>configure qos queue-group-templates egress queue-group</b> <i>string policer number</i>
Tree	<a href="#">policer</a>
Description	This command specifies the queue-group policer that will either be created or edited within the queue group template. For VSR, the queue group template may only have up to eight policers (numbered 1 through 8).
Range	1 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **adaptation-rule**

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure qos queue-group-templates egress queue-group</b> <i>string policer number adaptation-rule</i>
Tree	<a href="#">adaptation-rule</a>
Introduced	16.0.R1
Platforms	All

### **cir** *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	<b>configure qos queue-group-templates egress queue-group</b> <i>string policer number adaptation-rule cir keyword</i>
Tree	<a href="#">cir</a>
Options	max, min, closest
Default	closest

Introduced 16.0.R1  
Platforms All

### **pir** *keyword*

Synopsis Constraint used when deriving the operational PIR value  
Context **configure** qos queue-group-templates egress queue-group *string* policer *number* adaptation-rule **pir** *keyword*  
Tree [pir](#)  
Options max, min, closest  
Default closest  
Introduced 16.0.R1  
Platforms All

### **adv-config-policy** *reference*

Synopsis Advanced QoS policy name  
Context **configure** qos queue-group-templates egress queue-group *string* policer *number* adv-config-policy *reference*  
Tree [adv-config-policy](#)  
Reference **configure** qos adv-config-policy *string*  
Introduced 16.0.R1  
Platforms All

### **arbiter-parent**

Synopsis Enter the **arbiter-parent** context  
Context **configure** qos queue-group-templates egress queue-group *string* policer *number* arbiter-parent  
Tree [arbiter-parent](#)  
Introduced 16.0.R1  
Platforms All

### **arbiter-name** *string*

Synopsis Arbiter name

Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> arbiter-parent arbiter-name <i>string</i>
Tree	arbiter-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

**level** *number*

Synopsis	Priority level
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> arbiter-parent level <i>number</i>
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

**weight** *number*

Synopsis	Weight in the priority level
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> arbiter-parent weight <i>number</i>
Tree	weight
Range	1 to 100
Default	1
Introduced	16.0.R1
Platforms	All

**cbs** (*number* | *keyword*)

Synopsis	Exceed threshold of the CIR leaky bucket of the policer
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> cbs ( <i>number</i>   <i>keyword</i> )
Tree	cbs
Range	0 to 268435456

Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">qos queue-group-templates egress queue-group</a> <i>string</i> <a href="#">policer number description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **exceed-pir** *boolean*

Synopsis	Forward packets exceeding the PIR as exceed-profile
Context	<b>configure</b> <a href="#">qos queue-group-templates egress queue-group</a> <i>string</i> <a href="#">policer number exceed-pir</a> <i>boolean</i>
Tree	<a href="#">exceed-pir</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **high-prio-only** (*number | keyword*)

Synopsis	Percentage of MBS reserved for high priority traffic
Context	<b>configure</b> <a href="#">qos queue-group-templates egress queue-group</a> <i>string</i> <a href="#">policer number high-prio-only</a> ( <i>number   keyword</i> )
Tree	<a href="#">high-prio-only</a>
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1

Platforms All

### **mbs** (*number* | *keyword*)

Synopsis Maximum buffer size for the template queue

Context **configure** qos queue-group-templates egress queue-group *string* policer *number* mbs (*number* | *keyword*)

Tree [mbs](#)

Range 0 to 268435456

Units bytes

Options auto

Default auto

Introduced 16.0.R1

Platforms All

### **packet-byte-offset** *number*

Synopsis Packet size modification for policing information

Context **configure** qos queue-group-templates egress queue-group *string* policer *number* packet-byte-offset *number*

Tree [packet-byte-offset](#)

Range -64 to 31

Default 0

Introduced 16.0.R1

Platforms All

### **percent-rate**

Synopsis Enter the **percent-rate** context

Context **configure** qos queue-group-templates egress queue-group *string* policer *number* percent-rate

Tree [percent-rate](#)

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 20.10.R1

Platforms All

**cir** *decimal-number*

Synopsis	Administrative CIR
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> percent-rate cir <i>decimal-number</i>
Tree	<a href="#">cir</a>
Range	0.00 to 100.00
Default	0.00
Introduced	20.10.R1
Platforms	All

**pir** *decimal-number*

Synopsis	Administrative PIR
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> percent-rate pir <i>decimal-number</i>
Tree	<a href="#">pir</a>
Range	0.01 to 100.00
Introduced	20.10.R1
Platforms	All

**reference-rate** *keyword*

Synopsis	Reference rate
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> percent-rate reference-rate <i>keyword</i>
Tree	<a href="#">reference-rate</a>
Options	local-limit, reference-port-limit
Default	local-limit
Introduced	20.10.R1
Platforms	All

**profile-capped** *boolean*

Synopsis	Enforce a limit on the profile
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Context	<b>configure qos queue-group-templates egress queue-group</b> <i>string</i> <b>policer number profile-capped</b> <i>boolean</i>
Tree	<a href="#">profile-capped</a>
Default	false
Introduced	16.0.R1
Platforms	All

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure qos queue-group-templates egress queue-group</b> <i>string</i> <b>policer number rate</b>
Tree	<a href="#">rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

**cir** (*number* | *keyword*)

Synopsis	Administrative CIR
Context	<b>configure qos queue-group-templates egress queue-group</b> <i>string</i> <b>policer number rate</b> <a href="#">cir</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 2000000000
Units	kilobps
Options	max
Default	0
Introduced	16.0.R1
Platforms	All

**pir** (*number* | *keyword*)

Synopsis	Administrative PIR
Context	<b>configure qos queue-group-templates egress queue-group</b> <i>string</i> <b>policer number rate</b> <a href="#">pir</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 2000000000

Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

### **stat-mode** *keyword*

Synopsis	Mode of statistics collected by the policer
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> <b>stat-mode</b> <i>keyword</i>
Tree	<b>stat-mode</b>
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile
Default	minimal
Introduced	16.0.R1
Platforms	All

### **queue** [**queue-id**] *number*

Synopsis	Enter the <b>queue</b> list instance
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i>
Tree	<b>queue</b>
Introduced	16.0.R1
Platforms	All

### **[queue-id]** *number*

Synopsis	Egress Queue-Group queue identifier
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i>
Tree	<b>queue</b>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All



## adaptation-rule

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

## cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> adaptation-rule cir keyword
Tree	cir
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	All

## pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> adaptation-rule pir keyword
Tree	pir
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	All

## adv-config-policy *reference*

Synopsis	Name of the advanced configuration policy
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> adv-config-policy <i>reference</i>

Tree	<a href="#">adv-config-policy</a>
Reference	<b>configure</b> <a href="#">qos adv-config-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **burst-limit** (*number* | *keyword*)

Synopsis	Explicit shaping burst size of a queue
Context	<b>configure</b> <a href="#">qos queue-group-templates egress queue-group</a> <i>string</i> <a href="#">queue</a> <i>number</i> <b>burst-limit</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">burst-limit</a>
Range	1 to 14000000
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

### **cbs** (*number* | *keyword*)

Synopsis	Reserved buffer space for the queue
Context	<b>configure</b> <a href="#">qos queue-group-templates egress queue-group</a> <i>string</i> <a href="#">queue</a> <i>number</i> <b>cbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cbs</a>
Range	0 to 1048576
Units	kilobytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

### **drop-tail**

Synopsis	Enter the <b>drop-tail</b> context
Context	<b>configure</b> <a href="#">qos queue-group-templates egress queue-group</a> <i>string</i> <a href="#">queue</a> <i>number</i> <b>drop-tail</b>

Tree	<a href="#">drop-tail</a>
Introduced	16.0.R1
Platforms	All

## exceed

Synopsis	Enter the <b>exceed</b> context
Context	<b>configure</b> <a href="#">qos queue-group-templates egress queue-group</a> <i>string</i> <a href="#">queue</a> <i>number</i> <a href="#">drop-tail exceed</a>
Tree	<a href="#">exceed</a>
Introduced	16.0.R1
Platforms	All

## percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	<b>configure</b> <a href="#">qos queue-group-templates egress queue-group</a> <i>string</i> <a href="#">queue</a> <i>number</i> <a href="#">drop-tail exceed percent-reduction-from-mbs</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">percent-reduction-from-mbs</a>
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

## high

Synopsis	Enter the <b>high</b> context
Context	<b>configure</b> <a href="#">qos queue-group-templates egress queue-group</a> <i>string</i> <a href="#">queue</a> <i>number</i> <a href="#">drop-tail high</a>
Tree	<a href="#">high</a>
Introduced	16.0.R1
Platforms	All

**percent-reduction-from-mbs** (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> drop-tail high percent-reduction-from-mbs ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">percent-reduction-from-mbs</a>
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

**highplus**

Synopsis	Enter the <b>highplus</b> context
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> drop-tail highplus
Tree	<a href="#">highplus</a>
Introduced	16.0.R1
Platforms	All

**percent-reduction-from-mbs** (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> drop-tail highplus percent-reduction-from-mbs ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">percent-reduction-from-mbs</a>
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

**low**

Synopsis	Enter the <b>low</b> context
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Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> drop-tail low
Tree	low
Introduced	16.0.R1
Platforms	All

### **percent-reduction-from-mbs** (*number* | *keyword*)

Synopsis	Low drop-tail percent from MBS that is reduced
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> drop-tail low percent-reduction-from-mbs ( <i>number</i>   <i>keyword</i> )
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

### **dynamic-mbs** *boolean*

Synopsis	Allow MBS size modification to maintain maximum latency
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> dynamic-mbs <i>boolean</i>
Tree	dynamic-mbs
Default	false
Introduced	16.0.R1
Platforms	All

### **hs-alt-port-class-pool** *boolean*

Synopsis	Use HS alternate class port pool buffer for traffic
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> hs-alt-port-class-pool <i>boolean</i>
Tree	hs-alt-port-class-pool
Default	false
Introduced	16.0.R1

Platforms 7750 SR-7/12/12e

### **hs-class-weight** *number*

Synopsis Scheduling class weight

Context **configure** qos queue-group-templates egress queue-group *string* queue *number* **hs-class-weight** *number*

Tree [hs-class-weight](#)

Range 1 | 2 | 4 | 8

Default 1

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

### **hs-wred-queue**

Synopsis Enter the **hs-wred-queue** context

Context **configure** qos queue-group-templates egress queue-group *string* queue *number* **hs-wred-queue**

Tree [hs-wred-queue](#)

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

### **policy** *reference*

Synopsis Slope policy name

Context **configure** qos queue-group-templates egress queue-group *string* queue *number* **hs-wred-queue** *policy* *reference*

Tree [policy](#)

Reference **configure** qos slope-policy *string*

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

### **hs-wrr-weight** *number*

Synopsis WRR weight with which queue parents into the scheduler

Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> <b>hs-wrr-weight</b> <i>number</i>
Tree	<b>hs-wrr-weight</b>
Range	1 to 127
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **mbs** (*number* | *keyword*)

Synopsis	Buffer space allowed for the queue
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> <b>mbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>mbs</b>
Range	0 to 1073741824
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

### **packet-byte-offset** *number*

Synopsis	Packet byte offset for addition of policing information
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> <b>packet-byte-offset</b> <i>number</i>
Tree	<b>packet-byte-offset</b>
Range	-64 to 31
Default	0
Introduced	16.0.R1
Platforms	All

### **percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
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Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

### **cir** *decimal-number*

Synopsis	Administrative CIR percent
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Default	0.00
Introduced	16.0.R1
Platforms	All

### **pir** *decimal-number*

Synopsis	Administrative PIR percent
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

### **reference-rate** *keyword*

Synopsis	Reference rate
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> percent-rate reference-rate <i>keyword</i>
Tree	reference-rate
Options	port-limit, local-limit, reference-port-limit
Default	port-limit



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Introduced	20.10.R1
Platforms	All

## port-parent

Synopsis	Enable the <b>port-parent</b> context
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> port-parent
Tree	port-parent
Notes	The following elements are part of a choice: <b>port-parent</b> or <b>scheduler-parent</b> .
Introduced	16.0.R1
Platforms	All

## cir-level *number*

Synopsis	Port priority to receive bandwidth for within-CIR pass
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> port-parent cir-level <i>number</i>
Tree	cir-level
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	All

## cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> port-parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

**level number**

Synopsis	Port priority for bandwidth for above-CIR offered load
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> port-parent <i>level</i> <i>number</i>
Tree	<a href="#">level</a>
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

**weight number**

Synopsis	Weight used at above-CIR port priority level
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> port-parent <i>weight</i> <i>number</i>
Tree	<a href="#">weight</a>
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

**queue-delay number**

Synopsis	Target queue delay for forwarding packets through queue
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> queue-delay <i>number</i>
Tree	<a href="#">queue-delay</a>
Range	1 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

**queue-type keyword**

Synopsis	Method used to service queue from hardware perspective
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Context	<b>configure qos queue-group-templates egress queue-group</b> <i>string queue number queue-type keyword</i>
Tree	<a href="#">queue-type</a>
Options	expedited, best-effort
Introduced	16.0.R1
Platforms	All

## rate

Synopsis	Enter the <b>rate</b> context
Context	<b>configure qos queue-group-templates egress queue-group</b> <i>string queue number rate</i>
Tree	<a href="#">rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

## cir (*number* | *keyword*)

Synopsis	Administrative CIR
Context	<b>configure qos queue-group-templates egress queue-group</b> <i>string queue number rate cir</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 2000000000
Units	kilobps
Options	max
Default	0
Introduced	16.0.R1
Platforms	All

## pir (*number* | *keyword*)

Synopsis	Administrative PIR
Context	<b>configure qos queue-group-templates egress queue-group</b> <i>string queue number rate pir</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 2000000000

Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

### **scheduler-parent**

Synopsis	Enable the <b>scheduler-parent</b> context
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> scheduler-parent
Tree	scheduler-parent
Notes	The following elements are part of a choice: <b>port-parent</b> or <b>scheduler-parent</b> .
Introduced	16.0.R1
Platforms	All

### **cir-level number**

Synopsis	Level of priority while feeding to the parent
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> scheduler-parent cir-level <i>number</i>
Tree	cir-level
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	All

### **cir-weight number**

Synopsis	Weight used at the within-CIR port priority level
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> scheduler-parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Default	1
Introduced	16.0.R1

Platforms All

### **level** *number*

Synopsis Level of priority while feeding to the parent

Context **configure qos queue-group-templates egress queue-group** *string queue number scheduler-parent level number*

Tree [level](#)

Range 1 to 8

Default 1

Introduced 16.0.R1

Platforms All

### **scheduler-name** *string*

Synopsis Parent scheduler name

Context **configure qos queue-group-templates egress queue-group** *string queue number scheduler-parent scheduler-name string*

Tree [scheduler-name](#)

Description This command associates a scheduler name to a queue. The scheduler name must have previously been defined within an existing scheduler policy and exist on each SAP the queue is created on. There are no checks performed to ensure that the scheduler name exists within an existing scheduler policy. Until the scheduler name exists on the egress SAP, the queue operates in an orphaned state.

String Length 1 to 32

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

### **weight** *number*

Synopsis Weight used by the scheduler for feeding the queue

Context **configure qos queue-group-templates egress queue-group** *string queue number scheduler-parent weight number*

Tree [weight](#)

Range 0 to 100

Default 1

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Introduced	16.0.R1
Platforms	All

### wred-queue

Synopsis	Enter the <b>wred-queue</b> context
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> wred-queue
Tree	wred-queue
Introduced	16.0.R1
Platforms	All

### mode keyword

Synopsis	Pool association to allow queue-specific WRED slopes
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> wred-queue mode <i>keyword</i>
Tree	mode
Options	native, pool-per-queue
Introduced	16.0.R1
Platforms	All

### policy reference

Synopsis	Slope policy name
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> wred-queue policy <i>reference</i>
Tree	policy
Reference	<b>configure</b> qos slope-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

### usage keyword

Synopsis	Congestion control type
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Context	<b>configure qos queue-group-templates egress queue-group</b> <i>string queue number wred-queue usage keyword</i>
Tree	<a href="#">usage</a>
Options	auto, exceed-low
Introduced	16.0.R1
Platforms	All

### **queues-hqos-manageable** *boolean*

Synopsis	Manage queues through the Hierarchical QoS process
Context	<b>configure qos queue-group-templates egress queue-group</b> <i>string queues-hqos-manageable boolean</i>
Tree	<a href="#">queues-hqos-manageable</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, VSR

### **ingress**

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure qos queue-group-templates ingress</b>
Tree	<a href="#">ingress</a>
Introduced	16.0.R1
Platforms	All

### **queue-group** [[ingress-queue-group-name](#)] *string*

Synopsis	Enter the <b>queue-group</b> list instance
Context	<b>configure qos queue-group-templates ingress queue-group</b> <i>string</i>
Tree	<a href="#">queue-group</a>
Introduced	16.0.R1
Platforms	All

**[ingress-queue-group-name] string**

Synopsis	Ingress queue group template name
Context	<b>configure</b> qos queue-group-templates ingress queue-group string
Tree	queue-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> qos queue-group-templates ingress queue-group string description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**policer [policer-id] number**

Synopsis	Enter the <b>policer</b> list instance
Context	<b>configure</b> qos queue-group-templates ingress queue-group string policer number
Tree	policer
Introduced	16.0.R1
Platforms	All

**[policer-id] number**

Synopsis	Ingress Queue-Group Policer identifier
Context	<b>configure</b> qos queue-group-templates ingress queue-group string policer number
Tree	policer
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1



Platforms All

## adaptation-rule

Synopsis Enter the **adaptation-rule** context

Context **configure** qos queue-group-templates ingress queue-group *string* policer *number*  
adaptation-rule

Tree adaptation-rule

Introduced 16.0.R1

Platforms All

## cir keyword

Synopsis Constraint used when deriving the operational CIR value

Context **configure** qos queue-group-templates ingress queue-group *string* policer *number*  
adaptation-rule cir *keyword*

Tree cir

Options max, min, closest

Default closest

Introduced 16.0.R1

Platforms All

## pir keyword

Synopsis Constraint used when deriving the operational PIR value

Context **configure** qos queue-group-templates ingress queue-group *string* policer *number*  
adaptation-rule pir *keyword*

Tree pir

Options max, min, closest

Default closest

Introduced 16.0.R1

Platforms All

## adv-config-policy *reference*

Synopsis Advanced QoS policy name

Context	<b>configure qos queue-group-templates ingress queue-group</b> <i>string policer number adv-config-policy reference</i>
Tree	<a href="#">adv-config-policy</a>
Reference	<b>configure qos adv-config-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

## arbiter-parent

Synopsis	Enter the <b>arbiter-parent</b> context
Context	<b>configure qos queue-group-templates ingress queue-group</b> <i>string policer number arbiter-parent</i>
Tree	<a href="#">arbiter-parent</a>
Introduced	16.0.R1
Platforms	All

## arbiter-name *string*

Synopsis	Arbiter name
Context	<b>configure qos queue-group-templates ingress queue-group</b> <i>string policer number arbiter-parent arbiter-name</i> <i>string</i>
Tree	<a href="#">arbiter-name</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

## level *number*

Synopsis	Level of priority while feeding to the parent
Context	<b>configure qos queue-group-templates ingress queue-group</b> <i>string policer number arbiter-parent level</i> <i>number</i>
Tree	<a href="#">level</a>
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

**weight** *number*

Synopsis	Weight used by the arbiter for feeding the policer
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> <i>arbiter-parent weight number</i>
Tree	<a href="#">weight</a>
Range	1 to 100
Default	1
Introduced	16.0.R1
Platforms	All

**cbs** (*number* | *keyword*)

Synopsis	Exceed threshold of the CIR leaky bucket of the policer
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> cbs ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> <i>description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**high-prio-only** (*number* | *keyword*)

Synopsis	Percentage of MBS reserved for high priority traffic
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> high-prio-only ( <i>number</i>   <i>keyword</i> )
Tree	high-prio-only
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

**mbs** (*number* | *keyword*)

Synopsis	Maximum buffer size for the template queue
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> mbs ( <i>number</i>   <i>keyword</i> )
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

**packet-byte-offset** *number*

Synopsis	Packet size modification for policing information
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-32 to 31
Default	0
Introduced	16.0.R1
Platforms	All

## percent-rate

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.2.R1
Platforms	All

## cir decimal-number

Synopsis	Administrative CIR
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Default	0.00
Introduced	20.2.R1
Platforms	All

## pir decimal-number

Synopsis	Administrative PIR
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	20.2.R1
Platforms	All

## profile-capped boolean

Synopsis	Enforce a limit on the profile
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> profile-capped <i>boolean</i>
Tree	profile-capped

Default	false
Introduced	16.0.R1
Platforms	All

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure qos queue-group-templates ingress queue-group</b> <i>string</i> <b>policer</b> <i>number</i> <b>rate</b>
Tree	<b>rate</b>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

**cir** (*number* | *keyword*)

Synopsis	Administrative CIR
Context	<b>configure qos queue-group-templates ingress queue-group</b> <i>string</i> <b>policer</b> <i>number</i> <b>rate</b> <b>cir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>cir</b>
Range	0 to 2000000000
Units	kilobps
Options	max
Default	0
Introduced	16.0.R1
Platforms	All

**pir** (*number* | *keyword*)

Synopsis	Administrative PIR
Context	<b>configure qos queue-group-templates ingress queue-group</b> <i>string</i> <b>policer</b> <i>number</i> <b>rate</b> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>pir</b>
Range	1 to 2000000000
Units	kilobps
Options	max

Default	max
Introduced	16.0.R1
Platforms	All

### **stat-mode** *keyword*

Synopsis	Mode of statistics collected by the policer
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> <b>stat-mode</b> <i>keyword</i>
Tree	<b>stat-mode</b>
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Default	minimal
Introduced	16.0.R1
Platforms	All

### **queue** [**queue-id**] *number*

Synopsis	Enter the <b>queue</b> list instance
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i>
Tree	<b>queue</b>
Introduced	16.0.R1
Platforms	All

### **[queue-id]** *number*

Synopsis	Ingress Queue-Group Queue identifier
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i>
Tree	<b>queue</b>
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## adaptation-rule

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

## cir keyword

Synopsis	Constraint for deriving operational CIR for the queue
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> adaptation-rule cir <i>keyword</i>
Tree	cir
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	All

## fir keyword

Synopsis	Constraint for deriving operational FIR for the queue
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> adaptation-rule fir <i>keyword</i>
Tree	fir
Options	max, min, closest
Default	closest
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## pir keyword

Synopsis	Constraint for deriving operational FIR for the queue
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> adaptation-rule pir <i>keyword</i>
Tree	pir



Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	All

### **adv-config-policy** *reference*

Synopsis	Advanced QoS policy name
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue number <b>adv-config-policy</b> <i>reference</i>
Tree	<a href="#">adv-config-policy</a>
Reference	<b>configure</b> qos <a href="#">adv-config-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **burst-limit** (*number* | *keyword*)

Synopsis	Explicit shaping burst size of a queue
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue number <b>burst-limit</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">burst-limit</a>
Range	1 to 14000000
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

### **cbs** (*number* | *keyword*)

Synopsis	Reserved buffer space for the queue
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue number <b>cbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cbs</a>
Range	0 to 1048576
Units	kilobytes

Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

### **cir-non-profiling** *boolean*

Synopsis	Prevent profile modification of CIR dependent packet
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> cir-non-profiling <i>boolean</i>
Tree	<a href="#">cir-non-profiling</a>
Description	<p>When configured to <b>true</b>, the system prevents the modification of the profile of a packet-dependent queue rate compared to its configured CIR. The CIR continues to be used to affect the scheduling priority of a queue.</p> <p>This command is only supported on hardware that is FP4-based and later and is ignored when the related policy is applied to FP3-based hardware.</p> <p>This command should not be configured under an ingress queue group template queue associated with a LAG which spans FP4-based and later and FP3-based hardware as the resulting operation could be different depending on which hardware type the traffic ingresses.</p>
Default	false
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **drop-tail**

Synopsis	Enter the <b>drop-tail</b> context
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> drop-tail
Tree	<a href="#">drop-tail</a>
Introduced	16.0.R1
Platforms	All

### **low**

Synopsis	Enter the <b>low</b> context
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> drop-tail low

Tree	<a href="#">low</a>
Introduced	16.0.R1
Platforms	All

### **percent-reduction-from-mbs** (*number* | *keyword*)

Synopsis	Low drop-tail percent from MBS that is reduced
Context	<b>configure</b> <a href="#">qos queue-group-templates ingress queue-group</a> <i>string queue number drop-tail low percent-reduction-from-mbs</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">percent-reduction-from-mbs</a>
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

### **mbs** (*number* | *keyword*)

Synopsis	Maximum buffer space that is allowed for queue
Context	<b>configure</b> <a href="#">qos queue-group-templates ingress queue-group</a> <i>string queue number mbs</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs</a>
Range	0 to 1073741824
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

### **multipoint** *boolean*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Create an ingress multipoint queue
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Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> multipoint <i>boolean</i>
Tree	<a href="#">multipoint</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **packet-byte-offset** *number*

Synopsis	Packet size modification for queue accounting
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> packet-byte-offset <i>number</i>
Tree	<a href="#">packet-byte-offset</a>
Range	-32 to 31
Default	0
Introduced	16.0.R1
Platforms	All

### **percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> percent-rate
Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	All

### **cir** *decimal-number*

Synopsis	Administrative CIR
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> percent-rate cir <i>decimal-number</i>
Tree	<a href="#">cir</a>
Range	0.00 to 100.00
Default	0.00

Notes	The following elements are part of a choice: ( <b>cir</b> and <b>fir</b> ) or <b>police</b> .
Introduced	20.10.R1
Platforms	All

### **fir** *decimal-number*

Synopsis	Administrative FIR
Context	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">ingress</a> <a href="#">queue-group</a> <i>string</i> <a href="#">queue</a> <i>number</i> <a href="#">percent-rate</a> <b>fir</b> <i>decimal-number</i>
Tree	<a href="#">fir</a>
Range	0.00 to 100.00
Default	0.00
Notes	The following elements are part of a choice: ( <b>cir</b> and <b>fir</b> ) or <b>police</b> .
Introduced	20.10.R1
Platforms	All

### **pir** *decimal-number*

Synopsis	Administrative PIR
Context	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">ingress</a> <a href="#">queue-group</a> <i>string</i> <a href="#">queue</a> <i>number</i> <a href="#">percent-rate</a> <b>pir</b> <i>decimal-number</i>
Tree	<a href="#">pir</a>
Range	0.01 to 100.00
Introduced	20.10.R1
Platforms	All

### **police**

Synopsis	Drop out-of-profile traffic feeding into physical queue
Context	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">ingress</a> <a href="#">queue-group</a> <i>string</i> <a href="#">queue</a> <i>number</i> <a href="#">percent-rate</a> <b>police</b>
Tree	<a href="#">police</a>
Notes	The following elements are part of a choice: ( <b>cir</b> and <b>fir</b> ) or <b>police</b> .
Introduced	20.10.R1
Platforms	All

**reference-rate** *keyword*

Synopsis	Reference rate
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> percent-rate reference-rate <i>keyword</i>
Tree	reference-rate
Options	port-limit, local-limit, reference-port-limit
Default	port-limit
Introduced	20.10.R1
Platforms	All

**queue-mode** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Queue operational mode for explicitly profiled packets
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> queue-mode <i>keyword</i>
Tree	queue-mode
Options	priority, profile
Default	priority
Introduced	16.0.R1
Platforms	All

**queue-type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Priority that this queue receives from the hardware level schedulers
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> queue-type <i>keyword</i>
Tree	queue-type
Options	expedited, best-effort

Default	best-effort
Introduced	16.0.R1
Platforms	All

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure qos queue-group-templates ingress queue-group</b> <i>string queue number rate</i>
Tree	<a href="#">rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

**cir** (*number* | *keyword*)

Synopsis	Administrative CIR
Context	<b>configure qos queue-group-templates ingress queue-group</b> <i>string queue number rate cir</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 2000000000
Units	kilobps
Options	max
Default	0
Notes	The following elements are part of a choice: ( <b>cir</b> and <b>fir</b> ) or <b>police</b> .
Introduced	16.0.R1
Platforms	All

**fir** (*number* | *keyword*)

Synopsis	Administrative FIR
Context	<b>configure qos queue-group-templates ingress queue-group</b> <i>string queue number rate fir</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">fir</a>
Range	0 to 2000000000
Units	kilobps

Options	max
Default	0
Notes	The following elements are part of a choice: ( <b>cir</b> and <b>fir</b> ) or <b>police</b> .
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **pir** (*number* | *keyword*)

Synopsis	Administrative PIR
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> rate <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>pir</b>
Range	1 to 2000000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

### **police**

Synopsis	Drop out-of-profile traffic feeding into queue instance
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> rate <b>police</b>
Tree	<b>police</b>
Notes	The following elements are part of a choice: ( <b>cir</b> and <b>fir</b> ) or <b>police</b> .
Introduced	16.0.R1
Platforms	All

### **scheduler-parent**

Synopsis	Enter the <b>scheduler-parent</b> context
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> <b>scheduler-parent</b>
Tree	<b>scheduler-parent</b>
Introduced	16.0.R1



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Platforms All

### **cir-level** *number*

Synopsis Level of priority while feeding to the parent

Context **configure** qos queue-group-templates ingress queue-group *string* queue *number*  
scheduler-parent cir-level *number*

Tree [cir-level](#)

Range 0 to 8

Default 0

Introduced 16.0.R1

Platforms All

### **cir-weight** *number*

Synopsis Weight used at the within-CIR port priority level

Context **configure** qos queue-group-templates ingress queue-group *string* queue *number*  
scheduler-parent cir-weight *number*

Tree [cir-weight](#)

Range 0 to 100

Default 1

Introduced 16.0.R1

Platforms All

### **level** *number*

Synopsis Level of priority while feeding to the parent

Context **configure** qos queue-group-templates ingress queue-group *string* queue *number*  
scheduler-parent level *number*

Tree [level](#)

Range 1 to 8

Default 1

Introduced 16.0.R1

Platforms All

**scheduler-name** *string*

Synopsis	Scheduler name
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> scheduler-parent scheduler-name <i>string</i>
Tree	<a href="#">scheduler-name</a>
Description	This command associates a scheduler name to a queue. The scheduler name must have previously been defined within an existing scheduler policy and exist on each SAP the queue is created on. There are no checks performed to ensure that the scheduler name exists within an existing scheduler policy. Until the scheduler name exists on the egress SAP, the queue operates in an orphaned state.
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

**weight** *number*

Synopsis	Weight used by the scheduler for feeding the queue
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> scheduler-parent weight <i>number</i>
Tree	<a href="#">weight</a>
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

**sap-egress** [[sap-egress-policy-name](#)] *string*

Synopsis	Enter the <b>sap-egress</b> list instance
Context	<b>configure</b> qos sap-egress <i>string</i>
Tree	<a href="#">sap-egress</a>
Introduced	16.0.R1
Platforms	All

**[sap-egress-policy-name]** *string*

Synopsis	Policy name
Context	<b>configure</b> qos sap-egress <i>string</i>

Tree	<a href="#">sap-egress</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **dot1p** [[dot1p-value](#)] *number*

Synopsis	Enter the <b>dot1p</b> list instance
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">dot1p</a> <i>number</i>
Tree	<a href="#">dot1p</a>
Introduced	16.0.R1
Platforms	All

### **[dot1p-value]** *number*

Synopsis	Dot1p value to match in the packet
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">dot1p</a> <i>number</i>
Tree	<a href="#">dot1p</a>
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**fc keyword**

Synopsis	Forwarding class
Context	<b>configure qos sap-egress</b> <i>string dot1p number fc keyword</i>
Tree	<b>fc</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

**profile keyword**

Synopsis	Default profile for the ingressing traffic
Context	<b>configure qos sap-egress</b> <i>string dot1p number profile keyword</i>
Tree	<b>profile</b>
Options	in, out, de, exceed, inplus
Introduced	16.0.R1
Platforms	All

**dscp [dscp-name] keyword**

Synopsis	Enter the <b>dscp</b> list instance
Context	<b>configure qos sap-egress</b> <i>string dscp keyword</i>
Tree	<b>dscp</b>
Introduced	16.0.R1
Platforms	All

**[dscp-name] keyword**

Synopsis	DSCP name to perform reclassification actions
Context	<b>configure qos sap-egress</b> <i>string dscp keyword</i>
Tree	<b>dscp</b>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is part of a list key.

Introduced 16.0.R1  
Platforms All

### **fc** *keyword*

Synopsis Forwarding class  
Context **configure** qos sap-egress string dscp keyword fc keyword  
Tree fc  
Options be, l2, af, l1, h2, ef, h1, nc  
Introduced 16.0.R1  
Platforms All

### **profile** *keyword*

Synopsis Default profile for the ingressing traffic  
Context **configure** qos sap-egress string dscp keyword profile keyword  
Tree profile  
Options in, out, exceed, inplus  
Introduced 16.0.R1  
Platforms All

### **ethernet-ctag** *boolean*

Synopsis Tag value for dot1p and DE (Drop-Eligible) that are used by all dot1-p entries  
Context **configure** qos sap-egress string ethernet-ctag boolean  
Tree ethernet-ctag  
Default false  
Introduced 16.0.R1  
Platforms All

### **fc** [*fc-name*] *keyword*

Synopsis Enter the **fc** list instance  
Context **configure** qos sap-egress string fc keyword  
Tree fc

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Introduced	16.0.R1
Platforms	All

**[fc-name]** *keyword*

Synopsis	Forwarding class
Context	<b>configure qos sap-egress</b> <i>string fc keyword</i>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**de-mark**

Synopsis	Enable the <b>de-mark</b> context
Context	<b>configure qos sap-egress</b> <i>string fc keyword de-mark</i>
Tree	<a href="#">de-mark</a>
Introduced	16.0.R1
Platforms	All

**force number**

Synopsis	DE value
Context	<b>configure qos sap-egress</b> <i>string fc keyword de-mark force number</i>
Tree	<a href="#">force</a>
Range	0 to 1
Introduced	16.0.R1
Platforms	All

**de-mark-inner**

Synopsis	Enable the <b>de-mark-inner</b> context
Context	<b>configure qos sap-egress</b> <i>string fc keyword de-mark-inner</i>
Tree	<a href="#">de-mark-inner</a>

Introduced 16.0.R1  
Platforms All

### **force number**

Synopsis DE value to set in inner VLAN tag  
Context **configure qos sap-egress** *string fc keyword de-mark-inner force number*  
Tree [force](#)  
Range 0 to 1  
Introduced 16.0.R1  
Platforms All

### **de-mark-outer**

Synopsis Enable the **de-mark-outer** context  
Context **configure qos sap-egress** *string fc keyword de-mark-outer*  
Tree [de-mark-outer](#)  
Introduced 16.0.R1  
Platforms All

### **force number**

Synopsis DE value to set in outer VLAN tag  
Context **configure qos sap-egress** *string fc keyword de-mark-outer force number*  
Tree [force](#)  
Range 0 to 1  
Introduced 16.0.R1  
Platforms All

### **dot1p**

Synopsis Enter the **dot1p** context  
Context **configure qos sap-egress** *string fc keyword dot1p*  
Tree [dot1p](#)  
Introduced 16.0.R1

Platforms All

### **exceed-profile** *number*

Synopsis Dot1p value for exceed-profile frames  
Context **configure qos sap-egress** *string fc keyword dot1p exceed-profile number*  
Tree [exceed-profile](#)  
Range 0 to 7  
Introduced 16.0.R1  
Platforms All

### **in-profile** *number*

Synopsis Dot1p value for in-profile frames  
Context **configure qos sap-egress** *string fc keyword dot1p in-profile number*  
Tree [in-profile](#)  
Range 0 to 7  
Introduced 16.0.R1  
Platforms All

### **out-profile** *number*

Synopsis Dot1p value for out-of-profile frames  
Context **configure qos sap-egress** *string fc keyword dot1p out-profile number*  
Tree [out-profile](#)  
Range 0 to 7  
Introduced 16.0.R1  
Platforms All

### **dot1p-inner**

Synopsis Enter the **dot1p-inner** context  
Context **configure qos sap-egress** *string fc keyword dot1p-inner*  
Tree [dot1p-inner](#)  
Introduced 16.0.R1



Platforms All

### **in-profile** *number*

Synopsis Inner Dot1p value for in-profile frames

Context **configure** qos sap-egress *string* fc *keyword* dot1p-inner in-profile *number*

Tree [in-profile](#)

Range 0 to 7

Introduced 16.0.R1

Platforms All

### **out-profile** *number*

Synopsis Inner Dot1p value for out-of-profile frames

Context **configure** qos sap-egress *string* fc *keyword* dot1p-inner out-profile *number*

Tree [out-profile](#)

Range 0 to 7

Introduced 16.0.R1

Platforms All

### **dot1p-outer**

Synopsis Enter the **dot1p-outer** context

Context **configure** qos sap-egress *string* fc *keyword* dot1p-outer

Tree [dot1p-outer](#)

Introduced 16.0.R1

Platforms All

### **exceed-profile** *number*

Synopsis Outer Dot1p value for exceed-profile frames

Context **configure** qos sap-egress *string* fc *keyword* dot1p-outer exceed-profile *number*

Tree [exceed-profile](#)

Range 0 to 7

Introduced 16.0.R1

Platforms All

### **in-profile** *number*

Synopsis Outer Dot1p value for in-profile frames  
 Context **configure qos sap-egress** *string fc keyword dot1p-outer in-profile number*  
 Tree [in-profile](#)  
 Range 0 to 7  
 Introduced 16.0.R1  
 Platforms All

### **out-profile** *number*

Synopsis Outer Dot1p value for out-of-profile frames  
 Context **configure qos sap-egress** *string fc keyword dot1p-outer out-profile number*  
 Tree [out-profile](#)  
 Range 0 to 7  
 Introduced 16.0.R1  
 Platforms All

### **dscp**

Synopsis Enter the **dscp** context  
 Context **configure qos sap-egress** *string fc keyword dscp*  
 Tree [dscp](#)  
 Notes The following elements are part of a choice: **dscp** or **prec**.  
 Introduced 16.0.R1  
 Platforms All

### **exceed-profile** *keyword*

Synopsis DSCP name for exceed-profile frames  
 Context **configure qos sap-egress** *string fc keyword dscp exceed-profile keyword*  
 Tree [exceed-profile](#)  
 Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31,

cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Introduced 16.0.R1

Platforms All

### **in-profile** *keyword*

Synopsis DSCP name for in-profile frames

Context **configure** qos sap-egress *string* fc *keyword* dscp in-profile *keyword*

Tree [in-profile](#)

Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Introduced 16.0.R1

Platforms All

### **out-profile** *keyword*

Synopsis DSCP name for out-of-profile frames

Context **configure** qos sap-egress *string* fc *keyword* dscp out-profile *keyword*

Tree [out-profile](#)

Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Introduced 16.0.R1

Platforms All

### **policer** *reference*

Synopsis Policer to forward the traffic

Context **configure** qos sap-egress *string* fc *keyword* policer *reference*

Tree [policer](#)

Reference **configure** qos sap-egress *string* policer *number*

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **port-redirect-group-queue**

Synopsis	Enable the <b>port-redirect-group-queue</b> context
Context	<b>configure qos sap-egress string fc keyword port-redirect-group-queue</b>
Tree	<a href="#">port-redirect-group-queue</a>
Notes	The following elements are part of a choice: <b>port-redirect-group-queue</b> , <b>queue</b> , or <b>queue-group-queue</b> .
Introduced	16.0.R1
Platforms	All

### **queue number**

Synopsis	Queue to forward the traffic
Context	<b>configure qos sap-egress string fc keyword port-redirect-group-queue queue number</b>
Tree	<a href="#">queue</a>
Range	1 to 8
Introduced	16.0.R1
Platforms	All

### **prec**

Synopsis	Enter the <b>prec</b> context
Context	<b>configure qos sap-egress string fc keyword prec</b>
Tree	<a href="#">prec</a>
Notes	The following elements are part of a choice: <b>dscp</b> or <b>prec</b> .
Introduced	16.0.R1
Platforms	All

### **exceed-profile number**

Synopsis	Precedence for exceed-profile frames
Context	<b>configure qos sap-egress string fc keyword prec exceed-profile number</b>

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Tree	<a href="#">exceed-profile</a>
Range	0 to 7
Introduced	16.0.R1
Platforms	All

### **in-profile** *number*

Synopsis	Precedence value for in-profile frames
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">fc</a> <i>keyword</i> <a href="#">prec</a> <a href="#">in-profile</a> <i>number</i>
Tree	<a href="#">in-profile</a>
Range	0 to 7
Introduced	16.0.R1
Platforms	All

### **out-profile** *number*

Synopsis	Precedence value for out-of-profile frames
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">fc</a> <i>keyword</i> <a href="#">prec</a> <a href="#">out-profile</a> <i>number</i>
Tree	<a href="#">out-profile</a>
Range	0 to 7
Introduced	16.0.R1
Platforms	All

### **queue** *reference*

Synopsis	Queue to forward the traffic
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">fc</a> <i>keyword</i> <a href="#">queue</a> <i>reference</i>
Tree	<a href="#">queue</a>
Reference	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">queue</a> <i>number</i>
Notes	The following elements are part of a choice: <b>port-redirect-group-queue</b> , <b>queue</b> , or <b>queue-group-queue</b> .
Introduced	16.0.R1
Platforms	All

## queue-group-queue

Synopsis	Enable the <b>queue-group-queue</b> context
Context	<b>configure</b> qos sap-egress <i>string</i> fc <i>keyword</i> queue-group-queue
Tree	queue-group-queue
Notes	The following elements are part of a choice: <b>port-redirect-group-queue</b> , <b>queue</b> , or <b>queue-group-queue</b> .
Introduced	16.0.R1
Platforms	All

## instance *number*

Synopsis	Instance ID
Context	<b>configure</b> qos sap-egress <i>string</i> fc <i>keyword</i> queue-group-queue <i>instance number</i>
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

## queue *reference*

Synopsis	SAP egress queue ID
Context	<b>configure</b> qos sap-egress <i>string</i> fc <i>keyword</i> queue-group-queue <i>queue reference</i>
Tree	queue
Reference	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> <i>queue number</i>
Introduced	16.0.R1
Platforms	All

## queue-group-name *reference*

Synopsis	Queue group to forward traffic
Context	<b>configure</b> qos sap-egress <i>string</i> fc <i>keyword</i> queue-group-queue <i>queue-group-name reference</i>
Tree	queue-group-name
Reference	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i>
Notes	This element is mandatory.

Introduced 16.0.R1  
 Platforms All

### **hs-attachment-policy** *reference*

Synopsis HS attachment policy applied  
 Context **configure qos sap-egress** *string* **hs-attachment-policy** *reference*  
 Tree [hs-attachment-policy](#)  
 Reference **configure qos** **hs-attachment-policy** *string*  
 Introduced 16.0.R1  
 Platforms 7750 SR-7/12/12e

### **hs-wrr-group** [[group-id](#)] *number*

Synopsis Enter the **hs-wrr-group** list instance  
 Context **configure qos sap-egress** *string* **hs-wrr-group** *number*  
 Tree [hs-wrr-group](#)  
 Introduced 16.0.R1  
 Platforms 7750 SR-7/12/12e

### [[group-id](#)] *number*

Synopsis HS WRR group identifier  
 Context **configure qos sap-egress** *string* **hs-wrr-group** *number*  
 Tree [hs-wrr-group](#)  
 Range 1 to 2  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7750 SR-7/12/12e

### **adaptation-rule**

Synopsis Enter the **adaptation-rule** context  
 Context **configure qos sap-egress** *string* **hs-wrr-group** *number* **adaptation-rule**  
 Tree [adaptation-rule](#)

Introduced 16.0.R1  
Platforms 7750 SR-7/12/12e

### **pir** *keyword*

Synopsis Constraint used when deriving the operational PIR value  
Context **configure** [qos sap-egress](#) *string* [hs-wrr-group](#) *number* [adaptation-rule](#) **pir** *keyword*  
Tree [pir](#)  
Options max, min, closest  
Default closest  
Introduced 16.0.R1  
Platforms 7750 SR-7/12/12e

### **hs-class-weight** *number*

Synopsis Weight of scheduling class  
Context **configure** [qos sap-egress](#) *string* [hs-wrr-group](#) *number* [hs-class-weight](#) *number*  
Tree [hs-class-weight](#)  
Range 1 | 2 | 4 | 8  
Default 1  
Introduced 16.0.R1  
Platforms 7750 SR-7/12/12e

### **percent-rate** *decimal-number*

Synopsis Administrative PIR percent  
Context **configure** [qos sap-egress](#) *string* [hs-wrr-group](#) *number* [percent-rate](#) *decimal-number*  
Tree [percent-rate](#)  
Range 0.01 to 100.00  
Notes The following elements are part of a choice: **percent-rate** or **rate**.  
Introduced 16.0.R1  
Platforms 7750 SR-7/12/12e



**rate** (*number* | *keyword*)

Synopsis	Administrative PIR
Context	<b>configure</b> qos sap-egress <i>string</i> hs-wrr-group <i>number</i> rate ( <i>number</i>   <i>keyword</i> )
Tree	rate
Range	1 to 2000000000
Units	kilobps
Options	max
Default	max
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**ip-criteria**

Synopsis	Enter the <b>ip-criteria</b> context
Context	<b>configure</b> qos sap-egress <i>string</i> ip-criteria
Tree	ip-criteria
Introduced	16.0.R1
Platforms	All

**entry** [*entry-id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> qos sap-egress <i>string</i> ip-criteria entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

**[entry-id]** *number*

Synopsis	IP Criteria Entry Index
Context	<b>configure</b> qos sap-egress <i>string</i> ip-criteria entry <i>number</i>
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.

Introduced 16.0.R1  
 Platforms All

### **action**

Synopsis Enter the **action** context  
 Context **configure** qos sap-egress *string* ip-criteria entry number action  
 Tree [action](#)  
 Introduced 16.0.R1  
 Platforms All

### **fc keyword**

Synopsis Forwarding class  
 Context **configure** qos sap-egress *string* ip-criteria entry number action fc keyword  
 Tree [fc](#)  
 Options be, l2, af, l1, h2, ef, h1, nc  
 Introduced 16.0.R1  
 Platforms All

### **policer reference**

Synopsis Policer identifier for the matched traffic  
 Context **configure** qos sap-egress *string* ip-criteria entry number action policer reference  
 Tree [policer](#)  
 Reference **configure** qos sap-egress *string* policer number  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **port-redirect-group-queue boolean**

Synopsis Use queue specified in egress access port queue group  
 Context **configure** qos sap-egress *string* ip-criteria entry number action port-redirect-group-queue boolean  
 Tree [port-redirect-group-queue](#)

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Default	false
Introduced	16.0.R1
Platforms	All

### **profile** *keyword*

Synopsis	Default profile for the matching traffic
Context	<b>configure</b> qos sap-egress <i>string ip-criteria entry number action profile keyword</i>
Tree	<a href="#">profile</a>
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

### **queue** *number*

Synopsis	Queue used for matched traffic policed by local policer
Context	<b>configure</b> qos sap-egress <i>string ip-criteria entry number action queue number</i>
Tree	<a href="#">queue</a>
Range	1 to 8
Introduced	16.0.R1
Platforms	All

### **type** *keyword*

Synopsis	Action for criteria entry
Context	<b>configure</b> qos sap-egress <i>string ip-criteria entry number action type keyword</i>
Tree	<a href="#">type</a>
Options	ignore-match, accept
Default	ignore-match
Introduced	16.0.R1
Platforms	All

### **use-fc-mapped-queue** *boolean*

Synopsis	Redirect policer output to the configured queues
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Context	<b>configure qos sap-egress</b> <i>string ip-criteria entry number action use-fc-mapped-queue boolean</i>
Tree	<a href="#">use-fc-mapped-queue</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure qos sap-egress</b> <i>string ip-criteria entry number description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **match**

Synopsis	Enter the <b>match</b> context
Context	<b>configure qos sap-egress</b> <i>string ip-criteria entry number match</i>
Tree	<a href="#">match</a>
Introduced	16.0.R1
Platforms	All

### **dscp** *keyword*

Synopsis	DSCP value to match in the packet
Context	<b>configure qos sap-egress</b> <i>string ip-criteria entry number match dscp keyword</i>
Tree	<a href="#">dscp</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

**dst-ip**

Synopsis	Enter the <b>dst-ip</b> context
Context	<b>configure qos sap-egress</b> <i>string ip-criteria entry number match</i> <b>dst-ip</b>
Tree	<b>dst-ip</b>
Introduced	16.0.R1
Platforms	All

**address** (*ipv4-address* | *ipv4-prefix-with-host-bits*)

Synopsis	Destination IPv4 address for SAP QoS policy match
Context	<b>configure qos sap-egress</b> <i>string ip-criteria entry number match</i> <b>dst-ip address</b> ( <i>ipv4-address</i>   <i>ipv4-prefix-with-host-bits</i> )
Tree	<b>address</b>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

**ip-prefix-list** *reference*

Synopsis	List of IPv4 prefixes for the match criteria
Context	<b>configure qos sap-egress</b> <i>string ip-criteria entry number match</i> <b>dst-ip ip-prefix-list reference</b>
Tree	<b>ip-prefix-list</b>
Reference	<b>configure qos match-list ip-prefix-list</b> <i>string</i>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

**mask** *string*

Synopsis	IP address mask to match with source IP of the packet
Context	<b>configure qos sap-egress</b> <i>string ip-criteria entry number match</i> <b>dst-ip mask</b> <i>string</i>
Tree	<b>mask</b>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .

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Introduced	16.0.R1
Platforms	All

### **dst-port**

Synopsis	Enter the <b>dst-port</b> context
Context	<b>configure qos sap-egress string ip-criteria entry number match dst-port</b>
Tree	<a href="#">dst-port</a>
Introduced	16.0.R1
Platforms	All

### **eq number**

Synopsis	Value 'equal to' as match condition
Context	<b>configure qos sap-egress string ip-criteria entry number match dst-port eq number</b>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq, gt, lt, or range</b> .
Introduced	16.0.R1
Platforms	All

### **gt number**

Synopsis	Value 'greater than' as match condition
Context	<b>configure qos sap-egress string ip-criteria entry number match dst-port gt number</b>
Tree	<a href="#">gt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq, gt, lt, or range</b> .
Introduced	16.0.R1
Platforms	All

### **lt number**

Synopsis	Value 'less than' as match condition
Context	<b>configure qos sap-egress string ip-criteria entry number match dst-port lt number</b>

Tree	<a href="#">lt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## range

Synopsis	Enter the <b>range</b> context
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">ip-criteria</a> <i>entry</i> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <a href="#">range</a>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## end number

Synopsis	Upper bound of the port range
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">ip-criteria</a> <i>entry</i> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <a href="#">range</a> <a href="#">end</a> <i>number</i>
Tree	<a href="#">end</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

## start number

Synopsis	Lower bound of the port range
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">ip-criteria</a> <i>entry</i> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <a href="#">range</a> <a href="#">start</a> <i>number</i>
Tree	<a href="#">start</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

**fragment** *keyword*

Synopsis	Fragmented packets as the match criterion
Context	<b>configure</b> qos sap-egress <i>string</i> ip-criteria entry <i>number</i> match fragment <i>keyword</i>
Tree	fragment
Options	false, true
Introduced	16.0.R1
Platforms	All

**protocol** (*number* | *keyword*)

Synopsis	IP protocol to match
Context	<b>configure</b> qos sap-egress <i>string</i> ip-criteria entry <i>number</i> match protocol ( <i>number</i>   <i>keyword</i> )
Tree	protocol
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

**src-ip**

Synopsis	Enter the <b>src-ip</b> context
Context	<b>configure</b> qos sap-egress <i>string</i> ip-criteria entry <i>number</i> match src-ip
Tree	src-ip
Introduced	16.0.R1
Platforms	All

**address** (*ipv4-address* | *ipv4-prefix-with-host-bits*)

Synopsis	Source IPv4 address for SAP QoS policy match criterion
Context	<b>configure</b> qos sap-egress <i>string</i> ip-criteria entry <i>number</i> match src-ip address ( <i>ipv4-address</i>   <i>ipv4-prefix-with-host-bits</i> )
Tree	address
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .



Introduced	16.0.R1
Platforms	All

### **ip-prefix-list** *reference*

Synopsis	List of IPv4 prefixes for the match criteria
Context	<b>configure qos sap-egress string ip-criteria entry number match src-ip ip-prefix-list reference</b>
Tree	<a href="#">ip-prefix-list</a>
Reference	<b>configure qos match-list ip-prefix-list string</b>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### **mask** *string*

Synopsis	IP address mask to match with source IP of the packet
Context	<b>configure qos sap-egress string ip-criteria entry number match src-ip mask string</b>
Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### **src-port**

Synopsis	Enter the <b>src-port</b> context
Context	<b>configure qos sap-egress string ip-criteria entry number match src-port</b>
Tree	<a href="#">src-port</a>
Introduced	16.0.R1
Platforms	All

### **eq** *number*

Synopsis	Value 'equal to' as match condition
Context	<b>configure qos sap-egress string ip-criteria entry number match src-port eq number</b>

Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **gt** *number*

Synopsis	Value 'greater than' as match condition
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">ip-criteria</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">gt</a> <i>number</i>
Tree	<a href="#">gt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **lt** *number*

Synopsis	Value 'less than' as match condition
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">ip-criteria</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">lt</a> <i>number</i>
Tree	<a href="#">lt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **range**

Synopsis	Enter the <b>range</b> context
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">ip-criteria</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">range</a>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **end number**

Synopsis	Upper bound of the port range
Context	<b>configure qos sap-egress string ip-criteria entry number match src-port range end number</b>
Tree	<a href="#">end</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

### **start number**

Synopsis	Lower bound of the port range
Context	<b>configure qos sap-egress string ip-criteria entry number match src-port range start number</b>
Tree	<a href="#">start</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

### **ipv6-criteria**

Synopsis	Enter the <b>ipv6-criteria</b> context
Context	<b>configure qos sap-egress string ipv6-criteria</b>
Tree	<a href="#">ipv6-criteria</a>
Introduced	16.0.R1
Platforms	All

### **entry [entry-id] number**

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure qos sap-egress string ipv6-criteria entry number</b>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[entry-id]** *number*

Synopsis	IP Criteria Entry Index
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">ipv6-criteria entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**action**

Synopsis	Enter the <b>action</b> context
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">ipv6-criteria entry</a> <i>number</i> <a href="#">action</a>
Tree	<a href="#">action</a>
Introduced	16.0.R1
Platforms	All

**fc** *keyword*

Synopsis	Forwarding class
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">ipv6-criteria entry</a> <i>number</i> <a href="#">action fc</a> <i>keyword</i>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

**policer** *reference*

Synopsis	Policer identifier for the matched traffic
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">ipv6-criteria entry</a> <i>number</i> <a href="#">action policer</a> <i>reference</i>
Tree	<a href="#">policer</a>
Reference	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">policer</a> <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**port-redirect-group-queue** *boolean*

Synopsis	Use queue specified in egress access port queue group
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">ipv6-criteria entry number</a> <a href="#">action port-redirect-group-queue</a> <i>boolean</i>
Tree	<a href="#">port-redirect-group-queue</a>
Default	false
Introduced	16.0.R1
Platforms	All

**profile** *keyword*

Synopsis	Default profile for the matching traffic
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">ipv6-criteria entry number</a> <a href="#">action profile</a> <i>keyword</i>
Tree	<a href="#">profile</a>
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

**queue** *number*

Synopsis	Queue used for matched traffic policed by local policer
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">ipv6-criteria entry number</a> <a href="#">action queue</a> <i>number</i>
Tree	<a href="#">queue</a>
Range	1 to 8
Introduced	16.0.R1
Platforms	All

**type** *keyword*

Synopsis	Action for criteria entry
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">ipv6-criteria entry number</a> <a href="#">action type</a> <i>keyword</i>
Tree	<a href="#">type</a>
Options	ignore-match, accept
Default	ignore-match

Introduced 16.0.R1  
 Platforms All

### **use-fc-mapped-queue** *boolean*

Synopsis Redirect policer output to the configured queues  
 Context **configure qos sap-egress** *string ipv6-criteria entry number action use-fc-mapped-queue boolean*  
 Tree [use-fc-mapped-queue](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure qos sap-egress** *string ipv6-criteria entry number description string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **match**

Synopsis Enter the **match** context  
 Context **configure qos sap-egress** *string ipv6-criteria entry number match*  
 Tree [match](#)  
 Introduced 16.0.R1  
 Platforms All

### **dscp** *keyword*

Synopsis DSCP value to match in the packet  
 Context **configure qos sap-egress** *string ipv6-criteria entry number match dscp keyword*  
 Tree [dscp](#)

Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

## dst-ip

Synopsis	Enter the <b>dst-ip</b> context
Context	<b>configure qos sap-egress</b> <i>string</i> <b>ipv6-criteria entry number match dst-ip</b>
Tree	<b>dst-ip</b>
Introduced	16.0.R1
Platforms	All

## address (*ipv6-address* | *ipv6-prefix-with-host-bits*)

Synopsis	Destination IPv6 address for SAP QoS policy match
Context	<b>configure qos sap-egress</b> <i>string</i> <b>ipv6-criteria entry number match dst-ip address</b> ( <i>ipv6-address</i>   <i>ipv6-prefix-with-host-bits</i> )
Tree	<b>address</b>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

## ipv6-prefix-list *reference*

Synopsis	IPv6 prefix list as match criterion for IPv6 addresses
Context	<b>configure qos sap-egress</b> <i>string</i> <b>ipv6-criteria entry number match dst-ip ipv6-prefix-list reference</b>
Tree	<b>ipv6-prefix-list</b>
Reference	<b>configure qos match-list ipv6-prefix-list</b> <i>string</i>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mask string**

Synopsis	IP address mask to match with destination IP of packet
Context	<b>configure qos sap-egress string ipv6-criteria entry number match dst-ip mask string</b>
Tree	<b>mask</b>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### **dst-port**

Synopsis	Enter the <b>dst-port</b> context
Context	<b>configure qos sap-egress string ipv6-criteria entry number match dst-port</b>
Tree	<b>dst-port</b>
Introduced	16.0.R1
Platforms	All

### **eq number**

Synopsis	Value 'equal to' as match condition
Context	<b>configure qos sap-egress string ipv6-criteria entry number match dst-port eq number</b>
Tree	<b>eq</b>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **gt number**

Synopsis	Value 'greater than' as match condition
Context	<b>configure qos sap-egress string ipv6-criteria entry number match dst-port gt number</b>
Tree	<b>gt</b>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1



Platforms All

### **lt number**

Synopsis Value 'less than' as match condition

Context **configure qos sap-egress string ipv6-criteria entry number match dst-port lt number**

Tree **lt**

Range 0 to 65535

Notes The following elements are part of a choice: **eq, gt, lt, or range**.

Introduced 16.0.R1

Platforms All

### **range**

Synopsis Enter the **range** context

Context **configure qos sap-egress string ipv6-criteria entry number match dst-port range**

Tree **range**

Notes The following elements are part of a choice: **eq, gt, lt, or range**.

Introduced 16.0.R1

Platforms All

### **end number**

Synopsis Upper bound of the port range

Context **configure qos sap-egress string ipv6-criteria entry number match dst-port range end number**

Tree **end**

Range 0 to 65535

Introduced 16.0.R1

Platforms All

### **start number**

Synopsis Lower bound of the port range

Context **configure qos sap-egress string ipv6-criteria entry number match dst-port range start number**

Tree	<a href="#">start</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

### **next-header** (*number* | *keyword*)

Synopsis	IP protocol to match
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">ipv6-criteria entry</a> <i>number</i> <a href="#">match next-header</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">next-header</a>
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

### **src-ip**

Synopsis	Enter the <b>src-ip</b> context
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">ipv6-criteria entry</a> <i>number</i> <a href="#">match src-ip</a>
Tree	<a href="#">src-ip</a>
Introduced	16.0.R1
Platforms	All

### **address** (*ipv6-address* | *ipv6-prefix-with-host-bits*)

Synopsis	Source IPv6 address for SAP QoS policy match
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">ipv6-criteria entry</a> <i>number</i> <a href="#">match src-ip address</a> ( <i>ipv6-address</i>   <i>ipv6-prefix-with-host-bits</i> )
Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

**ipv6-prefix-list** *reference*

Synopsis	IPv6 prefix list as match criterion for IPv6 addresses
Context	<b>configure</b> qos sap-egress <i>string</i> ipv6-criteria entry <i>number</i> match src-ip ipv6-prefix-list <i>reference</i>
Tree	ipv6-prefix-list
Reference	<b>configure</b> qos match-list ipv6-prefix-list <i>string</i>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**mask** *string*

Synopsis	IP address mask to match with source IP of the packet
Context	<b>configure</b> qos sap-egress <i>string</i> ipv6-criteria entry <i>number</i> match src-ip mask <i>string</i>
Tree	mask
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

**src-port**

Synopsis	Enter the <b>src-port</b> context
Context	<b>configure</b> qos sap-egress <i>string</i> ipv6-criteria entry <i>number</i> match src-port
Tree	src-port
Introduced	16.0.R1
Platforms	All

**eq** *number*

Synopsis	Value 'equal to' as match condition
Context	<b>configure</b> qos sap-egress <i>string</i> ipv6-criteria entry <i>number</i> match src-port eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1

Platforms All

### **gt number**

Synopsis Value 'greater than' as match condition

Context **configure qos sap-egress string ipv6-criteria entry number match src-port gt number**

Tree [gt](#)

Range 0 to 65535

Notes The following elements are part of a choice: **eq, gt, lt, or range**.

Introduced 16.0.R1

Platforms All

### **lt number**

Synopsis Value 'less than' as match condition

Context **configure qos sap-egress string ipv6-criteria entry number match src-port lt number**

Tree [lt](#)

Range 0 to 65535

Notes The following elements are part of a choice: **eq, gt, lt, or range**.

Introduced 16.0.R1

Platforms All

### **range**

Synopsis Enter the **range** context

Context **configure qos sap-egress string ipv6-criteria entry number match src-port range**

Tree [range](#)

Notes The following elements are part of a choice: **eq, gt, lt, or range**.

Introduced 16.0.R1

Platforms All

### **end number**

Synopsis Upper bound of the port range

Context	<b>configure qos sap-egress</b> <i>string</i> <b>ipv6-criteria entry number match src-port range end number</b>
Tree	<b>end</b>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

**start number**

Synopsis	Lower bound of the port range
Context	<b>configure qos sap-egress</b> <i>string</i> <b>ipv6-criteria entry number match src-port range start number</b>
Tree	<b>start</b>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

**parent-location keyword**

Synopsis	Location where queues look to find parent scheduler
Context	<b>configure qos sap-egress</b> <i>string</i> <b>parent-location keyword</b>
Tree	<b>parent-location</b>
Options	auto, sla
Default	auto
Introduced	16.0.R1
Platforms	All

**policer [policer-id] number**

Synopsis	Enter the <b>policer</b> list instance
Context	<b>configure qos sap-egress</b> <i>string</i> <b>policer number</b>
Tree	<b>policer</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**[policer-id] number**

Synopsis	SAP egress policer ID
Context	<b>configure qos sap-egress</b> <i>string policer number</i>
Tree	<a href="#">policer</a>
Range	1 to 63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**adaptation-rule**

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure qos sap-egress</b> <i>string policer number adaptation-rule</i>
Tree	<a href="#">adaptation-rule</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**cir keyword**

Synopsis	Constraint used when deriving the operational CIR value
Context	<b>configure qos sap-egress</b> <i>string policer number adaptation-rule cir keyword</i>
Tree	<a href="#">cir</a>
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**pir keyword**

Synopsis	Constraint used when deriving the operational PIR value
Context	<b>configure qos sap-egress</b> <i>string policer number adaptation-rule pir keyword</i>
Tree	<a href="#">pir</a>
Options	max, min, closest
Default	closest
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **adv-config-policy** *reference*

Synopsis Advanced QoS policy name  
 Context **configure qos sap-egress** *string* *policer number* **adv-config-policy** *reference*  
 Tree **adv-config-policy**  
 Reference **configure qos adv-config-policy** *string*  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **arbiter-parent**

Synopsis Enter the **arbiter-parent** context  
 Context **configure qos sap-egress** *string* *policer number* **arbiter-parent**  
 Tree **arbiter-parent**  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **arbiter-name** *string*

Synopsis Arbiter name  
 Context **configure qos sap-egress** *string* *policer number* **arbiter-parent** **arbiter-name** *string*  
 Tree **arbiter-name**  
 Description This command specifies an arbiter name. The policer is intended to become a child to one of the tiered arbiters with the specified arbiter name where an instance of the policer is created. If the specified arbiter name does not exist, the policer is placed in the orphan state.  
 String Length 1 to 32  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **level** *number*

Synopsis Level of priority while feeding to the parent  
 Context **configure qos sap-egress** *string* *policer number* **arbiter-parent** **level** *number*

Tree	<a href="#">level</a>
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **weight** *number*

Synopsis	Weight used by the arbiter for feeding the policer
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">policer</a> <i>number</i> <a href="#">arbiter-parent</a> <a href="#">weight</a> <i>number</i>
Tree	<a href="#">weight</a>
Range	1 to 100
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **cbs** (*number* | *keyword*)

Synopsis	Exceed threshold of the CIR leaky bucket of the policer
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">policer</a> <i>number</i> <a href="#">cbs</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">policer</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **dscp-prec-remarking** *boolean*

Synopsis Remark DSCP/precedence based on packet profile state  
 Context **configure qos sap-egress** *string* **policer** *number* **dscp-prec-remarking** *boolean*  
 Tree [dscp-prec-remarking](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **exceed-pir** *boolean*

Synopsis Forward packets exceeding the PIR as exceed-profile  
 Context **configure qos sap-egress** *string* **policer** *number* **exceed-pir** *boolean*  
 Tree [exceed-pir](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **high-prio-only** (*number* | *keyword*)

Synopsis Percentage of MBS reserved for high priority traffic  
 Context **configure qos sap-egress** *string* **policer** *number* **high-prio-only** (*number* | *keyword*)  
 Tree [high-prio-only](#)  
 Range 0 to 100  
 Options auto  
 Default auto  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **mbs** (*number* | *keyword*)

Synopsis Maximum burst tolerance allowed by the policer  
 Context **configure qos sap-egress** *string* **policer** *number* **mbs** (*number* | *keyword*)

Tree	<a href="#">mbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **packet-byte-offset** *number*

Synopsis	Packet size modification for policing information
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">policer</a> <i>number</i> <a href="#">packet-byte-offset</a> <i>number</i>
Tree	<a href="#">packet-byte-offset</a>
Range	-64 to 31
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">policer</a> <i>number</i> <a href="#">percent-rate</a>
Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **cir** *decimal-number*

Synopsis	Administrative CIR percent
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">policer</a> <i>number</i> <a href="#">percent-rate</a> <a href="#">cir</a> <i>decimal-number</i>
Tree	<a href="#">cir</a>
Range	0.00 to 100.00
Default	0.00
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **pir** *decimal-number*

Synopsis Administrative PIR percent  
 Context **configure qos sap-egress** *string* **policer** *number* **percent-rate** **pir** *decimal-number*  
 Tree **pir**  
 Range 0.01 to 100.00  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **reference-rate** *keyword*

Synopsis Reference rate  
 Context **configure qos sap-egress** *string* **policer** *number* **percent-rate** **reference-rate** *keyword*  
 Tree **reference-rate**  
 Options local-limit, reference-port-limit  
 Default local-limit  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **port-parent**

Synopsis Enable the **port-parent** context  
 Context **configure qos sap-egress** *string* **policer** *number* **port-parent**  
 Tree **port-parent**  
 Notes The following elements are part of a choice: **port-parent** or **scheduler-parent**.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **cir-level** *number*

Synopsis Port priority level for within-CIR offered load  
 Context **configure qos sap-egress** *string* **policer** *number* **port-parent** **cir-level** *number*  
 Tree **cir-level**

Description	This command defines the port priority that the policer uses to receive bandwidth for its within-CIR offered load. If this command is set to the default value, the policer does not receive bandwidth during the port schedulers with-CIR pass and the <b>cir-weight</b> command is ignored.
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **cir-weight** *number*

Synopsis	Weight to use in the within-CIR port priority level
Context	<b>configure</b> qos sap-egress <i>string</i> policer <i>number</i> port-parent cir-weight <i>number</i>
Tree	<a href="#">cir-weight</a>
Description	<p>This command defines the weight that the policer uses at the within-CIR port priority level.</p> <p>All CIR weight values from all weighted active policers, queues, and schedulers with a common port parent are added together. Each individual active weight is then divided by the total to determine the percentage of remaining bandwidth provided to the policer, queue, or scheduler after the higher priority level children have been serviced. A weight is considered active when the applicable policer, queue, or scheduler has not reached its maximum rate and still has packets to transmit.</p> <p>When this command is set to the default value, the policer receives bandwidth only after other children with a non-zero weight at this level have been serviced.</p>
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **level** *number*

Synopsis	Port priority level for above-CIR behavior
Context	<b>configure</b> qos sap-egress <i>string</i> policer <i>number</i> port-parent level <i>number</i>
Tree	<a href="#">level</a>
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**weight** *number*

Synopsis	Weight to use in the above-CIR port priority level
Context	<b>configure</b> <b>qos sap-egress</b> <i>string</i> <b>policer</b> <i>number</i> <b>port-parent</b> <b>weight</b> <i>number</i>
Tree	<b>weight</b>
Description	<p>This command defines the weight that the policer uses at the above-CIR port priority level.</p> <p>All weight values from all weighted active policers, queues, and schedulers with a common port parent are added together. Each individual active weight is then divided by the total to determine the percentage of remaining bandwidth provided to the policer, queue, or scheduler after the higher priority level children have been serviced. A weight is considered to be active when the applicable policer, queue, or scheduler has not reached its maximum rate and still has packets to transmit.</p> <p>When this command is set to a value of 0, the policer receives bandwidth only after other children with a non-zero weight at this level.</p>
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**profile-capped** *boolean*

Synopsis	Enforce overall in-profile burst limit to CIR bucket
Context	<b>configure</b> <b>qos sap-egress</b> <i>string</i> <b>policer</b> <i>number</i> <b>profile-capped</b> <i>boolean</i>
Tree	<b>profile-capped</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**profile-out-preserve** *boolean*

Synopsis	Preserve the color of offered out-of-profile traffic
Context	<b>configure</b> <b>qos sap-egress</b> <i>string</i> <b>policer</b> <i>number</i> <b>profile-out-preserve</b> <i>boolean</i>
Tree	<b>profile-out-preserve</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure qos sap-egress string policer number rate</b>
Tree	<b>rate</b>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**cir (number | keyword)**

Synopsis	Administrative CIR
Context	<b>configure qos sap-egress string policer number rate cir (number   keyword)</b>
Tree	<b>cir</b>
Range	0 to 6400000000
Units	kilobps
Options	max
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**pir (number | keyword)**

Synopsis	Administrative PIR
Context	<b>configure qos sap-egress string policer number rate pir (number   keyword)</b>
Tree	<b>pir</b>
Range	1 to 6400000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## **scheduler-parent**

Synopsis	Enable the <b>scheduler-parent</b> context
Context	<b>configure qos sap-egress string policer number scheduler-parent</b>
Tree	<b>scheduler-parent</b>
Notes	The following elements are part of a choice: <b>port-parent</b> or <b>scheduler-parent</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## **cir-level number**

Synopsis	Port priority level for within-CIR offered load
Context	<b>configure qos sap-egress string policer number scheduler-parent cir-level number</b>
Tree	<b>cir-level</b>
Description	This command defines the hierarchy priority level when compared with other policers, queues, and schedulers that the policer uses to receive bandwidth for its within-CIR offered load. If this command is set to the default value, the policer does not receive bandwidth during the schedulers within-CIR pass and the <b>cir-weight</b> command is ignored.
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## **cir-weight number**

Synopsis	Weight to use in the within-CIR port priority level
Context	<b>configure qos sap-egress string policer number scheduler-parent cir-weight number</b>
Tree	<b>cir-weight</b>
Description	<p>The command defines the relative weight of the policer in comparison with other child policers, queues, or schedulers competing for bandwidth on the parent scheduler name at the within-CIR priority level.</p> <p>A weight is considered to be active when the applicable policer, queue, or scheduler has not reached its maximum rate and still has packets to transmit.</p> <p>When this command is set to a value of 0, the policer receives bandwidth only after the other children with a non-zero weight at this level have been serviced.</p>
Range	0 to 100
Default	1

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**level number**

Synopsis	Priority level for bandwidth on the parent scheduler
Context	<b>configure</b> qos sap-egress string policer number scheduler-parent level number
Tree	level
Description	This command defines the priority level when compared with other policers, queues, and schedulers when competing for bandwidth on the parent scheduler.  Children of the parent scheduler with a lower priority do not receive bandwidth until all children with a higher priority have either reached their maximum bandwidth or are idle. Children with the same level are serviced in relation to their relative weights.
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**scheduler-name string**

Synopsis	Scheduler name
Context	<b>configure</b> qos sap-egress string policer number scheduler-parent scheduler-name string
Tree	scheduler-name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**weight number**

Synopsis	Policer weight at the above-CIR priority level
Context	<b>configure</b> qos sap-egress string policer number scheduler-parent weight number
Tree	weight
Range	0 to 100
Default	1



Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**stat-mode** *keyword*

Synopsis	Mode of statistics collected by the policer
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">policer</a> <i>number</i> <b>stat-mode</b> <i>keyword</i>
Tree	<a href="#">stat-mode</a>
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile
Default	minimal
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**policers-hqos-manageable** *boolean*

Synopsis	Manage policers through the Hierarchical QoS process
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">policers-hqos-manageable</a> <i>boolean</i>
Tree	<a href="#">policers-hqos-manageable</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, VSR

**policy-id** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Egress SAP QoS policy ID
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">policy-id</a> <i>number</i>
Tree	<a href="#">policy-id</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

**post-policer-mapping** *reference*

Synopsis	Post policer mapping policy applied to this policy
Context	<b>configure qos sap-egress</b> <i>string</i> <b>post-policer-mapping</b> <i>reference</i>
Tree	<b>post-policer-mapping</b>
Reference	<b>configure qos post-policer-mapping</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**prec** [**prec-value**] *number*

Synopsis	Enter the <b>prec</b> list instance
Context	<b>configure qos sap-egress</b> <i>string</i> <b>prec</b> <i>number</i>
Tree	<b>prec</b>
Introduced	16.0.R1
Platforms	All

**[prec-value]** *number*

Synopsis	Precedence value for which mapping is performed
Context	<b>configure qos sap-egress</b> <i>string</i> <b>prec</b> <i>number</i>
Tree	<b>prec</b>
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**fc** *keyword*

Synopsis	Forwarding class
Context	<b>configure qos sap-egress</b> <i>string</i> <b>prec</b> <i>number</i> <b>fc</b> <i>keyword</i>
Tree	<b>fc</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

**profile** *keyword*

Synopsis	Default profile for the ingressing traffic
Context	<b>configure qos sap-egress</b> <i>string prec number profile keyword</i>
Tree	<a href="#">profile</a>
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

**queue** [[queue-id](#)] *number*

Synopsis	Enter the <b>queue</b> list instance
Context	<b>configure qos sap-egress</b> <i>string queue number</i>
Tree	<a href="#">queue</a>
Introduced	16.0.R1
Platforms	All

**[queue-id]** *number*

Synopsis	Egress Queue-Group queue identifier
Context	<b>configure qos sap-egress</b> <i>string queue number</i>
Tree	<a href="#">queue</a>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**adaptation-rule**

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure qos sap-egress</b> <i>string queue number adaptation-rule</i>
Tree	<a href="#">adaptation-rule</a>
Introduced	16.0.R1
Platforms	All

**cir keyword**

Synopsis	Constraint used when deriving the operational CIR value
Context	<b>configure qos sap-egress</b> <i>string queue number adaptation-rule cir keyword</i>
Tree	<a href="#">cir</a>
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	All

**pir keyword**

Synopsis	Constraint used when deriving the operational PIR value
Context	<b>configure qos sap-egress</b> <i>string queue number adaptation-rule pir keyword</i>
Tree	<a href="#">pir</a>
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	All

**adv-config-policy reference**

Synopsis	Name of the advanced configuration policy
Context	<b>configure qos sap-egress</b> <i>string queue number adv-config-policy reference</i>
Tree	<a href="#">adv-config-policy</a>
Reference	<b>configure qos adv-config-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

**agg-shaper-weight number**

Synopsis	Aggregate shaper weight of the sap-egress queue
Context	<b>configure qos sap-egress</b> <i>string queue number agg-shaper-weight number</i>
Tree	<a href="#">agg-shaper-weight</a>
Range	1 to 100

Default	1
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

### **avg-frame-overhead** *decimal-number*

Synopsis	Average packet-to-frame encapsulation overhead
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">queue</a> <i>number</i> <b>avg-frame-overhead</b> <i>decimal-number</i>
Tree	<a href="#">avg-frame-overhead</a>
Range	0.00 to 100.00
Default	0.00
Introduced	16.0.R1
Platforms	All

### **burst-limit** (*number* | *keyword*)

Synopsis	Explicit shaping burst size of a queue
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">queue</a> <i>number</i> <b>burst-limit</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">burst-limit</a>
Range	1 to 14000000
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

### **cbs** (*number* | *keyword*)

Synopsis	Reserved buffer space for the queue
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">queue</a> <i>number</i> <b>cbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cbs</a>
Range	0 to 1048576
Units	kilobytes
Options	auto
Default	auto

Introduced 16.0.R1  
 Platforms All

## drop-tail

Synopsis Enter the **drop-tail** context  
 Context **configure qos sap-egress** *string queue number drop-tail*  
 Tree [drop-tail](#)  
 Introduced 16.0.R1  
 Platforms All

## exceed

Synopsis Enter the **exceed** context  
 Context **configure qos sap-egress** *string queue number drop-tail exceed*  
 Tree [exceed](#)  
 Introduced 16.0.R1  
 Platforms All

## percent-reduction-from-mbs (*number | keyword*)

Synopsis Percentage reduction from the MBS for a queue drop tail  
 Context **configure qos sap-egress** *string queue number drop-tail exceed percent-reduction-from-mbs* (*number | keyword*)  
 Tree [percent-reduction-from-mbs](#)  
 Range 0 to 100  
 Options auto  
 Default auto  
 Introduced 16.0.R1  
 Platforms All

## high

Synopsis Enter the **high** context  
 Context **configure qos sap-egress** *string queue number drop-tail high*  
 Tree [high](#)

Introduced	16.0.R1
Platforms	All

### **percent-reduction-from-mbs** (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	<b>configure qos sap-egress</b> <i>string</i> <b>queue</b> <i>number</i> <b>drop-tail high percent-reduction-from-mbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">percent-reduction-from-mbs</a>
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

### **highplus**

Synopsis	Enter the <b>highplus</b> context
Context	<b>configure qos sap-egress</b> <i>string</i> <b>queue</b> <i>number</i> <b>drop-tail highplus</b>
Tree	<a href="#">highplus</a>
Introduced	16.0.R1
Platforms	All

### **percent-reduction-from-mbs** (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	<b>configure qos sap-egress</b> <i>string</i> <b>queue</b> <i>number</i> <b>drop-tail highplus percent-reduction-from-mbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">percent-reduction-from-mbs</a>
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

## low

Synopsis	Enter the <b>low</b> context
Context	<b>configure qos sap-egress</b> <i>string queue number drop-tail low</i>
Tree	<a href="#">low</a>
Introduced	16.0.R1
Platforms	All

## percent-reduction-from-mbs (*number | keyword*)

Synopsis	Low drop-tail percent from MBS that is reduced
Context	<b>configure qos sap-egress</b> <i>string queue number drop-tail low percent-reduction-from-mbs (number   keyword)</i>
Tree	<a href="#">percent-reduction-from-mbs</a>
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

## fir-burst-limit (*number | keyword*)

Synopsis	Burst limit for FIR
Context	<b>configure qos sap-egress</b> <i>string queue number fir-burst-limit (number   keyword)</i>
Tree	<a href="#">fir-burst-limit</a>
Description	This command configures a burst limit for the FIR of the specified queue. If the keyword <b>auto</b> is used, the FIR burst limit is based on the PIR. In this case, it is recommended to use the explicit PIR value in the queue configuration.
Range	1 to 102400
Units	bytes
Options	auto
Default	auto
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s



### **hs-alt-port-class-pool** *boolean*

Synopsis	Use HS alternate class port pool buffer for traffic
Context	<b>configure</b> qos sap-egress <i>string queue number</i> <b>hs-alt-port-class-pool</b> <i>boolean</i>
Tree	<a href="#">hs-alt-port-class-pool</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **hs-class-weight** *number*

Synopsis	Scheduling class weight
Context	<b>configure</b> qos sap-egress <i>string queue number</i> <b>hs-class-weight</b> <i>number</i>
Tree	<a href="#">hs-class-weight</a>
Range	1   2   4   8
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **hs-wred-queue**

Synopsis	Enter the <b>hs-wred-queue</b> context
Context	<b>configure</b> qos sap-egress <i>string queue number</i> <b>hs-wred-queue</b>
Tree	<a href="#">hs-wred-queue</a>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **policy** *reference*

Synopsis	Slope policy name
Context	<b>configure</b> qos sap-egress <i>string queue number</i> <b>hs-wred-queue</b> <b>policy</b> <i>reference</i>
Tree	<a href="#">policy</a>
Reference	<b>configure</b> qos slope-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**hs-wrr-weight** *number*

Synopsis	WRR weight with which queue parents into the scheduler
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">queue</a> <i>number</i> <b>hs-wrr-weight</b> <i>number</i>
Tree	<a href="#">hs-wrr-weight</a>
Range	1 to 127
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**mbs** (*number* | *keyword*)

Synopsis	Buffer space allowed for the queue
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">queue</a> <i>number</i> <b>mbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs</a>
Range	0 to 1073741824
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

**packet-byte-offset** *number*

Synopsis	Packet byte offset for addition of policing information
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">queue</a> <i>number</i> <b>packet-byte-offset</b> <i>number</i>
Tree	<a href="#">packet-byte-offset</a>
Range	-64 to 32
Default	0
Introduced	16.0.R1
Platforms	All

**percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
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Context	<b>configure qos sap-egress</b> <i>string queue number percent-rate</i>
Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

### **cir** *decimal-number*

Synopsis	Administrative CIR percent
Context	<b>configure qos sap-egress</b> <i>string queue number percent-rate cir decimal-number</i>
Tree	<a href="#">cir</a>
Range	0.00 to 100.00
Default	0.00
Introduced	16.0.R1
Platforms	All

### **pir** *decimal-number*

Synopsis	Administrative PIR percent
Context	<b>configure qos sap-egress</b> <i>string queue number percent-rate pir decimal-number</i>
Tree	<a href="#">pir</a>
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

### **reference-rate** *keyword*

Synopsis	Reference rate
Context	<b>configure qos sap-egress</b> <i>string queue number percent-rate reference-rate keyword</i>
Tree	<a href="#">reference-rate</a>
Options	port-limit, local-limit, reference-port-limit
Default	port-limit
Introduced	16.0.R1
Platforms	All

## port-parent

Synopsis	Enable the <b>port-parent</b> context
Context	<b>configure qos sap-egress</b> <i>string queue number</i> <b>port-parent</b>
Tree	<b>port-parent</b>
Notes	The following elements are part of a choice: <b>port-parent</b> or <b>scheduler-parent</b> .
Introduced	16.0.R1
Platforms	All

## cir-level *number*

Synopsis	Port priority to receive bandwidth for within-CIR pass
Context	<b>configure qos sap-egress</b> <i>string queue number</i> <b>port-parent</b> <i>cir-level number</i>
Tree	<b>cir-level</b>
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	All

## cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	<b>configure qos sap-egress</b> <i>string queue number</i> <b>port-parent</b> <i>cir-weight number</i>
Tree	<b>cir-weight</b>
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

## level *number*

Synopsis	Port priority for bandwidth for above-CIR offered load
Context	<b>configure qos sap-egress</b> <i>string queue number</i> <b>port-parent</b> <i>level number</i>
Tree	<b>level</b>
Range	1 to 8

Default	1
Introduced	16.0.R1
Platforms	All

### **weight** *number*

Synopsis	Weight used at above-CIR port priority level
Context	<b>configure</b> qos sap-egress <i>string</i> queue <i>number</i> port-parent <b>weight</b> <i>number</i>
Tree	<b>weight</b>
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

### **queue-type** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Method used to service queue from hardware perspective
Context	<b>configure</b> qos sap-egress <i>string</i> queue <i>number</i> <b>queue-type</b> <i>keyword</i>
Tree	<b>queue-type</b>
Options	expedited, auto-expedited, best-effort
Default	auto-expedited
Introduced	16.0.R1
Platforms	All

### **rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> qos sap-egress <i>string</i> queue <i>number</i> <b>rate</b>
Tree	<b>rate</b>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

**cir** (*number* | *keyword*)

Synopsis	Administrative CIR
Context	<b>configure qos sap-egress</b> <i>string queue number rate cir</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	max
Default	0
Introduced	16.0.R1
Platforms	All

**pir** (*number* | *keyword*)

Synopsis	Administrative PIR
Context	<b>configure qos sap-egress</b> <i>string queue number rate pir</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 6400000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

**sched-class** (*number* | *keyword*)

Synopsis	Scheduler class for the sap-egress queue
Context	<b>configure qos sap-egress</b> <i>string queue number sched-class</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">sched-class</a>
Description	This command configures a scheduling class for the specified queue. If the keyword <b>auto</b> is used, the scheduling class mapping is done automatically.
Range	1 to 6
Options	auto
Default	auto
Introduced	21.7.R1

Platforms 7750 SR-1, 7750 SR-s

### **scheduler-parent**

Synopsis Enable the **scheduler-parent** context

Context **configure qos sap-egress** *string queue number scheduler-parent*

Tree [scheduler-parent](#)

Notes The following elements are part of a choice: **port-parent** or **scheduler-parent**.

Introduced 16.0.R1

Platforms All

### **cir-level number**

Synopsis Level of priority while feeding to the parent

Context **configure qos sap-egress** *string queue number scheduler-parent cir-level number*

Tree [cir-level](#)

Range 0 to 8

Default 0

Introduced 16.0.R1

Platforms All

### **cir-weight number**

Synopsis Weight used at the within-CIR port priority level

Context **configure qos sap-egress** *string queue number scheduler-parent cir-weight number*

Tree [cir-weight](#)

Range 0 to 100

Default 1

Introduced 16.0.R1

Platforms All

### **level number**

Synopsis Level of priority while feeding to the parent

Context **configure qos sap-egress** *string queue number scheduler-parent level number*

Tree	<a href="#">level</a>
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

### **scheduler-name** *string*

Synopsis	Parent scheduler name
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">queue</a> <i>number</i> <a href="#">scheduler-parent</a> <b>scheduler-name</b> <i>string</i>
Tree	<a href="#">scheduler-name</a>
Description	This command associates a scheduler name to a queue. The scheduler name must have previously been defined within an existing scheduler policy and exist on each SAP the queue is created on. There are no checks performed to ensure that the scheduler name exists within an existing scheduler policy. Until the scheduler name exists on the egress SAP, the queue operates in an orphaned state.
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **weight** *number*

Synopsis	Weight used by the scheduler for feeding the queue
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">queue</a> <i>number</i> <a href="#">scheduler-parent</a> <b>weight</b> <i>number</i>
Tree	<a href="#">weight</a>
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

### **wred-queue**

Synopsis	Enter the <b>wred-queue</b> context
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">queue</a> <i>number</i> <b>wred-queue</b>
Tree	<a href="#">wred-queue</a>



Introduced 16.0.R1  
Platforms All

### **mode** *keyword*

Synopsis Pool association to allow queue-specific WRED slopes  
Context **configure qos sap-egress** *string queue number wred-queue mode keyword*  
Tree [mode](#)  
Options native, pool-per-queue  
Introduced 16.0.R1  
Platforms All

### **policy** *reference*

Synopsis Slope policy name  
Context **configure qos sap-egress** *string queue number wred-queue policy reference*  
Tree [policy](#)  
Reference **configure qos slope-policy** *string*  
Introduced 16.0.R1  
Platforms All

### **usage** *keyword*

Synopsis Congestion control type  
Context **configure qos sap-egress** *string queue number wred-queue usage keyword*  
Tree [usage](#)  
Options auto, exceed-low  
Introduced 16.0.R1  
Platforms All

### **sched-class-elevation**

Synopsis Enter the **sched-class-elevation** context  
Context **configure qos sap-egress** *string sched-class-elevation*  
Tree [sched-class-elevation](#)

Introduced 21.7.R1  
 Platforms 7750 SR-1, 7750 SR-s

### **sched-class** [*class-id*] *number*

Synopsis Enter the **sched-class** list instance  
 Context **configure qos sap-egress** *string* [sched-class-elevation](#) [sched-class](#) *number*  
 Tree [sched-class](#)  
 Introduced 21.7.R1  
 Platforms 7750 SR-1, 7750 SR-s

### **[class-id]** *number*

Synopsis Scheduling class associated with this SAP egress  
 Context **configure qos sap-egress** *string* [sched-class-elevation](#) [sched-class](#) *number*  
 Tree [sched-class](#)  
 Range 1 to 6  
 Notes This element is part of a list key.  
 Introduced 21.7.R1  
 Platforms 7750 SR-1, 7750 SR-s

### **weight** *number*

Synopsis Weight of the schedule class  
 Context **configure qos sap-egress** *string* [sched-class-elevation](#) [sched-class](#) *number* [weight](#) *number*  
 Tree [weight](#)  
 Range 1 to 8  
 Default 1  
 Introduced 21.7.R1  
 Platforms 7750 SR-1, 7750 SR-s

### **scope** *keyword*

Synopsis Scope of the policy

Context	<b>configure qos sap-egress</b> <i>string scope keyword</i>
Tree	<a href="#">scope</a>
Options	exclusive, template
Default	template
Introduced	16.0.R1
Platforms	All

## subscriber-mgmt

Synopsis	Enter the <b>subscriber-mgmt</b> context
Context	<b>configure qos sap-egress</b> <i>string subscriber-mgmt</i>
Tree	<a href="#">subscriber-mgmt</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## dynamic-policer

Synopsis	Enter the <b>dynamic-policer</b> context
Context	<b>configure qos sap-egress</b> <i>string subscriber-mgmt dynamic-policer</i>
Tree	<a href="#">dynamic-policer</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## arbiter-parent

Synopsis	Enter the <b>arbiter-parent</b> context
Context	<b>configure qos sap-egress</b> <i>string subscriber-mgmt dynamic-policer arbiter-parent</i>
Tree	<a href="#">arbiter-parent</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## arbiter-name *string*

Synopsis	Arbiter name
Context	<b>configure qos sap-egress</b> <i>string subscriber-mgmt dynamic-policer arbiter-parent arbiter-name string</i>

Tree	<a href="#">arbiter-name</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**level number**

Synopsis	Level of priority while feeding to the parent
Context	<b>configure</b> <a href="#">qos sap-egress string subscriber-mgmt dynamic-policer arbiter-parent level number</a>
Tree	<a href="#">level</a>
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**weight number**

Synopsis	Weight to be used by the arbiter for feeding this policer
Context	<b>configure</b> <a href="#">qos sap-egress string subscriber-mgmt dynamic-policer arbiter-parent weight number</a>
Tree	<a href="#">weight</a>
Range	1 to 100
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**cbs (number | keyword)**

Synopsis	Exceed threshold of the CIR leaky bucket of the policer
Context	<b>configure</b> <a href="#">qos sap-egress string subscriber-mgmt dynamic-policer cbs (number   keyword)</a>
Tree	<a href="#">cbs</a>
Range	0 to 268435456
Units	bytes
Options	auto

Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mbs** (*number* | *keyword*)

Synopsis	High priority 'violate' threshold of PIR leaky bucket of this policer
Context	<b>configure</b> qos sap-egress <i>string</i> subscriber-mgmt dynamic-policer mbs ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **packet-byte-offset** *number*

Synopsis	Packet size modification for policing information
Context	<b>configure</b> qos sap-egress <i>string</i> subscriber-mgmt dynamic-policer packet-byte-offset <i>number</i>
Tree	<a href="#">packet-byte-offset</a>
Range	-64 to 31
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **policer-id-range**

Synopsis	Enable the <b>policer-id-range</b> context
Context	<b>configure</b> qos sap-egress <i>string</i> subscriber-mgmt dynamic-policer policer-id-range
Tree	<a href="#">policer-id-range</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**end number**

Synopsis	Upper bound of the dynamic policer ID range
Context	<b>configure</b> qos sap-egress <i>string</i> subscriber-mgmt dynamic-policer policer-id-range end number
Tree	end
Range	1 to 63
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**start number**

Synopsis	Lower bound of the dynamic policer ID range
Context	<b>configure</b> qos sap-egress <i>string</i> subscriber-mgmt dynamic-policer policer-id-range start number
Tree	start
Range	1 to 63
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**stat-mode keyword**

Synopsis	Mode of statistics collected by the policer
Context	<b>configure</b> qos sap-egress <i>string</i> subscriber-mgmt dynamic-policer stat-mode keyword
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir
Default	minimal
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pcc-rule-entry**

Synopsis	Enter the <b>pcc-rule-entry</b> context
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Context	<b>configure qos sap-egress</b> <i>string</i> <i>subscriber-mgmt</i> <i>pcc-rule-entry</i>
Tree	<a href="#">pcc-rule-entry</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure qos sap-egress</b> <i>string</i> <i>subscriber-mgmt</i> <i>pcc-rule-entry</i> <b>range</b>
Tree	<a href="#">range</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **end number**

Synopsis	Upper bound of the filter and QoS policy entries range
Context	<b>configure qos sap-egress</b> <i>string</i> <i>subscriber-mgmt</i> <i>pcc-rule-entry</i> <b>range end</b> <i>number</i>
Tree	<a href="#">end</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **start number**

Synopsis	Lower bound of the filter and QoS policy entries range
Context	<b>configure qos sap-egress</b> <i>string</i> <i>subscriber-mgmt</i> <i>pcc-rule-entry</i> <b>range start</b> <i>number</i>
Tree	<a href="#">start</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sap-ingress** [[sap-ingress-policy-name](#)] *string*

Synopsis	Enter the <b>sap-ingress</b> list instance
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i>
Tree	<a href="#">sap-ingress</a>
Introduced	16.0.R1
Platforms	All

**[sap-ingress-policy-name]** *string*

Synopsis	Policy name
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i>
Tree	<a href="#">sap-ingress</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**default-fc** *string*

Synopsis	Default forwarding class for non-matching traffic
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">default-fc</a> <i>string</i>
Tree	<a href="#">default-fc</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

**default-priority** *keyword*

Synopsis	Priority for packets received on an ingress SAP
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">default-priority</a> <i>keyword</i>
Tree	<a href="#">default-priority</a>
Options	low, high
Default	low
Introduced	16.0.R1
Platforms	All



**description** *string*

Synopsis	Text description
Context	<b>configure</b> qos sap-ingress <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**dot1p** [**dot1p-value**] *number*

Synopsis	Enter the <b>dot1p</b> list instance
Context	<b>configure</b> qos sap-ingress <i>string</i> <b>dot1p</b> <i>number</i>
Tree	<b>dot1p</b>
Introduced	16.0.R1
Platforms	All

**[dot1p-value]** *number*

Synopsis	Dot1p value to match in the packet
Context	<b>configure</b> qos sap-ingress <i>string</i> <b>dot1p</b> <i>number</i>
Tree	<b>dot1p</b>
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**fc** *string*

Synopsis	Forwarding class for traffic matching specified dot1p
Context	<b>configure</b> qos sap-ingress <i>string</i> <b>dot1p</b> <i>number</i> <b>fc</b> <i>string</i>
Tree	<b>fc</b>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

**priority** *keyword*

Synopsis	Priority for packets that match the Dot1p value
Context	<b>configure qos sap-ingress</b> <i>string dot1p number priority keyword</i>
Tree	<i>priority</i>
Options	low, high, auto
Default	auto
Introduced	16.0.R1
Platforms	All

**dscp** [*dscp-name*] *keyword*

Synopsis	Enter the <b>dscp</b> list instance
Context	<b>configure qos sap-ingress</b> <i>string dscp keyword</i>
Tree	<i>dscp</i>
Introduced	16.0.R1
Platforms	All

**[dscp-name]** *keyword*

Synopsis	Name for the Differentiated Services Code Point (DSCP)
Context	<b>configure qos sap-ingress</b> <i>string dscp keyword</i>
Tree	<i>dscp</i>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**fc** *string*

Synopsis	Forwarding class for traffic matching specified DSCP
Context	<b>configure qos sap-ingress</b> <i>string dscp keyword fc string</i>

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Tree	<a href="#">fc</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

### **priority** *keyword*

Synopsis	Priority for the packet
Context	<b>configure</b> <a href="#">qos</a> <a href="#">sap-ingress</a> <i>string</i> <a href="#">dscp</a> <i>keyword</i> <a href="#">priority</a> <i>keyword</i>
Tree	<a href="#">priority</a>
Options	low, high, auto
Default	auto
Introduced	16.0.R1
Platforms	All

### **fc** [[fc-name](#)] *string*

Synopsis	Enter the <b>fc</b> list instance
Context	<b>configure</b> <a href="#">qos</a> <a href="#">sap-ingress</a> <i>string</i> <a href="#">fc</a> <i>string</i>
Tree	<a href="#">fc</a>
Introduced	16.0.R1
Platforms	All

### **[fc-name]** *string*

Synopsis	Forwarding class (and optional subclass) name
Context	<b>configure</b> <a href="#">qos</a> <a href="#">sap-ingress</a> <i>string</i> <a href="#">fc</a> <i>string</i>
Tree	<a href="#">fc</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**broadcast-policer** *number*

Synopsis	Policer ID for multicast traffic in forwarding class
Context	<b>configure qos sap-ingress</b> <i>string fc string broadcast-policer number</i>
Tree	<a href="#">broadcast-policer</a>
Range	1 to 63
Notes	The following elements are part of a choice: ( <b>broadcast-policer</b> and <b>fp-redirect-group-broadcast-policer</b> ), <b>broadcast-queue</b> , or <b>broadcast-queue-group-queue</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**broadcast-queue** *reference*

Synopsis	Broadcast queue for packets in the forwarding class
Context	<b>configure qos sap-ingress</b> <i>string fc string broadcast-queue reference</i>
Tree	<a href="#">broadcast-queue</a>
Reference	<b>configure qos sap-ingress</b> <i>string queue number</i>
Notes	The following elements are part of a choice: ( <b>broadcast-policer</b> and <b>fp-redirect-group-broadcast-policer</b> ), <b>broadcast-queue</b> , or <b>broadcast-queue-group-queue</b> .
Introduced	16.0.R1
Platforms	All

**broadcast-queue-group-queue**

Synopsis	Enable the <b>broadcast-queue-group-queue</b> context
Context	<b>configure qos sap-ingress</b> <i>string fc string broadcast-queue-group-queue</i>
Tree	<a href="#">broadcast-queue-group-queue</a>
Notes	The following elements are part of a choice: ( <b>broadcast-policer</b> and <b>fp-redirect-group-broadcast-policer</b> ), <b>broadcast-queue</b> , or <b>broadcast-queue-group-queue</b> .
Introduced	16.0.R1
Platforms	All

**queue** *reference*

Synopsis	Broadcast queue for packets in the forwarding class
Context	<b>configure qos sap-ingress</b> <i>string fc string broadcast-queue-group-queue queue reference</i>

Tree	<a href="#">queue</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">ingress</a> <a href="#">queue-group</a> <i>string</i> <a href="#">queue</a> <i>number</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **queue-group-name** *reference*

Synopsis	Queue group name to forward traffic
Context	<b>configure</b> <a href="#">qos</a> <a href="#">sap-ingress</a> <i>string</i> <a href="#">fc</a> <i>string</i> <a href="#">broadcast-queue-group-queue</a> <a href="#">queue-group-name</a> <i>reference</i>
Tree	<a href="#">queue-group-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">ingress</a> <a href="#">queue-group</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **de-1-out-profile** *boolean*

Synopsis	Frames with DE value to be assigned as out of profile
Context	<b>configure</b> <a href="#">qos</a> <a href="#">sap-ingress</a> <i>string</i> <a href="#">fc</a> <i>string</i> <a href="#">de-1-out-profile</a> <i>boolean</i>
Tree	<a href="#">de-1-out-profile</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **egress-fc** *keyword*

Synopsis	Forwarding class for egress QoS processing
Context	<b>configure</b> <a href="#">qos</a> <a href="#">sap-ingress</a> <i>string</i> <a href="#">fc</a> <i>string</i> <a href="#">egress-fc</a> <i>keyword</i>
Tree	<a href="#">egress-fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

### fp-redirect-group-broadcast-policer

Synopsis	Use policer as defined in FP queue-group for the SAP
Context	<b>configure qos sap-ingress string fc string fp-redirect-group-broadcast-policer</b>
Tree	<a href="#">fp-redirect-group-broadcast-policer</a>
Notes	The following elements are part of a choice: ( <b>broadcast-policer</b> and <b>fp-redirect-group-broadcast-policer</b> ), <b>broadcast-queue</b> , or <b>broadcast-queue-group-queue</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### fp-redirect-group-multicast-policer

Synopsis	Use policer as defined in FP queue-group for the SAP
Context	<b>configure qos sap-ingress string fc string fp-redirect-group-multicast-policer</b>
Tree	<a href="#">fp-redirect-group-multicast-policer</a>
Notes	The following elements are part of a choice: ( <b>fp-redirect-group-multicast-policer</b> and <b>multicast-policer</b> ), <b>multicast-queue</b> , or <b>multicast-queue-group-queue</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### fp-redirect-group-policer

Synopsis	Use policer as defined in FP queue-group for the SAP
Context	<b>configure qos sap-ingress string fc string fp-redirect-group-policer</b>
Tree	<a href="#">fp-redirect-group-policer</a>
Notes	The following elements are part of a choice: ( <b>fp-redirect-group-policer</b> and <b>policer</b> ), <b>queue</b> , or <b>queue-group-queue</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### fp-redirect-group-unknown-policer

Synopsis	Use policer as defined in FP queue-group for the SAP
Context	<b>configure qos sap-ingress string fc string fp-redirect-group-unknown-policer</b>
Tree	<a href="#">fp-redirect-group-unknown-policer</a>

Notes	The following elements are part of a choice: ( <b>fp-redirect-group-unknown-policer</b> and <b>unknown-policer</b> ), <b>unknown-queue</b> , or <b>unknown-queue-group-queue</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **in-remark**

Synopsis	Enter the <b>in-remark</b> context
Context	<b>configure</b> qos sap-ingress string fc string in-remark
Tree	in-remark
Introduced	16.0.R1
Platforms	All

### **dscp keyword**

Synopsis	DSCP to override DSCP bits of the matching packet
Context	<b>configure</b> qos sap-ingress string fc string in-remark dscp keyword
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	The following elements are part of a choice: <b>dscp</b> or <b>prec</b> .
Introduced	16.0.R1
Platforms	All

### **prec number**

Synopsis	Value to override precedence bits of matching packet
Context	<b>configure</b> qos sap-ingress string fc string in-remark prec number
Tree	prec
Range	0 to 7
Notes	The following elements are part of a choice: <b>dscp</b> or <b>prec</b> .
Introduced	16.0.R1
Platforms	All

**multicast-policer** *number*

Synopsis	Policer ID for multicast traffic in forwarding class
Context	<b>configure qos sap-ingress</b> <i>string fc string multicast-policer number</i>
Tree	<a href="#">multicast-policer</a>
Range	1 to 63
Notes	The following elements are part of a choice: ( <b>fp-redirect-group-multicast-policer</b> and <b>multicast-policer</b> ), <b>multicast-queue</b> , or <b>multicast-queue-group-queue</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**multicast-queue** *reference*

Synopsis	Broadcast queue for packets in the forwarding class
Context	<b>configure qos sap-ingress</b> <i>string fc string multicast-queue reference</i>
Tree	<a href="#">multicast-queue</a>
Reference	<b>configure qos sap-ingress</b> <i>string queue number</i>
Notes	The following elements are part of a choice: ( <b>fp-redirect-group-multicast-policer</b> and <b>multicast-policer</b> ), <b>multicast-queue</b> , or <b>multicast-queue-group-queue</b> .
Introduced	16.0.R1
Platforms	All

**multicast-queue-group-queue**

Synopsis	Enable the <b>multicast-queue-group-queue</b> context
Context	<b>configure qos sap-ingress</b> <i>string fc string multicast-queue-group-queue</i>
Tree	<a href="#">multicast-queue-group-queue</a>
Notes	The following elements are part of a choice: ( <b>fp-redirect-group-multicast-policer</b> and <b>multicast-policer</b> ), <b>multicast-queue</b> , or <b>multicast-queue-group-queue</b> .
Introduced	16.0.R1
Platforms	All

**queue** *reference*

Synopsis	Broadcast queue for packets in the forwarding class
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Context	<b>configure qos sap-ingress</b> <i>string</i> <b>fc</b> <i>string</i> <b>multicast-queue-group-queue</b> <i>queue reference</i>
Tree	<a href="#">queue</a>
Reference	<b>configure qos queue-group-templates ingress queue-group</b> <i>string</i> <b>queue</b> <i>number</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **queue-group-name** *reference*

Synopsis	Queue group name to forward traffic
Context	<b>configure qos sap-ingress</b> <i>string</i> <b>fc</b> <i>string</i> <b>multicast-queue-group-queue</b> <b>queue-group-name</b> <i>reference</i>
Tree	<a href="#">queue-group-name</a>
Reference	<b>configure qos queue-group-templates ingress queue-group</b> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **out-remark**

Synopsis	Enter the <b>out-remark</b> context
Context	<b>configure qos sap-ingress</b> <i>string</i> <b>fc</b> <i>string</i> <b>out-remark</b>
Tree	<a href="#">out-remark</a>
Introduced	16.0.R1
Platforms	All

### **dscp** *keyword*

Synopsis	DSCP to override DSCP bits of the matching packet
Context	<b>configure qos sap-ingress</b> <i>string</i> <b>fc</b> <i>string</i> <b>out-remark</b> <b>dscp</b> <i>keyword</i>
Tree	<a href="#">dscp</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef,

	cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	The following elements are part of a choice: <b>dscp</b> or <b>prec</b> .
Introduced	16.0.R1
Platforms	All

**prec number**

Synopsis	Value to override precedence bits of matching packet
Context	<b>configure qos sap-ingress string fc string out-remark prec number</b>
Tree	<a href="#">prec</a>
Range	0 to 7
Notes	The following elements are part of a choice: <b>dscp</b> or <b>prec</b> .
Introduced	16.0.R1
Platforms	All

**policer number**

Synopsis	Policer ID for unicast traffic in the forwarding class
Context	<b>configure qos sap-ingress string fc string policer number</b>
Tree	<a href="#">policer</a>
Range	1 to 63
Notes	The following elements are part of a choice: ( <b>fp-redirect-group-policer</b> and <b>policer</b> ), <b>queue</b> , or <b>queue-group-queue</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**profile keyword**

Synopsis	Packets profile associated with the forwarding class
Context	<b>configure qos sap-ingress string fc string profile keyword</b>
Tree	<a href="#">profile</a>
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

**queue reference**

Synopsis	Queue to assign for packets in this forwarding class
Context	<b>configure qos sap-ingress</b> <i>string fc string queue reference</i>
Tree	<a href="#">queue</a>
Reference	<b>configure qos sap-ingress</b> <i>string queue number</i>
Notes	The following elements are part of a choice: ( <b>fp-redirect-group-policer</b> and <b>policer</b> ), <b>queue</b> , or <b>queue-group-queue</b> .
Introduced	16.0.R1
Platforms	All

**queue-group-queue**

Synopsis	Enable the <b>queue-group-queue</b> context
Context	<b>configure qos sap-ingress</b> <i>string fc string queue-group-queue</i>
Tree	<a href="#">queue-group-queue</a>
Notes	The following elements are part of a choice: ( <b>fp-redirect-group-policer</b> and <b>policer</b> ), <b>queue</b> , or <b>queue-group-queue</b> .
Introduced	16.0.R1
Platforms	All

**queue reference**

Synopsis	Queue to assign for packets in this forwarding class
Context	<b>configure qos sap-ingress</b> <i>string fc string queue-group-queue queue reference</i>
Tree	<a href="#">queue</a>
Reference	<b>configure qos queue-group-templates ingress queue-group</b> <i>string queue number</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**queue-group-name reference**

Synopsis	Queue group to forward traffic
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Context	<b>configure qos sap-ingress</b> <i>string</i> <b>fc</b> <i>string</i> <b>queue-group-queue</b> <b>queue-group-name</b> <i>reference</i>
Tree	<b>queue-group-name</b>
Reference	<b>configure qos queue-group-templates ingress</b> <b>queue-group</b> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **unknown-policer** *number*

Synopsis	Policer ID for multicast traffic in forwarding class
Context	<b>configure qos sap-ingress</b> <i>string</i> <b>fc</b> <i>string</i> <b>unknown-policer</b> <i>number</i>
Tree	<b>unknown-policer</b>
Range	1 to 63
Notes	The following elements are part of a choice: ( <b>fp-redirect-group-unknown-policer</b> and <b>unknown-policer</b> ), <b>unknown-queue</b> , or <b>unknown-queue-group-queue</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **unknown-queue** *reference*

Synopsis	Broadcast queue for packets in the forwarding class
Context	<b>configure qos sap-ingress</b> <i>string</i> <b>fc</b> <i>string</i> <b>unknown-queue</b> <i>reference</i>
Tree	<b>unknown-queue</b>
Reference	<b>configure qos sap-ingress</b> <i>string</i> <b>queue</b> <i>number</i>
Notes	The following elements are part of a choice: ( <b>fp-redirect-group-unknown-policer</b> and <b>unknown-policer</b> ), <b>unknown-queue</b> , or <b>unknown-queue-group-queue</b> .
Introduced	16.0.R1
Platforms	All

### **unknown-queue-group-queue**

Synopsis	Enable the <b>unknown-queue-group-queue</b> context
Context	<b>configure qos sap-ingress</b> <i>string</i> <b>fc</b> <i>string</i> <b>unknown-queue-group-queue</b>
Tree	<b>unknown-queue-group-queue</b>

Notes	The following elements are part of a choice: ( <b>fp-redirect-group-unknown-policer</b> and <b>unknown-policer</b> ), <b>unknown-queue</b> , or <b>unknown-queue-group-queue</b> .
Introduced	16.0.R1
Platforms	All

### queue reference

Synopsis	Broadcast queue for packets in the forwarding class
Context	<b>configure</b> qos sap-ingress <i>string</i> fc <i>string</i> unknown-queue-group-queue queue <i>reference</i>
Tree	<a href="#">queue</a>
Reference	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### queue-group-name reference

Synopsis	Queue group name to forward traffic
Context	<b>configure</b> qos sap-ingress <i>string</i> fc <i>string</i> unknown-queue-group-queue queue-group-name <i>reference</i>
Tree	<a href="#">queue-group-name</a>
Reference	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### ip-criteria

Synopsis	Enter the <b>ip-criteria</b> context
Context	<b>configure</b> qos sap-ingress <i>string</i> ip-criteria
Tree	<a href="#">ip-criteria</a>
Introduced	16.0.R1
Platforms	All

**entry** [*entry-id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure qos sap-ingress</b> <i>string ip-criteria entry number</i>
Tree	<i>entry</i>
Introduced	16.0.R1
Platforms	All

**[entry-id]** *number*

Synopsis	IP criteria entry to create or edit for the policy
Context	<b>configure qos sap-ingress</b> <i>string ip-criteria entry number</i>
Tree	<i>entry</i>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**action**

Synopsis	Enter the <b>action</b> context
Context	<b>configure qos sap-ingress</b> <i>string ip-criteria entry number action</i>
Tree	<i>action</i>
Introduced	16.0.R1
Platforms	All

**fc** *string*

Synopsis	Forwarding class for traffic matching the criteria
Context	<b>configure qos sap-ingress</b> <i>string ip-criteria entry number action fc string</i>
Tree	<i>fc</i>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

**policer** *reference*

Synopsis	Policer ID for traffic matching the criteria
Context	<b>configure</b> qos sap-ingress <i>string</i> ip-criteria entry <i>number</i> action policer <i>reference</i>
Tree	policer
Reference	<b>configure</b> qos sap-ingress <i>string</i> policer <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**priority** *keyword*

Synopsis	Priority for the packet
Context	<b>configure</b> qos sap-ingress <i>string</i> ip-criteria entry <i>number</i> action priority <i>keyword</i>
Tree	priority
Options	low, high, auto
Default	auto
Introduced	16.0.R1
Platforms	All

**type** *keyword*

Synopsis	Action for criteria entry
Context	<b>configure</b> qos sap-ingress <i>string</i> ip-criteria entry <i>number</i> action type <i>keyword</i>
Tree	type
Options	ignore-match, accept
Default	ignore-match
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> qos sap-ingress <i>string</i> ip-criteria entry <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1

Platforms All

## match

Synopsis Enter the **match** context

Context **configure qos sap-ingress** *string ip-criteria entry number match*

Tree [match](#)

Introduced 16.0.R1

Platforms All

## dscp keyword

Synopsis DSCP value to match in the packet

Context **configure qos sap-ingress** *string ip-criteria entry number match dscp keyword*

Tree [dscp](#)

Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Introduced 16.0.R1

Platforms All

## dst-ip

Synopsis Enter the **dst-ip** context

Context **configure qos sap-ingress** *string ip-criteria entry number match dst-ip*

Tree [dst-ip](#)

Introduced 16.0.R1

Platforms All

## address (*ipv4-address* | *ipv4-prefix-with-host-bits*)

Synopsis Destination IPv4 address for SAP QoS policy match

Context **configure qos sap-ingress** *string ip-criteria entry number match dst-ip address (ipv4-address | ipv4-prefix-with-host-bits)*

Tree [address](#)



Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### **ip-prefix-list** *reference*

Synopsis	IP-prefix list as match criterion
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <a href="#">string</a> <a href="#">ip-criteria</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">dst-ip</a> <a href="#">ip-prefix-list</a> <a href="#">reference</a>
Tree	<a href="#">ip-prefix-list</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">match-list</a> <a href="#">ip-prefix-list</a> <a href="#">string</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### **mask** *string*

Synopsis	IP address to match with source IP of the packet
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <a href="#">string</a> <a href="#">ip-criteria</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">dst-ip</a> <a href="#">mask</a> <a href="#">string</a>
Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### **dst-port**

Synopsis	Enter the <b>dst-port</b> context
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <a href="#">string</a> <a href="#">ip-criteria</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">dst-port</a>
Tree	<a href="#">dst-port</a>
Introduced	16.0.R1
Platforms	All

### **eq** *number*

Synopsis	Value 'equal to' assigned as match condition
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Context	<b>configure qos sap-ingress</b> <i>string ip-criteria entry number match dst-port eq number</i>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **gt number**

Synopsis	Value 'greater than' assigned as match condition
Context	<b>configure qos sap-ingress</b> <i>string ip-criteria entry number match dst-port gt number</i>
Tree	<a href="#">gt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **lt number**

Synopsis	Value 'less than' assigned as match condition
Context	<b>configure qos sap-ingress</b> <i>string ip-criteria entry number match dst-port lt number</i>
Tree	<a href="#">lt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **range**

Synopsis	Enter the <b>range</b> context
Context	<b>configure qos sap-ingress</b> <i>string ip-criteria entry number match dst-port range</i>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1

Platforms All

### **end number**

Synopsis Upper bound of the port range

Context **configure qos sap-ingress string ip-criteria entry number match dst-port range end number**

Tree **end**

Range 0 to 65535

Introduced 16.0.R1

Platforms All

### **start number**

Synopsis Lower bound of the port range

Context **configure qos sap-ingress string ip-criteria entry number match dst-port range start number**

Tree **start**

Range 0 to 65535

Introduced 16.0.R1

Platforms All

### **fragment keyword**

Synopsis Fragmented packets as the match criterion

Context **configure qos sap-ingress string ip-criteria entry number match fragment keyword**

Tree **fragment**

Options false, true

Introduced 16.0.R1

Platforms All

### **protocol (number | keyword)**

Synopsis IP protocol to match

Context **configure qos sap-ingress string ip-criteria entry number match protocol (number | keyword)**

Tree	<a href="#">protocol</a>
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

## src-ip

Synopsis	Enter the <b>src-ip</b> context
Context	<b>configure qos sap-ingress</b> <i>string</i> <a href="#">ip-criteria</a> <i>entry</i> <i>number</i> <a href="#">match</a> <b>src-ip</b>
Tree	<a href="#">src-ip</a>
Introduced	16.0.R1
Platforms	All

## address (*ipv4-address* | *ipv4-prefix-with-host-bits*)

Synopsis	Source IPv4 address for SAP QoS policy match criterion
Context	<b>configure qos sap-ingress</b> <i>string</i> <a href="#">ip-criteria</a> <i>entry</i> <i>number</i> <a href="#">match</a> <b>src-ip</b> <i>address</i> ( <i>ipv4-address</i>   <i>ipv4-prefix-with-host-bits</i> )
Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

## ip-prefix-list *reference*

Synopsis	IP-prefix list as match criterion
Context	<b>configure qos sap-ingress</b> <i>string</i> <a href="#">ip-criteria</a> <i>entry</i> <i>number</i> <a href="#">match</a> <b>src-ip</b> <a href="#">ip-prefix-list</a> <i>reference</i>
Tree	<a href="#">ip-prefix-list</a>
Reference	<b>configure qos match-list</b> <a href="#">ip-prefix-list</a> <i>string</i>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### **mask string**

Synopsis	IP address to match with source IP of the packet
Context	<b>configure qos sap-ingress string ip-criteria entry number match src-ip mask string</b>
Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### **src-port**

Synopsis	Enter the <b>src-port</b> context
Context	<b>configure qos sap-ingress string ip-criteria entry number match src-port</b>
Tree	<a href="#">src-port</a>
Introduced	16.0.R1
Platforms	All

### **eq number**

Synopsis	Value 'equal to' assigned as match condition
Context	<b>configure qos sap-ingress string ip-criteria entry number match src-port eq number</b>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **gt number**

Synopsis	Value 'greater than' assigned as match condition
Context	<b>configure qos sap-ingress string ip-criteria entry number match src-port gt number</b>
Tree	<a href="#">gt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1

Platforms All

### **lt number**

Synopsis Value 'less than' assigned as match condition  
 Context **configure qos sap-ingress string ip-criteria entry number match src-port lt number**  
 Tree **lt**  
 Range 0 to 65535  
 Notes The following elements are part of a choice: **eq, gt, lt, or range**.  
 Introduced 16.0.R1  
 Platforms All

### **range**

Synopsis Enter the **range** context  
 Context **configure qos sap-ingress string ip-criteria entry number match src-port range**  
 Tree **range**  
 Notes The following elements are part of a choice: **eq, gt, lt, or range**.  
 Introduced 16.0.R1  
 Platforms All

### **end number**

Synopsis Upper bound of the port range  
 Context **configure qos sap-ingress string ip-criteria entry number match src-port range end number**  
 Tree **end**  
 Range 0 to 65535  
 Introduced 16.0.R1  
 Platforms All

### **start number**

Synopsis Lower bound of the port range  
 Context **configure qos sap-ingress string ip-criteria entry number match src-port range start number**

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Tree	<a href="#">start</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

## **vxlan-vni**

Synopsis	Enter the <b>vxlan-vni</b> context
Context	<b>configure qos sap-ingress</b> <i>string</i> <a href="#">ip-criteria</a> <i>entry</i> <i>number</i> <a href="#">match vxlan-vni</a>
Tree	<a href="#">vxlan-vni</a>
Introduced	16.0.R1
Platforms	All

## **eq number**

Synopsis	Value 'equal to' assigned as match condition
Context	<b>configure qos sap-ingress</b> <i>string</i> <a href="#">ip-criteria</a> <i>entry</i> <i>number</i> <a href="#">match vxlan-vni eq</a> <i>number</i>
Tree	<a href="#">eq</a>
Range	1 to 16777215
Notes	The following elements are part of a choice: <b>eq</b> or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## **range**

Synopsis	Enter the <b>range</b> context
Context	<b>configure qos sap-ingress</b> <i>string</i> <a href="#">ip-criteria</a> <i>entry</i> <i>number</i> <a href="#">match vxlan-vni range</a>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## **end number**

Synopsis	Upper bound of the VNI range
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Context	<b>configure qos sap-ingress</b> <i>string ip-criteria entry number match vxlan-vni range end number</i>
Tree	<b>end</b>
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

**start number**

Synopsis	Lower bound of the VNI range
Context	<b>configure qos sap-ingress</b> <i>string ip-criteria entry number match vxlan-vni range start number</i>
Tree	<b>start</b>
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

**tag number**

Synopsis	Tag ID associated with the criteria entry
Context	<b>configure qos sap-ingress</b> <i>string ip-criteria entry number tag number</i>
Tree	<b>tag</b>
Description	This command associates a tag with the criteria entry. Tag identifiers are not supported in SAP ingress QoS policies, MAC criteria statements, or in SAP egress QoS policies.
Range	0 to 255
Default	0
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**type keyword****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IPv4 criteria entry type
Context	<b>configure qos sap-ingress</b> <i>string ip-criteria type keyword</i>



Tree	<a href="#">type</a>
Description	This command specifies the type of entries that can be configured for IPv4 match criteria.
Options	normal, vxlan-vni, tagged-entries
Default	normal
Introduced	16.0.R1
Platforms	All

## ipv6-criteria

Synopsis	Enter the <b>ipv6-criteria</b> context
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">ipv6-criteria</a>
Tree	<a href="#">ipv6-criteria</a>
Introduced	16.0.R1
Platforms	All

## entry [[entry-id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">ipv6-criteria</a> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

## [[entry-id](#)] *number*

Synopsis	IPv6 criteria entry to create or edit for the policy
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">ipv6-criteria</a> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**action**

Synopsis	Enter the <b>action</b> context
Context	<b>configure</b> qos sap-ingress string ipv6-criteria entry number action
Tree	action
Introduced	16.0.R1
Platforms	All

**fc string**

Synopsis	Forwarding class for traffic matching the criteria
Context	<b>configure</b> qos sap-ingress string ipv6-criteria entry number action fc string
Tree	fc
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

**policer reference**

Synopsis	Policer ID for traffic matching the criteria
Context	<b>configure</b> qos sap-ingress string ipv6-criteria entry number action policer reference
Tree	policer
Reference	<b>configure</b> qos sap-ingress string policer number
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**priority keyword**

Synopsis	Priority for the packet
Context	<b>configure</b> qos sap-ingress string ipv6-criteria entry number action priority keyword
Tree	priority
Options	low, high, auto
Default	auto
Introduced	16.0.R1
Platforms	All

**type keyword**

Synopsis	Action for criteria entry
Context	<b>configure qos sap-ingress string ipv6-criteria entry number action type keyword</b>
Tree	<a href="#">type</a>
Options	ignore-match, accept
Default	ignore-match
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure qos sap-ingress string ipv6-criteria entry number description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**match**

Synopsis	Enter the <b>match</b> context
Context	<b>configure qos sap-ingress string ipv6-criteria entry number match</b>
Tree	<a href="#">match</a>
Introduced	16.0.R1
Platforms	All

**dscp keyword**

Synopsis	DSCP value to match in the packet
Context	<b>configure qos sap-ingress string ipv6-criteria entry number match dscp keyword</b>
Tree	<a href="#">dscp</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef,

	cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

## dst-ip

Synopsis	Enter the <b>dst-ip</b> context
Context	<b>configure qos sap-ingress</b> <i>string</i> <b>ipv6-criteria entry number match dst-ip</b>
Tree	<b>dst-ip</b>
Introduced	16.0.R1
Platforms	All

## address (*ipv6-address* | *ipv6-prefix-with-host-bits*)

Synopsis	IPv6 address to match destination IP of the packet
Context	<b>configure qos sap-ingress</b> <i>string</i> <b>ipv6-criteria entry number match dst-ip address</b> ( <i>ipv6-address</i>   <i>ipv6-prefix-with-host-bits</i> )
Tree	<b>address</b>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

## ipv6-prefix-list *reference*

Synopsis	IPv6 prefix list as match criterion for IPv6 addresses
Context	<b>configure qos sap-ingress</b> <i>string</i> <b>ipv6-criteria entry number match dst-ip ipv6-prefix-list reference</b>
Tree	<b>ipv6-prefix-list</b>
Reference	<b>configure qos match-list ipv6-prefix-list</b> <i>string</i>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mask string**

Synopsis	IP address to match with source IP of the packet
Context	<b>configure qos sap-ingress string ipv6-criteria entry number match dst-ip mask string</b>
Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### **dst-port**

Synopsis	Enter the <b>dst-port</b> context
Context	<b>configure qos sap-ingress string ipv6-criteria entry number match dst-port</b>
Tree	<a href="#">dst-port</a>
Introduced	16.0.R1
Platforms	All

### **eq number**

Synopsis	Value 'equal to' assigned as match condition
Context	<b>configure qos sap-ingress string ipv6-criteria entry number match dst-port eq number</b>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **gt number**

Synopsis	Value 'greater than' assigned as match condition
Context	<b>configure qos sap-ingress string ipv6-criteria entry number match dst-port gt number</b>
Tree	<a href="#">gt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1

Platforms All

### **lt number**

Synopsis Value 'less than' assigned as match condition

Context **configure qos sap-ingress string ipv6-criteria entry number match dst-port lt number**

Tree **lt**

Range 0 to 65535

Notes The following elements are part of a choice: **eq, gt, lt, or range**.

Introduced 16.0.R1

Platforms All

### **range**

Synopsis Enter the **range** context

Context **configure qos sap-ingress string ipv6-criteria entry number match dst-port range**

Tree **range**

Notes The following elements are part of a choice: **eq, gt, lt, or range**.

Introduced 16.0.R1

Platforms All

### **end number**

Synopsis Upper bound of the port range

Context **configure qos sap-ingress string ipv6-criteria entry number match dst-port range end number**

Tree **end**

Range 0 to 65535

Introduced 16.0.R1

Platforms All

### **start number**

Synopsis Lower bound of the port range

Context **configure qos sap-ingress string ipv6-criteria entry number match dst-port range start number**

Tree	<a href="#">start</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

### **fragment** *keyword*

Synopsis	Fragmented packets as the match criterion
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">ipv6-criteria</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <b>fragment</b> <i>keyword</i>
Tree	<a href="#">fragment</a>
Options	false, true, first-only, non-first-only
Introduced	16.0.R1
Platforms	All

### **next-header** (*number* | *keyword*)

Synopsis	IP protocol to match
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">ipv6-criteria</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <b>next-header</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">next-header</a>
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

### **src-ip**

Synopsis	Enter the <b>src-ip</b> context
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">ipv6-criteria</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <b>src-ip</b>
Tree	<a href="#">src-ip</a>
Introduced	16.0.R1
Platforms	All

**address** (*ipv6-address* | *ipv6-prefix-with-host-bits*)

Synopsis	IPv4 address to match
Context	<b>configure qos sap-ingress</b> <i>string</i> <a href="#">ipv6-criteria</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">src-ip</a> <a href="#">address</a> ( <i>ipv6-address</i>   <i>ipv6-prefix-with-host-bits</i> )
Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

**ipv6-prefix-list** *reference*

Synopsis	IPv6 prefix list as match criterion for IPv6 addresses
Context	<b>configure qos sap-ingress</b> <i>string</i> <a href="#">ipv6-criteria</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">src-ip</a> <a href="#">ipv6-prefix-list</a> <a href="#">reference</a>
Tree	<a href="#">ipv6-prefix-list</a>
Reference	<b>configure qos match-list</b> <a href="#">ipv6-prefix-list</a> <i>string</i>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**mask** *string*

Synopsis	IP address to match with source IP of the packet
Context	<b>configure qos sap-ingress</b> <i>string</i> <a href="#">ipv6-criteria</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">src-ip</a> <a href="#">mask</a> <i>string</i>
Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

**src-port**

Synopsis	Enter the <b>src-port</b> context
Context	<b>configure qos sap-ingress</b> <i>string</i> <a href="#">ipv6-criteria</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">src-port</a>
Tree	<a href="#">src-port</a>
Introduced	16.0.R1



Platforms All

### **eq** *number*

Synopsis Value 'equal to' assigned as match condition  
Context **configure** qos sap-ingress *string* ipv6-criteria entry *number* match src-port eq *number*  
Tree [eq](#)  
Range 0 to 65535  
Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.  
Introduced 16.0.R1  
Platforms All

### **gt** *number*

Synopsis Value 'greater than' assigned as match condition  
Context **configure** qos sap-ingress *string* ipv6-criteria entry *number* match src-port gt *number*  
Tree [gt](#)  
Range 0 to 65535  
Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.  
Introduced 16.0.R1  
Platforms All

### **lt** *number*

Synopsis Value 'less than' assigned as match condition  
Context **configure** qos sap-ingress *string* ipv6-criteria entry *number* match src-port lt *number*  
Tree [lt](#)  
Range 0 to 65535  
Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.  
Introduced 16.0.R1  
Platforms All

### **range**

Synopsis Enter the **range** context

Context	<b>configure qos sap-ingress</b> <i>string</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>match</i> <i>src-port</i> <i>range</i>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **end number**

Synopsis	Upper bound of the port range
Context	<b>configure qos sap-ingress</b> <i>string</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>match</i> <i>src-port</i> <i>range</i> <i>end</i> <i>number</i>
Tree	<a href="#">end</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

### **start number**

Synopsis	Lower bound of the port range
Context	<b>configure qos sap-ingress</b> <i>string</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>match</i> <i>src-port</i> <i>range</i> <i>start</i> <i>number</i>
Tree	<a href="#">start</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

### **vxlan-vni**

Synopsis	Enter the <b>vxlan-vni</b> context
Context	<b>configure qos sap-ingress</b> <i>string</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>match</i> <i>vxlan-vni</i>
Tree	<a href="#">vxlan-vni</a>
Introduced	16.0.R1
Platforms	All

**eq number**

Synopsis	Value 'equal to' assigned as match condition
Context	<b>configure qos sap-ingress string ipv6-criteria entry number match vxlan-vni eq number</b>
Tree	<a href="#">eq</a>
Range	1 to 16777215
Notes	The following elements are part of a choice: <b>eq</b> or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**range**

Synopsis	Enter the <b>range</b> context
Context	<b>configure qos sap-ingress string ipv6-criteria entry number match vxlan-vni range</b>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**end number**

Synopsis	Upper bound of the VNI range
Context	<b>configure qos sap-ingress string ipv6-criteria entry number match vxlan-vni range end number</b>
Tree	<a href="#">end</a>
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

**start number**

Synopsis	Lower bound of the VNI range
Context	<b>configure qos sap-ingress string ipv6-criteria entry number match vxlan-vni range start number</b>
Tree	<a href="#">start</a>
Range	1 to 16777215

Introduced	16.0.R1
Platforms	All

**tag** *number*

Synopsis	Tag ID associated with the criteria entry
Context	<b>configure qos sap-ingress</b> <i>string</i> <b>ipv6-criteria entry</b> <i>number</i> <b>tag</b> <i>number</i>
Tree	<b>tag</b>
Description	This command associates a tag with the criteria entry. Tag identifiers are not supported in SAP ingress QoS policies, MAC criteria statements, or in SAP egress QoS policies.
Range	0 to 255
Default	0
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IPv6 criteria entry type
Context	<b>configure qos sap-ingress</b> <i>string</i> <b>ipv6-criteria type</b> <i>keyword</i>
Tree	<b>type</b>
Description	This command specifies the type of entries that can be configured for IPv6 match criteria.
Options	normal, vxlan-vni, tagged-entries
Default	normal
Introduced	16.0.R1
Platforms	All

**lsp-exp** [**lsp-exp-value**] *number*

Synopsis	Enter the <b>lsp-exp</b> list instance
Context	<b>configure qos sap-ingress</b> <i>string</i> <b>lsp-exp</b> <i>number</i>
Tree	<b>lsp-exp</b>

Introduced	16.0.R1
Platforms	All

### **[lsp-exp-value]** *number*

Synopsis	LSP EXP value to match the LSP EXP rule
Context	<b>configure qos sap-ingress</b> <i>string lsp-exp number</i>
Tree	<a href="#">lsp-exp</a>
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **fc** *string*

Synopsis	Forwarding class for traffic matching the LSP EXP value
Context	<b>configure qos sap-ingress</b> <i>string lsp-exp number fc string</i>
Tree	<a href="#">fc</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

### **priority** *keyword*

Synopsis	Priority for the matching traffic
Context	<b>configure qos sap-ingress</b> <i>string lsp-exp number priority keyword</i>
Tree	<a href="#">priority</a>
Options	low, high, auto
Default	auto
Introduced	16.0.R1
Platforms	All

### **mac-criteria**

Synopsis	Enter the <b>mac-criteria</b> context
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Context	<b>configure qos sap-ingress string mac-criteria</b>
Tree	<b>mac-criteria</b>
Introduced	16.0.R1
Platforms	All

### **entry** [**entry-id**] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure qos sap-ingress string mac-criteria entry number</b>
Tree	<b>entry</b>
Introduced	16.0.R1
Platforms	All

### **[entry-id]** *number*

Synopsis	Entry ID
Context	<b>configure qos sap-ingress string mac-criteria entry number</b>
Tree	<b>entry</b>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **action**

Synopsis	Enter the <b>action</b> context
Context	<b>configure qos sap-ingress string mac-criteria entry number action</b>
Tree	<b>action</b>
Introduced	16.0.R1
Platforms	All

### **fc** *string*

Synopsis	Forwarding class for traffic matching the criteria
Context	<b>configure qos sap-ingress string mac-criteria entry number action fc string</b>

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Tree	<a href="#">fc</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

### **policer** *reference*

Synopsis	Policer ID for traffic matching the criteria
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">mac-criteria</a> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">policer</a> <i>reference</i>
Tree	<a href="#">policer</a>
Reference	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">policer</a> <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **priority** *keyword*

Synopsis	Priority for the packet
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">mac-criteria</a> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">priority</a> <i>keyword</i>
Tree	<a href="#">priority</a>
Options	low, high, auto
Default	auto
Introduced	16.0.R1
Platforms	All

### **type** *keyword*

Synopsis	Action for criteria entry
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">mac-criteria</a> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">type</a> <i>keyword</i>
Tree	<a href="#">type</a>
Options	ignore-match, accept
Default	ignore-match
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> qos sap-ingress <i>string</i> mac-criteria entry <i>number</i> description <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **match**

Synopsis	Enter the <b>match</b> context
Context	<b>configure</b> qos sap-ingress <i>string</i> mac-criteria entry <i>number</i> match
Tree	<a href="#">match</a>
Introduced	16.0.R1
Platforms	All

### **atm-vci** *number*

Synopsis	ATM VC Identifier to match as part of the MAC match criteria
Context	<b>configure</b> qos sap-ingress <i>string</i> mac-criteria entry <i>number</i> match atm-vci <i>number</i>
Tree	<a href="#">atm-vci</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

### **dot1p**

Synopsis	Enable the <b>dot1p</b> context
Context	<b>configure</b> qos sap-ingress <i>string</i> mac-criteria entry <i>number</i> match dot1p
Tree	<a href="#">dot1p</a>
Introduced	16.0.R1
Platforms	All



### **mask number**

Synopsis	3-bit mask for the 802.1p value
Context	<b>configure</b> qos sap-ingress string mac-criteria entry number match dot1p mask number
Tree	mask
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	All

### **priority number**

Synopsis	802.1P priority value to use as the match criterion
Context	<b>configure</b> qos sap-ingress string mac-criteria entry number match dot1p priority number
Tree	priority
Range	0 to 7
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **dst-mac**

Synopsis	Enable the <b>dst-mac</b> context
Context	<b>configure</b> qos sap-ingress string mac-criteria entry number match dst-mac
Tree	dst-mac
Introduced	16.0.R1
Platforms	All

### **address string**

Synopsis	Destination MAC address as QoS policy match criterion
Context	<b>configure</b> qos sap-ingress string mac-criteria entry number match dst-mac address string
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

### mask string

Synopsis Mask for destination MAC address

Context **configure qos sap-ingress string mac-criteria entry number match dst-mac mask string**

Tree [mask](#)

Default ff:ff:ff:ff:ff:ff

Introduced 16.0.R1

Platforms All

### etype string

Synopsis Ethernet type

Context **configure qos sap-ingress string mac-criteria entry number match etype string**

Tree [etype](#)

String Length 5 to 6

Introduced 16.0.R1

Platforms All

### frame-type keyword

Synopsis Match MAC criteria for ingress SAP QoS policy

Context **configure qos sap-ingress string mac-criteria entry number match frame-type keyword**

Tree [frame-type](#)

Options 802dot3, 802dot2-llc, 802dot2-snap, ethernet-ii, atm

Introduced 16.0.R1

Platforms All

### inner-tag

Synopsis Enable the **inner-tag** context

Context **configure qos sap-ingress string mac-criteria entry number match inner-tag**

Tree [inner-tag](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mask number**

Synopsis Mask to VID of the inner VLAN tag before comparing it with the inner-tag or outer-tag value

Context **configure qos sap-ingress string mac-criteria entry number match inner-tag mask number**

Tree [mask](#)

Range 1 to 4095

Default 4095

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **vlan number**

Synopsis Value to match against the VID of the second VLAN tag

Context **configure qos sap-ingress string mac-criteria entry number match inner-tag vlan number**

Tree [vlan](#)

Range 0 to 4095

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **llc-dsap**

Synopsis Enable the **llc-dsap** context

Context **configure qos sap-ingress string mac-criteria entry number match llc-dsap**

Tree [llc-dsap](#)

Introduced 16.0.R1

Platforms All

### **dsap number**

Synopsis DSAP value

Context	<b>configure qos sap-ingress</b> <i>string mac-criteria entry number match llc-dsap dsap number</i>
Tree	<a href="#">dsap</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**mask number**

Synopsis	DSAP mask
Context	<b>configure qos sap-ingress</b> <i>string mac-criteria entry number match llc-dsap mask number</i>
Tree	<a href="#">mask</a>
Range	0 to 255
Default	255
Introduced	16.0.R1
Platforms	All

**llc-ssap**

Synopsis	Enable the <b>llc-ssap</b> context
Context	<b>configure qos sap-ingress</b> <i>string mac-criteria entry number match llc-ssap</i>
Tree	<a href="#">llc-ssap</a>
Introduced	16.0.R1
Platforms	All

**mask number**

Synopsis	Source SAP mask
Context	<b>configure qos sap-ingress</b> <i>string mac-criteria entry number match llc-ssap mask number</i>
Tree	<a href="#">mask</a>
Range	0 to 255
Default	255
Introduced	16.0.R1

Platforms All

### **ssap number**

Synopsis SSAP value

Context **configure qos sap-ingress string mac-criteria entry number match llc-ssap ssap number**

Tree [ssap](#)

Range 0 to 255

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

### **outer-tag**

Synopsis Enable the **outer-tag** context

Context **configure qos sap-ingress string mac-criteria entry number match outer-tag**

Tree [outer-tag](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mask number**

Synopsis First tag carried transparently through the service

Context **configure qos sap-ingress string mac-criteria entry number match outer-tag mask number**

Tree [mask](#)

Range 1 to 4095

Default 4095

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **vlan number**

Synopsis Match against VID of the first VLAN tag in the packet carried transparently through service

Context	<b>configure qos sap-ingress string mac-criteria entry number match outer-tag vlan number</b>
Tree	<a href="#">vlan</a>
Range	0 to 4095
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **snap-oui** *keyword*

Synopsis	Parameter snap-oui as MAC filter match criteria
Context	<b>configure qos sap-ingress string mac-criteria entry number match snap-oui keyword</b>
Tree	<a href="#">snap-oui</a>
Options	zero, non-zero
Introduced	16.0.R1
Platforms	All

### **snap-pid** *number*

Synopsis	Parameter snap-pid as MAC filter match criteria
Context	<b>configure qos sap-ingress string mac-criteria entry number match snap-pid number</b>
Tree	<a href="#">snap-pid</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

### **src-mac**

Synopsis	Enable the <b>src-mac</b> context
Context	<b>configure qos sap-ingress string mac-criteria entry number match src-mac</b>
Tree	<a href="#">src-mac</a>
Introduced	16.0.R1
Platforms	All

**address string**

Synopsis	Source MAC address as QoS policy match criterion
Context	<b>configure</b> qos sap-ingress string mac-criteria entry number match src-mac address string
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**mask string**

Synopsis	Mask for source MAC address
Context	<b>configure</b> qos sap-ingress string mac-criteria entry number match src-mac mask string
Tree	mask
Default	ff:ff:ff:ff:ff:ff
Introduced	16.0.R1
Platforms	All

**type keyword****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MAC criteria filter type
Context	<b>configure</b> qos sap-ingress string mac-criteria type keyword
Tree	type
Options	normal, vid
Default	normal
Introduced	16.0.R1
Platforms	All

**policer [policer-id] number**

Synopsis	Enter the <b>policer</b> list instance
Context	<b>configure</b> qos sap-ingress string policer number

Tree	<a href="#">policer</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**[policer-id] number**

Synopsis	SAP-ingress policer identifier
Context	<b>configure qos sap-ingress</b> <i>string</i> <a href="#">policer</a> <i>number</i>
Tree	<a href="#">policer</a>
Range	1 to 63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**adaptation-rule**

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure qos sap-ingress</b> <i>string</i> <a href="#">policer</a> <i>number</i> <a href="#">adaptation-rule</a>
Tree	<a href="#">adaptation-rule</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**cir keyword**

Synopsis	Constraint used when deriving the operational CIR value
Context	<b>configure qos sap-ingress</b> <i>string</i> <a href="#">policer</a> <i>number</i> <a href="#">adaptation-rule</a> <a href="#">cir</a> <i>keyword</i>
Tree	<a href="#">cir</a>
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**pir keyword**

Synopsis	Constraint used when deriving the operational PIR value
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Context	<b>configure qos sap-ingress</b> <i>string</i> <b>policer</b> <i>number</i> <b>adaptation-rule</b> <b>pir</b> <i>keyword</i>
Tree	<a href="#">pir</a>
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **adv-config-policy** *reference*

Synopsis	Advanced QoS policy name
Context	<b>configure qos sap-ingress</b> <i>string</i> <b>policer</b> <i>number</i> <b>adv-config-policy</b> <i>reference</i>
Tree	<a href="#">adv-config-policy</a>
Reference	<b>configure qos adv-config-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **arbiter-parent**

Synopsis	Enter the <b>arbiter-parent</b> context
Context	<b>configure qos sap-ingress</b> <i>string</i> <b>policer</b> <i>number</i> <b>arbiter-parent</b>
Tree	<a href="#">arbiter-parent</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **arbiter-name** *string*

Synopsis	Arbiter name
Context	<b>configure qos sap-ingress</b> <i>string</i> <b>policer</b> <i>number</i> <b>arbiter-parent</b> <b>arbiter-name</b> <i>string</i>
Tree	<a href="#">arbiter-name</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**level number**

Synopsis	Level of priority while feeding to the parent
Context	<b>configure qos sap-ingress string policer number arbiter-parent level number</b>
Tree	<b>level</b>
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**weight number**

Synopsis	Weight used by the arbiter for feeding the policer
Context	<b>configure qos sap-ingress string policer number arbiter-parent weight number</b>
Tree	<b>weight</b>
Range	1 to 100
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**cbs (number | keyword)**

Synopsis	Exceed threshold of the CIR leaky bucket of the policer
Context	<b>configure qos sap-ingress string policer number cbs (number   keyword)</b>
Tree	<b>cbs</b>
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**description string**

Synopsis	Text description
Context	<b>configure qos sap-ingress string policer number description string</b>

Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **high-prio-only** (*number* | *keyword*)

Synopsis	Percentage of MBS reserved for high priority traffic
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">policer</a> <i>number</i> <b>high-prio-only</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">high-prio-only</a>
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **mbs** (*number* | *keyword*)

Synopsis	High priority violate threshold of PIR leaky bucket
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">policer</a> <i>number</i> <b>mbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **packet-byte-offset** *number*

Synopsis	Packet size modification for policing information
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">policer</a> <i>number</i> <b>packet-byte-offset</b> <i>number</i>
Tree	<a href="#">packet-byte-offset</a>
Range	-32 to 31
Default	0

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure qos sap-ingress string policer number percent-rate</b>
Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **cir decimal-number**

Synopsis	Administrative CIR percent
Context	<b>configure qos sap-ingress string policer number percent-rate cir decimal-number</b>
Tree	<a href="#">cir</a>
Range	0.00 to 100.00
Default	0.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **pir decimal-number**

Synopsis	Administrative PIR percent
Context	<b>configure qos sap-ingress string policer number percent-rate pir decimal-number</b>
Tree	<a href="#">pir</a>
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **reference-rate keyword**

Synopsis	Reference rate
Context	<b>configure qos sap-ingress string policer number percent-rate reference-rate keyword</b>

Tree	<a href="#">reference-rate</a>
Options	local-limit, reference-port-limit
Default	local-limit
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **profile-capped** *boolean*

Synopsis	Enforce overall in-profile burst limit to CIR bucket
Context	<b>configure qos sap-ingress</b> <i>string</i> <b>policer</b> <i>number</i> <b>profile-capped</b> <i>boolean</i>
Tree	<a href="#">profile-capped</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure qos sap-ingress</b> <i>string</i> <b>policer</b> <i>number</i> <b>rate</b>
Tree	<a href="#">rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **cir** (*number* | *keyword*)

Synopsis	Administrative CIR
Context	<b>configure qos sap-ingress</b> <i>string</i> <b>policer</b> <i>number</i> <b>rate</b> <b>cir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	max
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**pir** (*number* | *keyword*)

Synopsis	Administrative PIR
Context	<b>configure</b> qos sap-ingress <i>string</i> policer <i>number</i> rate pir ( <i>number</i>   <i>keyword</i> )
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**scheduler-parent**

Synopsis	Enter the <b>scheduler-parent</b> context
Context	<b>configure</b> qos sap-ingress <i>string</i> policer <i>number</i> scheduler-parent
Tree	scheduler-parent
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s

**cir-level** *number*

Synopsis	Port priority level for within-CIR offered load
Context	<b>configure</b> qos sap-ingress <i>string</i> policer <i>number</i> scheduler-parent cir-level <i>number</i>
Tree	cir-level
Description	This command defines the hierarchy priority level when compared with other policers, queues, and schedulers that the policer uses to receive bandwidth for its within-CIR offered load. If this command is set to the default value, the policer does not receive bandwidth during the within-CIR pass of the scheduler and the <b>cir-weight</b> command is ignored.
Range	0 to 8
Default	0
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s

**cir-weight** *number*

Synopsis	Weight to use in the within-CIR port priority level
Context	<b>configure qos sap-ingress</b> <i>string</i> <b>policer</b> <i>number</i> <b>scheduler-parent</b> <b>cir-weight</b> <i>number</i>
Tree	<b>cir-weight</b>
Description	<p>The command defines the relative weight of the policer in comparison with other child policers, queues, or schedulers competing for bandwidth on the parent scheduler name at the within-CIR priority level.</p> <p>A weight is considered to be active when the applicable policer, queue, or scheduler has not reached its maximum rate and still has packets to transmit.</p> <p>When this command is set to a value of 0, the policer receives bandwidth only after the other children with a non-zero weight at this level have been serviced.</p>
Range	0 to 100
Default	1
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s

**level** *number*

Synopsis	Priority level for bandwidth on the parent scheduler
Context	<b>configure qos sap-ingress</b> <i>string</i> <b>policer</b> <i>number</i> <b>scheduler-parent</b> <b>level</b> <i>number</i>
Tree	<b>level</b>
Description	<p>This command defines the priority level when compared with other policers, queues, and schedulers when competing for bandwidth on the parent scheduler.</p> <p>Children of the parent scheduler with a lower priority do not receive bandwidth until all children with a higher priority have either reached their maximum bandwidth or are idle. Children with the same level are serviced in relation to their relative weights.</p>
Range	1 to 8
Default	1
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s

**scheduler-name** *string*

Synopsis	Scheduler name
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Context	<b>configure qos sap-ingress</b> <i>string</i> <b>policer</b> <i>number</i> <b>scheduler-parent</b> <b>scheduler-name</b> <i>string</i>
Tree	<b>scheduler-name</b>
String Length	1 to 32
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s

### **weight** *number*

Synopsis	Policer weight at the above-CIR priority level
Context	<b>configure qos sap-ingress</b> <i>string</i> <b>policer</b> <i>number</i> <b>scheduler-parent</b> <b>weight</b> <i>number</i>
Tree	<b>weight</b>
Range	0 to 100
Default	1
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s

### **stat-mode** *keyword*

Synopsis	Mode of statistics collected by the policer
Context	<b>configure qos sap-ingress</b> <i>string</i> <b>policer</b> <i>number</i> <b>stat-mode</b> <i>keyword</i>
Tree	<b>stat-mode</b>
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir, offered-profile-with-discards
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **policers-hqos-manageable** *boolean*

Synopsis	Manage policers through the hierarchical QoS process
Context	<b>configure qos sap-ingress</b> <i>string</i> <b>policers-hqos-manageable</b> <i>boolean</i>
Tree	<b>policers-hqos-manageable</b>
Default	false
Introduced	22.2.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s

### **policy-id** *number*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Ingress SAP QoS policy ID

Context **configure qos sap-ingress** *string policy-id number*

Tree [policy-id](#)

Range 1 to 65535

Introduced 16.0.R1

Platforms All

### **prec** [[prec-value](#)] *number*

Synopsis Enter the **prec** list instance

Context **configure qos sap-ingress** *string prec number*

Tree [prec](#)

Introduced 16.0.R1

Platforms All

### **[prec-value]** *number*

Synopsis Precedence value for which mapping is performed

Context **configure qos sap-ingress** *string prec number*

Tree [prec](#)

Range 0 to 7

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

**fc string**

Synopsis	Forwarding class for traffic matching precedence value
Context	<b>configure qos sap-ingress string prec number fc string</b>
Tree	<b>fc</b>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

**priority keyword**

Synopsis	Priority for the matching traffic
Context	<b>configure qos sap-ingress string prec number priority keyword</b>
Tree	<b>priority</b>
Options	low, high, auto
Default	auto
Introduced	16.0.R1
Platforms	All

**queue [queue-id] number**

Synopsis	Enter the <b>queue</b> list instance
Context	<b>configure qos sap-ingress string queue number</b>
Tree	<b>queue</b>
Introduced	16.0.R1
Platforms	All

**[queue-id] number**

Synopsis	SAP-ingress policer identifier
Context	<b>configure qos sap-ingress string queue number</b>
Tree	<b>queue</b>
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## adaptation-rule

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure qos sap-ingress</b> <i>string queue number adaptation-rule</i>
Tree	<a href="#">adaptation-rule</a>
Introduced	16.0.R1
Platforms	All

## cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	<b>configure qos sap-ingress</b> <i>string queue number adaptation-rule cir keyword</i>
Tree	<a href="#">cir</a>
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	All

## fir keyword

Synopsis	Constraint used when deriving the operational FIR value
Context	<b>configure qos sap-ingress</b> <i>string queue number adaptation-rule fir keyword</i>
Tree	<a href="#">fir</a>
Options	max, min, closest
Default	closest
Introduced	16.0.R2
Platforms	All

## pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	<b>configure qos sap-ingress</b> <i>string queue number adaptation-rule pir keyword</i>
Tree	<a href="#">pir</a>
Options	max, min, closest
Default	closest

Introduced 16.0.R1  
 Platforms All

### **adv-config-policy** *reference*

Synopsis Advanced QoS policy name  
 Context **configure qos sap-ingress** *string queue number adv-config-policy reference*  
 Tree [adv-config-policy](#)  
 Reference **configure qos adv-config-policy** *string*  
 Introduced 16.0.R1  
 Platforms All

### **burst-limit** (*number | keyword*)

Synopsis Explicit shaping burst size of a queue  
 Context **configure qos sap-ingress** *string queue number burst-limit (number | keyword)*  
 Tree [burst-limit](#)  
 Range 1 to 14000000  
 Units bytes  
 Options auto  
 Default auto  
 Introduced 16.0.R1  
 Platforms All

### **cbs** (*number | keyword*)

Synopsis Reserved buffer space for the queue  
 Context **configure qos sap-ingress** *string queue number cbs (number | keyword)*  
 Tree [cbs](#)  
 Range 0 to 1048576  
 Units kilobytes  
 Options auto  
 Default auto  
 Introduced 16.0.R1  
 Platforms All

### **cir-non-profiling** *boolean*

Synopsis	Prevent profile modification of CIR dependent packets
Context	<b>configure qos sap-ingress</b> <i>string queue number cir-non-profiling boolean</i>
Tree	<a href="#">cir-non-profiling</a>
Default	false
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **drop-tail**

Synopsis	Enter the <b>drop-tail</b> context
Context	<b>configure qos sap-ingress</b> <i>string queue number drop-tail</i>
Tree	<a href="#">drop-tail</a>
Introduced	16.0.R1
Platforms	All

### **low**

Synopsis	Enter the <b>low</b> context
Context	<b>configure qos sap-ingress</b> <i>string queue number drop-tail low</i>
Tree	<a href="#">low</a>
Introduced	16.0.R1
Platforms	All

### **percent-reduction-from-mbs** (*number | keyword*)

Synopsis	Low drop-tail percent from MBS that is reduced
Context	<b>configure qos sap-ingress</b> <i>string queue number drop-tail low percent-reduction-from-mbs (number   keyword)</i>
Tree	<a href="#">percent-reduction-from-mbs</a>
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1

Platforms All

### **mbs** (*number* | *keyword*)

Synopsis Maximum buffer space that is allowed for queue  
 Context **configure qos sap-ingress** *string* *queue* *number* **mbs** (*number* | *keyword*)  
 Tree [mbs](#)  
 Range 0 to 1073741824  
 Units bytes  
 Options auto  
 Default auto  
 Introduced 16.0.R1  
 Platforms All

### **multipoint** *boolean*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Apply as a multicast queue  
 Context **configure qos sap-ingress** *string* *queue* *number* **multipoint** *boolean*  
 Tree [multipoint](#)  
 Introduced 16.0.R1  
 Platforms All

### **packet-byte-offset** *number*

Synopsis Packet size modification for queue accounting  
 Context **configure qos sap-ingress** *string* *queue* *number* **packet-byte-offset** *number*  
 Tree [packet-byte-offset](#)  
 Range -32 to 30  
 Default 0  
 Introduced 16.0.R1  
 Platforms All

## **percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure qos sap-ingress</b> <i>string queue number percent-rate</i>
Tree	<i>percent-rate</i>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

## **cir decimal-number**

Synopsis	Administrative CIR percent
Context	<b>configure qos sap-ingress</b> <i>string queue number percent-rate cir decimal-number</i>
Tree	<i>cir</i>
Range	0.00 to 100.00
Default	0.00
Notes	The following elements are part of a choice: ( <b>cir</b> and <b>fir</b> ) or <b>police</b> .
Introduced	16.0.R1
Platforms	All

## **fir decimal-number**

Synopsis	Administrative FIR percent
Context	<b>configure qos sap-ingress</b> <i>string queue number percent-rate fir decimal-number</i>
Tree	<i>fir</i>
Range	0.00 to 100.00
Default	0.00
Notes	The following elements are part of a choice: ( <b>cir</b> and <b>fir</b> ) or <b>police</b> .
Introduced	16.0.R2
Platforms	All

## **pir decimal-number**

Synopsis	Administrative PIR percent
Context	<b>configure qos sap-ingress</b> <i>string queue number percent-rate pir decimal-number</i>

Tree	<a href="#">pir</a>
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

## police

Synopsis	Drop out-of-profile traffic feeding into queue instance
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <a href="#">string</a> <a href="#">queue</a> <a href="#">number</a> <a href="#">percent-rate</a> <a href="#">police</a>
Tree	<a href="#">police</a>
Notes	The following elements are part of a choice: ( <b>cir</b> and <b>fir</b> ) or <b>police</b> .
Introduced	16.0.R1
Platforms	All

## reference-rate *keyword*

Synopsis	Reference rate
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <a href="#">string</a> <a href="#">queue</a> <a href="#">number</a> <a href="#">percent-rate</a> <a href="#">reference-rate</a> <i>keyword</i>
Tree	<a href="#">reference-rate</a>
Options	port-limit, local-limit, reference-port-limit
Default	port-limit
Introduced	16.0.R1
Platforms	All

## queue-mode *keyword*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Operating mode for this queue
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <a href="#">string</a> <a href="#">queue</a> <a href="#">number</a> <a href="#">queue-mode</a> <i>keyword</i>
Tree	<a href="#">queue-mode</a>
Options	priority, profile
Default	priority
Introduced	16.0.R1



Platforms All

## queue-type *keyword*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Method used to service queue from hardware perspective  
 Context **configure** qos sap-ingress *string* queue number queue-type *keyword*  
 Tree [queue-type](#)  
 Options expedited, auto-expedited, best-effort  
 Default auto-expedited  
 Introduced 16.0.R1  
 Platforms All

## rate

Synopsis Enter the **rate** context  
 Context **configure** qos sap-ingress *string* queue number rate  
 Tree [rate](#)  
 Notes The following elements are part of a choice: **percent-rate** or **rate**.  
 Introduced 16.0.R1  
 Platforms All

## cir (*number* | *keyword*)

Synopsis Administrative CIR  
 Context **configure** qos sap-ingress *string* queue number rate cir (*number* | *keyword*)  
 Tree [cir](#)  
 Range 0 to 6400000000  
 Units kilobps  
 Options max  
 Default 0  
 Notes The following elements are part of a choice: (**cir** and **fir**) or **police**.  
 Introduced 16.0.R1

Platforms All

### **fir** (*number* | *keyword*)

Synopsis Administrative FIR

Context **configure qos sap-ingress** *string queue number rate fir* (*number* | *keyword*)

Tree [fir](#)

Range 0 to 6400000000

Units kilobps

Options max

Default 0

Notes The following elements are part of a choice: (**cir** and **fir**) or **police**.

Introduced 16.0.R2

Platforms All

### **pir** (*number* | *keyword*)

Synopsis Administrative PIR

Context **configure qos sap-ingress** *string queue number rate pir* (*number* | *keyword*)

Tree [pir](#)

Range 1 to 6400000000

Units kilobps

Options max

Default max

Introduced 16.0.R1

Platforms All

### **police**

Synopsis Drop the traffic feeding into queue above the PIR rate

Context **configure qos sap-ingress** *string queue number rate police*

Tree [police](#)

Notes The following elements are part of a choice: (**cir** and **fir**) or **police**.

Introduced 16.0.R1

Platforms All

## **scheduler-parent**

Synopsis	Enter the <b>scheduler-parent</b> context
Context	<b>configure qos sap-ingress string queue number scheduler-parent</b>
Tree	<a href="#">scheduler-parent</a>
Introduced	16.0.R1
Platforms	All

## **cir-level number**

Synopsis	Level of priority while feeding to the parent
Context	<b>configure qos sap-ingress string queue number scheduler-parent cir-level number</b>
Tree	<a href="#">cir-level</a>
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	All

## **cir-weight number**

Synopsis	Weight used at the within-CIR port priority level
Context	<b>configure qos sap-ingress string queue number scheduler-parent cir-weight number</b>
Tree	<a href="#">cir-weight</a>
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

## **level number**

Synopsis	Level of priority while feeding to the parent
Context	<b>configure qos sap-ingress string queue number scheduler-parent level number</b>
Tree	<a href="#">level</a>
Range	1 to 8
Default	1

Introduced 16.0.R1  
Platforms All

### **scheduler-name** *string*

Synopsis Scheduler name  
Context **configure qos sap-ingress** *string queue number scheduler-parent scheduler-name string*  
Tree [scheduler-name](#)  
String Length 1 to 32  
Introduced 16.0.R1  
Platforms All

### **weight** *number*

Synopsis Relative weight of the scheduler to feed the queue  
Context **configure qos sap-ingress** *string queue number scheduler-parent weight number*  
Tree [weight](#)  
Range 0 to 100  
Default 1  
Introduced 16.0.R1  
Platforms All

### **scope** *keyword*

Synopsis Scope of the policy  
Context **configure qos sap-ingress** *string scope keyword*  
Tree [scope](#)  
Options exclusive, template  
Default template  
Introduced 16.0.R1  
Platforms All

### **subscriber-mgmt**

Synopsis Enter the **subscriber-mgmt** context

Context	<b>configure qos sap-ingress string subscriber-mgmt</b>
Tree	<a href="#">subscriber-mgmt</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## dynamic-policer

Synopsis	Enter the <b>dynamic-policer</b> context
Context	<b>configure qos sap-ingress string subscriber-mgmt dynamic-policer</b>
Tree	<a href="#">dynamic-policer</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## arbiter-parent

Synopsis	Enter the <b>arbiter-parent</b> context
Context	<b>configure qos sap-ingress string subscriber-mgmt dynamic-policer arbiter-parent</b>
Tree	<a href="#">arbiter-parent</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## arbiter-name *string*

Synopsis	Arbiter name
Context	<b>configure qos sap-ingress string subscriber-mgmt dynamic-policer arbiter-parent arbiter-name string</b>
Tree	<a href="#">arbiter-name</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## level *number*

Synopsis	Level of priority while feeding to the parent
Context	<b>configure qos sap-ingress string subscriber-mgmt dynamic-policer arbiter-parent level number</b>

Tree	<a href="#">level</a>
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **weight number**

Synopsis	Weight used by the arbiter for feeding the policer
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">subscriber-mgmt dynamic-policer arbiter-parent weight number</a>
Tree	<a href="#">weight</a>
Range	1 to 100
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cbs (number | keyword)**

Synopsis	Exceed threshold of the CIR leaky bucket of the policer
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">subscriber-mgmt dynamic-policer cbs (number   keyword)</a>
Tree	<a href="#">cbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mbs (number | keyword)**

Synopsis	High priority violate threshold of PIR leaky bucket of this policer
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">subscriber-mgmt dynamic-policer mbs (number   keyword)</a>
Tree	<a href="#">mbs</a>

Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **packet-byte-offset** *number*

Synopsis	Packet size modification for policing information
Context	<b>configure</b> qos sap-ingress <i>string</i> subscriber-mgmt dynamic-policer packet-byte-offset <i>number</i>
Tree	<a href="#">packet-byte-offset</a>
Range	-32 to 31
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **policer-id-range**

Synopsis	Enable the <b>policer-id-range</b> context
Context	<b>configure</b> qos sap-ingress <i>string</i> subscriber-mgmt dynamic-policer policer-id-range
Tree	<a href="#">policer-id-range</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **end** *number*

Synopsis	Upper bound of the dynamic policer ID range
Context	<b>configure</b> qos sap-ingress <i>string</i> subscriber-mgmt dynamic-policer policer-id-range end <i>number</i>
Tree	<a href="#">end</a>
Range	1 to 63
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **start number**

Synopsis Lower bound of the dynamic policer ID range

Context **configure qos sap-ingress** *string* **subscriber-mgmt dynamic-policer policer-id-range start number**

Tree [start](#)

Range 1 to 63

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **stat-mode keyword**

Synopsis Mode of statistics collected by the policer

Context **configure qos sap-ingress** *string* **subscriber-mgmt dynamic-policer stat-mode keyword**

Tree [stat-mode](#)

Options no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir

Default minimal

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pcc-rule-entry**

Synopsis Enter the **pcc-rule-entry** context

Context **configure qos sap-ingress** *string* **subscriber-mgmt pcc-rule-entry**

Tree [pcc-rule-entry](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **range**

Synopsis Enable the **range** context



Context	<b>configure qos sap-ingress</b> <i>string</i> <a href="#">subscriber-mgmt pcc-rule-entry range</a>
Tree	<a href="#">range</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**end number**

Synopsis	Upper bound of the filter and QoS policy entries range
Context	<b>configure qos sap-ingress</b> <i>string</i> <a href="#">subscriber-mgmt pcc-rule-entry range end number</a>
Tree	<a href="#">end</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**start number**

Synopsis	Lower bound of the filter and QoS policy entries range
Context	<b>configure qos sap-ingress</b> <i>string</i> <a href="#">subscriber-mgmt pcc-rule-entry range start number</a>
Tree	<a href="#">start</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**scheduler-policy** [[scheduler-policy-name](#)] *string*

Synopsis	Enter the <b>scheduler-policy</b> list instance
Context	<b>configure qos scheduler-policy</b> <i>string</i>
Tree	<a href="#">scheduler-policy</a>
Max. Instances	2047
Introduced	16.0.R1
Platforms	All

**[scheduler-policy-name] string**

Synopsis	Scheduler policy name
Context	<b>configure qos scheduler-policy string</b>
Tree	<a href="#">scheduler-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure qos scheduler-policy string description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**frame-based-accounting boolean**

Synopsis	Use frame-based accounting for queues and schedulers
Context	<b>configure qos scheduler-policy string frame-based-accounting boolean</b>
Tree	<a href="#">frame-based-accounting</a>
Default	false
Introduced	16.0.R1
Platforms	All

**tier [tier-id] number**

Synopsis	Enter the <b>tier</b> list instance
Context	<b>configure qos scheduler-policy string tier number</b>
Tree	<a href="#">tier</a>
Introduced	16.0.R1
Platforms	All

**[tier-id]** *number*

Synopsis	Tier for scheduler-policy scheduler
Context	<b>configure qos scheduler-policy</b> <i>string tier number</i>
Tree	<a href="#">tier</a>
Range	1 to 3
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**parent-location** *keyword*

Synopsis	Expected location of parent schedulers
Context	<b>configure qos scheduler-policy</b> <i>string tier number parent-location keyword</i>
Tree	<a href="#">parent-location</a>
Options	auto, sub, vport
Default	auto
Introduced	16.0.R1
Platforms	All

**scheduler** [[scheduler-name](#)] *string*

Synopsis	Enter the <b>scheduler</b> list instance
Context	<b>configure qos scheduler-policy</b> <i>string tier number scheduler string</i>
Tree	<a href="#">scheduler</a>
Introduced	16.0.R1
Platforms	All

**[scheduler-name]** *string*

Synopsis	Scheduler name
Context	<b>configure qos scheduler-policy</b> <i>string tier number scheduler string</i>
Tree	<a href="#">scheduler</a>
Description	This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a

unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.

If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.

If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> qos scheduler-policy <i>string</i> tier <i>number</i> scheduler <i>string</i> description <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **limit-unused-bandwidth** *boolean*

Synopsis	Enable aggregate rate overrun protection
Context	<b>configure</b> qos scheduler-policy <i>string</i> tier <i>number</i> scheduler <i>string</i> limit-unused-bandwidth <i>boolean</i>
Tree	<a href="#">limit-unused-bandwidth</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure</b> qos scheduler-policy <i>string</i> tier <i>number</i> scheduler <i>string</i> percent-rate

Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	All

### **cir** (*keyword* | *decimal-number*)

Synopsis	Scheduler CIR
Context	<b>configure</b> <a href="#">qos scheduler-policy</a> <i>string</i> <a href="#">tier</a> <i>number</i> <a href="#">scheduler</a> <i>string</i> <a href="#">percent-rate</a> <a href="#">cir</a> ( <i>keyword</i>   <i>decimal-number</i> )
Tree	<a href="#">cir</a>
Range	0.00 to 100.00
Options	sum
Default	sum
Introduced	20.10.R1
Platforms	All

### **pir** *decimal-number*

Synopsis	Scheduler PIR
Context	<b>configure</b> <a href="#">qos scheduler-policy</a> <i>string</i> <a href="#">tier</a> <i>number</i> <a href="#">scheduler</a> <i>string</i> <a href="#">percent-rate</a> <a href="#">pir</a> <i>decimal-number</i>
Tree	<a href="#">pir</a>
Range	0.01 to 100.00
Introduced	20.10.R1
Platforms	All

### **reference-rate** *keyword*

Synopsis	Reference rate
Context	<b>configure</b> <a href="#">qos scheduler-policy</a> <i>string</i> <a href="#">tier</a> <i>number</i> <a href="#">scheduler</a> <i>string</i> <a href="#">percent-rate</a> <a href="#">reference-rate</a> <i>keyword</i>
Tree	<a href="#">reference-rate</a>
Options	local-limit, reference-port-limit
Default	reference-port-limit
Introduced	20.10.R1

Platforms All

## port-parent

Synopsis Enable the **port-parent** context

Context **configure qos scheduler-policy** *string tier number scheduler string port-parent*

Tree [port-parent](#)

Notes The following elements are part of a choice: **port-parent** or **scheduler-parent**.

Introduced 16.0.R1

Platforms All

## cir-level *number*

Synopsis Port priority to receive bandwidth for within-CIR pass

Context **configure qos scheduler-policy** *string tier number scheduler string port-parent cir-level number*

Tree [cir-level](#)

Range 0 to 8

Default 0

Introduced 16.0.R1

Platforms All

## cir-weight *number*

Synopsis Weight used at the within-CIR port priority level

Context **configure qos scheduler-policy** *string tier number scheduler string port-parent cir-weight number*

Tree [cir-weight](#)

Range 0 to 100

Default 0

Introduced 16.0.R1

Platforms All

## level *number*

Synopsis Port priority for bandwidth for above-CIR offered load

Context	<b>configure qos scheduler-policy</b> <i>string tier number scheduler string port-parent level number</i>
Tree	<a href="#">level</a>
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

### **weight** *number*

Synopsis	Weight used at the above-CIR port priority level
Context	<b>configure qos scheduler-policy</b> <i>string tier number scheduler string port-parent weight number</i>
Tree	<a href="#">weight</a>
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

### **rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure qos scheduler-policy</b> <i>string tier number scheduler string rate</i>
Tree	<a href="#">rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

### **cir** (*number* | *keyword*)

Synopsis	Administrative CIR
Context	<b>configure qos scheduler-policy</b> <i>string tier number scheduler string rate cir (number   keyword)</i>
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps

Options	sum, max
Default	sum
Introduced	16.0.R1
Platforms	All

### **pir** (*number* | *keyword*)

Synopsis	Administrative PIR
Context	<b>configure</b> qos scheduler-policy <i>string tier number scheduler string rate pir (number   keyword)</i>
Tree	<a href="#">pir</a>
Range	1 to 6400000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

### **scheduler-parent**

Synopsis	Enable the <b>scheduler-parent</b> context
Context	<b>configure</b> qos scheduler-policy <i>string tier number scheduler string scheduler-parent</i>
Tree	<a href="#">scheduler-parent</a>
Notes	The following elements are part of a choice: <b>port-parent</b> or <b>scheduler-parent</b> .
Introduced	16.0.R1
Platforms	All

### **cir-level** *number*

Synopsis	Level of priority while feeding to the parent
Context	<b>configure</b> qos scheduler-policy <i>string tier number scheduler string scheduler-parent cir-level number</i>
Tree	<a href="#">cir-level</a>
Range	0 to 8
Default	0



Introduced 16.0.R1  
Platforms All

### **cir-weight** *number*

Synopsis Weight used at the within-CIR port priority level  
Context **configure qos scheduler-policy** *string tier number scheduler string scheduler-parent cir-weight number*  
Tree [cir-weight](#)  
Range 0 to 100  
Default 1  
Introduced 16.0.R1  
Platforms All

### **level** *number*

Synopsis Level of priority while feeding to the parent  
Context **configure qos scheduler-policy** *string tier number scheduler string scheduler-parent level number*  
Tree [level](#)  
Range 1 to 8  
Default 1  
Introduced 16.0.R1  
Platforms All

### **scheduler-name** *string*

Synopsis Scheduler name  
Context **configure qos scheduler-policy** *string tier number scheduler string scheduler-parent scheduler-name string*  
Tree [scheduler-name](#)  
String Length 1 to 32  
Notes This element is mandatory.  
Introduced 16.0.R1  
Platforms All

**weight** *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	<b>configure</b> qos scheduler-policy <i>string</i> tier <i>number</i> scheduler <i>string</i> scheduler-parent <i>weight</i> <i>number</i>
Tree	<a href="#">weight</a>
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

**shared-queue** [[shared-queue-policy-name](#)] *string*

Synopsis	Enter the <b>shared-queue</b> list instance
Context	<b>configure</b> qos <a href="#">shared-queue</a> <i>string</i>
Tree	<a href="#">shared-queue</a>
Introduced	16.0.R1
Platforms	All

**[shared-queue-policy-name]** *string*

Synopsis	Name of the default shared queue policy
Context	<b>configure</b> qos <a href="#">shared-queue</a> <i>string</i>
Tree	<a href="#">shared-queue</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> qos <a href="#">shared-queue</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	0 to 80

Introduced 16.0.R1  
Platforms All

### **fc** [**fc-name**] *keyword*

Synopsis Enter the **fc** list instance  
Context **configure qos shared-queue** *string fc keyword*  
Tree **fc**  
Introduced 16.0.R1  
Platforms All

### **[fc-name]** *keyword*

Synopsis Forwarding class mapping to queue mapping  
Context **configure qos shared-queue** *string fc keyword*  
Tree **fc**  
Options be, l2, af, l1, h2, ef, h1, nc  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms All

### **broadcast-queue** *number*

Synopsis ID of queue to forward all broadcast traffic  
Context **configure qos shared-queue** *string fc keyword broadcast-queue number*  
Tree **broadcast-queue**  
Range 9 to 32  
Introduced 16.0.R1  
Platforms All

### **multicast-queue** *number*

Synopsis ID of queue to forward multicast traffic  
Context **configure qos shared-queue** *string fc keyword multicast-queue number*  
Tree **multicast-queue**

Range	9 to 32
Introduced	16.0.R1
Platforms	All

**queue number**

Synopsis	ID of queue to forward all traffic
Context	<b>configure qos shared-queue</b> <i>string fc keyword queue number</i>
Tree	<a href="#">queue</a>
Range	1 to 8
Introduced	16.0.R1
Platforms	All

**unknown-queue number**

Synopsis	ID of queue to forward unknown unicast traffic
Context	<b>configure qos shared-queue</b> <i>string fc keyword unknown-queue number</i>
Tree	<a href="#">unknown-queue</a>
Range	9 to 32
Introduced	16.0.R1
Platforms	All

**queue [queue-id] number**

Synopsis	Enter the <b>queue</b> list instance
Context	<b>configure qos shared-queue</b> <i>string queue number</i>
Tree	<a href="#">queue</a>
Introduced	16.0.R1
Platforms	All

**[queue-id] number**

Synopsis	Shared queue identifier
Context	<b>configure qos shared-queue</b> <i>string queue number</i>
Tree	<a href="#">queue</a>

---

Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **cbs number**

Synopsis	Committed burst size as a percentage of the MBS
Context	<b>configure qos shared-queue</b> <i>string queue number cbs number</i>
Tree	<a href="#">cbs</a>
Range	0 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

### **drop-tail**

Synopsis	Enter the <b>drop-tail</b> context
Context	<b>configure qos shared-queue</b> <i>string queue number drop-tail</i>
Tree	<a href="#">drop-tail</a>
Introduced	16.0.R1
Platforms	All

### **low**

Synopsis	Enter the <b>low</b> context
Context	<b>configure qos shared-queue</b> <i>string queue number drop-tail low</i>
Tree	<a href="#">low</a>
Introduced	16.0.R1
Platforms	All

### **percent-reduction-from-mbs** (*number | keyword*)

Synopsis	Low drop-tail percent from MBS that is reduced
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Context	<b>configure qos shared-queue</b> <i>string queue number drop-tail low percent-reduction-from-mbs</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">percent-reduction-from-mbs</a>
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

### **mbs** *number*

Synopsis	Maximum buffers for the ingress shared queue
Context	<b>configure qos shared-queue</b> <i>string queue number mbs number</i>
Tree	<a href="#">mbs</a>
Range	0 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

### **multipoint** *boolean*

Synopsis	Apply as a multicast queue
Context	<b>configure qos shared-queue</b> <i>string queue number multipoint boolean</i>
Tree	<a href="#">multipoint</a>
Introduced	16.0.R1
Platforms	All

### **queue-type** *keyword*

Synopsis	Method used to service queue from hardware perspective
Context	<b>configure qos shared-queue</b> <i>string queue number queue-type keyword</i>
Tree	<a href="#">queue-type</a>
Options	expedited, auto-expedited, best-effort
Default	auto-expedited
Introduced	16.0.R1

---

Platforms All

### **rate**

Synopsis Enter the **rate** context

Context **configure qos shared-queue** *string queue number rate*

Tree [rate](#)

Introduced 16.0.R1

Platforms All

### **cir number**

Synopsis CIR percentage rate

Context **configure qos shared-queue** *string queue number rate cir number*

Tree [cir](#)

Range 0 to 100

Units percent

Introduced 16.0.R1

Platforms All

### **fir number**

Synopsis FIR percentage rate

Context **configure qos shared-queue** *string queue number rate fir number*

Tree [fir](#)

Range 0 to 100

Units percent

Default 0

Introduced 16.0.R2

Platforms All

### **pir number**

Synopsis PIR percentage rate

Context **configure qos shared-queue** *string queue number rate pir number*

Tree	<a href="#">pir</a>
Range	1 to 100
Units	percent
Default	100
Introduced	16.0.R1
Platforms	All

### **slope-policy** [[slope-policy-name](#)] *string*

Synopsis	Enter the <b>slope-policy</b> list instance
Context	<b>configure qos slope-policy</b> <i>string</i>
Tree	<a href="#">slope-policy</a>
Max. Instances	511
Introduced	16.0.R1
Platforms	All

### **[slope-policy-name]** *string*

Synopsis	Slope policy name
Context	<b>configure qos slope-policy</b> <i>string</i>
Tree	<a href="#">slope-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure qos slope-policy</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All



## **exceed-slope**

Synopsis	Enter the <b>exceed-slope</b> context
Context	<b>configure qos slope-policy string exceed-slope</b>
Tree	<a href="#">exceed-slope</a>
Introduced	16.0.R1
Platforms	All

## **admin-state keyword**

Synopsis	Administrative state of the exceed-priority RED slope
Context	<b>configure qos slope-policy string exceed-slope admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Introduced	16.0.R1
Platforms	All

## **max-avg number**

Synopsis	Buffer percentage after which drop probability is one
Context	<b>configure qos slope-policy string exceed-slope max-avg number</b>
Tree	<a href="#">max-avg</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

## **max-prob number**

Synopsis	Drop probability to increase at exceed start-average
Context	<b>configure qos slope-policy string exceed-slope max-prob number</b>
Tree	<a href="#">max-prob</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

**start-avg** *number*

Synopsis	Buffer percentage after which drop probability starts to rise above zero
Context	<b>configure</b> qos slope-policy <i>string</i> exceed-slope start-avg <i>number</i>
Tree	start-avg
Range	0 to 100
Introduced	16.0.R1
Platforms	All

**high-slope**

Synopsis	Enter the <b>high-slope</b> context
Context	<b>configure</b> qos slope-policy <i>string</i> high-slope
Tree	high-slope
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the high priority RED slope
Context	<b>configure</b> qos slope-policy <i>string</i> high-slope admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

**max-avg** *number*

Synopsis	Buffer percentage after which drop probability is one
Context	<b>configure</b> qos slope-policy <i>string</i> high-slope max-avg <i>number</i>
Tree	max-avg
Range	0 to 100
Introduced	16.0.R1
Platforms	All

### **max-prob** *number*

Synopsis	Drop probability to increase at high start-average
Context	<b>configure</b> qos slope-policy <i>string</i> high-slope max-prob <i>number</i>
Tree	max-prob
Range	0 to 100
Introduced	16.0.R1
Platforms	All

### **start-avg** *number*

Synopsis	Buffer percentage after which drop probability starts to rise above zero
Context	<b>configure</b> qos slope-policy <i>string</i> high-slope start-avg <i>number</i>
Tree	start-avg
Range	0 to 100
Introduced	16.0.R1
Platforms	All

### **highplus-slope**

Synopsis	Enter the <b>highplus-slope</b> context
Context	<b>configure</b> qos slope-policy <i>string</i> highplus-slope
Tree	highplus-slope
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the highplus priority RED slope
Context	<b>configure</b> qos slope-policy <i>string</i> highplus-slope admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

### **max-avg** *number*

Synopsis	Buffer percentage after which drop probability is one
Context	<b>configure</b> qos slope-policy <i>string</i> highplus-slope max-avg <i>number</i>
Tree	max-avg
Range	0 to 100
Introduced	16.0.R1
Platforms	All

### **max-prob** *number*

Synopsis	Drop probability increase at highplus start-average
Context	<b>configure</b> qos slope-policy <i>string</i> highplus-slope max-prob <i>number</i>
Tree	max-prob
Range	0 to 100
Introduced	16.0.R1
Platforms	All

### **start-avg** *number*

Synopsis	Buffer percentage after which drop probability starts to rise above zero
Context	<b>configure</b> qos slope-policy <i>string</i> highplus-slope start-avg <i>number</i>
Tree	start-avg
Range	0 to 100
Introduced	16.0.R1
Platforms	All

### **low-slope**

Synopsis	Enter the <b>low-slope</b> context
Context	<b>configure</b> qos slope-policy <i>string</i> low-slope
Tree	low-slope
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the low priority RED slope
Context	<b>configure</b> <a href="#">qos slope-policy</a> <i>string</i> <a href="#">low-slope</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Introduced	16.0.R1
Platforms	All

**max-avg** *number*

Synopsis	Buffer percentage after which drop probability is one
Context	<b>configure</b> <a href="#">qos slope-policy</a> <i>string</i> <a href="#">low-slope</a> <a href="#">max-avg</a> <i>number</i>
Tree	<a href="#">max-avg</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

**max-prob** *number*

Synopsis	Drop probability to increase at low start-average
Context	<b>configure</b> <a href="#">qos slope-policy</a> <i>string</i> <a href="#">low-slope</a> <a href="#">max-prob</a> <i>number</i>
Tree	<a href="#">max-prob</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

**start-avg** *number*

Synopsis	Buffer percentage after which drop probability starts to rise above zero
Context	<b>configure</b> <a href="#">qos slope-policy</a> <i>string</i> <a href="#">low-slope</a> <a href="#">start-avg</a> <i>number</i>
Tree	<a href="#">start-avg</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

**time-average-factor** *number*

Synopsis	Weighting factor to calculate shared buffer utilization
Context	<b>configure</b> <a href="#">qos slope-policy</a> <i>string</i> <b>time-average-factor</b> <i>number</i>
Tree	<a href="#">time-average-factor</a>
Range	0 to 15
Default	7
Introduced	16.0.R1
Platforms	All

### 3.38 redundancy commands

```

configure
- redundancy
  - apply-groups reference
  - apply-groups-exclude reference
  - bgp-evpn
    - ethernet-segment
      - activation-timer number
      - apply-groups reference
      - apply-groups-exclude reference
      - boot-timer number
    - bgp-mh
      - apply-groups reference
      - apply-groups-exclude reference
      - site
        - activation-timer number
        - boot-timer number
        - min-down-timer number
  - cert-sync boolean
  - mgmt-ethernet
    - revert number
  - multi-chassis
    - ipsec-domain number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - designated-role keyword
      - priority number
      - revertive boolean
      - tunnel-group reference
    - options
      - sub-mgmt
        - apply-groups reference
        - apply-groups-exclude reference
        - dhcp-lease-time-threshold number
  - peer (ipv4-address-no-zone | ipv6-address-no-zone)
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication-key string
    - description string
    - mc-endpoint
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - bfd boolean
      - boot-timer number
      - hold-on-neighbor-failure number
      - keep-alive-interval number
      - passive-mode boolean
      - system-priority number
    - mc-ipsec
      - apply-groups reference
      - apply-groups-exclude reference
      - bfd-liveness boolean
      - discovery-interval
        - boot number
        - interval-secs number
      - domain reference
      - admin-state keyword

```

configure redundancy multi-chassis peer mc-ipsec domain apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- hold-on-neighbor-failure number
- keep-alive-interval number
- tunnel-group reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - peer-group number
  - priority number
- mc-lag
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - hold-on-neighbor-failure number
  - keep-alive-interval number
  - lag reference
    - apply-groups reference
    - apply-groups-exclude reference
    - lacp-key number
    - remote-lag string
    - source-bmac-lsb (keyword | bmac-lsb)
    - system-id string
    - system-priority number
- mc-ring
  - apply-groups reference
  - apply-groups-exclude reference
  - ring string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - in-band-control-path
      - debounce boolean
      - dst-ip string
      - interface string
      - max-debounce-time number
      - service-name string
    - path-b
      - apply-groups reference
      - apply-groups-exclude reference
      - range start number end number
      - wildcard-saps boolean
    - path-excl
      - apply-groups reference
      - apply-groups-exclude reference
      - range start number end number
      - wildcard-saps boolean
    - ring-node string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - dst-ip string
      - interval number
      - service-name string
      - src-ip string
      - src-mac (keyword | ring-node-mac-address)
      - vlan string
      - srrp-instance number
      - type keyword
  - peer-name string
  - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- sync
  - admin-state keyword
  - apply-groups reference

```



## configure redundancy multi-chassis peer sync apply-groups-exclude

```

- apply-groups-exclude reference
- diameter-node
  - node reference
    - apply-groups reference
    - apply-groups-exclude reference
    - sync-tag string
- diameter-proxy boolean
- igmp boolean
- igmp-snooping boolean
- ipsec boolean
- l2tp boolean
- local-dhcp-server boolean
- mc-ring boolean
- mld boolean
- mld-snooping boolean
- nat
  - nat-group reference
    - apply-groups reference
    - apply-groups-exclude reference
    - sync-tag string
- pim-snooping
  - saps boolean
  - spoke-sdps boolean
- python boolean
- srrp boolean
- sub-host-trk boolean
- sub-mgmt
  - ipoe boolean
  - pppoe boolean
- tags
  - lag reference
    - apply-groups reference
    - apply-groups-exclude reference
    - range start string end string
      - apply-groups reference
      - apply-groups-exclude reference
      - sync-tag string
    - sync-tag string
  - port reference
    - apply-groups reference
    - apply-groups-exclude reference
    - range start string end string
      - apply-groups reference
      - apply-groups-exclude reference
      - sync-tag string
    - sync-tag string
  - pw-port reference
    - apply-groups reference
    - apply-groups-exclude reference
    - range start string end string
      - apply-groups reference
      - apply-groups-exclude reference
      - sync-tag string
    - sync-tag string
  - sdp number
    - apply-groups reference
    - apply-groups-exclude reference
    - range start number end number
      - apply-groups reference
      - apply-groups-exclude reference
      - sync-tag string
    - sync-tag string
- track-srrp number
  - apply-groups reference

```

---

configure redundancy multi-chassis peer sync track-srrp apply-groups-exclude

- **apply-groups-exclude** *reference*
- **l2tp-tunnel-id-range**
  - **end** *number*
  - **start** *number*
- **transport-encryption**
  - **application** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **keychain** *reference*
- **tunnel-group** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **sync-tag** *string*
- **rollback-sync** *keyword*
- **srrp**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **auto-srrp-id-range**
    - **end** *number*
    - **start** *number*
- **switchover-exec** *string*
- **synchronize** *keyword*

### 3.38.1 redundancy command descriptions

#### redundancy

Synopsis	Enter the <b>redundancy</b> context
Context	<b>configure</b> <a href="#">redundancy</a>
Tree	<a href="#">redundancy</a>
Introduced	16.0.R1
Platforms	All

#### bgp-evpn

Synopsis	Enter the <b>bgp-evpn</b> context
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">bgp-evpn</a>
Tree	<a href="#">bgp-evpn</a>
Introduced	16.0.R1
Platforms	All

#### ethernet-segment

Synopsis	Enter the <b>ethernet-segment</b> context
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">bgp-evpn</a> <a href="#">ethernet-segment</a>
Tree	<a href="#">ethernet-segment</a>
Introduced	16.0.R1
Platforms	All

#### activation-timer *number*

Synopsis	Time before Ethernet segment activated on DF-elected PE
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">bgp-evpn</a> <a href="#">ethernet-segment</a> <a href="#">activation-timer</a> <i>number</i>
Tree	<a href="#">activation-timer</a>
Range	0 to 100
Units	seconds
Default	3
Introduced	16.0.R1

Platforms All

### **boot-timer** *number*

Synopsis	Time before BGP EVPN multi-homing DF election algorithm
Context	<b>configure</b> <b>redundancy</b> <b>bgp-evpn</b> <b>ethernet-segment</b> <b>boot-timer</b> <i>number</i>
Tree	<b>boot-timer</b>
Description	<p>This command allows the necessary time for the control plane protocols to come up upon PE boot-up before bringing up the ESs and running the DF algorithm.</p> <p>The following considerations apply to this command:</p> <ul style="list-style-type: none"> <li>• The <b>boot-timer</b> command must provide enough time to allow the IOMs and BGP sessions to come up before exchanging ES routes and running the DF election for each EVI or ISID.</li> <li>• The boot-timer is synchronized across CPMs and is relative to the system up time; it is not changed or reset upon CPM switchover.</li> <li>• The boot-timer is never interrupted (the <b>es-activation-timer</b>, however, can be interrupted if there is a new event triggering the DF election).</li> <li>• The boot-timer runs per EVI or ISID on the ESs in the system. If the system up time (time the system has been up since the last reboot) is less than the <b>boot-timer</b> value, the system does not run the DF election for any EVI or ISID. When the <b>boot-timer</b> value expires, the DF election runs, and if the system is elected DF for the EVI or ISID, the <b>es-activation-timer</b> is triggered.</li> <li>• The system does not advertise ES routes until the boot timer expires, which guarantees that the peer ES PEs only run the DF election when the PE is ready to become the DF, if required.</li> </ul>
Range	0 to 1800
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

### **bgp-mh**

Synopsis	Enter the <b>bgp-mh</b> context
Context	<b>configure</b> <b>redundancy</b> <b>bgp-mh</b>
Tree	<b>bgp-mh</b>
Introduced	16.0.R1
Platforms	All

## site

Synopsis	Enter the <b>site</b> context
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">bgp-mh</a> <a href="#">site</a>
Tree	<a href="#">site</a>
Introduced	16.0.R1
Platforms	All

## activation-timer *number*

Synopsis	Time to wait for BGP updates from remote PEs
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">bgp-mh</a> <a href="#">site</a> <a href="#">activation-timer</a> <i>number</i>
Tree	<a href="#">activation-timer</a>
Range	0 to 100
Units	seconds
Default	2
Introduced	16.0.R1
Platforms	All

## boot-timer *number*

Synopsis	Wait time after reboot to run the DF election algorithm
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">bgp-mh</a> <a href="#">site</a> <a href="#">boot-timer</a> <i>number</i>
Tree	<a href="#">boot-timer</a>
Range	0 to 600
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

## min-down-timer *number*

Synopsis	Min downtime for BGP multi-homing site after transition
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">bgp-mh</a> <a href="#">site</a> <a href="#">min-down-timer</a> <i>number</i>
Tree	<a href="#">min-down-timer</a>

Description	<p>This command configures the BGP multi-homing site minimum down time. When this value is set and the site goes operationally down, it remains operationally down for at least the length of time configured by this timer, regardless of whether other state changes might cause the site to go operationally up. This timer is restarted every time the site transitions from operationally up to down.</p> <p>This timer is optimized in the following circumstances:</p> <ul style="list-style-type: none"> <li>• If the site goes down on the DF but there are no BGP multi-homing peers with the same site in an up state, this timer is not used.</li> <li>• If the site goes down on the DF but there are no active BGP multi-homing peers, this timer is not used.</li> <li>• If this timer is active and a BGP multihoming update is received from the DF indicating its site is down, this timer is immediately terminated and the BGP multihoming algorithm is triggered to determine whether this PE should become the DF.</li> </ul>
Range	1 to 100
Units	seconds
Introduced	16.0.R1
Platforms	All

### **cert-sync** *boolean*

Synopsis	Automatically synchronize certificate files
Context	<b>configure</b> <a href="#">redundancy</a> <b>cert-sync</b> <i>boolean</i>
Tree	<a href="#">cert-sync</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **mgmt-ethernet**

Synopsis	Enable the <b>mgmt-ethernet</b> context
Context	<b>configure</b> <a href="#">redundancy</a> <b>mgmt-ethernet</b>
Tree	<a href="#">mgmt-ethernet</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**revert *number***

Synopsis	Time before reverting standby CPM management Ethernet port to active CPM
Context	<b>configure</b> <a href="#">redundancy mgmt-ethernet</a> <a href="#">revert</a> <i>number</i>
Tree	<a href="#">revert</a>
Range	1 to 300
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**multi-chassis**

Synopsis	Enter the <b>multi-chassis</b> context
Context	<b>configure</b> <a href="#">redundancy multi-chassis</a>
Tree	<a href="#">multi-chassis</a>
Description	Commands in this context configure the attributes of multi-chassis redundancy.
Introduced	16.0.R1
Platforms	All

**ipsec-domain [*id*] *number***

Synopsis	Enter the <b>ipsec-domain</b> list instance
Context	<b>configure</b> <a href="#">redundancy multi-chassis ipsec-domain</a> <i>number</i>
Tree	<a href="#">ipsec-domain</a>
Description	Commands in this context configure an IPsec domain used for N:M IPsec redundancy.
Max. Instances	64
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[*id*] *number***

Synopsis	IPsec domain ID
Context	<b>configure</b> <a href="#">redundancy multi-chassis ipsec-domain</a> <i>number</i>
Tree	<a href="#">ipsec-domain</a>

Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the IPsec domain
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">ipsec-domain</a> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **designated-role** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Designated role for the IPsec domain
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">ipsec-domain</a> <i>number</i> <b>designated-role</b> <i>keyword</i>
Tree	<a href="#">designated-role</a>
Description	This command configures the designated role of the tunnel group in the IPsec domain.
Options	standby, active
Default	standby
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **priority** *number*

Synopsis	Priority for the IPsec domain
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">ipsec-domain</a> <i>number</i> <b>priority</b> <i>number</i>
Tree	<a href="#">priority</a>



Description	This command configures the priority for the tunnel group in the IPsec domain. The node with the higher priority is more likely to be elected as active within the domain.
Range	0 to 255
Default	100
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### revertive *boolean*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable revertive behavior for the tunnel group
Context	<b>configure</b> <a href="#">redundancy multi-chassis ipsec-domain</a> <i>number</i> <a href="#">revertive</a> <i>boolean</i>
Tree	<a href="#">revertive</a>
Description	When configured to <b>true</b> , the router enables the revertive behavior of the tunnel group, which allows a router in an N:M domain to automatically take over as the active router in the domain when it becomes eligible to do so.  When configured to <b>false</b> , the revertive behavior of the tunnel group is disabled.
Default	false
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### tunnel-group *reference*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Tunnel group ID for an IPsec domain
Context	<b>configure</b> <a href="#">redundancy multi-chassis ipsec-domain</a> <i>number</i> <a href="#">tunnel-group</a> <i>reference</i>
Tree	<a href="#">tunnel-group</a>
Description	This command specifies the tunnel group ID for the IPsec domain.
Reference	<b>configure</b> <a href="#">isa tunnel-group</a> <i>number</i>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## options

Synopsis	Enter the <b>options</b> context
Context	<b>configure</b> <a href="#">redundancy multi-chassis options</a>
Tree	<a href="#">options</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## sub-mgmt

Synopsis	Enter the <b>sub-mgmt</b> context
Context	<b>configure</b> <a href="#">redundancy multi-chassis options sub-mgmt</a>
Tree	<a href="#">sub-mgmt</a>
Description	Commands in this context configure subscriber management options for multi-chassis redundancy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## dhcp-lease-time-threshold *number*

Synopsis	DHCP lease threshold to skip MCS synchronization
Context	<b>configure</b> <a href="#">redundancy multi-chassis options sub-mgmt dhcp-lease-time-threshold</a> <i>number</i>
Tree	<a href="#">dhcp-lease-time-threshold</a>
Description	This command configures the DHCP lease time threshold to skip MCS synchronization. DHCP leases for the <b>sub-mgmt</b> MCS applications are eligible to skip synchronization if the committed lease time is less than the active threshold on a multi-chassis peer. The active threshold is the minimum value of the thresholds configured on the nodes at each end of a multi-chassis peer. The threshold is inactive when it is unconfigured on at least one end of the multi-chassis peer.
Range	0 to 86400
Units	seconds
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**peer** [*ip-address*] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>peer</b>
Description	This command configures the IP address of the peer in a redundant multi-chassis setup, and enters the context for further application-specific configuration options.
Max. Instances	20
Introduced	16.0.R1
Platforms	All

**[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Peer IP address
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>peer</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the MC redundancy peer
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

## authentication-key *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Authentication key used between the node and MC peer
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">authentication-key</a> <i>string</i>
Tree	<a href="#">authentication-key</a>
String Length	1 to 54
Introduced	16.0.R1
Platforms	All

## description *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

## mc-endpoint

Synopsis	Enable the <b>mc-endpoint</b> context
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-endpoint</a>
Tree	<a href="#">mc-endpoint</a>
Introduced	22.10.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of the MC-EP
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-endpoint</a> <a href="#">admin-state</a> <i>keyword</i>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	22.10.R1
Platforms	All

### **bfd boolean**

Synopsis	Enable BFD detection for the MC-EP peering tunnel
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-endpoint bfd boolean</a>
Tree	<a href="#">bfd</a>
Description	When configured to <b>true</b> , the system uses Bidirectional Forwarding Detection (BFD) to control the state of the associated protocol interface, where the state of the protocol interface is tied to the state of the BFD session between the local and remote nodes.  The BFD settings are configured in the IP interface contexts.
Default	false
Introduced	22.10.R1
Platforms	All

### **boot-timer number**

Synopsis	Time to attempt connection before declaring failure
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-endpoint boot-timer number</a>
Tree	<a href="#">boot-timer</a>
Description	This command configures the time interval to attempt connection that applies after the node reboots. This command specifies the time the multi-chassis endpoint (MC-EP) protocol takes to establish a connection before declaring a connection failure with the remote peer. When the time interval expires, all configured MC-EPs revert to single chassis behavior, activating the best local pseudowire.
Range	1 to 600
Units	seconds
Default	300
Introduced	22.10.R1
Platforms	All

**hold-on-neighbor-failure** *number*

Synopsis	Number of keepalive intervals to wait for packets
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>mc-endpoint</b> <b>hold-on-neighbor-failure</b> <i>number</i>
Tree	<a href="#">hold-on-neighbor-failure</a>
Description	This command configures the number of keepalive intervals that the local node waits for packets from the MC-EP peer before declaring a connection failure. When the number of intervals is reached, all configured MC-EPs revert to single chassis behavior, activating the best local pseudowire.
Range	2 to 25
Default	3
Introduced	22.10.R1
Platforms	All

**keep-alive-interval** *number*

Synopsis	Interval for exchange of keepalive messages
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>mc-endpoint</b> <b>keep-alive-interval</b> <i>number</i>
Tree	<a href="#">keep-alive-interval</a>
Description	This command configures the interval for which keepalive messages are exchanged between two systems participating as MC-EP when BFD is not active. The fast keepalive messages are used to detect remote node failure.
Range	5 to 500
Default	10
Introduced	22.10.R1
Platforms	All

**passive-mode** *boolean*

Synopsis	Enable passive mode for the MC-EP tunnel
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>mc-endpoint</b> <b>passive-mode</b> <i>boolean</i>
Tree	<a href="#">passive-mode</a>
Description	When configured to <b>true</b> , the system enables passive mode behavior for the MC-EP protocol. Assuming the remote pair is configured with regular MC-EP in passive mode, the MC-EP pair remains dormant until two of the pseudowires in an MC-EP are activated by the remote PEs.

When one pseudowire is active, the dormant MC-EP pair becomes active. The regular mechanism to select the best pseudowire between the active pair is initiated, and the system blocks the Rx and Tx directions of the other pseudowire.

Default	false
Introduced	22.10.R1
Platforms	All

### **system-priority** *number*

Synopsis	System priority of the MC-EP
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">mc-endpoint system-priority</a> <i>number</i>
Tree	<a href="#">system-priority</a>
Description	This command configures the system priority of the MC-EP. The peer configured with the lower value is selected as the master. If the system priority values are equal, the peer with the higher system ID (chassis MAC address) becomes the master.
Range	0 to 255
Default	0
Introduced	22.10.R1
Platforms	All

### **mc-ipsec**

Synopsis	Enable the <b>mc-ipsec</b> context
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">mc-ipsec</a>
Tree	<a href="#">mc-ipsec</a>
Description	This command enables the context to configure multi-chassis peer parameters.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **bfd-liveness** *boolean*

Synopsis	Enable BFD
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">mc-ipsec bfd-liveness</a> <i>boolean</i>
Tree	<a href="#">bfd-liveness</a>

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **discovery-interval**

Synopsis	Enter the <b>discovery-interval</b> context
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-ipsec discovery-interval</a>
Tree	<a href="#">discovery-interval</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **boot number**

Synopsis	Maximum interval after system bootup
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-ipsec discovery-interval boot</a> <i>number</i>
Tree	<a href="#">boot</a>
Range	1 to 1800
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **interval-secs number**

Synopsis	Maximum discovery interval
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-ipsec discovery-interval interval-secs</a> <i>number</i>
Tree	<a href="#">interval-secs</a>
Range	1 to 1800
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**domain** [*id*] *reference*

Synopsis	Enter the <b>domain</b> list instance
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">mc-ipsec</a> <a href="#">domain</a> <i>reference</i>
Tree	<a href="#">domain</a>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[id]** *reference*

Synopsis	IPsec domain ID
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">mc-ipsec</a> <a href="#">domain</a> <i>reference</i>
Tree	<a href="#">domain</a>
Reference	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">ipsec-domain</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the IPsec domain
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">mc-ipsec</a> <a href="#">domain</a> <i>reference</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**hold-on-neighbor-failure** *number*

Synopsis	Hold time on neighbor failure
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">mc-ipsec</a> <a href="#">hold-on-neighbor-failure</a> <i>number</i>

Tree	<a href="#">hold-on-neighbor-failure</a>
Range	2 to 25
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **keep-alive-interval** *number*

Synopsis	Keepalive interval
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">mc-ipsec keep-alive-interval</a> <i>number</i>
Tree	<a href="#">keep-alive-interval</a>
Range	5 to 500
Units	deciseconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tunnel-group** [[tunnel-group-id](#)] *reference*

Synopsis	Enter the <b>tunnel-group</b> list instance
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">mc-ipsec tunnel-group</a> <i>reference</i>
Tree	<a href="#">tunnel-group</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[tunnel-group-id]** *reference*

Synopsis	Tunnel group ID
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">mc-ipsec tunnel-group</a> <i>reference</i>
Tree	<a href="#">tunnel-group</a>
Reference	<b>configure</b> <a href="#">isa tunnel-group</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the peer IPsec tunnel group

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [mc-ipsec tunnel-group](#) *reference* [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **peer-group** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Peer tunnel group

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [mc-ipsec tunnel-group](#) *reference* [peer-group](#) *number*

Tree [peer-group](#)

Range 1 to 64

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **priority** *number*

Synopsis Tunnel group priority

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [mc-ipsec tunnel-group](#) *reference* [priority](#) *number*

Tree [priority](#)

Range 0 to 255

Default 100

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## mc-lag

Synopsis	Enter the <b>mc-lag</b> context
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>mc-lag</b>
Tree	<b>mc-lag</b>
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of MC-LAG
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>mc-lag</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

## hold-on-neighbor-failure *number*

Synopsis	Time to wait for packets before node failure assumed
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>mc-lag</b> <b>hold-on-neighbor-failure</b> <i>number</i>
Tree	<b>hold-on-neighbor-failure</b>
Range	2 to 25
Default	3
Introduced	16.0.R1
Platforms	All

## keep-alive-interval *number*

Synopsis	Keepalive timer value
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>mc-lag</b> <b>keep-alive-interval</b> <i>number</i>

Tree	<a href="#">keep-alive-interval</a>
Range	5 to 500
Units	deciseconds
Default	10
Introduced	16.0.R1
Platforms	All

### **lag** [[lag-name](#)] *reference*

Synopsis	Enter the <b>lag</b> list instance
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-lag</a> <a href="#">lag</a> <i>reference</i>
Tree	<a href="#">lag</a>
Introduced	16.0.R1
Platforms	All

### **[lag-name]** *reference*

Synopsis	LAG name
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-lag</a> <a href="#">lag</a> <i>reference</i>
Tree	<a href="#">lag</a>
Reference	<b>configure</b> <a href="#">lag</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

### **lACP-key** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key based on the remote MC-LAG
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-lag</a> <a href="#">lag</a> <i>reference</i> <a href="#">lACP-key</a> <i>number</i>
Tree	<a href="#">lACP-key</a>

Range	1 to 65535
Introduced	16.0.R1
Platforms	All

**remote-lag** *string*

Synopsis	LAG name
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">mc-lag lag</a> <i>reference</i> <a href="#">remote-lag string</a>
Tree	<a href="#">remote-lag</a>
String Length	1 to 27
Introduced	16.0.R1
Platforms	All

**source-bmac-lsb** (*keyword* | *bmac-lsb*)

Synopsis	MAC address value to apply to all ingress traffic
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">mc-lag lag</a> <i>reference</i> <a href="#">source-bmac-lsb</a> ( <i>keyword</i>   <i>bmac-lsb</i> )
Tree	<a href="#">source-bmac-lsb</a>
Options	use-lacp-key
Introduced	16.0.R1
Platforms	All

**system-id** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	ID based on the remote MC-LAG
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">mc-lag lag</a> <i>reference</i> <a href="#">system-id string</a>
Tree	<a href="#">system-id</a>
Introduced	16.0.R1
Platforms	All

**system-priority** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Priority based on the remote MC-LAG
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">mc-lag lag reference</a> <b>system-priority</b> <i>number</i>
Tree	<a href="#">system-priority</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

**mc-ring**

Synopsis	Enter the <b>mc-ring</b> context
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">mc-ring</a>
Tree	<a href="#">mc-ring</a>
Introduced	16.0.R1
Platforms	All

**ring** [[sync-tag](#)] *string*

Synopsis	Enter the <b>ring</b> list instance
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">mc-ring ring</a> <i>string</i>
Tree	<a href="#">ring</a>
Introduced	16.0.R1
Platforms	All

**[sync-tag]** *string*

Synopsis	Tag for synchronizing with the multi-chassis peer
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">mc-ring ring</a> <i>string</i>

Tree	<a href="#">ring</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the multi-chassis ring
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">mc-ring</a> <a href="#">ring</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **in-band-control-path**

Synopsis	Enter the <b>in-band-control-path</b> context
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">mc-ring</a> <a href="#">ring</a> <i>string</i> <b>in-band-control-path</b>
Tree	<a href="#">in-band-control-path</a>
Introduced	16.0.R1
Platforms	All

### **debounce** *boolean*

Synopsis	Enable inband control path debouncing
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">mc-ring</a> <a href="#">ring</a> <i>string</i> <a href="#">in-band-control-path</a> <b>debounce</b> <i>boolean</i>
Tree	<a href="#">debounce</a>
Default	true
Introduced	16.0.R1
Platforms	All



### **dst-ip** *string*

Synopsis	IP address of the in-band control path peer
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>mc-ring</b> <b>ring</b> <i>string</i> <b>in-band-control-path</b> <b>dst-ip</b> <i>string</i>
Tree	<b>dst-ip</b>
Introduced	16.0.R1
Platforms	All

### **interface** *string*

Synopsis	Interface to verify in-band control path
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>mc-ring</b> <b>ring</b> <i>string</i> <b>in-band-control-path</b> <b>interface</b> <i>string</i>
Tree	<b>interface</b>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

### **max-debounce-time** *number*

Synopsis	Maximum delay after a failure when debouncing is active
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>mc-ring</b> <b>ring</b> <i>string</i> <b>in-band-control-path</b> <b>max-debounce-time</b> <i>number</i>
Tree	<b>max-debounce-time</b>
Range	5 to 200
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

### **service-name** *string*

Synopsis	Administrative service name
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>mc-ring</b> <b>ring</b> <i>string</i> <b>in-band-control-path</b> <b>service-name</b> <i>string</i>

Tree	<a href="#">service-name</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

## path-b

Synopsis	Enter the <b>path-b</b> context
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">mc-ring ring</a> <i>string</i> <b>path-b</b>
Tree	<a href="#">path-b</a>
Introduced	16.0.R1
Platforms	All

## range start number end number

Synopsis	Add a list entry for <b>range</b>
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">mc-ring ring</a> <i>string</i> <a href="#">path-b</a> <b>range start number end number</b>
Tree	<a href="#">range</a>
Introduced	16.0.R1
Platforms	All

## start number

Synopsis	Lower bound of the VLAN range
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">mc-ring ring</a> <i>string</i> <a href="#">path-b</a> <b>range start number end number</b>
Tree	<a href="#">range</a>
Range	0 to 4094
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**end number**

Synopsis	Upper bound of the VLAN range
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-ring ring</a> <a href="#">string</a> <a href="#">path-b</a> <a href="#">range start number end number</a>
Tree	<a href="#">range</a>
Range	0 to 4094
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**wildcard-saps boolean**

Synopsis	Include the SAPs starting with a wildcard '*'
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-ring ring</a> <a href="#">string</a> <a href="#">path-b</a> <a href="#">wildcard-saps boolean</a>
Tree	<a href="#">wildcard-saps</a>
Default	false
Introduced	16.0.R4
Platforms	All

**path-excl**

Synopsis	Enter the <b>path-excl</b> context
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-ring ring</a> <a href="#">string</a> <a href="#">path-excl</a>
Tree	<a href="#">path-excl</a>
Introduced	16.0.R1
Platforms	All

**range start number end number**

Synopsis	Add a list entry for <b>range</b>
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-ring ring</a> <a href="#">string</a> <a href="#">path-excl</a> <a href="#">range start number end number</a>
Tree	<a href="#">range</a>
Introduced	16.0.R1

Platforms All

### **start number**

Synopsis Lower bound of the VLAN range

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [mc-ring ring](#) [string](#) [path-excl](#) [range](#) [start number](#) [end number](#)

Tree [range](#)

Range 0 to 4094

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **end number**

Synopsis Upper bound of the VLAN range

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [mc-ring ring](#) [string](#) [path-excl](#) [range](#) [start number](#) [end number](#)

Tree [range](#)

Range 0 to 4094

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **wildcard-saps boolean**

Synopsis Include the SAPs starting with a wildcard '\*\*'

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [mc-ring ring](#) [string](#) [path-excl](#) [wildcard-saps](#) [boolean](#)

Tree [wildcard-saps](#)

Default false

Introduced 16.0.R4

Platforms All

**ring-node** [*name*] *string*

Synopsis	Enter the <b>ring-node</b> list instance
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">mc-ring</a> <a href="#">ring</a> <i>string</i> <a href="#">ring-node</a> <i>string</i>
Tree	<a href="#">ring-node</a>
Introduced	16.0.R1
Platforms	All

**[name]** *string*

Synopsis	Name of the multi-chassis ring access node
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">mc-ring</a> <a href="#">ring</a> <i>string</i> <a href="#">ring-node</a> <i>string</i>
Tree	<a href="#">ring-node</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the ring node verification
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">mc-ring</a> <a href="#">ring</a> <i>string</i> <a href="#">ring-node</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**dst-ip** *string*

Synopsis	Destination IP address for access node connection
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">mc-ring</a> <a href="#">ring</a> <i>string</i> <a href="#">ring-node</a> <i>string</i> <a href="#">dst-ip</a> <i>string</i>
Tree	<a href="#">dst-ip</a>

Introduced	16.0.R1
Platforms	All

### **interval** *number*

Synopsis	Connection verification interval
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>mc-ring</b> <b>ring</b> <i>string</i> <b>ring-node</b> <i>string</i> <b>interval</b> <i>number</i>
Tree	<b>interval</b>
Range	1 to 6000
Units	minutes
Default	5
Introduced	16.0.R1
Platforms	All

### **service-name** *string*

Synopsis	Administrative service name
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>mc-ring</b> <b>ring</b> <i>string</i> <b>ring-node</b> <i>string</i> <b>service-name</b> <i>string</i>
Tree	<b>service-name</b>
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

### **src-ip** *string*

Synopsis	Source IP address for access node connection
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>mc-ring</b> <b>ring</b> <i>string</i> <b>ring-node</b> <i>string</i> <b>src-ip</b> <i>string</i>
Tree	<b>src-ip</b>
Introduced	16.0.R1
Platforms	All

**src-mac** (*keyword* | *ring-node-mac-address*)

Synopsis	Source MAC address for the access node connection
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">mc-ring ring</a> <i>string ring-node string src-mac</i> ( <i>keyword</i>   <i>ring-node-mac-address</i> )
Tree	<a href="#">src-mac</a>
Options	system-mac-address
Default	system-mac-address
Introduced	16.0.R1
Platforms	All

**vlan** *string*

Synopsis	VLAN ID for access node connection
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">mc-ring ring</a> <i>string ring-node string vlan string</i>
Tree	<a href="#">vlan</a>
String Length	1 to 11
Introduced	16.0.R1
Platforms	All

**srrp-instance** [*id*] *number*

Synopsis	Add a list entry for <b>srrp-instance</b>
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">mc-ring ring</a> <i>string srrp-instance number</i>
Tree	<a href="#">srrp-instance</a>
Max. Instances	2
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	SRRP instance ID
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">mc-ring ring</a> <i>string srrp-instance number</i>

Tree	<a href="#">srrp-instance</a>
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **type** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Type of the multi-chassis ring
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">mc-ring</a> <a href="#">ring</a> <i>string</i> <b>type</b> <i>keyword</i>
Tree	<a href="#">type</a>
Options	layer-2, layer-3
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **peer-name** *string*

Synopsis	Multi-chassis peer name
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">peer-name</a> <i>string</i>
Tree	<a href="#">peer-name</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

### **source-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



Synopsis	Source address to communicate with the MC peer
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">source-address</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> )
Tree	<a href="#">source-address</a>
Introduced	16.0.R1
Platforms	All

## sync

Synopsis	Enable the <b>sync</b> context
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync</a>
Tree	<a href="#">sync</a>
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of the peer synchronization
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

## diameter-node

Synopsis	Enable the <b>diameter-node</b> context
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync diameter-node</a>
Tree	<a href="#">diameter-node</a>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**node** [*host-name*] *reference*

Synopsis	Enter the <b>node</b> list instance
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">sync diameter-node node</a> <i>reference</i>
Tree	<a href="#">node</a>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[host-name]** *reference*

Synopsis	Origin-Host of the node
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">sync diameter-node node</a> <i>reference</i>
Tree	<a href="#">node</a>
Reference	<b>configure</b> <a href="#">aaa diameter node</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sync-tag** *string*

Synopsis	Sync tag to be used for synchronization
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">sync diameter-node node</a> <i>reference</i> <a href="#">sync-tag</a> <i>string</i>
Tree	<a href="#">sync-tag</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**diameter-proxy** *boolean*

Synopsis	Synchronize the Diameter proxy data with the multi-chassis peer
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">sync diameter-proxy</a> <i>boolean</i>
Tree	<a href="#">diameter-proxy</a>

---

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **igmp *boolean***

Synopsis	Synchronize IGMP protocol information with the MC peer
Context	<b>configure</b> <b>redundancy multi-chassis peer</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>sync igmp <i>boolean</i></b>
Tree	<a href="#">igmp</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **igmp-snooping *boolean***

Synopsis	Synchronize IGMP snooping information
Context	<b>configure</b> <b>redundancy multi-chassis peer</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>sync igmp-snooping <i>boolean</i></b>
Tree	<a href="#">igmp-snooping</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **ipsec *boolean***

Synopsis	Synchronize IPsec information
Context	<b>configure</b> <b>redundancy multi-chassis peer</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>sync ipsec <i>boolean</i></b>
Tree	<a href="#">ipsec</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### ***l2tp boolean***

Synopsis	Synchronize Layer Two Tunnel Protocol (L2TP)
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync l2tp boolean</a>
Tree	<a href="#">l2tp</a>
Default	false
Introduced	16.0.R1
Platforms	All

### ***local-dhcp-server boolean***

Synopsis	Synchronize DHCP Server information
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync local-dhcp-server boolean</a>
Tree	<a href="#">local-dhcp-server</a>
Default	false
Introduced	16.0.R1
Platforms	All

### ***mc-ring boolean***

Synopsis	Synchronize ring information
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync mc-ring boolean</a>
Tree	<a href="#">mc-ring</a>
Default	false
Introduced	16.0.R1
Platforms	All

### ***mld boolean***

Synopsis	Synchronize MLD protocol information
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync mld boolean</a>
Tree	<a href="#">mld</a>
Default	false

Introduced	16.0.R1
Platforms	All

### **mld-snooping** *boolean*

Synopsis	Synchronize MLD snooping information
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">sync</a> <b>mld-snooping</b> <i>boolean</i>
Tree	<a href="#">mld-snooping</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **nat**

Synopsis	Enable the <b>nat</b> context
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">sync</a> <b>nat</b>
Tree	<a href="#">nat</a>
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nat-group** [*id*] *reference*

Synopsis	Enter the <b>nat-group</b> list instance
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">sync</a> <b>nat</b> <b>nat-group</b> <i>reference</i>
Tree	<a href="#">nat-group</a>
Description	Commands in this context configure multi-chassis synchronization (MCS) for a NAT group. NAT group health information is exchanged between the pair of redundant NAT nodes. The system elects one of the nodes as the active node for the NAT group and the other node becomes the standby node.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[id] reference**

Synopsis	NAT group ID
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync nat nat-group reference</a>
Tree	<a href="#">nat-group</a>
Reference	<b>configure</b> <a href="#">isa nat-group number</a>
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**sync-tag string****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT group synchronization tag
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync nat nat-group reference</a> <a href="#">sync-tag string</a>
Tree	<a href="#">sync-tag</a>
Description	This command configures the synchronization tag for the NAT group. The tag must match the synchronization tag for the NAT group on the peering node.
String Length	1 to 32
Notes	This element is mandatory.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**pim-snooping**

Synopsis	Enter the <b>pim-snooping</b> context
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync pim-snooping</a>
Tree	<a href="#">pim-snooping</a>
Introduced	16.0.R1
Platforms	All

### **saps** *boolean*

Synopsis	Synchronize PIM snooping data with the multi-chassis peer on SDP endpoints
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync pim-snooping saps</a> <i>boolean</i>
Tree	<a href="#">saps</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **spoke-sdps** *boolean*

Synopsis	Synchronize spoke SDPs with the multi-chassis peer
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync pim-snooping spoke-sdps</a> <i>boolean</i>
Tree	<a href="#">spoke-sdps</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **python** *boolean*

Synopsis	Synchronize Python
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync python</a> <i>boolean</i>
Tree	<a href="#">python</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **srrp** *boolean*

Synopsis	Synchronize SRRP information
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync srrp</a> <i>boolean</i>
Tree	<a href="#">srrp</a>
Default	false

Introduced 16.0.R1  
Platforms All

### **sub-host-trk** *boolean*

Synopsis Synchronize subscriber host tracking information  
Context **configure** [redundancy](#) [multi-chassis peer](#) (*ipv4-address-no-zone | ipv6-address-no-zone*) [sync sub-host-trk](#) *boolean*  
Tree [sub-host-trk](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sub-mgmt**

Synopsis Enter the **sub-mgmt** context  
Context **configure** [redundancy](#) [multi-chassis peer](#) (*ipv4-address-no-zone | ipv6-address-no-zone*) [sync sub-mgmt](#)  
Tree [sub-mgmt](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipoe** *boolean*

Synopsis Synchronize subscriber management IPoE information  
Context **configure** [redundancy](#) [multi-chassis peer](#) (*ipv4-address-no-zone | ipv6-address-no-zone*) [sync sub-mgmt ipoe](#) *boolean*  
Tree [ipoe](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pppoe** *boolean*

Synopsis Synchronize subscriber management PPPoE information  
Context **configure** [redundancy](#) [multi-chassis peer](#) (*ipv4-address-no-zone | ipv6-address-no-zone*) [sync sub-mgmt pppoe](#) *boolean*



Tree	<a href="#">pppoe</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## tags

Synopsis	Enter the <b>tags</b> context
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">sync tags</a>
Tree	<a href="#">tags</a>
Introduced	16.0.R1
Platforms	All

## lag [[lag-name](#)] *reference*

Synopsis	Enter the <b>lag</b> list instance
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">sync tags</a> <a href="#">lag reference</a>
Tree	<a href="#">lag</a>
Introduced	16.0.R1
Platforms	All

## [[lag-name](#)] *reference*

Synopsis	LAG name
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">sync tags</a> <a href="#">lag reference</a>
Tree	<a href="#">lag</a>
Reference	<b>configure</b> <a href="#">lag</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

**range start string end string**

Synopsis	Enter the <b>range</b> list instance
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync tags lag</a> <a href="#">reference</a> <a href="#">range start string end string</a>
Tree	<a href="#">range</a>
Introduced	16.0.R1
Platforms	All

**start string**

Synopsis	First encapsulation value
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync tags lag</a> <a href="#">reference</a> <a href="#">range start string end string</a>
Tree	<a href="#">range</a>
String Length	1 to 11
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**end string**

Synopsis	Last encapsulation value
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync tags lag</a> <a href="#">reference</a> <a href="#">range start string end string</a>
Tree	<a href="#">range</a>
String Length	1 to 11
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**sync-tag string****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Synchronization tag
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync tags lag reference range start string end string sync-tag string</a>
Tree	<a href="#">sync-tag</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **sync-tag** *string*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Synchronization tag
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync tags lag reference sync-tag string</a>
Tree	<a href="#">sync-tag</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

### **port** [*id*] *reference*

Synopsis	Enter the <b>port</b> list instance
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync tags port reference</a>
Tree	<a href="#">port</a>
Introduced	16.0.R1
Platforms	All

### **[id]** *reference*

Synopsis	ID of port to be synchronized with multi-chassis peer
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync tags port reference</a>

Tree	<a href="#">port</a>
Reference	<b>configure</b> <a href="#">port</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **range** [start](#) *string* [end](#) *string*

Synopsis	Enter the <b>range</b> list instance
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">sync</a> <a href="#">tags</a> <a href="#">port</a> <i>reference</i> <a href="#">range</a> <a href="#">start</a> <i>string</i> <a href="#">end</a> <i>string</i>
Tree	<a href="#">range</a>
Introduced	16.0.R1
Platforms	All

### **start** *string*

Synopsis	First encapsulation value
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">sync</a> <a href="#">tags</a> <a href="#">port</a> <i>reference</i> <a href="#">range</a> <a href="#">start</a> <i>string</i> <a href="#">end</a> <i>string</i>
Tree	<a href="#">range</a>
String Length	1 to 11
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **end** *string*

Synopsis	Last encapsulation value
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">sync</a> <a href="#">tags</a> <a href="#">port</a> <i>reference</i> <a href="#">range</a> <a href="#">start</a> <i>string</i> <a href="#">end</a> <i>string</i>
Tree	<a href="#">range</a>
String Length	1 to 11
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **sync-tag** *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Synchronization tag

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [sync tags](#) [port reference](#) [range start string end string](#) **sync-tag** *string*

Tree [sync-tag](#)

String Length 1 to 32

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

### **sync-tag** *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Synchronization tag

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [sync tags](#) [port reference](#) **sync-tag** *string*

Tree [sync-tag](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms All

### **pw-port** [[id](#)] *reference*

Synopsis Enter the **pw-port** list instance

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [sync tags](#) **pw-port** *reference*

Tree [pw-port](#)

Introduced 16.0.R4

Platforms All

### [id] *reference*

Synopsis ID of pseudowire port to be synchronized with MC peer

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [sync tags](#) [pw-port](#) *reference*

Tree [pw-port](#)

Reference **configure** [pw-port](#) *number*

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms All

### **range** *start string end string*

Synopsis Enter the **range** list instance

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [sync tags](#) [pw-port](#) *reference* **range** *start string end string*

Tree [range](#)

Introduced 16.0.R4

Platforms All

### **start** *string*

Synopsis First encapsulation value

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [sync tags](#) [pw-port](#) *reference* **range** *start string end string*

Tree [range](#)

String Length 1 to 11

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms All

### **end** *string*

Synopsis Last encapsulation value

Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync tags pw-port reference range start string end string</a>
Tree	<a href="#">range</a>
String Length	1 to 11
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **sync-tag** *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Synchronization tag
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync tags pw-port reference range start string end string sync-tag string</a>
Tree	<a href="#">sync-tag</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **sync-tag** *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Synchronization tag
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync tags pw-port reference sync-tag string</a>
Tree	<a href="#">sync-tag</a>
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

**sdp [id] number**

Synopsis	Enter the <b>sdp</b> list instance
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">sync tags sdp number</a>
Tree	<a href="#">sdp</a>
Introduced	16.0.R1
Platforms	All

**[id] number**

Synopsis	ID of SDP to be synchronized with multi-chassis peer
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">sync tags sdp number</a>
Tree	<a href="#">sdp</a>
Range	1 to 32767
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**range start number end number**

Synopsis	Enter the <b>range</b> list instance
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">sync tags sdp number range start number end number</a>
Tree	<a href="#">range</a>
Introduced	16.0.R1
Platforms	All

**start number**

Synopsis	First virtual circuit ID
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">sync tags sdp number range start number end number</a>
Tree	<a href="#">range</a>
Range	1 to 4294967295
Notes	This element is part of a list key.



Introduced	16.0.R1
Platforms	All

**end number**

Synopsis	Last virtual circuit ID
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync tags sdp number range start number end number</a>
Tree	<a href="#">range</a>
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**sync-tag string****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Synchronization tag
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync tags sdp number range start number end number sync-tag string</a>
Tree	<a href="#">sync-tag</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**sync-tag string****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Synchronization tag
----------	---------------------

Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>sync</b> <b>tags</b> <b>sdp</b> <b>number</b> <b>sync-tag</b> <b>string</b>
Tree	<b>sync-tag</b>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

### **track-srrp** [**id**] *number*

Synopsis	Enter the <b>track-srrp</b> list instance
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>sync</b> <b>track-srrp</b> <b>number</b>
Tree	<b>track-srrp</b>
Introduced	16.0.R1
Platforms	All

### **[id]** *number*

Synopsis	Tracked SRRP instance ID
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>sync</b> <b>track-srrp</b> <b>number</b>
Tree	<b>track-srrp</b>
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **I2tp-tunnel-id-range**

Synopsis	Enter the <b>I2tp-tunnel-id-range</b> context
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>sync</b> <b>track-srrp</b> <b>number</b> <b>I2tp-tunnel-id-range</b>
Tree	<b>I2tp-tunnel-id-range</b>
Introduced	16.0.R1
Platforms	All

**end number**

Synopsis	Upper bound of the L2TP tunnel ID range
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync track-srrp number l2tp-tunnel-id-range end number</a>
Tree	<a href="#">end</a>
Range	1 to 16383
Introduced	16.0.R1
Platforms	All

**start number**

Synopsis	Lower bound of the L2TP tunnel ID range
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync track-srrp number l2tp-tunnel-id-range start number</a>
Tree	<a href="#">start</a>
Range	1 to 16383
Introduced	16.0.R1
Platforms	All

**transport-encryption**

Synopsis	Enter the <b>transport-encryption</b> context
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync transport-encryption</a>
Tree	<a href="#">transport-encryption</a>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**application** [[application-id](#)] *keyword*

Synopsis	Enter the <b>application</b> list instance
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync transport-encryption application keyword</a>
Tree	<a href="#">application</a>
Description	Commands in this context configure the MCS application for transport encryption. The application-id configures an application and a keychain defines the key used for the encryption.

Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[application-id]** *keyword*

Synopsis	Application using transport encryption
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">sync transport-encryption application</a> <i>keyword</i>
Tree	<a href="#">application</a>
Description	This command configures an MCS application for the transport encryption method.
Options	igmp, igmp-snooping, sub-mgmt-ipoe, srrp, mc-ring, mld-snooping, dhcp-server, sub-host-trk, sub-mgmt-pppoe, ipsec, mld, python, l2tp, diam-proxy, pim-snpg-sap, pim-snpg-sdp, diam-node, nat
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **keychain** *reference*

Synopsis	Keychain containing the authentication keys
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">sync transport-encryption application</a> <i>keyword</i> <a href="#">keychain</a> <i>reference</i>
Tree	<a href="#">keychain</a>
Description	This command specifies a keychain that contains authentication keys for the application.
Reference	<b>configure</b> <a href="#">system security keychains</a> <a href="#">keychain</a> <i>string</i>
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tunnel-group** [[tunnel-group-id](#)] *number*

Synopsis	Enter the <b>tunnel-group</b> list instance
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">sync tunnel-group</a> <i>number</i>
Tree	<a href="#">tunnel-group</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[tunnel-group-id] number**

Synopsis Multi-active tunnel group ID

Context **configure** **redundancy** **multi-chassis** **peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **sync** **tunnel-group** *number*

Tree **tunnel-group**

Range 1 to 64

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **sync-tag string**

Synopsis Tag to synchronize the tunnel group with the MC peer

Context **configure** **redundancy** **multi-chassis** **peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **sync** **tunnel-group** *number* **sync-tag** *string*

Tree **sync-tag**

String Length 1 to 32

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rollback-sync keyword**

Synopsis Parameters for redundancy rollback synchronization

Context **configure** **redundancy** **rollback-sync** *keyword*

Tree **rollback-sync**

Options rollback-single, rollback-all

Introduced 16.0.R1

Platforms All

### **srrp**

Synopsis Enter the **srrp** context

---

Context	<b>configure</b> <a href="#">redundancy srrp</a>
Tree	<a href="#">srrp</a>
Description	Commands in this context configure system parameters for BNG CUPS inter-UPF resiliency.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **auto-srrp-id-range**

Synopsis	Enable the <b>auto-srrp-id-range</b> context
Context	<b>configure</b> <a href="#">redundancy srrp auto-srrp-id-range</a>
Tree	<a href="#">auto-srrp-id-range</a>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **end number**

Synopsis	Upper bound of the ID range
Context	<b>configure</b> <a href="#">redundancy srrp auto-srrp-id-range end number</a>
Tree	<a href="#">end</a>
Range	2 to 4294967295
Default	4294967295
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **start number**

Synopsis	Lower bound of the ID range
Context	<b>configure</b> <a href="#">redundancy srrp auto-srrp-id-range start number</a>
Tree	<a href="#">start</a>
Range	1 to 4294967294
Default	2147483648
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**switchover-exec** *string*

Synopsis	CLI script file executed after a redundancy switchover
Context	<b>configure</b> <b>redundancy</b> <b>switchover-exec</b> <i>string</i>
Tree	<b>switchover-exec</b>
Description	<p>This command specifies the location and name of the CLI script file executed following a redundancy switchover from the previously active CPM card. A switchover can happen because of a fatal failure or by manual action.</p> <p>The CLI script file can contain commands for environment settings, classic CLI debug configuration (excluding mirroring settings), and other commands not maintained by the configuration redundancy.</p> <p>The following commands are not supported in the switchover-exec file: <b>clear</b>, <b>configure</b>, <b>candidate</b>, <b>oam</b>, <b>tools</b>, <b>oam</b>, <b>ping</b>, <b>traceroute</b>, <b>mstat</b>, <b>mtrace</b>, and <b>mrinfo</b>.</p>
String Length	1 to 100
Introduced	16.0.R1
Platforms	All

**synchronize** *keyword*

Synopsis	Parameters for redundancy synchronization
Context	<b>configure</b> <b>redundancy</b> <b>synchronize</b> <i>keyword</i>
Tree	<b>synchronize</b>
Options	config, boot-env
Introduced	16.0.R1
Platforms	All

### 3.39 router commands

```

configure
- router string
- aggregates
  - aggregate (ipv4-prefix | ipv6-prefix)
    - aggregator
      - address string
      - as-number number
    - apply-groups reference
    - apply-groups-exclude reference
    - as-set boolean
    - blackhole
      - generate-icmp boolean
    - community string
    - description string
    - discard-component-communities boolean
    - indirect (ipv4-address-no-zone | ipv6-address-no-zone)
    - local-preference number
    - policy reference
    - summary-only boolean
    - tunnel-group number
  - apply-groups reference
  - apply-groups-exclude reference
- allow-icmp-redirect boolean
- allow-icmp6-redirect boolean
- apply-groups reference
- apply-groups-exclude reference
- autonomous-system number
- bfd
  - seamless-bfd
    - peer (ipv4-address-no-zone | ipv6-address-no-zone)
      - apply-groups reference
      - apply-groups-exclude reference
      - discriminator number
- bgp
  - add-paths
    - evpn
      - receive boolean
      - send (number | keyword)
    - ipv4
      - receive boolean
      - send (number | keyword)
    - ipv6
      - receive boolean
      - send (number | keyword)
    - label-ipv4
      - receive boolean
      - send (number | keyword)
    - label-ipv6
      - receive boolean
      - send (number | keyword)
    - mcast-vpn-ipv4
      - receive boolean
      - send number
    - mcast-vpn-ipv6
      - receive boolean
      - send number
    - mvpn-ipv4
      - receive boolean
      - send number

```



configure router bgp add-paths mvpn-ipv6

- **mvpn-ipv6**
  - **receive** *boolean*
  - **send** *number*
- **vpn-ipv4**
  - **receive** *boolean*
  - **send** (*number* | *keyword*)
- **vpn-ipv6**
  - **receive** *boolean*
  - **send** (*number* | *keyword*)
- **admin-state** *keyword*
- **advertise-external**
  - **ipv4** *boolean*
  - **ipv6** *boolean*
  - **label-ipv4** *boolean*
  - **label-ipv6** *boolean*
- **advertise-inactive** *boolean*
- **advertise-ipv6-next-hops**
  - **evpn** *boolean*
  - **ipv4** *boolean*
  - **label-ipv4** *boolean*
  - **label-ipv6** *boolean*
  - **vpn-ipv4** *boolean*
  - **vpn-ipv6** *boolean*
- **aggregator-id-zero** *boolean*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **asn-4-byte** *boolean*
- **authentication-key** *string*
- **authentication-keychain** *reference*
- **backup-path**
  - **ipv4** *boolean*
  - **ipv6** *boolean*
  - **label-ipv4** *boolean*
  - **label-ipv6** *boolean*
- **best-path-selection**
  - **always-compare-med**
    - **med-value** *keyword*
    - **strict-as** *boolean*
- **as-path-ignore**
  - **ipv4** *boolean*
  - **ipv6** *boolean*
  - **l2-vpn** *boolean*
  - **label-ipv4** *boolean*
  - **label-ipv6** *boolean*
  - **mcast-ipv4** *boolean*
  - **mcast-ipv6** *boolean*
  - **mvpn-ipv4** *boolean*
  - **mvpn-ipv6** *boolean*
  - **vpn-ipv4** *boolean*
  - **vpn-ipv6** *boolean*
- **compare-origin-validation-state** *boolean*
- **d-path-length-ignore** *boolean*
- **deterministic-med** *boolean*
- **ebgp-ibgp-equal**
  - **evpn** *boolean*
  - **ipv4** *boolean*
  - **ipv6** *boolean*
  - **label-ipv4** *boolean*
  - **label-ipv6** *boolean*
  - **vpn-ipv4** *boolean*
  - **vpn-ipv6** *boolean*
- **ignore-nh-metric** *boolean*
- **ignore-router-id**
  - **include-internal**

configure router bgp best-path-selection ignore-router-id include-internal mvpn-ipv4

```

    - mvpn-ipv4 boolean
    - mvpn-ipv6 boolean
  - origin-invalid-unusable boolean
- bfd-liveness boolean
- bgp-tunnel-metric
  - prefer-aigp boolean
  - value number
- bgp-tunnel-preference number
- block-prefix-sid boolean
- client-reflect boolean
- cluster
  - allow-local-fallback boolean
  - cluster-id string
  - orr-location number
- connect-retry number
- convergence
  - family keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - max-wait-to-advertise number
  - min-wait-to-advertise number
- damp-peer-oscillations
  - error-interval number
  - idle-hold-time
    - initial-wait number
    - max-wait number
    - second-wait number
- damping boolean
- def-recv-evpn-encap keyword
- default-label-preference
  - ebgp number
  - ibgp number
- default-preference
  - ebgp number
  - ibgp number
- description string
- dynamic-neighbor-limit number
- ebgp-default-reject-policy
  - export boolean
  - import boolean
- egress-peer-engineering
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- enforce-first-as boolean
- error-handling
  - update-fault-tolerance boolean
- export
  - apply-groups reference
  - apply-groups-exclude reference
  - policy (policy-expr-string | string)
- extended-nh-encoding
  - ipv4 boolean
  - label-ipv4 boolean
  - vpn-ipv4 boolean
- family
  - bgp-ls boolean
  - evpn boolean
  - flow-ipv4 boolean
  - flow-ipv6 boolean
  - flow-vpn-ipv4 boolean
  - flow-vpn-ipv6 boolean
  - ipv4 boolean
  - ipv6 boolean

```

## configure router bgp family l2-vpn

- **l2-vpn** *boolean*
- **label-ipv4** *boolean*
- **label-ipv6** *boolean*
- **mcast-ipv4** *boolean*
- **mcast-ipv6** *boolean*
- **mcast-vpn-ipv4** *boolean*
- **mcast-vpn-ipv6** *boolean*
- **mdt-safi** *boolean*
- **ms-pw** *boolean*
- **mvpn-ipv4** *boolean*
- **mvpn-ipv6** *boolean*
- **route-target** *boolean*
- **sr-policy-ipv4** *boolean*
- **sr-policy-ipv6** *boolean*
- **vpn-ipv4** *boolean*
- **vpn-ipv6** *boolean*
- **fast-external-failover** *boolean*
- **flowspec**
  - **validate-dest-prefix** *boolean*
  - **validate-redirect-ip** *boolean*
- **graceful-restart**
  - **gr-notification** *boolean*
  - **long-lived**
    - **advertise-stale-to-all-neighbors** *boolean*
    - **advertised-stale-time** *number*
    - **family** *keyword*
      - **advertised-stale-time** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **helper-override-stale-time** *number*
    - **forwarding-bits-set** *keyword*
    - **helper-override-restart-time** *number*
    - **helper-override-stale-time** *number*
    - **without-no-export** *boolean*
  - **restart-time** *number*
  - **stale-routes-time** *number*
- **group** *string*
- **add-paths**
  - **evpn**
    - **receive** *boolean*
    - **send** (*number* | *keyword*)
  - **ipv4**
    - **receive** *boolean*
    - **send** (*number* | *keyword*)
  - **ipv6**
    - **receive** *boolean*
    - **send** (*number* | *keyword*)
  - **label-ipv4**
    - **receive** *boolean*
    - **send** (*number* | *keyword*)
  - **label-ipv6**
    - **receive** *boolean*
    - **send** (*number* | *keyword*)
  - **mcast-vpn-ipv4**
    - **receive** *boolean*
    - **send** *number*
  - **mcast-vpn-ipv6**
    - **receive** *boolean*
    - **send** *number*
  - **mvpn-ipv4**
    - **receive** *boolean*
    - **send** *number*
  - **mvpn-ipv6**
    - **receive** *boolean*

configure router bgp group add-paths mvpn-ipv6 send

```

- send number
- vpn-ipv4
  - receive boolean
  - send (number | keyword)
- vpn-ipv6
  - receive boolean
  - send (number | keyword)
- admin-state keyword
- advertise-inactive boolean
- advertise-ipv6-next-hops
  - evpn boolean
  - ipv4 boolean
  - label-ipv4 boolean
  - label-ipv6 boolean
  - vpn-ipv4 boolean
  - vpn-ipv6 boolean
- aggregator-id-zero boolean
- aigp boolean
- apply-groups reference
- apply-groups-exclude reference
- as-override boolean
- asn-4-byte boolean
- authentication-key string
- authentication-keychain reference
- bfd-liveness boolean
- block-prefix-sid boolean
- capability-negotiation boolean
- client-reflect boolean
- cluster
  - allow-local-fallback boolean
  - cluster-id string
  - orr-location number
- connect-retry number
- damp-peer-oscillations
  - error-interval number
  - idle-hold-time
    - initial-wait number
    - max-wait number
    - second-wait number
- damping boolean
- def-recv-evpn-encap keyword
- default-label-preference
  - ebgp number
  - ibgp number
- default-preference
  - ebgp number
  - ibgp number
- default-route-target boolean
- description string
- dynamic-neighbor
  - interface string
    - allowed-peer-as string
    - apply-groups reference
    - apply-groups-exclude reference
    - max-sessions number
  - match
    - prefix (ipv4-prefix | ipv6-prefix)
      - allowed-peer-as string
      - apply-groups reference
      - apply-groups-exclude reference
- dynamic-neighbor-limit number
- ebgp-default-reject-policy
  - export boolean
  - import boolean

```

configure router bgp group egress-engineering

- **egress-engineering**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **egress-peer-engineering-label-unicast** *boolean*
- **enforce-first-as** *boolean*
- **error-handling**
  - **update-fault-tolerance** *boolean*
- **export**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **policy** (*policy-expr-string* | *string*)
- **extended-nh-encoding**
  - **ipv4** *boolean*
  - **label-ipv4** *boolean*
  - **vpn-ipv4** *boolean*
- **family**
  - **bgp-ls** *boolean*
  - **evpn** *boolean*
  - **flow-ipv4** *boolean*
  - **flow-ipv6** *boolean*
  - **flow-vpn-ipv4** *boolean*
  - **flow-vpn-ipv6** *boolean*
  - **ipv4** *boolean*
  - **ipv6** *boolean*
  - **l2-vpn** *boolean*
  - **label-ipv4** *boolean*
  - **label-ipv6** *boolean*
  - **mcast-ipv4** *boolean*
  - **mcast-ipv6** *boolean*
  - **mcast-vpn-ipv4** *boolean*
  - **mcast-vpn-ipv6** *boolean*
  - **mdt-safi** *boolean*
  - **ms-pw** *boolean*
  - **mvpn-ipv4** *boolean*
  - **mvpn-ipv6** *boolean*
  - **route-target** *boolean*
  - **sr-policy-ipv4** *boolean*
  - **sr-policy-ipv6** *boolean*
  - **vpn-ipv4** *boolean*
  - **vpn-ipv6** *boolean*
- **fast-external-failover** *boolean*
- **graceful-restart**
  - **gr-notification** *boolean*
  - **long-lived**
    - **advertise-stale-to-all-neighbors** *boolean*
    - **advertised-stale-time** *number*
    - **family** *keyword*
      - **advertised-stale-time** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **helper-override-stale-time** *number*
      - **forwarding-bits-set** *keyword*
      - **helper-override-restart-time** *number*
      - **helper-override-stale-time** *number*
      - **without-no-export** *boolean*
  - **restart-time** *number*
  - **stale-routes-time** *number*
- **hold-time**
  - **minimum-hold-time** *number*
  - **seconds** *number*
- **import**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*

## configure router bgp group import policy

```

- policy (policy-expr-string | string)
- initial-send-delay-zero boolean
- keepalive number
- label-preference number
- link-bandwidth
  - accept-from-ebgp
    - ipv4 boolean
    - ipv6 boolean
    - label-ipv4 boolean
    - label-ipv6 boolean
    - vpn-ipv4 boolean
    - vpn-ipv6 boolean
  - add-to-received-ebgp
    - ipv4 boolean
    - ipv6 boolean
    - label-ipv4 boolean
    - label-ipv6 boolean
    - vpn-ipv4 boolean
    - vpn-ipv6 boolean
  - aggregate-used-paths
    - ipv4 boolean
    - ipv6 boolean
    - label-ipv4 boolean
    - label-ipv6 boolean
    - vpn-ipv4 boolean
    - vpn-ipv6 boolean
  - send-to-ebgp
    - ipv4 boolean
    - ipv6 boolean
    - label-ipv4 boolean
    - label-ipv6 boolean
    - vpn-ipv4 boolean
    - vpn-ipv6 boolean
- local-address (ipv4-address-no-zone | ipv6-address-no-zone | interface-name)
- local-as
  - as-number number
  - prepend-global-as boolean
  - private boolean
- local-preference number
- loop-detect keyword
- loop-detect-threshold number
- med-out (number | keyword)
- min-route-advertisement number
- monitor
  - admin-state keyword
  - all-stations boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - route-monitoring
    - post-policy boolean
    - pre-policy boolean
  - station reference
- multihop number
- multipath-eligible boolean
- next-hop-self boolean
- next-hop-unchanged
  - evpn boolean
  - label-ipv4 boolean
  - label-ipv6 boolean
  - vpn-ipv4 boolean
  - vpn-ipv6 boolean
- origin-validation
  - ipv4 boolean
  - ipv6 boolean

```

## configure router bgp group origin-validation label-ipv4

- **label-ipv4** *boolean*
- **label-ipv6** *boolean*
- **outbound-route-filtering**
  - **extended-community**
    - **accept-orf** *boolean*
    - **send-orf**
      - **route-target** *string*
- **passive** *boolean*
- **path-mtu-discovery** *boolean*
- **peer-as** *number*
- **peer-ip-tracking** *boolean*
- **preference** *number*
- **prefix-limit** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **idle-timeout** *number*
- **log-only** *boolean*
- **maximum** *number*
- **post-import** *boolean*
- **threshold** *number*
- **remove-private**
  - **limited** *boolean*
  - **replace** *boolean*
  - **skip-peer-as** *boolean*
- **segment-routing-v6**
  - **route-advertisement**
    - **drop-routes-with-srv6-tlvs** *boolean*
    - **family** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **strip-srv6-tlvs** *boolean*
- **selective-label-ipv4-install** *boolean*
- **send-communities**
  - **extended** *boolean*
  - **large** *boolean*
  - **standard** *boolean*
- **send-default**
  - **export-policy** *reference*
  - **ipv4** *boolean*
  - **ipv6** *boolean*
- **split-horizon** *boolean*
- **static-group** *boolean*
- **tcp-mss** (*number* | *keyword*)
- **third-party-next-hop** *boolean*
- **ttl-security** *number*
- **type** *keyword*
- **vpn-apply-export** *boolean*
- **vpn-apply-import** *boolean*
- **hold-time**
  - **minimum-hold-time** *number*
  - **seconds** *number*
- **ibgp-multipath** *boolean*
- **import**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **policy** (*policy-expr-string* | *string*)
- **initial-send-delay-zero** *boolean*
- **inter-as-vpn** *boolean*
- **keepalive** *number*
- **label-allocation**
  - **label-ipv6**
    - **explicit-null** *boolean*
- **label-preference** *number*
- **link-state-route-export** *boolean*

## configure router bgp link-state-route-import

```

- link-state-route-import boolean
- local-as
  - as-number number
  - prepend-global-as boolean
  - private boolean
- local-preference number
- loop-detect keyword
- loop-detect-threshold number
- med-out (number | keyword)
- min-route-advertisement number
- monitor
  - admin-state keyword
  - all-stations boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - route-monitoring
    - post-policy boolean
    - pre-policy boolean
  - station reference
- mp-bgp-keep boolean
- multihop number
- multipath
  - ebgp number
  - family keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - ebgp number
    - ibgp number
    - max-paths number
    - restrict keyword
    - unequal-cost boolean
  - ibgp number
  - max-paths number
  - restrict keyword
  - unequal-cost boolean
- mvpn-vrf-import-subtype-new boolean
- neighbor (ipv4-address-with-zone | ipv6-address-with-zone)
  - add-paths
    - evpn
      - receive boolean
      - send (number | keyword)
    - ipv4
      - receive boolean
      - send (number | keyword)
    - ipv6
      - receive boolean
      - send (number | keyword)
    - label-ipv4
      - receive boolean
      - send (number | keyword)
    - label-ipv6
      - receive boolean
      - send (number | keyword)
    - mcast-vpn-ipv4
      - receive boolean
      - send number
    - mcast-vpn-ipv6
      - receive boolean
      - send number
    - mvpn-ipv4
      - receive boolean
      - send number
    - mvpn-ipv6
      - receive boolean

```



configure router bgp neighbor add-paths mvpn-ipv6 send

```

- send number
- vpn-ipv4
  - receive boolean
  - send (number | keyword)
- vpn-ipv6
  - receive boolean
  - send (number | keyword)
- admin-state keyword
- advertise-inactive boolean
- advertise-ipv6-next-hops
  - evpn boolean
  - ipv4 boolean
  - label-ipv4 boolean
  - label-ipv6 boolean
  - vpn-ipv4 boolean
  - vpn-ipv6 boolean
- advertise-ldp-prefix boolean
- aggregator-id-zero boolean
- aigp boolean
- apply-groups reference
- apply-groups-exclude reference
- as-override boolean
- asn-4-byte boolean
- authentication-key string
- authentication-keychain reference
- bfd-liveness boolean
- block-prefix-sid boolean
- capability-negotiation boolean
- client-reflect boolean
- cluster
  - allow-local-fallback boolean
  - cluster-id string
  - orr-location number
- connect-retry number
- damp-peer-oscillations
  - error-interval number
  - idle-hold-time
    - initial-wait number
    - max-wait number
    - second-wait number
- damping boolean
- def-rcv-evpn-encap keyword
- default-label-preference
  - ebgp number
  - ibgp number
- default-preference
  - ebgp number
  - ibgp number
- default-route-target boolean
- description string
- ebgp-default-reject-policy
  - export boolean
  - import boolean
- egress-engineering
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- egress-peer-engineering-label-unicast boolean
- enforce-first-as boolean
- error-handling
  - update-fault-tolerance boolean
- export
  - apply-groups reference
  - apply-groups-exclude reference

```

## configure router bgp neighbor export policy

- **policy** (*policy-expr-string* | *string*)
- **extended-nh-encoding**
  - **ipv4** *boolean*
  - **label-ipv4** *boolean*
  - **vpn-ipv4** *boolean*
- **family**
  - **bgp-ls** *boolean*
  - **evpn** *boolean*
  - **flow-ipv4** *boolean*
  - **flow-ipv6** *boolean*
  - **flow-vpn-ipv4** *boolean*
  - **flow-vpn-ipv6** *boolean*
  - **ipv4** *boolean*
  - **ipv6** *boolean*
  - **l2-vpn** *boolean*
  - **label-ipv4** *boolean*
  - **label-ipv6** *boolean*
  - **mcast-ipv4** *boolean*
  - **mcast-ipv6** *boolean*
  - **mcast-vpn-ipv4** *boolean*
  - **mcast-vpn-ipv6** *boolean*
  - **mdt-safi** *boolean*
  - **ms-pw** *boolean*
  - **mvpn-ipv4** *boolean*
  - **mvpn-ipv6** *boolean*
  - **route-target** *boolean*
  - **sr-policy-ipv4** *boolean*
  - **sr-policy-ipv6** *boolean*
  - **vpn-ipv4** *boolean*
  - **vpn-ipv6** *boolean*
- **fast-external-failover** *boolean*
- **graceful-restart**
  - **gr-notification** *boolean*
  - **long-lived**
    - **advertise-stale-to-all-neighbors** *boolean*
    - **advertised-stale-time** *number*
    - **family** *keyword*
      - **advertised-stale-time** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **helper-override-stale-time** *number*
    - **forwarding-bits-set** *keyword*
    - **helper-override-restart-time** *number*
    - **helper-override-stale-time** *number*
    - **without-no-export** *boolean*
  - **restart-time** *number*
  - **stale-routes-time** *number*
- **group** *reference*
- **hold-time**
  - **minimum-hold-time** *number*
  - **seconds** *number*
- **import**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **policy** (*policy-expr-string* | *string*)
- **initial-send-delay-zero** *boolean*
- **keepalive** *number*
- **l2vpn-cisco-interop** *boolean*
- **label-preference** *number*
- **link-bandwidth**
  - **accept-from-ebgp**
    - **ipv4** *boolean*
    - **ipv6** *boolean*
    - **label-ipv4** *boolean*

configure router bgp neighbor link-bandwidth accept-from-ebgp label-ipv6

```

- label-ipv6 boolean
- vpn-ipv4 boolean
- vpn-ipv6 boolean
- add-to-received-ebgp
- ipv4 boolean
- ipv6 boolean
- label-ipv4 boolean
- label-ipv6 boolean
- vpn-ipv4 boolean
- vpn-ipv6 boolean
- aggregate-used-paths
- ipv4 boolean
- ipv6 boolean
- label-ipv4 boolean
- label-ipv6 boolean
- vpn-ipv4 boolean
- vpn-ipv6 boolean
- send-to-ebgp
- ipv4 boolean
- ipv6 boolean
- label-ipv4 boolean
- label-ipv6 boolean
- vpn-ipv4 boolean
- vpn-ipv6 boolean
- local-address (ipv4-address-no-zone | ipv6-address-no-zone | interface-name)
- local-as
- as-number number
- prepend-global-as boolean
- private boolean
- local-preference number
- loop-detect keyword
- loop-detect-threshold number
- med-out (number | keyword)
- min-route-advertisement number
- monitor
- admin-state keyword
- all-stations boolean
- apply-groups reference
- apply-groups-exclude reference
- route-monitoring
- post-policy boolean
- pre-policy boolean
- station reference
- multihop number
- multipath-eligible boolean
- next-hop-self boolean
- next-hop-unchanged
- evpn boolean
- label-ipv4 boolean
- label-ipv6 boolean
- vpn-ipv4 boolean
- vpn-ipv6 boolean
- origin-validation
- ipv4 boolean
- ipv6 boolean
- label-ipv4 boolean
- label-ipv6 boolean
- outbound-route-filtering
- extended-community
- accept-orf boolean
- send-orf
- route-target string
- passive boolean
- path-mtu-discovery boolean

```

## configure router bgp neighbor peer-as

- **peer-as** *number*
- **peer-creation-type** *keyword*
- **peer-ip-tracking** *boolean*
- **preference** *number*
- **prefix-limit** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **idle-timeout** *number*
  - **log-only** *boolean*
  - **maximum** *number*
  - **post-import** *boolean*
  - **threshold** *number*
- **remove-private**
  - **limited** *boolean*
  - **replace** *boolean*
  - **skip-peer-as** *boolean*
- **segment-routing-v6**
  - **route-advertisement**
    - **drop-routes-with-srv6-tlvs** *boolean*
    - **family** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **strip-srv6-tlvs** *boolean*
- **selective-label-ipv4-install** *boolean*
- **send-communities**
  - **extended** *boolean*
  - **large** *boolean*
  - **standard** *boolean*
- **send-default**
  - **export-policy** *reference*
  - **ipv4** *boolean*
  - **ipv6** *boolean*
- **split-horizon** *boolean*
- **tcp-mss** (*number* | *keyword*)
- **third-party-next-hop** *boolean*
- **ttl-security** *number*
- **type** *keyword*
- **vpn-apply-export** *boolean*
- **vpn-apply-import** *boolean*
- **neighbor-trust**
  - **vpn-ipv4** *boolean*
  - **vpn-ipv6** *boolean*
- **next-hop-resolution**
  - **allow-unresolved-leaking** *boolean*
  - **labeled-routes**
    - **allow-static** *boolean*
    - **rr-use-route-table** *boolean*
  - **transport-tunnel**
    - **family** *keyword*
      - **allow-flex-algo-fallback** *boolean*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **enforce-strict-tunnel-tagging** *boolean*
      - **resolution** *keyword*
      - **resolution-filter**
        - **bgp** *boolean*
        - **ldp** *boolean*
        - **mpls-fwd-policy** *boolean*
        - **rib-api** *boolean*
        - **rsvp** *boolean*
        - **sr-isis** *boolean*
        - **sr-ospf** *boolean*
        - **sr-ospf3** *boolean*
        - **sr-policy** *boolean*

configure router bgp next-hop-resolution labeled-routes transport-tunnel family resolution-filter sr-te

- **sr-te** *boolean*
  - **udp** *boolean*
- **use-bgp-routes**
  - **label-ipv6-explicit-null** *boolean*
- **policy** *reference*
- **shortcut-tunnel**
- **family** *keyword*
  - **allow-flex-algo-fallback** *boolean*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **disallow-igp** *boolean*
  - **enforce-strict-tunnel-tagging** *boolean*
  - **resolution** *keyword*
  - **resolution-filter**
    - **bgp** *boolean*
    - **ldp** *boolean*
    - **mpls-fwd-policy** *boolean*
    - **rib-api** *boolean*
    - **rsvp** *boolean*
    - **sr-isis** *boolean*
    - **sr-ospf** *boolean*
    - **sr-ospf3** *boolean*
    - **sr-policy** *boolean*
    - **sr-te** *boolean*
- **use-bgp-routes** *boolean*
- **vpn-family-policy** *reference*
- **weighted-ecmp** *boolean*
- **optimal-route-reflection**
  - **location** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **primary-ip-address** *string*
    - **primary-ipv6-address** *string*
    - **secondary-ip-address** *string*
    - **secondary-ipv6-address** *string*
    - **tertiary-ip-address** *string*
    - **tertiary-ipv6-address** *string*
  - **spf-wait**
    - **initial-wait** *number*
    - **max-wait** *number*
    - **second-wait** *number*
- **outbound-route-filtering**
  - **extended-community**
    - **accept-orf** *boolean*
    - **send-orf**
      - **route-target** *string*
- **override-tunnel-elc** *boolean*
- **path-mtu-discovery** *boolean*
- **peer-ip-tracking** *boolean*
- **peer-tracking-policy** *reference*
- **preference** *number*
- **purge-timer** *number*
- **rapid-update**
  - **evpn** *boolean*
  - **l2-vpn** *boolean*
  - **label-ipv4** *boolean*
  - **label-ipv6** *boolean*
  - **mcast-vpn-ipv4** *boolean*
  - **mcast-vpn-ipv6** *boolean*
  - **mdt-safi** *boolean*
  - **mvpn-ipv4** *boolean*
  - **mvpn-ipv6** *boolean*
  - **vpn-ipv4** *boolean*
  - **vpn-ipv6** *boolean*

## configure router bgp rapid-withdrawal

- **rapid-withdrawal** *boolean*
- **remove-private**
  - **limited** *boolean*
  - **replace** *boolean*
  - **skip-peer-as** *boolean*
- **rib-management**
  - **ipv4**
    - **leak-import**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **policy** (*policy-expr-string* | *string*)
    - **route-table-import**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **policy-name** *reference*
  - **ipv6**
    - **leak-import**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **policy** (*policy-expr-string* | *string*)
    - **route-table-import**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **policy-name** *reference*
  - **label-ipv4**
    - **leak-import**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **policy** (*policy-expr-string* | *string*)
    - **route-table-import**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **policy-name** *reference*
  - **label-ipv6**
    - **route-table-import**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **policy-name** *reference*
- **route-table-install** *boolean*
- **route-target-list** *string*
- **router-id** *string*
- **rr-vpn-forwarding** *boolean*
- **segment-routing**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **prefix-sid-range**
    - **global**
    - **max-index** *number*
    - **start-label** *number*
- **segment-routing-v6**
  - **family** *keyword*
  - **add-srv6-tlvs**
    - **locator-name** *reference*
    - **micro-segment-locator-name** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **ignore-received-srv6-tlvs** *boolean*
  - **resolution** *keyword*
  - **source-address** *string*
- **selective-label-ip** *keyword*
- **selective-label-ip-prioritization** *boolean*
- **selective-label-ipv4-install** *boolean*
- **send-communities**

## configure router bgp send-communities extended

- **extended** *boolean*
- **large** *boolean*
- **standard** *boolean*
- **send-default**
  - **export-policy** *reference*
  - **ipv4** *boolean*
  - **ipv6** *boolean*
- **split-horizon** *boolean*
- **sr-policy-import** *boolean*
- **subconfed-vpn-forwarding** *boolean*
- **tcp-mss** *number*
- **third-party-nexthop** *boolean*
- **vpn-apply-export** *boolean*
- **vpn-apply-import** *boolean*
- **bier**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **bfd-liveness** *keyword*
  - **fast-reroute** *boolean*
  - **template** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **sub-domain** *number end number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **bfr-id** *number*
      - **multi-topology** *keyword*
      - **prefix** *string*
- **class-forwarding** *boolean*
- **confederation**
  - **confed-as-num** *number*
  - **members** *number*
- **description** *string*
- **dhcp-server**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **dhcpv4** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
  - **failover**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **ignore-mclt-on-takeover** *boolean*
    - **maximum-client-lead-time** *number*
    - **partner-down-delay** *number*
    - **peer** *reference*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **sync-tag** *string*
    - **startup-wait-time** *number*
- **force-renews** *boolean*
- **lease-hold**
  - **additional-scenarios**
    - **internal-lease-ipsec** *boolean*
    - **solicited-release** *boolean*
  - **time** *number*
- **pool** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*

## configure router dhcp-server dhcpv4 pool description

```

- description string
- failover
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - ignore-mclt-on-takeover boolean
  - maximum-client-lead-time number
  - partner-down-delay number
  - peer reference
    - apply-groups reference
    - apply-groups-exclude reference
    - sync-tag string
  - startup-wait-time number
- max-lease-time number
- min-lease-time number
- minimum-free
  - absolute number
  - event-when-depleted boolean
  - percent number
- nak-non-matching-subnet boolean
- offer-time number
- options
  - option (number | keyword)
    - apply-groups reference
    - apply-groups-exclude reference
    - ascii-string string
    - duration number
    - empty
    - hex-string string
    - ipv4-address string
    - netbios-node-type keyword
- subnet string
  - address-range string end string
  - apply-groups reference
  - apply-groups-exclude reference
  - failover-control-type keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - drain boolean
  - exclude-addresses string end string
  - maximum-declined number
  - minimum-free
    - absolute number
    - event-when-depleted boolean
    - percent number
  - options
    - option (number | keyword)
      - apply-groups reference
      - apply-groups-exclude reference
      - ascii-string string
      - duration number
      - empty
      - hex-string string
      - ipv4-address string
      - netbios-node-type keyword
- pool-selection
  - use-gi-address
    - scope keyword
  - use-pool-from-client
    - delimiter string
- user-db reference
- user-identification keyword
- dhcpv6 string
- admin-state keyword

```



## configure router dhcp-server dhcpv6 apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **auto-provisioned** *boolean*
- **defaults**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **options**
    - **option** (*number | keyword*)
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **ascii-string** *string*
      - **domain-string** *string*
      - **duration** *number*
      - **empty**
      - **hex-string** *string*
      - **ipv6-address** *string*
  - **preferred-lifetime** *number*
  - **rebind-time** *number*
  - **renew-time** *number*
  - **valid-lifetime** *number*
- **description** *string*
- **failover**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **ignore-mclt-on-takeover** *boolean*
  - **maximum-client-lead-time** *number*
  - **partner-down-delay** *number*
  - **peer** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **sync-tag** *string*
  - **startup-wait-time** *number*
- **ignore-rapid-commit** *boolean*
- **interface-id-mapping** *boolean*
- **lease-hold**
  - **additional-scenarios**
    - **internal-lease-ipsec** *boolean*
    - **solicited-release** *boolean*
  - **time** *number*
- **lease-query** *boolean*
- **pool** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **delegated-prefix**
    - **length** *number*
    - **maximum** *number*
    - **minimum** *number*
  - **description** *string*
  - **exclude-prefix** *string*
  - **failover**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **ignore-mclt-on-takeover** *boolean*
    - **maximum-client-lead-time** *number*
    - **partner-down-delay** *number*
    - **peer** *reference*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **sync-tag** *string*
    - **startup-wait-time** *number*
  - **options**
    - **option** (*number | keyword*)

configure router dhcp-server dhcpv6 pool options option apply-groups

```

    - apply-groups reference
    - apply-groups-exclude reference
    - ascii-string string
    - domain-string string
    - duration number
    - empty
    - hex-string string
    - ipv6-address string
  - prefix string
    - apply-groups reference
    - apply-groups-exclude reference
    - drain boolean
    - failover-control-type keyword
    - options
      - option (number | keyword)
        - apply-groups reference
        - apply-groups-exclude reference
        - ascii-string string
        - domain-string string
        - duration number
        - empty
        - hex-string string
        - ipv6-address string
    - preferred-lifetime number
    - prefix-length-threshold number
      - absolute number
      - apply-groups reference
      - apply-groups-exclude reference
      - event-when-depleted boolean
      - percent number
    - prefix-type
      - pd boolean
      - wan-host boolean
    - rebind-time number
    - renew-time number
    - valid-lifetime number
  - prefix-length-threshold number
    - apply-groups reference
    - apply-groups-exclude reference
    - event-when-depleted boolean
    - minimum-free-percent number
  - pool-selection
    - use-link-address
      - scope keyword
    - use-pool-from-client
      - delimiter string
  - server-id
    - apply-groups reference
    - apply-groups-exclude reference
    - duid-enterprise
      - ascii-string string
      - hex-string string
    - duid-link-local
  - user-identification keyword
- dns
  - redirect-vprn
    - service reference
      - apply-groups reference
      - apply-groups-exclude reference
      - preference number
  - ecmp number
  - entropy-label boolean
  - fib-priority keyword
  - fib-telemetry boolean

```

## configure router firewall

- **firewall**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **domain** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **dhcpv6-server**
      - **name** *string*
      - **router-instance** *string*
    - **nat-group** *reference*
    - **prefix** *string*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **description** *string*
    - **wlan-gw-group** *reference*
- **flowspec**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **filter-cam-type** *keyword*
  - **ip-filter-max-size** *number*
  - **ipv6-filter-max-size** *number*
- **gtm**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **mvpn** *boolean*
  - **provider-tunnel**
    - **inclusive**
      - **rsvp**
        - **admin-state** *keyword*
        - **lsp-template** *reference*
    - **selective**
      - **data-delay-interval** *number*
      - **data-threshold**
        - **group-prefix** (*ipv4-prefix* | *ipv6-prefix*)
          - **apply-groups** *reference*
          - **apply-groups-exclude** *reference*
          - **pe-threshold-add** *number*
          - **pe-threshold-delete** *number*
          - **threshold** *number*
      - **maximum-p2mp-spmsi** *number*
      - **rsvp**
        - **admin-state** *keyword*
        - **lsp-template** *reference*
- **gtp**
  - **s11**
    - **interface** *reference*
    - **apn-policy** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **peer-profile-map**
      - **prefix** (*ipv4-prefix* | *ipv6-prefix*)
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **peer-profile** *reference*
  - **upf-data-endpoint**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **fpe** *reference*
    - **interface** *reference*
  - **uplink**
    - **apn** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*

configure router gtp uplink pdn-type

```

    - pdn-type keyword
    - peer-profile-map
      - prefix (ipv4-prefix | ipv6-prefix)
        - apply-groups reference
        - apply-groups-exclude reference
        - peer-profile reference
    - icmp-tunneling boolean
    - igmp
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - forwarding-group-interface forwarding-service string group-interface-
name reference
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - import-policy reference
      - maximum-number-group-sources number
      - maximum-number-groups number
      - maximum-number-sources number
      - mcac
        - bandwidth
          - mandatory (number | keyword)
          - total (number | keyword)
        - interface-policy reference
        - policy reference
      - query-interval number
      - query-last-member-interval number
      - query-response-interval number
      - query-source-address string
      - router-alert-check boolean
      - sub-hosts-only boolean
      - subnet-check boolean
      - version keyword
    - group-if-query-source-address string
    - group-interface reference
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - import-policy reference
      - maximum-number-group-sources number
      - maximum-number-groups number
      - maximum-number-sources number
      - mcac
        - bandwidth
          - mandatory (number | keyword)
          - total (number | keyword)
        - interface-policy reference
        - policy reference
      - query-interval number
      - query-last-member-interval number
      - query-response-interval number
      - query-source-address string
      - router-alert-check boolean
      - sub-hosts-only boolean
      - subnet-check boolean
      - version keyword
    - interface string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - import-policy reference
      - maximum-number-group-sources number
      - maximum-number-groups number

```

configure router igmp interface maximum-number-sources

```

- maximum-number-sources number
- mcac
  - bandwidth
    - mandatory (number | keyword)
    - total (number | keyword)
  - interface-policy reference
  - mc-constraints
    - level number
    - apply-groups reference
    - apply-groups-exclude reference
    - bandwidth number
    - number-down number
    - apply-groups reference
    - apply-groups-exclude reference
    - level number
    - use-lag-port-weight boolean
  - policy reference
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - redundant-mcast boolean
  - router-alert-check boolean
  - ssm-translate
    - group-range start string end string
    - apply-groups reference
    - apply-groups-exclude reference
    - source string
  - static
    - group string
    - apply-groups reference
    - apply-groups-exclude reference
    - source string
    - starg
    - group-range start string end string step string
    - apply-groups reference
    - apply-groups-exclude reference
    - source string
    - starg
  - subnet-check boolean
  - version keyword
- query-interval number
- query-last-member-interval number
- query-response-interval number
- robust-count number
- ssm-translate
  - group-range start string end string
  - apply-groups reference
  - apply-groups-exclude reference
  - source string
- tunnel-interface
  - ldp-p2mp-root reference sender-address reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - static
    - group string
    - apply-groups reference
    - apply-groups-exclude reference
    - source string
    - starg
  - rsvp-p2mp-root reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference

```

configure router igmp tunnel-interface rsvp-p2mp-root static

- **static**
  - **group** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **source** *string*
  - **starg**
- **interface** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **cflowd-parameters**
    - **sampling** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **direction** *keyword*
      - **sample-profile** (*keyword* | *number*)
      - **type** *keyword*
  - **cpu-protection** *reference*
  - **description** *string*
  - **dist-cpu-protection** *reference*
  - **egress**
    - **filter**
      - **ip** *reference*
      - **ipv6** *reference*
  - **eth-cfm**
    - **mep md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number*
    - **admin-state** *keyword*
    - **alarm-notification**
      - **fng-alarm-time** *number*
      - **fng-reset-time** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **ccm** *boolean*
    - **ccm-ltm-priority** *number*
    - **ccm-padding-size** *number*
    - **ccm-tlv-ignore** *keyword*
    - **collect-lmm-fc-stats**
      - **fc** *keyword*
      - **fc-in-profile** *keyword*
    - **collect-lmm-stats** *boolean*
    - **description** *string*
    - **eth-test**
      - **bit-error-threshold** *number*
      - **test-pattern**
        - **crc-tlv** *boolean*
        - **pattern** *keyword*
    - **facility-fault** *boolean*
    - **grace**
      - **eth-ed**
        - **max-rx-defect-window** *number*
        - **priority** *number*
        - **rx-eth-ed** *boolean*
        - **tx-eth-ed** *boolean*
      - **eth-vsm-grace**
        - **rx-eth-vsm-grace** *boolean*
        - **tx-eth-vsm-grace** *boolean*
    - **lbm-svc-act-responder** *boolean*
    - **low-priority-defect** *keyword*
    - **mac-address** *string*
    - **one-way-delay-threshold** *number*
  - **flavor** *keyword*
  - **gre-termination** *boolean*
  - **hold-time**
    - **ipv4**

configure router interface hold-time ipv4 down

```

- down
  - init-only boolean
  - seconds number
- up
  - seconds number
- ipv6
  - down
    - init-only boolean
    - seconds number
  - up
    - seconds number
- if-attribute
- admin-group reference
- delay
  - delay-selection keyword
  - dynamic
    - measurement-template reference
    - twamp-light
      - ipv4
        - admin-state keyword
        - destination string
        - source string
      - ipv6
        - admin-state keyword
        - destination string
        - source string
    - static number
  - srlg-group reference
- ingress
  - destination-class-lookup boolean
  - filter
    - ip reference
    - ipv6 reference
  - policy-accounting reference
- ingress-stats boolean
- ip-mtu number
- ip-tunnel
  - remote-ip string
- ipsec
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - ip-exception reference
  - ipsec-tunnel string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - bfd
    - bfd-designate boolean
    - bfd-liveness
      - dest-ip string
      - interface string
      - service-name string
  - clear-df-bit boolean
  - copy-traffic-class-upon-decapsulation boolean
  - description string
  - encapsulated-ip-mtu number
  - icmp-generation
    - frag-required
      - admin-state keyword
      - interval number
      - message-count number
  - icmp6-generation
    - packet-too-big

```

configure router interface ipsec ipsec-tunnel icmp6-generation packet-too-big admin-state

```

    - admin-state keyword
    - interval number
    - message-count number
- ip-mtu number
- key-exchange
  - dynamic
    - auto-establish boolean
    - cert
      - cert-profile reference
      - status-verify
        - default-result keyword
        - primary keyword
        - secondary keyword
      - trust-anchor-profile reference
    - id
      - fqdn string
      - ipv4 string
      - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
    - ike-policy reference
    - ipsec-transform reference
    - pre-shared-key string
  - manual
    - keys number direction keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - authentication-key string
      - encryption-key string
      - ipsec-transform reference
      - spi number
    - local-gateway-address-override (ipv4-address-no-zone | ipv6-address-no-zone)
  - max-history-key-records
    - esp number
    - ike number
  - pmtu-discovery-aging number
  - private-sap number
  - private-service string
  - private-tcp-mss-adjust number
  - propagate-pmtu-v4 boolean
  - propagate-pmtu-v6 boolean
  - public-tcp-mss-adjust (number | keyword)
  - remote-gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - replay-window number
  - security-policy
    - id number
    - strict-match boolean
- ipv6-exception reference
- public-sap number
- tunnel-group reference
- ipv4
  - allow-directed-broadcasts boolean
  - bfd
    - admin-state keyword
    - echo-receive number
    - multiplier number
    - receive number
    - transmit-interval number
    - type keyword
  - dhcp
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - gi-address string
    - option-82

```



configure router interface ipv4 dhcp option-82 action

```

- action keyword
- circuit-id
  - ascii-tuple
  - if-name
  - ifindex
  - none
  - port-id
  - vlan-ascii-tuple
- remote-id
  - ascii-string string
  - mac
  - none
- vendor-specific-option
  - client-mac-address boolean
  - pool-name boolean
  - port-id boolean
  - service-id boolean
  - string string
  - system-id boolean
- python-policy reference
- relay-plain-bootp boolean
- release-include-gi-address boolean
- server string
- src-ip-addr keyword
- trusted boolean
- icmp
  - mask-reply boolean
  - param-problem
    - admin-state keyword
    - number number
    - seconds number
  - redirects
    - admin-state keyword
    - number number
    - seconds number
  - ttl-expired
    - admin-state keyword
    - number number
    - seconds number
  - unreachables
    - admin-state keyword
    - number number
    - seconds number
- ip-helper-address string
- local-dhcp-server reference
- neighbor-discovery
  - learn-unsolicited boolean
  - limit
    - log-only boolean
    - max-entries number
    - threshold number
  - local-proxy-arp boolean
  - proactive-refresh boolean
  - proxy-arp-policy reference
  - remote-proxy-arp boolean
  - retry-timer number
  - static-neighbor string
    - apply-groups reference
    - apply-groups-exclude reference
    - mac-address string
  - static-neighbor-unnumbered
    - mac-address string
  - timeout number
- primary

```

configure router interface ipv4 primary address

- **address** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **broadcast** *keyword*
- **gre-termination** *boolean*
- **prefix-length** *number*
- **track-srrp** *number*
- **qos-route-lookup** *keyword*
- **secondary** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **broadcast** *keyword*
  - **igp-inhibit** *boolean*
  - **prefix-length** *number*
  - **track-srrp** *number*
- **tcp-mss** *number*
- **unnumbered**
  - **ip-address** *string*
  - **ip-int-name** *string*
  - **system**
- **urpf-check**
  - **ignore-default** *boolean*
  - **mode** *keyword*
- **vrrp** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **authentication-key** *string*
  - **backup** *string*
  - **bfd-liveness**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **dest-ip** *string*
    - **interface-name** *string*
    - **service-name** *string*
  - **init-delay** *number*
  - **mac** *string*
  - **master-int-inherit** *boolean*
  - **message-interval** *number*
  - **monitor-oper-group** *reference*
  - **ntp-reply** *boolean*
  - **oper-group** *reference*
  - **owner** *boolean*
  - **passive** *boolean*
  - **ping-reply** *boolean*
  - **policy** *reference*
  - **preempt** *boolean*
  - **priority** *number*
  - **ssh-reply** *boolean*
  - **standby-forwarding** *boolean*
  - **telnet-reply** *boolean*
  - **traceroute-reply** *boolean*
- **ipv6**
  - **address** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **duplicate-address-detection** *boolean*
  - **eui-64** *boolean*
  - **prefix-length** *number*
  - **primary-preference** *number*
  - **track-srrp** *number*
  - **bfd**
    - **admin-state** *keyword*
    - **echo-receive** *number*

## configure router interface ipv6 bfd multiplier

- **multiplier** *number*
- **receive** *number*
- **transmit-interval** *number*
- **type** *keyword*
- **duplicate-address-detection** *boolean*
- **forward-ipv4-packets** *boolean*
- **icmp6**
  - **packet-too-big**
    - **admin-state** *keyword*
    - **number** *number*
    - **seconds** *number*
  - **param-problem**
    - **admin-state** *keyword*
    - **number** *number*
    - **seconds** *number*
  - **redirects**
    - **admin-state** *keyword*
    - **number** *number*
    - **seconds** *number*
  - **time-exceeded**
    - **admin-state** *keyword*
    - **number** *number*
    - **seconds** *number*
  - **unreachables**
    - **admin-state** *keyword*
    - **number** *number*
    - **seconds** *number*
- **link-local-address**
  - **address** *string*
  - **duplicate-address-detection** *boolean*
- **local-dhcp-server** *reference*
- **neighbor-discovery**
  - **learn-unsolicited** *keyword*
  - **limit**
    - **log-only** *boolean*
    - **max-entries** *number*
    - **threshold** *number*
  - **local-proxy-nd** *boolean*
  - **proactive-refresh** *keyword*
  - **proxy-nd-policy** *reference*
  - **reachable-time** *number*
  - **secure-nd**
    - **admin-state** *keyword*
    - **allow-unsecured-msgs** *boolean*
    - **public-key-min-bits** *number*
    - **security-parameter** *number*
  - **stale-time** *number*
  - **static-neighbor** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **mac-address** *string*
- **qos-route-lookup** *keyword*
- **tcp-mss** *number*
- **urpf-check**
  - **ignore-default** *boolean*
  - **mode** *keyword*
- **vrrp** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **backup** *string*
  - **bfd-liveness**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*

configure router interface ipv6 vrrp bfd-liveness dest-ip

```

    - dest-ip (ipv4-address-no-zone | ipv6-address-no-zone)
    - interface-name string
    - service-name string
  - init-delay number
  - mac string
  - master-int-inherit boolean
  - message-interval number
  - monitor-oper-group reference
  - ntp-reply boolean
  - oper-group reference
  - owner boolean
  - passive boolean
  - ping-reply boolean
  - policy reference
  - preempt boolean
  - priority number
  - standby-forwarding boolean
  - telnet-reply boolean
  - traceroute-reply boolean
- lag
  - link-map-profile number
  - per-link-hash
    - class number
    - weight number
- ldp-sync-timer
  - end-of-lib boolean
  - seconds number
- load-balancing
  - flow-label-load-balancing boolean
  - ip-load-balancing keyword
  - lsr-load-balancing keyword
  - spi-load-balancing boolean
  - teid-load-balancing boolean
- loopback
- mac string
- mac-accounting boolean
- network-domains
  - network-domain reference
- port (port-and-encap | keyword)
- ptp-hw-assist
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- qos
  - apply-groups reference
  - apply-groups-exclude reference
  - egress-instance number
  - egress-port-redirect-group reference
  - ingress-fp-redirect-group reference
  - ingress-instance number
  - network-policy reference
- strip-label boolean
- tos-marking-state keyword
- untrusted
  - default-forwarding keyword
- urpf-selected-vprns boolean
- vas-if-type keyword
- ipsec
  - multi-chassis-shunt-interface string
    - apply-groups reference
    - apply-groups-exclude reference
    - next-hop
      - address (ipv4-address-no-zone | ipv6-address-no-zone)
  - multi-chassis-shunting-profile string

```

## configure router ipsec multi-chassis-shunting-profile apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **peer** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **multi-chassis-shunt-interface** *reference*
- **security-policy** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **entry** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **local-ip**
      - **address** *string*
      - **any** *boolean*
    - **local-ipv6**
      - **address** *string*
      - **any** *boolean*
    - **remote-ip**
      - **address** *string*
      - **any** *boolean*
    - **remote-ipv6**
      - **address** *string*
      - **any** *boolean*
- **ipv6**
  - **neighbor-discovery**
    - **reachable-time** *number*
    - **stale-time** *number*
  - **router-advertisement**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **dns-options**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **rdnss-lifetime** (*keyword* | *number*)
      - **server** *string*
  - **interface** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **current-hop-limit** *number*
    - **dns-options**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **include-rdnss** *boolean*
      - **rdnss-lifetime** (*number* | *keyword*)
      - **server** *string*
    - **managed-configuration** *boolean*
    - **max-advertisement-interval** *number*
    - **min-advertisement-interval** *number*
    - **mtu** *number*
    - **other-stateful-configuration** *boolean*
    - **prefix** *string*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **autonomous** *boolean*
      - **on-link** *boolean*
      - **preferred-lifetime** (*keyword* | *number*)
      - **valid-lifetime** (*keyword* | *number*)
    - **reachable-time** *number*
    - **retransmit-time** *number*
    - **router-lifetime** *number*
    - **use-virtual-mac** *boolean*
  - **ipv6-te-router-id**

configure router ipv6-te-router-id interface

```

- interface reference
- isa-service-chaining
- apply-groups reference
- apply-groups-exclude reference
- nat-group number
- vxlan-vtep-range
  - end (ipv4-address-no-zone | ipv6-address-no-zone)
  - start (ipv4-address-no-zone | ipv6-address-no-zone)
- isis number
  - admin-state keyword
  - advertise-passive-only boolean
  - advertise-router-capability keyword
  - advertise-tunnel-link boolean
  - all-llisis string
  - all-l2isis string
  - apply-groups reference
  - apply-groups-exclude reference
  - area-address string
  - authentication-check boolean
  - authentication-key string
  - authentication-keychain reference
  - authentication-type keyword
  - csnp-authentication boolean
  - database-export
    - bgp-ls-identifier
      - value number
    - igp-identifier number
  - default-route-tag number
  - entropy-label
    - override-tunnel-elc boolean
  - export-limit
    - log-percent number
    - number number
  - export-policy reference
  - flexible-algorithms
    - admin-state keyword
    - flex-algo number
      - advertise reference
      - apply-groups reference
      - apply-groups-exclude reference
      - loopfree-alternate
      - micro-loop-avoidance
      - participate boolean
  - graceful-restart
    - helper-mode boolean
  - hello-authentication boolean
  - hello-padding keyword
  - ignore-attached-bit boolean
  - ignore-lsp-errors boolean
  - ignore-narrow-metric boolean
  - igp-shortcut
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - tunnel-next-hop
    - family keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - resolution keyword
      - resolution-filter
        - rsvp boolean
        - sr-te boolean
  - iid-tlv boolean
  - import-policy reference

```

## configure router isis interface

- **interface** *string*
- **adjacency-set** *reference*
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **bfd-liveness**
  - **ipv4**
    - **include-bfd-tlv** *boolean*
  - **ipv6**
    - **include-bfd-tlv** *boolean*
- **csnp-interval** *number*
- **default-instance** *boolean*
- **flex-algo** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **ipv4-node-sid**
  - **index** *number*
  - **label** *number*
- **ipv6-node-sid**
  - **index** *number*
  - **label** *number*
- **hello-authentication** *boolean*
- **hello-authentication-key** *string*
- **hello-authentication-keychain** *reference*
- **hello-authentication-type** *keyword*
- **hello-padding** *keyword*
- **interface-type** *keyword*
- **ipv4-adjacency-sid**
  - **label** *number*
- **ipv4-multicast** *boolean*
- **ipv4-node-sid**
  - **clear-n-flag** *boolean*
  - **index** *number*
  - **label** *number*
- **ipv6-adjacency-sid**
  - **label** *number*
- **ipv6-multicast** *boolean*
- **ipv6-node-sid**
  - **clear-n-flag** *boolean*
  - **index** *number*
  - **label** *number*
- **ipv6-unicast** *boolean*
- **level** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **hello-authentication-key** *string*
  - **hello-authentication-keychain** *reference*
  - **hello-authentication-type** *keyword*
  - **hello-interval** *number*
  - **hello-multiplier** *number*
  - **hello-padding** *keyword*
  - **ipv4-multicast-metric** *number*
  - **ipv6-multicast-metric** *number*
  - **ipv6-unicast-metric** *number*
  - **metric** *number*
  - **passive** *boolean*
  - **priority** *number*
  - **sd-offset** *number*
  - **sf-offset** *number*
- **level-capability** *keyword*
- **load-balancing-weight** *number*
- **loopfree-alternate**
  - **exclude** *boolean*
- **policy-map**

## configure router isis interface loopfree-alternate policy-map route-nh-template

- **route-nh-template** *reference*
- **lsp-pacing-interval** *number*
- **mesh-group**
  - **blocked**
  - **value** *number*
- **passive** *boolean*
- **retransmit-interval** *number*
- **sid-protection** *boolean*
- **tag** *number*
- **ipv4-multicast-routing** *keyword*
- **ipv4-routing** *boolean*
- **ipv6-multicast-routing** *keyword*
- **ipv6-routing** *keyword*
- **ldp-over-rsvp** *boolean*
- **ldp-sync** *boolean*
- **level** *keyword*
  - **advertise-router-capability** *boolean*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **authentication-key** *string*
  - **authentication-keychain** *reference*
  - **authentication-type** *keyword*
  - **bier**
    - **admin-state** *keyword*
    - **template** *reference*
  - **csnp-authentication** *boolean*
  - **database-export-exclude** *boolean*
  - **default-ipv4-multicast-metric** *number*
  - **default-ipv6-multicast-metric** *number*
  - **default-ipv6-unicast-metric** *number*
  - **default-metric** *number*
  - **external-preference** *number*
  - **hello-authentication** *boolean*
  - **hello-padding** *keyword*
  - **loopfree-alternate-exclude** *boolean*
  - **lsp-mtu-size** *number*
  - **preference** *number*
  - **psnp-authentication** *boolean*
  - **wide-metrics-only** *boolean*
- **level-capability** *keyword*
- **link-group** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **level** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **ipv4-multicast-metric-offset** *number*
    - **ipv4-unicast-metric-offset** *number*
    - **ipv6-multicast-metric-offset** *number*
    - **ipv6-unicast-metric-offset** *number*
    - **member** *reference*
    - **oper-members** *number*
    - **revert-members** *number*
- **loopfree-alternate**
  - **augment-route-table** *boolean*
  - **exclude**
    - **prefix-policy** *reference*
  - **multi-homed-prefix**
    - **preference** *keyword*
  - **remote-lfa**
    - **max-pq-cost** *number*
    - **node-protect**
      - **max-pq-nodes** *number*



configure router isis loopfree-alternate ti-lfa

```

- ti-lfa
  - max-sr-frr-labels number
  - max-srv6-frr-sids number
  - node-protect
- lsp-lifetime number
- lsp-minimum-remaining-lifetime number
- lsp-mtu-size number
- lsp-refresh
  - half-lifetime boolean
  - interval number
- mru-mismatch-detection boolean
- multi-topology
  - ipv4-multicast boolean
  - ipv6-multicast boolean
  - ipv6-unicast boolean
- multicast-import
  - ipv4 boolean
  - ipv6 boolean
- overload
  - max-metric boolean
- overload-export-external boolean
- overload-export-interlevel boolean
- overload-on-boot
  - max-metric boolean
  - timeout number
- poi-tlv boolean
- prefix-attributes-tlv boolean
- prefix-limit
  - limit number
  - log-only boolean
  - overload-timeout (number | keyword)
  - warning-threshold number
- psnp-authentication boolean
- reference-bandwidth number
- rib-priority
  - high
    - prefix-list reference
    - tag number
- router-id string
- segment-routing
  - adj-sid-hold (number | keyword)
  - adjacency-set number
    - advertise boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - family keyword
    - parallel boolean
    - sid
      - label number
  - adjacency-sid
    - allocate-dual-sids boolean
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - class-forwarding boolean
  - egress-statistics
    - adj-set boolean
    - adj-sid boolean
    - node-sid boolean
  - entropy-label boolean
  - export-tunnel-table keyword
  - ingress-statistics
    - adj-set boolean
    - adj-sid boolean

```

## configure router isis segment-routing ingress-statistics node-sid

- **node-sid** *boolean*
- **mapping-server**
  - **admin-state** *keyword*
  - **node-sid-map** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **clear-n-flag** *boolean*
    - **ip-prefix** *string*
    - **level-capability** *keyword*
    - **range** *number*
    - **set-flags**
      - **bit-s** *boolean*
- **maximum-sid-depth**
  - **override-bmi** *number*
  - **override-erld** *number*
- **micro-loop-avoidance**
  - **fib-delay** *number*
- **prefix-sid-range**
  - **global**
  - **max-index** *number*
  - **start-label** *number*
- **srlb** *reference*
- **tunnel-mtu** *number*
- **tunnel-table-pref** *number*
- **segment-routing-v6**
  - **adj-sid-hold** (*number* | *keyword*)
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **locator** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **level** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **metric** *number*
    - **level-capability** *keyword*
  - **multi-topology**
    - **mt0** *boolean*
    - **mt2** *boolean*
  - **tag** *number*
- **micro-segment-locator** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **level** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **metric** *number*
  - **level-capability** *keyword*
  - **multi-topology**
    - **mt0** *boolean*
    - **mt2** *boolean*
  - **tag** *number*
- **standard-multi-instance** *boolean*
- **strict-adjacency-check** *boolean*
- **summary-address** (*ipv4-prefix* | *ipv6-prefix*)
  - **algorithm** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **level-capability** *keyword*
  - **route-tag** *number*
- **suppress-attached-bit** *boolean*
- **system-id** *string*
- **timers**

## configure router isis timers lsp-wait

- **lsp-wait**
  - **lsp-initial-wait** *number*
  - **lsp-max-wait** *number*
  - **lsp-second-wait** *number*
- **spf-wait**
  - **spf-initial-wait** *number*
  - **spf-max-wait** *number*
  - **spf-second-wait** *number*
- **traffic-engineering** *boolean*
- **traffic-engineering-options**
  - **advertise-delay** *boolean*
  - **application-link-attributes**
    - **legacy** *boolean*
  - **ipv6** *boolean*
- **unicast-import**
  - **ipv4** *boolean*
  - **ipv6** *boolean*
- **l2tp**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **avp-hiding** *keyword*
  - **challenge** *boolean*
  - **destruct-timeout** *number*
  - **ethernet-tunnel**
    - **reconnect-timeout** (*number* | *keyword*)
  - **exclude-avps**
    - **calling-number** *boolean*
    - **initial-rx-lcp-conf-req** *boolean*
  - **failover**
    - **recovery-max-session-lifetime** *number*
    - **recovery-method** *keyword*
    - **recovery-time** *number*
    - **track-srrp** *reference*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **peer** *reference*
      - **sync-tag** *string*
  - **group** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **avp-hiding** *keyword*
    - **challenge** *keyword*
    - **description** *string*
    - **destruct-timeout** *number*
    - **ethernet-tunnel**
      - **reconnect-timeout** (*number* | *keyword*)
    - **failover**
      - **recovery-method** *keyword*
      - **recovery-time** *number*
    - **hello-interval** (*number* | *keyword*)
    - **idle-timeout** (*number* | *keyword*)
  - **l2tpv3**
    - **cookie-length** (*number* | *keyword*)
    - **digest-type** *keyword*
    - **nonce-length** *number*
    - **password** *string*
    - **private-tcp-mss-adjust** (*number* | *keyword*)
    - **public-tcp-mss-adjust** (*number* | *keyword*)
    - **pw-cap-list**
      - **ethernet** *boolean*
      - **ethernet-vlan** *boolean*
    - **rem-router-id** *string*

configure router l2tp group l2tpv3 track-password-change

```

- track-password-change boolean
- lac
- df-bit keyword
- lns
  - lns-group reference
  - load-balance-method keyword
  - mlppp
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - endpoint
      - ip (ipv4-address | keyword)
      - mac (mac-address | keyword)
    - interleave boolean
    - max-fragment-delay (number | keyword)
    - max-links number
    - reassembly-timeout number
    - short-sequence-numbers boolean
  - ppp
    - authentication keyword
    - authentication-policy string
    - chap-challenge-length
      - end number
      - start number
    - default-group-interface
      - interface string
      - service-name string
    - ipcp-subnet-negotiation boolean
    - keepalive
      - interval number
      - multiplier number
    - lcp-force-ack-accm boolean
    - lcp-ignore-magic-numbers boolean
    - mtu number
    - proxy-authentication boolean
    - proxy-lcp boolean
    - reject-disabled-ncp boolean
    - user-db string
  - local-address string
  - local-name string
  - max-retries-estab number
  - max-retries-not-estab number
  - password string
  - protocol keyword
  - radius-accounting-policy reference
  - receive-window-size number
  - session-assign-method keyword
  - session-limit (number | keyword)
  - tunnel string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - auto-establish boolean
    - avp-hiding keyword
    - challenge keyword
    - description string
    - destruct-timeout number
    - failover
      - recovery-method keyword
      - recovery-time number
    - hello-interval (number | keyword)
    - idle-timeout (number | keyword)
  - l2tpv3
    - private-tcp-mss-adjust (number | keyword)

```

configure router l2tp group tunnel l2tpv3 public-tcp-mss-adjust

```

- public-tcp-mss-adjust (number | keyword)
- lac
- df-bit keyword
- lns
- lns-group reference
- load-balance-method keyword
- mlppp
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- endpoint
- ip (ipv4-address | keyword)
- mac (mac-address | keyword)
- interleave keyword
- max-fragment-delay number
- max-links number
- reassembly-timeout number
- short-sequence-numbers keyword
- ppp
- authentication keyword
- authentication-policy string
- chap-challenge-length
- end number
- start number
- default-group-interface
- interface string
- service-name string
- ipcp-subnet-negotiation keyword
- keepalive
- interval number
- multiplier number
- lcp-force-ack-accm keyword
- lcp-ignore-magic-numbers keyword
- mtu number
- proxy-authentication keyword
- proxy-lcp keyword
- reject-disabled-ncp keyword
- user-db string
- local-address string
- local-name string
- max-retries-estab number
- max-retries-not-estab number
- password string
- peer string
- preference number
- radius-accounting-policy reference
- receive-window-size number
- remote-name string
- session-limit (number | keyword)
- group-session-limit number
- hello-interval (number | keyword)
- idle-timeout (number | keyword)
- ignore-avps
- sequencing-required boolean
- l2tpv3
- cookie-length number
- digest-type keyword
- nonce-length number
- password string
- private-tcp-mss-adjust number
- public-tcp-mss-adjust number
- transport-type
- ip boolean
- lac

```

configure router l2tp lac calling-number-format

```

- calling-number-format string
- cisco-nas-port
  - ethernet string
- df-bit boolean
- local-address string
- local-name string
- max-retries-estab number
- max-retries-not-estab number
- next-attempt keyword
- password string
- peer-address-change-policy keyword
- radius-accounting-policy reference
- receive-window-size number
- replace-result-code
  - cdn-invalid-dst boolean
  - cdn-permanent-no-facilities boolean
  - cdn-temporary-no-facilities boolean
- rtm-debounce-time (number | keyword)
- session-assign-method keyword
- session-limit number
- tunnel-selection-blacklist
  - add-tunnel-on
    - address-change-timeout boolean
    - cdn-err-code boolean
    - cdn-invalid-dst boolean
    - cdn-permanent-no-facilities boolean
    - cdn-temporary-no-facilities boolean
    - stop-ccn-err-code boolean
    - stop-ccn-other boolean
    - tx-cdn-not-established-in-time boolean
  - max-list-length (number | keyword)
  - max-time number
  - timeout-action keyword
- tunnel-session-limit number
- ldp
  - admin-state keyword
  - aggregate-prefix-match
    - admin-state keyword
    - prefix-exclude reference
  - apply-groups reference
  - apply-groups-exclude reference
  - class-forwarding keyword
  - consider-system-ip-in-gep boolean
  - egress-statistics
    - fec-prefix (ipv4-prefix | ipv6-prefix)
      - accounting-policy reference
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - collect-stats boolean
    - entropy-label-capability boolean
  - export-policy reference
  - export-tunnel-table reference
  - fast-reroute
    - backup-sr-tunnel boolean
  - fec-originate (ipv4-prefix | ipv6-prefix)
    - advertised-label number
    - apply-groups reference
    - apply-groups-exclude reference
  - interface string
  - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
  - pop boolean
  - swap-label number
- generate-basic-fec-only boolean

```

## configure router ldp graceful-restart

- **graceful-restart**
  - **helper-mode** *boolean*
  - **maximum-recovery-time** *number*
  - **neighbor-liveness-time** *number*
- **implicit-null-label** *boolean*
- **import-mcast-policy** *reference*
- **import-pmsi-routes**
  - **mvpn** *boolean*
  - **mvpn-no-export-community** *boolean*
- **import-policy** *reference*
- **import-tunnel-table** *reference*
- **interface-parameters**
  - **interface** *reference*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **bfd-liveness**
      - **ipv4** *boolean*
      - **ipv6** *boolean*
  - **ipv4**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **fec-type-capability**
      - **p2mp-ipv4** *boolean*
      - **p2mp-ipv6** *boolean*
      - **prefix-ipv4** *boolean*
      - **prefix-ipv6** *boolean*
    - **hello**
      - **factor** *number*
      - **timeout** *number*
    - **keepalive**
      - **factor** *number*
      - **timeout** *number*
    - **local-lsr-id**
      - **interface-name** *reference*
    - **transport-address** *keyword*
  - **ipv6**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **fec-type-capability**
      - **p2mp-ipv4** *boolean*
      - **p2mp-ipv6** *boolean*
      - **prefix-ipv4** *boolean*
      - **prefix-ipv6** *boolean*
    - **hello**
      - **factor** *number*
      - **timeout** *number*
    - **keepalive**
      - **factor** *number*
      - **timeout** *number*
    - **local-lsr-id**
      - **format-32bit** *boolean*
      - **interface-name** *reference*
    - **transport-address** *keyword*
  - **load-balancing-weight** *number*
- **ipv4**
  - **hello**
    - **factor** *number*
    - **timeout** *number*
  - **keepalive**
    - **factor** *number*
    - **timeout** *number*

configure router ldp interface-parameters ipv4 transport-address

```

- transport-address keyword
- ipv6
- hello
  - factor number
  - timeout number
- keepalive
  - factor number
  - timeout number
- transport-address keyword
- label-withdrawal-delay number
- ldp-shortcut
  - ipv4 boolean
  - ipv6 boolean
- legacy-ipv4-lsr-interop boolean
- lsp-bfd reference
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd-liveness boolean
  - bfd-template reference
  - failure-action keyword
  - lsp-ping-interval (number | keyword)
  - priority number
  - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- max-ecmp-routes number
- mcast-upstream-asbr-frr boolean
- mcast-upstream-frr boolean
- mp-mbb-time number
- prefer-mcast-tunnel-in-tunnel boolean
- prefer-protocol-stitching boolean
- prefer-tunnel-in-tunnel boolean
- resolve-root-using keyword
- session-parameters
  - peer (ipv4-address-no-zone | ipv6-address-no-zone)
    - adv-adj-addr-only boolean
    - adv-local-lsr-id boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - community string
    - dod-label-distribution boolean
    - export-addresses reference
    - export-prefixes reference
    - fec-limit
      - limit number
      - log-only boolean
      - threshold number
    - fec-type-capability
      - p2mp boolean
      - prefix-ipv4 boolean
      - prefix-ipv6 boolean
    - fec129-cisco-interop boolean
    - import-prefixes reference
    - pe-id-mac-flush-interop boolean
  - shortcut-local-ttl-propagate boolean
  - shortcut-transit-ttl-propagate boolean
- targeted-session
  - auto-rx
    - ipv4
      - admin-state keyword
      - tunneling boolean
  - auto-tx
    - ipv4
      - admin-state keyword
      - tunneling boolean
- export-prefixes reference

```



## configure router ldp targeted-session import-prefixes

```

- import-prefixes reference
- ipv4
  - hello
    - factor number
    - timeout number
  - hello-reduction
    - admin-state keyword
    - factor number
  - keepalive
    - factor number
    - timeout number
- ipv6
  - hello
    - factor number
    - timeout number
  - hello-reduction
    - admin-state keyword
    - factor number
  - keepalive
    - factor number
    - timeout number
- peer (ipv4-address-no-zone | ipv6-address-no-zone)
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd-liveness boolean
  - hello
    - factor number
    - timeout number
  - hello-reduction
    - admin-state keyword
    - factor number
  - keepalive
    - factor number
    - timeout number
  - local-lsr-id
    - format-32bit boolean
    - interface-name reference
  - mcast-tunneling
    - lsp string
  - tunneling
    - lsp string
- peer-template string
  - admin-state keyword
  - adv-local-lsr-id boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd-liveness boolean
  - community string
  - hello
    - factor number
    - timeout number
  - hello-reduction
    - admin-state keyword
    - factor number
  - keepalive
    - factor number
    - timeout number
  - local-lsr-id
    - interface-name reference
  - mcast-tunneling boolean
  - tunneling boolean
- peer-template-map reference
  - apply-groups reference

```

configure router ldp targeted-session peer-template-map apply-groups-exclude

```

    - apply-groups-exclude reference
    - policy-map reference
    - resolve-v6-prefix-over-shortcut boolean
    - sdp-auto-targeted-session boolean
  - tcp-session-parameters
    - authentication-key string
    - authentication-keychain reference
    - peer-transport (ipv4-address-no-zone | ipv6-address-no-zone)
      - apply-groups reference
      - apply-groups-exclude reference
      - authentication-key string
      - authentication-keychain reference
      - path-mtu-discovery boolean
      - ttl-security number
    - tunnel-down-damp-time number
    - tunnel-table-pref number
    - weighted-ecmp boolean
  - leak-export
    - leak-export-limit number
    - policy-name (policy-expr-string | string)
  - lsp-bfd
    - bfd-sessions number
    - tail-end
      - apply-groups reference
      - apply-groups-exclude reference
      - multiplier number
      - receive-interval number
      - transmit-interval number
  - mc-maximum-routes
    - log-only boolean
    - threshold number
    - value number
  - mld
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - forwarding-group-interface forwarding-service string group-interface-
name reference
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - import-policy reference
      - maximum-number-group-sources number
      - maximum-number-groups number
      - maximum-number-sources number
      - mcac
        - bandwidth
          - mandatory (number | keyword)
          - total (number | keyword)
        - interface-policy reference
        - policy reference
      - query-interval number
      - query-last-member-interval number
      - query-response-interval number
      - query-source-address string
      - router-alert-check boolean
      - sub-hosts-only boolean
      - subnet-check boolean
      - version keyword
    - group-if-query-source-address string
  - group-interface reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference

```

## configure router mld group-interface import-policy

- **import-policy** *reference*
- **maximum-number-group-sources** *number*
- **maximum-number-groups** *number*
- **maximum-number-sources** *number*
- **mcac**
  - **bandwidth**
    - **mandatory** (*number* | *keyword*)
    - **total** (*number* | *keyword*)
  - **interface-policy** *reference*
  - **policy** *reference*
- **query-interval** *number*
- **query-last-member-interval** *number*
- **query-response-interval** *number*
- **query-source-address** *string*
- **router-alert-check** *boolean*
- **sub-hosts-only** *boolean*
- **subnet-check** *boolean*
- **version** *keyword*
- **interface** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **import-policy** *reference*
  - **maximum-number-group-sources** *number*
  - **maximum-number-groups** *number*
  - **maximum-number-sources** *number*
  - **mcac**
    - **bandwidth**
      - **mandatory** (*number* | *keyword*)
      - **total** (*number* | *keyword*)
    - **interface-policy** *reference*
  - **mc-constraints**
    - **level** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **bandwidth** *number*
    - **number-down** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **level** *number*
    - **use-lag-port-weight** *boolean*
  - **policy** *reference*
  - **query-interval** *number*
  - **query-last-member-interval** *number*
  - **query-response-interval** *number*
  - **router-alert-check** *boolean*
  - **ssm-translate**
    - **group-range** **start** *string* **end** *string*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **source** *string*
  - **static**
    - **group** *string*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **source** *string*
      - **starg**
    - **group-range** **start** *string* **end** *string* **step** *string*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **source** *string*
      - **starg**
  - **version** *keyword*
  - **query-interval** *number*

configure router mld query-last-member-interval

- **query-last-member-interval** *number*
- **query-response-interval** *number*
- **robust-count** *number*
- **ssm-translate**
  - **group-range** **start** *string* **end** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **source** *string*
- **mpls**
  - **admin-group-frr** *boolean*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **auto-bandwidth-multipliers**
    - **adjust-multiplier** *number*
    - **sample-multiplier** *number*
  - **auto-lsp** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **one-hop** *boolean*
    - **policy** *reference*
  - **aux-stats**
    - **sr** *boolean*
  - **bypass-resignal-timer** *number*
  - **class-forwarding-policy** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **default-set** *number*
    - **fc** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **forwarding-set** *number*
  - **cspf-on-loose-hop** *boolean*
  - **dynamic-bypass** *boolean*
  - **entropy-label**
    - **rsvp-te** *boolean*
    - **sr-te** *boolean*
  - **exponential-backoff-retry** *boolean*
  - **forwarding-policies**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **forwarding-policy** *string*
      - **admin-state** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **binding-label** *number*
      - **egress-statistics**
        - **admin-state** *keyword*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
      - **endpoint** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
      - **ingress-statistics**
        - **admin-state** *keyword*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
      - **metric** *number*
      - **next-hop-group** *number*
        - **admin-state** *keyword*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **backup-next-hop**
          - **apply-groups** *reference*
          - **apply-groups-exclude** *reference*

configure router mpls forwarding-policies forwarding-policy next-hop-group backup-next-hop next-hop

```

    - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
    - pushed-labels number
      - apply-groups reference
      - apply-groups-exclude reference
      - label number
    - load-balancing-weight number
    - primary-next-hop
      - apply-groups reference
      - apply-groups-exclude reference
      - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
      - pushed-labels number
        - apply-groups reference
        - apply-groups-exclude reference
        - label number
      - resolution-type keyword
    - preference number
    - revert-timer number
    - tunnel-table-pref number
  - reserved-label-block reference
- frr-object boolean
- hold-timer number
- ingress-statistics
  - lsp sender (ipv4-address-no-zone | ipv6-address-no-zone) lsp-name string
    - accounting-policy reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - collect-stats boolean
    - stat-mode keyword
  - p2mp-template-lsp sender (ipv4-address-no-zone | ipv6-address-no-zone) rsvp-  
session-name string
    - accounting-policy reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - collect-stats boolean
    - max-stats number
    - stat-mode keyword
  - p2p-template-lsp sender (ipv4-address-no-zone | ipv6-address-no-zone) rsvp-  
session-name string
    - accounting-policy reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - collect-stats boolean
    - max-stats number
    - stat-mode keyword
- interface reference
  - admin-group reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - label-map number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - pop
  - swap
    - apply-groups reference
    - apply-groups-exclude reference
    - next-hop string
    - out-label (number | keyword)
- srlg-group reference
- te-metric number

```

## configure router mpls least-fill-min-thd

```

- least-fill-min-thd number
- least-fill-reoptim-thd number
- logger-event-bundling boolean
- lsp string
  - adaptive boolean
  - admin-state keyword
  - admin-tag reference
  - adspec boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - auto-bandwidth
    - adjust-down
      - bw number
      - percent number
    - adjust-up
      - bw number
      - percent number
    - apply-groups reference
    - apply-groups-exclude reference
    - fc keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - sampling-weight number
    - max-bandwidth number
    - min-bandwidth number
    - monitor-bandwidth boolean
    - multipliers
      - adjust-multiplier number
      - sample-multiplier number
    - overflow-limit
      - bw number
      - number number
      - threshold number
    - underflow-limit
      - bw number
      - number number
      - threshold number
    - use-last-adj-bw
      - secondary-retry-limit (number | keyword)
  - bfd
    - bfd-liveness boolean
    - bfd-template reference
    - failure-action keyword
    - lsp-ping-interval (number | keyword)
    - return-path-label number
    - wait-for-up-timer number
  - bgp-shortcut boolean
  - bgp-transport-tunnel boolean
  - binding-sid number
  - class-forwarding
    - forwarding-set
      - policy reference
      - set number
  - class-type number
  - egress-statistics
    - accounting-policy reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - collect-stats boolean
    - stat-mode keyword
  - entropy-label keyword
  - exclude-admin-group reference
  - exclude-node (ipv4-address-no-zone | ipv6-address-no-zone)

```

configure router mpls lsp fallback-path-computation-method

- **fallback-path-computation-method** *keyword*
- **fast-reroute**
  - **frr-method** *keyword*
  - **hop-limit** *number*
  - **node-protect** *boolean*
  - **propagate-admin-group** *boolean*
- **from** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
- **hop-limit** *number*
- **igp-shortcut**
  - **admin-state** *keyword*
  - **lfa-type** *keyword*
  - **relative-metric** *number*
- **include-admin-group** *reference*
- **label-stack-reduction** *boolean*
- **ldp-over-rsvp** *boolean*
- **least-fill** *boolean*
- **load-balancing-weight** *number*
- **local-sr-protection** *keyword*
- **lsp-self-ping** *keyword*
- **main-ct-retry-limit** *number*
- **max-sr-labels**
  - **additional-frr-labels** *number*
  - **label-stack-size** *number*
- **metric** *number*
- **metric-type** *keyword*
- **override-tunnel-elc** *boolean*
- **p2mp-id** *number*
- **path-computation-method** *keyword*
- **path-profile** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **path-group** *number*
- **pce-associations**
  - **diversity** *reference*
  - **policy** *reference*
- **pce-control** *boolean*
- **pce-report** *keyword*
- **primary** *reference*
  - **adaptive** *boolean*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **backup-class-type** *number*
  - **bandwidth** *number*
  - **bfd**
    - **bfd-liveness** *boolean*
    - **bfd-template** *reference*
    - **lsp-ping-interval** (*number* | *keyword*)
    - **return-path-label** *number*
    - **wait-for-up-timer** *number*
- **class-type** *number*
- **exclude-admin-group**
  - **group** *reference*
- **hop-limit** *number*
- **include-admin-group**
  - **group** *reference*
- **priority**
  - **hold-priority** *number*
  - **setup-priority** *number*
- **record** *boolean*
- **record-label** *boolean*
- **primary-p2mp-instance** *string*
  - **adaptive** *boolean*
  - **admin-state** *keyword*

configure router mpls lsp primary-p2mp-instance apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **bandwidth** *number*
- **exclude-admin-group**
  - **group** *reference*
- **hop-limit** *number*
- **include-admin-group**
  - **group** *reference*
- **priority**
  - **hold-priority** *number*
  - **setup-priority** *number*
- **record** *boolean*
- **record-label** *boolean*
- **s2l-path** *reference to (ipv4-address-no-zone | ipv6-address-no-zone)*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **propagate-admin-group** *boolean*
- **retry-limit** *number*
- **retry-timer** *number*
- **revert-timer** *number*
- **rsvp-resv-style** *keyword*
- **secondary** *reference*
  - **adaptive** *boolean*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **bandwidth** *number*
  - **bfd**
    - **bfd-liveness** *boolean*
    - **bfd-template** *reference*
    - **lsp-ping-interval** *(number | keyword)*
    - **return-path-label** *number*
    - **wait-for-up-timer** *number*
- **class-type** *number*
- **exclude-admin-group**
  - **group** *reference*
- **hop-limit** *number*
- **include-admin-group**
  - **group** *reference*
- **path-preference** *number*
- **priority**
  - **hold-priority** *number*
  - **setup-priority** *number*
- **record** *boolean*
- **record-label** *boolean*
- **srlg** *boolean*
- **standby** *boolean*
- **soft-preemption** *boolean*
- **to** *(ipv4-address-no-zone | ipv6-address-no-zone)*
- **type** *keyword*
- **vprn-auto-bind** *boolean*
- **lsp-bsid-block** *reference*
- **lsp-history**
  - **admin-state** *keyword*
- **lsp-init-retry-timeout** *number*
- **lsp-self-ping**
  - **interval** *number*
  - **rsvp-te** *boolean*
  - **timeout** *number*
  - **timeout-action** *keyword*
- **lsp-template** *string*
  - **adaptive** *boolean*
  - **admin-state** *keyword*



## configure router mpls lsp-template admin-tag

- **admin-tag** *reference*
- **adspec** *boolean*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **auto-bandwidth**
  - **adjust-down**
    - **bw** *number*
    - **percent** *number*
  - **adjust-up**
    - **bw** *number*
    - **percent** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **fc** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **sampling-weight** *number*
- **max-bandwidth** *number*
- **min-bandwidth** *number*
- **monitor-bandwidth** *boolean*
- **multipliers**
  - **adjust-multiplier** *number*
  - **sample-multiplier** *number*
- **overflow-limit**
  - **bw** *number*
  - **number** *number*
  - **threshold** *number*
- **underflow-limit**
  - **bw** *number*
  - **number** *number*
  - **threshold** *number*
- **backup-class-type** *number*
- **bandwidth** *number*
- **bfd**
  - **bfd-liveness** *boolean*
  - **bfd-template** *reference*
  - **failure-action** *keyword*
  - **lsp-ping-interval** (*number* | *keyword*)
  - **return-path-label** *number*
  - **wait-for-up-timer** *number*
- **bgp-shortcut** *boolean*
- **bgp-transport-tunnel** *boolean*
- **binding-sid** *boolean*
- **class-forwarding**
  - **forwarding-set**
    - **policy** *reference*
    - **set** *number*
- **class-type** *number*
- **default-path** *reference*
- **egress-statistics**
  - **accounting-policy** *reference*
  - **collect-stats** *boolean*
  - **stat-mode** *keyword*
- **entropy-label** *keyword*
- **exclude-admin-group** *reference*
- **fallback-path-computation-method** *keyword*
- **family** *keyword*
- **fast-reroute**
  - **frr-method** *keyword*
  - **hop-limit** *number*
  - **node-protect** *boolean*
  - **propagate-admin-group** *boolean*
- **from** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
- **hop-limit** *number*

configure router mpls lsp-template igp-shortcut

- **igp-shortcut**
    - **admin-state** *keyword*
    - **lfa-type** *keyword*
    - **relative-metric** *number*
  - **include-admin-group** *reference*
  - **label-stack-reduction** *boolean*
  - **ldp-over-rsvp** *boolean*
  - **least-fill** *boolean*
  - **load-balancing-weight** *number*
  - **local-sr-protection** *keyword*
  - **lsp-self-ping** *keyword*
  - **main-ct-retry-limit** *number*
  - **max-sr-labels**
    - **additional-frr-labels** *number*
    - **label-stack-size** *number*
  - **metric** *number*
  - **metric-type** *keyword*
  - **override-tunnel-elc** *boolean*
  - **path-computation-method** *keyword*
  - **path-profile** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **path-group** *number*
  - **pce-associations**
    - **diversity** *reference*
    - **policy** *reference*
  - **pce-control** *boolean*
  - **pce-report** *keyword*
  - **priority**
    - **hold-priority** *number*
    - **setup-priority** *number*
  - **propagate-admin-group** *boolean*
  - **record** *boolean*
  - **record-label** *boolean*
  - **retry-limit** *number*
  - **retry-timer** *number*
  - **soft-preemption** *boolean*
  - **template-id** (*number* | *keyword*)
  - **type** *keyword*
  - **vprn-auto-bind** *boolean*
- **max-bypass-associations** *number*
  - **max-bypass-plr-associations** *number*
  - **mbb-prefer-current-hops** *boolean*
  - **p2mp-resignal-timer** *number*
  - **p2mp-s2l-fast-retry** *number*
  - **p2p-active-path-fast-retry** *number*
  - **path** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **hop** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
      - **sid-label** *number*
      - **type** *keyword*
  - **pce-init-lsp**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **sr-te**
      - **admin-state** *keyword*
  - **pce-report**
    - **rsvp-te** *boolean*
    - **sr-te** *boolean*

## configure router mpls resignal-on-igp-overload

- **resignal-on-igp-overload** *boolean*
- **resignal-timer** *number*
- **retry-on-igp-overload** *boolean*
- **secondary-fast-retry-timer** *number*
- **shortcut-local-ttl-propagate** *boolean*
- **shortcut-transit-ttl-propagate** *boolean*
- **sr-te-resignal**
  - **resignal-on-igp-event** *boolean*
  - **resignal-timer** *number*
- **srlg-database**
  - **router-id** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **interface** *string* **srlg-group** *reference*
- **srlg-frr** *keyword*
- **static-lsp** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **metric** *number*
  - **push**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **next-hop** *string*
    - **out-label** (*number* | *keyword*)
    - **to** *string*
  - **static-lsp-fast-retry** *number*
  - **strict-ero-nhop-direct-resolution** *boolean*
- **tunnel-table-pref**
  - **rsvp-te** *number*
  - **sr-te** *number*
- **user-srlg-db** *boolean*
- **mpls-labels**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **bgp-labels-hold-timer** *number*
  - **reserved-label-block** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **end-label** *number*
    - **start-label** *number*
  - **sr-labels**
    - **end** *number*
    - **start** *number*
  - **static-label-range** *number*
- **msdp**
  - **active-source-limit** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **data-encapsulation** *boolean*
  - **export-policy** *reference*
  - **group** *string*
    - **active-source-limit** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **export-policy** *reference*
    - **import-policy** *reference*
    - **local-address** *string*
    - **mode** *keyword*
    - **peer** *string*
      - **active-source-limit** *number*

configure router msdp group peer admin-state

```

- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- authentication-key string
- default-peer boolean
- export-policy reference
- import-policy reference
- local-address string
- receive-message-rate
  - rate number
  - threshold number
  - time number
- receive-message-rate
  - rate number
  - threshold number
  - time number
- import-policy reference
- local-address string
- peer string
  - active-source-limit number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication-key string
  - default-peer boolean
  - export-policy reference
  - import-policy reference
  - local-address string
  - receive-message-rate
    - rate number
    - threshold number
    - time number
- receive-message-rate
  - rate number
  - threshold number
  - time number
- rpf-table keyword
- source string
  - active-source-limit number
  - apply-groups reference
  - apply-groups-exclude reference
  - source-active-cache-lifetime number
- mss-adjust
  - apply-groups reference
  - apply-groups-exclude reference
  - nat-group number
  - segment-size number
- mtrace2
  - admin-state keyword
  - udp-port number
- multicast-info-policy reference
- nat
  - apply-groups reference
  - apply-groups-exclude reference
  - inside
    - l2-aware
      - subscribers string
    - large-scale
      - dnat-only
        - source-prefix-list reference
      - dual-stack-lite
        - admin-state keyword
        - deterministic
          - policy-map string

```

configure router nat inside large-scale dual-stack-lite deterministic policy-map admin-state

```

- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- map string to string
  - apply-groups reference
  - apply-groups-exclude reference
  - first-outside-address string
- nat-policy reference
- prefix-map string nat-policy reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - map string to string
    - apply-groups reference
    - apply-groups-exclude reference
    - first-outside-address string
- endpoint string
  - apply-groups reference
  - apply-groups-exclude reference
  - ip-fragmentation keyword
  - min-first-fragment-size-rx number
  - reassembly boolean
  - tunnel-mtu number
- max-subscriber-limit number
- subscriber-prefix-length number
- nat-policy reference
- nat44
  - destination-prefix string
  - apply-groups reference
  - apply-groups-exclude reference
  - nat-policy reference
- deterministic
  - policy-map string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - map string to string
      - apply-groups reference
      - apply-groups-exclude reference
      - first-outside-address string
    - nat-policy reference
  - prefix-map string nat-policy reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - map string to string
      - apply-groups reference
      - apply-groups-exclude reference
      - first-outside-address string
  - max-subscriber-limit number
  - nat-import reference
- nat64
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - drop-zero-ipv4-checksum boolean
  - insert-ipv6-fragment-header boolean
  - ip-fragmentation keyword
  - ipv6-mtu number
  - prefix string
  - subscriber-prefix-length number
- tos
  - downstream
    - use-ipv4 boolean

```

configure router nat inside large-scale nat64 tos upstream

```

    - upstream
      - set-tos (keyword | number)
  - redundancy
    - peer string
    - peer6 string
    - steering-route string
  - subscriber-identification
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - attribute
      - type keyword
      - vendor keyword
    - description string
    - drop-unidentified-traffic boolean
    - radius-proxy-server
      - router-instance string
      - server string
  - map
    - map-domain reference
  - outside
    - dnat-only
      - route-limit number
    - filters
      - downstream
        - ipv4 reference
        - ipv6 reference
      - upstream
        - ipv4 reference
        - ipv6 reference
  - mtu number
  - pool string
    - address-range string end string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - drain boolean
    - admin-state keyword
    - applications
      - agnostic boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - icmp-echo-reply boolean
    - l2-aware
      - default-host
        - inside-router-instance string
        - ip-address string
        - rate-limit number
      - external-assignment boolean
    - port-block-extension
      - ports number
      - subscriber
        - watermarks
          - high number
          - low number
      - subscriber-limit number
      - watermarks
        - high number
        - low number
  - large-scale
    - default-host
      - inside-router-instance string
      - ip-address string

```

configure router nat outside pool large-scale default-host rate-limit

```

    - rate-limit number
    - deterministic
    - port-reservation number
    - watermarks
      - high number
      - low number
    - redundancy
      - admin-state keyword
      - export-route string
      - follow
        - name string
        - router-instance string
      - monitor-route string
    - subscriber-limit number
  - mode keyword
  - nat-group reference
  - port-forwarding
    - dynamic-block-reservation boolean
    - range-end number
    - range-start number
  - port-reservation
    - port-blocks number
    - ports number
  - type keyword
  - watermarks
    - high number
    - low number
    - wlan-gw-group reference
- network-domains
  - network-domain string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
- origin-validation
  - apply-groups reference
  - apply-groups-exclude reference
  - rpki-session (ipv4-address-no-zone | ipv6-address-no-zone)
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - connect-retry number
    - description string
    - local-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - port number
    - refresh-time
      - hold-time number
      - value number
    - stale-time number
  - static-entry (ipv4-prefix | ipv6-prefix) upto number origin-as number
    - apply-groups reference
    - apply-groups-exclude reference
    - valid boolean
- ospf number
  - admin-state keyword
  - advertise-router-capability keyword
  - advertise-tunnel-link boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - area string
    - advertise-router-capability boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - area-range string
      - advertise boolean

```

## configure router ospf area area-range apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **bier**
  - **admin-state** *keyword*
  - **template** *reference*
- **blackhole-aggregate** *boolean*
- **database-export-exclude** *boolean*
- **export-policy** *reference*
- **import-policy** *reference*
- **interface** *string*
  - **adjacency-set** *reference*
  - **adjacency-sid**
    - **label** *number*
  - **admin-state** *keyword*
  - **advertise-router-capability** *boolean*
  - **advertise-subnet** *boolean*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **authentication-key** *string*
  - **authentication-keychain** *reference*
  - **authentication-type** *keyword*
  - **bfd-liveness**
    - **remain-down-on-failure** *boolean*
  - **dead-interval** *number*
  - **flex-algo** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **node-sid**
      - **index** *number*
      - **label** *number*
  - **hello-interval** *number*
  - **interface-type** *keyword*
  - **load-balancing-weight** *number*
  - **loopfree-alternate**
    - **exclude** *boolean*
    - **policy-map**
      - **route-nh-template** *reference*
  - **lsa-filter-out** *keyword*
  - **message-digest-key** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **md5** *string*
  - **metric** *number*
  - **mtu** *number*
  - **neighbor** *string*
  - **node-sid**
    - **clear-n-flag** *boolean*
    - **index** *number*
    - **label** *number*
  - **passive** *boolean*
  - **poll-interval** *number*
  - **priority** *number*
  - **retransmit-interval** *number*
  - **rib-priority** *keyword*
  - **sid-protection** *boolean*
  - **transit-delay** *number*
- **loopfree-alternate-exclude** *boolean*
- **nssa**
  - **area-range** *string*
    - **advertise** *boolean*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **originate-default-route**
    - **adjacency-check** *boolean*



configure router ospf area nssa originate-default-route type-nssa

- **type-nssa** *boolean*
- **redistribute-external** *boolean*
- **summaries** *boolean*
- **stub**
  - **default-metric** *number*
  - **summaries** *boolean*
- **virtual-link** *string* **transit-area** *reference*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **authentication-key** *string*
  - **authentication-keychain** *reference*
  - **authentication-type** *keyword*
  - **dead-interval** *number*
  - **hello-interval** *number*
  - **message-digest-key** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **md5** *string*
  - **retransmit-interval** *number*
  - **transit-delay** *number*
- **asbr**
  - **trace-path** (*number* | *keyword*)
- **compatible-rfc1583** *boolean*
- **database-export**
  - **bgp-ls-identifier**
    - **value** *number*
  - **igp-identifier** *number*
- **entropy-label**
  - **override-tunnel-elc** *boolean*
- **export-limit**
  - **log-percent** *number*
  - **number** *number*
- **export-policy** *reference*
- **external-db-overflow**
  - **interval** *number*
  - **limit** *number*
- **external-preference** *number*
- **flexible-algorithms**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **flex-algo** *number*
    - **advertise** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **loopfree-alternate**
    - **participate** *boolean*
- **graceful-restart**
  - **helper-mode** *boolean*
  - **strict-lsa-checking** *boolean*
- **igp-shortcut**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **tunnel-next-hop**
    - **family** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **resolution** *keyword*
      - **resolution-filter**
        - **rsvp** *boolean*
        - **sr-te** *boolean*
- **import-policy** *reference*

## configure router ospf ldp-over-rsvp

- **ldp-over-rsvp** *boolean*
- **ldp-sync** *boolean*
- **loopfree-alternate**
  - **augment-route-table** *boolean*
  - **exclude**
    - **prefix-policy** *reference*
- **multi-homed-prefix**
  - **preference** *keyword*
- **remote-lfa**
  - **max-pq-cost** *number*
  - **node-protect**
    - **max-pq-nodes** *number*
- **ti-lfa**
  - **max-sr-frr-labels** *number*
  - **node-protect**
- **multi-instance** *boolean*
- **multicast-import** *boolean*
- **overload** *boolean*
- **overload-include-ext-1** *boolean*
- **overload-include-ext-2** *boolean*
- **overload-include-stub** *boolean*
- **overload-on-boot**
  - **timeout** *number*
- **preference** *number*
- **reference-bandwidth** *number*
- **rib-priority**
  - **high**
    - **prefix-list** *reference*
- **router-id** *string*
- **rtr-adv-lsa-limit**
  - **log-only** *boolean*
  - **max-lsa-count** *number*
  - **overload-timeout** (*number* | *keyword*)
  - **warning-threshold** *number*
- **segment-routing**
  - **adj-sid-hold** (*number* | *keyword*)
  - **adjacency-set** *number*
    - **advertise** *boolean*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **parallel** *boolean*
    - **sid**
      - **label** *number*
  - **adjacency-sid**
    - **allocate-dual-sids** *boolean*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **backup-node-sid**
    - **index** *number*
    - **ip-prefix** *string*
    - **label** *number*
  - **class-forwarding** *boolean*
  - **egress-statistics**
    - **adj-set** *boolean*
    - **adj-sid** *boolean*
    - **node-sid** *boolean*
  - **entropy-label** *boolean*
  - **export-tunnel-table** *keyword*
  - **ingress-statistics**
    - **adj-set** *boolean*
    - **adj-sid** *boolean*
    - **node-sid** *boolean*
  - **mapping-server**

## configure router ospf segment-routing mapping-server admin-state

- **admin-state** *keyword*
- **node-sid-map** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **ip-prefix** *string*
  - **range** *number*
  - **scope**
    - **area** *reference*
    - **as**
- **maximum-sid-depth**
  - **override-bmi** *number*
  - **override-erld** *number*
- **prefix-sid-range**
  - **global**
  - **max-index** *number*
  - **start-label** *number*
- **srlb** *reference*
- **tunnel-mtu** *number*
- **tunnel-table-pref** *number*
- **timers**
  - **incremental-spf-wait** *number*
  - **lsa-accumulate** *number*
  - **lsa-arrival** *number*
  - **lsa-generate**
    - **lsa-initial-wait** *number*
    - **lsa-second-wait** *number*
    - **max-lsa-wait** *number*
  - **redistribute-delay** *number*
- **spf-wait**
  - **spf-initial-wait** *number*
  - **spf-max-wait** *number*
  - **spf-second-wait** *number*
- **traffic-engineering** *boolean*
- **traffic-engineering-options**
  - **advertise-delay** *boolean*
  - **sr-te** *keyword*
- **unicast-import** *boolean*
- **ospf3** *number*
  - **admin-state** *keyword*
  - **advertise-router-capability** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **area** *string*
    - **advertise-router-capability** *boolean*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **area-range** (*ipv4-prefix* | *ipv6-prefix*)
      - **advertise** *boolean*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
    - **blackhole-aggregate** *boolean*
    - **database-export-exclude** *boolean*
    - **export-policy** *reference*
    - **extended-lsa** *keyword*
    - **import-policy** *reference*
    - **interface** *string*
      - **admin-state** *keyword*
      - **advertise-router-capability** *boolean*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **authentication**
        - **inbound** *reference*
        - **outbound** *reference*
      - **bfd-liveness**

configure router ospf3 area interface bfd-liveness remain-down-on-failure

```

- remain-down-on-failure boolean
- dead-interval number
- hello-interval number
- interface-type keyword
- load-balancing-weight number
- loopfree-alternate
- exclude boolean
- policy-map
  - route-nh-template reference
- lsa-filter-out keyword
- metric number
- mtu number
- neighbor (ipv4-address-no-zone | ipv6-address-no-zone)
- node-sid
  - clear-n-flag boolean
  - index number
  - label number
- passive boolean
- poll-interval number
- priority number
- retransmit-interval number
- rib-priority keyword
- sid-protection boolean
- transit-delay number
- key-rollover-interval number
- loopfree-alternate-exclude boolean
- nssa
  - area-range (ipv4-prefix | ipv6-prefix)
  - advertise boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - originate-default-route
  - adjacency-check boolean
  - type-nssa boolean
  - redistribute-external boolean
  - summaries boolean
- stub
  - default-metric number
  - summaries boolean
- virtual-link string transit-area reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication
  - inbound reference
  - outbound reference
  - dead-interval number
  - hello-interval number
  - retransmit-interval number
  - transit-delay number
- asbr
- database-export
  - bgp-ls-identifier
  - value number
  - igp-identifier number
- export-limit
  - log-percent number
  - number number
- export-policy reference
- extended-lsa keyword
- external-db-overflow
  - interval number
  - limit number
- external-preference number

```

## configure router ospf3 graceful-restart

- **graceful-restart**
  - **helper-mode** *boolean*
  - **strict-lsa-checking** *boolean*
- **igp-shortcut**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **tunnel-next-hop**
    - **family** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **resolution** *keyword*
      - **resolution-filter**
        - **rsvp** *boolean*
        - **sr-te** *boolean*
- **import-policy** *reference*
- **ldp-sync** *boolean*
- **loopfree-alternate**
  - **exclude**
    - **prefix-policy** *reference*
  - **remote-lfa**
    - **max-pq-cost** *number*
    - **node-protect**
      - **max-pq-nodes** *number*
  - **ti-lfa**
    - **max-sr-frr-labels** *number*
    - **node-protect**
- **multicast-import** *boolean*
- **overload** *boolean*
- **overload-include-ext-1** *boolean*
- **overload-include-ext-2** *boolean*
- **overload-include-stub** *boolean*
- **overload-on-boot**
  - **timeout** *number*
- **preference** *number*
- **reference-bandwidth** *number*
- **rib-priority**
  - **high**
    - **prefix-list** *reference*
- **router-id** *string*
- **rtr-adv-lsa-limit**
  - **log-only** *boolean*
  - **max-lsa-count** *number*
  - **overload-timeout** (*number* | *keyword*)
  - **warning-threshold** *number*
- **segment-routing**
  - **adj-sid-hold** (*number* | *keyword*)
  - **adjacency-sid**
    - **allocate-dual-sids** *boolean*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **egress-statistics**
    - **adj-sid** *boolean*
    - **node-sid** *boolean*
  - **ingress-statistics**
    - **adj-sid** *boolean*
    - **node-sid** *boolean*
  - **prefix-sid-range**
    - **global**
    - **max-index** *number*
    - **start-label** *number*
  - **tunnel-mtu** *number*
  - **tunnel-table-pref** *number*

## configure router ospf3 timers

```

- timers
  - incremental-spf-wait number
  - lsa-accumulate number
  - lsa-arrival number
  - lsa-generate
    - lsa-initial-wait number
    - lsa-second-wait number
    - max-lsa-wait number
  - redistribute-delay number
  - spf-wait
    - spf-initial-wait number
    - spf-max-wait number
    - spf-second-wait number
- unicast-import boolean
- p2mp-sr-tree
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd-liveness keyword
  - p2mp-policy string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - candidate-path string
      - active-instance reference
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - path-instances number
        - apply-groups reference
        - apply-groups-exclude reference
        - instance-id number
      - preference number
    - root-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - tree-id number
  - replication-segment string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - downstream-nodes number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
    - label
      - sid-list number
        - apply-groups reference
        - apply-groups-exclude reference
        - replication-sid number
      - next-hop-address (ipv4-address-with-zone | ipv6-address-with-zone)
      - next-hop-interface-name string
      - protect-nexthop-id reference
    - instance-id number
    - replication-sid number
    - root-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - sid-action keyword
    - tree-id number
  - reserved-label-block reference
- pcep
  - apply-groups reference
  - apply-groups-exclude reference
- pcc
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference

```

configure router pcep pcc dead-timer

```

- dead-timer number
- keepalive number
- local-address string
- local-address-ipv6 string
- max-srte-pce-init-lsps number
- pce-associations
  - diversity string
    - apply-groups reference
    - apply-groups-exclude reference
    - association-id number
    - association-source (ipv4-address-no-zone | ipv6-address-no-zone)
    - disjointness-reference boolean
    - disjointness-type keyword
    - diversity-type keyword
  - policy string
    - apply-groups reference
    - apply-groups-exclude reference
    - association-id number
    - association-source (ipv4-address-no-zone | ipv6-address-no-zone)
- peer (ipv4-address-no-zone | ipv6-address-no-zone)
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - preference number
  - route-preference keyword
  - tls-client-profile reference
  - tls-wait-timer number
- redelegation-timer number
- report-path-constraints boolean
- state-timer
  - timer number
  - timer-action keyword
  - unknown-message-rate number
- pcp
  - server string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - dual-stack-lite-address string
    - fwd-inside-router string
    - interface reference
    - policy reference
- pim
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - apply-to keyword
  - import
    - join-policy reference
    - register-policy reference
  - interface string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - assert-period number
    - bfd-liveness
      - ipv4 boolean
      - ipv6 boolean
    - bier-signaling-type
      - ipv4 boolean
      - ipv6 boolean
    - bsm-check-rtr-alert boolean
    - hello-interval number

```

configure router pim interface hello-multiplier

- **hello-multiplier** *number*
- **improved-assert** *boolean*
- **instant-prune-echo** *boolean*
- **ipv4**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **monitor-oper-group**
    - **name** *reference*
    - **operation** *keyword*
    - **priority-delta** *number*
  - **multicast** *boolean*
- **ipv6**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **monitor-oper-group**
    - **name** *reference*
    - **operation** *keyword*
    - **priority-delta** *number*
  - **multicast** *boolean*
- **max-groups** *number*
- **mcac**
  - **bandwidth**
    - **mandatory** (*number* | *keyword*)
    - **total** (*number* | *keyword*)
  - **interface-policy** *reference*
  - **mc-constraints**
    - **admin-state** *keyword*
    - **level** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **bandwidth** *number*
    - **number-down** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **level** *number*
    - **use-lag-port-weight** *boolean*
  - **policy** *reference*
- **multicast-senders** *keyword*
- **p2mp-ldp-tree-join**
  - **ipv4** *boolean*
  - **ipv6** *boolean*
- **priority** *number*
- **sticky-dr**
  - **priority** *number*
- **three-way-hello** *boolean*
- **tracking-support** *boolean*
- **ipv4**
  - **admin-state** *keyword*
  - **gtm**
    - **auto-discovery** *keyword*
  - **multicast-fast-failover** *boolean*
  - **rpf-table** *keyword*
  - **ssm-assert-compatible-mode** *boolean*
  - **ssm-default-range** *boolean*
- **ipv6**
  - **admin-state** *keyword*
  - **multicast-fast-failover** *boolean*
  - **rpf-table** *keyword*
  - **ssm-default-range** *boolean*
- **lag-usage-optimization** *boolean*
- **mc-ecmp-balance** *boolean*
- **mc-ecmp-balance-hold** *number*
- **mc-ecmp-hashing**
  - **rebalance** *boolean*



## configure router pim mdt-spt

```

- mdt-spt boolean
- non-dr-attract-traffic boolean
- pim-ssm-scaling boolean
- rp
  - bootstrap
    - export reference
    - import reference
  - ipv4
    - anycast string rp-set-peer string
    - auto-rp-discovery boolean
    - bsr-candidate
      - address string
      - admin-state keyword
      - hash-mask-len number
      - priority number
    - candidate boolean
    - mapping-agent boolean
    - rp-candidate
      - address string
      - admin-state keyword
      - group-range string
      - holdtime number
      - priority number
    - static
      - address string
      - apply-groups reference
      - apply-groups-exclude reference
      - group-prefix string
      - override boolean
  - ipv6
    - anycast string rp-set-peer string
    - bsr-candidate
      - address string
      - admin-state keyword
      - hash-mask-len number
      - priority number
    - embedded-rp
      - admin-state keyword
      - group-range string
    - rp-candidate
      - address string
      - admin-state keyword
      - group-range string
      - holdtime number
      - priority number
    - static
      - address string
      - apply-groups reference
      - apply-groups-exclude reference
      - group-prefix string
      - override boolean
- rpfv
  - core boolean
  - mvpn boolean
- spt-switchover (ipv4-prefix | ipv6-prefix)
  - apply-groups reference
  - apply-groups-exclude reference
  - threshold (number | keyword)
- ssm-groups
  - group-range (ipv4-prefix | ipv6-prefix)
- radius
  - apply-groups reference
  - apply-groups-exclude reference
  - proxy string

```

## configure router radius proxy admin-state

- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **attribute-matching**
  - **entry** *number*
    - **accounting-server-policy** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **authentication-server-policy** *string*
    - **prefix-string** *string*
    - **suffix-string** *string*
  - **type** *number*
  - **vendor** (*number* | *keyword*)
- **cache**
  - **admin-state** *keyword*
  - **key**
    - **attribute-type** *number*
    - **packet-type** *keyword*
    - **vendor** (*number* | *keyword*)
  - **timeout** *number*
  - **track-accounting**
    - **accounting-off** *boolean*
    - **accounting-on** *boolean*
    - **interim-update** *boolean*
    - **start** *boolean*
    - **stop** *boolean*
  - **track-authentication**
    - **accept** *boolean*
  - **track-delete-hold-time** *number*
- **defaults**
  - **accounting-server-policy** *string*
  - **authentication-server-policy** *string*
- **description** *string*
- **interface** *string*
- **load-balance-key**
  - **attribute-1**
    - **type** *number*
    - **vendor** (*number* | *keyword*)
  - **attribute-2**
    - **type** *number*
    - **vendor** (*number* | *keyword*)
  - **attribute-3**
    - **type** *number*
    - **vendor** (*number* | *keyword*)
  - **attribute-4**
    - **type** *number*
    - **vendor** (*number* | *keyword*)
  - **attribute-5**
    - **type** *number*
    - **vendor** (*number* | *keyword*)
- **source-ip-udp**
- **purpose** *keyword*
- **python-policy** *reference*
- **secret** *string*
- **send-accounting-response** *boolean*
- **wlan-gw**
  - **address** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **ipv6-address** *string*
- **wlan-gw-group** *reference*
- **server** *string*
  - **accept-coa** *boolean*
  - **acct-port** *number*

## configure router radius server address

```

- address (ipv4-address-no-zone | ipv6-address-no-zone)
- apply-groups reference
- apply-groups-exclude reference
- auth-port number
- description string
- pending-requests-limit number
- python-policy reference
- secret string
- reassembly
- apply-groups reference
- apply-groups-exclude reference
- nat-group number
- to-base-network boolean
- rib-api
- apply-groups reference
- apply-groups-exclude reference
- mpls
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- label-name reference
- rip
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- authentication-key string
- authentication-type keyword
- bfd-liveness boolean
- check-zero boolean
- description string
- export-limit
- log-percent number
- number number
- export-policy reference
- group string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- authentication-key string
- authentication-type keyword
- bfd-liveness boolean
- check-zero boolean
- description string
- export-policy reference
- import-policy reference
- message-size number
- metric-in number
- metric-out number
- neighbor string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- authentication-key string
- authentication-type keyword
- bfd-liveness boolean
- check-zero boolean
- description string
- export-policy reference
- import-policy reference
- message-size number
- metric-in number
- metric-out number
- preference number
- receive keyword

```

## configure router rip group neighbor send

```

    - send keyword
    - split-horizon boolean
    - timers
      - flush number
      - timeout number
      - update number
    - unicast-address string
  - preference number
  - receive keyword
  - send keyword
  - split-horizon boolean
  - timers
    - flush number
    - timeout number
    - update number
  - import-policy reference
  - message-size number
  - metric-in number
  - metric-out number
  - preference number
  - receive keyword
  - send keyword
  - split-horizon boolean
  - timers
    - flush number
    - timeout number
    - update number
- ripng
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd-liveness boolean
  - check-zero boolean
  - description string
  - export-limit
    - log-percent number
    - number number
  - export-policy reference
  - group string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - bfd-liveness boolean
    - check-zero boolean
    - description string
    - export-policy reference
    - import-policy reference
    - message-size number
    - metric-in number
    - metric-out number
    - neighbor string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - bfd-liveness boolean
      - check-zero boolean
      - description string
      - export-policy reference
      - import-policy reference
      - message-size number
      - metric-in number
      - metric-out number
      - preference number
      - receive keyword

```

## configure router ripng group neighbor send

```

    - send keyword
    - split-horizon boolean
    - timers
      - flush number
      - timeout number
      - update number
    - unicast-address string
  - preference number
  - receive keyword
  - send keyword
  - split-horizon boolean
  - timers
    - flush number
    - timeout number
    - update number
  - import-policy reference
  - message-size number
  - metric-in number
  - metric-out number
  - preference number
  - receive keyword
  - send keyword
  - split-horizon boolean
  - timers
    - flush number
    - timeout number
    - update number
- router-id string
- rsvp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication-over-bypass boolean
  - dbw-accounting
    - dbw-multiplier number
    - down-threshold
      - bw number
      - percent number
    - sample-interval number
    - sample-multiplier number
    - up-threshold
      - bw number
      - percent number
  - diffserv-te
    - admission-control-model keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - class-type-bw
      - ct0 number
      - ct1 number
      - ct2 number
      - ct3 number
      - ct4 number
      - ct5 number
      - ct6 number
      - ct7 number
    - fc keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - class-type number
  - te-class number
    - apply-groups reference
    - apply-groups-exclude reference
    - class-type number

```

configure router rsvp diffserv-te te-class priority

- **priority** *number*
- **entropy-label-capability** *boolean*
- **graceful-restart**
  - **max-recovery** *number*
  - **max-restart** *number*
- **graceful-shutdown** *boolean*
- **implicit-null-label** *boolean*
- **include-node-id-in-rro** *boolean*
- **interface** *reference*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **authentication-key** *string*
  - **authentication-keychain** *reference*
  - **bfd-liveness** *boolean*
  - **class-type-bw**
    - **ct0** *number*
    - **ct1** *number*
    - **ct2** *number*
    - **ct3** *number*
    - **ct4** *number*
    - **ct5** *number*
    - **ct6** *number*
    - **ct7** *number*
  - **dbw-down-threshold**
    - **bw** *number*
    - **percent** *number*
  - **dbw-multiplier** *number*
  - **dbw-up-threshold**
    - **bw** *number*
    - **percent** *number*
  - **graceful-restart-helper-mode** *boolean*
  - **graceful-shutdown** *boolean*
  - **hello-interval** *number*
  - **implicit-null-label** *boolean*
  - **refresh-reduction**
    - **reliable-delivery** *boolean*
  - **subscription** *number*
  - **te-down-threshold**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **value** *number*
  - **te-up-threshold**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **value** *number*
- **keep-multiplier** *number*
- **msg-pacing**
  - **max-burst** *number*
  - **period** *number*
- **p2mp-merge-point-abort-timer** *number*
- **p2p-merge-point-abort-timer** *number*
- **preemption-timer** *number*
- **rapid-retransmit-time** *number*
- **rapid-retry-limit** *number*
- **refresh-reduction-over-bypass** *boolean*
- **refresh-time** *number*
- **te-down-threshold** *number*
- **te-threshold-update**
  - **on-cac-failure** *boolean*
  - **update-timer** *number*
- **te-up-threshold** *number*
- **segment-routing**
  - **apply-groups** *reference*

configure router segment-routing apply-groups-exclude

- **apply-groups-exclude** *reference*
- **maintenance-policy** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **bfd-liveness** *boolean*
  - **bfd-template** *reference*
  - **hold-down-timer** *number*
  - **mode** *keyword*
  - **return-path-label** *number*
  - **revert-timer** *number*
  - **threshold** *number*
- **segment-routing-v6**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **base-routing-instance**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **locator** *reference*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **function**
        - **end** *number*
          - **apply-groups** *reference*
          - **apply-groups-exclude** *reference*
          - **srh-mode** *keyword*
        - **end-dt4**
          - **value** *number*
        - **end-dt46**
          - **value** *number*
        - **end-dt6**
          - **value** *number*
        - **end-x** *number*
          - **apply-groups** *reference*
          - **apply-groups-exclude** *reference*
          - **interface-name** *reference*
          - **protection** *keyword*
          - **srh-mode** *keyword*
        - **end-x-auto-allocate** *keyword* **protection** *keyword*
  - **micro-segment-locator** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **function**
      - **ua** *number*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **interface-name** *reference*
        - **protection** *keyword*
        - **srh-mode** *keyword*
      - **ua-auto-allocate** *keyword* **protection** *keyword*
      - **udt4**
        - **value** *number*
      - **udt46**
        - **value** *number*
      - **udt6**
        - **value** *number*
  - **locator** *string*
    - **admin-state** *keyword*
    - **algorithm** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **block-length** *number*
    - **function-length** *number*
    - **label-block** *reference*

configure router segment-routing segment-routing-v6 locator prefix

- **prefix**
  - **ip-prefix** *string*
- **static-function**
  - **label-block** *reference*
  - **max-entries** *number*
- **termination-fpe** *reference*
- **micro-segment**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **block** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **label-block** *reference*
    - **prefix**
      - **ip-prefix** *string*
    - **static-function**
      - **max-entries** *number*
    - **termination-fpe** *reference*
  - **block-length** *number*
  - **global-sid-entries** *number*
  - **sid-length** *number*
- **micro-segment-locator** *string*
  - **admin-state** *keyword*
  - **algorithm** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **block** *reference*
  - **un**
    - **srh-mode** *keyword*
    - **value** *number*
- **origination-fpe** *reference*
- **source-address** *string*
- **sr-mpls**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **prefix-sids** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **ipv4-sid**
    - **index** *number*
    - **label** *number*
  - **ipv6-sid**
    - **index** *number*
    - **label** *number*
  - **node-sid** *boolean*
- **sr-policies**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **egress-statistics**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **ingress-statistics**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **reserved-label-block** *reference*
  - **static-policy** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **binding-sid** *number*



configure router segment-routing sr-policies static-policy color

- **color** *number*
- **distinguisher** *number*
- **endpoint** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
- **head-end** (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *keyword*)
- **maintenance-policy** *reference*
- **preference** *number*
- **segment-list** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **segment** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **mpls-label** *number*
    - **srv6-sid** *string*
  - **weight** *number*
- **segment-routing-v6**
  - **binding-sid** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **ip-address** *string*
    - **locator**
      - **function** *keyword*
      - **function-value** *number*
      - **locator-name** *reference*
  - **type** *keyword*
- **selective-fib** *boolean*
- **sfm-overload**
  - **holdoff-time** *number*
- **sgt-qos**
  - **dot1p**
    - **application** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **dot1p** (*keyword* | *number*)
  - **dscp**
    - **application** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **dscp** (*keyword* | *number*)
  - **dscp-map** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **fc** *keyword*
- **static-routes**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **hold-down**
    - **initial** *number*
    - **max-value** *number*
    - **multiplier** *number*
  - **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **backup-tag** *number*
  - **blackhole**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **community** *string*
    - **description** *string*
    - **dynamic-bgp** *boolean*
    - **generate-icmp** *boolean*
    - **metric** *number*

## configure router static-routes route blackhole preference

```

- preference number
- prefix-list
  - flag keyword
  - name reference
- tag number
- community string
- indirect (ipv4-address-no-zone | ipv6-address-no-zone)
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - community string
  - cpe-check (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - drop-count number
    - interval number
    - log boolean
    - padding-size number
  - description string
  - destination-class number
  - metric number
  - preference number
  - prefix-list
    - flag keyword
    - name reference
  - qos
    - forwarding-class keyword
    - priority keyword
  - source-class number
  - tag number
  - tunnel-next-hop
    - disallow-igp boolean
    - flex-algo number
    - resolution keyword
    - resolution-filter
      - ldp boolean
      - mpls-fwd-policy boolean
      - rib-api boolean
      - rsvp-te
        - lsp string
      - sr-isis boolean
      - sr-ospf boolean
      - sr-ospf3 boolean
      - sr-te
        - lsp string
- interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - community string
  - cpe-check (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - drop-count number
    - interval number
    - log boolean
    - padding-size number
  - description string
  - destination-class number
  - load-balancing-weight number
  - metric number
  - preference number
  - prefix-list
    - flag keyword

```

configure router static-routes route interface prefix-list name

```

- name reference
- qos
  - forwarding-class keyword
  - priority keyword
- source-class number
- tag number
- ipsec-tunnel string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - community string
  - description string
  - metric number
  - preference number
  - tag number
- next-hop (ipv4-address-with-zone | ipv6-address-with-zone)
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - backup-next-hop
    - address (ipv4-address-no-zone | ipv6-address-no-zone)
  - bfd-liveness boolean
  - community string
  - cpe-check (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - drop-count number
    - interval number
    - log boolean
    - padding-size number
  - description string
  - destination-class number
  - ldp-sync boolean
  - load-balancing-weight number
  - metric number
  - preference number
  - prefix-list
    - flag keyword
    - name reference
  - qos
    - forwarding-class keyword
    - priority keyword
    - source-class number
    - tag number
    - validate-next-hop boolean
  - tag number
- triggered-policy boolean
- ttl-propagate
  - apply-groups reference
  - apply-groups-exclude reference
  - label-route-local keyword
  - label-route-transit keyword
  - lsr-label-route keyword
  - vprn-local keyword
  - vprn-transit keyword
- tunnel-interface
  - ldp-p2mp-leaf number sender-address string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
  - ldp-p2mp-root number sender-address string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string

```

configure router tunnel-interface rsvp-p2mp-leaf

```

- rsvp-p2mp-leaf string sender-address string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
- rsvp-p2mp-root string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
- twamp-light
  - apply-groups reference
  - apply-groups-exclude reference
  - reflector
    - admin-state keyword
    - allow-ipv6-udp-checksum-zero boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - prefix (ipv4-prefix | ipv6-prefix)
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
    - type keyword
    - udp-port number
- vrgw
  - lanext
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - vlan-port number
    - vlan-vtep-range
      - end (ipv4-address-no-zone | ipv6-address-no-zone)
      - start (ipv4-address-no-zone | ipv6-address-no-zone)
    - wlan-gw-group reference
- weighted-ecmp keyword
- wlan-gw
  - apply-groups reference
  - apply-groups-exclude reference
  - distributed-subscriber-mgmt
    - apply-groups reference
    - apply-groups-exclude reference
    - ipv6-tcp-mss-adjust number
  - mobility-triggered-accounting
    - admin-state keyword
    - hold-down number
    - include-counters boolean
  - xconnect
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - tunnel-source-ip string
    - wlan-gw-group reference
- wpp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - portal string
    - ack-auth-retry-count number
    - address (ipv4-address-no-zone | ipv6-address-no-zone)
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - ntf-logout-retry-count number
    - port-format keyword
    - retry-interval number

```

---

configure router wpp portal secret

- **secret** *string*
- **version** *number*

### 3.39.1 router command descriptions

#### **router** [**router-name**] *string*

Synopsis	Enter the <b>router</b> list instance
Context	<b>configure router</b> <i>string</i>
Tree	<b>router</b>
Description	Commands in this context configure a router instance that represents a virtual router in the system. There will always be at least two instances in the system. The Base or transport router and the management router are created when the system is initialized and cannot be deleted.
Max. Instances	4
Introduced	16.0.R1
Platforms	All

#### **[router-name]** *string*

Synopsis	Administrative router name
Context	<b>configure router</b> <i>string</i>
Tree	<b>router</b>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

#### **aggregates**

Synopsis	Enter the <b>aggregates</b> context
Context	<b>configure router</b> <i>string aggregates</i>
Tree	<b>aggregates</b>
Introduced	16.0.R1
Platforms	All

**aggregate** [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the <b>aggregate</b> list instance
Context	<b>configure router</b> <i>string</i> <a href="#">aggregates aggregate</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">aggregate</a>
Description	<p>Commands in this context add aggregate routes to the routing table when there are one or more component routes. A component route is any route installed in the forwarding table that is a more-specific match of the aggregate.</p> <p>The use of aggregate routes can lead to smaller routing table sizes by reducing the number of routes that need to be advertised to neighbor routes.</p>
Introduced	16.0.R1
Platforms	All

**[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Destination IP address prefix of the aggregate route
Context	<b>configure router</b> <i>string</i> <a href="#">aggregates aggregate</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">aggregate</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**aggregator**

Synopsis	Enter the <b>aggregator</b> context
Context	<b>configure router</b> <i>string</i> <a href="#">aggregates aggregate</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">aggregator</a>
Tree	<a href="#">aggregator</a>
Description	Commands in this context configure the BGP AGGREGATOR path attribute for the aggregate route.
Introduced	16.0.R1
Platforms	All

**address** *string*

Synopsis	Aggregator IP address
Context	<b>configure router</b> <i>string</i> <a href="#">aggregates aggregate</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">aggregator</a> <a href="#">address</a> <i>string</i>

Tree	<a href="#">address</a>
Introduced	16.0.R1
Platforms	All

**as-number** *number*

Synopsis	Aggregator AS number
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">aggregates</a> <a href="#">aggregate</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">aggregator</a> <a href="#">as-number</a> <i>number</i>
Tree	<a href="#">as-number</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

**as-set** *boolean*

Synopsis	Use AS_SET path segment type for the aggregate route
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">aggregates</a> <a href="#">aggregate</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">as-set</a> <i>boolean</i>
Tree	<a href="#">as-set</a>
Description	<p>When configured to <b>true</b>, the AS_PATH attribute of the aggregate contains an AS_SET containing all AS numbers from the contributing routes. This can increase the amount of churn due to best-path changes.</p> <p>When configured to <b>false</b>, the AS_PATH attribute contains no AS_SET and will be originated by the ESR.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**blackhole**

Synopsis	Enable the <b>blackhole</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">aggregates</a> <a href="#">aggregate</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">blackhole</a>
Tree	<a href="#">blackhole</a>
Notes	The following elements are part of a choice: <b>blackhole</b> or <b>indirect</b> .
Introduced	16.0.R1
Platforms	All



**generate-icmp *boolean***

Synopsis	Send ICMP unreachable messages for aggregate routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>aggregates</b> <b>aggregate</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>blackhole</b> <b>generate-icmp</b> <i>boolean</i>
Tree	<b>generate-icmp</b>
Description	When configured to <b>true</b> , ICMP unreachable messages are sent when packets match an aggregate route in the FIB with a black-hole next-hop. When configured to <b>false</b> , ICMP unreachable messages are not generated.
Default	false
Introduced	16.0.R2
Platforms	All

**community *string***

Synopsis	Community name that is added to the aggregate route
Context	<b>configure</b> <b>router</b> <i>string</i> <b>aggregates</b> <b>aggregate</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>community</b> <i>string</i>
Tree	<b>community</b>
Description	This command associates a BGP community with the aggregate route. The community name can be matched in route policies and is automatically added to BGP routes exported from the aggregate route.
String Length	1 to 72
Max. Instances	12
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

**description *string***

Synopsis	Text description
Context	<b>configure</b> <b>router</b> <i>string</i> <b>aggregates</b> <b>aggregate</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**discard-component-communities** *boolean*

Synopsis	Advertise aggregate with aggregate route community set
Context	<b>configure</b> <b>router</b> <i>string</i> <b>aggregates aggregate</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>discard-component-communities</b> <i>boolean</i>
Tree	<b>discard-component-communities</b>
Default	false
Introduced	19.7.R1
Platforms	All

**indirect** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Address of the indirect next hop
Context	<b>configure</b> <b>router</b> <i>string</i> <b>aggregates aggregate</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>indirect</b>
Description	This command programs aggregate routes into the forwarding table with an indirect next hop. If a packet matches the aggregate route but not a contributing route, it is forwarded toward the indirect next hop rather than being discarded.
Notes	The following elements are part of a choice: <b>blackhole</b> or <b>indirect</b> .
Introduced	16.0.R1
Platforms	All

**local-preference** *number*

Synopsis	Local preference used when aggregate route is exported
Context	<b>configure</b> <b>router</b> <i>string</i> <b>aggregates aggregate</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>local-preference</b> <i>number</i>
Tree	<b>local-preference</b>
Description	This command configures the local preference value to use when the aggregate route is exported rather than using any of the local preference values assigned for any of the contributing routes.
Range	0 to 4294967295
Introduced	16.0.R1

Platforms All

### **policy reference**

Synopsis Policy name for the aggregated route

Context **configure router string aggregates aggregate (ipv4-prefix | ipv6-prefix) policy reference**

Tree [policy](#)

Description This command associates an aggregate route with a policy reference. The aggregated route is activated only when there is at least one eligible active route in the sub-trees below it that is accepted by the policy evaluation. There is no evaluation into any sub-tree that starts with another active aggregate route. Eligible routes exclude host routes and LDP shortcut routes.

If an aggregate route has no policy, or the reference is to an empty policy, this configuration is treated as equivalent to a policy with one rule that accepts all routes.

Reference **configure policy-options policy-statement string**

Introduced 20.10.R1

Platforms All

### **summary-only boolean**

Synopsis Advertise the aggregate route only

Context **configure router string aggregates aggregate (ipv4-prefix | ipv6-prefix) summary-only boolean**

Tree [summary-only](#)

Description When configured to **true**, the router suppresses the advertisement of more specific component routes for the aggregate.

When configured to **false**, the router advertises both the aggregate route and its contributing routes.

Default false

Introduced 16.0.R1

Platforms All

### **tunnel-group number**

Synopsis Tunnel group from which to associate the MC IPSec state

Context **configure router string aggregates aggregate (ipv4-prefix | ipv6-prefix) tunnel-group number**

Tree [tunnel-group](#)

Description	This command adds the MC-IPsec state of the specific tunnel-group to the aggregate route.
Range	1 to 64
Introduced	20.7.R1
Platforms	All

### **allow-icmp-redirect** *boolean*

Synopsis	Allow ICMP redirects on the management interface
Context	<b>configure</b> <i>router</i> <i>string</i> <b>allow-icmp-redirect</b> <i>boolean</i>
Tree	<a href="#">allow-icmp-redirect</a>
Description	When configured to <b>true</b> , ICMP redirect messages can be received on the management interface. When configured to <b>false</b> , all received ICMP redirect messages are dropped. This command cannot be configured on a non-management interface.
Default	false
Introduced	16.0.R1
Platforms	All

### **allow-icmp6-redirect** *boolean*

Synopsis	Allow IPv6 ICMP redirects on the management interface
Context	<b>configure</b> <i>router</i> <i>string</i> <b>allow-icmp6-redirect</b> <i>boolean</i>
Tree	<a href="#">allow-icmp6-redirect</a>
Description	When configured to <b>true</b> , IPv6 ICMP redirect messages can be received on the management interface. When configured to <b>false</b> , all received IPv6 ICMP redirect messages are dropped. This command cannot be configured on a non-management interface.
Default	false
Introduced	16.0.R1
Platforms	All

### **autonomous-system** *number*

Synopsis	AS number advertised to peers for this router
Context	<b>configure</b> <i>router</i> <i>string</i> <b>autonomous-system</b> <i>number</i>

Tree	<a href="#">autonomous-system</a>
Description	This command configures the autonomous system (AS) number for the router. This value must be set before BGP can be activated.  If the AS number is changed on a router with an active BGP instance, the new AS number is not used until the BGP instance is restarted.
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

**bfd**

Synopsis	Enter the <b>bfd</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bfd</a>
Tree	<a href="#">bfd</a>
Introduced	19.7.R1
Platforms	All

**seamless-bfd**

Synopsis	Enter the <b>seamless-bfd</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bfd</a> <a href="#">seamless-bfd</a>
Tree	<a href="#">seamless-bfd</a>
Introduced	19.7.R1
Platforms	All

**peer** [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bfd</a> <a href="#">seamless-bfd</a> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">peer</a>
Max. Instances	8000
Introduced	19.7.R1
Platforms	All

**[address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Address of the remote node
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bfd</b> <b>seamless-bfd</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>peer</b>
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	All

**discriminator** *number*

Synopsis	Discriminator of the remote node
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bfd</b> <b>seamless-bfd</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>discriminator</b> <i>number</i>
Tree	<b>discriminator</b>
Range	1 to 4294967295
Introduced	19.7.R1
Platforms	All

**bgp**

Synopsis	Enable the <b>bgp</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b>
Tree	<b>bgp</b>
Introduced	16.0.R1
Platforms	All

**add-paths**

Synopsis	Enable the <b>add-paths</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>add-paths</b>
Tree	<b>add-paths</b>
Description	Commands in this context configure add-paths support for the specified address families of the BGP instance. The BGP add-paths capability allows the router to send or receive multiple paths per prefix to and from a peer.
Introduced	16.0.R1

Platforms All

## evpn

Synopsis Enter the **evpn** context

Context **configure router string bgp add-paths evpn**

Tree **evpn**

Description Commands in this context configure the Add-Paths capability for EVPN routes. By default, Add-Paths is not enabled for EVPN routes.

Introduced 21.10.R1

Platforms All

## receive *boolean*

Synopsis Receive multiple EVPN paths per prefix from a peer

Context **configure router string bgp add-paths evpn receive *boolean***

Tree **receive**

Default false

Introduced 21.10.R1

Platforms All

## send (*number* | *keyword*)

Synopsis Maximum number of EVPN paths to send

Context **configure router string bgp add-paths evpn send (*number* | *keyword*)**

Tree **send**

Range 1 to 16

Options multipaths

Introduced 21.10.R1

Platforms All

## ipv4

Synopsis Enter the **ipv4** context

Context **configure router string bgp add-paths ipv4**

Tree	<a href="#">ipv4</a>
Description	Commands in this context configure add-paths support for the IPv4 unicast address family.
Introduced	16.0.R1
Platforms	All

### **receive *boolean***

Synopsis	Receive multiple routes per unlabeled IPv4 prefix
Context	<b>configure router</b> <i>string</i> <a href="#">bgp add-paths ipv4 receive boolean</a>
Tree	<a href="#">receive</a>
Description	When configured to <b>true</b> , this command allows multiple unlabeled IPv4 unicast routes per prefix to be received from a peer. When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

### **send (*number* | *keyword*)**

Synopsis	Maximum paths per unlabeled IPv4 unicast prefix
Context	<b>configure router</b> <i>string</i> <a href="#">bgp add-paths ipv4 send (<i>number</i>   <i>keyword</i>)</a>
Tree	<a href="#">send</a>
Description	This command configures the maximum number of paths per unlabeled IPv4 unicast prefix that are allowed to be advertised to ADD-PATH peers. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, add-paths send capability is not enabled for unlabeled IPv4 unicast routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

### **ipv6**

Synopsis	Enter the <b>ipv6</b> context
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Context	<b>configure router string</b> <code>bgp add-paths ipv6</code>
Tree	<code>ipv6</code>
Description	Commands in this context configure add-paths support for the IPv6 unicast address family.
Introduced	16.0.R1
Platforms	All

### **receive *boolean***

Synopsis	Receive multiple routes per unlabeled IPv6 prefix
Context	<b>configure router string</b> <code>bgp add-paths ipv6 receive boolean</code>
Tree	<code>receive</code>
Description	When configured to <b>true</b> , this command allows multiple unlabeled IPv6 unicast routes per prefix to be received from a peer. When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

### **send (*number* | *keyword*)**

Synopsis	Maximum paths per unlabeled IPv6 unicast prefix
Context	<b>configure router string</b> <code>bgp add-paths ipv6 send (number   keyword)</code>
Tree	<code>send</code>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per unlabeled IPv6 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, add-paths send capability is not enabled for unlabeled IPv6 unicast routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

**label-ipv4**

Synopsis	Enter the <b>label-ipv4</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp add-paths label-ipv4</b>
Tree	<b>label-ipv4</b>
Description	Commands in this context configure add-paths support for the labeled IPv4 unicast address family.
Introduced	16.0.R1
Platforms	All

**receive** *boolean*

Synopsis	Receive multiple labeled-unicast routes per IPv4 prefix
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp add-paths label-ipv4 receive</b> <i>boolean</i>
Tree	<b>receive</b>
Description	When configured to <b>true</b> , this command allows multiple labeled-unicast routes per IPv4 prefix to be received from a peer. When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

**send** (*number* | *keyword*)

Synopsis	Max paths advertised per labeled IPv4 unicast prefix
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp add-paths label-ipv4 send</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>send</b>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv4 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, add-paths send capability is not enabled for labeled IPv4 unicast routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

## label-ipv6

Synopsis	Enter the <b>label-ipv6</b> context
Context	<b>configure router string</b> <a href="#">bgp add-paths label-ipv6</a>
Tree	<a href="#">label-ipv6</a>
Description	Commands in this context configure add-paths support for the labeled IPv6 unicast address family.
Introduced	16.0.R1
Platforms	All

## receive *boolean*

Synopsis	Receive multiple labeled-unicast routes per IPv6 prefix
Context	<b>configure router string</b> <a href="#">bgp add-paths label-ipv6 receive</a> <i>boolean</i>
Tree	<a href="#">receive</a>
Description	When configured to <b>true</b> , this command allows multiple labeled-unicast routes per IPv6 prefix to be received from a peer. When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

## send (*number* | *keyword*)

Synopsis	Max paths advertised per labeled IPv6 unicast prefix
Context	<b>configure router string</b> <a href="#">bgp add-paths label-ipv6 send</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">send</a>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv6 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, add-paths send capability is not enabled for labeled IPv6 unicast routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1

Platforms All

## mcast-vpn-ipv4

Synopsis Enter the **mcast-vpn-ipv4** context

Context **configure** *router string* **bgp add-paths mcast-vpn-ipv4**

Tree **mcast-vpn-ipv4**

Description Commands in this context configure add-paths support for the multicast IPv4 VPN address family.

Introduced 16.0.R1

Platforms All

## receive *boolean*

Synopsis Receive multiple multicast routes per IPv4 VPN prefix

Context **configure** *router string* **bgp add-paths mcast-vpn-ipv4 receive *boolean***

Tree **receive**

Description When configured to **true**, this command allows multiple multicast routes per IPv4 VPN prefix to be received from a peer.  
When configured to **false**, the ADD-PATH receive capability is not enabled.

Default false

Introduced 16.0.R1

Platforms All

## send *number*

Synopsis Maximum paths advertised per multicast IPv4 VPN prefix

Context **configure** *router string* **bgp add-paths mcast-vpn-ipv4 send *number***

Tree **send**

Description This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast IPv4 VPN prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.  
When not configured, add-paths send capability is not enabled for multicast IPv4 VPN routes.

Range 1 to 16

Introduced 16.0.R1

Platforms All

## mcast-vpn-ipv6

Synopsis Enter the **mcast-vpn-ipv6** context

Context **configure** *router string* **bgp add-paths mcast-vpn-ipv6**

Tree **mcast-vpn-ipv6**

Description Commands in this context configure add-paths support for the multicast IPv6 VPN address family.

Introduced 16.0.R1

Platforms All

## receive *boolean*

Synopsis Receive multiple multicast routes per IPv6 VPN prefix

Context **configure** *router string* **bgp add-paths mcast-vpn-ipv6 receive** *boolean*

Tree **receive**

Description When configured to **true**, this command allows multiple multicast routes per IPv6 VPN prefix to be received from a peer.  
When configured to **false**, the ADD-PATH receive capability is not enabled.

Default false

Introduced 16.0.R1

Platforms All

## send *number*

Synopsis Maximum paths advertised per multicast IPv6 VPN prefix

Context **configure** *router string* **bgp add-paths mcast-vpn-ipv6 send** *number*

Tree **send**

Description This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast IPv6 VPN prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.  
When not configured, add-paths send capability is not enabled for multicast IPv6 VPN routes.

Range 1 to 16

Introduced 16.0.R1

Platforms All

## mvpn-ipv4

Synopsis Enter the **mvpn-ipv4** context

Context **configure router string** `bgp add-paths mvpn-ipv4`

Tree `mvpn-ipv4`

Description Commands in this context configure add-paths support for the multicast VPN IPv4 address family.

Introduced 16.0.R1

Platforms All

## receive *boolean*

Synopsis Receive multiple routes per multicast VPN IPv4 NRLI

Context **configure router string** `bgp add-paths mvpn-ipv4 receive boolean`

Tree `receive`

Description When configured to **true**, this command allows multiple routes per multicast VPN IPv4 NRLI to be received from a peer.  
When configured to **false**, the ADD-PATH receive capability is not enabled.

Default false

Introduced 16.0.R1

Platforms All

## send *number*

Synopsis Maximum paths advertised per multicast VPN IPv4 NRLI

Context **configure router string** `bgp add-paths mvpn-ipv4 send number`

Tree `send`

Description This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast VPN IPv4 NRLI. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.  
When not configured, add-paths send capability is not enabled for multicast VPN IPv4 routes.

Range 1 to 16

Introduced 16.0.R1

Platforms All

## mvpn-ipv6

Synopsis Enter the **mvpn-ipv6** context

Context **configure router string** `bgp add-paths mvpn-ipv6`

Tree `mvpn-ipv6`

Description Commands in this context configure add-paths support for the multicast VPN IPv6 address family.

Introduced 16.0.R1

Platforms All

## receive *boolean*

Synopsis Receive multiple routes per multicast VPN IPv6 NRLI

Context **configure router string** `bgp add-paths mvpn-ipv6 receive boolean`

Tree `receive`

Description When configured to **true**, this command allows multiple routes per multicast VPN IPv6 NRLI to be received from a peer.  
When configured to **false**, the ADD-PATH receive capability is not enabled.

Default false

Introduced 16.0.R1

Platforms All

## send *number*

Synopsis Maximum paths advertised per multicast VPN IPv6 NRLI

Context **configure router string** `bgp add-paths mvpn-ipv6 send number`

Tree `send`

Description This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast VPN IPv6 NRLI. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.  
When not configured, add-paths send capability is not enabled for multicast VPN IPv6 routes.

Range 1 to 16

Introduced 16.0.R1

Platforms All

## vpn-ipv4

Synopsis Enter the **vpn-ipv4** context

Context **configure** *router string* **bgp add-paths vpn-ipv4**

Tree **vpn-ipv4**

Description Commands in this context configure add-paths support for the VPN-IPv4 address family.

Introduced 16.0.R1

Platforms All

## receive *boolean*

Synopsis Receive multiple routes per VPN-IPv4 prefix

Context **configure** *router string* **bgp add-paths vpn-ipv4 receive boolean**

Tree **receive**

Description When configured to **true**, this command allows multiple routes per VPN-IPv4 prefix to be received from a peer.  
When configured to **false**, the ADD-PATH receive capability is not enabled.

Default false

Introduced 16.0.R1

Platforms All

## send (*number* | *keyword*)

Synopsis Maximum paths advertised per VPN-IPv4 prefix

Context **configure** *router string* **bgp add-paths vpn-ipv4 send (*number* | *keyword*)**

Tree **send**

Description This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv4 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.  
When not configured, add-paths send capability is not enabled for VPN-IPv4 routes.

Range 1 to 16

Options multipaths

Introduced 16.0.R1



Platforms All

## vpn-ipv6

Synopsis Enter the **vpn-ipv6** context

Context **configure router string bgp add-paths vpn-ipv6**

Tree **vpn-ipv6**

Description Commands in this context configure add-paths support for the VPN-IPv6 address family.

Introduced 16.0.R1

Platforms All

## receive *boolean*

Synopsis Receive multiple routes per VPN-IPv6 prefix

Context **configure router string bgp add-paths vpn-ipv6 receive boolean**

Tree **receive**

Description When configured to **true**, this command allows multiple routes per VPN-IPv6 prefix to be received from a peer.  
When configured to **false**, the ADD-PATH receive capability is not enabled.

Default false

Introduced 16.0.R1

Platforms All

## send (*number* | *keyword*)

Synopsis Maximum paths advertised per VPN-IPv6 prefix

Context **configure router string bgp add-paths vpn-ipv6 send (*number* | *keyword*)**

Tree **send**

Description This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv6 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.  
When not configured, add-paths send capability is not enabled for VPN-IPv6 routes.

Range 1 to 16

Options multipaths

Introduced 16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the BGP instance  
 Context **configure** *router string bgp admin-state keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 16.0.R1  
 Platforms All

### **advertise-external**

Synopsis Enter the **advertise-external** context  
 Context **configure** *router string bgp advertise-external*  
 Tree [advertise-external](#)  
 Description Commands in this context allow BGP to advertise its best external route to a destination for specified address families even when its best overall route is an internal route.  
 Introduced 16.0.R1  
 Platforms All

### **ipv4** *boolean*

Synopsis Enable support for unlabeled unicast IPv4 routes  
 Context **configure** *router string bgp advertise-external ipv4 boolean*  
 Tree [ipv4](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **ipv6** *boolean*

Synopsis Enable support for unlabeled unicast IPv6 routes  
 Context **configure** *router string bgp advertise-external ipv6 boolean*

Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**label-ipv4** *boolean*

Synopsis	Enable support for labeled-unicast IPv4 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">advertise-external</a> <a href="#">label-ipv4</a> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**label-ipv6** *boolean*

Synopsis	Enable support for labeled-unicast IPv6 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">advertise-external</a> <a href="#">label-ipv6</a> <i>boolean</i>
Tree	<a href="#">label-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**advertise-inactive** *boolean*

Synopsis	Advertise inactive BGP routes to peers
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">advertise-inactive</a> <i>boolean</i>
Tree	<a href="#">advertise-inactive</a>
Description	When configured to <b>true</b> , this command allows any inactive BGP route to be advertised, even though it is not the used route.  When configured to <b>false</b> , the advertisement of inactive BGP routes to other BGP peers is disabled.
Default	false
Introduced	16.0.R1
Platforms	All

## advertise-ipv6-next-hops

Synopsis	Enter the <b>advertise-ipv6-next-hops</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp advertise-ipv6-next-hops</b>
Tree	<b>advertise-ipv6-next-hops</b>
Description	<p>Commands in this context allow specified BGP address family routes to be advertised to IPv6 transport peers with a true IPv6 address when originated or when a configured or automatic next-hop-self action is applied.</p> <p>This command context has no effect on routes advertised to IPv4 peers.</p>
Introduced	16.0.R1
Platforms	All

## evpn *boolean*

Synopsis	Advertise EVPN route with IPv6 next-hop address
Context	<b>configure router</b> <i>string</i> <b>bgp advertise-ipv6-next-hops evpn</b> <i>boolean</i>
Tree	<b>evpn</b>
Description	<p>When configured to <b>true</b>, EVPN routes are advertised with IPv6 next-hop addresses to IPv6 transport peers.</p> <p>When configured to <b>false</b>, EVPN routes are advertised with IPv4 next-hop addresses to IPv6 transport peers.</p>
Default	false
Introduced	19.5.R1
Platforms	All

## ipv4 *boolean*

Synopsis	Advertise IPv4 route with IPv6 next-hop address
Context	<b>configure router</b> <i>string</i> <b>bgp advertise-ipv6-next-hops ipv4</b> <i>boolean</i>
Tree	<b>ipv4</b>
Description	<p>When configured to <b>true</b>, IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.</p> <p>When configured to <b>false</b>, IPv4 routes are advertised with IPv4 next-hop addresses to IPv6 transport peers. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability</p>

was not received by the remote peer, the route is handled as though it was rejected by the policy entry.

Default	false
Introduced	19.5.R1
Platforms	All

### **label-ipv4** *boolean*

Synopsis	Advertise label IPv4 route with IPv6 next-hop address
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">bgp advertise-ipv6-next-hops label-ipv4</a> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Description	<p>When configured to <b>true</b>, label IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.</p> <p>When configured to <b>false</b>, label IPv4 routes are advertised with the system IPv4 address as the next hop to IPv6 transport peers. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **label-ipv6** *boolean*

Synopsis	Advertise label IPv6 route with IPv6 next-hop address
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">bgp advertise-ipv6-next-hops label-ipv6</a> <i>boolean</i>
Tree	<a href="#">label-ipv6</a>
Description	<p>When configured to <b>true</b>, label IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers.</p> <p>When configured to <b>false</b>, label IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**vpn-ipv4** *boolean*

Synopsis	Advertise VPN IPv4 route with IPv6 next-hop address
Context	<b>configure</b> <i>router string</i> <a href="#">bgp advertise-ipv6-next-hops</a> <a href="#">vpn-ipv4</a> <i>boolean</i>
Tree	<a href="#">vpn-ipv4</a>
Description	<p>When configured to <b>true</b>, VPN IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.</p> <p>When configured to <b>false</b>, VPN IPv4 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**vpn-ipv6** *boolean*

Synopsis	Advertise VPN IPv6 route with IPv6 next-hop address
Context	<b>configure</b> <i>router string</i> <a href="#">bgp advertise-ipv6-next-hops</a> <a href="#">vpn-ipv6</a> <i>boolean</i>
Tree	<a href="#">vpn-ipv6</a>
Description	<p>When configured to <b>true</b>, VPN IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers.</p> <p>When configured to <b>false</b>, VPN IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**aggregator-id-zero** *boolean*

Synopsis	Set router ID in the BGP AGGREGATOR attribute to 0
Context	<b>configure</b> <i>router string</i> <a href="#">bgp aggregator-id-zero</a> <i>boolean</i>
Tree	<a href="#">aggregator-id-zero</a>
Description	When configured to <b>true</b> , the router ID in the BGP AGGREGATOR path attribute is set to 0 when BGP aggregates routes. This prevents different routers within an AS from creating aggregate routes for the same prefix with different path attributes.

When configured to **false**, the AS number and router ID are added to the AGGREGATOR path attribute.

Default	false
Introduced	16.0.R1
Platforms	All

### **asn-4-byte** *boolean*

Synopsis	Advertise support for 4-byte ASNs
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">asn-4-byte</a> <i>boolean</i>
Tree	<a href="#">asn-4-byte</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **authentication-key** *string*

Synopsis	BGP authentication key for all peers
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">authentication-key</a> <i>string</i>
Tree	<a href="#">authentication-key</a>
Description	This command configures the authentication key used to protect all sessions. The stored format of the authentication key is based on the <b>configure system security hash-control management-interface md-cli hash-algorithm</b> setting.
String Length	1 to 370
Introduced	16.0.R1
Platforms	All

### **authentication-keychain** *reference*

Synopsis	TCP authentication keychain for the session
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">authentication-keychain</a> <i>reference</i>
Tree	<a href="#">authentication-keychain</a>
Description	This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session.
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i>
Introduced	16.0.R3

Platforms All

## backup-path

Synopsis Enter the **backup-path** context

Context **configure router string bgp backup-path**

Tree **backup-path**

Description Commands in this context enable the use of a backup path for specified BGP-learned prefixes belonging to the base router. Multiple paths must be received for a prefix in order to take advantage of this feature. When a prefix has a backup path and its primary paths fail, the affected traffic is rapidly diverted to the backup path without waiting for control plane re-convergence to occur. When many prefixes share the same primary paths and in some cases, the same backup path, the time to divert failover traffic to the backup path is independent of the number of prefixes.

By default, IPv4 and IPv6 prefixes do not have a backup path installed in the IOM.

Introduced 16.0.R1

Platforms All

## ipv4 boolean

Synopsis Enable support for unlabeled unicast IPv4 routes

Context **configure router string bgp backup-path ipv4 boolean**

Tree **ipv4**

Default false

Introduced 16.0.R1

Platforms All

## ipv6 boolean

Synopsis Enable support for unlabeled unicast IPv6 routes

Context **configure router string bgp backup-path ipv6 boolean**

Tree **ipv6**

Default false

Introduced 16.0.R1

Platforms All



**label-ipv4** *boolean*

Synopsis	Enable support for labeled-unicast IPv4 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp backup-path label-ipv4</b> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**label-ipv6** *boolean*

Synopsis	Enable support for labeled-unicast IPv6 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp backup-path label-ipv6</b> <i>boolean</i>
Tree	<a href="#">label-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**best-path-selection**

Synopsis	Enter the <b>best-path-selection</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp best-path-selection</b>
Tree	<a href="#">best-path-selection</a>
Introduced	16.0.R1
Platforms	All

**always-compare-med**

Synopsis	Enter the <b>always-compare-med</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp best-path-selection always-compare-med</b>
Tree	<a href="#">always-compare-med</a>
Description	Commands in this context determine how the BGP decision process is affected by the MED path attribute.
Introduced	16.0.R1
Platforms	All

**med-value** *keyword*

Synopsis	Action for a missing MED attribute
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">bgp best-path-selection always-compare-med</a> <b>med-value</b> <i>keyword</i>
Tree	<a href="#">med-value</a>
Options	off, missing-med-zero, missing-med-infinity, on
Default	off
Introduced	16.0.R1
Platforms	All

**strict-as** *boolean*

Synopsis	Compare MED only for routes from same neighbor AS
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">bgp best-path-selection always-compare-med</a> <b>strict-as</b> <i>boolean</i>
Tree	<a href="#">strict-as</a>
Description	When configured to <b>true</b> , the route selection process can compare the MED path attribute between routes only if they come from the same neighbor AS. When configured to <b>false</b> , the route selection process can compare the MED path attribute between routes even if they come from different neighbor ASs.
Default	true
Introduced	16.0.R1
Platforms	All

**as-path-ignore**

Synopsis	Enter the <b>as-path-ignore</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">bgp best-path-selection</a> <b>as-path-ignore</b>
Tree	<a href="#">as-path-ignore</a>
Description	Commands in this context determine whether the AS path length is considered in the selection process for routes of the specified address families.
Introduced	16.0.R1
Platforms	All

### **ipv4** *boolean*

Synopsis	Ignore AS path length for unlabeled unicast IPv4 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp best-path-selection as-path-ignore</b> <b>ipv4</b> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **ipv6** *boolean*

Synopsis	Ignore AS path length for unlabeled unicast IPv6 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp best-path-selection as-path-ignore</b> <b>ipv6</b> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **l2-vpn** *boolean*

Synopsis	Ignore AS path length for L2-VPN routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp best-path-selection as-path-ignore</b> <b>l2-vpn</b> <i>boolean</i>
Tree	<a href="#">l2-vpn</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **label-ipv4** *boolean*

Synopsis	Ignore AS path length for labeled-unicast IPv4 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp best-path-selection as-path-ignore</b> <b>label-ipv4</b> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**label-ipv6** *boolean*

Synopsis	Ignore AS path length for labeled-unicast IPv6 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">bgp best-path-selection as-path-ignore label-ipv6</a> <i>boolean</i>
Tree	<a href="#">label-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mcast-ipv4** *boolean*

Synopsis	Ignore AS path length for IPv4 multicast routes
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">bgp best-path-selection as-path-ignore mcast-ipv4</a> <i>boolean</i>
Tree	<a href="#">mcast-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mcast-ipv6** *boolean*

Synopsis	Ignore AS path length for IPv6 multicast routes
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">bgp best-path-selection as-path-ignore mcast-ipv6</a> <i>boolean</i>
Tree	<a href="#">mcast-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mvpn-ipv4** *boolean*

Synopsis	Ignore AS path length for IPv4 MVPN routes
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">bgp best-path-selection as-path-ignore mvpn-ipv4</a> <i>boolean</i>
Tree	<a href="#">mvpn-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mvpn-ipv6** *boolean*

Synopsis	Ignore AS path length for IPv6 MVPN routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>best-path-selection</b> <b>as-path-ignore</b> <b>mvpn-ipv6</b> <i>boolean</i>
Tree	<a href="#">mvpn-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**vpn-ipv4** *boolean*

Synopsis	Ignore AS path length for VPN IPv4 (SAFI 128) routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>best-path-selection</b> <b>as-path-ignore</b> <b>vpn-ipv4</b> <i>boolean</i>
Tree	<a href="#">vpn-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**vpn-ipv6** *boolean*

Synopsis	Ignore AS path length for VPN IPv6 (SAFI 128) routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>best-path-selection</b> <b>as-path-ignore</b> <b>vpn-ipv6</b> <i>boolean</i>
Tree	<a href="#">vpn-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**compare-origin-validation-state** *boolean*

Synopsis	Compare RPKI origin validation state of usable routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>best-path-selection</b> <b>compare-origin-validation-state</b> <i>boolean</i>
Tree	<a href="#">compare-origin-validation-state</a>
Description	When configured to <b>true</b> , the RPKI origin validation state is compared between BGP routes, where a Valid state is preferred over a Not-Found state, and a Not-Found state is preferred over an Invalid state.

When configured to **false**, the RPKI origin validate state comparison is not performed as part of the BGP route selection process.

Default	false
Introduced	16.0.R1
Platforms	All

### **d-path-length-ignore** *boolean*

Synopsis	Enable D-PATH length ignore
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp best-path-selection d-path-length-ignore</b> <i>boolean</i>
Tree	<a href="#">d-path-length-ignore</a>

**Description** When configured to **true**, this command, enables the router to ignore the D-PATH domain segment length during best-path selection.

At the base router level (or VPRN BGP level for PE-CE routers), this command allows BGP to ignore the D-PATH domain segment length for best-path selection purposes. BGP ignores the D-PATH length when comparing two VPN routes or two IFL routes within the same RD. However, these VPN/IFL routes are processed in the main-BGP instance.

At the VPRN router level, this command allows the VPRN RTM to ignore the D-PATH domain segment length for best-path selection purposes (for routes in VPRN). The user can control whether the RTM considers the D-PATH length when comparing two VPN routes with different RDs.

Best-path selection for EVPN-IFF routes against other owners (for example, EVPN-IFL or IPVPN) still relies on RTM preference. When EVPN-IFF RTM preference matches the RTM preference of another BGP owner, the existing RTM selection applies and D-PATH is not considered, irrespective of the **d-path-length-ignore** configuration.

When configured to **false**, this command disables the ability to ignore the D-PATH domain segment length.

Default	false
Introduced	21.10.R1
Platforms	All

### **deterministic-med** *boolean*

Synopsis	Group paths based on AS before MED attribute comparison
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp best-path-selection deterministic-med</b> <i>boolean</i>
Tree	<a href="#">deterministic-med</a>

**Description** When configured to **true**, BGP groups paths from the same AS that are equal up to the MED attribute comparison and then compares the best path from each group to

select the overall best path. This process ensures that the best-path selection process is deterministic in all cases.

When configured to **false**, paths are not grouped and the overall best-path selection can depend on the order of route arrival.

Default	false
Introduced	16.0.R1
Platforms	All

## **ebgp-ibgp-equal**

Synopsis	Enter the <b>ebgp-ibgp-equal</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp best-path-selection ebgp-ibgp-equal</a>
Tree	<a href="#">ebgp-ibgp-equal</a>
Description	<p>Commands in this context allow BGP to ignore the difference between EBGP and IBGP routes in selecting the best path and eligible multipaths (if multipath and ECMP are enabled) for the specified address families. The result is a form of EIBGP load-balancing in a multipath scenario. This behavior can be applied selectively to certain address families.</p> <p>By default, the BGP decision process prefers an EBGP learned route over an IBGP learned route.</p>
Introduced	16.0.R1
Platforms	All

## **evpn boolean**

Synopsis	Consider EBGP and IBGP EVPN routes equal
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp best-path-selection ebgp-ibgp-equal evpn boolean</a>
Tree	<a href="#">evpn</a>
Default	false
Introduced	22.7.R1
Platforms	All

## **ipv4 boolean**

Synopsis	Consider EBGP and IBGP IPv4 routes equal
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp best-path-selection ebgp-ibgp-equal ipv4 boolean</a>
Tree	<a href="#">ipv4</a>

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Default	false
Introduced	16.0.R1
Platforms	All

### **ipv6** *boolean*

Synopsis	Consider EBGP and IBGP IPv6 routes equal
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp best-path-selection ebgp-ibgp-equal</a> <a href="#">ipv6</a> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **label-ipv4** *boolean*

Synopsis	Consider EBGP and IBGP label-IPv4 routes equal
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp best-path-selection ebgp-ibgp-equal</a> <a href="#">label-ipv4</a> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **label-ipv6** *boolean*

Synopsis	Consider EBGP and IBGP label-IPv6 routes equal
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp best-path-selection ebgp-ibgp-equal</a> <a href="#">label-ipv6</a> <i>boolean</i>
Tree	<a href="#">label-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **vpn-ipv4** *boolean*

Synopsis	Consider EBGP and IBGP VPN-IPv4 routes equal
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp best-path-selection ebgp-ibgp-equal</a> <a href="#">vpn-ipv4</a> <i>boolean</i>



Tree	<a href="#">vpn-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **vpn-ipv6** *boolean*

Synopsis	Consider EBGP and IBGP VPN-IPv6 routes equal
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp best-path-selection ebgp-ibgp-equal vpn-ipv6</a> <i>boolean</i>
Tree	<a href="#">vpn-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **ignore-nh-metric** *boolean*

Synopsis	Ignore next-hop distance in best path selection
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp best-path-selection ignore-nh-metric</a> <i>boolean</i>
Tree	<a href="#">ignore-nh-metric</a>
Description	When configured to <b>true</b> , BGP ignores the resolved distance to the BGP next hop in its route selection process.  When configured to <b>false</b> , BGP factors the distance to the next hop into its decision process when it compares two BGP routes with the same NLRI learned from base router BGP peers (in the <b>router</b> context) or IP prefix learned from VPRN BGP peers (in the <b>vprn</b> context).
Default	false
Introduced	16.0.R1
Platforms	All

### **ignore-router-id**

Synopsis	Enable the <b>ignore-router-id</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp best-path-selection ignore-router-id</a>
Tree	<a href="#">ignore-router-id</a>
Description	Commands in this context determine whether the BGP selection process ignores the BGP identifier (router ID) comparison of two EBGP paths from different EBGP peers when determining the best path for the specified address families.

By default, BGP selects the path with the lower router ID when it compares two paths from EBGP peers.

Introduced	16.0.R1
Platforms	All

## include-internal

Synopsis	Enter the <b>include-internal</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">best-path-selection</a> <a href="#">ignore-router-id</a> <a href="#">include-internal</a>
Tree	<a href="#">include-internal</a>
Description	Commands in this context specify the internal address families for which the router ID values are ignored, even when comparing two IBGP paths or an EBGP and an IBGP path.
Introduced	16.0.R1
Platforms	All

## mvpn-ipv4 *boolean*

Synopsis	Ignore the router IDs of MVPN-IPv4 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">best-path-selection</a> <a href="#">ignore-router-id</a> <a href="#">include-internal</a> <a href="#">mvpn-ipv4</a> <i>boolean</i>
Tree	<a href="#">mvpn-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

## mvpn-ipv6 *boolean*

Synopsis	Ignore the router IDs of MVPN-IPv6 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">best-path-selection</a> <a href="#">ignore-router-id</a> <a href="#">include-internal</a> <a href="#">mvpn-ipv6</a> <i>boolean</i>
Tree	<a href="#">mvpn-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**origin-invalid-unusable** *boolean*

Synopsis	Deem invalid routes unusable for best-path selection
Context	<b>configure</b> <i>router string</i> <i>bgp best-path-selection origin-invalid-unusable boolean</i>
Tree	<a href="#">origin-invalid-unusable</a>
Description	<p>When configured to <b>true</b>, routes that have an RPKI origin validation state of Invalid are considered unusable by the best-path selection algorithm. These routes cannot be used for forwarding and cannot be advertised to BGP peers.</p> <p>When configured to <b>false</b>, routes with an RPKI origin validation state of Invalid are compared to other usable routes for the same prefix according to the BGP decision process.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**bfd-liveness** *boolean*

Synopsis	Enable BFD
Context	<b>configure</b> <i>router string</i> <i>bgp bfd-liveness boolean</i>
Tree	<a href="#">bfd-liveness</a>
Description	<p>When configured to <b>true</b>, BFD is enabled on all BGP sessions, subject to the association of those BGP sessions with IP interfaces that have BFD configurations.</p> <p>When configured to <b>false</b>, BFD is not enabled globally for all BGP sessions.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**bgp-tunnel-metric**

Synopsis	Enter the <b>bgp-tunnel-metric</b> context
Context	<b>configure</b> <i>router string</i> <i>bgp bgp-tunnel-metric</i>
Tree	<a href="#">bgp-tunnel-metric</a>
Description	Commands in this context control the tunnel table metrics associated with BGP label unicast routes.
Introduced	20.5.R1
Platforms	All

**prefer-aigp** *boolean*

Synopsis	Use the AIGP attribute as tunnel metric when present
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp</i> <i>bgp-tunnel-metric</i> <i>prefer-aigp</i> <i>boolean</i>
Tree	<i>prefer-aigp</i>
Description	<p>When configured to <b>true</b>, the TTM metric is based on the AIGP metric if the route has the path attribute. When the BGP-LU route is selected for installation in TTM and it is not matched by a BGP import policy entry that overrides the BGP tunnel metric action, the TTM metric of the tunnel is set to the AIGP metric value of the BGP-LU route plus the resolved cost to the BGP next-hop of the route; otherwise, the metric is set to the value in the <b>value</b> setting.</p> <p>When configured to <b>false</b>, the AIGP attribute is ignored for purposes to TTM metric derivation.</p>
Default	false
Introduced	20.5.R1
Platforms	All

**value** *number*

Synopsis	BGP tunnel metric value
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp</i> <i>bgp-tunnel-metric</i> <i>value</i> <i>number</i>
Tree	<i>value</i>
Description	<p>This command configures a BGP tunnel metric for label IPv4 routes that do not have their metric set by more specific means.</p> <p>If a BGP-LU route is selected for installation in the TTM and there is no tunnel metric policy action that applies to the route, the TTM metric of the associated tunnel is set to this value if either:</p> <ul style="list-style-type: none"> <li>• <b>prefer-aigp</b> is set to <b>false</b></li> <li>• <b>prefer-aigp</b> is set to <b>true</b> but the BGP-LU route does not have an AIGP attribute</li> </ul>
Range	0 to 4294967295
Default	1000
Introduced	20.5.R1
Platforms	All

**bgp-tunnel-preference** *number*

Synopsis	BGP tunnel table preference
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp</i> <i>bgp-tunnel-preference</i> <i>number</i>

Tree	<a href="#">bgp-tunnel-preference</a>
Description	<p>This command configures the tunnel table preference for BGP-LU tunnel type.</p> <p>The tunnel table preference applies to next-hop resolution of BGP routes for: EVPN, IPv4, IPv6, VPN-IPv4, VPN-IPv6, label-IPv4, and label-IPV6 in the tunnel table.</p> <p>This feature does not apply to a VPRN, VPLS, or VLL service with explicit binding to an SDP that enabled the <b>mixed-lsp-mode</b> option. The service manager controls and fixes the tunnel preference in such an SDP. The tunnel table preference configuration does not modify the SDP behavior, nor the services that bind to it.</p>
Range	1 to 255
Default	12
Introduced	21.10.R1
Platforms	All

### **block-prefix-sid** *boolean*

Synopsis	Block the prefix SID attribute
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <b>block-prefix-sid</b> <i>boolean</i>
Tree	<a href="#">block-prefix-sid</a>
Description	<p>When configured to <b>true</b>, all prefix SID attributes are removed from label IPv4 and label IPv6 routes when they are exchanged with EBGP and IBGP peers covered by the scope of the command. Locally-imposed prefix SID attributes are also removed.</p> <p>When configured to <b>false</b>, all prefix SID attributes associated with label IPv4 and label IPv6 routes are propagated without restriction.</p> <p>A change of this configuration causes the affected BGP sessions to flap.</p>
Default	false
Introduced	19.10.R1
Platforms	All

### **client-reflect** *boolean*

Synopsis	Allow client reflection of routes by route reflector
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <b>client-reflect</b> <i>boolean</i>
Tree	<a href="#">client-reflect</a>
Description	<p>When configured to <b>true</b>, routes received from neighbors considered to be RR clients are reflected to other peers as expected.</p> <p>When configured to <b>false</b>, routes received from neighbors considered to be RR clients are not reflected to other clients.</p>
Default	true

Introduced	16.0.R1
Platforms	All

## cluster

Synopsis	Enter the <b>cluster</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">cluster</a>
Tree	<a href="#">cluster</a>
Introduced	16.0.R1
Platforms	All

## allow-local-fallback *boolean*

Synopsis	Allow fallback to RR topology location for ORR
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">cluster</a> <a href="#">allow-local-fallback</a> <i>boolean</i>
Tree	<a href="#">allow-local-fallback</a>
Description	When configured to <b>true</b> , this command allows the RR to advertise the best BGP path from its own topology location when there are no reachable routes from the client's ORR location. The ORR location must be specified before this command can be set to <b>true</b> . When configured to <b>false</b> , no route is advertised to the clients when there are no reachable routes from the client's ORR location.
Default	false
Introduced	16.0.R1
Platforms	All

## cluster-id *string*

Synopsis	Route reflector cluster ID
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">cluster</a> <a href="#">cluster-id</a> <i>string</i>
Tree	<a href="#">cluster-id</a>
Description	The command specifies the cluster ID to associate with the routing instance, effectively making all IBGP peers of the routing instance RR clients.
Introduced	16.0.R1
Platforms	All

**orr-location** *number*

Synopsis	Optimal route reflection location for the cluster
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp cluster</b> <b>orr-location</b> <i>number</i>
Tree	<b>orr-location</b>
Description	<p>This command configures an ORR location ID. If a cluster ID is also specified, the clients in that cluster receive routes optimal for that specific location.</p> <p>With optimal route reflection, the best path advertised to a client takes location ID into account. If the tie-break for best path (or Add-Paths) comes down to next-hop IGP cost, the IGP costs will be calculated relative to the specified location. In the SR OS implementation, the IGP costs from arbitrary ORR locations are calculated using OSPF, OSPFv3, IS-IS, or BGP-LS information in the TE DB.</p>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

**connect-retry** *number*

Synopsis	BGP connect retry timer value
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp connect-retry</b> <i>number</i>
Tree	<b>connect-retry</b>
Description	This command configures the BGP connect retry timer. When the timer expires, BGP tries to reconnect to the configured peer.
Range	1 to 65535
Default	120
Introduced	16.0.R1
Platforms	All

**convergence**

Synopsis	Enter the <b>convergence</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp convergence</b>
Tree	<b>convergence</b>
Introduced	19.7.R1
Platforms	All

**family** [*family-type*] *keyword*

Synopsis	Enter the <b>family</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp convergence family</b> <i>keyword</i>
Tree	<b>family</b>
Description	Commands in this context configure route convergence options for a specific BGP address family, specifically, the maximum amount of time BGP waits until it advertises the routes of the address family to its BGP peers.
Introduced	19.7.R1
Platforms	All

**[family-type]** *keyword*

Synopsis	Address family for which convergence selection applies
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp convergence family</b> <i>keyword</i>
Tree	<b>family</b>
Options	ipv4, ipv6
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	All

**max-wait-to-advertise** *number*

Synopsis	Maximum wait time before advertising routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp convergence family</b> <i>keyword</i> <b>max-wait-to-advertise</b> <i>number</i>
Tree	<b>max-wait-to-advertise</b>
Range	0 to 3600
Default	0
Introduced	19.7.R1
Platforms	All

**min-wait-to-advertise** *number*

Synopsis	Minimum wait time before advertising routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp convergence min-wait-to-advertise</b> <i>number</i>
Tree	<b>min-wait-to-advertise</b>



Range	0 to 3600
Default	0
Introduced	19.7.R1
Platforms	All

## damp-peer-oscillations

Synopsis	Enable the <b>damp-peer-oscillations</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp damp-peer-oscillations</a>
Tree	<a href="#">damp-peer-oscillations</a>
Description	Commands in this context specify how long a BGP peer session remains in the idle state after an error causes the session to reset. In the idle state, BGP does not initiate or respond to attempts to establish a new session. Repeated errors that occur a short time after each session reset cause longer and longer hold times in the idle state.
Introduced	16.0.R1
Platforms	All

## error-interval *number*

Synopsis	Time after a reset that the session must be error-free
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp damp-peer-oscillations error-interval</a> <i>number</i>
Tree	<a href="#">error-interval</a>
Description	This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time.
Range	0 to 2048
Default	30
Introduced	16.0.R1
Platforms	All

## idle-hold-time

Synopsis	Enter the <b>idle-hold-time</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp damp-peer-oscillations idle-hold-time</a>
Tree	<a href="#">idle-hold-time</a>
Introduced	16.0.R1

Platforms All

### **initial-wait** *number*

Synopsis Time session remains in idle state after stabilization

Context **configure** *router string* *bgp damp-peer-oscillations idle-hold-time initial-wait number*

Tree [initial-wait](#)

Range 0 to 2048

Default 0

Introduced 16.0.R1

Platforms All

### **max-wait** *number*

Synopsis Maximum session idle time after repeated instability

Context **configure** *router string* *bgp damp-peer-oscillations idle-hold-time max-wait number*

Tree [max-wait](#)

Range 1 to 2048

Default 60

Introduced 16.0.R1

Platforms All

### **second-wait** *number*

Synopsis Time that doubles after each session failure

Context **configure** *router string* *bgp damp-peer-oscillations idle-hold-time second-wait number*

Tree [second-wait](#)

Description This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time.

Range 1 to 2048

Default 5

Introduced 16.0.R1

Platforms All

**damping** *boolean*

Synopsis	Use BGP route damping to reduce route flap
Context	<b>configure</b> <i>router string bgp damping boolean</i>
Tree	<a href="#">damping</a>
Description	<p>When configured to <b>true</b>, this command enables route damping to reduce the number of update messages sent between BGP peers and reduce the load on peers without affecting the route convergence time for stable routes.</p> <p>Route damping is controlled by profiles set in route policies. If no profile is specified in the route policy, the default damping profile is used with the following parameters:</p> <ul style="list-style-type: none"> <li>• Half-life: 15 minutes</li> <li>• Max-suppress: 60 minutes</li> <li>• Suppress-threshold: 3000</li> <li>• Reuse-threshold: 750</li> </ul> <p>When configured to <b>false</b>, BGP route damping for learned routes is disabled.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**def-recv-evpn-encap** *keyword*

Synopsis	Default EVPN encapsulation type
Context	<b>configure</b> <i>router string bgp def-recv-evpn-encap keyword</i>
Tree	<a href="#">def-recv-evpn-encap</a>
Description	This command specifies the encapsulation type that BGP uses when an EVPN route is received without the Encapsulation Extended Community.
Options	mpls, vxlan
Default	mpls
Introduced	16.0.R1
Platforms	All

**default-label-preference**

Synopsis	Enter the <b>default-label-preference</b> context
Context	<b>configure</b> <i>router string bgp default-label-preference</i>
Tree	<a href="#">default-label-preference</a>
Introduced	19.5.R1

Platforms All

### **ebgp number**

Synopsis Default preference for EBGp

Context **configure** [router](#) *string* [bgp default-label-preference](#) *ebgp number*

Tree [ebgp](#)

Range 0 to 255

Default 0

Introduced 19.5.R1

Platforms All

### **ibgp number**

Synopsis Default preference for IBGP

Context **configure** [router](#) *string* [bgp default-label-preference](#) *ibgp number*

Tree [ibgp](#)

Range 0 to 255

Default 0

Introduced 19.5.R1

Platforms All

### **default-preference**

Synopsis Enter the **default-preference** context

Context **configure** [router](#) *string* [bgp default-preference](#)

Tree [default-preference](#)

Introduced 19.5.R1

Platforms All

### **ebgp number**

Synopsis Default preference for EBGp

Context **configure** [router](#) *string* [bgp default-preference](#) *ebgp number*

Tree [ebgp](#)

Range	0 to 255
Default	0
Introduced	19.5.R1
Platforms	All

**ibgp number**

Synopsis	Default preference for IBGP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp default-preference</b> <b>ibgp</b> <i>number</i>
Tree	<b>ibgp</b>
Range	0 to 255
Default	0
Introduced	19.5.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**dynamic-neighbor-limit number**

Synopsis	Max dynamic BGP sessions to accept from remote peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp dynamic-neighbor-limit</b> <i>number</i>
Tree	<b>dynamic-neighbor-limit</b>
Description	This command configures the maximum number of dynamic BGP sessions to accept from remote peers associated with the entire BGP instance. If accepting a new dynamic session causes the instance limit to be exceeded, the new session attempt is rejected and a Notification message is sent back to the remote peer.
Range	1 to 8192
Introduced	16.0.R1
Platforms	All

## **ebgp-default-reject-policy**

Synopsis	Enter the <b>ebgp-default-reject-policy</b> context
Context	<b>configure</b> <i>router string</i> <a href="#">bgp ebgp-default-reject-policy</a>
Tree	<a href="#">ebgp-default-reject-policy</a>
Introduced	19.5.R1
Platforms	All

## **export** *boolean*

Synopsis	Enable default reject export policy for external peers
Context	<b>configure</b> <i>router string</i> <a href="#">bgp ebgp-default-reject-policy export</a> <i>boolean</i>
Tree	<a href="#">export</a>
Default	true
Introduced	19.5.R1
Platforms	All

## **import** *boolean*

Synopsis	Enable default reject import policy for external peers
Context	<b>configure</b> <i>router string</i> <a href="#">bgp ebgp-default-reject-policy import</a> <i>boolean</i>
Tree	<a href="#">import</a>
Default	true
Introduced	19.5.R1
Platforms	All

## **egress-peer-engineering**

Synopsis	Enable the <b>egress-peer-engineering</b> context
Context	<b>configure</b> <i>router string</i> <a href="#">bgp egress-peer-engineering</a>
Tree	<a href="#">egress-peer-engineering</a>
Introduced	21.7.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of BGP egress engineering
Context	<b>configure</b> <i>router string</i> <i>bgp egress-peer-engineering admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Description	This command administratively enables or disables egress engineering for the BGP. If enabled, peer node SIDs and peer adjacency SIDs are advertised in BGP-LS.
Options	enable, disable
Default	disable
Introduced	21.7.R1
Platforms	All

**enforce-first-as** *boolean*

Synopsis	Enforce the configured peer AS value in received routes
Context	<b>configure</b> <i>router string</i> <i>bgp enforce-first-as boolean</i>
Tree	<a href="#">enforce-first-as</a>
Description	<p>When configured to <b>true</b> for an EBGP session, all routes received from an EBGP peer are checked to ensure that the most recent ASN in the AS_PATH attribute of each route matches the configured AS of the session. If there is not a match, the session is reset (if the <b>update-fault-tolerance</b> command in the <b>error-handling</b> context is set to <b>false</b>) or the session is left up but the route is treated as withdrawn (if <b>update-fault-tolerance</b> is set to <b>true</b>).</p> <p>This command does not flap an established session because it applies only to routes received after the command is issued.</p> <p>When configured to <b>false</b>, received routes are not checked for compliance with the rule.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**error-handling**

Synopsis	Enter the <b>error-handling</b> context
Context	<b>configure</b> <i>router string</i> <i>bgp error-handling</i>
Tree	<a href="#">error-handling</a>
Introduced	16.0.R1
Platforms	All

**update-fault-tolerance** *boolean*

Synopsis	Tolerate non-critical errors in UPDATE messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp error-handling update-fault-tolerance</b> <i>boolean</i>
Tree	<b>update-fault-tolerance</b>
Description	When configured to <b>true</b> , non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset.  When configured to <b>false</b> , most errors trigger a session reset.
Default	false
Introduced	16.0.R1
Platforms	All

**export**

Synopsis	Enable the <b>export</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp export</b>
Tree	<b>export</b>
Description	Commands in this context specify route policies that control the handling of outbound routes transmitted to all peers. Route policies are configured in the <b>configure policy-options</b> context.  When no export policies are specified in this context, BGP-learned routes are advertised by default and non-BGP routes are not advertised.
Introduced	16.0.R1
Platforms	All

**policy** (*policy-expr-string* | *string*)

Synopsis	List of export policy names
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp export policy</b> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<b>policy</b>
Description	This command specifies route policies that control the handling of outbound routes transmitted to certain peers.  Each object in this command is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified order to determine the modifications of each route and the final action to accept or reject the route.



Only one of the objects referenced by the command can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).

When no export policies are specified, BGP-learned routes are advertised by default and non-BGP routes are not advertised.

String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### extended-nh-encoding

Synopsis	Enter the <b>extended-nh-encoding</b> context
Context	<b>configure</b> <i>router string</i> <a href="#">bgp extended-nh-encoding</a>
Tree	<a href="#">extended-nh-encoding</a>
Description	Commands in this context specify the IPv4-related address families that can receive IPv6 next hops from peers. The peers should not send such routes unless the peers receive notification of this capability. If the router receives an enabled address family route from a peer to which it did not advertise the necessary capability, the UPDATE message will be considered malformed. This causes either a session reset or treat-as-withdraw behavior depending on the error handling settings.
Introduced	16.0.R1
Platforms	All

### ipv4 *boolean*

Synopsis	Advertise encoding capability for IPv4 routes
Context	<b>configure</b> <i>router string</i> <a href="#">bgp extended-nh-encoding ipv4 boolean</a>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	19.5.R1
Platforms	All

**label-ipv4** *boolean*

Synopsis	Advertise encoding capability for label-IPv4 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp extended-nh-encoding label-ipv4</b> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**vpn-ipv4** *boolean*

Synopsis	Advertise encoding capability for VPN-IPv4 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp extended-nh-encoding vpn-ipv4</b> <i>boolean</i>
Tree	<a href="#">vpn-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**family**

Synopsis	Enter the <b>family</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp family</b>
Tree	<a href="#">family</a>
Description	Commands in this context specify the BGP address families supported by the base router BGP sessions.
Introduced	16.0.R1
Platforms	All

**bgp-ls** *boolean*

Synopsis	Advertise MP-BGP support for the BGP-LS address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp family bgp-ls</b> <i>boolean</i>
Tree	<a href="#">bgp-ls</a>
Default	false
Introduced	16.0.R1
Platforms	All

**evpn boolean**

Synopsis	Advertise MP-BGP support for the EVPN address family
Context	<b>configure</b> <i>router string bgp family evpn boolean</i>
Tree	<a href="#">evpn</a>
Default	false
Introduced	16.0.R1
Platforms	All

**flow-ipv4 boolean**

Synopsis	Advertise support for the flowspec-IPv4 address family
Context	<b>configure</b> <i>router string bgp family flow-ipv4 boolean</i>
Tree	<a href="#">flow-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**flow-ipv6 boolean**

Synopsis	Advertise support for the flowspec-IPv6 address family
Context	<b>configure</b> <i>router string bgp family flow-ipv6 boolean</i>
Tree	<a href="#">flow-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**flow-vpn-ipv4 boolean**

Synopsis	Advertise support for FlowSpec-VPN IPv4 address family
Context	<b>configure</b> <i>router string bgp family flow-vpn-ipv4 boolean</i>
Tree	<a href="#">flow-vpn-ipv4</a>
Default	false
Introduced	22.7.R1
Platforms	All

**flow-vpn-ipv6** *boolean*

Synopsis	Advertise support for FlowSpec-VPN IPv6 address family
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>flow-vpn-ipv6</i> <i>boolean</i>
Tree	<a href="#">flow-vpn-ipv6</a>
Default	false
Introduced	22.7.R1
Platforms	All

**ipv4** *boolean*

Synopsis	Advertise MP-BGP support for the IPv4 address family
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>ipv4</i> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	true
Introduced	16.0.R1
Platforms	All

**ipv6** *boolean*

Synopsis	Advertise MP-BGP support for the IPv6 address family
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>ipv6</i> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**l2-vpn** *boolean*

Synopsis	Advertise MP-BGP support for the L2-VPN address family
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>l2-vpn</i> <i>boolean</i>
Tree	<a href="#">l2-vpn</a>
Default	false
Introduced	16.0.R1
Platforms	All

**label-ipv4** *boolean*

Synopsis	Advertise support for the label-IPv4 address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>family</b> <b>label-ipv4</b> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**label-ipv6** *boolean*

Synopsis	Advertise support for the label-IPv6 address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>family</b> <b>label-ipv6</b> <i>boolean</i>
Tree	<a href="#">label-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mcast-ipv4** *boolean*

Synopsis	Advertise support for the MCAST-IPv4 address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>family</b> <b>mcast-ipv4</b> <i>boolean</i>
Tree	<a href="#">mcast-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mcast-ipv6** *boolean*

Synopsis	Advertise support for the MCAST-IPv6 address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>family</b> <b>mcast-ipv6</b> <i>boolean</i>
Tree	<a href="#">mcast-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mcast-vpn-ipv4** *boolean*

Synopsis	Advertise support for the IPv4 VPN MCAST address family
Context	<b>configure</b> <i>router string</i> <i>bgp family mcast-vpn-ipv4 boolean</i>
Tree	<a href="#">mcast-vpn-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mcast-vpn-ipv6** *boolean*

Synopsis	Advertise support for the IPv6 VPN MCAST address family
Context	<b>configure</b> <i>router string</i> <i>bgp family mcast-vpn-ipv6 boolean</i>
Tree	<a href="#">mcast-vpn-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mdt-safi** *boolean*

Synopsis	Advertise MP-BGP support for MDT-SAFI address family
Context	<b>configure</b> <i>router string</i> <i>bgp family mdt-safi boolean</i>
Tree	<a href="#">mdt-safi</a>
Default	false
Introduced	16.0.R1
Platforms	All

**ms-pw** *boolean*

Synopsis	Advertise support for multi-segment PW address family
Context	<b>configure</b> <i>router string</i> <i>bgp family ms-pw boolean</i>
Tree	<a href="#">ms-pw</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mvpn-ipv4** *boolean*

Synopsis	Advertise support for the IPv4 MCAST VPN address family
Context	<b>configure</b> <i>router string</i> <i>bgp family mvpn-ipv4 boolean</i>
Tree	<a href="#">mvpn-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mvpn-ipv6** *boolean*

Synopsis	Advertise support for the IPv6 MCAST VPN address family
Context	<b>configure</b> <i>router string</i> <i>bgp family mvpn-ipv6 boolean</i>
Tree	<a href="#">mvpn-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**route-target** *boolean*

Synopsis	Advertise MP-BGP support for RT constraint routes
Context	<b>configure</b> <i>router string</i> <i>bgp family route-target boolean</i>
Tree	<a href="#">route-target</a>
Default	false
Introduced	16.0.R1
Platforms	All

**sr-policy-ipv4** *boolean*

Synopsis	Advertise MP-BGP support for the SR-policy-IPv4 family
Context	<b>configure</b> <i>router string</i> <i>bgp family sr-policy-ipv4 boolean</i>
Tree	<a href="#">sr-policy-ipv4</a>
Description	This command allows the router to advertise the capability for AFI1/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv4 destination.
Default	false

Introduced 16.0.R1  
Platforms All

### **sr-policy-ipv6** *boolean*

Synopsis Advertise MP-BGP support for the SR-policy-IPv6 family  
Context **configure** *router* *string* *bgp* *family* *sr-policy-ipv6* *boolean*  
Tree [sr-policy-ipv6](#)  
Description This command allows the router to advertise the capability for AFI2/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv6 destination.  
Default false  
Introduced 19.10.R1  
Platforms All

### **vpn-ipv4** *boolean*

Synopsis Advertise MP-BGP support for IPv4 VPN address family  
Context **configure** *router* *string* *bgp* *family* *vpn-ipv4* *boolean*  
Tree [vpn-ipv4](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **vpn-ipv6** *boolean*

Synopsis Advertise MP-BGP support for IPv6 VPN address family  
Context **configure** *router* *string* *bgp* *family* *vpn-ipv6* *boolean*  
Tree [vpn-ipv6](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **fast-external-failover** *boolean*

Synopsis Drop external BGP session immediately when link fails



Context	<b>configure router</b> <i>string</i> <b>bgp fast-external-failover</b> <i>boolean</i>
Tree	<b>fast-external-failover</b>
Description	When configured to <b>true</b> , the router drops an external BGP session to a single-hop neighbor immediately when the local interface goes down. When configured to <b>false</b> , the BGP session remains up until the hold time expires.
Default	true
Introduced	16.0.R1
Platforms	All

## flowspec

Synopsis	Enter the <b>flowspec</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp flowspec</b>
Tree	<b>flowspec</b>
Introduced	16.0.R1
Platforms	All

## validate-dest-prefix *boolean*

Synopsis	Validate destination prefix in FlowSpec-IPv4/IPv6 route
Context	<b>configure router</b> <i>string</i> <b>bgp flowspec validate-dest-prefix</b> <i>boolean</i>
Tree	<b>validate-dest-prefix</b>
Description	When configured to <b>true</b> , this command enables validation of received IPv4 and IPv6 FlowSpec routes that contain a destination-prefix subcomponent. A FlowSpec route with a destination-prefix subcomponent is considered invalid if both of the following are true: <ul style="list-style-type: none"> <li>• it was originated outside the local AS of the receiving BGP router</li> <li>• the neighbor AS of the FlowSpec route does not match the neighbor AS of the best match BGP (unicast) route for the destination prefix or the neighbor AS of any longer match BGP (unicast) route for the destination prefix</li> </ul> An invalid route is retained in the BGP but it is not used for filtering traffic or propagated to other BGP routers. When configured to <b>false</b> , destination-prefix validation is disabled.
Default	false
Introduced	16.0.R1
Platforms	All

**validate-redirect-ip** *boolean*

Synopsis	Validate the redirect-to-IPv4 action in FlowSpec route
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>flowspec</b> <b>validate-redirect-ip</b> <i>boolean</i>
Tree	<a href="#">validate-redirect-ip</a>
Description	<p>When configured to <b>true</b>, this command enables procedures to validate the redirect-to-IPv4 action attached to FlowSpec-IPv4 routes that are received by the BGP instance.</p> <p>A FlowSpec-IPv4 route is considered invalid and is not installed as a filter rule if the FlowSpec-IPv4 route is deemed to have originated from a different AS than the IP route that resolves the redirection IPv4 address. The originating AS of a FlowSpec route is determined from its AS path.</p> <p>When configured to <b>false</b>, the validation check is disabled.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**graceful-restart**

Synopsis	Enable the <b>graceful-restart</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>graceful-restart</b>
Tree	<a href="#">graceful-restart</a>
Description	Commands in this context configure BGP graceful restart helper procedures for address families included in the GR capabilities of both peers.
Introduced	16.0.R1
Platforms	All

**gr-notification** *boolean*

Synopsis	Perform Graceful Restart procedures
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>graceful-restart</b> <b>gr-notification</b> <i>boolean</i>
Tree	<a href="#">gr-notification</a>
Description	<p>When configured to <b>true</b>, the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error.</p> <p>When configured to <b>false</b>, NOTIFICATION messages are not supported.</p>
Default	false

Introduced	16.0.R1
Platforms	All

## long-lived

Synopsis	Enable the <b>long-lived</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp graceful-restart long-lived</a>
Tree	<a href="#">long-lived</a>
Description	<p>Commands in this context configure the BGP Long-Lived Graceful-Restart (LLGR) procedures.</p> <p>LLGR, known informally as BGP persistence, is an extension of BGP GR that allows a session to stay down for a longer period of time. During this time, learned routes are marked and re-advertised as stale but they can continue to be used as routes of last resort.</p> <p>The LLGR handling of a session failure can be invoked immediately or it can be delayed until the end of the traditional GR restart window.</p>
Introduced	16.0.R1
Platforms	All

## advertise-stale-to-all-neighbors *boolean*

Synopsis	Advertise stale routes to all BGP peers
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp graceful-restart long-lived advertise-stale-to-all-neighbors</a> <i>boolean</i>
Tree	<a href="#">advertise-stale-to-all-neighbors</a>
Default	false
Introduced	16.0.R1
Platforms	All

## advertised-stale-time *number*

Synopsis	LLGR stale routes time
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp graceful-restart long-lived advertised-stale-time</a> <i>number</i>
Tree	<a href="#">advertised-stale-time</a>
Range	0 to 16777215
Default	86400
Introduced	16.0.R1

Platforms All

### **family** [[family-type](#)] *keyword*

Synopsis Enter the **family** list instance

Context **configure** [router](#) *string* [bgp graceful-restart long-lived family](#) *keyword*

Tree [family](#)

Introduced 16.0.R1

Platforms All

### **[family-type]** *keyword*

Synopsis Family type for family-specific LLGR configuration

Context **configure** [router](#) *string* [bgp graceful-restart long-lived family](#) *keyword*

Tree [family](#)

Options [ipv4](#), [vpn-ipv4](#), [ipv6](#), [vpn-ipv6](#), [l2-vpn](#), [flow-ipv4](#), [route-target](#), [flow-ipv6](#), [label-ipv4](#), [label-ipv6](#), [flow-vpn-ipv4](#), [flow-vpn-ipv6](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **advertised-stale-time** *number*

Synopsis LLGR stale routes time for family override

Context **configure** [router](#) *string* [bgp graceful-restart long-lived family](#) *keyword* [advertised-stale-time](#) *number*

Tree [advertised-stale-time](#)

Range 0 to 16777215

Default 86400

Introduced 16.0.R1

Platforms All

### **helper-override-stale-time** *number*

Synopsis Locally-configured stale routes override time

Context	<b>configure</b> <i>router string</i> <a href="#">bgp graceful-restart long-lived family keyword helper-override-stale-time number</a>
Tree	<a href="#">helper-override-stale-time</a>
Range	0 to 16777215
Introduced	16.0.R1
Platforms	All

### **forwarding-bits-set** *keyword*

Synopsis	BGP LLGR forwarding-bit behavior for address family
Context	<b>configure</b> <i>router string</i> <a href="#">bgp graceful-restart long-lived forwarding-bits-set keyword</a>
Tree	<a href="#">forwarding-bits-set</a>
Description	<p>This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family.</p> <p>This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).</p>
Options	none, all, non-fwd
Default	none
Introduced	16.0.R1
Platforms	All

### **helper-override-restart-time** *number*

Synopsis	Locally-configured override for restart time
Context	<b>configure</b> <i>router string</i> <a href="#">bgp graceful-restart long-lived helper-override-restart-time number</a>
Tree	<a href="#">helper-override-restart-time</a>
Description	<p>This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI.</p>
Range	0 to 4095
Introduced	16.0.R1

Platforms All

### **helper-override-stale-time** *number*

Synopsis Locally-configured stale routes override time

Context **configure** *router string* **bgp graceful-restart long-lived helper-override-stale-time** *number*

Tree [helper-override-stale-time](#)

Description This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability.

This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override.

Range 0 to 16777215

Introduced 16.0.R1

Platforms All

### **without-no-export** *boolean*

Synopsis Advertise LLGR stale routes to non-LLGR peers

Context **configure** *router string* **bgp graceful-restart long-lived without-no-export** *boolean*

Tree [without-no-export](#)

Description When configured to **true**, LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0.

When configured to **false**, LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0 and a NO\_EXPORT standard community is automatically added to the routes.

Default false

Introduced 16.0.R1

Platforms All

### **restart-time** *number*

Synopsis Restart time advertised by GR capability

Context **configure** *router string* **bgp graceful-restart restart-time** *number*

Tree [restart-time](#)

Range	0 to 4095
Default	120
Introduced	16.0.R1
Platforms	All

### **stale-routes-time** *number*

Synopsis	Maximum time to maintain routes after graceful restart
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp graceful-restart stale-routes-time</b> <i>number</i>
Tree	<b>stale-routes-time</b>
Range	1 to 3600
Default	360
Introduced	16.0.R1
Platforms	All

### **group** [*group-name*] *string*

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i>
Tree	<b>group</b>
Description	Commands in this context define BGP peer groups and their group-specific command options. The options in this context are identical to the global BGP options. Any options that are not overridden by the group-specific commands inherit the configuration settings from the BGP global level.
Introduced	16.0.R1
Platforms	All

### [*group-name*] *string*

Synopsis	BGP peer group name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i>
Tree	<b>group</b>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## add-paths

Synopsis	Enable the <b>add-paths</b> context
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <b>add-paths</b>
Tree	<b>add-paths</b>
Description	<p>Commands in this context allow the add-paths node to be configured for the specified families for configuration of the BGP group or neighbor. The BGP add-paths capability allows the router to send or receive multiple paths per prefix to and from a peer.</p> <p>When unconfigured, command settings are inherited from a higher level BGP configuration.</p>
Introduced	16.0.R1
Platforms	All

## evpn

Synopsis	Enter the <b>evpn</b> context
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <b>add-paths evpn</b>
Tree	<b>evpn</b>
Description	Commands in this context configure the add-paths capability for EVPN routes. By default, add-paths is not enabled for EVPN routes.
Introduced	21.10.R1
Platforms	All

## receive *boolean*

Synopsis	Receive multiple EVPN paths per prefix from a peer
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <b>add-paths evpn receive</b> <i>boolean</i>
Tree	<b>receive</b>
Default	false
Introduced	21.10.R1
Platforms	All

## send (*number* | *keyword*)

Synopsis	Maximum paths per EVPN prefix to Add-Path peers
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <b>add-paths evpn send</b> ( <i>number</i>   <i>keyword</i> )



Tree	<a href="#">send</a>
Range	1 to 16
Options	multipaths
Introduced	21.10.R1
Platforms	All

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">add-paths</a> <a href="#">ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	All

## receive *boolean*

Synopsis	Receive multiple labeled-unicast routes per IPv4 prefix
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">add-paths</a> <a href="#">ipv4</a> <a href="#">receive</a> <i>boolean</i>
Tree	<a href="#">receive</a>
Description	When configured to <b>true</b> , the router can receive multiple unlabeled IPv4 unicast routes per prefix from a peer. When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

## send (*number* | *keyword*)

Synopsis	Maximum paths per unlabeled IPv4 unicast prefix
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">add-paths</a> <a href="#">ipv4</a> <a href="#">send</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">send</a>
Description	This command configures the maximum number of paths per unlabeled IPv4 unicast prefix that are allowed to be advertised to ADD-PATH peers. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.

When not configured, ADD-PATH send capability is not enabled for unlabeled IPv4 unicast routes.

Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

## ipv6

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths ipv6</i>
Tree	<i>ipv6</i>
Introduced	16.0.R1
Platforms	All

## receive *boolean*

Synopsis	Receive multiple routes per IPv6 prefix
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths ipv6 receive boolean</i>
Tree	<i>receive</i>
Description	When configured to <b>true</b> , this command allows multiple unlabeled IPv6 unicast routes per prefix to be received from a peer. When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

## send (*number* | *keyword*)

Synopsis	Maximum paths per unlabeled IPv6 unicast prefix
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths ipv6 send (number   keyword)</i>
Tree	<i>send</i>
Description	This command configures the maximum number of paths per unlabeled IPv4 unicast prefix that are allowed to be advertised to ADD-PATH peers. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.

When not configured, ADD-PATH send capability is not enabled for unlabeled IPv4 unicast routes.

Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

## label-ipv4

Synopsis	Enter the <b>label-ipv4</b> context
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths</i> <b>label-ipv4</b>
Tree	<b>label-ipv4</b>
Introduced	16.0.R1
Platforms	All

## receive *boolean*

Synopsis	Receive multiple labeled-unicast routes per IPv4 prefix
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths</i> <b>label-ipv4</b> <i>receive boolean</i>
Tree	<b>receive</b>
Description	When configured to <b>true</b> , this command allows multiple labeled-unicast routes per IPv4 prefix to be received from a peer. When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

## send (*number* | *keyword*)

Synopsis	Maximum paths per labeled IPv4 unicast prefix
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths</i> <b>label-ipv4</b> <i>send (number   keyword)</i>
Tree	<b>send</b>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv4 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.

	When not configured, ADD-PATH send capability is not enabled for labeled IPv4 unicast routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

## label-ipv6

Synopsis	Enter the <b>label-ipv6</b> context
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths</i> <b>label-ipv6</b>
Tree	<b>label-ipv6</b>
Introduced	16.0.R1
Platforms	All

## receive *boolean*

Synopsis	Receive multiple labeled-unicast routes per IPv6 prefix
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths</i> <b>label-ipv6</b> <i>receive boolean</i>
Tree	<b>receive</b>
Description	When configured to <b>true</b> , this command allows multiple labeled-unicast routes per IPv6 prefix to be received from a peer. When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

## send (*number* | *keyword*)

Synopsis	Maximum paths per labeled IPv6 unicast prefix
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths</i> <b>label-ipv6</b> <i>send (number   keyword)</i>
Tree	<b>send</b>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv6 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.

	When not configured, ADD-PATH send capability is not enabled for labeled IPv6 unicast routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

## mcast-vpn-ipv4

Synopsis	Enter the <b>mcast-vpn-ipv4</b> context
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths</i> <b>mcast-vpn-ipv4</b>
Tree	<b>mcast-vpn-ipv4</b>
Introduced	16.0.R1
Platforms	All

## receive *boolean*

Synopsis	Receive multiple multicast routes per IPv4 VPN prefix
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths</i> <b>mcast-vpn-ipv4</b> <b>receive</b> <i>boolean</i>
Tree	<b>receive</b>
Description	When configured to <b>true</b> , this command allows multiple multicast routes per IPv4 VPN prefix to be received from a peer. When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

## send *number*

Synopsis	Maximum paths per multicast IPv4 VPN prefix
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths</i> <b>mcast-vpn-ipv4</b> <b>send</b> <i>number</i>
Tree	<b>send</b>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast IPv4 VPN prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.

	When not configured, ADD-PATH send capability is not enabled for multicast IPv4 VPN routes.
Range	1 to 16
Introduced	16.0.R1
Platforms	All

## mcast-vpn-ipv6

Synopsis	Enter the <b>mcast-vpn-ipv6</b> context
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths</i> <b>mcast-vpn-ipv6</b>
Tree	<b>mcast-vpn-ipv6</b>
Introduced	16.0.R1
Platforms	All

## receive *boolean*

Synopsis	Receive multiple multicast routes per IPv6 VPN prefix
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths</i> <b>mcast-vpn-ipv6</b> <b>receive</b> <i>boolean</i>
Tree	<b>receive</b>
Description	When configured to <b>true</b> , this command allows multiple multicast routes per IPv6 VPN prefix to be received from a peer. When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

## send *number*

Synopsis	Maximum paths per multicast IPv6 VPN prefix
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths</i> <b>mcast-vpn-ipv6</b> <b>send</b> <i>number</i>
Tree	<b>send</b>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast IPv6 VPN prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for multicast IPv6 VPN routes.

Range	1 to 16
Introduced	16.0.R1
Platforms	All

## **mvpn-ipv4**

Synopsis	Enter the <b>mvpn-ipv4</b> context
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths mvpn-ipv4</i>
Tree	<i>mvpn-ipv4</i>
Introduced	16.0.R1
Platforms	All

## **receive boolean**

Synopsis	Receive multiple multicast VPN routes per IPv4 prefix
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths mvpn-ipv4 receive boolean</i>
Tree	<i>receive</i>
Description	When configured to <b>true</b> , this command allows multiple multicast VPN routes per IPv4 prefix to be received from a peer. When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

## **send number**

Synopsis	Maximum paths per multicast VPN IPv4 prefix
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths mvpn-ipv4 send number</i>
Tree	<i>send</i>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast VPN IPv4 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for multicast VPN IPv4 routes.
Range	1 to 16

Introduced	16.0.R1
Platforms	All

## **mvpn-ipv6**

Synopsis	Enter the <b>mvpn-ipv6</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">add-paths</a> <a href="#">mvpn-ipv6</a>
Tree	<a href="#">mvpn-ipv6</a>
Introduced	16.0.R1
Platforms	All

## **receive** *boolean*

Synopsis	Receive multiple multicast VPN routes per IPv6 prefix
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">add-paths</a> <a href="#">mvpn-ipv6</a> <a href="#">receive</a> <i>boolean</i>
Tree	<a href="#">receive</a>
Description	When configured to <b>true</b> , this command allows multiple multicast VPN routes per IPv6 prefix to be received from a peer. When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

## **send** *number*

Synopsis	Maximum paths per multicast VPN IPv6 prefix
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">add-paths</a> <a href="#">mvpn-ipv6</a> <a href="#">send</a> <i>number</i>
Tree	<a href="#">send</a>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast VPN IPv6 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for multicast VPN IPv6 routes.
Range	1 to 16
Introduced	16.0.R1



Platforms All

## vpn-ipv4

Synopsis Enter the **vpn-ipv4** context

Context **configure** *router string bgp group string add-paths vpn-ipv4*

Tree [vpn-ipv4](#)

Introduced 16.0.R1

Platforms All

## receive *boolean*

Synopsis Receive multiple routes per VPN-IPv4 prefix

Context **configure** *router string bgp group string add-paths vpn-ipv4 receive boolean*

Tree [receive](#)

Description When configured to **true**, this command allows multiple VPN-IPv4 routes per prefix to be received from a peer.  
When configured to **false**, the ADD-PATH receive capability is not enabled.

Default false

Introduced 16.0.R1

Platforms All

## send (*number* | *keyword*)

Synopsis Maximum paths per VPN-IPv4 prefix

Context **configure** *router string bgp group string add-paths vpn-ipv4 send (number | keyword)*

Tree [send](#)

Description This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv4 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.  
When not configured, ADD-PATH send capability is not enabled for VPN-IPv4 routes.

Range 1 to 16

Options multipaths

Introduced 16.0.R1

Platforms All

**vpn-ipv6**

Synopsis	Enter the <b>vpn-ipv6</b> context
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths vpn-ipv6</i>
Tree	<i>vpn-ipv6</i>
Introduced	16.0.R1
Platforms	All

**receive** *boolean*

Synopsis	Receive multiple routes per VPN-IPv6 prefix
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths vpn-ipv6 receive boolean</i>
Tree	<i>receive</i>
Description	When configured to <b>true</b> , this command allows multiple VPN-IPv6 routes per prefix to be received from a peer. When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

**send** (*number* | *keyword*)

Synopsis	Maximum paths per VPN-IPv6 prefix
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths vpn-ipv6 send (number   keyword)</i>
Tree	<i>send</i>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv6 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for VPN-IPv6 routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the BGP group
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <i>group</i> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**advertise-inactive** *boolean*

Synopsis	Advertise an inactive BGP route to peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <i>group</i> <i>string</i> <b>advertise-inactive</b> <i>boolean</i>
Tree	<a href="#">advertise-inactive</a>
Description	<p>When configured to <b>true</b>, this command allows an inactive BGP route to be advertised, even though it is not the most preferred route. The effect of the command on advertised unlabeled, labeled, and multicast IPv4 and IPv6 routes depends on several factors.</p> <ul style="list-style-type: none"> <li>• If the active route for the IP prefix is a BGP route, that route is advertised.</li> <li>• If the active route is a non-BGP route and there are valid inactive BGP routes to the same destination, the best valid inactive route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session.</li> <li>• If the active route is a non-BGP route and there are no valid BGP routes to the same destination, no route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session.</li> </ul> <p>When unconfigured, the command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, the advertisement of inactive BGP routes to other BGP peers is disabled.</p>
Introduced	16.0.R1
Platforms	All

**advertise-ipv6-next-hops**

Synopsis	Enable the <b>advertise-ipv6-next-hops</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <i>group</i> <i>string</i> <b>advertise-ipv6-next-hops</b>
Tree	<a href="#">advertise-ipv6-next-hops</a>

Description	<p>Commands in this context allow specified IP family routes to be advertised to IPv6 transport peers with a true IPv6 address when originated or when a configured or automatic next-hop-self action is applied.</p> <p>When unconfigured, command settings are inherited from a higher level BGP configuration.</p>
Introduced	16.0.R1
Platforms	All

### **evpn boolean**

Synopsis	Advertise EVPN route with IPv6 next-hop address
Context	<b>configure</b> <i>router string bgp group string advertise-ipv6-next-hops evpn boolean</i>
Tree	<a href="#">evpn</a>
Description	<p>When configured to <b>true</b>, EVPN routes are advertised with IPv6 next-hop addresses to IPv6 transport peers.</p> <p>When configured to <b>false</b>, EVPN routes are advertised with IPv4 next-hop addresses to IPv6 transport peers.</p>
Default	false
Introduced	19.5.R1
Platforms	All

### **ipv4 boolean**

Synopsis	Advertise IPv4 route with IPv6 next-hop address
Context	<b>configure</b> <i>router string bgp group string advertise-ipv6-next-hops ipv4 boolean</i>
Tree	<a href="#">ipv4</a>
Description	<p>When configured to <b>true</b>, IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.</p> <p>When configured to <b>false</b>, IPv4 routes are advertised with IPv4 next-hop addresses to IPv6 transport peers. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.</p>
Default	false
Introduced	19.5.R1
Platforms	All

**label-ipv4** *boolean*

Synopsis	Advertise label IPv4 route with IPv6 next-hop address
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>advertise-ipv6-next-hops</i> <i>label-ipv4</i> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Description	<p>When configured to <b>true</b>, label IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.</p> <p>When configured to <b>false</b>, label IPv4 routes are advertised with the system IPv4 address as the next hop to IPv6 transport peers. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**label-ipv6** *boolean*

Synopsis	Advertise label IPv6 route with IPv6 next-hop address
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>advertise-ipv6-next-hops</i> <i>label-ipv6</i> <i>boolean</i>
Tree	<a href="#">label-ipv6</a>
Description	<p>When configured to <b>true</b>, label IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers.</p> <p>When configured to <b>false</b>, label IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**vpn-ipv4** *boolean*

Synopsis	Advertise VPN IPv4 route with IPv6 next-hop address
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>advertise-ipv6-next-hops</i> <i>vpn-ipv4</i> <i>boolean</i>
Tree	<a href="#">vpn-ipv4</a>

Description	<p>When configured to <b>true</b>, VPN IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.</p> <p>When configured to <b>false</b>, VPN IPv4 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **vpn-ipv6** *boolean*

Synopsis	Advertise VPN IPv6 route with IPv6 next-hop address
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <i>group</i> <i>string</i> <a href="#">advertise-ipv6-next-hops</a> <a href="#">vpn-ipv6</a> <i>boolean</i>
Tree	<a href="#">vpn-ipv6</a>
Description	<p>When configured to <b>true</b>, VPN IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers.</p> <p>When configured to <b>false</b>, VPN IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **aggregator-id-zero** *boolean*

Synopsis	Set router ID in the BGP AGGREGATOR attribute to zero
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <i>group</i> <i>string</i> <a href="#">aggregator-id-zero</a> <i>boolean</i>
Tree	<a href="#">aggregator-id-zero</a>
Introduced	16.0.R1
Platforms	All

### **aigp** *boolean*

Synopsis	Add AIGP attribute to advertised routes
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Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>aigp boolean</i>
Tree	<i>aigp</i>
Description	When configured to <b>true</b> , this command enables Accumulated IGP (AIGP) path attribute support with one or more BGP peers. BGP path selection among routes with an associated AIGP metric is based on the end-to-end IGP metrics of the different BGP paths, even when these BGP paths span more than one AS and IGP instance. When configured to <b>false</b> , the AIGP attribute is removed from advertised routes, if present, and is ignored in received routes.
Default	false
Introduced	16.0.R1
Platforms	All

### **as-override** *boolean*

Synopsis	Replace the peer ASN with the local ASN in AS Path
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>as-override boolean</i>
Tree	<i>as-override</i>
Description	When configured to <b>true</b> , the advertising router's local AS replaces all occurrences of the peer AS in the AS_PATH attribute. This command should be used with caution, as it breaks BGP's loop detection mechanism. When configured to <b>false</b> , no AS override is performed.
Default	false
Introduced	19.7.R1
Platforms	All

### **asn-4-byte** *boolean*

Synopsis	Advertise the use of 4-byte ASNs
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>asn-4-byte boolean</i>
Tree	<i>asn-4-byte</i>
Description	When this command inherits a value of <b>true</b> , the use of 4-byte ASNs is supported. When unconfigured, the command inherits the value of the global-level setting ( <b>true</b> or <b>false</b> ). The command cannot be explicitly configured to <b>true</b> . When configured to <b>false</b> , this command disables the use of 4-byte ASNs.
Introduced	16.0.R1
Platforms	All

**authentication-key *string***

Synopsis	BGP authentication key for peers in the group
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">authentication-key</a> <i>string</i>
Tree	<a href="#">authentication-key</a>
Description	This command configures the authentication key that must be configured on both peers. The stored format of the authentication key is based on the <b>configure system security hash-control management-interface md-cli hash-algorithm</b> setting.
String Length	1 to 370
Introduced	16.0.R1
Platforms	All

**authentication-keychain *reference***

Synopsis	TCP authentication keychain for the session
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">authentication-keychain</a> <i>reference</i>
Tree	<a href="#">authentication-keychain</a>
Description	This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session.
Reference	<b>configure</b> <a href="#">system security keychains</a> <a href="#">keychain</a> <i>string</i>
Introduced	16.0.R3
Platforms	All

**bfd-liveness *boolean***

Synopsis	Enable BFD
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">bfd-liveness</a> <i>boolean</i>
Tree	<a href="#">bfd-liveness</a>
Description	<p>When configured to <b>true</b>, BFD is enabled on a given protocol interface where the state of the protocol interface is tied to the state of the BFD session between the local node and the remote node.</p> <p>When unconfigured, the command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, BFD is removed from the associated protocol adjacency.</p>
Introduced	16.0.R1
Platforms	All



### **block-prefix-sid** *boolean*

Synopsis	Block the prefix SID attribute
Context	<b>configure</b> <i>router string bgp group string block-prefix-sid boolean</i>
Tree	<a href="#">block-prefix-sid</a>
Description	<p>When configured to <b>true</b>, all prefix SID attributes are removed from all routes exchanged between EBGP and IBGP peers covered by the scope of the command. Locally-imposed prefix SID attributes are also removed.</p> <p>When configured to <b>false</b>, all prefix SID attributes are propagated without restriction.</p> <p>A change of this configuration causes the affected BGP sessions to flap.</p>
Default	false
Introduced	19.10.R1
Platforms	All

### **capability-negotiation** *boolean*

Synopsis	Enable capability negotiation
Context	<b>configure</b> <i>router string bgp group string capability-negotiation boolean</i>
Tree	<a href="#">capability-negotiation</a>
Description	<p>When configured to <b>true</b>, this command enables the exchange of capabilities.</p> <p>When configured to <b>false</b> and the peering is flapped, new capabilities are not negotiated and strictly IPv4 exchanges are supported with the peer.</p>
Default	true
Introduced	16.0.R1
Platforms	All

### **client-reflect** *boolean*

Synopsis	Allow cluster RR to advertise routes to its clients
Context	<b>configure</b> <i>router string bgp group string client-reflect boolean</i>
Tree	<a href="#">client-reflect</a>
Description	<p>When unconfigured, this command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>true</b>.</p> <p>When the command inherits a value of <b>true</b>, client reflection of routes is enabled.</p> <p>When configured to <b>false</b>, this command disables client reflection of routes.</p>
Introduced	16.0.R1

Platforms All

## cluster

Synopsis Enter the **cluster** context

Context **configure** *router string bgp group string cluster*

Tree [cluster](#)

Introduced 16.0.R1

Platforms All

## allow-local-fallback *boolean*

Synopsis Allow fallback to RR topology location

Context **configure** *router string bgp group string cluster allow-local-fallback boolean*

Tree [allow-local-fallback](#)

Description When configured to **true**, this command allows the RR to advertise the best BGP path from its own topology location when there are no reachable routes from the client's ORR location. The ORR location must be specified before this command can be set to **true**.  
When configured to **false**, no route is advertised to the client.

Default false

Introduced 16.0.R1

Platforms All

## cluster-id *string*

Synopsis Route reflector cluster ID

Context **configure** *router string bgp group string cluster cluster-id string*

Tree [cluster-id](#)

Introduced 16.0.R1

Platforms All

## orr-location *number*

Synopsis Optimal route reflection location for the cluster

Context **configure** *router string bgp group string cluster orr-location number*

Tree [orr-location](#)

Description	This command configures an ORR location ID. If a cluster ID is also specified, the clients in that cluster receive routes optimal for that specific location.  With optimal route reflection, the best path advertised to a client takes location ID into account. If the tie-break for best path (or Add-Paths) comes down to next-hop IGP cost, the IGP costs will be calculated relative to the specified location. In the SR OS implementation, the IGP costs from arbitrary ORR locations are calculated using OSPF, OSPFv3, IS-IS, or BGP-LS information in the TE DB.
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **connect-retry** *number*

Synopsis	BGP connect retry timer value
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">connect-retry</a> <i>number</i>
Tree	<a href="#">connect-retry</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

### **damp-peer-oscillations**

Synopsis	Enable the <b>damp-peer-oscillations</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">damp-peer-oscillations</a>
Tree	<a href="#">damp-peer-oscillations</a>
Description	Commands in this context specify how long a BGP peer session remains in the idle state after an error causes the session to reset. In the idle state, BGP does not initiate or respond to attempts to establish a new session. Repeated errors that occur a short time after each session reset cause longer and longer hold times in the idle state.  When unconfigured, command settings are inherited from the global-level configuration.
Introduced	16.0.R1
Platforms	All

### **error-interval** *number*

Synopsis	Time after a reset that the session must be error-free
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">damp-peer-oscillations</a> <a href="#">error-interval</a> <i>number</i>

Tree	<a href="#">error-interval</a>
Description	This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time.
Range	0 to 2048
Default	30
Introduced	16.0.R1
Platforms	All

### idle-hold-time

Synopsis	Enter the <b>idle-hold-time</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">damp-peer-oscillations</a> <a href="#">idle-hold-time</a>
Tree	<a href="#">idle-hold-time</a>
Introduced	16.0.R1
Platforms	All

### initial-wait *number*

Synopsis	Time session remains in idle state after stabilization
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">damp-peer-oscillations</a> <a href="#">idle-hold-time</a> <a href="#">initial-wait</a> <i>number</i>
Tree	<a href="#">initial-wait</a>
Range	0 to 2048
Default	0
Introduced	16.0.R1
Platforms	All

### max-wait *number*

Synopsis	Maximum session idle time after repeated instability
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">damp-peer-oscillations</a> <a href="#">idle-hold-time</a> <a href="#">max-wait</a> <i>number</i>
Tree	<a href="#">max-wait</a>
Range	1 to 2048
Default	60

Introduced	16.0.R1
Platforms	All

### **second-wait** *number*

Synopsis	Time that doubles after each repeated session failure
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>damp-peer-oscillations</i> <i>idle-hold-time</i> <i>second-wait number</i>
Tree	<i>second-wait</i>
Description	This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time.
Range	1 to 2048
Default	5
Introduced	16.0.R1
Platforms	All

### **damping** *boolean*

Synopsis	Use BGP route damping to reduce route flap
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>damping boolean</i>
Tree	<i>damping</i>
Introduced	16.0.R1
Platforms	All

### **def-recv-evpn-encap** *keyword*

Synopsis	Default EVPN encapsulation type
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>def-recv-evpn-encap keyword</i>
Tree	<i>def-recv-evpn-encap</i>
Description	This command specifies the encapsulation type that BGP uses when an EVPN route is received without the Encapsulation Extended Community.  When unconfigured, the setting for this command is inherited from the BGP global-level configuration.
Options	<i>mpls, vxlan</i>
Introduced	16.0.R1
Platforms	All

## default-label-preference

Synopsis	Enter the <b>default-label-preference</b> context
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>default-label-preference</i>
Tree	<a href="#">default-label-preference</a>
Introduced	19.5.R1
Platforms	All

## ebgp number

Synopsis	Default preference for EBGp
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>default-label-preference</i> <i>ebgp number</i>
Tree	<a href="#">ebgp</a>
Range	0 to 255
Introduced	19.5.R1
Platforms	All

## ibgp number

Synopsis	Default preference for IBGP
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>default-label-preference</i> <i>ibgp number</i>
Tree	<a href="#">ibgp</a>
Range	0 to 255
Introduced	19.5.R1
Platforms	All

## default-preference

Synopsis	Enter the <b>default-preference</b> context
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>default-preference</i>
Tree	<a href="#">default-preference</a>
Introduced	19.5.R1
Platforms	All

**ebgp number**

Synopsis	Default preference for EBGp
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>default-preference</b> <b>ebgp</b> <i>number</i>
Tree	<b>ebgp</b>
Range	0 to 255
Introduced	19.5.R1
Platforms	All

**ibgp number**

Synopsis	Default preference for IBGP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>default-preference</b> <b>ibgp</b> <i>number</i>
Tree	<b>ibgp</b>
Range	0 to 255
Introduced	19.5.R1
Platforms	All

**default-route-target boolean**

Synopsis	Send default RTC route (zero prefix length) to peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>default-route-target</b> <i>boolean</i>
Tree	<b>default-route-target</b>
Description	When configured to <b>true</b> , this command sends the default RTC route (zero prefix length) toward the selected peers. When configured to <b>false</b> , a default RTC route is not sent.
Default	false
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80

Introduced	16.0.R1
Platforms	All

## dynamic-neighbor

Synopsis	Enter the <b>dynamic-neighbor</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <b>dynamic-neighbor</b>
Tree	<a href="#">dynamic-neighbor</a>
Description	Commands in this context configure dynamic BGP sessions for a peer group.
Introduced	16.0.R1
Platforms	All

## interface [[interface-name](#)] *string*

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <b>dynamic-neighbor</b> <a href="#">interface</a> <i>string</i>
Tree	<a href="#">interface</a>
Description	<p>Commands in this context configure an unnumbered base router network interface for dynamic neighbors.</p> <p>If this interface connects to a network with other BGP routers, sessions with the other routers can be set up automatically without explicitly configuring them as BGP neighbors. The interface must be IPv6 enabled, but because the interface is considered unnumbered, it does not require an IPv4 address or a global-unicast IPv6 address. The sessions are set up using IPv6 link-local addresses.</p> <p>The BGP unnumbered feature supports all address families that allow IPv6 link-local BGP next-hop addresses. This includes IPv4 with the use of RFC 8950 extensions.</p> <p>When an interface is added to the list of dynamic-neighbor interfaces, an outgoing connection attempt is initiated toward any directly connected router on the interface that announces itself using an ICMPv6 router advertisement message. The session attempt is unsuccessful if the peer type is not EBGp, the reported AS number of the peer does not match one of the allowed values, or the maximum session limit of the interface would be exceeded.</p>
Introduced	22.10.R1
Platforms	All

## [\[interface-name\]](#) *string*

Synopsis	Name of the dynamic neighbor interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <b>dynamic-neighbor</b> <a href="#">interface</a> <i>string</i>



Tree	<a href="#">interface</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

### **allowed-peer-as** *string*

Synopsis	Allowed peer AS value or range of acceptable values
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">dynamic-neighbor</a> <a href="#">interface</a> <i>string</i> <b>allowed-peer-as</b> <i>string</i>
Tree	<a href="#">allowed-peer-as</a>
Description	This command specifies a singular allowed peer AS value or a range of acceptable values in the format <i>n1..n2</i> .  All values greater than or equal to <i>n1</i> and less than or equal to <i>n2</i> are acceptable. For example, if the acceptable peer AS numbers are 65001 to 65005 (range) and 62100 (singular value), configure this command to use a value of [65001..65005 62100].
Max. Instances	32
Notes	This element is ordered by the user.
Introduced	22.10.R1
Platforms	All

### **max-sessions** *number*

Synopsis	Maximum number of dynamic sessions allowed
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">dynamic-neighbor</a> <a href="#">interface</a> <i>string</i> <b>max-sessions</b> <i>number</i>
Tree	<a href="#">max-sessions</a>
Description	This command specifies the maximum number of dynamic sessions that are allowed to be set up on the interface as a result of accepting sessions from link-local addresses or initiating sessions by receiving IPv6 router advertisements.
Range	1 to 255
Default	1
Introduced	22.10.R1
Platforms	All

**match**

Synopsis	Enter the <b>match</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>dynamic-neighbor</b> <b>match</b> <b>match</b>
Tree	<b>match</b>
Description	Commands in this context configure match conditions for the dynamic neighbors.
Introduced	19.5.R1
Platforms	All

**prefix** [**ip-prefix**] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the <b>prefix</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>dynamic-neighbor</b> <b>match</b> <b>prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<b>prefix</b>
Introduced	19.5.R1
Platforms	All

**[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Dynamic peer prefix for the group
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>dynamic-neighbor</b> <b>match</b> <b>prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<b>prefix</b>
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

**allowed-peer-as** *string*

Synopsis	Allowed peer AS value or range of acceptable values
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>dynamic-neighbor</b> <b>match</b> <b>prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>allowed-peer-as</b> <i>string</i>
Tree	<b>allowed-peer-as</b>
Description	This command specifies a singular allowed peer AS value or a range of acceptable values in the format <i>n1..n2</i> .

All values greater than or equal to  $n1$  and less than or equal to  $n2$  are acceptable. For example, if the acceptable peer AS numbers are 65001 to 65005 (range) and 62100 (singular value), configure this command to use a value of [65001..65005 62100].

Max. Instances	32
Notes	This element is ordered by the user.
Introduced	19.5.R1
Platforms	All

### **dynamic-neighbor-limit** *number*

Synopsis	Maximum dynamic BGP sessions to accept from remote peer
Context	<b>configure</b> <i>router string bgp group string dynamic-neighbor-limit number</i>
Tree	<a href="#">dynamic-neighbor-limit</a>
Description	This command configures the maximum number of dynamic BGP sessions that are accepted from remote peers associated with a specific peer group. If accepting a new dynamic session causes the group limit to be exceeded, the new session attempt is rejected and a Notification message is sent back to the remote peer.  When unconfigured, the setting is inherited from the BGP global-level configuration.
Range	1 to 8192
Introduced	16.0.R1
Platforms	All

### **ebgp-default-reject-policy**

Synopsis	Enable the <b>ebgp-default-reject-policy</b> context
Context	<b>configure</b> <i>router string bgp group string ebgp-default-reject-policy</i>
Tree	<a href="#">ebgp-default-reject-policy</a>
Introduced	19.5.R1
Platforms	All

### **export** *boolean*

Synopsis	Enable default reject export policy for external peers
Context	<b>configure</b> <i>router string bgp group string ebgp-default-reject-policy export boolean</i>
Tree	<a href="#">export</a>
Default	true

Introduced 19.5.R1  
 Platforms All

### **import** *boolean*

Synopsis Enable default reject import policy for external peers  
 Context **configure** *router string bgp group string ebgp-default-reject-policy import boolean*  
 Tree [import](#)  
 Default true  
 Introduced 19.5.R1  
 Platforms All

### **egress-engineering**

Synopsis Enable the **egress-engineering** context  
 Context **configure** *router string bgp group string egress-engineering*  
 Tree [egress-engineering](#)  
 Introduced 21.7.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of BGP egress engineering  
 Context **configure** *router string bgp group string egress-engineering admin-state keyword*  
 Tree [admin-state](#)  
 Description This command administratively enables or disables egress engineering for the BGP. If enabled, peer node SIDs and peer adjacency SIDs are advertised in BGP-LS.  
 Options enable, disable  
 Default disable  
 Introduced 21.7.R1  
 Platforms All

### **egress-peer-engineering-label-unicast** *boolean*

Synopsis Generate EPE label-unicast routes for group

Context	<b>configure router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>egress-peer-engineering-label-unicast</b> <i>boolean</i>
Tree	<a href="#">egress-peer-engineering-label-unicast</a>
Description	When configured to <b>true</b> , BGP generates a label-unicast route for each /32 or /128 prefix that corresponds to the BGP group address in the scope of the command. These routes can be advertised to other routers to recursively resolve unlabeled BGP routes for AS external destinations. They support the Egress Peer Engineering (EPE) use case.
Default	false
Introduced	22.2.R1
Platforms	All

### **enforce-first-as** *boolean*

Synopsis	Enforce the configured peer AS value in received routes
Context	<b>configure router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>enforce-first-as</b> <i>boolean</i>
Tree	<a href="#">enforce-first-as</a>
Introduced	16.0.R1
Platforms	All

### **error-handling**

Synopsis	Enter the <b>error-handling</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>error-handling</b>
Tree	<a href="#">error-handling</a>
Introduced	16.0.R1
Platforms	All

### **update-fault-tolerance** *boolean*

Synopsis	Tolerate non-critical errors in UPDATE messages
Context	<b>configure router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>error-handling</b> <b>update-fault-tolerance</b> <i>boolean</i>
Tree	<a href="#">update-fault-tolerance</a>
Description	When configured to <b>true</b> , non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset.  When unconfigured, the command inherits the value of the global-level setting ( <b>true</b> or <b>false</b> ). The command cannot be explicitly configured to <b>false</b> .

When this command inherits a value of **false**, all errors trigger a session reset.

Introduced	16.0.R1
Platforms	All

## export

Synopsis	Enable the <b>export</b> context
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <b>export</b>
Tree	<b>export</b>
Description	<p>Commands in this context specify route policies that control the handling of outbound routes transmitted to certain peers. Route policies are configured in the <b>configure policy-options</b> context.</p> <p>When this context is unconfigured, the policy association for the group is inherited from the BGP global-level configuration.</p>
Introduced	16.0.R1
Platforms	All

## policy (*policy-expr-string* | *string*)

Synopsis	BGP export policy name
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <b>export policy</b> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<b>policy</b>
Description	<p>This command specifies route policies that control the handling of outbound routes transmitted to certain peers.</p> <p>Each object in this command is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified order to determine the modifications of each route and the final action to accept or reject the route.</p> <p>Only one of the objects referenced by the command can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).</p> <p>Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@," "start@variable@end"," @variable@end", or"start@variable@".</p>
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.

Introduced	16.0.R1
Platforms	All

### **extended-nh-encoding**

Synopsis	Enable the <b>extended-nh-encoding</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">extended-nh-encoding</a>
Tree	<a href="#">extended-nh-encoding</a>
Description	<p>Commands in this context specify the address families enabled to advertise the capability to receive label IPv4 routes, VPN IPv4 routes, or IPv6 next hops from peers. The peers should not send such routes unless notification has been received of this capability. If the router receives an enabled address family route from a peer to which it did not advertise the necessary capability, the UPDATE message will be considered malformed. This causes either a session reset or treat-as-withdraw behavior depending on the error handling settings.</p> <p>When the context is unconfigured, command settings are inherited from the higher level BGP configuration.</p>
Introduced	16.0.R1
Platforms	All

### **ipv4** *boolean*

Synopsis	Advertise encoding capability for IPv4 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">extended-nh-encoding</a> <a href="#">ipv4</a> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	19.5.R1
Platforms	All

### **label-ipv4** *boolean*

Synopsis	Advertise encoding capability for label-IPv4 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">extended-nh-encoding</a> <a href="#">label-ipv4</a> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**vpn-ipv4** *boolean*

Synopsis	Advertise encoding capability for VPN-IPv4 routes
Context	<b>configure</b> <i>router string bgp group string extended-nh-encoding vpn-ipv4 boolean</i>
Tree	<a href="#">vpn-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**family**

Synopsis	Enable the <b>family</b> context
Context	<b>configure</b> <i>router string bgp group string family</i>
Tree	<a href="#">family</a>
Introduced	16.0.R1
Platforms	All

**bgp-ls** *boolean*

Synopsis	Advertise MP-BGP support for the BGP-LS address family
Context	<b>configure</b> <i>router string bgp group string family bgp-ls boolean</i>
Tree	<a href="#">bgp-ls</a>
Default	false
Introduced	16.0.R1
Platforms	All

**evpn** *boolean*

Synopsis	Advertise MP-BGP support for the EVPN address family
Context	<b>configure</b> <i>router string bgp group string family evpn boolean</i>
Tree	<a href="#">evpn</a>
Default	false
Introduced	16.0.R1
Platforms	All



**flow-ipv4** *boolean*

Synopsis	Advertise support for the flowspec-IPv4 address family
Context	<b>configure</b> <i>router string bgp group string family flow-ipv4 boolean</i>
Tree	<a href="#">flow-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**flow-ipv6** *boolean*

Synopsis	Advertise support for the flowspec-IPv6 address family
Context	<b>configure</b> <i>router string bgp group string family flow-ipv6 boolean</i>
Tree	<a href="#">flow-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**flow-vpn-ipv4** *boolean*

Synopsis	Advertise support for FlowSpec-VPN IPv4 address family
Context	<b>configure</b> <i>router string bgp group string family flow-vpn-ipv4 boolean</i>
Tree	<a href="#">flow-vpn-ipv4</a>
Default	false
Introduced	22.7.R1
Platforms	All

**flow-vpn-ipv6** *boolean*

Synopsis	Advertise support for FlowSpec-VPN IPv6 address family
Context	<b>configure</b> <i>router string bgp group string family flow-vpn-ipv6 boolean</i>
Tree	<a href="#">flow-vpn-ipv6</a>
Default	false
Introduced	22.7.R1
Platforms	All

### **ipv4** *boolean*

Synopsis	Add support for the IPv4 address family
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>family ipv4 boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **ipv6** *boolean*

Synopsis	Advertise MP-BGP support for the IPv6 address family
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>family ipv6 boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **l2-vpn** *boolean*

Synopsis	Advertise MP-BGP support for the L2-VPN address family
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>family l2-vpn boolean</i>
Tree	<a href="#">l2-vpn</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **label-ipv4** *boolean*

Synopsis	Advertise support for the label-IPv4 address family
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>family label-ipv4 boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**label-ipv6** *boolean*

Synopsis	Advertise support for the label-IPv6 address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>family</b> <b>label-ipv6</b> <i>boolean</i>
Tree	<a href="#">label-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mcast-ipv4** *boolean*

Synopsis	Advertise support for the MCAST-IPv4 address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>family</b> <b>mcast-ipv4</b> <i>boolean</i>
Tree	<a href="#">mcast-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mcast-ipv6** *boolean*

Synopsis	Advertise support for the MCAST-IPv6 address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>family</b> <b>mcast-ipv6</b> <i>boolean</i>
Tree	<a href="#">mcast-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mcast-vpn-ipv4** *boolean*

Synopsis	Advertise support for the IPv4 VPN MCAST address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>family</b> <b>mcast-vpn-ipv4</b> <i>boolean</i>
Tree	<a href="#">mcast-vpn-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **mcast-vpn-ipv6** *boolean*

Synopsis	Advertise support for the IPv6 VPN MCAST address family
Context	<b>configure</b> <i>router string bgp group string family mcast-vpn-ipv6 boolean</i>
Tree	<a href="#">mcast-vpn-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **mdt-safi** *boolean*

Synopsis	Advertise MP-BGP support for MDT-SAFI address family
Context	<b>configure</b> <i>router string bgp group string family mdt-safi boolean</i>
Tree	<a href="#">mdt-safi</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **ms-pw** *boolean*

Synopsis	Advertise support for multi-segment PW address family
Context	<b>configure</b> <i>router string bgp group string family ms-pw boolean</i>
Tree	<a href="#">ms-pw</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **mvpn-ipv4** *boolean*

Synopsis	Advertise support for the IPv4 MCAST VPN address family
Context	<b>configure</b> <i>router string bgp group string family mvpn-ipv4 boolean</i>
Tree	<a href="#">mvpn-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mvpn-ipv6** *boolean*

Synopsis	Advertise support for the IPv6 MCAST VPN address family
Context	<b>configure</b> <i>router string bgp group string family mvpn-ipv6 boolean</i>
Tree	<a href="#">mvpn-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**route-target** *boolean*

Synopsis	Advertise MP-BGP support for RT constraint routes
Context	<b>configure</b> <i>router string bgp group string family route-target boolean</i>
Tree	<a href="#">route-target</a>
Default	false
Introduced	16.0.R1
Platforms	All

**sr-policy-ipv4** *boolean*

Synopsis	Advertise MP-BGP support for the SR-policy-IPv4 family
Context	<b>configure</b> <i>router string bgp group string family sr-policy-ipv4 boolean</i>
Tree	<a href="#">sr-policy-ipv4</a>
Description	This command allows the router to advertise the capability for AFI1/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv4 destination.
Default	false
Introduced	16.0.R1
Platforms	All

**sr-policy-ipv6** *boolean*

Synopsis	Advertise MP-BGP support for the SR-policy-IPv6 family
Context	<b>configure</b> <i>router string bgp group string family sr-policy-ipv6 boolean</i>
Tree	<a href="#">sr-policy-ipv6</a>

Description	This command allows the router to advertise the capability for AF12/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv6 destination.
Default	false
Introduced	19.10.R1
Platforms	All

### **vpn-ipv4** *boolean*

Synopsis	Advertise MP-BGP support for IPv4 VPN address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>family</b> <b>vpn-ipv4</b> <i>boolean</i>
Tree	<a href="#">vpn-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **vpn-ipv6** *boolean*

Synopsis	Advertise MP-BGP support for IPv6 VPN address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>family</b> <b>vpn-ipv6</b> <i>boolean</i>
Tree	<a href="#">vpn-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **fast-external-failover** *boolean*

Synopsis	Drop external BGP session immediately when link fails
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>fast-external-failover</b> <i>boolean</i>
Tree	<a href="#">fast-external-failover</a>
Description	<p>When this command inherits a value of <b>true</b>, the router drops an external BGP session on a single-hop route immediately when the local interface goes down.</p> <p>When unconfigured, the command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>true</b>.</p> <p>When configured to <b>false</b>, the BGP session remains up until the hold time expires.</p>
Introduced	16.0.R1
Platforms	All

## graceful-restart

Synopsis	Enable the <b>graceful-restart</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">graceful-restart</a>
Tree	<a href="#">graceful-restart</a>
Description	<p>Commands in this context configure BGP graceful restart helper procedures for address families included in the GR capabilities of both peers.</p> <p>When the context is unconfigured, the command settings are inherited from the BGP global-level configuration.</p>
Introduced	16.0.R1
Platforms	All

## gr-notification *boolean*

Synopsis	Perform graceful restart procedures after NOTIFICATION
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">graceful-restart</a> <a href="#">gr-notification</a> <i>boolean</i>
Tree	<a href="#">gr-notification</a>
Description	<p>When configured to <b>true</b>, the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error.</p> <p>When configured to <b>false</b>, NOTIFICATION messages are not supported.</p>
Default	false
Introduced	16.0.R1
Platforms	All

## long-lived

Synopsis	Enable the <b>long-lived</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">graceful-restart</a> <a href="#">long-lived</a>
Tree	<a href="#">long-lived</a>
Description	<p>Commands in this context configure the BGP Long-Lived Graceful-Restart (LLGR) procedures.</p> <p>LLGR, known informally as BGP persistence, is an extension of BGP GR that allows a session to stay down for a longer period of time. During this time, learned routes are marked and re-advertised as stale but they can continue to be used as routes of last resort.</p>

The LLGR handling of a session failure can be invoked immediately or it can be delayed until the end of the traditional GR restart window.

Introduced 16.0.R1  
 Platforms All

### **advertise-stale-to-all-neighbors** *boolean*

Synopsis Advertise stale routes to all BGP peers  
 Context **configure** [router](#) *string* [bgp group](#) *string* [graceful-restart long-lived advertise-stale-to-all-neighbors](#) *boolean*  
 Tree [advertise-stale-to-all-neighbors](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **advertised-stale-time** *number*

Synopsis Advertised long-lived stale time for LLGR routes  
 Context **configure** [router](#) *string* [bgp group](#) *string* [graceful-restart long-lived advertised-stale-time](#) *number*  
 Tree [advertised-stale-time](#)  
 Range 0 to 16777215  
 Default 86400  
 Introduced 16.0.R1  
 Platforms All

### **family** [[family-type](#)] *keyword*

Synopsis Enter the **family** list instance  
 Context **configure** [router](#) *string* [bgp group](#) *string* [graceful-restart long-lived family](#) *keyword*  
 Tree [family](#)  
 Introduced 16.0.R1  
 Platforms All



**[family-type] keyword**

Synopsis	Family type for family-specific LLGR configuration
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>graceful-restart</b> <b>long-lived</b> <b>family</b> <i>keyword</i>
Tree	<b>family</b>
Options	ipv4, vpn-ipv4, ipv6, vpn-ipv6, l2-vpn, flow-ipv4, route-target, flow-ipv6, label-ipv4, label-ipv6, flow-vpn-ipv4, flow-vpn-ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**advertised-stale-time number**

Synopsis	LLGR stale routes time for family override
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>graceful-restart</b> <b>long-lived</b> <b>family</b> <i>keyword</i> <b>advertised-stale-time</b> <i>number</i>
Tree	<b>advertised-stale-time</b>
Description	This command configures the long-lived stale routes time that is advertised by the router in its LLGR capability.  This command applies to all AFI/SAFI in the advertised LLGR capability with a family-specific override.
Range	0 to 16777215
Default	86400
Introduced	16.0.R1
Platforms	All

**helper-override-stale-time number**

Synopsis	Locally-configured stale routes override time
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>graceful-restart</b> <b>long-lived</b> <b>family</b> <i>keyword</i> <b>helper-override-stale-time</b> <i>number</i>
Tree	<b>helper-override-stale-time</b>
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This is a family-specific override value.
Range	0 to 16777216
Default	16777216
Introduced	16.0.R1

Platforms All

### **forwarding-bits-set** *keyword*

**Synopsis** BGP LLGR forwarding-bit behavior for address family

**Context** **configure** *router string* *bgp group string* *graceful-restart long-lived forwarding-bits-set keyword*

**Tree** [forwarding-bits-set](#)

**Description** This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family.

This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).

**Options** none, all, non-fwd

**Default** none

**Introduced** 16.0.R1

**Platforms** All

### **helper-override-restart-time** *number*

**Synopsis** Locally-configured override for restart time

**Context** **configure** *router string* *bgp group string* *graceful-restart long-lived helper-override-restart-time number*

**Tree** [helper-override-restart-time](#)

**Description** This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI.

**Range** 0 to 4095

**Introduced** 16.0.R1

**Platforms** All

### **helper-override-stale-time** *number*

**Synopsis** Locally-configured stale routes override time

Context	<b>configure</b> <i>router</i> <i>string</i> <b>bgp</b> <i>group</i> <i>string</i> <b>graceful-restart</b> <b>long-lived</b> <b>helper-override-stale-time</b> <i>number</i>
Tree	<a href="#">helper-override-stale-time</a>
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability.  This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override.
Range	0 to 16777215
Introduced	16.0.R1
Platforms	All

### **without-no-export** *boolean*

Synopsis	Advertise LLGR stale routes to non-LLGR peers
Context	<b>configure</b> <i>router</i> <i>string</i> <b>bgp</b> <i>group</i> <i>string</i> <b>graceful-restart</b> <b>long-lived</b> <b>without-no-export</b> <i>boolean</i>
Tree	<a href="#">without-no-export</a>
Description	When configured to <b>true</b> , LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0.  When configured to <b>false</b> , LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0 and a NO_EXPORT standard community is automatically added to the routes.
Default	false
Introduced	16.0.R1
Platforms	All

### **restart-time** *number*

Synopsis	Restart time advertised by GR capability
Context	<b>configure</b> <i>router</i> <i>string</i> <b>bgp</b> <i>group</i> <i>string</i> <b>graceful-restart</b> <b>restart-time</b> <i>number</i>
Tree	<a href="#">restart-time</a>
Range	0 to 4095
Default	300
Introduced	16.0.R1

Platforms All

### **stale-routes-time** *number*

Synopsis Maximum time to maintain routes after graceful restart

Context **configure** *router string* *bgp group string* *graceful-restart* **stale-routes-time** *number*

Tree [stale-routes-time](#)

Range 1 to 3600

Default 360

Introduced 16.0.R1

Platforms All

### **hold-time**

Synopsis Enter the **hold-time** context

Context **configure** *router string* *bgp group string* **hold-time**

Tree [hold-time](#)

Introduced 16.0.R1

Platforms All

### **minimum-hold-time** *number*

Synopsis Minimum hold time between successive messages

Context **configure** *router string* *bgp group string* *hold-time* **minimum-hold-time** *number*

Tree [minimum-hold-time](#)

Description This command specifies the minimum hold time that is accepted for the session. If a peer proposes a hold time lower than this value, the session attempt is rejected.  
When unconfigured, the command value is inherited from the BGP global-level setting.

Range 0 | 3 to 65536

Default 0

Introduced 16.0.R1

Platforms All

**seconds** *number*

Synopsis	Maximum time BGP waits between successive messages
Context	<b>configure</b> <i>router string bgp group string hold-time seconds number</i>
Tree	<i>seconds</i>
Description	<p>This command configures the maximum time BGP waits between successive messages (either keepalive or update) from its peer before closing the connection.</p> <p>Although the implementation allows setting the keepalive timer at the BGP group level times separately, the configured keepalive timer is overridden by this value under the following circumstances.</p> <ul style="list-style-type: none"> <li>• If the specified hold time is less than the configured keepalive time, the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed.</li> <li>• If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. The connection with the peer is up permanently and no keepalive packets are sent to the peer.</li> </ul> <p>When unconfigured, the command setting is inherited from the BGP global-level configuration.</p>
Range	0   3 to 65535
Introduced	16.0.R1
Platforms	All

**import**

Synopsis	Enable the <b>import</b> context
Context	<b>configure</b> <i>router string bgp group string import</i>
Tree	<i>import</i>
Description	<p>Commands in this context specify route policies that control the handling of inbound routes received from certain peers. Route policies are configured in the <b>configure policy-options</b> context.</p> <p>When this context is unconfigured, the policy association for the group is inherited from the BGP global-level configuration.</p>
Introduced	16.0.R1
Platforms	All

**policy** (*policy-expr-string* | *string*)

Synopsis	BGP import policy name
Context	<b>configure</b> <i>router string bgp group string import policy (policy-expr-string   string)</i>

Tree	<a href="#">policy</a>
Description	<p>This command specifies route policies that control the handling of inbound routes received from certain peers.</p> <p>Each object in this command is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified order to determine the modifications of each route and the final action to accept or reject the route.</p> <p>Only one of the objects referenced by the command can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).</p> <p>Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@", "start@variable@end", "@variable@end", or "start@variable@".</p>
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **initial-send-delay-zero** *boolean*

Synopsis	Send BGP updates as soon as the session comes up
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <b>initial-send-delay-zero</b> <i>boolean</i>
Tree	<a href="#">initial-send-delay-zero</a>
Description	<p>When configured to <b>true</b>, BGP updates are sent as soon as the session comes up.</p> <p>When unconfigured, the command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, BGP waits to send UPDATE messages for the minimum route advertisement time after a session is established.</p>
Introduced	16.0.R1
Platforms	All

### **keepalive** *number*

Synopsis	Time after which the BGP KEEPALIVE message is sent
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <b>keepalive</b> <i>number</i>
Tree	<a href="#">keepalive</a>

Description	<p>This command configures the BGP keepalive timer value. A keepalive message is sent every time this timer expires.</p> <p>This value is generally one-third of the hold time interval configured in the <b>hold-time seconds</b> context. Although the implementation allows this keepalive value and the hold time interval to be independently set, under the following circumstances, the configured keepalive value is overridden by the hold time interval value:</p> <ul style="list-style-type: none"> <li>• If the specified keepalive value is greater than the configured hold time, the specified keepalive value is ignored and the timer value is set to one third of the current hold time value.</li> <li>• If the specified hold time interval is less than the configured keepalive value, the keepalive value is reset to one third of the specified hold time interval.</li> <li>• If the hold time interval is set to zero, the configured keepalive value is ignored. This means that the connection with the peer is up permanently and no keepalive packets are sent to the peer.</li> </ul> <p>When unconfigured, the command inherits the BGP global-level setting.</p>
Range	0 to 21845
Introduced	16.0.R1
Platforms	All

### label-preference *number*

Synopsis	Route preference for routes from labeled-unicast peers
Context	<b>configure router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>label-preference</b> <i>number</i>
Tree	<a href="#">label-preference</a>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### link-bandwidth

Synopsis	Enter the <b>link-bandwidth</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>link-bandwidth</b>
Tree	<a href="#">link-bandwidth</a>
Description	<p>Commands in this context specify the handling of the Link Bandwidth Extended Community attached to specific BGP routes.</p> <p>When all used multipaths of an IP prefix correspond to BGP routes with a Link Bandwidth EC, the datapath is programmed to use weighted ECMP across the BGP next hops in proportion to the bandwidth values.</p>
Introduced	16.0.R3

Platforms All

### **accept-from-ebgp**

Synopsis Enter the **accept-from-ebgp** context

Context **configure** [router](#) *string* [bgp group](#) *string* [link-bandwidth](#) [accept-from-ebgp](#)

Tree [accept-from-ebgp](#)

Introduced 16.0.R4

Platforms All

### **ipv4** *boolean*

Synopsis Support Link Bandwidth EC in IPv4 routes

Context **configure** [router](#) *string* [bgp group](#) *string* [link-bandwidth](#) [accept-from-ebgp](#) [ipv4](#) *boolean*

Tree [ipv4](#)

Default false

Introduced 16.0.R4

Platforms All

### **ipv6** *boolean*

Synopsis Support Link Bandwidth EC in IPv6 routes

Context **configure** [router](#) *string* [bgp group](#) *string* [link-bandwidth](#) [accept-from-ebgp](#) [ipv6](#) *boolean*

Tree [ipv6](#)

Default false

Introduced 16.0.R4

Platforms All

### **label-ipv4** *boolean*

Synopsis Support Link Bandwidth EC in label-IPv4 routes

Context **configure** [router](#) *string* [bgp group](#) *string* [link-bandwidth](#) [accept-from-ebgp](#) [label-ipv4](#) *boolean*

Tree [label-ipv4](#)

Default false

Introduced 16.0.R4



Platforms All

### **label-ipv6** *boolean*

Synopsis Support Link Bandwidth EC in label-IPv6 routes

Context **configure** *router string* *bgp group string* *link-bandwidth accept-from-ebgp label-ipv6 boolean*

Tree [label-ipv6](#)

Default false

Introduced 16.0.R4

Platforms All

### **vpn-ipv4** *boolean*

Synopsis Support Link Bandwidth EC in VPN-IPv4 routes

Context **configure** *router string* *bgp group string* *link-bandwidth accept-from-ebgp vpn-ipv4 boolean*

Tree [vpn-ipv4](#)

Default false

Introduced 16.0.R4

Platforms All

### **vpn-ipv6** *boolean*

Synopsis Support Link Bandwidth EC in VPN-IPv6 routes

Context **configure** *router string* *bgp group string* *link-bandwidth accept-from-ebgp vpn-ipv6 boolean*

Tree [vpn-ipv6](#)

Default false

Introduced 16.0.R4

Platforms All

### **add-to-received-ebgp**

Synopsis Enter the **add-to-received-ebgp** context

Context **configure** *router string* *bgp group string* *link-bandwidth add-to-received-ebgp*

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Tree	<a href="#">add-to-received-ebgp</a>
Introduced	16.0.R3
Platforms	All

### **ipv4 boolean**

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">add-to-received-ebgp</a> <a href="#">ipv4</a> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R3
Platforms	All

### **ipv6 boolean**

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">add-to-received-ebgp</a> <a href="#">ipv6</a> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R3
Platforms	All

### **label-ipv4 boolean**

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">add-to-received-ebgp</a> <a href="#">label-ipv4</a> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R3
Platforms	All

**label-ipv6** *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp group</i> <i>string</i> <i>link-bandwidth</i> <i>add-to-received-ebgp</i> <i>label-ipv6</i> <i>boolean</i>
Tree	<a href="#">label-ipv6</a>
Default	false
Introduced	16.0.R3
Platforms	All

**vpn-ipv4** *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp group</i> <i>string</i> <i>link-bandwidth</i> <i>add-to-received-ebgp</i> <i>vpn-ipv4</i> <i>boolean</i>
Tree	<a href="#">vpn-ipv4</a>
Default	false
Introduced	16.0.R3
Platforms	All

**vpn-ipv6** *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp group</i> <i>string</i> <i>link-bandwidth</i> <i>add-to-received-ebgp</i> <i>vpn-ipv6</i> <i>boolean</i>
Tree	<a href="#">vpn-ipv6</a>
Default	false
Introduced	16.0.R3
Platforms	All

**aggregate-used-paths**

Synopsis	Enter the <b>aggregate-used-paths</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp group</i> <i>string</i> <i>link-bandwidth</i> <i>aggregate-used-paths</i>
Tree	<a href="#">aggregate-used-paths</a>
Introduced	16.0.R4
Platforms	All

**ipv4 boolean**

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">aggregate-used-paths</a> <a href="#">ipv4</a> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	All

**ipv6 boolean**

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">aggregate-used-paths</a> <a href="#">ipv6</a> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R4
Platforms	All

**label-ipv4 boolean**

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">aggregate-used-paths</a> <a href="#">label-ipv4</a> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	All

**label-ipv6 boolean**

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">aggregate-used-paths</a> <a href="#">label-ipv6</a> <i>boolean</i>
Tree	<a href="#">label-ipv6</a>

Default	false
Introduced	16.0.R4
Platforms	All

**vpn-ipv4** *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">aggregate-used-paths</a> <a href="#">vpn-ipv4</a> <i>boolean</i>
Tree	<a href="#">vpn-ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	All

**vpn-ipv6** *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">aggregate-used-paths</a> <a href="#">vpn-ipv6</a> <i>boolean</i>
Tree	<a href="#">vpn-ipv6</a>
Default	false
Introduced	16.0.R4
Platforms	All

**send-to-ebgp**

Synopsis	Enter the <b>send-to-ebgp</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">send-to-ebgp</a>
Tree	<a href="#">send-to-ebgp</a>
Introduced	16.0.R4
Platforms	All

**ipv4** *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">send-to-ebgp</a> <a href="#">ipv4</a> <i>boolean</i>

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Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **ipv6 *boolean***

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">send-to-ebgp</a> <a href="#">ipv6</a> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **label-ipv4 *boolean***

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">send-to-ebgp</a> <a href="#">label-ipv4</a> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **label-ipv6 *boolean***

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">send-to-ebgp</a> <a href="#">label-ipv6</a> <i>boolean</i>
Tree	<a href="#">label-ipv6</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **vpn-ipv4 *boolean***

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
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Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>link-bandwidth send-to-ebgp vpn-ipv4 boolean</i>
Tree	<a href="#">vpn-ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **vpn-ipv6** *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>link-bandwidth send-to-ebgp vpn-ipv6 boolean</i>
Tree	<a href="#">vpn-ipv6</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **local-address** (*ipv4-address-no-zone | ipv6-address-no-zone | interface-name*)

Synopsis	Local IP address used when communicating with BGP peers
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <b>local-address</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone   interface-name</i> )
Tree	<a href="#">local-address</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

### **local-as**

Synopsis	Enter the <b>local-as</b> context
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <b>local-as</b>
Tree	<a href="#">local-as</a>
Introduced	16.0.R1
Platforms	All

### **as-number** *number*

Synopsis	Local (or virtual) BGP AS number
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Context	<b>configure router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>local-as as-number</b> <i>number</i>
Tree	<a href="#">as-number</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **prepend-global-as** *boolean*

Synopsis	Prepend global ASN when advertising routes to BGP peer
Context	<b>configure router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>local-as prepend-global-as</b> <i>boolean</i>
Tree	<a href="#">prepend-global-as</a>
Description	When configured to <b>true</b> , the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer. When configured to <b>false</b> , the global ASN is not included in the AS_PATH attribute.
Default	true
Introduced	16.0.R1
Platforms	All

### **private** *boolean*

Synopsis	Hide the local ASN in sent paths learned from peering
Context	<b>configure router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>local-as private</b> <i>boolean</i>
Tree	<a href="#">private</a>
Description	When configured to <b>true</b> , the local AS number is only advertised to peers that use the local ASN for establishing BGP peering sessions. When configured to <b>false</b> , the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions.
Default	false
Introduced	16.0.R1
Platforms	All

### **local-preference** *number*

Synopsis	Default local preference if not in incoming routes
Context	<b>configure router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>local-preference</b> <i>number</i>
Tree	<a href="#">local-preference</a>



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Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

### **loop-detect** *keyword*

Synopsis	Strategy for loop detection in the AS path
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>loop-detect</b> <i>keyword</i>
Tree	<b>loop-detect</b>
Options	drop-peer, ignore-loop, off, discard-route
Introduced	16.0.R1
Platforms	All

### **loop-detect-threshold** *number*

Synopsis	Threshold for the global ASN in a received AS path
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>loop-detect-threshold</b> <i>number</i>
Tree	<b>loop-detect-threshold</b>
Range	0 to 15
Introduced	16.0.R6
Platforms	All

### **med-out** (*number* | *keyword*)

Synopsis	Default MED attribute value to advertise to peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>med-out</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>med-out</b>
Max. Range	0 to 4294967295
Options	igp-cost
Introduced	16.0.R1
Platforms	All

### **min-route-advertisement** *number*

Synopsis	Minimum time before a prefix can be advertised to peer
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Context	<b>configure router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>min-route-advertisement</b> <i>number</i>
Tree	<b>min-route-advertisement</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

## monitor

Synopsis	Enable the <b>monitor</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>monitor</b>
Tree	<b>monitor</b>
Description	Commands in this context specify BMP-related configurations at the BGP group level. When this context is unconfigured, the command settings are inherited from the BGP global-level configuration.
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of BMP monitoring
Context	<b>configure router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>monitor</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

## all-stations *boolean*

Synopsis	Send BMP messages to all configured stations
Context	<b>configure router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>monitor</b> <b>all-stations</b> <i>boolean</i>
Tree	<b>all-stations</b>
Description	When configured to <b>true</b> , this command specifies that BMP messages are to be sent to all configured BMP monitoring stations.

When configured to **false**, the command is not used to indicate the stations which can receive BMP messages. The **station** command (at the same context level) identifies the BMP stations for which BMP messages are to be sent.

Default	false
Introduced	16.0.R1
Platforms	All

## route-monitoring

Synopsis	Enter the <b>route-monitoring</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <i>group</i> <i>string</i> <a href="#">monitor</a> <a href="#">route-monitoring</a>
Tree	<a href="#">route-monitoring</a>
Introduced	16.0.R1
Platforms	All

## post-policy *boolean*

Synopsis	Allow post-policy route-monitoring messages to be sent
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <i>group</i> <i>string</i> <a href="#">monitor</a> <a href="#">route-monitoring</a> <a href="#">post-policy</a> <i>boolean</i>
Tree	<a href="#">post-policy</a>
Default	false
Introduced	16.0.R1
Platforms	All

## pre-policy *boolean*

Synopsis	Allow pre-policy route-monitoring messages to be sent
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <i>group</i> <i>string</i> <a href="#">monitor</a> <a href="#">route-monitoring</a> <a href="#">pre-policy</a> <i>boolean</i>
Tree	<a href="#">pre-policy</a>
Default	false
Introduced	16.0.R1
Platforms	All

## station [[station-name](#)] *reference*

Synopsis	Add a list entry for <b>station</b>
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">monitor station</a> <i>reference</i>
Tree	<a href="#">station</a>
Description	This command identifies a BMP monitoring station for which BMP messages are to be sent.
Max. Instances	8
Introduced	16.0.R1
Platforms	All

### **[station-name]** *reference*

Synopsis	BMP monitoring station
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">monitor station</a> <i>reference</i>
Tree	<a href="#">station</a>
Reference	<b>configure</b> <a href="#">bmp station</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **multihop** *number*

Synopsis	TTL in IP packet headers for EBGP peers multi-hops away
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">multihop</a> <i>number</i>
Tree	<a href="#">multihop</a>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **multipath-eligible** *boolean*

Synopsis	Allow routes from group peers in multipath eligibility
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">multipath-eligible</a> <i>boolean</i>
Tree	<a href="#">multipath-eligible</a>
Default	false
Introduced	19.5.R1

Platforms All

### **next-hop-self** *boolean*

Synopsis Advertise routes with local address as next-hop address  
Context **configure** *router string bgp group string next-hop-self boolean*  
Tree [next-hop-self](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **next-hop-unchanged**

Synopsis Enter the **next-hop-unchanged** context  
Context **configure** *router string bgp group string next-hop-unchanged*  
Tree [next-hop-unchanged](#)  
Description Commands in this context specify the IP address families that allow unchanged BGP next-hops when sending BGP routes to peers in the group.  
Introduced 16.0.R1  
Platforms All

### **evpn** *boolean*

Synopsis Advertise EVPN routes with unchanged BGP next hop  
Context **configure** *router string bgp group string next-hop-unchanged evpn boolean*  
Tree [evpn](#)  
Default false  
Introduced 20.2.R1  
Platforms All

### **label-ipv4** *boolean*

Synopsis Advertise label-IPv4 routes with unchanged BGP next hop  
Context **configure** *router string bgp group string next-hop-unchanged label-ipv4 boolean*  
Tree [label-ipv4](#)

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Default	false
Introduced	16.0.R1
Platforms	All

### **label-ipv6** *boolean*

Synopsis	Advertise label-IPv6 routes with unchanged BGP next hop
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <i>group</i> <i>string</i> <a href="#">next-hop-unchanged</a> <a href="#">label-ipv6</a> <i>boolean</i>
Tree	<a href="#">label-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **vpn-ipv4** *boolean*

Synopsis	Advertise VPN IPv4 routes with unchanged BGP next hop
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <i>group</i> <i>string</i> <a href="#">next-hop-unchanged</a> <a href="#">vpn-ipv4</a> <i>boolean</i>
Tree	<a href="#">vpn-ipv4</a>
Default	false
Introduced	20.2.R1
Platforms	All

### **vpn-ipv6** *boolean*

Synopsis	Advertise VPN IPv6 routes with unchanged BGP next hop
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <i>group</i> <i>string</i> <a href="#">next-hop-unchanged</a> <a href="#">vpn-ipv6</a> <i>boolean</i>
Tree	<a href="#">vpn-ipv6</a>
Default	false
Introduced	20.2.R1
Platforms	All

### **origin-validation**

Synopsis	Enter the <b>origin-validation</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <i>group</i> <i>string</i> <a href="#">origin-validation</a>

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Tree	<a href="#">origin-validation</a>
Introduced	16.0.R1
Platforms	All

### **ipv4 boolean**

Synopsis	Enable support for unlabeled unicast IPv4 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">origin-validation</a> <a href="#">ipv4</a> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **ipv6 boolean**

Synopsis	Enable support for unlabeled unicast IPv6 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">origin-validation</a> <a href="#">ipv6</a> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **label-ipv4 boolean**

Synopsis	Enable support for labeled-unicast IPv4 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">origin-validation</a> <a href="#">label-ipv4</a> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **label-ipv6 boolean**

Synopsis	Enable support for labeled-unicast IPv6 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">origin-validation</a> <a href="#">label-ipv6</a> <i>boolean</i>

Tree	<a href="#">label-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

## outbound-route-filtering

Synopsis	Enable the <b>outbound-route-filtering</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">outbound-route-filtering</a>
Tree	<a href="#">outbound-route-filtering</a>
Description	Commands in this context configure the send and receive capabilities for Outbound Route Filtering (ORF).  When this context is unconfigured, the group command settings are inherited from the BGP global-level configuration.
Introduced	16.0.R1
Platforms	All

## extended-community

Synopsis	Enable the <b>extended-community</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">outbound-route-filtering</a> <a href="#">extended-community</a>
Tree	<a href="#">extended-community</a>
Description	Commands in this context configure the ORF send and receive capabilities based on Extended Communities.  When this context is unconfigured, the command settings are inherited from the global-level configuration.
Introduced	16.0.R1
Platforms	All

## accept-orf *boolean*

Synopsis	Negotiate with peer to accept BGP ORF filters
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">outbound-route-filtering</a> <a href="#">extended-community</a> <a href="#">accept-orf</a> <i>boolean</i>
Tree	<a href="#">accept-orf</a>
Description	When configured to <b>true</b> , the receive capability in the BGP ORF is negotiated with a peer and ORF filters can be accepted from peers.



When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the accept capability in the BGP ORF is removed and any existing ORF filters that are currently in place are cleared.

Introduced	16.0.R1
Platforms	All

## send-orf

Synopsis	Enable the <b>send-orf</b> context
Context	<b>configure</b> <i>router string bgp group string outbound-route-filtering extended-community send-orf</i>
Tree	<i>send-orf</i>
Description	<p>Commands in this context allow BGP to negotiate the send capability in the ORF negotiation with a peer. The send capability also causes the router to send a community filter, prefix filter, or AS path filter configured as an inbound filter on the BGP session to its peer as an ORF Action ADD.</p> <p>When this context is unconfigured, the command settings are inherited from the BGP global-level configuration.</p>
Introduced	16.0.R1
Platforms	All

## route-target [*community-name*] *string*

Synopsis	Add a list entry for <b>route-target</b>
Context	<b>configure</b> <i>router string bgp group string outbound-route-filtering extended-community send-orf route-target string</i>
Tree	<i>route-target</i>
Introduced	16.0.R1
Platforms	All

## [*community-name*] *string*

Synopsis	Route target community name
Context	<b>configure</b> <i>router string bgp group string outbound-route-filtering extended-community send-orf route-target string</i>
Tree	<i>route-target</i>
String Length	1 to 32

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**passive** *boolean*

Synopsis	Enable passive mode for BGP communication
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>passive</b> <i>boolean</i>
Tree	<b>passive</b>
Default	false
Introduced	16.0.R1
Platforms	All

**path-mtu-discovery** *boolean*

Synopsis	Enable Path MTU Discovery
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>path-mtu-discovery</b> <i>boolean</i>
Tree	<b>path-mtu-discovery</b>
Description	<p>When configured to <b>true</b>, Path MTU Discovery (PMTUD) is enabled for the associated TCP connections.</p> <p>When set to true, PMTUD is activated toward an IPv4 BGP neighbor and the Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, this device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value so that the IP MTU constraint can be accommodated.</p> <p>When PMTUD is configured to <b>false</b> and there is no TCP MSS configuration that can be associated with a BGP neighbor (in either the BGP configuration or the first hop IP interface configuration), the router advertises a value of only 1024 bytes as the TCP MSS option value, limiting received TCP segments to that size.</p>
Introduced	16.0.R1
Platforms	All

**peer-as** *number*

Synopsis	Peer AS number
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>peer-as</b> <i>number</i>

Tree	<a href="#">peer-as</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **peer-ip-tracking** *boolean*

Synopsis	Enable BGP peer tracking
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">peer-ip-tracking</a> <i>boolean</i>
Tree	<a href="#">peer-ip-tracking</a>
Description	<p>When configured to <b>true</b>, this command enables BGP peer tracking.</p> <p>Peer tracking should be used with caution. Peer tracking can tear a session down even if the loss of connectivity turns out to be short-lived (for example, while the IGP protocol is re-converging). Next-hop tracking, which is always enabled, handles temporary connectivity issues more effectively.</p> <p>When unconfigured, the command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, peer tracking is disabled.</p>
Introduced	16.0.R1
Platforms	All

### **preference** *number*

Synopsis	Route preference for routes learned from all peers
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">preference</a> <i>number</i>
Tree	<a href="#">preference</a>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **prefix-limit** [[family](#)] *keyword*

Synopsis	Enter the <b>prefix-limit</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">prefix-limit</a> <i>keyword</i>
Tree	<a href="#">prefix-limit</a>
Introduced	16.0.R1

Platforms All

### **[family]** *keyword*

Synopsis Address family to which the limit applies

Context **configure** *router string bgp group string prefix-limit keyword*

Tree [prefix-limit](#)

Options ipv4, vpn-ipv4, ipv6, mcast-ipv4, vpn-ipv6, l2-vpn, mvpn-ipv4, mdt-safi, ms-pw, flow-ipv4, route-target, mcast-vpn-ipv4, mvpn-ipv6, flow-ipv6, evpn, mcast-ipv6, label-ipv4, label-ipv6, bgp-ls, mcast-vpn-ipv6, sr-policy-ipv4, sr-policy-ipv6, flow-vpn-ipv4, flow-vpn-ipv6

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **idle-timeout** *number*

Synopsis Time BGP peering remains idle before reconnecting

Context **configure** *router string bgp group string prefix-limit keyword idle-timeout number*

Tree [idle-timeout](#)

Range 1 to 1024

Introduced 16.0.R1

Platforms All

### **log-only** *boolean*

Synopsis Send warning message at threshold instead of take-down

Context **configure** *router string bgp group string prefix-limit keyword log-only boolean*

Tree [log-only](#)

Default false

Introduced 16.0.R1

Platforms All

### **maximum** *number*

Synopsis Maximum number of routes to be learned from a peer

---

Context	<b>configure router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>prefix-limit</b> <i>keyword</i> <b>maximum</b> <i>number</i>
Tree	<b>maximum</b>
Description	This command configures the maximum number of BGP routes that can be received from a peer before administrative action is taken.
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R2
Platforms	All

### **post-import** *boolean*

Synopsis	Apply limit only to routes accepted by import policies
Context	<b>configure router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>prefix-limit</b> <i>keyword</i> <b>post-import</b> <i>boolean</i>
Tree	<b>post-import</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **threshold** *number*

Synopsis	Percentage threshold that triggers a warning message
Context	<b>configure router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>prefix-limit</b> <i>keyword</i> <b>threshold</b> <i>number</i>
Tree	<b>threshold</b>
Range	1 to 100
Default	90
Introduced	16.0.R1
Platforms	All

### **remove-private**

Synopsis	Enable the <b>remove-private</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>remove-private</b>
Tree	<b>remove-private</b>
Introduced	16.0.R1
Platforms	All

### **limited** *boolean*

Synopsis	Remove private ASNs up to first public ASN encountered
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>remove-private</b> <b>limited</b> <i>boolean</i>
Tree	<b>limited</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **replace** *boolean*

Synopsis	Replace private ASN with global ASN before advertising
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>remove-private</b> <b>replace</b> <i>boolean</i>
Tree	<b>replace</b>
Default	false
Introduced	19.10.R1
Platforms	All

### **skip-peer-as** *boolean*

Synopsis	Keep private ASN if it is the same as the BGP peer ASN
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>remove-private</b> <b>skip-peer-as</b> <i>boolean</i>
Tree	<b>skip-peer-as</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **segment-routing-v6**

Synopsis	Enable the <b>segment-routing-v6</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>segment-routing-v6</b>
Tree	<b>segment-routing-v6</b>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**route-advertisement**

Synopsis	Enable the <b>route-advertisement</b> context
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>segment-routing-v6 route-advertisement</i>
Tree	<a href="#">route-advertisement</a>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**drop-routes-with-srv6-tlvs** *boolean*

Synopsis	Drop BGP routes with SRv6 TLVs
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>segment-routing-v6 route-advertisement drop-routes-with-srv6-tlvs</i> <i>boolean</i>
Tree	<a href="#">drop-routes-with-srv6-tlvs</a>
Description	When configured to <b>true</b> , the router drops and does not advertise BGP routes (that belong to any address family) with SRv6 TLVs. When configured to <b>false</b> , the router advertises BGP routes with SRv6 TLVs.
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**family** [*family-type*] *keyword*

Synopsis	Enter the <b>family</b> list instance
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>segment-routing-v6 route-advertisement family</i> <i>keyword</i>
Tree	<a href="#">family</a>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**[family-type]** *keyword*

Synopsis	IP address type that SRv6 route attributes apply to
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>segment-routing-v6 route-advertisement family</i> <i>keyword</i>
Tree	<a href="#">family</a>

Options	ipv4, ipv6
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **strip-srv6-tlvs** *boolean*

Synopsis	Strip SRv6 TLVs from BGP routes advertised to peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>segment-routing-v6 route-advertisement family</b> <i>keyword</i> <b>strip-srv6-tlvs</b> <i>boolean</i>
Tree	<a href="#">strip-srv6-tlvs</a>
Description	When configured to <b>true</b> , BGP routes that belong to the address family specified using the <b>family</b> command are advertised to peers with SRv6 TLVs removed. Locally or remotely added SRv6 TLVs can be removed.  When configured to <b>false</b> , SRv6 TLVs are not stripped from BGP routes advertised to peers.
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **selective-label-ipv4-install** *boolean*

Synopsis	Enable selective download for bgp label-ipv4 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>selective-label-ipv4-install</b> <i>boolean</i>
Tree	<a href="#">selective-label-ipv4-install</a>
Introduced	19.10.R1
Platforms	All

### **send-communities**

Synopsis	Enter the <b>send-communities</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>send-communities</b>
Tree	<a href="#">send-communities</a>
Introduced	16.0.R1
Platforms	All



**extended boolean**

Synopsis	Advertise the Extended Communities attribute to peers
Context	<b>configure</b> <i>router string bgp group string send-communities extended boolean</i>
Tree	<i>extended</i>
Description	<p>When unconfigured, this command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>true</b>.</p> <p>When this command inherits a value of <b>true</b>, BGP extended communities are sent to peers in the Extended Communities attribute.</p> <p>When configured to <b>false</b>, all extended communities are removed from all routes advertised to BGP peers.</p>
Introduced	16.0.R1
Platforms	All

**large boolean**

Synopsis	Advertise the Large Communities attribute to peers
Context	<b>configure</b> <i>router string bgp group string send-communities large boolean</i>
Tree	<i>large</i>
Description	<p>When unconfigured, this command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>true</b>.</p> <p>When this command inherits a value of <b>true</b>, BGP large communities are sent to peers in the Large Communities attribute.</p> <p>When configured to <b>false</b>, all large communities are removed from all routes advertised to BGP peers.</p>
Introduced	16.0.R1
Platforms	All

**standard boolean**

Synopsis	Advertise the Communities attribute to peers
Context	<b>configure</b> <i>router string bgp group string send-communities standard boolean</i>
Tree	<i>standard</i>
Description	<p>When unconfigured, this command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>true</b>.</p> <p>When this command inherits a value of <b>true</b>, BGP standard communities are sent to peers in the Communities attribute.</p>

When configured to **false**, all standard communities are removed from all routes advertised to BGP peers.

Introduced 16.0.R1  
 Platforms All

## send-default

Synopsis Enable the **send-default** context  
 Context **configure** [router](#) *string* [bgp group](#) *string* **send-default**  
 Tree [send-default](#)  
 Introduced 19.7.R1  
 Platforms All

## export-policy *reference*

Synopsis Export policy name  
 Context **configure** [router](#) *string* [bgp group](#) *string* [send-default](#) **export-policy** *reference*  
 Tree [export-policy](#)  
 Reference **configure** [policy-options](#) [policy-statement](#) *string*  
 Introduced 19.7.R1  
 Platforms All

## ipv4 *boolean*

Synopsis Generate and advertise an IPv4 default route (0/0)  
 Context **configure** [router](#) *string* [bgp group](#) *string* [send-default](#) **ipv4** *boolean*  
 Tree [ipv4](#)  
 Default false  
 Introduced 19.7.R1  
 Platforms All

## ipv6 *boolean*

Synopsis Generate and advertise an IPv6 default route (::/0)  
 Context **configure** [router](#) *string* [bgp group](#) *string* [send-default](#) **ipv6** *boolean*

Tree	<a href="#">ipv6</a>
Default	false
Introduced	19.7.R1
Platforms	All

### **split-horizon** *boolean*

Synopsis	Prevent routes being reflected back to best-route peer
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">split-horizon</a> <i>boolean</i>
Tree	<a href="#">split-horizon</a>
Description	<p>When configured to <b>true</b>, this command enables the use of split-horizon.</p> <p>This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGp and IBGP.</p> <p>Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary.</p> <p>When unconfigured, the command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, the use of split-horizon is disabled.</p>
Introduced	16.0.R1
Platforms	All

### **static-group** *boolean*

Synopsis	Use group for static peers
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">static-group</a> <i>boolean</i>
Tree	<a href="#">static-group</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **tcp-mss** (*number* | *keyword*)

Synopsis	TCP maximum segment size override
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">tcp-mss</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">tcp-mss</a>

Description	<p>This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command).</p> <p>The configured value controls two properties of the TCP connection as follows:</p> <p>TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router.</p> <p>TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.</p>
Range	384 to 9746
Options	ip-stack
Introduced	21.2.R1
Platforms	All

### **third-party-nexthop** *boolean*

Synopsis	Apply third-party next-hop processing to EBGP peers
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp group</i> <i>string</i> <i>third-party-nexthop</i> <i>boolean</i>
Tree	<i>third-party-nexthop</i>
Description	<p>When configured to <b>true</b>, this command enables the router to send third-party next hop to EBGP peers in the same subnet as the source peer. The address family of the transport must match the address family of the route.</p> <p>When an IPv4 or IPv6 route is received from one EBGP peer and advertised to another EBGP peer in the same IP subnet, the BGP next hop is left unchanged.</p> <p>When unconfigured, the command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, third-party next-hop processing is disabled and the next hop carries the IP address of the interface used to establish the TCP connection to the peer.</p>
Introduced	16.0.R1
Platforms	All

### **ttl-security** *number*

Synopsis	Minimum TTL value for an incoming BGP packet
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp group</i> <i>string</i> <i>ttl-security</i> <i>number</i>
Tree	<i>ttl-security</i>

Description	This command configures the minimum TTL value that BGP will accept from an incoming packet. A packet with a TTL value less than the minimum configured TTL value is discarded.
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **type** *keyword*

Synopsis	BGP peer type
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>type</b> <i>keyword</i>
Tree	<b>type</b>
Options	no-type, internal, external
Default	no-type
Introduced	16.0.R1
Platforms	All

### **vpn-apply-export** *boolean*

Synopsis	Apply base-instance BGP export policies to VPN routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>vpn-apply-export</b> <i>boolean</i>
Tree	<b>vpn-apply-export</b>
Description	When configured to <b>true</b> , base-instance BGP export route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes. When unconfigured, the command inherits the value of the global-level setting ( <b>true</b> or <b>false</b> ). The command cannot be explicitly configured to <b>false</b> . When this command inherits a value of <b>false</b> , the export policies are not applied.
Introduced	16.0.R1
Platforms	All

### **vpn-apply-import** *boolean*

Synopsis	Apply base-instance BGP import policies to VPN routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>vpn-apply-import</b> <i>boolean</i>
Tree	<b>vpn-apply-import</b>
Description	When configured to <b>true</b> , base-instance BGP import route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes.

When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the import policies are not applied.

Introduced	16.0.R1
Platforms	All

## hold-time

Synopsis	Enter the <b>hold-time</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp hold-time</b>
Tree	<b>hold-time</b>
Introduced	16.0.R1
Platforms	All

## minimum-hold-time *number*

Synopsis	Minimum hold time between successive messages
Context	<b>configure router</b> <i>string</i> <b>bgp hold-time minimum-hold-time</b> <i>number</i>
Tree	<b>minimum-hold-time</b>
Description	This command specifies the minimum hold time that is accepted for the session. If a peer proposes a hold time lower than this value, the session attempt is rejected.
Range	0   3 to 65535
Default	0
Introduced	16.0.R1
Platforms	All

## seconds *number*

Synopsis	Maximum time BGP waits between successive messages
Context	<b>configure router</b> <i>string</i> <b>bgp hold-time seconds</b> <i>number</i>
Tree	<b>seconds</b>
Description	This command configures the maximum time BGP waits between successive messages (either keepalive or update) from its peer before closing the connection.  Although the implementation allows setting the keepalive timer at the BGP global level times separately, the configured keepalive timer is overridden by this value under the following circumstances.

- If the specified hold time is less than the configured keepalive time, the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed.
- If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. The connection with the peer is up permanently and no keepalive packets are sent to the peer.

Range	0   3 to 65535
Default	90
Introduced	16.0.R1
Platforms	All

### **ibgp-multipath** *boolean*

Synopsis	Enable IBGP multipath load balancing
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp</i> <i>ibgp-multipath</i> <i>boolean</i>
Tree	<a href="#">ibgp-multipath</a>
Description	When configured to <b>true</b> , this command enables IBGP multipath load balancing when adding BGP routes to the route table if the route resolving the BGP next hop offers multiple next hops.  When configured to <b>false</b> , this command disables IBGP multipath load balancing.
Default	false
Introduced	16.0.R1
Platforms	All

### **import**

Synopsis	Enable the <b>import</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp</i> <i>import</i>
Tree	<a href="#">import</a>
Description	Commands in this context specify route policies that control the handling of inbound routes received from certain peers. Route policies are configured in the <b>configure policy-options</b> context.  When no import policies are specified in this context, BGP routes are accepted by default.
Introduced	16.0.R1
Platforms	All

**policy** (*policy-expr-string* | *string*)

Synopsis	BGP import policy name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp import policy</b> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<b>policy</b>
Description	<p>This command specifies a list of objects, where each object is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified order to determine the modifications of each route and the final action to accept or reject the route.</p> <p>Only one of the objects referenced by this command is allowed to be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).</p> <p>Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@", "start@variable@end", "@variable@end", or "start@variable@".</p>
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

**initial-send-delay-zero** *boolean*

Synopsis	Send BGP updates as soon as session comes up
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp initial-send-delay-zero</b> <i>boolean</i>
Tree	<b>initial-send-delay-zero</b>
Default	false
Introduced	16.0.R1
Platforms	All

**inter-as-vpn** *boolean*

Synopsis	Allow advertisement of VPN routes across AS boundaries
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp inter-as-vpn</b> <i>boolean</i>
Tree	<b>inter-as-vpn</b>
Description	When configured to <b>true</b> , this command allows VPNs to exchange routes across AS boundaries, providing model B connectivity.



When configured to **false**, ASBRs are prevented from advertising VPN routes to peers in other ASs.

Default	false
Introduced	16.0.R1
Platforms	All

### **keepalive** *number*

Synopsis	Time after which the BGP KEEPALIVE message is sent
Context	<b>configure</b> <i>router string</i> <b>bgp</b> <i>keepalive number</i>
Tree	<a href="#">keepalive</a>
Range	0 to 21845
Default	30
Introduced	16.0.R1
Platforms	All

### **label-allocation**

Synopsis	Enter the <b>label-allocation</b> context
Context	<b>configure</b> <i>router string</i> <b>bgp</b> <i>label-allocation</i>
Tree	<a href="#">label-allocation</a>
Introduced	20.10.R1
Platforms	All

### **label-ipv6**

Synopsis	Enter the <b>label-ipv6</b> context
Context	<b>configure</b> <i>router string</i> <b>bgp</b> <i>label-allocation</i> <b>label-ipv6</b>
Tree	<a href="#">label-ipv6</a>
Description	This command controls the label allocation behavior for labeled unicast IPv6 routes. The label options are <b>explicit-null</b> and <b>normal</b> .
Introduced	20.10.R1
Platforms	All

**explicit-null** *boolean*

Synopsis	Apply advertised label and associated programming rules
Context	<b>configure</b> <i>router string</i> <i>bgp label-allocation label-ipv6 explicit-null boolean</i>
Tree	<i>explicit-null</i>
Description	<p>When configured to <b>true</b>, this command uses the advertised label and associated programming rules on this instance of BGP. The following applies:</p> <ul style="list-style-type: none"> <li>• The router is required to act as the BGP next-hop of a label-unicast IPv6 route that it is advertising. It sets the BGP label value to IPv6 explicit null (value 2), forcing a POP behavior for received packets.</li> <li>• The received label-unicast IPv6 routes never create tunnels in TTM that can be used to resolve other BGP routes (with an IPv6 next-hop).</li> <li>• A received label-unicast IPv6 route can be resolved by a label-ipv4 BGP tunnel that is transported over a stacked tunnel (SR-TE LSP or LDPoRSVP LSP).</li> </ul> <p>When configured to <b>false</b>, advertised label IPv6 programming rules are not used. The following applies</p> <ul style="list-style-type: none"> <li>• When the router is required to act as the BGP next-hop of a label-unicast IPv6 route that it is advertising, it sets the BGP label value to a proper value in the dynamic label range and programs a POP or SWAP operation for that label, depending on the origin of the route and various import policy actions that could apply to the route.</li> <li>• Received label-unicast IPv6 routes that have a prefix length of 128 bits are automatically installed in TTM so that they can be used to resolve other (non-labeled-unicast) BGP routes (with an IPv6 next-hop).</li> <li>• A received label-unicast IPv6 route cannot be resolved by a label-ipv4 BGP tunnel that is transported over a stacked tunnel (SR-TE LSP or LDPoRSVP LSP).</li> <li>• The label-ipv6 routes used for ECMP toward an IPv6 destination cannot be a mix of routes with regular label values and routes with special (IPv6 explicit null) label values.</li> </ul> <p>Changes in the value of this leaf do not cause the BGP sessions of the base router to reset.</p>
Default	true
Introduced	20.10.R1
Platforms	All

**label-preference** *number*

Synopsis	Route preference for routes from labeled-unicast peers
Context	<b>configure</b> <i>router string</i> <i>bgp label-preference number</i>
Tree	<i>label-preference</i>
Range	1 to 255
Default	170

Introduced	16.0.R1
Platforms	All

### **link-state-route-export** *boolean*

Synopsis	Allow the export of the TED NLRI database
Context	<b>configure</b> <i>router string</i> <a href="#">bgp link-state-route-export</a> <i>boolean</i>
Tree	<a href="#">link-state-route-export</a>
Description	When configured to <b>true</b> , this command allows BGP to export link-state information to BGP neighbors. When configured to <b>false</b> , link-state information is not exported.
Default	false
Introduced	16.0.R1
Platforms	All

### **link-state-route-import** *boolean*

Synopsis	Allow the import of the TED NLRI database
Context	<b>configure</b> <i>router string</i> <a href="#">bgp link-state-route-import</a> <i>boolean</i>
Tree	<a href="#">link-state-route-import</a>
Description	When configured to <b>true</b> , this command enables the import of link-state information into the BGP-LS address family for advertisement to other BGP neighbors. When configured to <b>false</b> , this command disables the import of link-state information.
Default	false
Introduced	16.0.R1
Platforms	All

### **local-as**

Synopsis	Enter the <b>local-as</b> context
Context	<b>configure</b> <i>router string</i> <a href="#">bgp local-as</a>
Tree	<a href="#">local-as</a>
Introduced	16.0.R1
Platforms	All

**as-number** *number*

Synopsis	Local (or virtual) BGP AS number
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp local-as</b> <b>as-number</b> <i>number</i>
Tree	<b>as-number</b>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

**prepend-global-as** *boolean*

Synopsis	Prepend global AS when advertising routes to BGP peer
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp local-as prepend-global-as</b> <i>boolean</i>
Tree	<b>prepend-global-as</b>
Description	When configured to <b>true</b> , the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer.  When configured to <b>false</b> , the global ASN is hidden in paths announced to the EBGp peer.
Default	true
Introduced	16.0.R1
Platforms	All

**private** *boolean*

Synopsis	Hide the local ASN in sent paths learned from peering
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp local-as private</b> <i>boolean</i>
Tree	<b>private</b>
Description	When configured to <b>true</b> , the local ASN is hidden in paths learned from the peering.  When configured to <b>false</b> , the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions.
Default	false
Introduced	16.0.R1
Platforms	All

**local-preference** *number*

Synopsis	Default local preference if not in incoming routes
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Context	<b>configure router</b> <i>string</i> <a href="#">bgp local-preference</a> <i>number</i>
Tree	<a href="#">local-preference</a>
Max. Range	0 to 4294967295
Default	100
Introduced	16.0.R1
Platforms	All

### **loop-detect** *keyword*

Synopsis	Strategy for loop detection in the AS path
Context	<b>configure router</b> <i>string</i> <a href="#">bgp loop-detect</a> <i>keyword</i>
Tree	<a href="#">loop-detect</a>
Options	drop-peer, ignore-loop, off, discard-route
Default	ignore-loop
Introduced	16.0.R1
Platforms	All

### **loop-detect-threshold** *number*

Synopsis	Threshold for the global ASN in a received AS path
Context	<b>configure router</b> <i>string</i> <a href="#">bgp loop-detect-threshold</a> <i>number</i>
Tree	<a href="#">loop-detect-threshold</a>
Range	0 to 15
Default	0
Introduced	16.0.R6
Platforms	All

### **med-out** (*number* | *keyword*)

Synopsis	Default MED attribute value to advertise to peers
Context	<b>configure router</b> <i>string</i> <a href="#">bgp med-out</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">med-out</a>
Max. Range	0 to 4294967295
Options	igp-cost
Introduced	16.0.R1

Platforms All

### **min-route-advertisement** *number*

Synopsis Minimum time before a prefix can be advertised to peer  
Context **configure** *router string* **bgp min-route-advertisement** *number*  
Tree [min-route-advertisement](#)  
Range 1 to 255  
Default 30  
Introduced 16.0.R1  
Platforms All

### **monitor**

Synopsis Enable the **monitor** context  
Context **configure** *router string* **bgp monitor**  
Tree [monitor](#)  
Description Commands in this context specify BMP-related configurations.  
When this context is unconfigured, the sending of BMP messages to BMP monitoring stations is disabled.  
Introduced 16.0.R1  
Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of BMP monitoring  
Context **configure** *router string* **bgp monitor admin-state** *keyword*  
Tree [admin-state](#)  
Options enable, disable  
Default disable  
Introduced 16.0.R1  
Platforms All

**all-stations** *boolean*

Synopsis	Send BMP messages to all configured stations
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>monitor</b> <b>all-stations</b> <i>boolean</i>
Tree	<a href="#">all-stations</a>
Description	When configured to <b>true</b> , this command specifies that BMP messages are to be sent to all configured BMP monitoring stations.  When configured to <b>false</b> , the command is not used to indicate the stations which can receive BMP messages. The <b>station</b> command (at the same context level) identifies the BMP stations for which BMP messages are to be sent.
Default	false
Introduced	16.0.R1
Platforms	All

**route-monitoring**

Synopsis	Enter the <b>route-monitoring</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>monitor</b> <b>route-monitoring</b>
Tree	<a href="#">route-monitoring</a>
Introduced	16.0.R1
Platforms	All

**post-policy** *boolean*

Synopsis	Allow post-policy route-monitoring messages to be sent
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>monitor</b> <b>route-monitoring</b> <b>post-policy</b> <i>boolean</i>
Tree	<a href="#">post-policy</a>
Default	false
Introduced	16.0.R1
Platforms	All

**pre-policy** *boolean*

Synopsis	Allow pre-policy route-monitoring messages to be sent
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>monitor</b> <b>route-monitoring</b> <b>pre-policy</b> <i>boolean</i>
Tree	<a href="#">pre-policy</a>
Default	false

Introduced	16.0.R1
Platforms	All

### **station** [[station-name](#)] *reference*

Synopsis	Add a list entry for <b>station</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">monitor</a> <a href="#">station</a> <i>reference</i>
Tree	<a href="#">station</a>
Description	This command identifies a BMP monitoring station for which BMP messages are to be sent.
Max. Instances	8
Introduced	16.0.R1
Platforms	All

### **[station-name]** *reference*

Synopsis	BMP monitoring station
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">monitor</a> <a href="#">station</a> <i>reference</i>
Tree	<a href="#">station</a>
Reference	<b>configure</b> <a href="#">bmp</a> <a href="#">station</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **mp-bgp-keep** *boolean*

Synopsis	Keep rejected VPN-IP routes in RIB-IN
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">mp-bgp-keep</a> <i>boolean</i>
Tree	<a href="#">mp-bgp-keep</a>
Description	When configured to <b>true</b> , the RIB-IN retains all MP-BGP routes, including VPN routes rejected by import policies or not imported by any services. As a result, sending Route Refresh messages is not required when an import policy changes. When configured to <b>false</b> , these VPN routes are deleted from the RIB-IN.
Default	false
Introduced	16.0.R1



Platforms All

### **multihop** *number*

Synopsis TTL in IP packet headers for EBGP peers multi-hops away

Context **configure** *router string* **bgp multihop** *number*

Tree [multihop](#)

Description This command configures the Time to Live (TTL) value entered in the IP header of packets sent to an EBGP peer multiple hops away. This command applies only to EBGP.

Range 1 to 255

Introduced 16.0.R1

Platforms All

### **multipath**

Synopsis Enter the **multipath** context

Context **configure** *router string* **bgp multipath**

Tree [multipath](#)

Introduced 16.0.R1

Platforms All

### **ebgp** *number*

Synopsis Maximum multipaths per prefix for EBGP learned routes

Context **configure** *router string* **bgp multipath ebgp** *number*

Tree [ebgp](#)

Range 1 to 64

Introduced 16.0.R1

Platforms All

### **family** [*family-type*] *keyword*

Synopsis Enter the **family** list instance

Context **configure** *router string* **bgp multipath family** *keyword*

Tree [family](#)

Introduced	19.5.R1
Platforms	All

### **[family-type]** *keyword*

Synopsis	Address family for which multipath selection applies
Context	<b>configure</b> <i>router string</i> <i>bgp multipath family keyword</i>
Tree	<i>family</i>
Options	ipv4, ipv6, label-ipv4, label-ipv6
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

### **ebgp** *number*

Synopsis	Maximum multipaths when best path is EBGp learned route
Context	<b>configure</b> <i>router string</i> <i>bgp multipath family keyword</i> <i>ebgp number</i>
Tree	<i>ebgp</i>
Description	This command configures the maximum number of multipaths per prefix or NLRI when the best path is an EBGp learned route. The limit configured using this command overrides the limit configured in the <b>max-paths</b> command. If the best path is an EBGp learned route, and this command is set to 1, multipaths are disabled.
Range	1 to 64
Introduced	19.5.R1
Platforms	All

### **ibgp** *number*

Synopsis	Maximum multipaths when best path is IBGP learned route
Context	<b>configure</b> <i>router string</i> <i>bgp multipath family keyword</i> <i>ibgp number</i>
Tree	<i>ibgp</i>
Description	This command configures the maximum number of multipaths per prefix or NLRI when the best path is an IBGP learned route. The limit configured using this command overrides the limit configured in the <b>max-paths</b> command. If the best path is an IBGP learned route and this command is set to 1, multipaths are disabled.
Range	1 to 64
Introduced	19.5.R1

Platforms All

### **max-paths** *number*

Synopsis	Maximum number of multipaths per prefix or NLRI
Context	<b>configure</b> <i>router string</i> <b>bgp multipath family</b> <i>keyword</i> <b>max-paths</b> <i>number</i>
Tree	<b>max-paths</b>
Description	This command configures the maximum number of multipaths per prefix or NLRI for the IP family option specified using the <b>family</b> command. Consider the following when configuring this command: <ul style="list-style-type: none"> <li>• If the best path is an EBGP-learned route and the <b>ebgp</b> command is configured, the limit configured in the <b>ebgp</b> command overrides the limit configured in this command.</li> <li>• If the best path is an IBGP-learned route and the <b>ibgp</b> command is configured, the limit configured in the <b>ibgp</b> command overrides the limit configured in this command.</li> <li>• If the best path is an EBGP-learned route and the <b>ebgp</b> command is not configured, and this command is configured to 1, multipaths are disabled.</li> <li>• If the best path is an IBGP-learned route and the <b>ibgp</b> command is not configured, and this command is configured to 1, multipaths are disabled.</li> </ul>
Range	1 to 64
Introduced	19.5.R1
Platforms	All

### **restrict** *keyword*

Synopsis	AS path restriction for the non-best path
Context	<b>configure</b> <i>router string</i> <b>bgp multipath family</b> <i>keyword</i> <b>restrict</b> <i>keyword</i>
Tree	<b>restrict</b>
Options	same-as-path-length, same-neighbor-as, exact-as-path
Default	same-as-path-length
Introduced	19.5.R1
Platforms	All

### **unequal-cost** *boolean*

Synopsis	Ignore differences in the next-hop cost for multipath
Context	<b>configure</b> <i>router string</i> <b>bgp multipath family</b> <i>keyword</i> <b>unequal-cost</b> <i>boolean</i>

Tree	<a href="#">unequal-cost</a>
Description	When configured to <b>true</b> , BGP ignores differences in the next-hop cost when determining eligible multipaths.
Default	false
Introduced	19.5.R1
Platforms	All

### **ibgp number**

Synopsis	Maximum multipaths per prefix for IBGP learned routes
Context	<b>configure router</b> <i>string</i> <a href="#">bgp multipath ibgp number</a>
Tree	<a href="#">ibgp</a>
Range	1 to 64
Introduced	16.0.R1
Platforms	All

### **max-paths number**

Synopsis	Maximum multipaths per prefix
Context	<b>configure router</b> <i>string</i> <a href="#">bgp multipath max-paths number</a>
Tree	<a href="#">max-paths</a>
Range	1 to 64
Default	1
Introduced	16.0.R1
Platforms	All

### **restrict keyword**

Synopsis	AS path restriction for the non-best path
Context	<b>configure router</b> <i>string</i> <a href="#">bgp multipath restrict keyword</a>
Tree	<a href="#">restrict</a>
Options	same-as-path-length, same-neighbor-as, exact-as-path
Default	same-as-path-length
Introduced	16.0.R1
Platforms	All

**unequal-cost** *boolean*

Synopsis	Ignore differences in the next-hop cost for multipath
Context	<b>configure</b> <i>router</i> <i>string</i> <b>bgp</b> <i>multipath</i> <b>unequal-cost</b> <i>boolean</i>
Tree	<b>unequal-cost</b>
Default	false
Introduced	19.5.R1
Platforms	All

**mvpn-vrf-import-subtype-new** *boolean*

Synopsis	Encode the IANA value of 0x010b in advertised routes
Context	<b>configure</b> <i>router</i> <i>string</i> <b>bgp</b> <i>mvpn-vrf-import-subtype-new</i> <i>boolean</i>
Tree	<b>mvpn-vrf-import-subtype-new</b>
Description	When configured to <b>true</b> , this command encodes the value of 0x010b for the type or subtype in advertised routes.  When configured to <b>false</b> , BGP encodes the extended community type or subtype as 0x010a to preserve backwards compatibility.
Default	false
Introduced	16.0.R1
Platforms	All

**neighbor** [*ip-address*] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	Enter the <b>neighbor</b> list instance
Context	<b>configure</b> <i>router</i> <i>string</i> <b>bgp</b> <i>neighbor</i> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> )
Tree	<b>neighbor</b>
Introduced	16.0.R1
Platforms	All

**[ip-address]** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	IP address of the BGP peer router
Context	<b>configure</b> <i>router</i> <i>string</i> <b>bgp</b> <i>neighbor</i> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> )
Tree	<b>neighbor</b>

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## add-paths

Synopsis	Enable the <b>add-paths</b> context
Context	<b>configure router string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>add-paths</b>
Tree	<b>add-paths</b>
Description	Commands in this context allow the add-paths node to be configured for the specified families for configuration of the BGP group or neighbor. The BGP add-paths capability allows the router to send or receive multiple paths per prefix to and from a peer.  When unconfigured, command settings are inherited from a higher level BGP configuration.
Introduced	16.0.R1
Platforms	All

## evpn

Synopsis	Enter the <b>evpn</b> context
Context	<b>configure router string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>add-paths evpn</b>
Tree	<b>evpn</b>
Description	Commands in this context configure the add-paths capability for EVPN routes. By default, add-paths is not enabled for EVPN routes.
Introduced	21.10.R1
Platforms	All

## receive boolean

Synopsis	Receive multiple EVPN paths per prefix from a peer
Context	<b>configure router string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>add-paths evpn receive boolean</b>
Tree	<b>receive</b>
Default	false
Introduced	21.10.R1

Platforms All

### **send** (*number* | *keyword*)

Synopsis Maximum paths per EVPN prefix to Add-Path peers

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**add-paths evpn send** (*number* | *keyword*)

Tree **send**

Range 1 to 16

Options multipaths

Introduced 21.10.R1

Platforms All

### **ipv4**

Synopsis Enter the **ipv4** context

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**add-paths ipv4**

Tree **ipv4**

Introduced 16.0.R1

Platforms All

### **receive** *boolean*

Synopsis Receive multiple labeled-unicast routes per IPv4 prefix

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**add-paths ipv4 receive** *boolean*

Tree **receive**

Description When configured to **true**, the router can receive multiple unlabeled IPv4 unicast routes per prefix from a peer.  
When configured to **false**, the ADD-PATH receive capability is not enabled.

Default false

Introduced 16.0.R1

Platforms All

**send** (*number* | *keyword*)

Synopsis	Maximum paths per unlabeled IPv4 unicast prefix
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths</b> <b>ipv4 send</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>send</b>
Description	This command configures the maximum number of paths per unlabeled IPv4 unicast prefix that are allowed to be advertised to ADD-PATH peers. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.  When not configured, ADD-PATH send capability is not enabled for unlabeled IPv4 unicast routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

**ipv6**

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths</b> <b>ipv6</b>
Tree	<b>ipv6</b>
Introduced	16.0.R1
Platforms	All

**receive** *boolean*

Synopsis	Receive multiple routes per IPv6 prefix
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths</b> <b>ipv6 receive</b> <i>boolean</i>
Tree	<b>receive</b>
Description	When configured to <b>true</b> , this command allows multiple unlabeled IPv6 unicast routes per prefix to be received from a peer.  When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All



**send** (*number* | *keyword*)

Synopsis	Maximum paths per unlabeled IPv6 unicast prefix
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths</b> <b>ipv6</b> <b>send</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>send</b>
Description	This command configures the maximum number of paths per unlabeled IPv4 unicast prefix that are allowed to be advertised to ADD-PATH peers. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.  When not configured, ADD-PATH send capability is not enabled for unlabeled IPv4 unicast routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

**label-ipv4**

Synopsis	Enter the <b>label-ipv4</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths</b> <b>label-ipv4</b>
Tree	<b>label-ipv4</b>
Introduced	16.0.R1
Platforms	All

**receive** *boolean*

Synopsis	Receive multiple labeled-unicast routes per IPv4 prefix
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths</b> <b>label-ipv4</b> <b>receive</b> <i>boolean</i>
Tree	<b>receive</b>
Description	When configured to <b>true</b> , this command allows multiple labeled-unicast routes per IPv4 prefix to be received from a peer.  When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1

Platforms All

### **send** (*number* | *keyword*)

Synopsis Maximum paths per labeled IPv4 unicast prefix

Context **configure** *router string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**add-paths label-ipv4 send** (*number* | *keyword*)

Tree **send**

Description This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv4 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.

When not configured, ADD-PATH send capability is not enabled for labeled IPv4 unicast routes.

Range 1 to 16

Options multipaths

Introduced 16.0.R1

Platforms All

### **label-ipv6**

Synopsis Enter the **label-ipv6** context

Context **configure** *router string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**add-paths label-ipv6**

Tree **label-ipv6**

Introduced 16.0.R1

Platforms All

### **receive** *boolean*

Synopsis Receive multiple labeled-unicast routes per IPv6 prefix

Context **configure** *router string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**add-paths label-ipv6 receive** *boolean*

Tree **receive**

Description When configured to **true**, this command allows multiple labeled-unicast routes per IPv6 prefix to be received from a peer.

When configured to **false**, the ADD-PATH receive capability is not enabled.

Default	false
Introduced	16.0.R1
Platforms	All

### **send** (*number* | *keyword*)

Synopsis	Maximum paths per labeled IPv6 unicast prefix
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths label-ipv6 send</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>send</b>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv6 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.  When not configured, ADD-PATH send capability is not enabled for labeled IPv6 unicast routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

### **mcast-vpn-ipv4**

Synopsis	Enter the <b>mcast-vpn-ipv4</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths mcast-vpn-ipv4</b>
Tree	<b>mcast-vpn-ipv4</b>
Introduced	16.0.R1
Platforms	All

### **receive** *boolean*

Synopsis	Receive multiple multicast routes per IPv4 VPN prefix
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths mcast-vpn-ipv4 receive</b> <i>boolean</i>
Tree	<b>receive</b>
Description	When configured to <b>true</b> , this command allows multiple multicast routes per IPv4 VPN prefix to be received from a peer.

When configured to **false**, the ADD-PATH receive capability is not enabled.

Default	false
Introduced	16.0.R1
Platforms	All

### **send number**

Synopsis	Maximum paths per multicast IPv4 VPN prefix
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths mcast-vpn-ipv4 send number</b>
Tree	<b>send</b>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast IPv4 VPN prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.  When not configured, ADD-PATH send capability is not enabled for multicast IPv4 VPN routes.
Range	1 to 16
Introduced	16.0.R1
Platforms	All

### **mcast-vpn-ipv6**

Synopsis	Enter the <b>mcast-vpn-ipv6</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths mcast-vpn-ipv6</b>
Tree	<b>mcast-vpn-ipv6</b>
Introduced	16.0.R1
Platforms	All

### **receive boolean**

Synopsis	Receive multiple multicast routes per IPv6 VPN prefix
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths mcast-vpn-ipv6 receive boolean</b>
Tree	<b>receive</b>
Description	When configured to <b>true</b> , this command allows multiple multicast routes per IPv6 VPN prefix to be received from a peer.

When configured to **false**, the ADD-PATH receive capability is not enabled.

Default	false
Introduced	16.0.R1
Platforms	All

### **send number**

Synopsis	Maximum paths per multicast IPv6 VPN prefix
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths mcast-vpn-ipv6 send number</b>
Tree	<b>send</b>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast IPv6 VPN prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.  When not configured, ADD-PATH send capability is not enabled for multicast IPv6 VPN routes.
Range	1 to 16
Introduced	16.0.R1
Platforms	All

### **mvpn-ipv4**

Synopsis	Enter the <b>mvpn-ipv4</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths mvpn-ipv4</b>
Tree	<b>mvpn-ipv4</b>
Introduced	16.0.R1
Platforms	All

### **receive boolean**

Synopsis	Receive multiple multicast VPN routes per IPv4 prefix
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths mvpn-ipv4 receive boolean</b>
Tree	<b>receive</b>
Description	When configured to <b>true</b> , this command allows multiple multicast VPN routes per IPv4 prefix to be received from a peer.

When configured to **false**, the ADD-PATH receive capability is not enabled.

Default	false
Introduced	16.0.R1
Platforms	All

### **send number**

Synopsis	Maximum paths per multicast VPN IPv4 prefix
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths mvpn-ipv4 send number</b>
Tree	<b>send</b>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast VPN IPv4 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.  When not configured, ADD-PATH send capability is not enabled for multicast VPN IPv4 routes.
Range	1 to 16
Introduced	16.0.R1
Platforms	All

### **mvpn-ipv6**

Synopsis	Enter the <b>mvpn-ipv6</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths mvpn-ipv6</b>
Tree	<b>mvpn-ipv6</b>
Introduced	16.0.R1
Platforms	All

### **receive boolean**

Synopsis	Receive multiple multicast VPN routes per IPv6 prefix
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths mvpn-ipv6 receive boolean</b>
Tree	<b>receive</b>
Description	When configured to <b>true</b> , this command allows multiple multicast VPN routes per IPv6 prefix to be received from a peer.

When configured to **false**, the ADD-PATH receive capability is not enabled.

Default	false
Introduced	16.0.R1
Platforms	All

### **send number**

Synopsis	Maximum paths per multicast VPN IPv6 prefix
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths mvpn-ipv6 send number</b>
Tree	<b>send</b>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast VPN IPv6 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.  When not configured, ADD-PATH send capability is not enabled for multicast VPN IPv6 routes.
Range	1 to 16
Introduced	16.0.R1
Platforms	All

### **vpn-ipv4**

Synopsis	Enter the <b>vpn-ipv4</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths vpn-ipv4</b>
Tree	<b>vpn-ipv4</b>
Introduced	16.0.R1
Platforms	All

### **receive boolean**

Synopsis	Receive multiple routes per VPN-IPv4 prefix
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths vpn-ipv4 receive boolean</b>
Tree	<b>receive</b>
Description	When configured to <b>true</b> , this command allows multiple VPN-IPv4 routes per prefix to be received from a peer.

	When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

### **send** (*number* | *keyword*)

Synopsis	Maximum paths per VPN-IPv4 prefix
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths vpn-ipv4 send</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>send</b>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv4 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.  When not configured, ADD-PATH send capability is not enabled for VPN-IPv4 routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

### **vpn-ipv6**

Synopsis	Enter the <b>vpn-ipv6</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths vpn-ipv6</b>
Tree	<b>vpn-ipv6</b>
Introduced	16.0.R1
Platforms	All

### **receive** *boolean*

Synopsis	Receive multiple routes per VPN-IPv6 prefix
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths vpn-ipv6 receive</b> <i>boolean</i>
Tree	<b>receive</b>



Description	When configured to <b>true</b> , this command allows multiple VPN-IPv6 routes per prefix to be received from a peer. When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

### **send** (*number* | *keyword*)

Synopsis	Maximum paths per VPN-IPv6 prefix
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths vpn-ipv6 send</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>send</b>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv6 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for VPN-IPv6 routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the BGP neighbor
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **advertise-inactive** *boolean*

Synopsis	Advertise an inactive BGP route to peers
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Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>advertise-inactive</b> <i>boolean</i>
Tree	<b>advertise-inactive</b>
Description	<p>When configured to <b>true</b>, this command allows an inactive BGP route to be advertised, even though it is not the most preferred route. The effect of the command on advertised unlabeled, labeled, and multicast IPv4 and IPv6 routes depends on several factors.</p> <ul style="list-style-type: none"> <li>• If the active route for the IP prefix is a BGP route, that route is advertised.</li> <li>• If the active route is a non-BGP route and there are valid inactive BGP routes to the same destination, the best valid inactive route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session.</li> <li>• If the active route is a non-BGP route and there are no valid BGP routes to the same destination, no route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session.</li> </ul> <p>When unconfigured, the command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, the advertisement of inactive BGP routes to other BGP peers is disabled.</p>
Introduced	16.0.R1
Platforms	All

### advertise-ipv6-next-hops

Synopsis	Enable the <b>advertise-ipv6-next-hops</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>advertise-ipv6-next-hops</b>
Tree	<b>advertise-ipv6-next-hops</b>
Description	<p>Commands in this context allow specified IP family routes to be advertised to IPv6 transport peers with a true IPv6 address when originated or when a configured or automatic next-hop-self action is applied.</p> <p>When unconfigured, command settings are inherited from a higher level BGP configuration.</p>
Introduced	16.0.R1
Platforms	All

### evpn *boolean*

Synopsis	Advertise EVPN route with IPv6 next-hop address
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>advertise-ipv6-next-hops evpn</b> <i>boolean</i>

Tree	<a href="#">evpn</a>
Description	When configured to <b>true</b> , EVPN routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. When configured to <b>false</b> , EVPN routes are advertised with IPv4 next-hop addresses to IPv6 transport peers.
Default	false
Introduced	19.5.R1
Platforms	All

### **ipv4 boolean**

Synopsis	Advertise IPv4 route with IPv6 next-hop address
Context	<b>configure router</b> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">advertise-ipv6-next-hops</a> <a href="#">ipv4 boolean</a>
Tree	<a href="#">ipv4</a>
Description	When configured to <b>true</b> , IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop. When configured to <b>false</b> , IPv4 routes are advertised with IPv4 next-hop addresses to IPv6 transport peers. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.
Default	false
Introduced	19.5.R1
Platforms	All

### **label-ipv4 boolean**

Synopsis	Advertise label IPv4 route with IPv6 next-hop address
Context	<b>configure router</b> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">advertise-ipv6-next-hops</a> <a href="#">label-ipv4 boolean</a>
Tree	<a href="#">label-ipv4</a>
Description	When configured to <b>true</b> , label IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop. When configured to <b>false</b> , label IPv4 routes are advertised with the system IPv4 address as the next hop to IPv6 transport peers. If the route matches a BGP export policy entry

that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.

Default	false
Introduced	16.0.R1
Platforms	All

### **label-ipv6** *boolean*

Synopsis	Advertise label IPv6 route with IPv6 next-hop address
Context	<b>configure</b> <i>router</i> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>advertise-ipv6-next-hops label-ipv6</b> <i>boolean</i>
Tree	<a href="#">label-ipv6</a>
Description	When configured to <b>true</b> , label IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers.  When configured to <b>false</b> , label IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.
Default	false
Introduced	16.0.R1
Platforms	All

### **vpn-ipv4** *boolean*

Synopsis	Advertise VPN IPv4 route with IPv6 next-hop address
Context	<b>configure</b> <i>router</i> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>advertise-ipv6-next-hops vpn-ipv4</b> <i>boolean</i>
Tree	<a href="#">vpn-ipv4</a>
Description	When configured to <b>true</b> , VPN IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.  When configured to <b>false</b> , VPN IPv4 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.
Default	false
Introduced	16.0.R1

Platforms All

### **vpn-ipv6** *boolean*

Synopsis Advertise VPN IPv6 route with IPv6 next-hop address

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**advertise-ipv6-next-hops** **vpn-ipv6** *boolean*

Tree [vpn-ipv6](#)

Description When configured to **true**, VPN IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers.  
When configured to **false**, VPN IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.

Default false

Introduced 16.0.R1

Platforms All

### **advertise-ldp-prefix** *boolean*

Synopsis Advertise active /32 LDP FEC prefixes to BGP peers

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**advertise-ldp-prefix** *boolean*

Tree [advertise-ldp-prefix](#)

Default false

Introduced 16.0.R1

Platforms All

### **aggregator-id-zero** *boolean*

Synopsis Set router ID in the BGP AGGREGATOR attribute to zero

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**aggregator-id-zero** *boolean*

Tree [aggregator-id-zero](#)

Introduced 16.0.R1

Platforms All

**aigp boolean**

Synopsis	Add AIGP attribute to advertised routes
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>aigp boolean</b>
Tree	<b>aigp</b>
Description	<p>When configured to <b>true</b>, this command enables Accumulated IGP (AIGP) path attribute support with one or more BGP peers. BGP path selection among routes with an associated AIGP metric is based on the end-to-end IGP metrics of the different BGP paths, even when these BGP paths span more than one AS and IGP instance.</p> <p>When unconfigured, the command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, the AIGP attribute is removed from advertised routes, if present, and is ignored in received routes.</p>
Introduced	16.0.R1
Platforms	All

**as-override boolean**

Synopsis	Replace the peer's ASN with the local ASN in AS Path
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>as-override boolean</b>
Tree	<b>as-override</b>
Description	<p>When configured to <b>true</b>, the advertising router's local AS replaces all occurrences of the peer AS in the AS_PATH attribute.</p> <p>This command should be used with caution, as it breaks BGP's loop detection mechanism.</p> <p>When unconfigured, the command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). This command cannot be explicitly configured to <b>false</b>.</p> <p>When configured to <b>false</b>, no AS override is performed.</p>
Introduced	19.7.R1
Platforms	All

**asn-4-byte boolean**

Synopsis	Advertise the use of 4-byte ASNs
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>asn-4-byte boolean</b>
Tree	<b>asn-4-byte</b>

Introduced 16.0.R1  
 Platforms All

### **authentication-key** *string*

Synopsis BGP authentication key  
 Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**authentication-key** *string*  
 Tree **authentication-key**  
 String Length 1 to 370  
 Introduced 16.0.R1  
 Platforms All

### **authentication-keychain** *reference*

Synopsis TCP authentication keychain for the session  
 Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**authentication-keychain** *reference*  
 Tree **authentication-keychain**  
 Description This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session.  
 Reference **configure** **system** **security** **keychains** **keychain** *string*  
 Introduced 16.0.R3  
 Platforms All

### **bfd-liveness** *boolean*

Synopsis Enable BFD  
 Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**bfd-liveness** *boolean*  
 Tree **bfd-liveness**  
 Description When configured to **true**, BFD is enabled on a given protocol interface where the state of the protocol interface is tied to the state of the BFD session between the local node and the remote node.  
 When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, BFD is removed from the associated protocol adjacency.

Introduced 16.0.R1  
 Platforms All

### **block-prefix-sid** *boolean*

Synopsis Block the prefix SID attribute

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **block-prefix-sid** *boolean*

Tree **block-prefix-sid**

Description When configured to **true**, all prefix SID attributes are removed from all routes exchanged between EBGp and IBGP peers covered by the scope of the command. Locally-imposed prefix SID attributes are also removed.

When configured to **false**, all prefix SID attributes are propagated without restriction.

A change of this configuration causes the affected BGP sessions to flap.

Default false

Introduced 19.10.R1

Platforms All

### **capability-negotiation** *boolean*

Synopsis Enable capability negotiation

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **capability-negotiation** *boolean*

Tree **capability-negotiation**

Introduced 16.0.R1

Platforms All

### **client-reflect** *boolean*

Synopsis Allow cluster RR to advertise routes to its clients

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **client-reflect** *boolean*

Tree **client-reflect**

Introduced 16.0.R1

Platforms All



**cluster**

Synopsis	Enter the <b>cluster</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>cluster</b>
Tree	<b>cluster</b>
Introduced	16.0.R1
Platforms	All

**allow-local-fallback** *boolean*

Synopsis	Allow fallback to RR topology
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>cluster allow-local-fallback</b> <i>boolean</i>
Tree	<b>allow-local-fallback</b>
Description	When configured to <b>true</b> , this command allows the RR to advertise the best BGP path from its own topology location when there are no reachable routes from the client's ORR location. The ORR location must be specified before this command can be set to <b>true</b> . When configured to <b>false</b> , this command no route is advertised to the client.
Default	false
Introduced	16.0.R1
Platforms	All

**cluster-id** *string*

Synopsis	Route reflector cluster ID
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>cluster cluster-id</b> <i>string</i>
Tree	<b>cluster-id</b>
Introduced	16.0.R1
Platforms	All

**orr-location** *number*

Synopsis	Optimal route reflection location for the cluster
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>cluster orr-location</b> <i>number</i>

Tree	<a href="#">orr-location</a>
Description	This command configures an ORR location ID. If a cluster ID is also specified, the clients in that cluster receive routes optimal for that specific location.  With optimal route reflection, the best path advertised to a client takes location ID into account. If the tie-break for best path (or Add-Paths) comes down to next-hop IGP cost, the IGP costs will be calculated relative to the specified location. In the SR OS implementation, the IGP costs from arbitrary ORR locations are calculated using OSPF, OSPFv3, IS-IS, or BGP-LS information in the TE DB.
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **connect-retry** *number*

Synopsis	BGP connect retry timer value
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>connect-retry</b> <i>number</i>
Tree	<a href="#">connect-retry</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

### **damp-peer-oscillations**

Synopsis	Enable the <b>damp-peer-oscillations</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>damp-peer-oscillations</b>
Tree	<a href="#">damp-peer-oscillations</a>
Introduced	16.0.R1
Platforms	All

### **error-interval** *number*

Synopsis	Time after a reset that the session must be error-free
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>damp-peer-oscillations error-interval</b> <i>number</i>
Tree	<a href="#">error-interval</a>

Description	This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time.
Range	0 to 2048
Default	30
Introduced	16.0.R1
Platforms	All

### idle-hold-time

Synopsis	Enter the <b>idle-hold-time</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>damp-peer-oscillations</b> <b>idle-hold-time</b>
Tree	<b>idle-hold-time</b>
Introduced	16.0.R1
Platforms	All

### initial-wait number

Synopsis	Time session remains in idle state after stabilization
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>damp-peer-oscillations</b> <b>idle-hold-time</b> <b>initial-wait</b> <i>number</i>
Tree	<b>initial-wait</b>
Range	0 to 2048
Default	0
Introduced	16.0.R1
Platforms	All

### max-wait number

Synopsis	Maximum session idle time after repeated instability
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>damp-peer-oscillations</b> <b>idle-hold-time</b> <b>max-wait</b> <i>number</i>
Tree	<b>max-wait</b>
Range	1 to 2048
Default	60

Introduced	16.0.R1
Platforms	All

**second-wait** *number*

Synopsis	Time that doubles after each repeated session failure
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>damp-peer-oscillations</b> <b>idle-hold-time</b> <b>second-wait</b> <i>number</i>
Tree	<b>second-wait</b>
Description	This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time.
Range	1 to 2048
Default	5
Introduced	16.0.R1
Platforms	All

**damping** *boolean*

Synopsis	Use BGP route damping to reduce route flap
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>damping</b> <i>boolean</i>
Tree	<b>damping</b>
Introduced	16.0.R1
Platforms	All

**def-recv-evpn-encap** *keyword*

Synopsis	Default EVPN encapsulation type
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>def-recv-evpn-encap</b> <i>keyword</i>
Tree	<b>def-recv-evpn-encap</b>
Description	This command specifies the encapsulation type that BGP uses when an EVPN route is received without the Encapsulation Extended Community.  When unconfigured, the setting for this command is inherited from the BGP group-level configuration.
Options	mpls, vxlan
Introduced	16.0.R1

Platforms All

### default-label-preference

Synopsis Enter the **default-label-preference** context

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**default-label-preference**

Tree **default-label-preference**

Introduced 19.5.R1

Platforms All

### ebgp number

Synopsis Default preference for EBGp

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**default-label-preference** **ebgp** *number*

Tree **ebgp**

Range 0 to 255

Introduced 19.5.R1

Platforms All

### ibgp number

Synopsis Default preference for IBGP

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**default-label-preference** **ibgp** *number*

Tree **ibgp**

Range 0 to 255

Introduced 19.5.R1

Platforms All

### default-preference

Synopsis Enter the **default-preference** context

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**default-preference**

Tree **default-preference**

Introduced	19.5.R1
Platforms	All

### **ebgp number**

Synopsis	Default preference for EBGP
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>default-preference ebgp</b> <i>number</i>
Tree	<b>ebgp</b>
Range	0 to 255
Introduced	19.5.R1
Platforms	All

### **ibgp number**

Synopsis	Default preference for IBGP
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>default-preference ibgp</b> <i>number</i>
Tree	<b>ibgp</b>
Range	0 to 255
Introduced	19.5.R1
Platforms	All

### **default-route-target boolean**

Synopsis	Send default RTC route (zero prefix length) to peers
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>default-route-target</b> <i>boolean</i>
Tree	<b>default-route-target</b>
Description	When configured to <b>true</b> , this command sends the default RTC route (zero prefix length) toward the selected peers.  When unconfigured, the command inherits the value of the group-level setting ( <b>true</b> or <b>false</b> ). The command cannot be explicitly configured to <b>false</b> .  When this command inherits a value of <b>false</b> , a default RTC route is not sent.
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **ebgp-default-reject-policy**

Synopsis	Enable the <b>ebgp-default-reject-policy</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>ebgp-default-reject-policy</b>
Tree	<b>ebgp-default-reject-policy</b>
Introduced	19.5.R1
Platforms	All

### **export** *boolean*

Synopsis	Enable default reject export policy for external peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>ebgp-default-reject-policy export</b> <i>boolean</i>
Tree	<b>export</b>
Default	true
Introduced	19.5.R1
Platforms	All

### **import** *boolean*

Synopsis	Enable default reject import policy for external peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>ebgp-default-reject-policy import</b> <i>boolean</i>
Tree	<b>import</b>
Default	true

Introduced	19.5.R1
Platforms	All

## egress-engineering

Synopsis	Enable the <b>egress-engineering</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>egress-engineering</b>
Tree	<b>egress-engineering</b>
Introduced	21.7.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of BGP egress engineering
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>egress-engineering admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Description	This command administratively enables or disables egress engineering for the BGP. If enabled, peer node SIDs and peer adjacency SIDs are advertised in BGP-LS.
Options	enable, disable
Default	disable
Introduced	21.7.R1
Platforms	All

## egress-peer-engineering-label-unicast *boolean*

Synopsis	Generate EPE label-unicast routes for neighbor
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>egress-peer-engineering-label-unicast</b> <i>boolean</i>
Tree	<b>egress-peer-engineering-label-unicast</b>
Description	When configured to <b>true</b> , BGP generates a label-unicast route for the /32 or /128 prefix that corresponds to the BGP neighbor address. This route can be advertised to other routers to recursively resolve unlabeled BGP routes for AS external destinations. This supports the Egress Peer Engineering (EPE) use case.
Default	false
Introduced	22.2.R1



Platforms All

### **enforce-first-as** *boolean*

**Synopsis** Enforce the configured peer AS value in received routes

**Context** **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **enforce-first-as** *boolean*

**Tree** [enforce-first-as](#)

**Description** When configured to **true** for an EBGP session, all routes received from an EBGP peer are checked to ensure that the most recent ASN in the AS\_PATH attribute of each route matches the configured AS of the session. If there is not a match, the session is reset (if the **update-fault-tolerance** command in the **error-handling** context is set to **false**) or the session is left up but the route is treated as withdrawn (if **update-fault-tolerance** is set to **true**).

This command does not flap an established session because it applies only to routes received after the command is issued.

When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, received routes are not checked for compliance with the rule.

**Introduced** 16.0.R1

**Platforms** All

### **error-handling**

**Synopsis** Enter the **error-handling** context

**Context** **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **error-handling**

**Tree** [error-handling](#)

**Introduced** 16.0.R1

**Platforms** All

### **update-fault-tolerance** *boolean*

**Synopsis** Tolerate non-critical errors in UPDATE messages

**Context** **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **error-handling update-fault-tolerance** *boolean*

**Tree** [update-fault-tolerance](#)

Description	<p>When configured to <b>true</b>, non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset.</p> <p>When unconfigured, the command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, all errors trigger a session reset.</p>
Introduced	16.0.R1
Platforms	All

## export

Synopsis	Enable the <b>export</b> context
Context	<b>configure router string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>export</b>
Tree	<b>export</b>
Description	<p>Commands in this context specify route policies that control the handling of outbound routes transmitted to certain peers. Route policies are configured in the <b>configure policy-options</b> context.</p> <p>When this context is unconfigured, the policy association for the group is inherited from the BGP global-level configuration.</p>
Introduced	16.0.R1
Platforms	All

## policy (*policy-expr-string | string*)

Synopsis	BGP export policy name
Context	<b>configure router string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>export policy</b> ( <i>policy-expr-string   string</i> )
Tree	<b>policy</b>
Description	<p>This command specifies route policies that control the handling of outbound routes transmitted to certain peers.</p> <p>Each object in this command is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified order to determine the modifications of each route and the final action to accept or reject the route.</p> <p>Only one of the objects referenced by the command can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).</p> <p>Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@", "start@variable@end", "@variable@end", or "start@variable@".</p>

String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### extended-nh-encoding

Synopsis	Enable the <b>extended-nh-encoding</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>extended-nh-encoding</b>
Tree	<b>extended-nh-encoding</b>
Description	<p>Commands in this context specify the address families enabled to advertise the capability to receive label IPv4 routes, VPN IPv4 routes, or IPv6 next hops from peers. The peers should not send such routes unless notification has been received of this capability. If the router receives an enabled address family route from a peer to which it did not advertise the necessary capability, the UPDATE message will be considered malformed. This causes either a session reset or treat-as-withdraw behavior depending on the error handling settings.</p> <p>When the context is unconfigured, command settings are inherited from the higher level BGP configuration.</p>
Introduced	16.0.R1
Platforms	All

### ipv4 boolean

Synopsis	Advertise encoding capability for IPv4 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>extended-nh-encoding</b> <b>ipv4 boolean</b>
Tree	<b>ipv4</b>
Default	false
Introduced	19.5.R1
Platforms	All

### label-ipv4 *boolean*

Synopsis	Advertise encoding capability for label-IPv4 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>extended-nh-encoding</b> <b>label-ipv4</b> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### vpn-ipv4 *boolean*

Synopsis	Advertise encoding capability for VPN-IPv4 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>extended-nh-encoding</b> <b>vpn-ipv4</b> <i>boolean</i>
Tree	<a href="#">vpn-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### family

Synopsis	Enable the <b>family</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family</b>
Tree	<a href="#">family</a>
Introduced	16.0.R1
Platforms	All

### bgp-ls *boolean*

Synopsis	Advertise MP-BGP support for the BGP-LS address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family</b> <b>bgp-ls</b> <i>boolean</i>
Tree	<a href="#">bgp-ls</a>
Default	false
Introduced	16.0.R1

Platforms All

### **evpn** *boolean*

Synopsis Advertise MP-BGP support for the EVPN address family

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**family evpn** *boolean*

Tree **evpn**

Default false

Introduced 16.0.R1

Platforms All

### **flow-ipv4** *boolean*

Synopsis Advertise support for the flowspec-IPv4 address family

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**family flow-ipv4** *boolean*

Tree **flow-ipv4**

Default false

Introduced 16.0.R1

Platforms All

### **flow-ipv6** *boolean*

Synopsis Advertise support for the flowspec-IPv6 address family

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**family flow-ipv6** *boolean*

Tree **flow-ipv6**

Default false

Introduced 16.0.R1

Platforms All

### **flow-vpn-ipv4** *boolean*

Synopsis Advertise support for FlowSpec-VPN IPv4 address family

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**family flow-vpn-ipv4** *boolean*

Tree	<a href="#">flow-vpn-ipv4</a>
Default	false
Introduced	22.7.R1
Platforms	All

### **flow-vpn-ipv6** *boolean*

Synopsis	Advertise support for FlowSpec-VPN IPv6 address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family</b> <a href="#">flow-vpn-ipv6</a> <i>boolean</i>
Tree	<a href="#">flow-vpn-ipv6</a>
Default	false
Introduced	22.7.R1
Platforms	All

### **ipv4** *boolean*

Synopsis	Add support for the IPv4 address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family</b> <a href="#">ipv4</a> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **ipv6** *boolean*

Synopsis	Advertise MP-BGP support for the IPv6 address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family</b> <a href="#">ipv6</a> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

## ***l2-vpn boolean***

Synopsis	Advertise MP-BGP support for the L2-VPN address family
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family l2-vpn boolean</b>
Tree	<a href="#">l2-vpn</a>
Default	false
Introduced	16.0.R1
Platforms	All

## ***label-ipv4 boolean***

Synopsis	Advertise support for the label-IPv4 address family
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family label-ipv4 boolean</b>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

## ***label-ipv6 boolean***

Synopsis	Advertise support for the label-IPv6 address family
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family label-ipv6 boolean</b>
Tree	<a href="#">label-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

## ***mcast-ipv4 boolean***

Synopsis	Advertise support for the MCAST-IPv4 address family
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family mcast-ipv4 boolean</b>
Tree	<a href="#">mcast-ipv4</a>
Default	false

Introduced 16.0.R1  
Platforms All

### **mcast-ipv6** *boolean*

Synopsis Advertise support for the MCAST-IPv6 address family  
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**family mcast-ipv6** *boolean*  
Tree [mcast-ipv6](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **mcast-vpn-ipv4** *boolean*

Synopsis Advertise support for the IPv4 VPN MCAST address family  
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**family mcast-vpn-ipv4** *boolean*  
Tree [mcast-vpn-ipv4](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **mcast-vpn-ipv6** *boolean*

Synopsis Advertise support for the IPv6 VPN MCAST address family  
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**family mcast-vpn-ipv6** *boolean*  
Tree [mcast-vpn-ipv6](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **mdt-safi** *boolean*

Synopsis Advertise MP-BGP support for MDT-SAFI address family



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Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family</b> <b>mdt-safi</b> <i>boolean</i>
Tree	<b>mdt-safi</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **ms-pw** *boolean*

Synopsis	Advertise support for multi-segment PW address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family</b> <b>ms-pw</b> <i>boolean</i>
Tree	<b>ms-pw</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **mvpn-ipv4** *boolean*

Synopsis	Advertise support for the IPv4 MCAST VPN address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family</b> <b>mvpn-ipv4</b> <i>boolean</i>
Tree	<b>mvpn-ipv4</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **mvpn-ipv6** *boolean*

Synopsis	Advertise support for the IPv6 MCAST VPN address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family</b> <b>mvpn-ipv6</b> <i>boolean</i>
Tree	<b>mvpn-ipv6</b>
Default	false
Introduced	16.0.R1
Platforms	All

**route-target** *boolean*

Synopsis	Advertise MP-BGP support for RT constraint routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family route-target</b> <i>boolean</i>
Tree	<b>route-target</b>
Default	false
Introduced	16.0.R1
Platforms	All

**sr-policy-ipv4** *boolean*

Synopsis	Advertise MP-BGP support for the SR-policy-IPv4 family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family sr-policy-ipv4</b> <i>boolean</i>
Tree	<b>sr-policy-ipv4</b>
Description	This command allows the router to advertise the capability for AF11/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv4 destination.
Default	false
Introduced	16.0.R1
Platforms	All

**sr-policy-ipv6** *boolean*

Synopsis	Advertise MP-BGP support for the SR-policy-IPv6 family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family sr-policy-ipv6</b> <i>boolean</i>
Tree	<b>sr-policy-ipv6</b>
Description	This command allows the router to advertise the capability for AF12/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv6 destination.
Default	false
Introduced	19.10.R1
Platforms	All

**vpn-ipv4** *boolean*

Synopsis	Advertise MP-BGP support for IPv4 VPN address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family</b> <b>vpn-ipv4</b> <i>boolean</i>
Tree	<b>vpn-ipv4</b>
Default	false
Introduced	16.0.R1
Platforms	All

**vpn-ipv6** *boolean*

Synopsis	Advertise MP-BGP support for IPv6 VPN address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family</b> <b>vpn-ipv6</b> <i>boolean</i>
Tree	<b>vpn-ipv6</b>
Default	false
Introduced	16.0.R1
Platforms	All

**fast-external-failover** *boolean*

Synopsis	Drop external BGP session immediately when link fails
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>fast-external-failover</b> <i>boolean</i>
Tree	<b>fast-external-failover</b>
Description	When this command inherits a value of <b>true</b> , the router drops an external BGP session on a single-hop route immediately when the local interface goes down.  When unconfigured, the command inherits the value of the group-level setting ( <b>true</b> or <b>false</b> ). The command cannot be explicitly configured to <b>true</b> .  When configured to <b>false</b> , the BGP session remains up until the hold time expires.
Introduced	16.0.R1
Platforms	All

**graceful-restart**

Synopsis	Enable the <b>graceful-restart</b> context
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Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart</b>
Tree	<b>graceful-restart</b>
Description	Commands in this context configure BGP graceful restart helper procedures for address families included in the GR capabilities of both peers.  When this context is unconfigured, the command settings are inherited from the BGP group-level configuration.
Introduced	16.0.R1
Platforms	All

### **gr-notification** *boolean*

Synopsis	Perform graceful restart procedures after NOTIFICATION
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart gr-notification</b> <i>boolean</i>
Tree	<b>gr-notification</b>
Description	When configured to <b>true</b> , the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error.  When configured to <b>false</b> , NOTIFICATION messages are not supported.
Default	false
Introduced	16.0.R1
Platforms	All

### **long-lived**

Synopsis	Enable the <b>long-lived</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart long-lived</b>
Tree	<b>long-lived</b>
Description	Commands in this context configure the BGP Long-Lived Graceful-Restart (LLGR) procedures.  LLGR, known informally as BGP persistence, is an extension of BGP GR that allows a session to stay down for a longer period of time. During this time, learned routes are marked and re-advertised as stale but they can continue to be used as routes of last resort.  The LLGR handling of a session failure can be invoked immediately or it can be delayed until the end of the traditional GR restart window.

Introduced 16.0.R1  
 Platforms All

### **advertise-stale-to-all-neighbors** *boolean*

Synopsis Advertise stale routes to all BGP peers  
 Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
*graceful-restart long-lived advertise-stale-to-all-neighbors* *boolean*  
 Tree [advertise-stale-to-all-neighbors](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **advertised-stale-time** *number*

Synopsis Advertised long-lived stale time for LLGR routes  
 Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
*graceful-restart long-lived advertised-stale-time* *number*  
 Tree [advertised-stale-time](#)  
 Range 0 to 16777215  
 Default 86400  
 Introduced 16.0.R1  
 Platforms All

### **family** [[family-type](#)] *keyword*

Synopsis Enter the **family** list instance  
 Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
*graceful-restart long-lived family* *keyword*  
 Tree [family](#)  
 Introduced 16.0.R1  
 Platforms All

### **[family-type]** *keyword*

Synopsis Family type for family-specific LLGR configuration

Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart long-lived family</b> <i>keyword</i>
Tree	<b>family</b>
Options	ipv4, vpn-ipv4, ipv6, vpn-ipv6, l2-vpn, flow-ipv4, route-target, flow-ipv6, label-ipv4, label-ipv6, flow-vpn-ipv4, flow-vpn-ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **advertised-stale-time** *number*

Synopsis	LLGR stale routes time for family override
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart long-lived family</b> <i>keyword</i> <b>advertised-stale-time</b> <i>number</i>
Tree	<b>advertised-stale-time</b>
Description	This command configures the long-lived stale routes time that is advertised by the router in its LLGR capability.  This command applies to all AFI/SAFI in the advertised LLGR capability with a family-specific override.
Range	0 to 16777215
Default	86400
Introduced	16.0.R1
Platforms	All

### **helper-override-stale-time** *number*

Synopsis	Locally-configured stale routes override time
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart long-lived family</b> <i>keyword</i> <b>helper-override-stale-time</b> <i>number</i>
Tree	<b>helper-override-stale-time</b>
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This is a family-specific override value.
Range	0 to 16777216
Default	16777216
Introduced	16.0.R1
Platforms	All

**forwarding-bits-set** *keyword*

Synopsis	BGP LLGR forwarding-bit behavior for address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart long-lived forwarding-bits-set</b> <i>keyword</i>
Tree	<b>forwarding-bits-set</b>
Description	<p>This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family.</p> <p>This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).</p>
Options	none, all, non-fwd
Default	none
Introduced	16.0.R1
Platforms	All

**helper-override-restart-time** *number*

Synopsis	Locally-configured override for restart time
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart long-lived helper-override-restart-time</b> <i>number</i>
Tree	<b>helper-override-restart-time</b>
Description	<p>This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI.</p>
Range	0 to 4095
Introduced	16.0.R1
Platforms	All

**helper-override-stale-time** *number*

Synopsis	Locally-configured stale routes override time
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart long-lived helper-override-stale-time</b> <i>number</i>

Tree	<a href="#">helper-override-stale-time</a>
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability.  This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override.
Range	0 to 16777215
Introduced	16.0.R1
Platforms	All

### **without-no-export** *boolean*

Synopsis	Advertise LLGR stale routes to non-LLGR peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart long-lived without-no-export</b> <i>boolean</i>
Tree	<a href="#">without-no-export</a>
Description	When configured to <b>true</b> , LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0.  When configured to <b>false</b> , LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0 and a NO_EXPORT standard community is automatically added to the routes.
Default	false
Introduced	16.0.R1
Platforms	All

### **restart-time** *number*

Synopsis	Restart time advertised by GR capability
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart restart-time</b> <i>number</i>
Tree	<a href="#">restart-time</a>
Range	0 to 4095
Default	300
Introduced	16.0.R1
Platforms	All



**stale-routes-time** *number*

Synopsis	Maximum time to maintain routes after graceful restart
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart</b> <b>stale-routes-time</b> <i>number</i>
Tree	<b>stale-routes-time</b>
Range	1 to 3600
Default	360
Introduced	16.0.R1
Platforms	All

**group** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	BGP peer group
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>group</b> <i>reference</i>
Tree	<b>group</b>
Reference	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**hold-time**

Synopsis	Enter the <b>hold-time</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>hold-time</b>
Tree	<b>hold-time</b>
Introduced	16.0.R1
Platforms	All

**minimum-hold-time** *number*

Synopsis	Minimum time BGP waits between successive messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>hold-time</b> <b>minimum-hold-time</b> <i>number</i>
Tree	<b>minimum-hold-time</b>
Range	0   3 to 65536
Default	0
Introduced	16.0.R1
Platforms	All

**seconds** *number*

Synopsis	Maximum hold time between successive messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>hold-time</b> <b>seconds</b> <i>number</i>
Tree	<b>seconds</b>
Description	<p>The BGP hold time specifies the maximum time BGP waits between successive messages (either keepalive or update) from its peer, before closing the connection.</p> <p>Even though the implementation allows setting the keepalive timer at the BGP neighbor level times separately, the configured keepalive timer is overridden by this value under the following circumstances:</p> <ul style="list-style-type: none"> <li>• If the specified hold time is less than the configured keepalive time, then the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed.</li> <li>• If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. This means that the connection with the peer is up permanently and no keepalive packets are sent to the peer.</li> </ul> <p>When unconfigured, the command setting is inherited from the BGP group-level configuration.</p>
Range	0   3 to 65535
Introduced	16.0.R1
Platforms	All

**import**

Synopsis	Enable the <b>import</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>import</b>

Tree	<a href="#">import</a>
Description	<p>Commands in this context specify route policies that control the handling of inbound routes received from certain peers. Route policies are configured in the <b>configure policy-options</b> context.</p> <p>When this context is unconfigured, the policy association is inherited from the BGP group-level configuration.</p>
Introduced	16.0.R1
Platforms	All

### **policy** (*policy-expr-string* | *string*)

Synopsis	Names of the BGP import policies
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">import policy</a> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<a href="#">policy</a>
Description	<p>This command specifies route policies that control the handling of inbound routes received from certain peers.</p> <p>Each object in this command is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified order to determine the modifications of each route and the final action to accept or reject the route.</p> <p>Only one of the objects referenced by the command can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).</p> <p>Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@," "start@variable@end"," @variable@end", or"start@variable@".</p>
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **initial-send-delay-zero** *boolean*

Synopsis	Send BGP updates as soon as the session comes up
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">initial-send-delay-zero</a> <i>boolean</i>

Tree	<a href="#">initial-send-delay-zero</a>
Description	When configured to <b>true</b> , BGP updates are sent as soon as the session comes up. When unconfigured, the command inherits the value of the group-level setting ( <b>true</b> or <b>false</b> ). The command cannot be explicitly configured to <b>false</b> . When this command inherits a value of <b>false</b> , BGP waits to send UPDATE messages for the minimum route advertisement time after a session is established.
Introduced	16.0.R1
Platforms	All

### **keepalive** *number*

Synopsis	Time after which the BGP KEEPALIVE message is sent
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>keepalive</b> <i>number</i>
Tree	<a href="#">keepalive</a>
Range	0 to 21845
Introduced	16.0.R1
Platforms	All

### **l2vpn-cisco-interop** *boolean*

Synopsis	Allow translation from Cisco non-compliant NLRI format
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>l2vpn-cisco-interop</b> <i>boolean</i>
Tree	<a href="#">l2vpn-cisco-interop</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **label-preference** *number*

Synopsis	Route preference for routes from labeled-unicast peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>label-preference</b> <i>number</i>
Tree	<a href="#">label-preference</a>
Range	1 to 255
Introduced	16.0.R1

Platforms All

## link-bandwidth

Synopsis Enter the **link-bandwidth** context

Context **configure router string bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*)  
**link-bandwidth**

Tree **link-bandwidth**

Introduced 16.0.R3

Platforms All

## accept-from-ebgp

Synopsis Enable the **accept-from-ebgp** context

Context **configure router string bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*)  
**link-bandwidth accept-from-ebgp**

Tree **accept-from-ebgp**

Introduced 16.0.R4

Platforms All

## ipv4 boolean

Synopsis Support Link Bandwidth EC in IPv4 routes

Context **configure router string bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*)  
**link-bandwidth accept-from-ebgp ipv4 boolean**

Tree **ipv4**

Default false

Introduced 16.0.R4

Platforms All

## ipv6 boolean

Synopsis Support Link Bandwidth EC in IPv6 routes

Context **configure router string bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*)  
**link-bandwidth accept-from-ebgp ipv6 boolean**

Tree **ipv6**

Default false

Introduced 16.0.R4  
Platforms All

### **label-ipv4** *boolean*

Synopsis Support Link Bandwidth EC in label-IPv4 routes  
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
*link-bandwidth accept-from-ebgp label-ipv4 boolean*  
Tree [label-ipv4](#)  
Default false  
Introduced 16.0.R4  
Platforms All

### **label-ipv6** *boolean*

Synopsis Support Link Bandwidth EC in label-IPv6 routes  
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
*link-bandwidth accept-from-ebgp label-ipv6 boolean*  
Tree [label-ipv6](#)  
Default false  
Introduced 16.0.R4  
Platforms All

### **vpn-ipv4** *boolean*

Synopsis Support Link Bandwidth EC in VPN-IPv4 routes  
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
*link-bandwidth accept-from-ebgp vpn-ipv4 boolean*  
Tree [vpn-ipv4](#)  
Default false  
Introduced 16.0.R4  
Platforms All

### **vpn-ipv6** *boolean*

Synopsis Support Link Bandwidth EC in VPN-IPv6 routes

Context	<b>configure</b> <i>router string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>link-bandwidth accept-from-ebgp vpn-ipv6 boolean</b>
Tree	<b>vpn-ipv6</b>
Default	false
Introduced	16.0.R4
Platforms	All

### **add-to-received-ebgp**

Synopsis	Enable the <b>add-to-received-ebgp</b> context
Context	<b>configure</b> <i>router string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>link-bandwidth add-to-received-ebgp</b>
Tree	<b>add-to-received-ebgp</b>
Introduced	16.0.R3
Platforms	All

### **ipv4 boolean**

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	<b>configure</b> <i>router string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>link-bandwidth add-to-received-ebgp ipv4 boolean</b>
Tree	<b>ipv4</b>
Default	false
Introduced	16.0.R3
Platforms	All

### **ipv6 boolean**

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	<b>configure</b> <i>router string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>link-bandwidth add-to-received-ebgp ipv6 boolean</b>
Tree	<b>ipv6</b>
Default	false
Introduced	16.0.R3
Platforms	All

### **label-ipv4** *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth add-to-received-ebgp label-ipv4</b> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R3
Platforms	All

### **label-ipv6** *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth add-to-received-ebgp label-ipv6</b> <i>boolean</i>
Tree	<a href="#">label-ipv6</a>
Default	false
Introduced	16.0.R3
Platforms	All

### **vpn-ipv4** *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth add-to-received-ebgp vpn-ipv4</b> <i>boolean</i>
Tree	<a href="#">vpn-ipv4</a>
Default	false
Introduced	16.0.R3
Platforms	All

### **vpn-ipv6** *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth add-to-received-ebgp vpn-ipv6</b> <i>boolean</i>
Tree	<a href="#">vpn-ipv6</a>
Default	false



Introduced 16.0.R3  
 Platforms All

### aggregate-used-paths

Synopsis Enable the **aggregate-used-paths** context  
 Context **configure** *router string* **bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*)  
[link-bandwidth aggregate-used-paths](#)  
 Tree [aggregate-used-paths](#)  
 Introduced 16.0.R4  
 Platforms All

### ipv4 *boolean*

Synopsis Support Link Bandwidth EC in IPv4 routes  
 Context **configure** *router string* **bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*)  
[link-bandwidth aggregate-used-paths ipv4 boolean](#)  
 Tree [ipv4](#)  
 Default false  
 Introduced 16.0.R4  
 Platforms All

### ipv6 *boolean*

Synopsis Support Link Bandwidth EC in IPv6 routes  
 Context **configure** *router string* **bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*)  
[link-bandwidth aggregate-used-paths ipv6 boolean](#)  
 Tree [ipv6](#)  
 Default false  
 Introduced 16.0.R4  
 Platforms All

### label-ipv4 *boolean*

Synopsis Support Link Bandwidth EC in label-IPv4 routes  
 Context **configure** *router string* **bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*)  
[link-bandwidth aggregate-used-paths label-ipv4 boolean](#)

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Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **label-ipv6** *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth aggregate-used-paths</b> <b>label-ipv6</b> <i>boolean</i>
Tree	<a href="#">label-ipv6</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **vpn-ipv4** *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth aggregate-used-paths</b> <b>vpn-ipv4</b> <i>boolean</i>
Tree	<a href="#">vpn-ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **vpn-ipv6** *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth aggregate-used-paths</b> <b>vpn-ipv6</b> <i>boolean</i>
Tree	<a href="#">vpn-ipv6</a>
Default	false
Introduced	16.0.R4
Platforms	All

## send-to-ebgp

Synopsis	Enable the <b>send-to-ebgp</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth send-to-ebgp</b>
Tree	<b>send-to-ebgp</b>
Introduced	16.0.R4
Platforms	All

## ipv4 boolean

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth send-to-ebgp ipv4 boolean</b>
Tree	<b>ipv4</b>
Default	false
Introduced	16.0.R4
Platforms	All

## ipv6 boolean

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth send-to-ebgp ipv6 boolean</b>
Tree	<b>ipv6</b>
Default	false
Introduced	16.0.R4
Platforms	All

## label-ipv4 boolean

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth send-to-ebgp label-ipv4 boolean</b>
Tree	<b>label-ipv4</b>
Default	false
Introduced	16.0.R4

Platforms All

### **label-ipv6** *boolean*

Synopsis Support Link Bandwidth EC in label-IPv6 routes

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**link-bandwidth send-to-ebgp label-ipv6** *boolean*

Tree [label-ipv6](#)

Default false

Introduced 16.0.R4

Platforms All

### **vpn-ipv4** *boolean*

Synopsis Support Link Bandwidth EC in VPN-IPv4 routes

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**link-bandwidth send-to-ebgp vpn-ipv4** *boolean*

Tree [vpn-ipv4](#)

Default false

Introduced 16.0.R4

Platforms All

### **vpn-ipv6** *boolean*

Synopsis Support Link Bandwidth EC in VPN-IPv6 routes

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**link-bandwidth send-to-ebgp vpn-ipv6** *boolean*

Tree [vpn-ipv6](#)

Default false

Introduced 16.0.R4

Platforms All

### **local-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *interface-name*)

Synopsis Local IP address used when communicating with BGP peers

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**local-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *interface-name*)

Tree	<a href="#">local-address</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

## local-as

Synopsis	Enter the <b>local-as</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">local-as</a>
Tree	<a href="#">local-as</a>
Introduced	16.0.R1
Platforms	All

## as-number *number*

Synopsis	Local (or virtual) BGP AS number
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">local-as</a> <a href="#">as-number</a> <i>number</i>
Tree	<a href="#">as-number</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

## prepend-global-as *boolean*

Synopsis	Prepend global ASN when advertising routes to BGP peer
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">local-as</a> <a href="#">prepend-global-as</a> <i>boolean</i>
Tree	<a href="#">prepend-global-as</a>
Description	When configured to <b>true</b> , the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer. When configured to <b>false</b> , the global ASN is not included in the AS_PATH attribute.
Default	true
Introduced	16.0.R1
Platforms	All

**private** *boolean*

Synopsis	Hide the local ASN in sent paths learned from peering
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>local-as private</b> <i>boolean</i>
Tree	<b>private</b>
Description	When configured to <b>true</b> , the local AS number is only advertised to peers that use the local ASN for establishing BGP peering sessions.  When configured to <b>false</b> , the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions.
Default	false
Introduced	16.0.R1
Platforms	All

**local-preference** *number*

Synopsis	Default local preference if not in incoming routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>local-preference</b> <i>number</i>
Tree	<b>local-preference</b>
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

**loop-detect** *keyword*

Synopsis	Strategy for loop detection in the AS path
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>loop-detect</b> <i>keyword</i>
Tree	<b>loop-detect</b>
Options	drop-peer, ignore-loop, off, discard-route
Introduced	16.0.R1
Platforms	All

**loop-detect-threshold** *number*

Synopsis	Threshold for the global ASN in a received AS path
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Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>loop-detect-threshold</b> <i>number</i>
Tree	<b>loop-detect-threshold</b>
Range	0 to 15
Introduced	16.0.R6
Platforms	All

### **med-out** (*number* | *keyword*)

Synopsis	Default MED attribute value to advertise to peers
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>med-out</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>med-out</b>
Max. Range	0 to 4294967295
Options	igp-cost
Introduced	16.0.R1
Platforms	All

### **min-route-advertisement** *number*

Synopsis	Minimum interval between successive prefix updates
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>min-route-advertisement</b> <i>number</i>
Tree	<b>min-route-advertisement</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **monitor**

Synopsis	Enable the <b>monitor</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>monitor</b>
Tree	<b>monitor</b>
Description	Commands in this context specify BMP-related configurations at the BGP neighbor level.

When this context is unconfigured, the command settings are inherited from the BGP group-level configuration.

Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of BMP monitoring
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>monitor admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **all-stations** *boolean*

Synopsis	Send BMP messages to all configured stations
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>monitor all-stations</b> <i>boolean</i>
Tree	<a href="#">all-stations</a>
Description	When configured to <b>true</b> , this command specifies that BMP messages are to be sent to all configured BMP monitoring stations.  When configured to <b>false</b> , the command is not used to indicate the stations which can receive BMP messages. The <b>station</b> command (at the same context level) identifies the BMP stations for which BMP messages are to be sent.
Default	false
Introduced	16.0.R1
Platforms	All

### **route-monitoring**

Synopsis	Enter the <b>route-monitoring</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>monitor route-monitoring</b>
Tree	<a href="#">route-monitoring</a>



Introduced	16.0.R1
Platforms	All

### **post-policy** *boolean*

Synopsis	Allow post-policy route-monitoring messages to be sent
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>monitor route-monitoring post-policy</b> <i>boolean</i>
Tree	<a href="#">post-policy</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **pre-policy** *boolean*

Synopsis	Allow pre-policy route-monitoring messages to be sent
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>monitor route-monitoring pre-policy</b> <i>boolean</i>
Tree	<a href="#">pre-policy</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **station** [[station-name](#)] *reference*

Synopsis	Add a list entry for <b>station</b>
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>monitor</b> <a href="#">station</a> <i>reference</i>
Tree	<a href="#">station</a>
Description	This command configures the set of BMP monitoring stations for which BMP messages are to be sent.
Max. Instances	8
Introduced	16.0.R1
Platforms	All

**[station-name] reference**

Synopsis	BMP monitoring station
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>monitor station reference</b>
Tree	<b>station</b>
Reference	<b>configure bmp station</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**multihop number**

Synopsis	TTL in IP packet headers for EBGP peers multi-hops away
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>multihop number</b>
Tree	<b>multihop</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

**multipath-eligible boolean**

Synopsis	Allow routes from this peer in multipath eligibility
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>multipath-eligible boolean</b>
Tree	<b>multipath-eligible</b>
Introduced	19.5.R1
Platforms	All

**next-hop-self boolean**

Synopsis	Advertise routes with local address as next-hop address
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>next-hop-self boolean</b>
Tree	<b>next-hop-self</b>

Description	<p>When configured to <b>true</b>, this command configures BGP to advertise routes to members of a group using a local address of the BGP instance as the BGP next-hop address.</p> <p>Note that this command is set without exception, regardless of the route source (EBGP or IBGP) or its family. When used with VPN-IPv4 and VPN-IPv6 routes, the <b>configure router bgp rr-vpn-forwarding</b> command should also be configured.</p> <p>When unconfigured, the command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, protocol standard behavior is applied to determine whether to set <b>next-hop-self</b> in advertised routes.</p>
Introduced	16.0.R1
Platforms	All

### next-hop-unchanged

Synopsis	Enable the <b>next-hop-unchanged</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>next-hop-unchanged</b>
Tree	<b>next-hop-unchanged</b>
Description	Commands in this context specify the IP address families where the next hop remains unchanged when sending BGP routes to peers of the neighbor.
Introduced	16.0.R1
Platforms	All

### evpn boolean

Synopsis	Advertise EVPN routes with unchanged BGP next hop
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>next-hop-unchanged evpn</b> <i>boolean</i>
Tree	<b>evpn</b>
Default	false
Introduced	20.2.R1
Platforms	All

### label-ipv4 boolean

Synopsis	Advertise label-IPv4 routes with unchanged BGP next hop
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>next-hop-unchanged label-ipv4</b> <i>boolean</i>

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Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **label-ipv6** *boolean*

Synopsis	Advertise label-IPv6 routes with unchanged BGP next hop
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>next-hop-unchanged</b> <b>label-ipv6</b> <i>boolean</i>
Tree	<a href="#">label-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **vpn-ipv4** *boolean*

Synopsis	Advertise VPN IPv4 routes with unchanged BGP next hop
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>next-hop-unchanged</b> <b>vpn-ipv4</b> <i>boolean</i>
Tree	<a href="#">vpn-ipv4</a>
Default	false
Introduced	20.2.R1
Platforms	All

### **vpn-ipv6** *boolean*

Synopsis	Advertise VPN IPv6 routes with unchanged BGP next hop
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>next-hop-unchanged</b> <b>vpn-ipv6</b> <i>boolean</i>
Tree	<a href="#">vpn-ipv6</a>
Default	false
Introduced	20.2.R1
Platforms	All

## origin-validation

Synopsis	Enable the <b>origin-validation</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>origin-validation</b>
Tree	<b>origin-validation</b>
Introduced	16.0.R1
Platforms	All

## ipv4 boolean

Synopsis	Enable support for unlabeled unicast IPv4 routes
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>origin-validation ipv4 boolean</b>
Tree	<b>ipv4</b>
Default	false
Introduced	16.0.R1
Platforms	All

## ipv6 boolean

Synopsis	Enable support for unlabeled unicast IPv6 routes
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>origin-validation ipv6 boolean</b>
Tree	<b>ipv6</b>
Default	false
Introduced	16.0.R1
Platforms	All

## label-ipv4 boolean

Synopsis	Enable support for labeled-unicast IPv4 routes
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>origin-validation label-ipv4 boolean</b>
Tree	<b>label-ipv4</b>
Default	false
Introduced	16.0.R1

Platforms All

### **label-ipv6** *boolean*

Synopsis Enable support for labeled-unicast IPv6 routes

Context **configure router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **origin-validation label-ipv6** *boolean*

Tree [label-ipv6](#)

Default false

Introduced 16.0.R1

Platforms All

### **outbound-route-filtering**

Synopsis Enable the **outbound-route-filtering** context

Context **configure router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **outbound-route-filtering**

Tree [outbound-route-filtering](#)

Description Commands in this context configure the send and receive capabilities for Outbound Route Filtering (ORF).  
When this context is unconfigured, the command settings are inherited from the BGP group-level configuration.

Introduced 16.0.R1

Platforms All

### **extended-community**

Synopsis Enable the **extended-community** context

Context **configure router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **outbound-route-filtering extended-community**

Tree [extended-community](#)

Description Commands in this context configure the ORF send and receive capabilities based on Extended Communities.  
When this context is unconfigured, the command settings are inherited from the group-level configuration.

Introduced 16.0.R1

Platforms All

**accept-orf** *boolean*

Synopsis	Negotiate with peer to accept BGP ORF filters
Context	<b>configure</b> <i>router string bgp neighbor (ipv4-address-with-zone   ipv6-address-with-zone) outbound-route-filtering extended-community accept-orf boolean</i>
Tree	<a href="#">accept-orf</a>
Description	<p>When configured to <b>true</b>, the receive capability in the BGP ORF is negotiated with a peer and ORF filters can be accepted from peers.</p> <p>When unconfigured, the command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, the accept capability in the BGP ORF is removed and any existing ORF filters that are currently in place are cleared.</p>
Introduced	16.0.R1
Platforms	All

**send-orf**

Synopsis	Enable the <b>send-orf</b> context
Context	<b>configure</b> <i>router string bgp neighbor (ipv4-address-with-zone   ipv6-address-with-zone) outbound-route-filtering extended-community send-orf</i>
Tree	<a href="#">send-orf</a>
Description	<p>Commands in this context allow BGP to negotiate the send capability in the ORF negotiation with a peer. The send capability also causes the router to send a community filter, prefix filter, or AS path filter configured as an inbound filter on the BGP session to its peer as an ORF Action ADD.</p> <p>When this context is unconfigured, the command settings are inherited from the BGP group-level configuration.</p>
Introduced	16.0.R1
Platforms	All

**route-target** [*community-name*] *string*

Synopsis	Add a list entry for <b>route-target</b>
Context	<b>configure</b> <i>router string bgp neighbor (ipv4-address-with-zone   ipv6-address-with-zone) outbound-route-filtering extended-community send-orf route-target string</i>
Tree	<a href="#">route-target</a>
Introduced	16.0.R1
Platforms	All

**[community-name] string**

Synopsis	Route target community name
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>outbound-route-filtering extended-community send-orf route-target</b> <i>string</i>
Tree	<b>route-target</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**passive boolean**

Synopsis	Use passive mode for BGP communication
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>passive</b> <i>boolean</i>
Tree	<b>passive</b>
Introduced	16.0.R1
Platforms	All

**path-mtu-discovery boolean**

Synopsis	Enable path MTU discovery
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>path-mtu-discovery</b> <i>boolean</i>
Tree	<b>path-mtu-discovery</b>

Description When configured to **true**, Path MTU Discovery (PMTUD) is enabled for the associated TCP connections.

When set to **true**, PMTUD is activated toward an IPv4 BGP neighbor and the Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, this device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value so that the IP MTU constraint can be accommodated.

When PMTUD is configured to **false** and there is no TCP MSS configuration that can be associated with a BGP neighbor (in either the BGP configuration or the first hop IP interface configuration), the router advertises a value of only 1024 bytes as the TCP MSS option value, limiting received TCP segments to that size.



Introduced	16.0.R1
Platforms	All

### **peer-as** *number*

Synopsis	Peer AS number
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>peer-as</b> <i>number</i>
Tree	<b>peer-as</b>
Description	This command configures the autonomous system number for the peer. The peer AS number must be configured for each configured peer.  For EBGp peers, the peer AS number configured must be different from the autonomous system number configured for this router under the global level since the peer will be in a different autonomous system than this router.  For IBGP peers, the peer AS number must be the same as the autonomous system number of this router configured under the global level.
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **peer-creation-type** *keyword*

Synopsis	Peer creation type
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>peer-creation-type</b> <i>keyword</i>
Tree	<b>peer-creation-type</b>
Options	static, dynamic, dynamic-if-remote, dynamic-if-local
Default	static
Introduced	16.0.R1
Platforms	All

### **peer-ip-tracking** *boolean*

Synopsis	Enable BGP peer tracking
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>peer-ip-tracking</b> <i>boolean</i>
Tree	<b>peer-ip-tracking</b>

Description	<p>When configured to <b>true</b>, this command enables BGP peer tracking.</p> <p>Peer tracking should be used with caution. Peer tracking can tear a session down even if the loss of connectivity turns out to be short-lived (for example, while the IGP protocol is re-converging). Next-hop tracking, which is always enabled, handles temporary connectivity issues more effectively.</p> <p>When unconfigured, the command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, peer tracking is disabled.</p>
Introduced	16.0.R1
Platforms	All

### **preference** *number*

Synopsis	Route preference for routes learned from all peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>preference</b> <i>number</i>
Tree	<b>preference</b>
Description	<p>This command configures the route preference for routes learned from the configured peers.</p> <p>The lower the preference value, the higher the chance of the route being the active route. The router assigns BGP routes the highest default preference as compared to routes that are direct, static or learned via MPLS or OSPF.</p> <p>When unconfigured, the command setting is inherited from the group-level configuration.</p>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **prefix-limit** [*family*] *keyword*

Synopsis	Enter the <b>prefix-limit</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>prefix-limit</b> <i>keyword</i>
Tree	<b>prefix-limit</b>
Introduced	16.0.R1
Platforms	All

**[family] keyword**

Synopsis	Address family to which the limit applies
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>prefix-limit</b> <i>keyword</i>
Tree	<b>prefix-limit</b>
Options	ipv4, vpn-ipv4, ipv6, mcast-ipv4, vpn-ipv6, l2-vpn, mvpn-ipv4, mdt-safi, ms-pw, flow-ipv4, route-target, mcast-vpn-ipv4, mvpn-ipv6, flow-ipv6, evpn, mcast-ipv6, label-ipv4, label-ipv6, bgp-ls, mcast-vpn-ipv6, sr-policy-ipv4, sr-policy-ipv6, flow-vpn-ipv4, flow-vpn-ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**idle-timeout number**

Synopsis	Time which BGP peering remains idle before reconnecting
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>prefix-limit</b> <i>keyword</i> <b>idle-timeout</b> <i>number</i>
Tree	<b>idle-timeout</b>
Description	This command defines the idle time after an administrative take-down before BGP re-establishes a session and reconnects to a peer.  When unconfigured, the command inherits the value from the group-level configuration.
Range	1 to 1024
Introduced	16.0.R1
Platforms	All

**log-only boolean**

Synopsis	Send warning message at threshold instead of take-down
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>prefix-limit</b> <i>keyword</i> <b>log-only</b> <i>boolean</i>
Tree	<b>log-only</b>
Default	false
Introduced	16.0.R1
Platforms	All

**maximum** *number*

Synopsis	Maximum number of routes to be learned from a peer
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>prefix-limit</b> <i>keyword</i> <b>maximum</b> <i>number</i>
Tree	<b>maximum</b>
Description	This command configures the maximum number of BGP routes than can be received from a peer before administrative action is taken.
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R2
Platforms	All

**post-import** *boolean*

Synopsis	Apply limit only to routes accepted by import policies
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>prefix-limit</b> <i>keyword</i> <b>post-import</b> <i>boolean</i>
Tree	<b>post-import</b>
Default	false
Introduced	16.0.R1
Platforms	All

**threshold** *number*

Synopsis	Percentage threshold that triggers a warning message
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>prefix-limit</b> <i>keyword</i> <b>threshold</b> <i>number</i>
Tree	<b>threshold</b>
Range	1 to 100
Default	90
Introduced	16.0.R1
Platforms	All

**remove-private**

Synopsis	Enable the <b>remove-private</b> context
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Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>remove-private</b>
Tree	<b>remove-private</b>
Introduced	16.0.R1
Platforms	All

**limited** *boolean*

Synopsis	Remove private ASNs up to first public ASN encountered
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>remove-private limited</b> <i>boolean</i>
Tree	<b>limited</b>
Default	false
Introduced	16.0.R1
Platforms	All

**replace** *boolean*

Synopsis	Replace private ASN with global ASN before advertising
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>remove-private replace</b> <i>boolean</i>
Tree	<b>replace</b>
Default	false
Introduced	19.10.R1
Platforms	All

**skip-peer-as** *boolean*

Synopsis	Keep private ASN if it is the same as the BGP peer ASN
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>remove-private skip-peer-as</b> <i>boolean</i>
Tree	<b>skip-peer-as</b>
Default	false
Introduced	16.0.R1
Platforms	All

## segment-routing-v6

Synopsis	Enable the <b>segment-routing-v6</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>segment-routing-v6</b>
Tree	<b>segment-routing-v6</b>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## route-advertisement

Synopsis	Enable the <b>route-advertisement</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>segment-routing-v6 route-advertisement</b>
Tree	<b>route-advertisement</b>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## drop-routes-with-srv6-tlvs *boolean*

Synopsis	Drop BGP routes with SRv6 TLVs
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>segment-routing-v6 route-advertisement drop-routes-with-srv6-tlvs</b> <i>boolean</i>
Tree	<b>drop-routes-with-srv6-tlvs</b>
Description	When configured to <b>true</b> , the router drops and does not advertise BGP routes (that belong to any address family) with SRv6 TLVs. When configured to <b>false</b> , the router advertises BGP routes with SRv6 TLVs.
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## family [*family-type*] *keyword*

Synopsis	Enter the <b>family</b> list instance
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>segment-routing-v6 route-advertisement family</b> <i>keyword</i>
Tree	<b>family</b>

Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **[family-type]** *keyword*

Synopsis	IP address type that SRv6 route attributes apply to
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>segment-routing-v6 route-advertisement family</b> <i>keyword</i>
Tree	<b>family</b>
Options	ipv4, ipv6
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **strip-srv6-tlvs** *boolean*

Synopsis	Strip SRv6 TLVs from BGP routes advertised to peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>segment-routing-v6 route-advertisement family</b> <i>keyword</i> <b>strip-srv6-tlvs</b> <i>boolean</i>
Tree	<b>strip-srv6-tlvs</b>
Description	When configured to <b>true</b> , BGP routes that belong to the address family specified using the <b>family</b> command are advertised to peers with SRv6 TLVs removed. Locally or remotely added SRv6 TLVs can be removed.  When configured to <b>false</b> , SRv6 TLVs are not stripped from BGP routes advertised to peers.
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **selective-label-ipv4-install** *boolean*

Synopsis	Enable selective download for BGP label-ipv4 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>selective-label-ipv4-install</b> <i>boolean</i>
Tree	<b>selective-label-ipv4-install</b>
Introduced	19.10.R1
Platforms	All

## send-communities

Synopsis	Enter the <b>send-communities</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>send-communities</b>
Tree	<b>send-communities</b>
Introduced	16.0.R1
Platforms	All

## extended *boolean*

Synopsis	Advertise the Extended Communities attribute to peers
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>send-communities extended</b> <i>boolean</i>
Tree	<b>extended</b>
Description	<p>When unconfigured, this command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>true</b>.</p> <p>When this command inherits a value of <b>true</b>, BGP extended communities are sent to peers in the Extended Communities attribute.</p> <p>When configured to <b>false</b>, all extended communities are removed from all routes advertised to BGP peers.</p>
Introduced	16.0.R1
Platforms	All

## large *boolean*

Synopsis	Advertise the Large Communities attribute to peers
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>send-communities large</b> <i>boolean</i>
Tree	<b>large</b>
Description	<p>When unconfigured, this command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>true</b>.</p> <p>When this command inherits a value of <b>true</b>, BGP large communities are sent to peers in the Large Communities attribute.</p> <p>When configured to <b>false</b>, all large communities are removed from all routes advertised to BGP peers.</p>
Introduced	16.0.R1
Platforms	All



**standard** *boolean*

Synopsis	Advertise the Communities attribute to peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>send-communities</b> <b>standard</b> <i>boolean</i>
Tree	<b>standard</b>
Description	When unconfigured, this command inherits the value of the group-level setting ( <b>true</b> or <b>false</b> ). The command cannot be explicitly configured to <b>true</b> .  When this command inherits a value of <b>true</b> , BGP standard communities are sent to peers in the Communities attribute.  When configured to <b>false</b> , all standard communities are removed from all routes advertised to BGP peers.
Introduced	16.0.R1
Platforms	All

**send-default**

Synopsis	Enable the <b>send-default</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>send-default</b>
Tree	<b>send-default</b>
Introduced	19.7.R1
Platforms	All

**export-policy** *reference*

Synopsis	Export policy name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>send-default</b> <b>export-policy</b> <i>reference</i>
Tree	<b>export-policy</b>
Reference	<b>configure</b> <b>policy-options</b> <b>policy-statement</b> <i>string</i>
Introduced	19.7.R1
Platforms	All

**ipv4** *boolean*

Synopsis	Enable IPv4 family type
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Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>send-default ipv4</b> <i>boolean</i>
Tree	<b>ipv4</b>
Default	false
Introduced	19.7.R1
Platforms	All

**ipv6** *boolean*

Synopsis	Enable IPv6 family type
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>send-default ipv6</b> <i>boolean</i>
Tree	<b>ipv6</b>
Default	false
Introduced	19.7.R1
Platforms	All

**split-horizon** *boolean*

Synopsis	Prevent routes being reflected back to best-route peer
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>split-horizon</b> <i>boolean</i>
Tree	<b>split-horizon</b>
Description	<p>When configured to <b>true</b>, this command enables the use of split-horizon.</p> <p>This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGP and IBGP.</p> <p>Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary.</p> <p>When unconfigured, the command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, the use of split-horizon is disabled.</p>
Introduced	16.0.R1
Platforms	All

**tcp-mss** (*number | keyword*)

Synopsis	TCP maximum segment size override
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>tcp-mss</b> ( <i>number   keyword</i> )
Tree	<b>tcp-mss</b>
Description	<p>This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command).</p> <p>The configured value controls two properties of the TCP connection as follows:</p> <p>TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router.</p> <p>TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.</p>
Range	384 to 9746
Options	ip-stack
Introduced	21.2.R1
Platforms	All

**third-party-nexthop** *boolean*

Synopsis	Apply third-party next-hop processing to EBGp peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>third-party-nexthop</b> <i>boolean</i>
Tree	<b>third-party-nexthop</b>
Introduced	16.0.R1
Platforms	All

**ttl-security** *number*

Synopsis	Minimum TTL value for an incoming BGP packet
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>ttl-security</b> <i>number</i>
Tree	<b>ttl-security</b>
Description	This command configures the minimum TTL value that BGP will accept from an incoming packet. A packet with a TTL value less than the minimum configured TTL value is discarded.

	When unconfigured, the command inherits the value of the group-level setting.
Range	1 to 255
Introduced	16.0.R1
Platforms	All

**type keyword**

Synopsis	BGP peer type
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>type keyword</b>
Tree	<b>type</b>
Options	no-type, internal, external
Introduced	16.0.R1
Platforms	All

**vpn-apply-export boolean**

Synopsis	Apply base-instance BGP export policies to VPN routes
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>vpn-apply-export boolean</b>
Tree	<b>vpn-apply-export</b>
Description	When configured to <b>true</b> , base-instance BGP export route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes. When unconfigured, the command inherits the value of the group-level setting ( <b>true</b> or <b>false</b> ). The command cannot be explicitly configured to <b>false</b> . When this command inherits a value of <b>false</b> , the export policies are not applied.
Introduced	16.0.R1
Platforms	All

**vpn-apply-import boolean**

Synopsis	Apply base-instance BGP import policies to VPN routes
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>vpn-apply-import boolean</b>
Tree	<b>vpn-apply-import</b>
Description	When configured to <b>true</b> , base-instance BGP import route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes.

When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the import policies are not applied.

Introduced 16.0.R1

Platforms All

## neighbor-trust

Synopsis Enter the **neighbor-trust** context

Context **configure** *router string* **bgp neighbor-trust**

Tree **neighbor-trust**

Description Commands in this context enable a label security feature at an inter-AS boundary for the specified IP families.

This label security feature allows the configuration of a router, acting in a PE or in an ASBR role, to accept packets of VPN-IP or EVPN prefixes only from direct EBGP neighbors to which it advertised a service label.

The untrusted state identifies the participating interfaces. The router supports a maximum of 15 network interfaces that can participate in this feature.

At a high level, BGP tracks each direct EBGP neighbor over an untrusted interface and to which it sent a prefix label. For each of those prefixes, BGP programs a bit map in the ILM record that indicates, on a per-untrusted interface basis, whether the matching received packets must be forwarded or dropped.

Introduced 16.0.R4

Platforms All

## vpn-ipv4 *boolean*

Synopsis Enable inter-AS label security for the VPN-IPv4 family

Context **configure** *router string* **bgp neighbor-trust vpn-ipv4 boolean**

Tree **vpn-ipv4**

Default false

Introduced 16.0.R4

Platforms All

## vpn-ipv6 *boolean*

Synopsis Enable inter-AS label security for the VPN-IPv6 family

Context **configure** *router string* **bgp neighbor-trust vpn-ipv6 boolean**

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Tree	<a href="#">vpn-ipv6</a>
Default	false
Introduced	16.0.R4
Platforms	All

## next-hop-resolution

Synopsis	Enter the <b>next-hop-resolution</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp next-hop-resolution</a>
Tree	<a href="#">next-hop-resolution</a>
Introduced	16.0.R1
Platforms	All

## allow-unresolved-leaking *boolean*

Synopsis	Allow unresolved BGP routes to be leaked to VPRN routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp next-hop-resolution allow-unresolved-leaking</a> <i>boolean</i>
Tree	<a href="#">allow-unresolved-leaking</a>
Description	When configured to <b>true</b> , this command instructs BGP in the base router instance to allow its routes to be leaked to other (VPRN) BGP instances even if the routes to be leaked do not have a BGP next-hop that can be resolved by the base instance. When configured to <b>false</b> , VPRN cannot import a route.
Default	false
Introduced	19.10.R1
Platforms	All

## labeled-routes

Synopsis	Enter the <b>labeled-routes</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp next-hop-resolution labeled-routes</a>
Tree	<a href="#">labeled-routes</a>
Introduced	16.0.R1
Platforms	All

**allow-static** *boolean*

Synopsis	Allow static routes to resolve BGP next-hop
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp next-hop-resolution labeled-routes allow-static</i> <i>boolean</i>
Tree	<a href="#">allow-static</a>
Description	<p>When configured to <b>true</b>, the BGP next-hop of label-IPv4, label-IPv6, VPN-IPv4, and VPN-IPv6 routes received from any EBGP or IBGP peer can be resolved using static routes, except for static default routes (0/0 and ::/0).</p> <p>A static route is less preferred than a local or interface route for resolving the BGP next-hop of labeled route but is more preferred than other IGP routes or tunnels.</p> <p>When configured to <b>false</b>, BGP next-hop resolution using static routes is not allowed.</p> <p>A label-IPv4 or label-IPv6 route can be resolved by a static blackhole route, even when this command is configured to <b>false</b>, but only if the static blackhole route is the longest prefix match (LPM) static route for the BGP next-hop address.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**rr-use-route-table** *boolean*

Synopsis	Use RTM to resolve BGP next-hop if TTM resolution fails
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp next-hop-resolution labeled-routes rr-use-route-table</i> <i>boolean</i>
Tree	<a href="#">rr-use-route-table</a>
Description	<p>When configured to <b>true</b>, this command enables BGP to perform a lookup of IGP routes in the route table to resolve the BGP next-hop of label-IPv4 and label-IPv6 routes. This is useful for a Route Reflector (RR) that does not participate in tunnel signaling protocols such as LDP and RSVP and therefore, does not have tunnels to resolve the BGP next-hops of label-unicast routes.</p> <p>Disable route table installation (via the <b>route-table-install</b> command) before setting this command to <b>true</b>; otherwise, forwarding of label routes resolved in this way will be incorrect.</p> <p>When configured to <b>false</b>, RTM next-hop resolution is not enabled.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**transport-tunnel**

Synopsis	Enter the <b>transport-tunnel</b> context
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">next-hop-resolution</a> <a href="#">labeled-routes</a> <a href="#">transport-tunnel</a>
Tree	<a href="#">transport-tunnel</a>
Description	Commands in this context configure options for the next-hop resolution of BGP labeled routes (VPN-IP and labeled-unicast) using tunnels in TTM.
Introduced	16.0.R1
Platforms	All

### **family** [[family-type](#)] *keyword*

Synopsis	Enter the <b>family</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">next-hop-resolution</a> <a href="#">labeled-routes</a> <a href="#">transport-tunnel</a> <a href="#">family</a> <i>keyword</i>
Tree	<a href="#">family</a>
Introduced	16.0.R1
Platforms	All

### **[family-type]** *keyword*

Synopsis	Address family type for tunnel selection
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">next-hop-resolution</a> <a href="#">labeled-routes</a> <a href="#">transport-tunnel</a> <a href="#">family</a> <i>keyword</i>
Tree	<a href="#">family</a>
Options	vpn, label-ipv4, label-ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **allow-flex-algo-fallback** *boolean*

Synopsis	Enable flexible algorithm fallback
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">next-hop-resolution</a> <a href="#">labeled-routes</a> <a href="#">transport-tunnel</a> <a href="#">family</a> <i>keyword</i> <a href="#">allow-flex-algo-fallback</a> <i>boolean</i>
Tree	<a href="#">allow-flex-algo-fallback</a>
Description	When configured to <b>true</b> , a BGP router with a Flex-Algorithm action configured (via the <b>configure policy-options policy-statement entry action flex-algo</b> command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available.



When configured to **false**, the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available.

Default	false
Introduced	20.10.R1
Platforms	All

### **enforce-strict-tunnel-tagging** *boolean*

Synopsis	Consider only LSPs with an admin-tag for next hop
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">bgp next-hop-resolution</a> <a href="#">labeled-routes</a> <a href="#">transport-tunnel</a> <i>family</i> <i>keyword</i> <a href="#">enforce-strict-tunnel-tagging</a> <i>boolean</i>
Tree	<a href="#">enforce-strict-tunnel-tagging</a>
Description	When configured to <b>true</b> , the system only considers LSPs marked with an administrative tag for next-hop resolution. Untagged LSPs are not considered.  When configured to <b>false</b> , matching admin-tagged RSVP or SR-TE LSPs are used in preference to other LSP types, whether tagged or untagged. If no eligible RSVP or SR-TE LSP exists, the system falls back to using tagged LSPs that are not explicitly excluded by a route admin tag policy and untagged LSPs of other types.
Default	false
Introduced	16.0.R1
Platforms	All

### **resolution** *keyword*

Synopsis	Resolution mode for binding BGP routes to tunnel types
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">bgp next-hop-resolution</a> <a href="#">labeled-routes</a> <a href="#">transport-tunnel</a> <i>family</i> <i>keyword</i> <a href="#">resolution</a> <i>keyword</i>
Tree	<a href="#">resolution</a>
Options	none, filter, any
Default	filter
Introduced	16.0.R1
Platforms	All

### **resolution-filter**

Synopsis	Enter the <b>resolution-filter</b> context
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp next-hop-resolution</a> <a href="#">labeled-routes</a> <a href="#">transport-tunnel</a> <a href="#">family</a> <i>keyword</i> <a href="#">resolution-filter</a>
Tree	<a href="#">resolution-filter</a>
Introduced	16.0.R1
Platforms	All

**bgp boolean**

Synopsis	Use BGP tunneling for next-hop resolution
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp next-hop-resolution</a> <a href="#">labeled-routes</a> <a href="#">transport-tunnel</a> <a href="#">family</a> <i>keyword</i> <a href="#">resolution-filter</a> <a href="#">bgp</a> <a href="#">boolean</a>
Tree	<a href="#">bgp</a>
Description	When configured to <b>true</b> , this command enables the selection of BGP tunneling for next-hop resolution and specifies the IPv4 tunnels created by receiving BGP label-unicast IPv4 routes for /32 IPv4 prefixes.  When configured to <b>false</b> , BGP tunneling for next-hop resolution is not enabled.
Introduced	16.0.R1
Platforms	All

**ldp boolean**

Synopsis	Use LDP tunneling for next-hop resolution
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp next-hop-resolution</a> <a href="#">labeled-routes</a> <a href="#">transport-tunnel</a> <a href="#">family</a> <i>keyword</i> <a href="#">resolution-filter</a> <a href="#">ldp</a> <a href="#">boolean</a>
Tree	<a href="#">ldp</a>
Description	When configured to <b>true</b> , this command enables the selection of LDP tunneling for next-hop resolution and specifies the LDP tunnels in the tunnel table corresponding to /32 IPv4 FECs and /128 IPv6 FECs.  When configured to <b>false</b> , LDP tunneling for next-hop resolution is not enabled.
Default	true
Introduced	16.0.R1
Platforms	All

**mpls-fwd-policy boolean**

Synopsis	Use MPLS forwarding policy for next-hop resolution
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Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">bgp next-hop-resolution</a> <a href="#">labeled-routes</a> <a href="#">transport-tunnel</a> <a href="#">family</a> <i>keyword</i> <a href="#">resolution-filter</a> <a href="#">mpls-fwd-policy</a> <i>boolean</i>
Tree	<a href="#">mpls-fwd-policy</a>
Default	false
Introduced	16.0.R4
Platforms	All

**rib-api** *boolean*

Synopsis	Use RIB API gRPC service for next-hop resolution
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">bgp next-hop-resolution</a> <a href="#">labeled-routes</a> <a href="#">transport-tunnel</a> <a href="#">family</a> <i>keyword</i> <a href="#">resolution-filter</a> <a href="#">rib-api</a> <i>boolean</i>
Tree	<a href="#">rib-api</a>
Default	false
Introduced	16.0.R4
Platforms	All

**rsvp** *boolean*

Synopsis	Use RSVP tunneling for next-hop resolution
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">bgp next-hop-resolution</a> <a href="#">labeled-routes</a> <a href="#">transport-tunnel</a> <a href="#">family</a> <i>keyword</i> <a href="#">resolution-filter</a> <a href="#">rsvp</a> <i>boolean</i>
Tree	<a href="#">rsvp</a>
Description	<p>When configured to <b>true</b>, this command enables the selection of RSVP tunneling for next-hop resolution and specifies RSVP tunnels in a tunnel table to IPv4 destinations. This option allows BGP to use the best metric RSVP LSP to the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface of the remote BGP router. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID.</p> <p>When configured to <b>false</b>, this command disables the selection of RSVP tunneling for next-hop resolution.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**sr-isis** *boolean*

Synopsis	Use IS-IS SR tunneling for next-hop resolution
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Context	<b>configure</b> <i>router string</i> <a href="#">bgp next-hop-resolution</a> <a href="#">labeled-routes</a> <a href="#">transport-tunnel</a> <a href="#">family keyword</a> <a href="#">resolution-filter</a> <a href="#">sr-isis</a> <i>boolean</i>
Tree	<a href="#">sr-isis</a>
Description	<p>When configured to <b>true</b>, this command enables the selection of the Segment Routing (SR) tunnel type programmed by an IS-IS instance in the TTM for next-hop resolution of BGP routes and labeled routes.</p> <p>This command allows BGP to use the segment-routing tunnel in the tunnel table submitted by the lowest preference IS-IS instance or, in case of a tie, the lowest numbered IS-IS instance.</p> <p>When configured to <b>false</b>, the SR tunnel type programmed by an IS-IS instance in the TTM for next-hop resolution is not enabled for selection.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **sr-ospf** *boolean*

Synopsis	Use OSPF SR tunneling for next-hop resolution
Context	<b>configure</b> <i>router string</i> <a href="#">bgp next-hop-resolution</a> <a href="#">labeled-routes</a> <a href="#">transport-tunnel</a> <a href="#">family keyword</a> <a href="#">resolution-filter</a> <a href="#">sr-ospf</a> <i>boolean</i>
Tree	<a href="#">sr-ospf</a>
Description	<p>When configured to <b>true</b>, this command enables the selection of the Segment Routing (SR) tunnel type programmed by an OSPF instance in the TTM for next-hop resolution of BGP routes and labeled routes.</p> <p>This command allows BGP to use the segment routing tunnel in the tunnel table submitted by the lowest preference OSPF instance or, in case of a tie, the lowest numbered OSPF instance.</p> <p>When configured to <b>false</b>, the SR tunnel type programmed by an OSPF instance in the TTM for next-hop resolution is not enabled for selection.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **sr-ospf3** *boolean*

Synopsis	Use OSPFv3 SR tunneling for next-hop resolution
Context	<b>configure</b> <i>router string</i> <a href="#">bgp next-hop-resolution</a> <a href="#">labeled-routes</a> <a href="#">transport-tunnel</a> <a href="#">family keyword</a> <a href="#">resolution-filter</a> <a href="#">sr-ospf3</a> <i>boolean</i>
Tree	<a href="#">sr-ospf3</a>

Description	<p>When configured to <b>true</b>, this command enables the selection of the IPv6 Segment Routing (SR) tunnel type programmed by an OSPFv3 instance in the TTMv6 for next-hop resolution of BGP routes and labeled routes.</p> <p>This command allows BGP to use the segment routing tunnel in the tunnel table submitted by the lowest preference OSPFv3 instance or, in case of a tie, the lowest numbered OSPFv3 instance.</p> <p>When configured to <b>false</b>, the SR tunnel type programmed by an OSPFv3 instance in the TTM for next-hop resolution is not enabled for selection.</p>
Default	false
Introduced	16.0.R6
Platforms	All

### **sr-policy** *boolean*

Synopsis	Use SR policies for next-hop resolution
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp next-hop-resolution</b> <b>labeled-routes</b> <b>transport-tunnel</b> <b>family</b> <i>keyword</i> <b>resolution-filter</b> <b>sr-policy</b> <i>boolean</i>
Tree	<b>sr-policy</b>
Description	<p>When configured to <b>true</b>, this command enables the use of segment routing policies to resolve the BGP next hop of certain BGP routes (depending on the context).</p> <p>The segment routing policies that are considered are statically configured in the local router or learned by BGP routes (AFI 1/SAFI 73). For a BGP route to be resolved by an SR policy, the highest numbered color extended community attached to BGP route must match the color of the SR policy. Next hop resolution of VPN-IP routes by SR policies is not supported.</p> <p>When configured to <b>false</b>, segment routing policies are not enabled for next-hop resolution.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **sr-te** *boolean*

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp next-hop-resolution</b> <b>labeled-routes</b> <b>transport-tunnel</b> <b>family</b> <i>keyword</i> <b>resolution-filter</b> <b>sr-te</b> <i>boolean</i>
Tree	<b>sr-te</b>
Description	When configured to <b>true</b> , this command enables the selection of the Segment Routing (SR) tunnel type programmed by a traffic engineered (TE) instance in the TTM for next-hop resolution.

In the case of multiple SR-TE tunnels with the same lowest metric, BGP selects the tunnel with the lowest tunnel ID.

When configured to **false**, the SR tunnel type programmed by a TE instance in the TTM for next-hop resolution is not enabled for selection.

Default	false
Introduced	16.0.R1
Platforms	All

### **udp boolean**

Synopsis	Use MPLS over UDP tunneling for next-hop resolution
Context	<b>configure router string</b> <a href="#">bgp next-hop-resolution labeled-routes transport-tunnel family keyword resolution-filter udp boolean</a>
Tree	<a href="#">udp</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **use-bgp-routes**

Synopsis	Enter the <b>use-bgp-routes</b> context
Context	<b>configure router string</b> <a href="#">bgp next-hop-resolution labeled-routes use-bgp-routes</a>
Tree	<a href="#">use-bgp-routes</a>
Introduced	21.2.R1
Platforms	All

### **label-ipv6-explicit-null boolean**

Synopsis	Use BGP routes to resolve address family routes
Context	<b>configure router string</b> <a href="#">bgp next-hop-resolution labeled-routes use-bgp-routes label-ipv6-explicit-null boolean</a>
Tree	<a href="#">label-ipv6-explicit-null</a>
Description	When configured to <b>true</b> , a labeled IPv6 route with the explicit-null label can be resolved by other routes, and also by unlabeled IPv4 routes and unlabeled IPv6 routes that are resolved by static routes, interface routes, or tunnels. Up to four levels of recursive resolution are supported when the top route is a labeled IPv6 route with an explicit-null label. When disabled, a labeled IPv6 route cannot be resolved by other labeled IPv6 routes.

A labeled IPv6 route with a regular label (not explicit-null) is never resolved by other labeled IPv6 routes.

Default	false
Introduced	21.2.R1
Platforms	All

### **policy** *reference*

Synopsis	Policy that filters routes for BGP next-hop resolution
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp next-hop-resolution</a> <a href="#">policy</a> <i>reference</i>
Tree	<a href="#">policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **shortcut-tunnel**

Synopsis	Enter the <b>shortcut-tunnel</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp next-hop-resolution</a> <a href="#">shortcut-tunnel</a>
Tree	<a href="#">shortcut-tunnel</a>
Description	Commands in this context configure the tunnel types that can be used to resolve unlabeled IPv4 and IPv6 BGP routes.
Introduced	16.0.R1
Platforms	All

### **family** [[family-type](#)] *keyword*

Synopsis	Enter the <b>family</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp next-hop-resolution</a> <a href="#">shortcut-tunnel</a> <a href="#">family</a> <i>keyword</i>
Tree	<a href="#">family</a>
Introduced	16.0.R1
Platforms	All

### **[family-type]** *keyword*

Synopsis	Address family type for shortcut tunnel selection
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Context	<b>configure</b> <i>router string</i> <b>bgp next-hop-resolution shortcut-tunnel family keyword</b>
Tree	<b>family</b>
Options	ipv4, ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **allow-flex-algo-fallback** *boolean*

Synopsis	Enable flexible algorithm fallback
Context	<b>configure</b> <i>router string</i> <b>bgp next-hop-resolution shortcut-tunnel family keyword</b> <b>allow-flex-algo-fallback</b> <i>boolean</i>
Tree	<b>allow-flex-algo-fallback</b>
Description	<p>When configured to <b>true</b>, a BGP router with a Flex-Algorithm action configured (via the <b>configure policy-options policy-statement entry action flex-algo</b> command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available.</p> <p>When configured to <b>false</b>, the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available.</p>
Default	false
Introduced	20.10.R1
Platforms	All

### **disallow-igp** *boolean*

Synopsis	Do not perform route table lookup to resolve BGP route
Context	<b>configure</b> <i>router string</i> <b>bgp next-hop-resolution shortcut-tunnel family keyword</b> <b>disallow-igp</b> <i>boolean</i>
Tree	<b>disallow-igp</b>
Description	<p>When configured to <b>true</b>, no attempt is made to resolve the IPv4 or IPv6 BGP route using route table lookup if no resolving tunnel can be found in the tunnel table.</p> <p>When configured to <b>false</b>, route table lookup can be performed if no resolving tunnel is found in the tunnel table.</p>
Default	false
Introduced	16.0.R1
Platforms	All



**enforce-strict-tunnel-tagging** *boolean*

Synopsis	Consider only LSPs with an admin-tag for next hop
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp next-hop-resolution shortcut-tunnel family</i> <i>keyword</i> <b>enforce-strict-tunnel-tagging</b> <i>boolean</i>
Tree	<a href="#">enforce-strict-tunnel-tagging</a>
Description	When configured to <b>true</b> , the system only considers LSPs marked with an administrative tag for next-hop resolution. Untagged LSPs are not considered.  When configured to <b>false</b> , matching admin-tagged RSVP or SR-TE LSPs are used in preference to other LSP types, whether tagged or untagged. If no eligible RSVP or SR-TE LSP exists, the system falls back to using tagged LSPs that are not explicitly excluded by a route admin tag policy and untagged LSPs of other types.
Default	false
Introduced	16.0.R1
Platforms	All

**resolution** *keyword*

Synopsis	Resolution mode for binding BGP routes to tunnel types
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp next-hop-resolution shortcut-tunnel family</i> <i>keyword</i> <b>resolution</b> <i>keyword</i>
Tree	<a href="#">resolution</a>
Options	none, filter, any
Default	none
Introduced	16.0.R1
Platforms	All

**resolution-filter**

Synopsis	Enter the <b>resolution-filter</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp next-hop-resolution shortcut-tunnel family</i> <i>keyword</i> <b>resolution-filter</b>
Tree	<a href="#">resolution-filter</a>
Introduced	16.0.R1
Platforms	All

**bgp *boolean***

Synopsis	Use BGP tunneling for next-hop resolution
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp next-hop-resolution shortcut-tunnel family keyword resolution-filter bgp boolean</i>
Tree	<i>bgp</i>
Description	When configured to <b>true</b> , this command enables the selection of BGP tunneling for next-hop resolution and specifies the IPv4 tunnels created by receiving BGP label-unicast IPv4 routes for /32 IPv4 prefixes.  When configured to <b>false</b> , BGP tunneling for next-hop resolution is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

**ldp *boolean***

Synopsis	Use LDP tunneling for next-hop resolution
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp next-hop-resolution shortcut-tunnel family keyword resolution-filter ldp boolean</i>
Tree	<i>ldp</i>
Description	When configured to <b>true</b> , BGP selects the LDP FEC that is the longest prefix match to the BGP next-hop address.  When configured to <b>false</b> , LDP tunneling for next-hop resolution is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

**mpls-fwd-policy *boolean***

Synopsis	Use MPLS forwarding policy for next-hop resolution
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp next-hop-resolution shortcut-tunnel family keyword resolution-filter mpls-fwd-policy boolean</i>
Tree	<i>mpls-fwd-policy</i>
Default	false
Introduced	16.0.R4
Platforms	All

**rib-api** *boolean*

Synopsis	Use RIB API gRPC service for next-hop resolution
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>next-hop-resolution</b> <b>shortcut-tunnel</b> <b>family</b> <i>keyword</i> <b>resolution-filter</b> <b>rib-api</b> <i>boolean</i>
Tree	<b>rib-api</b>
Default	false
Introduced	16.0.R4
Platforms	All

**rsvp** *boolean*

Synopsis	Use RSVP tunneling for next-hop resolution
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>next-hop-resolution</b> <b>shortcut-tunnel</b> <b>family</b> <i>keyword</i> <b>resolution-filter</b> <b>rsvp</b> <i>boolean</i>
Tree	<b>rsvp</b>
Description	<p>When configured to <b>true</b>, this command enables the selection of RSVP tunneling for next-hop resolution and specifies RSVP tunnels in a tunnel table to IPv4 destinations.</p> <p>This option allows BGP to use the best metric RSVP LSP to the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface of the remote BGP router. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID.</p> <p>When configured to <b>false</b>, this command disables the selection of RSVP tunneling for next-hop resolution.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**sr-isis** *boolean*

Synopsis	Use IS-IS SR tunneling for next-hop resolution
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>next-hop-resolution</b> <b>shortcut-tunnel</b> <b>family</b> <i>keyword</i> <b>resolution-filter</b> <b>sr-isis</b> <i>boolean</i>
Tree	<b>sr-isis</b>
Description	<p>When configured to <b>true</b>, this command enables the selection of the Segment Routing (SR) tunnel type programmed by an IS-IS instance in the TTM for next-hop resolution of BGP routes and labeled routes.</p> <p>This command allows BGP to use the segment-routing tunnel in the tunnel table submitted by the lowest preference IS-IS instance or, in case of a tie, the lowest numbered IS-IS instance.</p>

When configured to **false**, the SR tunnel type programmed by an IS-IS instance in the TTM for next-hop resolution is not enabled for selection.

Default	false
Introduced	16.0.R1
Platforms	All

### **sr-ospf** *boolean*

Synopsis	Use OSPF SR tunneling for next-hop resolution
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp next-hop-resolution shortcut-tunnel family keyword resolution-filter sr-ospf boolean</i>
Tree	<i>sr-ospf</i>
Description	<p>When configured to <b>true</b>, this command enables the selection of the Segment Routing (SR) tunnel type programmed by an OSPF instance in the TTM for next-hop resolution of BGP routes and labeled routes.</p> <p>This command allows BGP to use the segment routing tunnel in the tunnel table submitted by the lowest preference OSPF instance or, in case of a tie, the lowest numbered OSPF instance.</p> <p>When configured to <b>false</b>, the SR tunnel type programmed by an OSPF instance in the TTM for next-hop resolution is not enabled for selection.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **sr-ospf3** *boolean*

Synopsis	Use OSPFv3 SR tunneling for next-hop resolution
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp next-hop-resolution shortcut-tunnel family keyword resolution-filter sr-ospf3 boolean</i>
Tree	<i>sr-ospf3</i>
Description	<p>When configured to <b>true</b>, this command enables the selection of the IPv6 Segment Routing (SR) tunnel type programmed by an OSPFv3 instance in the TTMv6 for next-hop resolution of BGP routes and labeled routes.</p> <p>This command allows BGP to use the segment routing tunnel in the tunnel table submitted by the lowest preference OSPFv3 instance or, in case of a tie, the lowest numbered OSPFv3 instance.</p> <p>When configured to <b>false</b>, the SR tunnel type programmed by an OSPFv3 instance in the TTM for next-hop resolution is not enabled for selection.</p>
Default	false

Introduced	16.0.R6
Platforms	All

### **sr-policy** *boolean*

Synopsis	Use SR policies for next-hop resolution
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp next-hop-resolution shortcut-tunnel family</b> <i>keyword</i> <b>resolution-filter sr-policy</b> <i>boolean</i>
Tree	<a href="#">sr-policy</a>
Description	<p>When configured to <b>true</b>, this command enables the use of segment routing policies to resolve the BGP next hop of certain BGP routes (depending on the context).</p> <p>The segment routing policies that are considered are statically configured in the local router or learned by BGP routes (AFI 1/SAFI 73). For a BGP route to be resolved by an SR policy, the highest numbered color extended community attached to BGP route must match the color of the SR policy.</p> <p>When configured to <b>false</b>, segment routing policies are not enabled for next-hop resolution.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **sr-te** *boolean*

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp next-hop-resolution shortcut-tunnel family</b> <i>keyword</i> <b>resolution-filter sr-te</b> <i>boolean</i>
Tree	<a href="#">sr-te</a>
Description	<p>When configured to <b>true</b>, this command enables the selection of the Segment Routing (SR) tunnel type programmed by a traffic engineered (TE) instance in the TTM for next-hop resolution.</p> <p>In the case of multiple SR-TE tunnels with the same lowest metric, BGP selects the tunnel with the lowest tunnel ID.</p> <p>When configured to <b>false</b>, the SR tunnel type programmed by a TE instance in the TTM for next-hop resolution is not enabled for selection.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**use-bgp-routes** *boolean*

Synopsis	Use BGP routes to resolve BGP next hops
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp next-hop-resolution use-bgp-routes</b> <i>boolean</i>
Tree	<a href="#">use-bgp-routes</a>
Description	<p>This command enables the use of BGP routes to resolve BGP next hops. When this command is enabled, any unlabeled IPv4 or IPv6 BGP route received from a VPRN BGP peer becomes resolvable by up to four other BGP routes in order to resolve the route to a VPRN IP interface. A VPRN BGP route is not resolvable by another VPRN BGP route or by a BGP-VPN route.</p> <p>This command also allows unlabeled IPv4 or IPv6 BGP routes leaked from the GRT with unresolved next hops (in the GRT) to be resolvable by BGP-VPN routes (of the VPRN).</p>
Default	false
Introduced	16.0.R1
Platforms	All

**vpn-family-policy** *reference*

Synopsis	Policy to filter routes for next-hop resolution
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp next-hop-resolution vpn-family-policy</b> <i>reference</i>
Tree	<a href="#">vpn-family-policy</a>
Reference	<b>configure</b> <a href="#">policy-options policy-statement</a> <i>string</i>
Introduced	20.5.R1
Platforms	All

**weighted-ecmp** *boolean*

Synopsis	Use weighted ECMP for next-hop tunnel selection for 6PE
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp next-hop-resolution weighted-ecmp</b> <i>boolean</i>
Tree	<a href="#">weighted-ecmp</a>
Description	<p>When configured to <b>true</b>, this command enables weighted ECMP for next-hop tunnel selection for 6PE. When weighted ECMP is enabled, the RSVP-TE tunnel used to forward 6PE packets to the ECMP next hop that is chosen according to the outcome of the hash on the packet at the normalized load-balancing weight of the tunnel.</p> <p>When configured to <b>false</b>, weighted ECMP is disabled for next-hop tunnel selection for 6PE.</p>
Default	false
Introduced	16.0.R1

Platforms All

## optimal-route-reflection

Synopsis Enter the **optimal-route-reflection** context

Context **configure** *router string* **bgp optimal-route-reflection**

Tree **optimal-route-reflection**

Introduced 16.0.R1

Platforms All

## location [*location-id*] *number*

Synopsis Enter the **location** list instance

Context **configure** *router string* **bgp optimal-route-reflection location** *number*

Tree **location**

Description Commands in this context configure the location ID for the route reflector. A BGP neighbor can be associated with a location if it is a route-reflector client.

Up to three IPv4 addresses and three IPv6 addresses can be specified per location.

If the TE DB is unable find a node in its topology database that matches a primary address of the location, it tries to find a node matching a secondary address. If this attempt also fails, the TE DB tries to find a node matching a tertiary address.

The IP addresses specified for a location should be topologically “close” to a set of clients that should all receive the same optimal path for that location.

Introduced 16.0.R1

Platforms All

## [*location-id*] *number*

Synopsis Optimal route reflection location ID

Context **configure** *router string* **bgp optimal-route-reflection location** *number*

Tree **location**

Range 1 to 255

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

**primary-ip-address** *string*

Synopsis	Primary IPv4 address of the reference location for ORR
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>optimal-route-reflection</b> <b>location</b> <i>number</i> <b>primary-ip-address</b> <i>string</i>
Tree	<a href="#">primary-ip-address</a>
Introduced	16.0.R1
Platforms	All

**primary-ipv6-address** *string*

Synopsis	Primary IPv6 address of the reference location for ORR
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>optimal-route-reflection</b> <b>location</b> <i>number</i> <b>primary-ipv6-address</b> <i>string</i>
Tree	<a href="#">primary-ipv6-address</a>
Introduced	16.0.R4
Platforms	All

**secondary-ip-address** *string*

Synopsis	Secondary IPv4 address of reference location for ORR
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>optimal-route-reflection</b> <b>location</b> <i>number</i> <b>secondary-ip-address</b> <i>string</i>
Tree	<a href="#">secondary-ip-address</a>
Introduced	16.0.R1
Platforms	All

**secondary-ipv6-address** *string*

Synopsis	Secondary IPv6 address of reference location for ORR
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>optimal-route-reflection</b> <b>location</b> <i>number</i> <b>secondary-ipv6-address</b> <i>string</i>
Tree	<a href="#">secondary-ipv6-address</a>
Introduced	16.0.R4
Platforms	All



**tertiary-ip-address** *string*

Synopsis	Tertiary IPv4 address of the reference location for ORR
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>optimal-route-reflection</b> <b>location</b> <i>number</i> <b>tertiary-ip-address</b> <i>string</i>
Tree	<a href="#">tertiary-ip-address</a>
Introduced	16.0.R1
Platforms	All

**tertiary-ipv6-address** *string*

Synopsis	Tertiary IPv6 address of the reference location for ORR
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>optimal-route-reflection</b> <b>location</b> <i>number</i> <b>tertiary-ipv6-address</b> <i>string</i>
Tree	<a href="#">tertiary-ipv6-address</a>
Introduced	16.0.R4
Platforms	All

**spf-wait**

Synopsis	Enter the <b>spf-wait</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>optimal-route-reflection</b> <b>spf-wait</b>
Tree	<a href="#">spf-wait</a>
Description	Commands in this context specify the interval between consecutive SPF calculations performed by the TE DB in support of BGP optimal route reflection. The time components implement an exponential back-off algorithm.
	.
Introduced	16.0.R1
Platforms	All

**initial-wait** *number*

Synopsis	Initial SPF calculation delay after a topology change
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>optimal-route-reflection</b> <b>spf-wait</b> <b>initial-wait</b> <i>number</i>
Tree	<a href="#">initial-wait</a>
Range	1 to 300
Default	5

Introduced	16.0.R1
Platforms	All

### **max-wait** *number*

Synopsis	Maximum interval between consecutive SPF calculations
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp optimal-route-reflection</a> <a href="#">spf-wait</a> <b>max-wait</b> <i>number</i>
Tree	<a href="#">max-wait</a>
Range	1 to 600
Default	60
Introduced	16.0.R1
Platforms	All

### **second-wait** *number*

Synopsis	Delay between first and second SPF calculation
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp optimal-route-reflection</a> <a href="#">spf-wait</a> <b>second-wait</b> <i>number</i>
Tree	<a href="#">second-wait</a>
Range	1 to 300
Default	15
Introduced	16.0.R1
Platforms	All

### **outbound-route-filtering**

Synopsis	Enable the <b>outbound-route-filtering</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp outbound-route-filtering</a>
Tree	<a href="#">outbound-route-filtering</a>
Description	Commands in this context configure the send and receive capabilities for Outbound Route Filtering (ORF). When unconfigured, the ORF capabilities are not enabled.
Introduced	16.0.R1
Platforms	All

## extended-community

Synopsis	Enable the <b>extended-community</b> context
Context	<b>configure</b> <i>router string</i> <a href="#">bgp outbound-route-filtering extended-community</a>
Tree	<a href="#">extended-community</a>
Description	Commands in this context configure the ORF send and receive capabilities based on Extended Communities.  When this context is unconfigured, the ORF capabilities for Extended Communities is not enabled.
Introduced	16.0.R1
Platforms	All

## accept-orf *boolean*

Synopsis	Negotiate with peer to accept BGP ORF filters
Context	<b>configure</b> <i>router string</i> <a href="#">bgp outbound-route-filtering extended-community accept-orf boolean</a>
Tree	<a href="#">accept-orf</a>
Description	When configured to <b>true</b> , the receive capability in the BGP ORF is negotiated with a peer and ORF filters can be accepted from peers.  When configured to <b>false</b> , the accept capability in the BGP ORF is removed and any existing ORF filters that are currently in place are cleared.
Default	false
Introduced	16.0.R1
Platforms	All

## send-orf

Synopsis	Enable the <b>send-orf</b> context
Context	<b>configure</b> <i>router string</i> <a href="#">bgp outbound-route-filtering extended-community send-orf</a>
Tree	<a href="#">send-orf</a>
Description	Commands in this context allow BGP to negotiate the send capability in the ORF negotiation with a peer. The send capability also causes the router to send a community filter, prefix filter, or AS path filter configured as an inbound filter on the BGP session to its peer as an ORF Action ADD.  When this context is unconfigured, ORF send capability is not enabled.
Introduced	16.0.R1
Platforms	All

**route-target** [*community-name*] *string*

Synopsis	Add a list entry for <b>route-target</b>
Context	<b>configure</b> <i>router string</i> <a href="#">bgp</a> <a href="#">outbound-route-filtering</a> <a href="#">extended-community</a> <a href="#">send-orf</a> <a href="#">route-target</a> <i>string</i>
Tree	<a href="#">route-target</a>
Introduced	16.0.R1
Platforms	All

**[community-name]** *string*

Synopsis	Route target community name
Context	<b>configure</b> <i>router string</i> <a href="#">bgp</a> <a href="#">outbound-route-filtering</a> <a href="#">extended-community</a> <a href="#">send-orf</a> <a href="#">route-target</a> <i>string</i>
Tree	<a href="#">route-target</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**override-tunnel-elc** *boolean*

Synopsis	Enable entropy label capability on BGP tunnels
Context	<b>configure</b> <i>router string</i> <a href="#">bgp</a> <a href="#">override-tunnel-elc</a> <i>boolean</i>
Tree	<a href="#">override-tunnel-elc</a>
Description	<p>When configured to <b>true</b>, this command renders all far ends for BGP tunnels as entropy-label-capable, regardless of any received capability signaling. This ensures that the entropy label will be inserted on BGP tunnels in the absence of capability signaling support by the far end.</p> <p>This is a system-wide configuration, since efficient entropy label operation requires that all LSRs in a network support entropy labels. This command should be used with care, particularly in inter-AS use cases, as entropy label capability may differ between domains.</p> <p>When configured to <b>false</b>, this command disables all far ends for BGP tunnels as entropy-label-capable.</p>
Default	false
Introduced	16.0.R1

Platforms All

### **path-mtu-discovery** *boolean*

Synopsis Enable Path MTU Discovery

Context **configure** *router* *string* *bgp path-mtu-discovery* *boolean*

Tree [path-mtu-discovery](#)

Description When configured to **true**, Path MTU Discovery (PMTUD) is enabled for the associated TCP connections.

When set to **true**, PMTUD is activated toward an IPv4 BGP neighbor and the Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, this device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value so that the IP MTU constraint can be accommodated.

When PMTUD is configured to **false** and there is no TCP MSS configuration that can be associated with a BGP neighbor (in either the BGP configuration or the first hop IP interface configuration), the router advertises a value of only 1024 bytes as the TCP MSS option value, limiting received TCP segments to that size.

Default false

Introduced 16.0.R1

Platforms All

### **peer-ip-tracking** *boolean*

Synopsis Enable BGP peer tracking

Context **configure** *router* *string* *bgp peer-ip-tracking* *boolean*

Tree [peer-ip-tracking](#)

Default false

Introduced 16.0.R1

Platforms All

### **peer-tracking-policy** *reference*

Synopsis Policy for BGP peer tracking on router instance

Context **configure** *router* *string* *bgp peer-tracking-policy* *reference*

Tree [peer-tracking-policy](#)

Description	<p>This command specifies the name of a policy statement to use with the BGP peer-tracking function on BGP sessions where peer tracking is enabled.</p> <p>When unconfigured, the default peer-tracking policy allows any type of route to match the neighbor IP address except aggregate routes and LDP shortcut routes.</p> <p>Peer tracking should be used with caution. The peer-tracking policy should only permit one of direct-interface or direct routes to be advertised to a BGP peer. Advertising both routes causes the best route to oscillate.</p>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **preference** *number*

Synopsis	Route preference for routes learned from all peers
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">preference</a> <i>number</i>
Tree	<a href="#">preference</a>
Description	<p>This command configures the route preference for routes learned from the configured peers.</p> <p>The lower the preference value, the higher the chance of the route being the active route. The router assigns BGP routes the highest default preference as compared to routes that are direct, static or learned via MPLS or OSPF.</p>
Range	1 to 255
Default	170
Introduced	16.0.R1
Platforms	All

### **purge-timer** *number*

Synopsis	Maximum time before stale routes are purged
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">purge-timer</a> <i>number</i>
Tree	<a href="#">purge-timer</a>
Description	<p>This command configures the maximum time before stale routes are purged.</p> <p>When a route refresh request is sent to a peer for VPN-IP routes received from that peer (in the RIB-IN), the routes are set to stale and the purge timer is started. If the routes are not updated (refreshed) before the purge timer expires, the routes are removed.</p>
Range	1 to 60
Default	10

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Introduced	16.0.R1
Platforms	All

## rapid-update

Synopsis	Enter the <b>rapid-update</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">rapid-update</a>
Tree	<a href="#">rapid-update</a>
Description	Commands in this context specify the address families that are configured to support the rapid update functionality.  The rapid update functionality overrides the remaining time on a peer's MRAI timer and immediately sends routes belonging the specified address families (and all other pending updates) to the peers receiving these routes.
Introduced	16.0.R1
Platforms	All

## evpn *boolean*

Synopsis	Include EVPN address family routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">rapid-update</a> <a href="#">evpn</a> <i>boolean</i>
Tree	<a href="#">evpn</a>
Default	false
Introduced	16.0.R1
Platforms	All

## l2-vpn *boolean*

Synopsis	Include L2 VPN address family routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">rapid-update</a> <a href="#">l2-vpn</a> <i>boolean</i>
Tree	<a href="#">l2-vpn</a>
Default	false
Introduced	16.0.R1
Platforms	All

**label-ipv4** *boolean*

Synopsis	Include labeled IPv4 address family routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>rapid-update</b> <b>label-ipv4</b> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**label-ipv6** *boolean*

Synopsis	Include labeled IPv6 address family routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>rapid-update</b> <b>label-ipv6</b> <i>boolean</i>
Tree	<a href="#">label-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mcast-vpn-ipv4** *boolean*

Synopsis	Include multicast VPN IPv4 address family routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>rapid-update</b> <b>mcast-vpn-ipv4</b> <i>boolean</i>
Tree	<a href="#">mcast-vpn-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mcast-vpn-ipv6** *boolean*

Synopsis	Include multicast VPN IPv6 address family routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>rapid-update</b> <b>mcast-vpn-ipv6</b> <i>boolean</i>
Tree	<a href="#">mcast-vpn-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All



**mdt-safi** *boolean*

Synopsis	Include MDT SAFI address family routes
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp rapid-update</i> <i>mdt-safi</i> <i>boolean</i>
Tree	<a href="#">mdt-safi</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mvpn-ipv4** *boolean*

Synopsis	Include MVPN IPv4 address family routes
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp rapid-update</i> <i>mvpn-ipv4</i> <i>boolean</i>
Tree	<a href="#">mvpn-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mvpn-ipv6** *boolean*

Synopsis	Include MVPN IPv6 address family routes
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp rapid-update</i> <i>mvpn-ipv6</i> <i>boolean</i>
Tree	<a href="#">mvpn-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**vpn-ipv4** *boolean*

Synopsis	Include VPN IPv4 address family routes
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp rapid-update</i> <i>vpn-ipv4</i> <i>boolean</i>
Tree	<a href="#">vpn-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **vpn-ipv6** *boolean*

Synopsis	Include VPN IPv6 address family routes
Context	<b>configure</b> <i>router string</i> <a href="#">bgp rapid-update</a> <a href="#">vpn-ipv6</a> <i>boolean</i>
Tree	<a href="#">vpn-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **rapid-withdrawal** *boolean*

Synopsis	Send BGP withdrawal UPDATE messages immediately
Context	<b>configure</b> <i>router string</i> <a href="#">bgp rapid-withdrawal</a> <i>boolean</i>
Tree	<a href="#">rapid-withdrawal</a>
Description	<p>When configured to <b>true</b>, UPDATE messages containing withdrawn NLRI are sent immediately to a peer without waiting for the MRAI timer to expire. UPDATE messages containing reachable NLRI continue to wait for the MRAI timer to expire, or for a rapid update trigger.</p> <p>When configured to <b>false</b>, withdrawal processing continues with the normal behavior.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **remove-private**

Synopsis	Enable the <b>remove-private</b> context
Context	<b>configure</b> <i>router string</i> <a href="#">bgp remove-private</a>
Tree	<a href="#">remove-private</a>
Introduced	16.0.R1
Platforms	All

### **limited** *boolean*

Synopsis	Remove private ASNs up to first public ASN encountered
Context	<b>configure</b> <i>router string</i> <a href="#">bgp remove-private limited</a> <i>boolean</i>
Tree	<a href="#">limited</a>

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Default	false
Introduced	16.0.R1
Platforms	All

### **replace** *boolean*

Synopsis	Replace private ASN with global ASN before advertising
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp remove-private replace boolean</i>
Tree	<a href="#">replace</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **skip-peer-as** *boolean*

Synopsis	Keep private ASN if AS-PATH contains eBGP peer's ASN
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp remove-private skip-peer-as boolean</i>
Tree	<a href="#">skip-peer-as</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **rib-management**

Synopsis	Enter the <b>rib-management</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp rib-management</i>
Tree	<a href="#">rib-management</a>
Introduced	16.0.R1
Platforms	All

### **ipv4**

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp rib-management ipv4</i>
Tree	<a href="#">ipv4</a>

Introduced	16.0.R1
Platforms	All

## leak-import

Synopsis	Enter the <b>leak-import</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">rib-management</a> <a href="#">ipv4</a> <a href="#">leak-import</a>
Tree	<a href="#">leak-import</a>
Description	Commands in this context specify route policies that control the importation of leak-eligible routes from the BGP RIB of another routing instance into the unlabeled-IPv4 RIB of the base router. To leak a route from one routing instance to another, the origin and destination RIB types must be the same; for example, it is not possible to leak a route from an unlabeled-IPv4 RIB of a VPRN into the labeled-IPv4 RIB of the base router.
Introduced	16.0.R1
Platforms	All

## policy (*policy-expr-string* | *string*)

Synopsis	Leak import policy name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">rib-management</a> <a href="#">ipv4</a> <a href="#">leak-import</a> <a href="#">policy</a> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<a href="#">policy</a>
Description	This command specifies one or more leak import policies.  Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).
String Length	1 to 255
Max. Instances	15
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

## route-table-import

Synopsis	Enter the <b>route-table-import</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">rib-management</a> <a href="#">ipv4</a> <a href="#">route-table-import</a>

Tree	<a href="#">route-table-import</a>
Introduced	16.0.R1
Platforms	All

### **policy-name** *reference*

Synopsis	Name of policy that controls route importation into RIB
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp rib-management ipv4 route-table-import policy-name reference</a>

Tree	<a href="#">policy-name</a>
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Description	This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs.
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When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.

Aggregate routes are always imported into each RIB, independent of the specified policy.

Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.

When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.

Reference	<b>configure</b> <a href="#">policy-options policy-statement string</a>
Introduced	16.0.R1
Platforms	All

### **ipv6**

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp rib-management ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	16.0.R1
Platforms	All

### **leak-import**

Synopsis	Enter the <b>leak-import</b> context
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Context	<b>configure router</b> <i>string</i> <a href="#">bgp rib-management ipv6 leak-import</a>
Tree	<a href="#">leak-import</a>
Description	Commands in this context specify route policies that control the importation of leak-eligible routes from the BGP RIB of another routing instance into the unlabeled-IPv6 RIB of the base router. To leak a route from one routing instance to another, the origin and destination RIB types must be the same; for example, it is not possible to leak a route from an unlabeled-IPv4 RIB of a VPRN into the labeled-IPv4 RIB of the base router.
Introduced	16.0.R1
Platforms	All

### **policy** (*policy-expr-string* | *string*)

Synopsis	Leak import policy name
Context	<b>configure router</b> <i>string</i> <a href="#">bgp rib-management ipv6 leak-import policy</a> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<a href="#">policy</a>
Description	This command specifies one or more leak import policies.  Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).
String Length	1 to 255
Max. Instances	15
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **route-table-import**

Synopsis	Enter the <b>route-table-import</b> context
Context	<b>configure router</b> <i>string</i> <a href="#">bgp rib-management ipv6 route-table-import</a>
Tree	<a href="#">route-table-import</a>
Description	This command enables the context to specify the name of a route to control the importation of active routes from the IP route table into one of the BGP RIBs.  If this command is configured, then routes dropped or rejected by the configured policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by this command then the

best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.

Aggregate routes are always imported into each RIB, independent of this command's policy.

Route modifications specified in the actions of this command's policy are ignored and have no effect on the imported routes.

If this command is not configured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.

Introduced	16.0.R1
Platforms	All

### **policy-name** *reference*

Synopsis	Name of policy that controls route importation into RIB
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>rib-management</b> <b>ipv6</b> <b>route-table-import</b> <b>policy-name</b> <i>reference</i>
Tree	<a href="#">policy-name</a>
Description	<p>This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs.</p> <p>When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.</p> <p>Aggregate routes are always imported into each RIB, independent of the specified policy.</p> <p>Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.</p> <p>When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.</p>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **label-ipv4**

Synopsis	Enter the <b>label-ipv4</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>rib-management</b> <b>label-ipv4</b>
Tree	<a href="#">label-ipv4</a>

Introduced	16.0.R1
Platforms	All

## leak-import

Synopsis	Enter the <b>leak-import</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">rib-management</a> <a href="#">label-ipv4</a> <a href="#">leak-import</a>
Tree	<a href="#">leak-import</a>
Description	Commands in this context specify route policies that control the importation of leak-eligible routes from the BGP RIB of another routing instance into the labeled-IPv4 RIB of the base router. To leak a route from one routing instance to another, the origin and destination RIB types must be the same; for example, it is not possible to leak a route from an unlabeled-IPv4 RIB of a VPRN into the labeled-IPv4 RIB of the base router.
Introduced	16.0.R1
Platforms	All

## policy (*policy-expr-string* | *string*)

Synopsis	Leak import policy name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">rib-management</a> <a href="#">label-ipv4</a> <a href="#">leak-import</a> <a href="#">policy</a> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<a href="#">policy</a>
Description	This command specifies one or more leak import policies.  Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).
String Length	1 to 255
Max. Instances	15
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

## route-table-import

Synopsis	Enter the <b>route-table-import</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">rib-management</a> <a href="#">label-ipv4</a> <a href="#">route-table-import</a>



Tree	<a href="#">route-table-import</a>
Introduced	16.0.R1
Platforms	All

### **policy-name** *reference*

Synopsis	Name of policy that controls route importation into RIB
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp rib-management label-ipv4 route-table-import policy-name reference</a>
Tree	<a href="#">policy-name</a>
Description	<p>This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs.</p> <p>When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.</p> <p>Aggregate routes are always imported into each RIB, independent of the specified policy.</p> <p>Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.</p> <p>When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.</p>
Reference	<b>configure</b> <a href="#">policy-options policy-statement</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **label-ipv6**

Synopsis	Enter the <b>label-ipv6</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp rib-management label-ipv6</a>
Tree	<a href="#">label-ipv6</a>
Introduced	16.0.R1
Platforms	All

### **route-table-import**

Synopsis	Enter the <b>route-table-import</b> context
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp rib-management label-ipv6 route-table-import</a>
Tree	<a href="#">route-table-import</a>
Introduced	16.0.R1
Platforms	All

### **policy-name** *reference*

Synopsis	Name of policy that controls route importation into RIB
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp rib-management label-ipv6 route-table-import policy-name reference</a>
Tree	<a href="#">policy-name</a>
Description	<p>This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs.</p> <p>When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.</p> <p>Aggregate routes are always imported into each RIB, independent of the specified policy.</p> <p>Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.</p> <p>When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.</p>
Reference	<b>configure</b> <a href="#">policy-options policy-statement</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **route-table-install** *boolean*

Synopsis	Install all IPv4 and IPv6 BGP routes in FIB and RTM
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp route-table-install</a> <i>boolean</i>
Tree	<a href="#">route-table-install</a>
Default	true
Introduced	16.0.R1
Platforms	All

**route-target-list** [**community-name**] *string*

Synopsis	Add a list entry for <b>route-target-list</b>
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>route-target-list</b> <i>string</i>
Tree	<b>route-target-list</b>
Description	This command specifies a route target to be accepted from or advertised to peers. This command is only applicable if the router is a route-reflector server.
Introduced	16.0.R1
Platforms	All

**[community-name]** *string*

Synopsis	Route target community name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>route-target-list</b> <i>string</i>
Tree	<b>route-target-list</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**router-id** *string*

Synopsis	Router ID for the BGP instance in the AS
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>router-id</b> <i>string</i>
Tree	<b>router-id</b>
Description	This command specifies the router ID to be used with the BGP instance.  Changing the BGP router ID on an active BGP instance causes the BGP instance to restart with the new router ID.  When an SR OS is configured with an IPv6-only BOF and no IPv4 system interface address, explicitly-defined IPv4 router IDs are required for BGP as there is no mechanism to derive the router ID from an IPv6 system interface address.
Introduced	16.0.R1
Platforms	All

**rr-vpn-forwarding** *boolean*

Synopsis	Allow route reflector to forward VPN-IP routes
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Context	<b>configure router</b> <i>string</i> <b>bgp rr-vpn-forwarding</b> <i>boolean</i>
Tree	<a href="#">rr-vpn-forwarding</a>
Description	<p>When configured to <b>true</b>, the route reflector resolves VPN-IPv4 and VPN-IPv6 routes, sets itself as the next hop, and generates new labels for all the resolved routes.</p> <p>During this process, all received VPN-IP routes, regardless of route target, are imported into the dummy VRF, where the BGP next hops are resolved. The routes are resolved to next-hop-self, and BGP allocates new VPRN service-label values for the routes, which are then advertised to peers.</p> <p>The <b>transport-tunnel</b> command under the <b>configure router bgp next-hop-resolution labeled-routes</b> context determines what types of tunnels are eligible to resolve the next hops. If a received VPN-IP route from IBGP peer X is resolved and selected as the best path so that it can be re-advertised to an IBGP peer Y, and the BGP next-hop is modified toward peer Y (by using the <b>next-hop-self</b> command in Y's group or neighbor context or by using a next-hop action in an export policy applied to Y), BGP allocates a new VPRN service label value for the route, signals that new label value to Y, and programs the IOM to do the corresponding label swap operation. The supported combinations of X and Y are outlined below:</p> <ul style="list-style-type: none"> <li>• from X (client) to Y (client)</li> <li>• from X (client) to Y (non-client)</li> <li>• from X (non-client) to Y (client)</li> </ul> <p>When configured to <b>false</b>, the routes are re-advertised without signaling new VPRN labels, even if the BGP next hop is changed.</p> <p>Nokia recommends setting this command to <b>false</b> for scaling and convergence reasons.</p>
Default	false
Introduced	16.0.R1
Platforms	All

## segment-routing

Synopsis	Enter the <b>segment-routing</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp segment-routing</b>
Tree	<a href="#">segment-routing</a>
Description	Commands in this context configure options related to BGP segment routing (including prefix SID support).
Introduced	19.10.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of segment routing
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>segment-routing</b> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	19.10.R1
Platforms	All

**prefix-sid-range**

Synopsis	Enable the <b>prefix-sid-range</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>segment-routing</b> <b>prefix-sid-range</b>
Tree	<a href="#">prefix-sid-range</a>
Introduced	19.10.R1
Platforms	All

**global**

Synopsis	Allow label allocation from entire SRBG space
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>segment-routing</b> <b>prefix-sid-range</b> <b>global</b>
Tree	<a href="#">global</a>
Notes	The following elements are part of a choice: <b>global</b> or ( <b>max-index</b> and <b>start-label</b> ).
Introduced	19.10.R1
Platforms	All

**max-index** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Last label value available in contiguous range
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>segment-routing</b> <b>prefix-sid-range</b> <b>max-index</b> <i>number</i>
Tree	<a href="#">max-index</a>
Range	0 to 524287

Default	1
Notes	The following elements are part of a choice: <b>global</b> or ( <b>max-index</b> and <b>start-label</b> ).
Introduced	19.10.R1
Platforms	All

### **start-label** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	First label value available in a contiguous range
Context	<b>configure</b> <i>router string</i> <a href="#">bgp segment-routing prefix-sid-range</a> <b>start-label</b> <i>number</i>
Tree	<a href="#">start-label</a>
Range	0 to 524287
Default	0
Notes	The following elements are part of a choice: <b>global</b> or ( <b>max-index</b> and <b>start-label</b> ).
Introduced	19.10.R1
Platforms	All

### **segment-routing-v6**

Synopsis	Enable the <b>segment-routing-v6</b> context
Context	<b>configure</b> <i>router string</i> <a href="#">bgp segment-routing-v6</a>
Tree	<a href="#">segment-routing-v6</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **family** [[family-type](#)] *keyword*

Synopsis	Enter the <b>family</b> list instance
Context	<b>configure</b> <i>router string</i> <a href="#">bgp segment-routing-v6 family</a> <i>keyword</i>
Tree	<a href="#">family</a>
Description	Commands in this context configure family-specific behavior for processing prefix SID attributes containing SRv6 TLVs.
Introduced	21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### [family-type] keyword

Synopsis IP address type that SRv6 route attributes apply to

Context **configure** *router* *string* *bgp segment-routing-v6 family keyword*

Tree *family*

Options ipv4, ipv6

Notes This element is part of a list key.

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### add-srv6-tlvs

Synopsis Enable the **add-srv6-tlvs** context

Context **configure** *router* *string* *bgp segment-routing-v6 family keyword* *add-srv6-tlvs*

Tree *add-srv6-tlvs*

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### locator-name reference

Synopsis SRv6 locator name

Context **configure** *router* *string* *bgp segment-routing-v6 family keyword* *add-srv6-tlvs locator-name reference*

Tree *locator-name*

Reference **configure** *router* *string* *segment-routing segment-routing-v6 base-routing-instance locator reference*

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### micro-segment-locator-name reference

Synopsis Micro-segment SRv6 locator name

Context **configure** *router* *string* *bgp segment-routing-v6 family keyword* *add-srv6-tlvs micro-segment-locator-name reference*

Tree	<a href="#">micro-segment-locator-name</a>
Description	This command adds a prefix SID attribute containing an SRv6 TLV to routes that belong to the family and that are redistributed from another protocol to BGP. This command also adds a prefix SID attribute with SRv6 TLV to BGP routes that are received from other peers without the SRv6 TLV and that are propagated to other peers with next-hop-self applied.
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">micro-segment-locator</a> <i>reference</i>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **ignore-received-srv6-tlvs** *boolean*

Synopsis	Ignore SRv6 TLVs for received routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">segment-routing-v6</a> <a href="#">family</a> <i>keyword</i> <a href="#">ignore-received-srv6-tlvs</a> <i>boolean</i>
Tree	<a href="#">ignore-received-srv6-tlvs</a>
Description	<p>When configured to <b>true</b>, if a route of the family is received with a prefix SID attribute carrying an SRv6 TLV, the SRv6 TLV is ignored and the route resolution is based on the BGP next-hop only.</p> <p>When configured to <b>false</b>, if a route of the family is received with a prefix SID attribute carrying an SRv6 TLV, the SRv6 TLV is processed. Such a route is resolved only if its BGP next-hop is reachable and the locator prefix is reachable. The datapath programming and IGP cost to reach the next-hop (used by the BGP decision process) is based on the route to the locator prefix.</p>
Default	true
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **resolution** *keyword*

Synopsis	Resolution options for routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">segment-routing-v6</a> <a href="#">family</a> <i>keyword</i> <a href="#">resolution</a> <i>keyword</i>
Tree	<a href="#">resolution</a>
Options	<a href="#">route-table</a> , <a href="#">tunnel-table</a> , <a href="#">fallback-tunnel-to-route-table</a>
Default	<a href="#">route-table</a>
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR



**source-address** *string*

Synopsis	Source address used in SRv6 packet
Context	<b>configure</b> <i>router string</i> <b>bgp segment-routing-v6 source-address</b> <i>string</i>
Tree	<a href="#">source-address</a>
Description	<p>When configured, this command specifies the source IPv6 address used in the SA field of the outer IPv6 header of the SRv6 encapsulated packet.</p> <p>When not configured, the source IPv6 address is inherited from the configuration of the global default address in the <b>router "base" segment-routing segment-routing-v6 source-address</b> context.</p> <p>A source IPv6 address must be configured in this context or in the base router context. The system does not check if the address entered is a valid local address.</p>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**selective-label-ip** *keyword*

Synopsis	Label IP routes installed for local use on NHS router
Context	<b>configure</b> <i>router string</i> <b>bgp selective-label-ip</b> <i>keyword</i>
Tree	<a href="#">selective-label-ip</a>
Description	<p>This command enables selective installation of labeled unicast routes for resolution by local services and IP shortcuts on a labeled unicast Next-hop=self router.</p> <p>This command is supported for labeled unicast for both IPv4 and IPv6 routes.</p> <p>The <b>no-install</b> option installs labeled IP routes that are required by services. This option conserves labeled route table space in addition to RTM table space on BGP-LU next-hop-self route reflectors. The <b>route-table-install-only</b> option ensures that the labeled unicast routes are installed in the RTM in full. When <b>no-install</b> is specified, the download of labeled unicast routes for NHLFE resolution by services continues.</p>
Options	no-install, route-table-install-only
Introduced	22.10.R1
Platforms	All

**selective-label-ip-prioritization** *boolean*

Synopsis	Enable BGP selective prioritization for labeled routes
Context	<b>configure</b> <i>router string</i> <b>bgp selective-label-ip-prioritization</b> <i>boolean</i>
Tree	<a href="#">selective-label-ip-prioritization</a>

Description	<p>When this command is set to <b>true</b>, every labeled IPv4 and IPv6 route that is received and potentially usable by a local service is automatically prioritized for fast control plane reconvergence. When the reachability of a BGP next-hop changes, the labeled IPv4 and IPv6 routes are updated into the route table first, along with other routes manually tagged as high priority by import policies. A /32 or /128 labeled unicast route (and associated BGP-LU tunnel) is determined to be potentially usable by a local service if one of the following conditions applies:</p> <ul style="list-style-type: none"> <li>the route matches the far-end address of a user-provisioned SDP of a Layer 2 service and the SDP is configured to use BGP tunnels as transport</li> <li>the route matches the BGP next-hop address of a BGP-EVPN or IP VPN route, and this VPN route is either imported into a local service or readvertised by the router acting as a next-hop-self route reflector or a model-B ASBR</li> </ul> <p>When this command is set to <b>false</b>, selective-label IP prioritization for BGP is not used.</p>
Default	false
Introduced	21.10.R1
Platforms	All

### **selective-label-ipv4-install** *boolean*

Synopsis	Enable selective download for BGP label-ipv4 routes
Context	<b>configure</b> <i>router string</i> <b>bgp selective-label-ipv4-install</b> <i>boolean</i>
Tree	<a href="#">selective-label-ipv4-install</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **send-communities**

Synopsis	Enter the <b>send-communities</b> context
Context	<b>configure</b> <i>router string</i> <b>bgp send-communities</b>
Tree	<a href="#">send-communities</a>
Introduced	16.0.R1
Platforms	All

### **extended** *boolean*

Synopsis	Advertise the Extended Communities attribute to peers
Context	<b>configure</b> <i>router string</i> <b>bgp send-communities extended</b> <i>boolean</i>

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Tree	<a href="#">extended</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **large** *boolean*

Synopsis	Advertise the Large Communities attribute to peers
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp send-communities large</a> <i>boolean</i>
Tree	<a href="#">large</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **standard** *boolean*

Synopsis	Advertise the Communities attribute to peers
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp send-communities standard</a> <i>boolean</i>
Tree	<a href="#">standard</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **send-default**

Synopsis	Enter the <b>send-default</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp send-default</a>
Tree	<a href="#">send-default</a>
Introduced	19.7.R1
Platforms	All

### **export-policy** *reference*

Synopsis	Export policy name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp send-default export-policy</a> <i>reference</i>

Tree	<a href="#">export-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Introduced	19.7.R1
Platforms	All

### **ipv4** *boolean*

Synopsis	Enable IPv4 family type
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">send-default</a> <a href="#">ipv4</a> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	19.7.R1
Platforms	All

### **ipv6** *boolean*

Synopsis	Enable IPv6 family type
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">send-default</a> <a href="#">ipv6</a> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	19.7.R1
Platforms	All

### **split-horizon** *boolean*

Synopsis	Prevent routes being reflected back to best-route peer
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">split-horizon</a> <i>boolean</i>
Tree	<a href="#">split-horizon</a>
Description	<p>When configured to <b>true</b>, this command enables the use of split-horizon.</p> <p>This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGP and IBGP.</p> <p>Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary.</p> <p>When configured to <b>false</b>, the use of split-horizon is disabled.</p>
Default	false

Introduced	16.0.R1
Platforms	All

### **sr-policy-import** *boolean*

Synopsis	Import all segment routing policies into the BGP RIB
Context	<b>configure</b> <i>router string</i> <b>bgp</b> <i>sr-policy-import</i> <i>boolean</i>
Tree	<a href="#">sr-policy-import</a>
Description	<p>When configured to <b>true</b>, statically-configured non-local segment routing policies from the segment routing database are imported into the BGP RIB so that they can be advertised as originated routes toward BGP peers supporting segment routing policies (<b>sr-policy-ipv4</b> IP family type).</p> <p>When configured to <b>false</b>, the SR policies are not imported into the BGP RIB.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **subconfed-vpn-forwarding** *boolean*

Synopsis	Allow subconfed route resolution, next hop and labels
Context	<b>configure</b> <i>router string</i> <b>bgp</b> <i>subconfed-vpn-forwarding</i> <i>boolean</i>
Tree	<a href="#">subconfed-vpn-forwarding</a>
Description	<p>When this is set to <b>true</b>, the base router BGP instance retains all received VPN-IPv4 and VPN-IPv6 routes, including those with route targets not matching any VRF import policy of any locally configured VPRN. In addition, when the base router BGP is configured to apply a <b>next-hop-self</b> command to a peer of any type (EBGP, IBGP, or confed-EBGP), VPN-IPv4 and VPN-IPv6 routes are advertised to the peer with a new BGP label, next hop, and label-swap forwarding entry. These behaviors described above are applied when the <b>enable-inter-as-vpn</b> or <b>enable-rr-vpn-forwarding</b> commands are enabled in the <b>configure router bgp</b> context, in the same BGP instance. This applies regardless of whether the base router has a confederation configuration.</p> <p>When this command is set to <b>false</b>, subconfederation VPN forwarding is not used.</p>
Default	false
Introduced	21.10.R1
Platforms	All

**tcp-mss *number***

Synopsis	TCP maximum segment size override
Context	<b>configure</b> <i>router string</i> <b>bgp</b> <i>tcp-mss number</i>
Tree	<b>tcp-mss</b>
Description	<p>This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command).</p> <p>The configured value controls two properties of the TCP connection as follows:</p> <p>TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router.</p> <p>TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.</p>
Range	384 to 9746
Introduced	21.2.R1
Platforms	All

**third-party-nexthop *boolean***

Synopsis	Apply third-party next-hop processing to EBGP peers
Context	<b>configure</b> <i>router string</i> <b>bgp</b> <i>third-party-nexthop boolean</i>
Tree	<b>third-party-nexthop</b>
Description	<p>When configured to <b>true</b>, this command enables the router to send third-party next hop to EBGP peers in the same subnet as the source peer. The address family of the transport must match the address family of the route.</p> <p>When an IPv4 or IPv6 route is received from one EBGP peer and advertised to another EBGP peer in the same IP subnet, the BGP next hop is left unchanged.</p> <p>When configured to <b>false</b>, third-party next-hop processing is disabled and the next hop carries the IP address of the interface used to establish the TCP connection to the peer.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**vpn-apply-export *boolean***

Synopsis	Apply base-instance BGP export policies to VPN routes
Context	<b>configure</b> <i>router string</i> <b>bgp</b> <i>vpn-apply-export boolean</i>

Tree	<a href="#">vpn-apply-export</a>
Description	When configured to <b>true</b> , base-instance BGP export route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes. When configured to <b>false</b> , the export policies are not applied.
Default	false
Introduced	16.0.R1
Platforms	All

### **vpn-apply-import** *boolean*

Synopsis	Apply base-instance import route policies to VPN routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">vpn-apply-import</a> <i>boolean</i>
Tree	<a href="#">vpn-apply-import</a>
Description	When configured to <b>true</b> , base-instance BGP import route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes. When configured to <b>false</b> , the import policies are not applied.
Default	false
Introduced	16.0.R1
Platforms	All

### **bier**

Synopsis	Enable the <b>bier</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bier</a>
Tree	<a href="#">bier</a>
Introduced	19.5.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of BIER
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bier</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable

Introduced 19.5.R1  
Platforms All

### **bfd-liveness** *keyword*

Synopsis BIER next-hops with BFD enabled  
Context **configure** *router string bier bfd-liveness keyword*  
Tree [bfd-liveness](#)  
Options ipv4  
Max. Instances 1  
Introduced 21.7.R1  
Platforms All

### **fast-reroute** *boolean*

Synopsis Enable BIER Fast Reroute  
Context **configure** *router string bier fast-reroute boolean*  
Tree [fast-reroute](#)  
Default false  
Introduced 21.7.R1  
Platforms All

### **template** [[template-name](#)] *string*

Synopsis Enter the **template** list instance  
Context **configure** *router string bier template string*  
Tree [template](#)  
Description Commands in this context create a BIER template to be assigned to IGP.  
Introduced 19.5.R1  
Platforms All

### **[template-name]** *string*

Synopsis BIER template name



Context	<b>configure router</b> <i>string bier template string</i>
Tree	<a href="#">template</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the BIER template
Context	<b>configure router</b> <i>string bier template string admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	19.5.R1
Platforms	All

### **sub-domain** [[start](#)] *number end number*

Synopsis	Enter the <b>sub-domain</b> list instance
Context	<b>configure router</b> <i>string bier template string sub-domain number end number</i>
Tree	<a href="#">sub-domain</a>
Introduced	19.5.R1
Platforms	All

### **[start]** *number*

Synopsis	Lower bound of sub-domain range
Context	<b>configure router</b> <i>string bier template string sub-domain number end number</i>
Tree	<a href="#">sub-domain</a>
Range	0 to 255
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

### **end number**

Synopsis	Upper bound of sub-domain range
Context	<b>configure router string bier template string sub-domain number end number</b>
Tree	<b>sub-domain</b>
Range	0 to 255
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

### **bfr-id number**

Synopsis	BIER ID for the sub-domain
Context	<b>configure router string bier template string sub-domain number end number bfr-id number</b>
Tree	<b>bfr-id</b>
Range	1 to 4096
Introduced	19.5.R1
Platforms	All

### **multi-topology keyword**

Synopsis	Multi-topology for the sub-domain
Context	<b>configure router string bier template string sub-domain number end number multi-topology keyword</b>
Tree	<b>multi-topology</b>
Options	ipv4-unicast, ipv6-unicast, ipv4-multicast, ipv6-multicast
Default	ipv4-unicast
Introduced	19.5.R1
Platforms	All

### **prefix string**

Synopsis	IP address used as BFR prefix
Context	<b>configure router string bier template string sub-domain number end number prefix string</b>

Tree	<a href="#">prefix</a>
Description	This command specifies the IP address to be used as the BFR prefix. The prefix can be a loopback interface or system IP address.
Default	0.0.0.0
Introduced	19.5.R1
Platforms	All

### **class-forwarding** *boolean*

Synopsis	Allow class-based forwarding over IGP shortcuts
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">class-forwarding</a> <i>boolean</i>
Tree	<a href="#">class-forwarding</a>
Description	When configured to <b>true</b> , this command enables class-based forwarding (CBF) over IGP shortcuts.  Weighted ECMP, at the transport-tunnel level of BGP prefixes over IGP shortcuts, and the CBF feature on a per-BGP next-hop basis are mutually exclusive.  When configured to <b>false</b> , class-based forwarding (CBF) over IGP shortcuts is disabled.
Default	false
Introduced	16.0.R1
Platforms	All

### **confederation**

Synopsis	Enter the <b>confederation</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">confederation</a>
Tree	<a href="#">confederation</a>
Description	Commands in this context configure members that are to be part of a confederation.  Creating confederation autonomous systems within an AS can be used to reduce the number of IBGP sessions required within an AS.
Introduced	16.0.R1
Platforms	All

### **confed-as-num** *number*

Synopsis	Confederation AS number
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">confederation</a> <a href="#">confed-as-num</a> <i>number</i>

Tree	<a href="#">confed-as-num</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **members** [[as-number](#)] *number*

Synopsis	Add a list entry for <b>members</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">confederation</a> <a href="#">members</a> <i>number</i>
Tree	<a href="#">members</a>
Max. Instances	256
Introduced	16.0.R1
Platforms	All

### **[as-number]** *number*

Synopsis	Confederation member AS number
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">confederation</a> <a href="#">members</a> <i>number</i>
Tree	<a href="#">members</a>
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**dhcp-server**

Synopsis	Enter the <b>dhcp-server</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b>
Tree	<b>dhcp-server</b>
Introduced	16.0.R1
Platforms	All

**dhcpv4** [*name*] *string*

Synopsis	Enter the <b>dhcpv4</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i>
Tree	<b>dhcpv4</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	DHCP server name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i>
Tree	<b>dhcpv4</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the DHCP server
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**failover**

Synopsis	Enter the <b>failover</b> context
Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string failover</i>
Tree	<a href="#">failover</a>
Description	Commands in this context define DHCP failover where two DHCP servers manage the same pool of addresses, enabling them to share the load to assign leases for pool and provide backup for each in the event of network outages.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the failover mechanism
Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string failover admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ignore-mclt-on-takeover** *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string failover ignore-mclt-on-takeover boolean</i>
Tree	<a href="#">ignore-mclt-on-takeover</a>

Description	When configured to <b>true</b> , the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.  When configured to <b>false</b> , the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### maximum-client-lead-time *number*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum time that DHCP server can extend client's lease
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>failover</b> <b>maximum-client-lead-time</b> <i>number</i>
Tree	<a href="#">maximum-client-lead-time</a>
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.
Range	600 to 86399
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### partner-down-delay *number*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>failover</b> <b>partner-down-delay</b> <i>number</i>

Tree	<a href="#">partner-down-delay</a>
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.
Range	0 to 86399
Units	seconds
Default	86399
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **peer** [[address](#)] *reference*

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <i>string</i> <a href="#">failover</a> <b>peer</b> <i>reference</i>
Tree	<a href="#">peer</a>
Description	<p>Commands in this context define the peer-related parameters for DHCP failover.</p> <p>DHCP leases can be synchronized at the level of the DHCP server or pool. The pair of synchronizing servers or pools is identified by a tag. The synchronization information is carried over the Multi-Chassis Synchronization (MCS) link between the two peers. The MCS link is a logical IP or MPLS link.</p> <p>MCS runs over TCP port 45067, using either data traffic or keepalives to detect failure on the communication link between the two nodes. In the absence of any MCS data traffic for more than 0.5 seconds, MCS sends its own keepalive to the peer. If a reply is not received within 3 seconds, MCS declares its operational state as down and the DB sync state as out-of-sync. MCS consequently notifies its clients, including the DHCP server. It can take up to 3 seconds before the DHCP client realizes that the inter-chassis link has failed.</p> <p>The link failure does not necessarily imply the same failed state for the access links. It is possible, although unlikely, that both access links are operational while the inter-chassis communication link is broken. In this case, the two redundant nodes can become isolated from each other in the network. For this reason, it is important that the MCS link be highly redundant.</p>
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**[address] reference**

Synopsis	IP address of the failover peer
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">failover peer</a> <i>reference</i>
Tree	<a href="#">peer</a>
Reference	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sync-tag string****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">failover peer</a> <i>reference</i> <a href="#">sync-tag</a> <i>string</i>
Tree	<a href="#">sync-tag</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**startup-wait-time number****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between initialization and assuming active role
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">failover</a> <a href="#">startup-wait-time</a> <i>number</i>
Tree	<a href="#">startup-wait-time</a>
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600

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Units	seconds
Default	120
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **force-renews** *boolean*

Synopsis	Send FORCERENEW messages to force renewals of leases
Context	<b>configure</b> <i>router</i> <i>string</i> <i>dhcp-server</i> <i>dhcpv4</i> <i>string</i> <i>force-renews</i> <i>boolean</i>
Tree	<a href="#">force-renews</a>
Description	When configured to <b>true</b> , FORCERENEW messages are enabled for DHCP.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lease-hold**

Synopsis	Enter the <b>lease-hold</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <i>dhcp-server</i> <i>dhcpv4</i> <i>string</i> <i>lease-hold</i>
Tree	<a href="#">lease-hold</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **additional-scenarios**

Synopsis	Enter the <b>additional-scenarios</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <i>dhcp-server</i> <i>dhcpv4</i> <i>string</i> <i>lease-hold</i> <i>additional-scenarios</i>
Tree	<a href="#">additional-scenarios</a>
Description	Commands in this context configure additional types of leases or triggers that cause the system to hold up leases.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**internal-lease-ipsec** *boolean*

Synopsis	Apply the lease hold timer to local IPsec clients
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>lease-hold</b> <b>additional-scenarios</b> <b>internal-lease-ipsec</b> <i>boolean</i>
Tree	<b>internal-lease-ipsec</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**solicited-release** *boolean*

Synopsis	Apply lease hold timer for solicited releases
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>lease-hold</b> <b>additional-scenarios</b> <b>solicited-release</b> <i>boolean</i>
Tree	<b>solicited-release</b>
Description	This command enables the server to hold up a lease even for a solicited release, for example, when the server receives a normal DHCP release message.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**time** *number*

Synopsis	Lease hold time
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>lease-hold</b> <b>time</b> <i>number</i>
Tree	<b>time</b>
Range	1 to 631152000
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pool** [*pool-name*] *string*

Synopsis	Enter the <b>pool</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i>
Tree	<b>pool</b>

Description	Commands in this context configure a DHCP address pool on the router.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[pool-name] string**

Synopsis	DHCP server pool name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i>
Tree	<b>pool</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description string**

Synopsis	Text description
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **failover**

Synopsis	Enter the <b>failover</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>failover</b>
Tree	<b>failover</b>
Description	Commands in this context define DHCP failover where two DHCP servers manage the same pool of addresses, enabling them to share the load to assign leases for pool and provide backup for each in the event of network outages.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the failover mechanism
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>failover</b> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ignore-mclt-on-takeover** *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>failover</b> <b>ignore-mclt-on-takeover</b> <i>boolean</i>
Tree	<a href="#">ignore-mclt-on-takeover</a>
Description	<p>When configured to <b>true</b>, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.</p> <p>When configured to <b>false</b>, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**maximum-client-lead-time** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum time that DHCP server can extend client's lease
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>failover</b> <b>maximum-client-lead-time</b> <i>number</i>
Tree	<a href="#">maximum-client-lead-time</a>
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time

currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.

Range	600 to 86399
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **partner-down-delay** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>failover</b> <b>partner-down-delay</b> <i>number</i>
Tree	<b>partner-down-delay</b>
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.
Range	0 to 86399
Units	seconds
Default	86399
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **peer** [**address**] *reference*

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>failover</b> <b>peer</b> <i>reference</i>
Tree	<b>peer</b>
Description	Commands in this context configure peer-related parameters for DHCP failover.  DHCP leases can be synchronized at the level of the DHCP server or pool. The pair of synchronizing servers or pools is identified by a tag. The synchronization information is

carried over the Multi-Chassis Synchronization (MCS) link between the two peers. The MCS link is a logical IP or MPLS link.

MCS runs over TCP port 45067, using either data traffic or keepalives to detect failure on the communication link between the two nodes. In the absence of any MCS data traffic for more than 0.5 seconds, MCS sends its own keepalive to the peer. If a reply is not received within 3 seconds, MCS declares its operational state as down and the DB sync state as out-of-sync. MCS consequently notifies its clients, including the DHCP server. It can take up to 3 seconds before the DHCP client realizes that the inter-chassis link has failed.

The link failure does not necessarily imply the same failed state for the access links. It is possible, although unlikely, that both access links are operational while the inter-chassis communication link is broken. In this case, the two redundant nodes can become isolated from each other in the network. For this reason, it is important that the MCS link be highly redundant.

Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### [address] reference

Synopsis	IP address of the failover peer
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>failover</b> <b>peer</b> <i>reference</i>
Tree	<b>peer</b>
Reference	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### sync-tag *string*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>failover</b> <b>peer</b> <i>reference</i> <b>sync-tag</b> <i>string</i>
Tree	<b>sync-tag</b>

String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **startup-wait-time** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between initialization and assuming active role
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>failover</b> <b>startup-wait-time</b> <i>number</i>
Tree	<b>startup-wait-time</b>
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max-lease-time** *number*

Synopsis	Maximum lease time
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>max-lease-time</b> <i>number</i>
Tree	<b>max-lease-time</b>
Range	10 to 315446399
Units	seconds
Default	864000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**min-lease-time** *number*

Synopsis	Minimum lease time
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>min-lease-time</b> <i>number</i>
Tree	<b>min-lease-time</b>
Range	10 to 315446399
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**minimum-free**

Synopsis	Enter the <b>minimum-free</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>minimum-free</b>
Tree	<b>minimum-free</b>
Description	Commands in this context specify the minimum number of free addresses in this pool.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**absolute** *number*

Synopsis	Minimum number of free addresses in this pool or subnet
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>minimum-free</b> <b>absolute</b> <i>number</i>
Tree	<b>absolute</b>
Range	0 to 255
Default	1
Notes	The following elements are part of a choice: <b>absolute</b> or <b>percent</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**event-when-depleted** *boolean*

Synopsis	Generate notification when addresses are depleted
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Context	<b>configure router string dhcp-server dhcpv4 string pool string minimum-free event-when-depleted boolean</b>
Tree	<b>event-when-depleted</b>
Description	When configured to <b>true</b> , a system-generated event is generated when all available addresses in the pool or subnet of a local DHCP server are depleted. When configured to <b>false</b> , no action is taken when all available addresses in the pool or subnet of a local DHCP server are depleted.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **percent number**

Synopsis	Minimum free addresses as a percentage
Context	<b>configure router string dhcp-server dhcpv4 string pool string minimum-free percent number</b>
Tree	<b>percent</b>
Range	0 to 100
Default	1
Notes	The following elements are part of a choice: <b>absolute</b> or <b>percent</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **nak-non-matching-subnet boolean**

Synopsis	Send NAK if no match for request address pool range
Context	<b>configure router string dhcp-server dhcpv4 string pool string nak-non-matching-subnet boolean</b>
Tree	<b>nak-non-matching-subnet</b>
Description	When configured to <b>true</b> , a NAK response when the local DHCPv4 server receives a DHCP request with option 50 (the client is trying to request a previously allocated message). If the address-allocation algorithm uses a pool that does not contain the requested address, the system returns the DHCP NAK. When configured to <b>false</b> or unconfigured, the system drops the DHCP packet.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**offer-time** *number*

Synopsis	Time interval during which a DHCP offer remains valid
Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string pool string offer-time number</i>
Tree	<i>offer-time</i>
Range	10 to 600
Units	seconds
Default	60
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**options**

Synopsis	Enter the <b>options</b> context
Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string pool string options</i>
Tree	<i>options</i>
Description	Commands in this context define DHCPv4 pool options.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**option** [*number*] (*number* | *keyword*)

Synopsis	Enter the <b>option</b> list instance
Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string pool string options option (number   keyword)</i>
Tree	<i>option</i>
Description	This command configures DHCP options at the pool level. The pool options can be overruled by the value of the same option in the local user database.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[number]** (*number* | *keyword*)

Synopsis	DHCP option to send identification strings to client
Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string pool string options option (number   keyword)</i>

Tree	<a href="#">option</a>
Range	1 to 254
Options	subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ascii-string** *string*

Synopsis	DHCP option specified as an ASCII string
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">options</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">ascii-string</a> <i>string</i>
Tree	<a href="#">ascii-string</a>
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **duration** *number*

Synopsis	DHCP option specified as time duration
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">options</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">duration</a> <i>number</i>
Tree	<a href="#">duration</a>
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **empty**

Synopsis	Remove DHCP option from configuration
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Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>options</b> <b>option</b> ( <i>number</i>   <i>keyword</i> ) <b>empty</b>
Tree	<b>empty</b>
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **hex-string** *string*

Synopsis	DHCP option specified as hexadecimal string
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>options</b> <b>option</b> ( <i>number</i>   <i>keyword</i> ) <b>hex-string</b> <i>string</i>
Tree	<b>hex-string</b>
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv4-address** *string*

Synopsis	DHCP option specified as a list of IPv4 addresses
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>options</b> <b>option</b> ( <i>number</i>   <i>keyword</i> ) <b>ipv4-address</b> <i>string</i>
Tree	<b>ipv4-address</b>
Max. Instances	4
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> . This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **netbios-node-type** *keyword*

Synopsis	DHCP option specified as a NetBIOS node type
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Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string pool string options option (number   keyword) netbios-node-type keyword</i>
Tree	<a href="#">netbios-node-type</a>
Options	b-node, p-node, m-node, h-node
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **subnet** [[ipv4-prefix](#)] *string*

Synopsis	Enter the <b>subnet</b> list instance
Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string pool string subnet string</i>
Tree	<a href="#">subnet</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### [\[ipv4-prefix\]](#) *string*

Synopsis	IPv4 prefix for the subnet
Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string pool string subnet string</i>
Tree	<a href="#">subnet</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **address-range** [[start](#)] *string* [end](#) *string*

Synopsis	Enter the <b>address-range</b> list instance
Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string pool string subnet string address-range string end string</i>
Tree	<a href="#">address-range</a>
Description	This command configures the range of IP addresses to be served from the pool subnet. The range includes all the IP addresses between the specified start and end addresses, other than specifically excluded addresses. The start and end addresses must be unique within the subnet.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[start]** *string*

Synopsis Lower bound of the IP address range

Context **configure** **router** *string* **dhcp-server** **dhcpv4** *string* **pool** *string* **subnet** *string* **address-range** *string* **end** *string*

Tree **address-range**

Description This command specifies the start of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **end** *string*

Synopsis Upper bound of the IP address range

Context **configure** **router** *string* **dhcp-server** **dhcpv4** *string* **pool** *string* **subnet** *string* **address-range** *string* **end** *string*

Tree **address-range**

Description This command specifies the end of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **failover-control-type** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Failover control type for this range

Context **configure** **router** *string* **dhcp-server** **dhcpv4** *string* **pool** *string* **subnet** *string* **address-range** *string* **end** *string* **failover-control-type** *keyword*

Tree **failover-control-type**

Options local, remote, access-driven

Default	local
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**drain** *boolean*

Synopsis	Prevent new lease assignment from this subnet
Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string pool string subnet string drain boolean</i>
Tree	<a href="#">drain</a>
Description	When configured to <b>true</b> , new leases cannot be assigned and existing leases are kept up until they are released. When configured to <b>false</b> , the subnet is active and new leases can be assigned.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**exclude-addresses** [*start*] *string end string*

Synopsis	Add a list entry for <b>exclude-addresses</b>
Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string pool string subnet string exclude-addresses string end string</i>
Tree	<a href="#">exclude-addresses</a>
Description	This command configures an IP address to be excluded from the pool of IP addresses in the subnet.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[start]** *string*

Synopsis	Lower bound of the IP address range
Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string pool string subnet string exclude-addresses string end string</i>
Tree	<a href="#">exclude-addresses</a>
Description	This command specifies the start of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.
Notes	This element is part of a list key.



Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **end string**

Synopsis	Upper bound of the IP address range
Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string pool string subnet string exclude-addresses string end string</i>
Tree	<i>exclude-addresses</i>
Description	This command specifies the end of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-declined number**

Synopsis	Maximum number of declined addresses allowed
Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string pool string subnet string maximum-declined number</i>
Tree	<i>maximum-declined</i>
Max. Range	0 to 4294967295
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **minimum-free**

Synopsis	Enter the <b>minimum-free</b> context
Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string pool string subnet string minimum-free</i>
Tree	<i>minimum-free</i>
Description	Commands in this context specify the minimum number of free addresses in this pool.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**absolute number**

Synopsis	Minimum number of free addresses in this pool or subnet
Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string pool string subnet string minimum-free absolute number</i>
Tree	<i>absolute</i>
Range	0 to 255
Default	1
Notes	The following elements are part of a choice: <b>absolute</b> or <b>percent</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**event-when-depleted boolean**

Synopsis	Generate notification when addresses are depleted
Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string pool string subnet string minimum-free event-when-depleted boolean</i>
Tree	<i>event-when-depleted</i>
Description	When configured to <b>true</b> , a system-generated event is generated when all available addresses in the pool or subnet of a local DHCP server are depleted.  When configured to <b>false</b> , no action is taken when all available addresses in the pool or subnet of a local DHCP server are depleted.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**percent number**

Synopsis	Minimum free addresses as a percentage
Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string pool string subnet string minimum-free percent number</i>
Tree	<i>percent</i>
Range	0 to 100
Default	1
Notes	The following elements are part of a choice: <b>absolute</b> or <b>percent</b> .
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## options

Synopsis Enter the **options** context

Context **configure** *router string dhcp-server dhcpv4 string pool string subnet string options*

Tree [options](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## option [number] (*number | keyword*)

Synopsis Enter the **option** list instance

Context **configure** *router string dhcp-server dhcpv4 string pool string subnet string options option (number | keyword)*

Tree [option](#)

Description This command configures DHCP options at the pool subnet level. The options can be overruled by the value of the same option in the local user database.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [number] (*number | keyword*)

Synopsis DHCP option to send identification strings to client

Context **configure** *router string dhcp-server dhcpv4 string pool string subnet string options option (number | keyword)*

Tree [option](#)

Range 1 to 254

Options subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ascii-string *string*

Synopsis	DHCP option specified as an ASCII string
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>subnet</b> <i>string</i> <b>options</b> <i>option</i> ( <i>number</i>   <i>keyword</i> ) <b>ascii-string</b> <i>string</i>
Tree	<b>ascii-string</b>
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## duration *number*

Synopsis	DHCP option specified as time
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>subnet</b> <i>string</i> <b>options</b> <i>option</i> ( <i>number</i>   <i>keyword</i> ) <b>duration</b> <i>number</i>
Tree	<b>duration</b>
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## empty

Synopsis	Empty DHCP option
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>subnet</b> <i>string</i> <b>options</b> <i>option</i> ( <i>number</i>   <i>keyword</i> ) <b>empty</b>
Tree	<b>empty</b>
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**hex-string** *string*

Synopsis	DHCP option specified as hexadecimal string
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>subnet</b> <i>string</i> <b>options</b> <i>option</i> ( <i>number</i>   <i>keyword</i> ) <b>hex-string</b> <i>string</i>
Tree	<b>hex-string</b>
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipv4-address** *string*

Synopsis	DHCP option specified as a list of IPv4 addresses
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>subnet</b> <i>string</i> <b>options</b> <i>option</i> ( <i>number</i>   <i>keyword</i> ) <b>ipv4-address</b> <i>string</i>
Tree	<b>ipv4-address</b>
Max. Instances	4
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> . This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**netbios-node-type** *keyword*

Synopsis	DHCP option specified as a NetBIOS node type
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>subnet</b> <i>string</i> <b>options</b> <i>option</i> ( <i>number</i>   <i>keyword</i> ) <b>netbios-node-type</b> <i>keyword</i>
Tree	<b>netbios-node-type</b>
Options	b-node, p-node, m-node, h-node
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## pool-selection

Synopsis	Enter the <b>pool-selection</b> context
Context	<b>configure router</b> <i>string dhcp-server dhcpv4 string pool-selection</i>
Tree	<a href="#">pool-selection</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## use-gi-address

Synopsis	Enable the <b>use-gi-address</b> context
Context	<b>configure router</b> <i>string dhcp-server dhcpv4 string pool-selection use-gi-address</i>
Tree	<a href="#">use-gi-address</a>
Description	<p>Commands in this context configure gateway interface (GI) address matching. When configured, the pool can be used for address matching even if a subnet is not found. If the local user database name is not used, addresses are provided only by GI. If a user must be blocked from getting an address, the server maps to a local user database and configures the user with no address.</p> <p>A pool can include multiple subnets. Since the GI is shared by multiple subnets in a subscriber interface, the pool can provide IP addresses from any of the subnets included when the GI is matched to one of its subnets. This allows a pool to be created that represents a sub-net.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## scope *keyword*

Synopsis	GI address-matching scope
Context	<b>configure router</b> <i>string dhcp-server dhcpv4 string pool-selection use-gi-address scope keyword</i>
Tree	<a href="#">scope</a>
Options	subnet, pool
Default	subnet
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## use-pool-from-client

Synopsis	Enable the <b>use-pool-from-client</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">pool-selection use-pool-from-client</a>
Tree	<a href="#">use-pool-from-client</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## delimiter *string*

Synopsis	Delimiter to combine primary and secondary pool names
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">pool-selection use-pool-from-client delimiter</a> <i>string</i>
Tree	<a href="#">delimiter</a>
Description	This command configures a single ASCII character that separates the pool names in DHCP vendor-specific option 82, which identifies the address pool to be used for this client.
String Length	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## user-db *reference*

Synopsis	Local user database for authentication
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">user-db reference</a>
Tree	<a href="#">user-db</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## user-identification *keyword*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	User identification method for the DHCP server
----------	--

Context	<b>configure router</b> <i>string dhcp-server dhcpv4 string user-identification keyword</i>
Tree	<a href="#">user-identification</a>
Options	mac-circuit-id, duid, interface-id, interface-id-link-local, client-id, mac, circuit-id, remote-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dhcpv6** [[name](#)] *string*

Synopsis	Enter the <b>dhcpv6</b> list instance
Context	<b>configure router</b> <i>string dhcp-server dhcpv6 string</i>
Tree	<a href="#">dhcpv6</a>
Description	Commands in this context configure DHCPv6 parameters.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis	DHCP server name
Context	<b>configure router</b> <i>string dhcp-server dhcpv6 string</i>
Tree	<a href="#">dhcpv6</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the DHCP server
Context	<b>configure router</b> <i>string dhcp-server dhcpv6 string admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



## auto-provisioned *boolean*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Auto-provision the pools of this server
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">auto-provisioned</a> <i>boolean</i>
Tree	<a href="#">auto-provisioned</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## defaults

Synopsis	Enter the <b>defaults</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">defaults</a>
Tree	<a href="#">defaults</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## options

Synopsis	Enter the <b>options</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">defaults</a> <a href="#">options</a>
Tree	<a href="#">options</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## option [[number](#)] (*number* | *keyword*)

Synopsis	Enter the <b>option</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">defaults</a> <a href="#">options</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">option</a>

Description	This command configures DHCP options at the pool level. The pool options defined here can be overruled by the value of the same option in the local user database.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[number]** (*number* | *keyword*)

Synopsis	DHCP option to send as identification string
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>defaults</b> <b>options</b> <b>option</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>option</b>
Range	1 to 65535
Options	dns-server, domain-name
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ascii-string** *string*

Synopsis	DHCP option specified as an ASCII string
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>defaults</b> <b>options</b> <b>option</b> ( <i>number</i>   <i>keyword</i> ) <b>ascii-string</b> <i>string</i>
Tree	<b>ascii-string</b>
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **domain-string** *string*

Synopsis	DHCP option specified as a domain name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>defaults</b> <b>options</b> <b>option</b> ( <i>number</i>   <i>keyword</i> ) <b>domain-string</b> <i>string</i>
Tree	<b>domain-string</b>
String Length	1 to 127

Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **duration** *number*

Synopsis	DHCP option specified as time
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>defaults</b> <b>options</b> <b>option</b> ( <i>number</i>   <i>keyword</i> ) <b>duration</b> <i>number</i>
Tree	<b>duration</b>
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **empty**

Synopsis	Empty DHCP option
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>defaults</b> <b>options</b> <b>option</b> ( <i>number</i>   <i>keyword</i> ) <b>empty</b>
Tree	<b>empty</b>
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **hex-string** *string*

Synopsis	DHCP option specified as hexadecimal string
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>defaults</b> <b>options</b> <b>option</b> ( <i>number</i>   <i>keyword</i> ) <b>hex-string</b> <i>string</i>
Tree	<b>hex-string</b>
String Length	1 to 256

Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv6-address** *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>defaults</b> <b>options</b> <b>option</b> ( <i>number</i>   <i>keyword</i> ) <b>ipv6-address</b> <i>string</i>
Tree	<a href="#">ipv6-address</a>
Max. Instances	4
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> . This element is ordered by the user.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **preferred-lifetime** *number*

Synopsis	Time this lease remains preferred
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>defaults</b> <b>preferred-lifetime</b> <i>number</i>
Tree	<a href="#">preferred-lifetime</a>
Description	This command configures the preferred lifetime of the IPv6 lease address or prefix. When the preferred lifetime expires, any derived addresses are deprecated. The preferred lifetime must be less than or equal to the valid lifetime.  Each address or prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address/prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).
Range	300 to 315446399
Units	seconds
Default	3600
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **rebind-time** *number*

Synopsis Rebind time for the lease

Context **configure** *router string dhcp-server dhcpv6 string defaults rebind-time number*

Tree [rebind-time](#)

Description This command configures the rebind time, known as T2, at which the client contacts the addressing authority to extend the lifetimes of its leases.

The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew or reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses or prefixes currently assigned to the IA in its renew message.

Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured rebind timer value should always be less than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.

Range 0 to 1209600

Units seconds

Default 2880

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **renew-time** *number*

Synopsis Renew time for the lease

Context **configure** *router string dhcp-server dhcpv6 string defaults renew-time number*

Tree [renew-time](#)

Description This command configures the renew time, known as T1, at which the client makes a transition to the lease-renewal state.

The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew/reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses/prefixes currently assigned to the IA in its renew message.

Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to

extend, respectively. The configured renew timer value should always be shorter than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.

Range	0 to 604800
Units	seconds
Default	1800
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **valid-lifetime** *number*

Synopsis	Time for the lease to remain valid
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>defaults</b> <b>valid-lifetime</b> <i>number</i>
Tree	<b>valid-lifetime</b>
Description	<p>This command configures a valid lifetime for a DHCPv6 lease address or prefix. The valid lifetime is the length of time an address and prefix remains in the valid state. The valid lifetime must be greater than or equal to the preferred lifetime. When the valid lifetime expires, the address and prefix becomes invalid and must not be used in communications. RFC 2461 recommends a default value of 30 days.</p> <p>Each address and prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address and prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).</p>
Range	300 to 315446399
Units	seconds
Default	86400
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## failover

Synopsis	Enter the <b>failover</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <a href="#">string</a> <b>failover</b>
Tree	<a href="#">failover</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of the failover mechanism
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <a href="#">string</a> <b>failover</b> <a href="#">admin-state</a> <a href="#">keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ignore-mclt-on-takeover *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <a href="#">string</a> <b>failover</b> <a href="#">ignore-mclt-on-takeover</a> <a href="#">boolean</a>
Tree	<a href="#">ignore-mclt-on-takeover</a>
Description	<p>When configured to <b>true</b>, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.</p> <p>When configured to <b>false</b>, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**maximum-client-lead-time** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum time that DHCP server can extend client's lease
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string failover maximum-client-lead-time number</i>
Tree	<a href="#">maximum-client-lead-time</a>
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.
Range	600 to 86399
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**partner-down-delay** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string failover partner-down-delay number</i>
Tree	<a href="#">partner-down-delay</a>
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.
Range	0 to 86399
Units	seconds
Default	86399



Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **peer** [[address](#)] *reference*

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">failover peer</a> <i>reference</i>
Tree	<a href="#">peer</a>
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[address]** *reference*

Synopsis	IP address of the failover peer
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">failover peer</a> <i>reference</i>
Tree	<a href="#">peer</a>
Reference	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sync-tag** *string*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">failover peer</a> <i>reference</i> <a href="#">sync-tag</a> <i>string</i>
Tree	<a href="#">sync-tag</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### startup-wait-time *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between initialization and assuming active role
Context	<b>configure</b> <i>router</i> <i>string</i> <i>dhcp-server dhcpv6</i> <i>string</i> <i>failover startup-wait-time</i> <i>number</i>
Tree	<a href="#">startup-wait-time</a>
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### ignore-rapid-commit *boolean*

Synopsis	Ignore Rapid Commit option
Context	<b>configure</b> <i>router</i> <i>string</i> <i>dhcp-server dhcpv6</i> <i>string</i> <i>ignore-rapid-commit</i> <i>boolean</i>
Tree	<a href="#">ignore-rapid-commit</a>
Description	When configured to <b>true</b> , the server ignores the Rapid Commit option sent by the client and uses the regular message exchange.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### interface-id-mapping *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Map hosts within interface-to-prefix combinations
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string interface-id-mapping boolean</i>
Tree	<a href="#">interface-id-mapping</a>
Description	When configured to <b>true</b> , this command specifies an interface-mapping method that uses a combination of unique /64 prefixes and interface IDs. A /64 prefix is allocated to each interface ID, and all clients with the same interface ID are assigned an address from the prefix. This method is used for bridging clients in the same local loop and SAP, so that sharing the prefix allows communication to stay local. For SLAAC-based assignment, downstream neighbor discovery is automatically enabled to resolve the assigned address.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## lease-hold

Synopsis	Enter the <b>lease-hold</b> context
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string lease-hold</i>
Tree	<a href="#">lease-hold</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## additional-scenarios

Synopsis	Enter the <b>additional-scenarios</b> context
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string lease-hold additional-scenarios</i>
Tree	<a href="#">additional-scenarios</a>
Description	Commands in this context configure additional types of leases or triggers that cause the system to hold up leases.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## internal-lease-ipsec *boolean*

Synopsis	Apply the lease hold timer to local IPsec clients
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string lease-hold additional-scenarios internal-lease-ipsec boolean</i>

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Tree	<a href="#">internal-lease-ipsec</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **solicited-release** *boolean*

Synopsis	Apply lease hold timer for solicited releases
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">lease-hold additional-scenarios solicited-release</a> <i>boolean</i>
Tree	<a href="#">solicited-release</a>
Description	This command enables the server to hold up a lease even for a solicited release, for example, when the server receives a normal DHCP release message.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **time** *number*

Synopsis	Lease hold time
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">lease-hold time</a> <i>number</i>
Tree	<a href="#">time</a>
Range	1 to 631152000
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lease-query** *boolean*

Synopsis	Handle and reply to lease query messages
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">lease-query</a> <i>boolean</i>
Tree	<a href="#">lease-query</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pool** [*pool-name*] *string*

Synopsis	Enter the <b>pool</b> list instance
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string</i>
Tree	<i>pool</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[pool-name]** *string*

Synopsis	DHCP server pool name
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string</i>
Tree	<i>pool</i>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**delegated-prefix**

Synopsis	Enter the <b>delegated-prefix</b> context
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string delegated-prefix</i>
Tree	<i>delegated-prefix</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**length** *number*

Synopsis	Prefix length for pool if unspecified by client
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string delegated-prefix length number</i>
Tree	<i>length</i>
Range	48 to 127
Default	64
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum number**

Synopsis Maximum delegated prefix length for this pool

Context **configure** *router string dhcp-server dhcpv6 string pool string delegated-prefix maximum number*

Tree [maximum](#)

Range 48 to 127

Default 64

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **minimum number**

Synopsis Minimum delegated prefix length for this pool

Context **configure** *router string dhcp-server dhcpv6 string pool string delegated-prefix minimum number*

Tree [minimum](#)

Range 48 to 127

Default 48

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description string**

Synopsis Text description

Context **configure** *router string dhcp-server dhcpv6 string pool string description string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **exclude-prefix [ipv6-prefix] string**

Synopsis Add a list entry for **exclude-prefix**

Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string exclude-prefix string</i>
Tree	<a href="#">exclude-prefix</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[ipv6-prefix]** *string*

Synopsis	IPv6 prefix to be excluded from available pool prefixes
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string exclude-prefix string</i>
Tree	<a href="#">exclude-prefix</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **failover**

Synopsis	Enter the <b>failover</b> context
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string failover</i>
Tree	<a href="#">failover</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the failover mechanism
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string failover admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ignore-mclt-on-takeover** *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>failover</b> <b>ignore-mclt-on-takeover</b> <i>boolean</i>
Tree	<a href="#">ignore-mclt-on-takeover</a>
Description	<p>When configured to <b>true</b>, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.</p> <p>When configured to <b>false</b>, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**maximum-client-lead-time** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum time that DHCP server can extend client's lease
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>failover</b> <b>maximum-client-lead-time</b> <i>number</i>
Tree	<a href="#">maximum-client-lead-time</a>
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.
Range	600 to 86399
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**partner-down-delay** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string failover partner-down-delay number</i>
Tree	<a href="#">partner-down-delay</a>
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.
Range	0 to 86399
Units	seconds
Default	86399
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**peer** [[address](#)] *reference*

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string failover peer reference</i>
Tree	<a href="#">peer</a>
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[address]** *reference*

Synopsis	IP address of the failover peer
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string failover peer reference</i>
Tree	<a href="#">peer</a>
Reference	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sync-tag** *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>failover</b> <b>peer</b> <i>reference</i> <b>sync-tag</b> <i>string</i>
Tree	<b>sync-tag</b>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **startup-wait-time** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between initialization and assuming active role
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>failover</b> <b>startup-wait-time</b> <i>number</i>
Tree	<b>startup-wait-time</b>
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**options**

Synopsis	Enter the <b>options</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">options</a>
Tree	<a href="#">options</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**option** [[number](#)] (*number* | *keyword*)

Synopsis	Enter the <b>option</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">options</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">option</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[number]** (*number* | *keyword*)

Synopsis	DHCP option to send as identification string
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">options</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">option</a>
Range	1 to 65535
Options	dns-server, domain-name
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ascii-string** *string*

Synopsis	DHCP option specified as an ASCII string
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">options</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">ascii-string</a> <i>string</i>
Tree	<a href="#">ascii-string</a>
String Length	1 to 127

Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **domain-string** *string*

Synopsis	DHCP option specified as a domain name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>options</b> <b>option</b> ( <i>number</i>   <i>keyword</i> ) <b>domain-string</b> <i>string</i>
Tree	<b>domain-string</b>
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **duration** *number*

Synopsis	DHCP option specified as time
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>options</b> <b>option</b> ( <i>number</i>   <i>keyword</i> ) <b>duration</b> <i>number</i>
Tree	<b>duration</b>
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **empty**

Synopsis	Empty DHCP option
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>options</b> <b>option</b> ( <i>number</i>   <i>keyword</i> ) <b>empty</b>
Tree	<b>empty</b>

Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **hex-string** *string*

Synopsis	DHCP option specified as hexadecimal string
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>options</b> <i>option</i> ( <i>number</i>   <i>keyword</i> ) <b>hex-string</b> <i>string</i>
Tree	<b>hex-string</b>
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv6-address** *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>options</b> <i>option</i> ( <i>number</i>   <i>keyword</i> ) <b>ipv6-address</b> <i>string</i>
Tree	<b>ipv6-address</b>
Max. Instances	4
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> . This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **prefix** [**ipv6-prefix**] *string*

Synopsis	Enter the <b>prefix</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i>
Tree	<b>prefix</b>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### [**ipv6-prefix**] *string*

Synopsis IPv6 prefix to be excluded from available pool prefixes  
 Context **configure** *router string dhcp-server dhcpv6 string pool string prefix string*  
 Tree [prefix](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **drain** *boolean*

Synopsis No new leases can be assigned  
 Context **configure** *router string dhcp-server dhcpv6 string pool string prefix string drain boolean*  
 Tree [drain](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **failover-control-type** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Failover control type for this range  
 Context **configure** *router string dhcp-server dhcpv6 string pool string prefix string failover-control-type keyword*  
 Tree [failover-control-type](#)  
 Options local, remote, access-driven  
 Default local  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**options**

Synopsis	Enter the <b>options</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>options</b>
Tree	<b>options</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**option** [*number*] (*number* | *keyword*)

Synopsis	Enter the <b>option</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>options</b> <b>option</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>option</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[number]** (*number* | *keyword*)

Synopsis	DHCP option to send as identification string
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>options</b> <b>option</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>option</b>
Range	1 to 65535
Options	dns-server, domain-name
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ascii-string** *string*

Synopsis	DHCP option specified as an ASCII string
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>options</b> <b>option</b> ( <i>number</i>   <i>keyword</i> ) <b>ascii-string</b> <i>string</i>
Tree	<b>ascii-string</b>
String Length	1 to 127

Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **domain-string** *string*

Synopsis	DHCP option specified as a domain name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>options</b> <i>option</i> ( <i>number</i>   <i>keyword</i> ) <b>domain-string</b> <i>string</i>
Tree	<b>domain-string</b>
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **duration** *number*

Synopsis	DHCP option specified as time
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>options</b> <i>option</i> ( <i>number</i>   <i>keyword</i> ) <b>duration</b> <i>number</i>
Tree	<b>duration</b>
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **empty**

Synopsis	Empty DHCP option
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>options</b> <i>option</i> ( <i>number</i>   <i>keyword</i> ) <b>empty</b>
Tree	<b>empty</b>



Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **hex-string** *string*

Synopsis	DHCP option specified as hexadecimal string
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>options</b> <i>option</i> ( <i>number</i>   <i>keyword</i> ) <b>hex-string</b> <i>string</i>
Tree	<b>hex-string</b>
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv6-address** *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>options</b> <i>option</i> ( <i>number</i>   <i>keyword</i> ) <b>ipv6-address</b> <i>string</i>
Tree	<b>ipv6-address</b>
Max. Instances	4
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> . This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **preferred-lifetime** *number*

Synopsis	Time this lease remains preferred
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>preferred-lifetime</b> <i>number</i>
Tree	<b>preferred-lifetime</b>

Description	<p>This command configures the preferred lifetime of the IPv6 lease address or prefix. When the preferred lifetime expires, any derived addresses are deprecated. The preferred lifetime must be less than or equal to the valid lifetime.</p> <p>Each address or prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address/prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).</p>
Range	300 to 315446399
Units	seconds
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **prefix-length-threshold** [*prefix-length*] *number*

Synopsis	Enter the <b>prefix-length-threshold</b> list instance
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string prefix string prefix-length-threshold number</i>
Tree	<i>prefix-length-threshold</i>
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[prefix-length]** *number*

Synopsis	Delegated prefix length for pool thresholds
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string prefix string prefix-length-threshold number</i>
Tree	<i>prefix-length-threshold</i>
Range	1 to 128
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **absolute** *number*

Synopsis	Minimum number of free prefixes for this prefix length
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string prefix string prefix-length-threshold number absolute number</i>
Tree	<i>absolute</i>
Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>absolute</b> or <b>percent</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **event-when-depleted** *boolean*

Synopsis	Generate a notification when this pool is depleted
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string prefix string prefix-length-threshold number event-when-depleted boolean</i>
Tree	<i>event-when-depleted</i>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **percent** *number*

Synopsis	Minimum percentage of free prefixes for prefix length
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string prefix string prefix-length-threshold number percent number</i>
Tree	<i>percent</i>
Range	1 to 100
Notes	The following elements are part of a choice: <b>absolute</b> or <b>percent</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **prefix-type**

Synopsis	Enter the <b>prefix-type</b> context
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string prefix string prefix-type</i>

Tree	<a href="#">prefix-type</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pd** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Allocate IA-PD prefixes from this prefix pool
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <a href="#">string</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">prefix</a> <a href="#">string</a> <a href="#">prefix-type</a> <a href="#">pd</a> <i>boolean</i>
Tree	<a href="#">pd</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**wan-host** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Allocate IA-NA or SLAAC prefixes from this prefix pool
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <a href="#">string</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">prefix</a> <a href="#">string</a> <a href="#">prefix-type</a> <a href="#">wan-host</a> <i>boolean</i>
Tree	<a href="#">wan-host</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**rebind-time** *number*

Synopsis	Rebind time for the lease
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <a href="#">string</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">prefix</a> <a href="#">string</a> <a href="#">rebind-time</a> <i>number</i>
Tree	<a href="#">rebind-time</a>

Description	<p>This command configures the rebind time, known as T2, at which the client contacts the addressing authority to extend the lifetimes of its leases.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew or reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses or prefixes currently assigned to the IA in its renew message.</p> <p>Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured rebind timer value should always be less than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.</p>
Range	0 to 1209600
Units	seconds
Default	2880
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **renew-time** *number*

Synopsis	Renew time for the lease
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>renew-time</b> <i>number</i>
Tree	<b>renew-time</b>
Description	<p>This command configures the renew time, known as T1, at which the client makes a transition to the lease-renewal state.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew/reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses/prefixes currently assigned to the IA in its renew message.</p> <p>Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured renew timer value should always be shorter than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.</p>
Range	0 to 604800
Units	seconds
Default	1800

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **valid-lifetime** *number*

Synopsis	Time for the lease to remain valid
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string prefix string valid-lifetime number</i>
Tree	<a href="#">valid-lifetime</a>
Description	<p>This command configures a valid lifetime for a DHCPv6 lease address or prefix. The valid lifetime is the length of time an address and prefix remains in the valid state. The valid lifetime must be greater than or equal to the preferred lifetime. When the valid lifetime expires, the address and prefix becomes invalid and must not be used in communications. RFC 2461 recommends a default value of 30 days.</p> <p>Each address and prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address and prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).</p>
Range	300 to 315446399
Units	seconds
Default	86400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **prefix-length-threshold** [[prefix-length](#)] *number*

Synopsis	Enter the <b>prefix-length-threshold</b> list instance
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string prefix-length-threshold number</i>
Tree	<a href="#">prefix-length-threshold</a>
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[prefix-length]** *number*

Synopsis	Delegated prefix length for pool thresholds
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix-length-threshold</b> <i>number</i>
Tree	<a href="#">prefix-length-threshold</a>
Range	1 to 128
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**event-when-depleted** *boolean*

Synopsis	Generate a notification when this pool is depleted
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix-length-threshold</b> <i>number</i> <b>event-when-depleted</b> <i>boolean</i>
Tree	<a href="#">event-when-depleted</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**minimum-free-percent** *number*

Synopsis	Percentage of free prefixes for this prefix length
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix-length-threshold</b> <i>number</i> <b>minimum-free-percent</b> <i>number</i>
Tree	<a href="#">minimum-free-percent</a>
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pool-selection**

Synopsis	Enter the <b>pool-selection</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool-selection</b>
Tree	<a href="#">pool-selection</a>

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### use-link-address

Synopsis	Enable the <b>use-link-address</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool-selection</b> <b>use-link-address</b>
Tree	<b>use-link-address</b>
Description	This command configures the local pool selection for DHCPv6 address or prefix assignment to use the link address. When configured, the selected pool contains a prefix covering the link address.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### scope *keyword*

Synopsis	Scope of the IP address selection
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool-selection</b> <b>use-link-address</b> <b>scope</b> <i>keyword</i>
Tree	<b>scope</b>
Options	subnet, pool
Default	subnet
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### use-pool-from-client

Synopsis	Enable the <b>use-pool-from-client</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool-selection</b> <b>use-pool-from-client</b>
Tree	<b>use-pool-from-client</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### delimiter *string*

Synopsis	Delimiter to combine primary and secondary pool names
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Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool-selection use-pool-from-client delimiter string</i>
Tree	<a href="#">delimiter</a>
Description	This command configures a single ASCII character that separates the pool names in DHCP vendor-specific option 82, which identifies the address pool to be used for this client.
String Length	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### server-id

Synopsis	Enter the <b>server-id</b> context
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string server-id</i>
Tree	<a href="#">server-id</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### duid-enterprise

Synopsis	Enter the <b>duid-enterprise</b> context
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string server-id duid-enterprise</i>
Tree	<a href="#">duid-enterprise</a>
Notes	The following elements are part of a choice: <b>duid-enterprise</b> or <b>duid-link-local</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### ascii-string *string*

Synopsis	DUID enterprise server ID specified as an ASCII string
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string server-id duid-enterprise ascii-string string</i>
Tree	<a href="#">ascii-string</a>
String Length	1 to 58
Notes	The following elements are part of a choice: <b>ascii-string</b> or <b>hex-string</b> .
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### hex-string *string*

Synopsis DUID enterprise server ID specified as a hex string

Context **configure** **router** *string* **dhcp-server** **dhcpv6** *string* **server-id** **duid-enterprise** **hex-string** *string*

Tree [hex-string](#)

String Length 1 to 118

Notes The following elements are part of a choice: **ascii-string** or **hex-string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### duid-link-local

Synopsis Derive DUID server ID from a system link-layer address

Context **configure** **router** *string* **dhcp-server** **dhcpv6** *string* **server-id** **duid-link-local**

Tree [duid-link-local](#)

Notes The following elements are part of a choice: **duid-enterprise** or **duid-link-local**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### user-identification *keyword*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis User identification method for the DHCP server

Context **configure** **router** *string* **dhcp-server** **dhcpv6** *string* **user-identification** *keyword*

Tree [user-identification](#)

Options mac-circuit-id, duid, interface-id, interface-id-link-local, client-id, mac, circuit-id, remote-id

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**dns**

Synopsis	Enter the <b>dns</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dns</a>
Tree	<a href="#">dns</a>
Introduced	20.2.R1
Platforms	All

**redirect-vprn**

Synopsis	Enter the <b>redirect-vprn</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dns</a> <a href="#">redirect-vprn</a>
Tree	<a href="#">redirect-vprn</a>
Description	Commands in this context configure DNS resolution of all packets through the VPRN DNS server.  The VPRN DNS server must be configured before using the commands in this context. If the VPRN DNS server is not configured, all packet resolution fails.
Introduced	20.2.R1
Platforms	All

**service** [[service-name](#)] *reference*

Synopsis	Enter the <b>service</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dns</a> <a href="#">redirect-vprn</a> <a href="#">service</a> <i>reference</i>
Tree	<a href="#">service</a>
Max. Instances	1
Introduced	20.2.R1
Platforms	All

**[service-name]** *reference*

Synopsis	Administrative service name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dns</a> <a href="#">redirect-vprn</a> <a href="#">service</a> <i>reference</i>
Tree	<a href="#">service</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i>
Notes	This element is part of a list key.

Introduced	20.2.R1
Platforms	All

### **preference** *number*

Synopsis	Service preference
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dns redirect-vprn service</b> <i>reference</i> <b>preference</b> <i>number</i>
Tree	<b>preference</b>
Range	0 to 255
Introduced	20.2.R1
Platforms	All

### **ecmp** *number*

Synopsis	Maximum equal-cost routes for routing table instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ecmp</b> <i>number</i>
Tree	<b>ecmp</b>
Description	<p>This command configures ECMP and defines the number of routes for path sharing. ECMP can be used only for routes learned with the same preference and the same protocol.</p> <p>If available ECMP routes at the best preference exceed the maximum ECMP routes allowed, the system selects the route using the following criteria:</p> <ol style="list-style-type: none"> <li>1. The system selects the lowest next hop router ID.</li> <li>2. If the next hop goes to the same neighbor, the system selects the next hop with the lowest interface index.</li> </ol>
Range	1 to 64
Default	1
Introduced	16.0.R1
Platforms	All

### **entropy-label** *boolean*

Synopsis	Use entropy label
Context	<b>configure</b> <b>router</b> <i>string</i> <b>entropy-label</b> <i>boolean</i>
Tree	<b>entropy-label</b>
Description	When configured to <b>true</b> , this command enables the use of entropy labels.

The entropy label and indicator (EL/ELI) are inserted on relevant packets. Applicable packets are those for which at least one LSP in the stack at the far end has advertised the entropy-label capability. These LSPs are in LDP or RSVP tunnels used by an IGP or BGP shortcut. If the tunnel is of type RSVP, the entropy-label capability must also be enabled under the **configure router mpls** or **configure router mpls lsp** context.

This command also results in other traffic that is forwarded over an LDP or RSVP LSP for which this router is the LER, and for which there is no explicit service endpoint on this router, to have the EL/ELI enabled, subject to the LSP far-end advertising entropy-label-capability. An example of such traffic includes packets arriving on a stitched LDP LSP forwarded over an RSVP LSP.

The entropy label and the hash label features are mutually exclusive. The entropy label cannot be configured on a spoke SDP or service where the hash label feature has already been configured.

When configured to **false**, this command disables the use of entropy labels.

Default	false
Introduced	16.0.R1
Platforms	All

### **fib-priority** *keyword*

Synopsis	FIB priority for VPRN BGP routes
Context	<b>configure router</b> <i>string fib-priority keyword</i>
Tree	<a href="#">fib-priority</a>
Options	standard, high
Default	standard
Introduced	16.0.R1
Platforms	All

### **fib-telemetry** *boolean*

Synopsis	Collect extra state information
Context	<b>configure router</b> <i>string fib-telemetry boolean</i>
Tree	<a href="#">fib-telemetry</a>
Default	false
Introduced	16.0.R4
Platforms	All

**firewall**

Synopsis	Enter the <b>firewall</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">firewall</a>
Tree	<a href="#">firewall</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**domain** [[name](#)] [string](#)

Synopsis	Enter the <b>domain</b> list instance
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">firewall</a> <a href="#">domain</a> <a href="#">string</a>
Tree	<a href="#">domain</a>
Max. Instances	1024
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[name]** [string](#)

Synopsis	Firewall domain name
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">firewall</a> <a href="#">domain</a> <a href="#">string</a>
Tree	<a href="#">domain</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** [keyword](#)

Synopsis	Administrative state of the firewall domain
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">firewall</a> <a href="#">domain</a> <a href="#">string</a> <a href="#">admin-state</a> <a href="#">keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dhcpv6-server

Synopsis Enter the **dhcpv6-server** context  
 Context **configure** *router string firewall domain string dhcpv6-server*  
 Tree [dhcpv6-server](#)  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### name *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis DHCPv6 server name  
 Context **configure** *router string firewall domain string dhcpv6-server name string*  
 Tree [name](#)  
 String Length 1 to 32  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### router-instance *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Router name  
 Context **configure** *router string firewall domain string dhcpv6-server router-instance string*  
 Tree [router-instance](#)  
 Introduced 16.0.R4  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nat-group** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT group for this domain
Context	<b>configure</b> <i>router string firewall domain string nat-group reference</i>
Tree	<a href="#">nat-group</a>
Reference	<b>configure</b> <i>isa nat-group number</i>
Notes	The following elements are part of a mandatory choice: <b>nat-group</b> or <b>wlan-gw-group</b> .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**prefix** [[ip-prefix](#)] *string*

Synopsis	Enter the <b>prefix</b> list instance
Context	<b>configure</b> <i>router string firewall domain string prefix string</i>
Tree	<a href="#">prefix</a>
Max. Instances	4096
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[ip-prefix]** *string*

Synopsis	IP prefix and prefix length for the domain firewall
Context	<b>configure</b> <i>router string firewall domain string prefix string</i>
Tree	<a href="#">prefix</a>
Description	This command configures a prefix for which firewall functionality applies within the domain. Prefixes cannot be shared or duplicated across multiple domains in the same routing context. A domain can contain multiple prefixes.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR



**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">firewall domain</a> <i>string</i> <a href="#">prefix</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**wlan-gw-group** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	WLAN GW group used for NAT
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">firewall domain</a> <i>string</i> <a href="#">wlan-gw-group</a> <i>reference</i>
Tree	<a href="#">wlan-gw-group</a>
Reference	<b>configure</b> <a href="#">isa</a> <a href="#">wlan-gw-group</a> <i>number</i>
Notes	The following elements are part of a mandatory choice: <b>nat-group</b> or <b>wlan-gw-group</b> .
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**flowspec**

Synopsis	Enter the <b>flowspec</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">flowspec</a>
Tree	<a href="#">flowspec</a>
Introduced	16.0.R1
Platforms	All

**filter-cam-type** *keyword*

Synopsis	Filter policy type for FlowSpec embedding
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">flowspec</a> <a href="#">filter-cam-type</a> <i>keyword</i>
Tree	<a href="#">filter-cam-type</a>

Description	This command specifies the filter type that is required to embed FlowSpec entries. The filter type defines the match criteria that are available in the filter policy.
Options	normal, packet-length
Default	normal
Introduced	20.7.R1
Platforms	All

### **ip-filter-max-size** *number*

Synopsis	Maximum number of flowspec rule entries in IPv4 filter
Context	<b>configure</b> <b>router</b> <i>string</i> <b>flowspec</b> <b>ip-filter-max-size</b> <i>number</i>
Tree	<a href="#">ip-filter-max-size</a>
Description	<p>This command configures the maximum number of IPv4 flowspec routes, or rules, that can be entered in the auto-created embedded filter, fSpec-X. Flowspec filter entries embedded in a filter policy in this routing instance will use filter entries from the range between the embedding offset and (offset + ip-filter-max-size – 1).</p> <p>The sum of the maximum-size value and the highest offset in any IPv4 filter that embeds IPv4 flowspec rules from this routing instance (excluding filters that embed at offset 262143) must not exceed 262143.</p> <p>The maximum size can be adjusted up or down at any time. If the current number of IPv4 flowspec rules is greater than the new maximum, the extra rules are removed immediately but retained in the BGP RIB. If the limit is increased, new rules are programmed only as they are received in new BGP updates.</p>
Range	0 to 262143
Default	512
Introduced	16.0.R1
Platforms	All

### **ipv6-filter-max-size** *number*

Synopsis	Maximum number of flowspec rule entries in IPv6 filter
Context	<b>configure</b> <b>router</b> <i>string</i> <b>flowspec</b> <b>ipv6-filter-max-size</b> <i>number</i>
Tree	<a href="#">ipv6-filter-max-size</a>
Description	<p>This command configures the maximum number of IPv6 flowspec routes or rules that can be embedded into an ingress IPv6 filter policy for a specified routing instance. Flowspec filter entries embedded in a filter policy in this routing instance will use filter entries from the range between the embedding offset and (offset + ip-filter-max-size – 1).</p>

The sum of the maximum-size value and the highest offset in any IPv6 filter that embeds IPv6 flowspec rules from this routing instance (excluding filters that embed at offset 262143) must not exceed 262143.

The maximum size can be adjusted up or down at any time. If the current number of IPv6 flowspec rules is greater than the new maximum, the extra rules are removed immediately but retained in the BGP RIB. If the limit is increased, new rules are programmed only as they are received in new BGP updates.

Range	0 to 262143
Default	512
Introduced	16.0.R1
Platforms	All

## gtm

Synopsis	Enter the <b>gtm</b> context
Context	<b>configure</b> <i>router string</i> <b>gtm</b>
Tree	<b>gtm</b>
Introduced	19.5.R1
Platforms	All

## mvpn *boolean*

Synopsis	Enable the configuration of MVPN-related parameters
Context	<b>configure</b> <i>router string</i> <b>gtm mvpn</b> <i>boolean</i>
Tree	<b>mvpn</b>
Default	false
Introduced	19.5.R1
Platforms	All

## provider-tunnel

Synopsis	Enter the <b>provider-tunnel</b> context
Context	<b>configure</b> <i>router string</i> <b>gtm provider-tunnel</b>
Tree	<b>provider-tunnel</b>
Introduced	19.5.R1
Platforms	All

## inclusive

Synopsis	Enter the <b>inclusive</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <i>gtm</i> <i>provider-tunnel</i> <b>inclusive</b>
Tree	<b>inclusive</b>
Introduced	19.5.R1
Platforms	All

## rsvp

Synopsis	Enable the <b>rsvp</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <i>gtm</i> <i>provider-tunnel</i> <b>inclusive</b> <b>rsvp</b>
Tree	<b>rsvp</b>
Introduced	19.5.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of P2MP RSVP as provider tunnel
Context	<b>configure</b> <i>router</i> <i>string</i> <i>gtm</i> <i>provider-tunnel</i> <b>inclusive</b> <b>rsvp</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	19.5.R1
Platforms	All

## lsp-template *reference*

Synopsis	LSP template name
Context	<b>configure</b> <i>router</i> <i>string</i> <i>gtm</i> <i>provider-tunnel</i> <b>inclusive</b> <b>rsvp</b> <b>lsp-template</b> <i>reference</i>
Tree	<b>lsp-template</b>
Reference	<b>configure</b> <i>router</i> <i>string</i> <i>mpls</i> <b>lsp-template</b> <i>string</i>
Introduced	19.5.R1
Platforms	All

## selective

Synopsis	Enter the <b>selective</b> context
Context	<b>configure</b> <i>router string gtm provider-tunnel selective</i>
Tree	<a href="#">selective</a>
Introduced	19.5.R1
Platforms	All

## data-delay-interval *number*

Synopsis	Delay before a PBR switches traffic to selective tunnel
Context	<b>configure</b> <i>router string gtm provider-tunnel selective data-delay-interval number</i>
Tree	<a href="#">data-delay-interval</a>
Range	3 to 180
Default	3
Introduced	19.5.R1
Platforms	All

## data-threshold

Synopsis	Enter the <b>data-threshold</b> context
Context	<b>configure</b> <i>router string gtm provider-tunnel selective data-threshold</i>
Tree	<a href="#">data-threshold</a>
Introduced	19.5.R1
Platforms	All

## group-prefix [[ip-group-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the <b>group-prefix</b> list instance
Context	<b>configure</b> <i>router string gtm provider-tunnel selective data-threshold group-prefix (ipv4-prefix   ipv6-prefix)</i>
Tree	<a href="#">group-prefix</a>
Introduced	19.5.R1
Platforms	All

**[ip-group-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Multicast group-prefix
Context	<b>configure</b> <b>router</b> <i>string</i> <b>gtm</b> <b>provider-tunnel</b> <b>selective</b> <b>data-threshold</b> <b>group-prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<b>group-prefix</b>
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

**pe-threshold-add** *number*

Synopsis	Number of receiver PBRs to create S-PMSI
Context	<b>configure</b> <b>router</b> <i>string</i> <b>gtm</b> <b>provider-tunnel</b> <b>selective</b> <b>data-threshold</b> <b>group-prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>pe-threshold-add</b> <i>number</i>
Tree	<b>pe-threshold-add</b>
Range	1 to 65535
Default	65535
Introduced	19.5.R1
Platforms	All

**pe-threshold-delete** *number*

Synopsis	Number of receiver PBRs to delete S-PMSI
Context	<b>configure</b> <b>router</b> <i>string</i> <b>gtm</b> <b>provider-tunnel</b> <b>selective</b> <b>data-threshold</b> <b>group-prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>pe-threshold-delete</b> <i>number</i>
Tree	<b>pe-threshold-delete</b>
Range	2 to 65535
Default	65535
Introduced	19.5.R1
Platforms	All

**threshold** *number*

Synopsis	Threshold for a group prefix
Context	<b>configure</b> <b>router</b> <i>string</i> <b>gtm</b> <b>provider-tunnel</b> <b>selective</b> <b>data-threshold</b> <b>group-prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>threshold</b> <i>number</i>

Tree	<a href="#">threshold</a>
Range	1 to 4294967294
Units	kilobps
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

### **maximum-p2mp-spmsi** *number*

Synopsis	Maximum number of RSVP P2MP or LDP P2MP S-PMSI tunnels
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtm</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <b>maximum-p2mp-spmsi</b> <i>number</i>
Tree	<a href="#">maximum-p2mp-spmsi</a>
Range	1 to 4000
Default	10
Introduced	19.5.R1
Platforms	All

### **rsvp**

Synopsis	Enable the <b>rsvp</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtm</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <b>rsvp</b>
Tree	<a href="#">rsvp</a>
Introduced	19.5.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of P2MP RSVP as provider tunnel
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtm</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <b>rsvp</b> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	19.5.R1
Platforms	All

## **lsp-template** *reference*

Synopsis	LSP template name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtp</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">rsvp</a> <a href="#">lsp-template</a> <i>reference</i>
Tree	<a href="#">lsp-template</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">lsp-template</a> <i>string</i>
Introduced	19.5.R1
Platforms	All

## **gtp**

Synopsis	Enter the <b>gtp</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtp</a>
Tree	<a href="#">gtp</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **s11**

Synopsis	Enter the <b>s11</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtp</a> <a href="#">s11</a>
Tree	<a href="#">s11</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **interface** [[interface-name](#)] *reference*

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtp</a> <a href="#">s11</a> <a href="#">interface</a> <i>reference</i>
Tree	<a href="#">interface</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR



**[interface-name] reference**

Synopsis	Name for the S11 interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtp s11 interface</a> <i>reference</i>
Tree	<a href="#">interface</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**apn-policy reference**

Synopsis	Access point name policy for the S11 interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtp s11 interface</a> <i>reference</i> <a href="#">apn-policy</a> <i>reference</i>
Tree	<a href="#">apn-policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">apn-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**peer-profile-map**

Synopsis	Enter the <b>peer-profile-map</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtp s11 peer-profile-map</a>
Tree	<a href="#">peer-profile-map</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**prefix [peer-prefix] (ipv4-prefix | ipv6-prefix)**

Synopsis	Enter the <b>prefix</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtp s11 peer-profile-map</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">prefix</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[peer-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix and prefix length for the subnet
Context	<b>configure</b> <b>router</b> <i>string</i> <b>gtp</b> <b>s11</b> <b>peer-profile-map</b> <b>prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<b>prefix</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**peer-profile** *reference*

Synopsis	GTP peer profile associated with the address prefix
Context	<b>configure</b> <b>router</b> <i>string</i> <b>gtp</b> <b>s11</b> <b>peer-profile-map</b> <b>prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>peer-profile</b> <i>reference</i>
Tree	<b>peer-profile</b>
Reference	<b>configure</b> <b>subscriber-mgmt</b> <b>gtp</b> <b>peer-profile</b> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**upf-data-endpoint**

Synopsis	Enable the <b>upf-data-endpoint</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>gtp</b> <b>upf-data-endpoint</b>
Tree	<b>upf-data-endpoint</b>
Description	Commands in this context configure a GTP - User Plane (GTP-U) endpoint used by BNG CUPS FWA sessions.
Introduced	21.2.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**fpe** *reference*

Synopsis	FPE used to encapsulate and decapsulate GTP-U traffic
Context	<b>configure</b> <b>router</b> <i>string</i> <b>gtp</b> <b>upf-data-endpoint</b> <b>fpe</b> <i>reference</i>
Tree	<b>fpe</b>
Reference	<b>configure</b> <b>fwd-path-ext</b> <b>fpe</b> <i>number</i>

Notes	This element is mandatory.
Introduced	21.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **interface** *reference*

Synopsis	Interface on which the GTP-U packets terminate
Context	<b>configure</b> <b>router</b> <i>string</i> <b>gtp</b> <b>upf-data-endpoint</b> <b>interface</b> <i>reference</i>
Tree	<a href="#">interface</a>
Reference	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i>
Notes	This element is mandatory.
Introduced	21.2.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **uplink**

Synopsis	Enable the <b>uplink</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>gtp</b> <b>uplink</b>
Tree	<a href="#">uplink</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **apn** *string*

Synopsis	Network identifier part of the APN for the uplink
Context	<b>configure</b> <b>router</b> <i>string</i> <b>gtp</b> <b>uplink</b> <b>apn</b> <i>string</i>
Tree	<a href="#">apn</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **pdn-type** *keyword*

Synopsis	Default PDN to be signaled in GTP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>gtp</b> <b>uplink</b> <b>pdn-type</b> <i>keyword</i>

Tree	<a href="#">pdn-type</a>
Options	ipv4, ipv6, ipv4v6
Default	ipv4
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## peer-profile-map

Synopsis	Enter the <b>peer-profile-map</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtp</a> <a href="#">uplink</a> <a href="#">peer-profile-map</a>
Tree	<a href="#">peer-profile-map</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## prefix [[peer-prefix](#)] ([ipv4-prefix](#) | [ipv6-prefix](#))

Synopsis	Enter the <b>prefix</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtp</a> <a href="#">uplink</a> <a href="#">peer-profile-map</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> )
Tree	<a href="#">prefix</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## [[peer-prefix](#)] ([ipv4-prefix](#) | [ipv6-prefix](#))

Synopsis	IP prefix and prefix length for the subnet
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtp</a> <a href="#">uplink</a> <a href="#">peer-profile-map</a> <a href="#">prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> )
Tree	<a href="#">prefix</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## peer-profile *reference*

Synopsis	GTP peer profile associated with the address prefix
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtp uplink peer-profile-map prefix (ipv4-prefix   ipv6-prefix)</a> <a href="#">peer-profile reference</a>
Tree	<a href="#">peer-profile</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt gtp peer-profile</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **icmp-tunneling** *boolean*

Synopsis	Allow tunneling of ICMP reply packets over MPLS LSPs
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">icmp-tunneling</a> <i>boolean</i>
Tree	<a href="#">icmp-tunneling</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **igmp**

Synopsis	Enable the <b>igmp</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a>
Tree	<a href="#">igmp</a>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of IGMP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**forwarding-group-interface forwarding-service *string* group-interface-name *reference***

Synopsis	Enter the <b>forwarding-group-interface</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i>
Tree	<b>forwarding-group-interface</b>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**forwarding-service *string***

Synopsis	Forwarding service for the subscriber interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i>
Tree	<b>forwarding-group-interface</b>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**group-interface-name *reference***

Synopsis	Group interface name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i>
Tree	<b>forwarding-group-interface</b>
Reference	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state *keyword***

Synopsis	Administrative state of IGMP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>admin-state</b> <i>keyword</i>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **import-policy** *reference*

Synopsis	Import policy that filters IGMP packets
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>import-policy</b> <i>reference</i>
Tree	<a href="#">import-policy</a>
Description	This command configures the IGMP import policy, or filter, for an interface subscriber or a group interface. An IGMP filter is also known as a black or white list, and it is defined as a router policy option.  When redirection is applied, only the import policy from the subscriber is in effect. The import policy under the group interface is applicable only for IGMP states received directly on the SAP (AN in IGMP proxy mode).
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-group-sources** *number*

Synopsis	Maximum number of group sources for this interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>maximum-number-group-sources</b> <i>number</i>
Tree	<a href="#">maximum-number-group-sources</a>
Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**maximum-number-groups** *number*

Synopsis	Maximum number of groups for this interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>maximum-number-groups</b> <i>number</i>
Tree	<a href="#">maximum-number-groups</a>
Range	1 to 16000
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**maximum-number-sources** *number*

Synopsis	Maximum number of sources that are allowed per group
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>maximum-number-sources</b> <i>number</i>
Tree	<a href="#">maximum-number-sources</a>
Range	1 to 1000
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mcac**

Synopsis	Enter the <b>mcac</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>mcac</b>
Tree	<a href="#">mcac</a>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**bandwidth**

Synopsis	Enter the <b>bandwidth</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>mcac</b> <b>bandwidth</b>
Tree	<a href="#">bandwidth</a>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**mandatory** (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	<b>configure</b> <i>router</i> <i>string</i> <i>igmp</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> <i>mcac</i> <i>bandwidth</i> <i>mandatory</i> ( <i>number</i>   <i>keyword</i> )
Tree	<i>mandatory</i>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**total** (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	<b>configure</b> <i>router</i> <i>string</i> <i>igmp</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> <i>mcac</i> <i>bandwidth</i> <i>total</i> ( <i>number</i>   <i>keyword</i> )
Tree	<i>total</i>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**interface-policy** *reference*

Synopsis	Name of multicast CAC interface policy
Context	<b>configure</b> <i>router</i> <i>string</i> <i>igmp</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> <i>mcac</i> <i>interface-policy</i> <i>reference</i>
Tree	<i>interface-policy</i>
Reference	<b>configure</b> <i>mcac</i> <i>interface-policy</i> <i>string</i>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**policy reference**

Synopsis	Multicast CAC policy name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp forwarding-group-interface forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>mcac policy reference</b>
Tree	<b>policy</b>
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> <li>• subscriber level and redirected interface when redirection is configured</li> <li>• subscriber level and group-interface level when redirection is unconfigured</li> </ul> <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p>
Reference	<b>configure mcac policy</b> <i>string</i>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**query-interval** *number*

Synopsis	Time between two consecutive host-query messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp forwarding-group-interface forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>query-interval</b> <i>number</i>
Tree	<b>query-interval</b>
Range	2 to 1024
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**query-last-member-interval** *number*

Synopsis	Time between group-specific query messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp forwarding-group-interface forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>query-last-member-interval</b> <i>number</i>

Tree	<a href="#">query-last-member-interval</a>
Range	1 to 1023
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-response-interval** *number*

Synopsis	Time to wait for a response to the host-query messages
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">igmp forwarding-group-interface forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <a href="#">query-response-interval</a> <i>number</i>
Tree	<a href="#">query-response-interval</a>
Range	1 to 1023
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-source-address** *string*

Synopsis	Source address for IGMP queries
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">igmp forwarding-group-interface forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <a href="#">query-source-address</a> <i>string</i>
Tree	<a href="#">query-source-address</a>
Description	This command configures the query source IP address for the group interface. This IP address overrides the source IP address configured at the router level.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **router-alert-check** *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">igmp forwarding-group-interface forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <a href="#">router-alert-check</a> <i>boolean</i>
Tree	<a href="#">router-alert-check</a>
Default	true
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sub-hosts-only** *boolean*

Synopsis	Allow IGMP traffic from known hosts only
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>sub-hosts-only</b> <i>boolean</i>
Tree	<a href="#">sub-hosts-only</a>
Default	true
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**subnet-check** *boolean*

Synopsis	Allow subnet checking
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>subnet-check</b> <i>boolean</i>
Tree	<a href="#">subnet-check</a>
Default	true
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**version** *keyword*

Synopsis	IGMP protocol version
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>version</b> <i>keyword</i>
Tree	<a href="#">version</a>
Options	1, 2, 3
Default	3
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**group-if-query-source-address** *string*

Synopsis	Default query-source address for all group interfaces
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>group-if-query-source-address</b> <i>string</i>
Tree	<a href="#">group-if-query-source-address</a>
Introduced	16.0.R1

Platforms All

### **group-interface** [\[group-interface-name\]](#) *reference*

Synopsis Enter the **group-interface** list instance  
 Context **configure** [router](#) *string* [igmp](#) [group-interface](#) *reference*  
 Tree [group-interface](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[group-interface-name]** *reference*

Synopsis Group interface name  
 Context **configure** [router](#) *string* [igmp](#) [group-interface](#) *reference*  
 Tree [group-interface](#)  
 Reference **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string*  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of IGMP  
 Context **configure** [router](#) *string* [igmp](#) [group-interface](#) *reference* [admin-state](#) *keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **import-policy** *reference*

Synopsis Import policy that filters IGMP packets  
 Context **configure** [router](#) *string* [igmp](#) [group-interface](#) *reference* [import-policy](#) *reference*  
 Tree [import-policy](#)

Description	This command configures the IGMP import policy, or filter, for an interface subscriber or a group interface. An IGMP filter is also known as a black or white list, and it is defined as a router policy option.  When redirection is applied, only the import policy from the subscriber is in effect. The import policy under the group interface is applicable only for IGMP states received directly on the SAP (AN in IGMP proxy mode).
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-group-sources** *number*

Synopsis	Maximum number of group sources for this interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">maximum-number-group-sources</a> <i>number</i>
Tree	<a href="#">maximum-number-group-sources</a>
Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-groups** *number*

Synopsis	Maximum number of groups for this interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">maximum-number-groups</a> <i>number</i>
Tree	<a href="#">maximum-number-groups</a>
Range	1 to 16000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-sources** *number*

Synopsis	Maximum number of sources that are allowed per group
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">maximum-number-sources</a> <i>number</i>
Tree	<a href="#">maximum-number-sources</a>
Range	1 to 1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## mcac

Synopsis	Enter the <b>mcac</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">mcac</a>
Tree	<a href="#">mcac</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## bandwidth

Synopsis	Enter the <b>bandwidth</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">mcac</a> <a href="#">bandwidth</a>
Tree	<a href="#">bandwidth</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## mandatory (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">mcac</a> <a href="#">bandwidth</a> <a href="#">mandatory</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mandatory</a>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**total** (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>group-interface</b> <i>reference</i> <b>mcac</b> <b>bandwidth</b> <b>total</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>total</b>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**interface-policy** *reference*

Synopsis	Name of multicast CAC interface policy
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>group-interface</b> <i>reference</i> <b>mcac</b> <b>interface-policy</b> <i>reference</i>
Tree	<b>interface-policy</b>
Reference	<b>configure</b> <b>mcac</b> <b>interface-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**policy** *reference*

Synopsis	Multicast CAC policy name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>group-interface</b> <i>reference</i> <b>mcac</b> <b>policy</b> <i>reference</i>
Tree	<b>policy</b>
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> <li>• subscriber level and redirected interface when redirection is configured</li> <li>• subscriber level and group-interface level when redirection is unconfigured</li> </ul> <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the</p>



policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).

Reference	<b>configure mcac policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-interval** *number*

Synopsis	Time between two consecutive host-query messages
Context	<b>configure router</b> <i>string igmp group-interface reference query-interval number</i>
Tree	<a href="#">query-interval</a>
Range	2 to 1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-last-member-interval** *number*

Synopsis	Time between group-specific query messages
Context	<b>configure router</b> <i>string igmp group-interface reference query-last-member-interval number</i>
Tree	<a href="#">query-last-member-interval</a>
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-response-interval** *number*

Synopsis	Time to wait for a response to the host-query messages
Context	<b>configure router</b> <i>string igmp group-interface reference query-response-interval number</i>
Tree	<a href="#">query-response-interval</a>
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-source-address** *string*

Synopsis	Source address for IGMP queries
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">query-source-address</a> <i>string</i>
Tree	<a href="#">query-source-address</a>
Description	This command configures the query source IP address for the group interface. This IP address overrides the source IP address configured at the router level.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **router-alert-check** *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">router-alert-check</a> <i>boolean</i>
Tree	<a href="#">router-alert-check</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sub-hosts-only** *boolean*

Synopsis	Allow IGMP traffic from known hosts only
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">sub-hosts-only</a> <i>boolean</i>
Tree	<a href="#">sub-hosts-only</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **subnet-check** *boolean*

Synopsis	Allow subnet checking
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">subnet-check</a> <i>boolean</i>
Tree	<a href="#">subnet-check</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**version** *keyword*

Synopsis	IGMP protocol version
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>group-interface</b> <i>reference</i> <b>version</b> <i>keyword</i>
Tree	<b>version</b>
Options	1, 2, 3
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**interface** [**ip-interface-name**] *string*

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>interface</b> <i>string</i>
Tree	<b>interface</b>
Introduced	16.0.R1
Platforms	All

**[ip-interface-name]** *string*

Synopsis	IP interface name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>interface</b> <i>string</i>
Tree	<b>interface</b>
Description	This command configures the interface name, which must be unique within the group of defined IP interfaces for the context. If the IP interface name does not exist or does not have an IP address configured, an error message is returned. If the IP interface exists in a different area, it is moved to this area.  An interface name cannot be in the form of an IP address.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of IGMP
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **import-policy** *reference*

Synopsis	Import policy that filters IGMP packets
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">import-policy</a> <i>reference</i>
Tree	<a href="#">import-policy</a>
Description	<p>This command configures the IGMP import policy, or filter, for an interface subscriber or a group interface. An IGMP filter is also known as a black or white list, and it is defined as a router policy option.</p> <p>When redirection is applied, only the import policy from the subscriber is in effect. The import policy under the group interface is applicable only for IGMP states received directly on the SAP (AN in IGMP proxy mode).</p>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **maximum-number-group-sources** *number*

Synopsis	Maximum number of group sources for this interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">maximum-number-group-sources</a> <i>number</i>
Tree	<a href="#">maximum-number-group-sources</a>
Description	<p>This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.</p>
Range	1 to 32000
Introduced	16.0.R1
Platforms	All

### **maximum-number-groups** *number*

Synopsis	Maximum number of groups for this interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>interface</b> <i>string</i> <b>maximum-number-groups</b> <i>number</i>
Tree	<a href="#">maximum-number-groups</a>
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

### **maximum-number-sources** *number*

Synopsis	Maximum number of sources that are allowed per group
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>interface</b> <i>string</i> <b>maximum-number-sources</b> <i>number</i>
Tree	<a href="#">maximum-number-sources</a>
Range	1 to 1000
Introduced	16.0.R1
Platforms	All

### **mcac**

Synopsis	Enter the <b>mcac</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>interface</b> <i>string</i> <b>mcac</b>
Tree	<a href="#">mcac</a>
Introduced	16.0.R1
Platforms	All

### **bandwidth**

Synopsis	Enter the <b>bandwidth</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>interface</b> <i>string</i> <b>mcac</b> <b>bandwidth</b>
Tree	<a href="#">bandwidth</a>
Introduced	16.0.R1
Platforms	All

**mandatory** (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>interface</b> <i>string</i> <b>mcac</b> <b>bandwidth</b> <b>mandatory</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>mandatory</b>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

**total** (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>interface</b> <i>string</i> <b>mcac</b> <b>bandwidth</b> <b>total</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>total</b>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

**interface-policy** *reference*

Synopsis	Name of multicast CAC interface policy
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>interface</b> <i>string</i> <b>mcac</b> <b>interface-policy</b> <i>reference</i>
Tree	<b>interface-policy</b>
Reference	<b>configure</b> <b>mcac</b> <b>interface-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

**mc-constraints**

Synopsis	Enter the <b>mc-constraints</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>interface</b> <i>string</i> <b>mcac</b> <b>mc-constraints</b>

Tree	<a href="#">mc-constraints</a>
Introduced	16.0.R1
Platforms	All

### **level** [[level-id](#)] *number*

Synopsis	Enter the <b>level</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">level</a> <i>number</i>
Tree	<a href="#">level</a>
Description	Commands in this context configure the amount of bandwidth available within a given bundle for MC traffic for a specified level.
Introduced	16.0.R1
Platforms	All

### **[level-id]** *number*

Synopsis	Bandwidth level ID for an MCAC constraint
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">level</a> <i>number</i>
Tree	<a href="#">level</a>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **bandwidth** *number*

Synopsis	Bandwidth available for this level
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">level</a> <i>number</i> <a href="#">bandwidth</a> <i>number</i>
Tree	<a href="#">bandwidth</a>
Range	0 to 2147483647
Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**number-down** [[number-lag-port-down](#)] *number*

Synopsis	Enter the <b>number-down</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">number-down</a> <i>number</i>
Tree	<a href="#">number-down</a>
Description	Commands in this context configure the number of ports down along with level for the MCAC policy on the interface.
Introduced	16.0.R1
Platforms	All

**[number-lag-port-down]** *number*

Synopsis	Number of ports that are down in this LAG link
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">number-down</a> <i>number</i>
Tree	<a href="#">number-down</a>
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**level** *number*

Synopsis	Level ID to associate with number of down LAG ports
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">number-down</a> <i>number</i> <a href="#">level</a> <i>number</i>
Tree	<a href="#">level</a>
Description	This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.
Range	1 to 8
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**use-lag-port-weight** *boolean*

Synopsis	Use LAG port weight in calculating MCAC constraints
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Context	<b>configure</b> <i>router string igmp interface string mcac mc-constraints use-lag-port-weight boolean</i>
Tree	<a href="#">use-lag-port-weight</a>
Description	When configured to <b>true</b> , port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs.
Default	false
Introduced	16.0.R1
Platforms	All

### policy reference

Synopsis	Multicast CAC policy name
Context	<b>configure</b> <i>router string igmp interface string mcac policy reference</i>
Tree	<a href="#">policy</a>
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> <li>• subscriber level and redirected interface when redirection is configured</li> <li>• subscriber level and group-interface level when redirection is unconfigured</li> </ul> <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p>
Reference	<b>configure</b> <i>mcac policy string</i>
Introduced	16.0.R1
Platforms	All

### query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	<b>configure</b> <i>router string igmp interface string query-interval number</i>

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Tree	<a href="#">query-interval</a>
Range	2 to 1024
Introduced	16.0.R1
Platforms	All

### **query-last-member-interval** *number*

Synopsis	Time between group-specific query messages
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">query-last-member-interval</a> <i>number</i>
Tree	<a href="#">query-last-member-interval</a>
Range	1 to 1023
Introduced	16.0.R1
Platforms	All

### **query-response-interval** *number*

Synopsis	Time to wait for a response to the host-query messages
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">query-response-interval</a> <i>number</i>
Tree	<a href="#">query-response-interval</a>
Range	1 to 1023
Introduced	16.0.R1
Platforms	All

### **redundant-mcast** *boolean*

Synopsis	Use interface as a redundant-pair member for multicast
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">redundant-mcast</a> <i>boolean</i>
Tree	<a href="#">redundant-mcast</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **router-alert-check** *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">router-alert-check</a> <i>boolean</i>
Tree	<a href="#">router-alert-check</a>
Default	true
Introduced	16.0.R1
Platforms	All

## ssm-translate

Synopsis	Enter the <b>ssm-translate</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">ssm-translate</a>
Tree	<a href="#">ssm-translate</a>
Description	Commands in this context configure a group range that is translated to SSM (S,G) entries. If a static entry needs to be created, it is translated from an IGMPv1 or v2 request to an SSM join message.
Introduced	16.0.R1
Platforms	All

## group-range [start](#) *string* [end](#) *string*

Synopsis	Enter the <b>group-range</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">ssm-translate</a> <a href="#">group-range</a> <a href="#">start</a> <i>string</i> <a href="#">end</a> <i>string</i>
Tree	<a href="#">group-range</a>
Description	Commands in this context configure the range of IP addresses that is translated to SSM (S,G) entries.
Introduced	16.0.R1
Platforms	All

## [start](#) *string*

Synopsis	Lower bound of the IP address group range
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">ssm-translate</a> <a href="#">group-range</a> <a href="#">start</a> <i>string</i> <a href="#">end</a> <i>string</i>
Tree	<a href="#">group-range</a>
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **end string**

Synopsis Upper bound of the IP address group range

Context **configure** [router string](#) [igmp interface string](#) [ssm-translate group-range start string](#) [end string](#)

Tree [group-range](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **source** [[source-address](#)] *string*

Synopsis Add a list entry for **source**

Context **configure** [router string](#) [igmp interface string](#) [ssm-translate group-range start string](#) [end string](#) [source string](#)

Tree [source](#)

Min. Instances 1

Introduced 16.0.R1

Platforms All

### **[source-address]** *string*

Synopsis Source IP address of multicast channel sending data

Context **configure** [router string](#) [igmp interface string](#) [ssm-translate group-range start string](#) [end string](#) [source string](#)

Tree [source](#)

Notes This element is part of a list key.

Introduced 16.0.R2

Platforms All

### **static**

Synopsis Enter the **static** context

Context	<b>configure</b> <i>router string igmp interface string static</i>
Tree	<i>static</i>
Description	Commands in this context configure the testing of multicast forwarding on an interface without a receiver host.
Introduced	16.0.R1
Platforms	All

### **group** [*group-address*] *string*

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure</b> <i>router string igmp interface string static group string</i>
Tree	<i>group</i>
Description	<p>Commands in this context configure a static multicast group as either a starg (*,G), or one or more SSM (S,G) records. IGMP static group memberships are used to test multicast forwarding without a receiver host.</p> <p>When a static IGMP group is configured, data is forwarded to an interface without receiving membership reports from host members.</p> <p>When the group entries are configured on point-to-point links that connect routers to a rendezvous point (RP), the static IGMP group entries do not generate join messages toward the RP.</p>
Introduced	16.0.R1
Platforms	All

### **[group-address]** *string*

Synopsis	Group address of static IGMP multicast channel
Context	<b>configure</b> <i>router string igmp interface string static group string</i>
Tree	<i>group</i>
Description	This command configures an address that receives data on an interface. The IP address must be unique for each static group.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **source** [*source-address*] *string*

Synopsis	Add a list entry for <b>source</b>
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">static</a> <a href="#">group</a> <i>string</i> <a href="#">source</a> <i>string</i>
Tree	<a href="#">source</a>
Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .
Introduced	16.0.R1
Platforms	All

### **[source-address]** *string*

Synopsis	Source IP address of multicast channel sending data
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">static</a> <a href="#">group</a> <i>string</i> <a href="#">source</a> <i>string</i>
Tree	<a href="#">source</a>
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

### **starg**

Synopsis	Add a starg (*,G) address entry for the group range
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">static</a> <a href="#">group</a> <i>string</i> <a href="#">starg</a>
Tree	<a href="#">starg</a>
Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .
Introduced	16.0.R2
Platforms	All

### **group-range** [start](#) *string* [end](#) *string* [step](#) *string*

Synopsis	Enter the <b>group-range</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">static</a> <a href="#">group-range</a> <a href="#">start</a> <i>string</i> <a href="#">end</a> <i>string</i> <a href="#">step</a> <i>string</i>
Tree	<a href="#">group-range</a>
Description	Commands in this context configure the ranges of IP addresses for the static groups.
Introduced	16.0.R1
Platforms	All

**start string**

Synopsis	IP address for the start of the static group range
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>interface</b> <i>string</i> <b>static</b> <b>group-range</b> <b>start</b> <i>string</i> <b>end</b> <i>string</i> <b>step</b> <i>string</i>
Tree	<b>group-range</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**end string**

Synopsis	IP address for the end of the static group range
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>interface</b> <i>string</i> <b>static</b> <b>group-range</b> <b>start</b> <i>string</i> <b>end</b> <i>string</i> <b>step</b> <i>string</i>
Tree	<b>group-range</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**step string**

Synopsis	Step interval in the group-range address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>interface</b> <i>string</i> <b>static</b> <b>group-range</b> <b>start</b> <i>string</i> <b>end</b> <i>string</i> <b>step</b> <i>string</i>
Tree	<b>group-range</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**source** [**source-address**] *string*

Synopsis	Add a list entry for <b>source</b>
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>interface</b> <i>string</i> <b>static</b> <b>group-range</b> <b>start</b> <i>string</i> <b>end</b> <i>string</i> <b>step</b> <i>string</i> <b>source</b> <i>string</i>
Tree	<b>source</b>
Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .

Introduced 16.0.R1  
 Platforms All

### **[source-address]** *string*

Synopsis Source IP address of multicast channel sending data  
 Context **configure** *router string igmp interface string static group-range start string end string step string source string*  
 Tree [source](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R2  
 Platforms All

### **starg**

Synopsis Add a starg (\*,G) address entry for the group range  
 Context **configure** *router string igmp interface string static group-range start string end string step string starg*  
 Tree [starg](#)  
 Notes The following elements are part of a mandatory choice: **source** or **starg**.  
 Introduced 16.0.R2  
 Platforms All

### **subnet-check** *boolean*

Synopsis Allow subnet checking  
 Context **configure** *router string igmp interface string subnet-check boolean*  
 Tree [subnet-check](#)  
 Default true  
 Introduced 16.0.R1  
 Platforms All

### **version** *keyword*

Synopsis IGMP protocol version  
 Context **configure** *router string igmp interface string version keyword*



Tree	<a href="#">version</a>
Options	1, 2, 3
Default	3
Introduced	16.0.R1
Platforms	All

### **query-interval** *number*

Synopsis	Time between two consecutive host-query messages
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">query-interval</a> <i>number</i>
Tree	<a href="#">query-interval</a>
Description	This command configures the timing of the host-query messages that solicit group membership information. The messages are sent to the all-systems multicast group address, 224.0.0.1.
Range	2 to 1024
Units	seconds
Default	125
Introduced	16.0.R1
Platforms	All

### **query-last-member-interval** *number*

Synopsis	Time between group-specific query messages
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">query-last-member-interval</a> <i>number</i>
Tree	<a href="#">query-last-member-interval</a>
Description	This command configures the timing of the query-message interval, defining the interval for leave-group messages among others. The lower the interval that is configured, the faster the detection of the loss of the last member of a group.
Range	1 to 1023
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

**query-response-interval** *number*

Synopsis	Time to wait for a response to the host-query messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>query-response-interval</b> <i>number</i>
Tree	<b>query-response-interval</b>
Range	1 to 1023
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

**robust-count** *number*

Synopsis	Number of retries after expected message loss
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>robust-count</b> <i>number</i>
Tree	<b>robust-count</b>
Description	This command configures the level of expected packet loss on a subnet. If a subnet anticipates losses, the robust-count can be increased.
Range	2 to 10
Default	2
Introduced	16.0.R1
Platforms	All

**ssm-translate**

Synopsis	Enter the <b>ssm-translate</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>ssm-translate</b>
Tree	<b>ssm-translate</b>
Description	Commands in this context configure a group range that is translated to SSM (S,G) entries. If a static entry needs to be created, it is translated from an IGMPv1 or v2 request to an SSM join message.
Introduced	16.0.R1
Platforms	All

**group-range** **start** *string* **end** *string*

Synopsis	Enter the <b>group-range</b> list instance
----------	--

Context	<b>configure</b> <i>router string igmp ssm-translate group-range start string end string</i>
Tree	<i>group-range</i>
Description	Commands in this context configure the range of IP addresses that is translated to SSM (S,G) entries.
Introduced	16.0.R1
Platforms	All

**start string**

Synopsis	Lower bound of the IP address group range
Context	<b>configure</b> <i>router string igmp ssm-translate group-range start string end string</i>
Tree	<i>group-range</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**end string**

Synopsis	Upper bound of the IP address group range
Context	<b>configure</b> <i>router string igmp ssm-translate group-range start string end string</i>
Tree	<i>group-range</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**source [source-address] string**

Synopsis	Add a list entry for <b>source</b>
Context	<b>configure</b> <i>router string igmp ssm-translate group-range start string end string source string</i>
Tree	<i>source</i>
Min. Instances	1
Introduced	16.0.R1
Platforms	All

**[source-address] string**

Synopsis	Source IP address of multicast channel sending data
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">ssm-translate</a> <a href="#">group-range</a> <a href="#">start</a> <i>string</i> <a href="#">end</a> <i>string</i> <a href="#">source</a> <i>string</i>
Tree	<a href="#">source</a>
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

**tunnel-interface**

Synopsis	Enter the <b>tunnel-interface</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">tunnel-interface</a>
Tree	<a href="#">tunnel-interface</a>
Introduced	16.0.R1
Platforms	All

**ldp-p2mp-root [p2mp-id] reference sender-address reference**

Synopsis	Enter the <b>ldp-p2mp-root</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">tunnel-interface</a> <a href="#">ldp-p2mp-root</a> <i>reference</i> <a href="#">sender-address</a> <i>reference</i>
Tree	<a href="#">ldp-p2mp-root</a>
Description	Commands in this context configure the LDP parameters for the IGMP P2MP LSP tunnel.
Introduced	16.0.R1
Platforms	All

**[p2mp-id] reference**

Synopsis	RSVP P2MP LSP ID
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">tunnel-interface</a> <a href="#">ldp-p2mp-root</a> <i>reference</i> <a href="#">sender-address</a> <i>reference</i>
Tree	<a href="#">ldp-p2mp-root</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">tunnel-interface</a> <a href="#">ldp-p2mp-root</a> <i>number</i> <a href="#">sender-address</a> <i>string</i>

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **sender-address** *reference*

Synopsis	System address of the ingress LER for the P2MP RSVP LSP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>tunnel-interface</b> <b>ldp-p2mp-root</b> <i>reference</i> <b>sender-address</b> <i>reference</i>
Tree	<a href="#">ldp-p2mp-root</a>
Reference	<b>configure</b> <b>router</b> <i>string</i> <b>tunnel-interface</b> <b>ldp-p2mp-root</b> <i>number</i> <b>sender-address</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of IGMP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>tunnel-interface</b> <b>ldp-p2mp-root</b> <i>reference</i> <b>sender-address</b> <i>reference</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **static**

Synopsis	Enter the <b>static</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>tunnel-interface</b> <b>ldp-p2mp-root</b> <i>reference</i> <b>sender-address</b> <i>reference</i> <b>static</b>
Tree	<a href="#">static</a>
Description	<p>Commands in this context configure static multicast receiver hosts on a tunnel interface associated with an RSVP P2MP LSP.</p> <p>When a static IGMP group is configured, data is forwarded to an interface without receiving membership reports from host members.</p>

Introduced	16.0.R1
Platforms	All

### **group** [*group-address*] *string*

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure</b> <i>router</i> <i>string</i> <i>igmp</i> <i>tunnel-interface</i> <i>ldp-p2mp-root</i> <i>reference</i> <i>sender-address</i> <i>reference</i> <i>static</i> <i>group</i> <i>string</i>
Tree	<i>group</i>
Description	<p>Commands in this context configure a static multicast group as either a starg (*,G), or one or more SSM (S,G) records.</p> <p>Static multicast group joins can be assigned to a tunnel interface associated with an RSVP P2MP LSP.</p> <p>A given &lt;*,G&gt; or &lt;S,G&gt; can only be associated with a single tunnel interface.</p> <p>A multicast packet which is received on an interface and which succeeds the RPF check for the source address will be replicated and forwarded to all OIFs which correspond to the branches of the P2MP LSP. The packet is sent on each OIF with the label stack indicated in the NHLFE of this OIF. The packets will also be replicated and forwarded natively on all OIFs which have received IGMP or PIM joins for this &lt;S,G&gt;.</p> <p>The multicast packet can be received over a PIM or IGMP interface which can be an IES interface, a spoke SDP terminated IES interface, or a network interface.</p>
Introduced	16.0.R1
Platforms	All

### **[group-address]** *string*

Synopsis	Group address of static IGMP multicast channel
Context	<b>configure</b> <i>router</i> <i>string</i> <i>igmp</i> <i>tunnel-interface</i> <i>ldp-p2mp-root</i> <i>reference</i> <i>sender-address</i> <i>reference</i> <i>static</i> <i>group</i> <i>string</i>
Tree	<i>group</i>
Description	This command configures an address that receives data on an interface. The IP address must be unique for each static group.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**source** [[source-address](#)] *string*

Synopsis	Add a list entry for <b>source</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">tunnel-interface</a> <a href="#">ldp-p2mp-root</a> <i>reference</i> <a href="#">sender-address</a> <i>reference</i> <a href="#">static group</a> <i>string</i> <b>source</b> <i>string</i>
Tree	<a href="#">source</a>
Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .
Introduced	16.0.R1
Platforms	All

**[source-address]** *string*

Synopsis	Source IP address of multicast channel sending data
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">tunnel-interface</a> <a href="#">ldp-p2mp-root</a> <i>reference</i> <a href="#">sender-address</a> <i>reference</i> <a href="#">static group</a> <i>string</i> <b>source</b> <i>string</i>
Tree	<a href="#">source</a>
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

**starg**

Synopsis	Add a starg (*,G) address entry for the group range
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">tunnel-interface</a> <a href="#">ldp-p2mp-root</a> <i>reference</i> <a href="#">sender-address</a> <i>reference</i> <a href="#">static group</a> <i>string</i> <b>starg</b>
Tree	<a href="#">starg</a>
Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .
Introduced	16.0.R2
Platforms	All

**rsvp-p2mp-root** [[lsp-name](#)] *reference*

Synopsis	Enter the <b>rsvp-p2mp-root</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">tunnel-interface</a> <a href="#">rsvp-p2mp-root</a> <i>reference</i>
Tree	<a href="#">rsvp-p2mp-root</a>
Description	Commands in this context configure the RSVP parameters for the IGMP P2MP LSP tunnel.

Introduced	16.0.R1
Platforms	All

**[lsp-name]** *reference*

Synopsis	LSP name for the RSVP P2MP LSP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">tunnel-interface</a> <a href="#">rsvp-p2mp-root</a> <i>reference</i>
Tree	<a href="#">rsvp-p2mp-root</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">tunnel-interface</a> <a href="#">rsvp-p2mp-root</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of IGMP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">tunnel-interface</a> <a href="#">rsvp-p2mp-root</a> <i>reference</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**static**

Synopsis	Enter the <b>static</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">tunnel-interface</a> <a href="#">rsvp-p2mp-root</a> <i>reference</i> <a href="#">static</a>
Tree	<a href="#">static</a>
Description	<p>Commands in this context configure static multicast receiver hosts on a tunnel interface associated with an RSVP P2MP LSP.</p> <p>When a static IGMP group is configured, data is forwarded to an interface without receiving membership reports from host members.</p>
Introduced	16.0.R1
Platforms	All



**group** [[group-address](#)] *string*

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">tunnel-interface</a> <a href="#">rsvp-p2mp-root</a> <i>reference</i> <a href="#">static</a> <a href="#">group</a> <i>string</i>
Tree	<a href="#">group</a>
Introduced	16.0.R1
Platforms	All

**[group-address]** *string*

Synopsis	Group address of static IGMP multicast channel
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">tunnel-interface</a> <a href="#">rsvp-p2mp-root</a> <i>reference</i> <a href="#">static</a> <a href="#">group</a> <i>string</i>
Tree	<a href="#">group</a>
Description	This command configures an address that receives data on an interface. The IP address must be unique for each static group.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**source** [[source-address](#)] *string*

Synopsis	Add a list entry for <b>source</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">tunnel-interface</a> <a href="#">rsvp-p2mp-root</a> <i>reference</i> <a href="#">static</a> <a href="#">group</a> <i>string</i> <a href="#">source</a> <i>string</i>
Tree	<a href="#">source</a>
Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .
Introduced	16.0.R1
Platforms	All

**[source-address]** *string*

Synopsis	Source IP address of multicast channel sending data
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">tunnel-interface</a> <a href="#">rsvp-p2mp-root</a> <i>reference</i> <a href="#">static</a> <a href="#">group</a> <i>string</i> <a href="#">source</a> <i>string</i>

Tree	<a href="#">source</a>
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

## starg

Synopsis	Add a starg (*,G) address entry for the group range
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">igmp</a> <a href="#">tunnel-interface</a> <a href="#">rsvp-p2mp-root</a> <a href="#">reference</a> <a href="#">static</a> <a href="#">group</a> <a href="#">string</a> <a href="#">starg</a>
Tree	<a href="#">starg</a>
Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .
Introduced	16.0.R2
Platforms	All

## interface [[interface-name](#)] [string](#)

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a>
Tree	<a href="#">interface</a>
Description	Commands in this context create a logical IP routing or unnumbered MPLS-TP interface. An IP address, port, or system can then be associated with the IP interface.
Introduced	16.0.R1
Platforms	All

## [\[interface-name\]](#) [string](#)

Synopsis	Router interface name
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a>
Tree	<a href="#">interface</a>
Description	This command specifies the name of the router interface. When a user enters a new name, the system creates a new logical interface and the context changes to that interface for more command processing.  When an existing interface name is entered, the user enters the router interface context for editing and configuration.

Nokia recommends using names that are meaningful and unique to remove ambiguity when displaying the state associated with IP interfaces either via show commands or model-driven interfaces.

See "Router configuration overview" in the *7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide* for more information about the interface name.

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Introduced	16.0.R1
Platforms	All

### **cflowd-parameters**

Synopsis	Enter the <b>cflowd-parameters</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>cflowd-parameters</b>
Tree	<a href="#">cflowd-parameters</a>
Description	Commands in this context configure cflowd parameters for the associated IP interfaces.
Introduced	16.0.R1
Platforms	All

### **sampling** [[sampling-type](#)] *keyword*

Synopsis	Enter the <b>sampling</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">cflowd-parameters</a> <b>sampling</b> <i>keyword</i>
Tree	<a href="#">sampling</a>
Description	Commands in this context configure cflowd sampling behavior, which configures the collection of traffic flow samples for analysis for this IP interface.
Introduced	16.0.R1

Platforms All

### **[sampling-type]** *keyword*

Synopsis Traffic sampling type

Context **configure** *router string interface string cflowd-parameters sampling keyword*

Tree [sampling](#)

Description This command configures the type of traffic to be sampled on the associated IP interface.

Options unicast, multicast, both

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **direction** *keyword*

Synopsis Direction of traffic for cflowd sampling

Context **configure** *router string interface string cflowd-parameters sampling keyword direction keyword*

Tree [direction](#)

Description This command configures the direction in which sampling occurs on the associated IP interfaces.

Options ingress-only, egress-only, both

Default ingress-only

Introduced 16.0.R1

Platforms All

### **sample-profile** (*keyword | number*)

Synopsis Sample profile ID

Context **configure** *router string interface string cflowd-parameters sampling keyword sample-profile (keyword | number)*

Tree [sample-profile](#)

Description This command defines the sampling rate profile associated with this interface.

Max. Range 0 to 4294967295

Options 1

Introduced	19.5.R1
Platforms	All

**type** *keyword*

Synopsis	Type of cflowd analysis
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">cflowd-parameters</a> <a href="#">sampling</a> <i>keyword</i> <b>type</b> <i>keyword</i>
Tree	<a href="#">type</a>
Description	This command configures the cflowd sampling type on the associated IP interface.
Options	acl, interface
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**cpu-protection** *reference*

Synopsis	CPU protection policy ID for the interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">cpu-protection</a> <i>reference</i>
Tree	<a href="#">cpu-protection</a>
Description	This command assigns an existing CPU protection policy to the associated interface. For these interface types, the per-source rate limit is not applicable.  If no CPU-protection policy is assigned to an interface, the default policy is used to limit the overall rate.
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpu-protection</a> <i>policy</i> <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 255
Introduced	16.0.R1

Platforms All

### **dist-cpu-protection** *reference*

Synopsis DCP policy name for interface

Context **configure** *router string interface string dist-cpu-protection reference*

Tree [dist-cpu-protection](#)

Description This command configures a Distributed CPU Protection (DCP) policy for the associated IP interface or SAP. The user can only assign a valid created DCP policy to a SAP or network interface (this rule does not apply to templates such as an MSAP policy).  
If the operator does not assign a DCP policy to a router interface, the system uses the default network DCP policy.  
See "Distributed CPU protection" in the *7450 ESS, 7750 SR, 7950 XRS, and VSR System Management Guide* for more information.

Reference **configure** *system security dist-cpu-protection policy string*

Introduced 16.0.R1

Platforms All

### **egress**

Synopsis Enter the **egress** context

Context **configure** *router string interface string egress*

Tree [egress](#)

Description Commands in this context configure egress network filter policies for the IP interface. The system does not filter unless an operator defines a filter.

Introduced 16.0.R1

Platforms All

### **filter**

Synopsis Enter the **filter** context

Context **configure** *router string interface string egress filter*

Tree [filter](#)

Description Commands in this context configure the names of the egress IPv4 and IPv6 network filter policies for the interface. Filter policies control packet forwarding and dropping based on IP match criteria.

Introduced 16.0.R1

Platforms All

### ip reference

Synopsis IPv4 filter policy name  
 Context **configure** [router](#) *string* [interface](#) *string* [egress filter ip reference](#)  
 Tree [ip](#)  
 Reference **configure** [filter ip-filter](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### ipv6 reference

Synopsis IPv6 filter policy name  
 Context **configure** [router](#) *string* [interface](#) *string* [egress filter ipv6 reference](#)  
 Tree [ipv6](#)  
 Reference **configure** [filter ipv6-filter](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### eth-cfm

Synopsis Enter the **eth-cfm** context  
 Context **configure** [router](#) *string* [interface](#) *string* [eth-cfm](#)  
 Tree [eth-cfm](#)  
 Description Commands in this context configure the Ethernet CFM parameters for the associated IP interface.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### mep [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number*

Synopsis Enter the **mep** list instance  
 Context **configure** [router](#) *string* [interface](#) *string* [eth-cfm mep md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number*  
 Tree [mep](#)

Description	Commands in this context configure an 802.1ag Maintenance Endpoint (MEP) instance.
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **md-admin-name** *reference*

Synopsis	Maintenance Domain (MD) name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i>
Tree	<a href="#">mep</a>
Reference	<b>configure</b> <a href="#">eth-cfm domain</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ma-admin-name** *reference*

Synopsis	Maintenance Association (MA) name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i>
Tree	<a href="#">mep</a>
Reference	<b>configure</b> <a href="#">eth-cfm domain</a> <i>string</i> <a href="#">association</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mep-id** *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i>
Tree	<a href="#">mep</a>
Range	1 to 8191
Notes	This element is part of a list key.



Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **admin-state** *keyword*

Synopsis	Administrative state of the MEP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **alarm-notification**

Synopsis	Enter the <b>alarm-notification</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>alarm-notification</b>
Tree	<a href="#">alarm-notification</a>
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fng-alarm-time** *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>alarm-notification fng-alarm-time</b> <i>number</i>
Tree	<a href="#">fng-alarm-time</a>
Range	250   500   1000
Units	centiseconds
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fng-reset-time** *number*

Synopsis Time that must expire before an FNG alarm is reset

Context **configure** *router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-reset-time number*

Tree [fng-reset-time](#)

Range 250 | 500 | 1000

Units centiseconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm** *boolean*

Synopsis Generate CCM messages

Context **configure** *router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm boolean*

Tree [ccm](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm-ltm-priority** *number*

Synopsis Priority of CCM and LTM messages transmitted by the MEP

Context **configure** *router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-ltm-priority number*

Tree [ccm-ltm-priority](#)

Range 0 to 7

Default 7

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ccm-padding-size** *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>eth-cfm</b> <b>mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>ccm-padding-size</b> <i>number</i>
Tree	<a href="#">ccm-padding-size</a>
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.  This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through <b>configure eth-cfm domain association ccm-interval</b> ) is less than 1 second.
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ccm-tlv-ignore** *keyword*

Synopsis	TLV to ignore on reception
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>eth-cfm</b> <b>mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>ccm-tlv-ignore</b> <i>keyword</i>
Tree	<a href="#">ccm-tlv-ignore</a>
Description	This command configures the receiving MEP to ignore the specified TLVs in the CCM PDU. The ignored TLVs are reported as absent and have no impact on the MEP state machine.  When unconfigured, the MEP processes all the recognized TLVs.
Options	interface-status, port-status
Max. Instances	2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**collect-lmm-fc-stats**

Synopsis	Enter the <b>collect-lmm-fc-stats</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>eth-cfm</b> <b>mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>collect-lmm-fc-stats</b>
Tree	<a href="#">collect-lmm-fc-stats</a>

Description	<p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands <b>fc-in-profile</b> and <b>fc</b> in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the <b>collect-lmm-stats</b> command are mutually exclusive when there is entity resource contention.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fc** keyword

Synopsis	Forwarding class name for profile-unaware counter
Context	<b>configure</b> <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number collect-lmm-fc-stats fc keyword</i>
Tree	<a href="#">fc</a>
Description	<p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the <b>fc-in-profile</b> command under the <b>collect-lmm-fc-stats</b> context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fc-in-profile** keyword

Synopsis	Forwarding class name for profile-aware counter
Context	<b>configure</b> <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number collect-lmm-fc-stats fc-in-profile keyword</i>
Tree	<a href="#">fc-in-profile</a>
Description	<p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p>

An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the **fc** command under the **collect-lmm-fc-stats** context.

When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.

Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **collect-lmm-stats** *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>eth-cfm</b> <b>mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>collect-lmm-stats</b> <i>boolean</i>
Tree	<a href="#">collect-lmm-stats</a>
Description	<p>When configured to <b>true</b>, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.</p> <p>The <b>show eth-cfm collect-lmm-stats</b> command displays entities that have been enabled to collect transit and receive counters.</p> <p>When configured to <b>false</b>, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>eth-cfm</b> <b>mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**eth-test**

Synopsis	Enable the <b>eth-test</b> context
Context	<b>configure</b> <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test</i>
Tree	<i>eth-test</i>
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the <b>oam eth-cfm eth-test</b> command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**bit-error-threshold** *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure</b> <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test bit-error-threshold number</i>
Tree	<i>bit-error-threshold</i>
Range	0 to 11840
Units	bit errors
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**test-pattern**

Synopsis	Enter the <b>test-pattern</b> context
Context	<b>configure</b> <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern</i>
Tree	<i>test-pattern</i>
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**crc-tlv** *boolean*

Synopsis	Generate a CRC checksum
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Context	<b>configure</b> <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern crc-tlv boolean</i>
Tree	<a href="#">crc-tlv</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **pattern** *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	<b>configure</b> <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern pattern keyword</i>
Tree	<a href="#">pattern</a>
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **facility-fault** *boolean*

Synopsis	Allow the facility MEP to generate a network action
Context	<b>configure</b> <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number facility-fault boolean</i>
Tree	<a href="#">facility-fault</a>
Description	When configured to <b>true</b> , the system facility MEP responds to a fault with a network-actionable function instead of just reporting the defect condition.  When configured to <b>false</b> , the system monitors transmissions and reports fault conditions.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **grace**

Synopsis	Enter the <b>grace</b> context
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Context	<b>configure</b> <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace</i>
Tree	<a href="#">grace</a>
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## eth-ed

Synopsis	Enter the <b>eth-ed</b> context
Context	<b>configure</b> <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed</i>
Tree	<a href="#">eth-ed</a>
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	<b>configure</b> <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed max-rx-defect-window number</i>
Tree	<a href="#">max-rx-defect-window</a>
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## priority *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	<b>configure</b> <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed priority number</i>
Tree	<a href="#">priority</a>
Range	0 to 7



Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **rx-eth-ed** *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace eth-ed rx-eth-ed</a> <i>boolean</i>
Tree	<a href="#">rx-eth-ed</a>
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **tx-eth-ed** *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace eth-ed tx-eth-ed</a> <i>boolean</i>
Tree	<a href="#">tx-eth-ed</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **eth-vsm-grace**

Synopsis	Enter the <b>eth-vsm-grace</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace eth-vsm-grace</a>
Tree	<a href="#">eth-vsm-grace</a>
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**rx-eth-vsm-grace** *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	<b>configure</b> <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace rx-eth-vsm-grace boolean</i>
Tree	<a href="#">rx-eth-vsm-grace</a>
Description	When configured to <b>true</b> , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.  When configured to <b>false</b> , the router disables the Nokia Grace function.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**tx-eth-vsm-grace** *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	<b>configure</b> <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace tx-eth-vsm-grace boolean</i>
Tree	<a href="#">tx-eth-vsm-grace</a>
Description	When configured to <b>true</b> , the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.  The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.  The operator must configure the <b>configure system eth-cfm grace</b> command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).  When configured to <b>false</b> , the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**lbm-svc-act-responder** *boolean*

Synopsis	Process service activation streams in ETH-CFM LBM
Context	<b>configure</b> <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number lbm-svc-act-responder boolean</i>

Tree	<a href="#">lbm-svc-act-responder</a>
Description	<p>When configured to <b>true</b>, the router enables the MEP to process service activation streams encapsulated in ETH-CFM LBM frames that are directed to it.</p> <p>When configured to <b>false</b>, this command reverts to MEP LBM standard processing.</p> <p>There is interaction between this command and the <b>tools perform service id loopback eth</b> command. Nokia recommends that either the <b>lbm-svc act-responder</b> or the <b>tools perform service id loopback eth</b> command be used within a service. If both commands must be configured, and the target reflection point is the MAC Swap Loopback function, the inbound stream of data must not include ETH-CFM traffic that is equal to or lower than the domain level of any configured MEP that would otherwise extract and process the ETH-CFM message.</p> <p>See "Promiscuous ETH-LBM mode of operation" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Services Overview Guide</i> for more information.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **low-priority-defect** *keyword*

Synopsis	Lowest priority defect for fault alarm generation
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>low-priority-defect</b> <i>keyword</i>
Tree	<a href="#">low-priority-defect</a>
Description	This command specifies the lowest priority defect that generates a fault alarm and also configures the fault state of the MEP that causes a network reaction.
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mac-address** *string*

Synopsis	MAC address of the MEP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>mac-address</b> <i>string</i>
Tree	<a href="#">mac-address</a>
Description	<p>This command specifies the MAC address of the MEP.</p> <p>When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.</p>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **one-way-delay-threshold** *number*

Synopsis Threshold time limit for the one-way delay test

Context **configure** *router* *string* *interface* *string* *eth-cfm* *mep* *md-admin-name* *reference* *ma-admin-name* *reference* *mep-id* *number* **one-way-delay-threshold** *number*

Tree [one-way-delay-threshold](#)

Range 0 to 600

Units seconds

Default 3

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **flavor** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Network interface flavor

Context **configure** *router* *string* *interface* *string* **flavor** *keyword*

Tree [flavor](#)

Options regular, control-tunnel, pdn, unnumbered-mpls-tp, gmpls-loopback

Default regular

Introduced 16.0.R1

Platforms All

### **gre-termination** *boolean*

Synopsis Terminate GRE packets on primary subnet of interface

Context **configure** *router* *string* *interface* *string* **gre-termination** *boolean*

Tree [gre-termination](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## hold-time

Synopsis	Enter the <b>hold-time</b> context
Context	<b>configure router string interface string hold-time</b>
Tree	<b>hold-time</b>
Description	Commands in this context configure the interface-level up and down hold timers for the associated IP interface.
Introduced	16.0.R1
Platforms	All

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure router string interface string hold-time ipv4</b>
Tree	<b>ipv4</b>
Description	Commands in this context configure the interface-level IPv4 hold timers for the associated IP interface.
Introduced	16.0.R1
Platforms	All

## down

Synopsis	Enter the <b>down</b> context
Context	<b>configure router string interface string hold-time ipv4 down</b>
Tree	<b>down</b>
Description	Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the <b>init-only</b> command.
Introduced	16.0.R1
Platforms	All

## init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	<b>configure router string interface string hold-time ipv4 down init-only boolean</b>

Tree	<a href="#">init-only</a>
Description	This command applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	All

### **seconds** *number*

Synopsis	Down hold time for the IP interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> <a href="#">down</a> <a href="#">seconds</a> <i>number</i>
Tree	<a href="#">seconds</a>
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

### **up**

Synopsis	Enter the <b>up</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> <a href="#">up</a>
Tree	<a href="#">up</a>
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	All

### **seconds** *number*

Synopsis	Up hold time for the IP interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> <a href="#">up</a> <a href="#">seconds</a> <i>number</i>
Tree	<a href="#">seconds</a>
Range	1 to 1200
Units	seconds
Introduced	16.0.R1

Platforms All

## ipv6

Synopsis Enter the **ipv6** context

Context **configure** *router string* *interface string* *hold-time* *ipv6*

Tree *ipv6*

Description Commands in this context configure the interface-level IPv6 hold timers for the associated IP interface.

Introduced 16.0.R1

Platforms All

## down

Synopsis Enter the **down** context

Context **configure** *router string* *interface string* *hold-time* *ipv6* **down**

Tree *down*

Description Commands in this context configure the down hold timer, which specifies the delay before activation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the **init-only** command.

Introduced 16.0.R1

Platforms All

## init-only *boolean*

Synopsis Apply delay only at interface configuration or reboot

Context **configure** *router string* *interface string* *hold-time* *ipv6* **down** *init-only* *boolean*

Tree *init-only*

Description This command applies the delay only when when the IP interface is first configured or after a system reboot.

Default false

Introduced 16.0.R1

Platforms All

**seconds** *number*

Synopsis	Down hold time for the IP interface
Context	<b>configure</b> <i>router string interface string hold-time ipv6 down seconds number</i>
Tree	<i>seconds</i>
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

**up**

Synopsis	Enter the <b>up</b> context
Context	<b>configure</b> <i>router string interface string hold-time ipv6 up</i>
Tree	<i>up</i>
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	All

**seconds** *number*

Synopsis	Up hold time for the IP interface
Context	<b>configure</b> <i>router string interface string hold-time ipv6 up seconds number</i>
Tree	<i>seconds</i>
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

**if-attribute**

Synopsis	Enter the <b>if-attribute</b> context
Context	<b>configure</b> <i>router string interface string if-attribute</i>
Tree	<i>if-attribute</i>



Description	Commands in this context configure attributes of the IP interface.
Introduced	16.0.R1
Platforms	All

### **admin-group** *reference*

Synopsis	Administrative group name for the interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">if-attribute</a> <a href="#">admin-group</a> <i>reference</i>
Tree	<a href="#">admin-group</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute</a> <a href="#">admin-group</a> <i>string</i>
Max. Instances	32
Introduced	16.0.R1
Platforms	All

### **delay**

Synopsis	Enter the <b>delay</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">if-attribute</a> <a href="#">delay</a>
Tree	<a href="#">delay</a>
Introduced	20.7.R1
Platforms	All

### **delay-selection** *keyword*

Synopsis	Delay source advertised by IGP for the interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">if-attribute</a> <a href="#">delay</a> <a href="#">delay-selection</a> <i>keyword</i>
Tree	<a href="#">delay-selection</a>
Options	static, dynamic, static-preferred, dynamic-preferred
Default	static-preferred
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## dynamic

Synopsis	Enter the <b>dynamic</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">if-attribute</a> <a href="#">delay</a> <a href="#">dynamic</a>
Tree	<a href="#">dynamic</a>
Description	Commands in this context configure dynamic link delay measurement options for the interface.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## measurement-template *reference*

Synopsis	Link delay measurement template for the interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">if-attribute</a> <a href="#">delay</a> <a href="#">dynamic</a> <a href="#">measurement-template</a> <i>reference</i>
Tree	<a href="#">measurement-template</a>
Reference	<b>configure</b> <a href="#">test-oam</a> <a href="#">link-measurement</a> <a href="#">measurement-template</a> <i>string</i>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## twamp-light

Synopsis	Enter the <b>twamp-light</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">if-attribute</a> <a href="#">delay</a> <a href="#">dynamic</a> <a href="#">twamp-light</a>
Tree	<a href="#">twamp-light</a>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">if-attribute</a> <a href="#">delay</a> <a href="#">dynamic</a> <a href="#">twamp-light</a> <a href="#">ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**admin-state** *keyword*

Synopsis	Administrative state of IPv4 TWAMP Light packets
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>if-attribute</b> <b>delay</b> <b>dynamic</b> <b>twamp-light</b> <b>ipv4</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Description	This command specifies the administrative state of the IPv4 encapsulated TWAMP Light measurement packets.
Options	enable, disable
Default	disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**destination** *string*

Synopsis	TWAMP Light measurement packet destination IPv4 address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>if-attribute</b> <b>delay</b> <b>dynamic</b> <b>twamp-light</b> <b>ipv4</b> <b>destination</b> <i>string</i>
Tree	<b>destination</b>
Description	This command specifies the unicast destination address to be associated with the IPv4 TWAMP Light measurement packet.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**source** *string*

Synopsis	TWAMP Light measurement packets source IPv4 address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>if-attribute</b> <b>delay</b> <b>dynamic</b> <b>twamp-light</b> <b>ipv4</b> <b>source</b> <i>string</i>
Tree	<b>source</b>
Description	This command specifies the unicast source address to be associated with the IPv4 TWAMP Light measurement packet.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ipv6

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>if-attribute</b> <b>delay</b> <b>dynamic</b> <b>twamp-light</b> <b>ipv6</b>
Tree	<b>ipv6</b>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## admin-state *keyword*

Synopsis	Administrative state of IPv6 TWAMP Light packets
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>if-attribute</b> <b>delay</b> <b>dynamic</b> <b>twamp-light</b> <b>ipv6</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## destination *string*

Synopsis	TWAMP Light measurement packet destination IPv6 address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>if-attribute</b> <b>delay</b> <b>dynamic</b> <b>twamp-light</b> <b>ipv6</b> <b>destination</b> <i>string</i>
Tree	<b>destination</b>
Description	This command specifies the unicast destination address to be associated with the IPv6 TWAMP Light measurement packet. Globally routable and Link Local addressing is supported.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## source *string*

Synopsis	TWAMP Light measurement packets source IPv6 address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>if-attribute</b> <b>delay</b> <b>dynamic</b> <b>twamp-light</b> <b>ipv6</b> <b>source</b> <i>string</i>
Tree	<b>source</b>

Description	This command specifies the unicast source address to be associated with the IPv6 TWAMP Light measurement packet. Globally routable and Link Local addressing is supported.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **static number**

Synopsis	Unidirectional link delay static information
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>if-attribute</b> <b>delay</b> <b>static</b> <i>number</i>
Tree	<b>static</b>
Description	This command configures the unidirectional link delay. By default there is no configured delay, and the link delay metric TLV is pruned in the IGP.
Range	1 to 16777214
Units	microseconds
Introduced	20.7.R1
Platforms	All

### **srlg-group [name] reference**

Synopsis	Add a list entry for <b>srlg-group</b>
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>if-attribute</b> <b>srlg-group</b> <i>reference</i>
Tree	<b>srlg-group</b>
Description	<p>Commands in this context add a list entry for a Shared Risk Link Group (SRLG) that can be associated with an IP or MPLS interface to tag IP or MPLS interfaces that share a specific outcome with the same identifier. For example, an SRLG group identifier could represent all links that use separate fibers but are carried in the same fiber conduit.</p> <p>The name and identifier of each SRLG group must be configured locally on each router before the user configures the SRLG membership of an interface. A maximum of 1024 SRLGs can be configured per system. The user can apply SRLGs to an IES, VPRN, network IP, or MPLS interface. A maximum of 64 SRLGs can be applied to an interface.</p> <p>See "Shared Risk Link Groups" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR MPLS Guide</i> for more information about SRLGs.</p>
Introduced	16.0.R1
Platforms	All

**[name] reference**

Synopsis	SRLG name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">if-attribute</a> <a href="#">srlg-group</a> <i>reference</i>
Tree	<a href="#">srlg-group</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute</a> <a href="#">srlg-group</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**ingress**

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ingress</a>
Tree	<a href="#">ingress</a>
Description	Commands in this context configure ingress network filter policies for the IP interface. If an ingress filter is not defined, the system performs no filtering.
Introduced	16.0.R1
Platforms	All

**destination-class-lookup *boolean***

Synopsis	Enable BGP destination class lookup
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ingress</a> <a href="#">destination-class-lookup</a> <i>boolean</i>
Tree	<a href="#">destination-class-lookup</a>
Description	When configured to <b>true</b> , the router performs a destination class lookup. This command is supported on FP3-based cards and later and is used in combination with the <b>destination-class</b> match criterion for an IP filter policy to filter egress traffic based on BGP destination classes.  When configured to <b>false</b> , destination class lookup is not enabled.
Default	false
Introduced	20.7.R1
Platforms	All

**filter**

Synopsis	Enter the <b>filter</b> context
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Context	<b>configure</b> <i>router string interface string ingress filter</i>
Tree	<i>filter</i>
Description	Commands in this context associate an IP filter policy with an IP interface. Filter policies control packet forwarding and dropping based on IP match criteria.
Introduced	16.0.R1
Platforms	All

### **ip reference**

Synopsis	IPv4 filter policy name
Context	<b>configure</b> <i>router string interface string ingress filter ip reference</i>
Tree	<i>ip</i>
Reference	<b>configure</b> <i>filter ip-filter string</i>
Introduced	16.0.R1
Platforms	All

### **ipv6 reference**

Synopsis	IPv6 filter policy name
Context	<b>configure</b> <i>router string interface string ingress filter ipv6 reference</i>
Tree	<i>ipv6</i>
Reference	<b>configure</b> <i>filter ipv6-filter string</i>
Introduced	16.0.R1
Platforms	All

### **policy-accounting reference**

Synopsis	Policy accounting template applied to the interface
Context	<b>configure</b> <i>router string interface string ingress policy-accounting reference</i>
Tree	<i>policy-accounting</i>
Reference	<b>configure</b> <i>routing-options policy-accounting policy-acct-template string</i>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**ingress-stats** *boolean*

Synopsis	Collect ingress statistics
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ingress-stats</b> <i>boolean</i>
Tree	<a href="#">ingress-stats</a>
Description	<p>When configured to <b>true</b>, the router configures the collection of IPv4 and IPv6 offered packets and octets. This only applies to IP statistics, not to uRPF statistics.</p> <p>Octet statistics for IPv4 and IPv6 bytes at IP interfaces include the Layer 2 frame overhead.</p> <p>When configured to <b>false</b>, the router does not collect the statistics.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**ip-mtu** *number*

Synopsis	Interface IP MTU
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ip-mtu</b> <i>number</i>
Tree	<a href="#">ip-mtu</a>
Description	<p>This command configures the IP maximum transmit unit (packet) for the associated router IP interface.</p> <p>The operational IP MTU used for the interface is based on the configured IP MTU and the port MTU of the port bound to this interface; that is, the operational MTU is set to the lesser of the values configured by this command and the port MTU value less the Ethernet header size.</p> <p>If the interface supports IPv6 packets, this command must be set to at least 1280, in accordance with RFC 2460 <i>Internet Protocol, Version 6 (IPv6) Specification</i>.</p>
Range	512 to 9786
Units	bytes
Introduced	16.0.R1
Platforms	All

**ip-tunnel**

Synopsis	Enter the <b>ip-tunnel</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ip-tunnel</b>
Tree	<a href="#">ip-tunnel</a>



Description	Commands in this context configure the IP or GRE tunnel on a control-channel loopback interface. The local-end tunnel IP address is configured using the interface primary IP address.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **remote-ip** *string*

Synopsis	IP address of the remote end of the IP tunnel
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ip-tunnel</b> <b>remote-ip</b> <i>string</i>
Tree	<a href="#">remote-ip</a>
Description	This command configures the destination address of the outer IP header in the IP or GRE encapsulation.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ipsec**

Synopsis	Enable the <b>ipsec</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b>
Tree	<a href="#">ipsec</a>
Description	Commands in this context configure an IPsec secured interface.
Introduced	22.7.R1
Platforms	VSR

### **admin-state** *keyword*

Synopsis	Administrative state of IPsec secured interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	22.7.R1
Platforms	VSR

**ip-exception** *reference*

Synopsis	IP exception filter
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ip-exception</b> <i>reference</i>
Tree	<a href="#">ip-exception</a>
Description	This command configures the IP exception filter for the secured interface. All ingress traffic matching the specified filter bypasses IPsec processing.
Reference	<b>configure</b> <b>filter</b> <b>ip-exception</b> <i>string</i>
Introduced	22.7.R1
Platforms	VSR

**ipsec-tunnel** [*name*] *string*

Synopsis	Enter the <b>ipsec-tunnel</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i>
Tree	<a href="#">ipsec-tunnel</a>
Description	Commands in this context configure IPsec tunnels used to secure traffic forwarded over the interface.
Introduced	22.7.R1
Platforms	VSR

**[name]** *string*

Synopsis	IPsec tunnel name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i>
Tree	<a href="#">ipsec-tunnel</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

**admin-state** *keyword*

Synopsis	Administrative state of the IPsec tunnel
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>

Options	enable, disable
Default	disable
Introduced	22.7.R1
Platforms	VSR

## bfd



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>bfd</b> context
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string</i> <b>bfd</b>
Tree	<b>bfd</b>
Introduced	22.7.R1
Platforms	VSR

## bfd-designate *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Designate IPsec tunnel to carry BFD traffic
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string</i> <b>bfd bfd-designate</b> <i>boolean</i>
Tree	<b>bfd-designate</b>
Default	false
Introduced	22.7.R1
Platforms	VSR

## bfd-liveness



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>bfd-liveness</b> context
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Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string bfd bfd-liveness</i>
Tree	<i>bfd-liveness</i>
Description	<p>Commands in this context configure a BFD session to provide a heart-beat mechanism for a specified IPsec tunnel. There can be only one BFD session assigned to any given IPsec tunnel, but there can be multiple IPsec tunnels using the same BFD session.</p> <p>BFD controls the state of the association tunnel. If the BFD session goes down, the system brings down the associated non-designated IPsec tunnel.</p>
Introduced	22.7.R1
Platforms	VSR

### **dest-ip** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination address used for the BFD session
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string bfd bfd-liveness dest-ip string</i>
Tree	<i>dest-ip</i>
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

### **interface** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the interface used by the BFD session
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string bfd bfd-liveness interface string</i>
Tree	<i>interface</i>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

**service-name** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>bfd</b> <b>bfd-liveness</b> <b>service-name</b> <i>string</i>
Tree	<b>service-name</b>
Description	This command configures the name of the service where BFD traffic is forwarded to.
String Length	1 to 64
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

**clear-df-bit** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reset the DF bit to 0 in all payload IP packets
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>clear-df-bit</b> <i>boolean</i>
Tree	<b>clear-df-bit</b>
Description	When configured to <b>true</b> , the DF bit is set to 0 in all payload IP packets associated with the IPsec tunnel, before any potential fragmentation occurs.
Default	false
Introduced	22.7.R1
Platforms	VSR

**copy-traffic-class-upon-decapsulation** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable traffic class copy upon decapsulation
----------	--

Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string copy-traffic-class-upon-decapsulation boolean</i>
Tree	<a href="#">copy-traffic-class-upon-decapsulation</a>
Description	When configured to <b>true</b> , the system copies the traffic class from the outer tunnel IP packet header to the payload IP packet header in the decapsulating direction (public to private).
Default	false
Introduced	22.7.R1
Platforms	VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	22.7.R1
Platforms	VSR

### **encapsulated-ip-mtu** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum size of the encapsulated tunnel packet
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string encapsulated-ip-mtu number</i>
Tree	<a href="#">encapsulated-ip-mtu</a>
Description	This command specifies the maximum size of the encapsulated tunnel packet to the IPsec tunnel, the IP tunnel, or the dynamic tunnels terminated on the IPsec Gateway. If the encapsulated IPv4 or IPv6 tunnel packet exceeds this value, the system fragments the packet.
Range	512 to 9000
Units	bytes
Introduced	22.7.R1
Platforms	VSR

## icmp-generation



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>icmp-generation</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec</a> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">icmp-generation</a>
Tree	<a href="#">icmp-generation</a>
Description	Commands in this context configure settings for ICMPv4 message generation.
Introduced	22.7.R1
Platforms	VSR

## frag-required



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>frag-required</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec</a> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">icmp-generation</a> <a href="#">frag-required</a>
Tree	<a href="#">frag-required</a>
Description	Commands in this context configure the attributes for sending generated ICMP Destination Unreachable "fragmentation needed and DF set" messages (type 3, code 4) back to the source, if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Introduced	22.7.R1
Platforms	VSR

## admin-state *keyword*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of sending ICMP messages
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec</a> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">icmp-generation</a> <a href="#">frag-required</a> <b>admin-state</b> <i>keyword</i>

Tree	<a href="#">admin-state</a>
Description	This command configures the administrative state of sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) messages to the source if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Options	enable, disable
Default	enable
Introduced	22.7.R1
Platforms	VSR

### **interval** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending ICMP messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>icmp-generation frag-required</b> <i>interval</i> <i>number</i>
Tree	<a href="#">interval</a>
Description	This command configures the interval for sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4).
Range	1 to 60
Units	seconds
Default	10
Introduced	22.7.R1
Platforms	VSR

### **message-count** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMP messages that can be sent
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>icmp-generation frag-required</b> <i>message-count</i> <i>number</i>
Tree	<a href="#">message-count</a>



Description	This command configures the maximum number of ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	22.7.R1
Platforms	VSR

## icmp6-generation



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>icmp6-generation</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">icmp6-generation</a>
Tree	<a href="#">icmp6-generation</a>
Description	Commands in this context configure settings for ICMPv6 message generation.
Introduced	22.7.R1
Platforms	VSR

## packet-too-big



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>packet-too-big</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">icmp6-generation</a> <a href="#">packet-too-big</a>
Tree	<a href="#">packet-too-big</a>
Description	Commands in this context configure the parameters to send ICMPv6 PTB (Packet Too Big) messages on the private side.  The system sends PTB messages if a received IPv6 packet on the private side is greater than 1280 bytes and it exceeds the private MTU of the tunnel.  The private MTU for the tunnel is configured via the <b>configure router interface ipsec ipsec-tunnel ip-mtu</b> command for the interface.
Introduced	22.7.R1

Platforms VSR

### **admin-state** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of Packet Too Big message sends
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>icmp6-generation</b> <b>packet-too-big</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	22.7.R1
Platforms	VSR

### **interval** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending Packet Too Big messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>icmp6-generation</b> <b>packet-too-big</b> <b>interval</b> <i>number</i>
Tree	<b>interval</b>
Range	1 to 60
Units	seconds
Default	10
Introduced	22.7.R1
Platforms	VSR

## message-count *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMPv6 PTB messages that can be sent
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string icmp6-generation packet-too-big message-count number</i>
Tree	<a href="#">message-count</a>
Description	This command configures the maximum number of PTB messages that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	22.7.R1
Platforms	VSR

## ip-mtu *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Private MTU of the IPsec tunnel
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string ip-mtu number</i>
Tree	<a href="#">ip-mtu</a>
Description	This command specifies the private MTU of the IPsec tunnel. The private MTU is used to determine the need for fragmentation before encapsulation of the payload packet.
Range	512 to 9000
Units	bytes
Introduced	22.7.R1
Platforms	VSR

## key-exchange

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>key-exchange</b> context
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string</i> <b>key-exchange</b>
Tree	<a href="#">key-exchange</a>
Introduced	22.7.R1
Platforms	VSR

## dynamic



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>dynamic</b> context
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string</i> <b>key-exchange dynamic</b>
Tree	<a href="#">dynamic</a>
Notes	The following elements are part of a choice: <b>dynamic</b> or <b>manual</b> .
Introduced	22.7.R1
Platforms	VSR

## auto-establish *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Attempt to establish a phase 1 exchange automatically
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string</i> <b>key-exchange dynamic auto-establish</b> <i>boolean</i>
Tree	<a href="#">auto-establish</a>
Default	false
Introduced	22.7.R1
Platforms	VSR

## cert

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>cert</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec</a> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic</a> <a href="#">cert</a>
Tree	<a href="#">cert</a>
Description	Commands in this context configure the attributes of the dynamic keying certificate.
Introduced	22.7.R1
Platforms	VSR

## cert-profile *reference*

Synopsis	Certificate profile name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec</a> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic</a> <a href="#">cert</a> <a href="#">cert-profile</a> <i>reference</i>
Tree	<a href="#">cert-profile</a>
Reference	<b>configure</b> <a href="#">ipsec</a> <a href="#">cert-profile</a> <i>string</i>
Introduced	22.7.R1
Platforms	VSR

## status-verify

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>status-verify</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec</a> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic</a> <a href="#">cert</a> <a href="#">status-verify</a>
Tree	<a href="#">status-verify</a>
Description	Commands in this context configure attributes of Certificate Status Verification (CSV).
Introduced	22.7.R1
Platforms	VSR

**default-result** *keyword*

Synopsis	Default result for Certificate Status Verification
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>key-exchange</b> <b>dynamic</b> <b>cert status-verify default-result</b> <i>keyword</i>
Tree	<b>default-result</b>
Description	This command specifies the default certificate revocation status result to use when all configured CSV methods fail to return a result.
Options	revoked, good
Default	revoked
Introduced	22.7.R1
Platforms	VSR

**primary** *keyword*

Synopsis	Primary method of CSV to verify the revocation status
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>key-exchange</b> <b>dynamic</b> <b>cert status-verify primary</b> <i>keyword</i>
Tree	<b>primary</b>
Description	This command configures the primary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the certificate of the peer.
Options	crl, ocsf
Default	crl
Introduced	22.7.R1
Platforms	VSR

**secondary** *keyword*

Synopsis	Secondary method used to verify certificate revocation
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>key-exchange</b> <b>dynamic</b> <b>cert status-verify secondary</b> <i>keyword</i>
Tree	<b>secondary</b>
Description	This command specifies the secondary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the peer certificate.
Options	none, crl, ocsf
Default	none

Introduced 22.7.R1  
 Platforms VSR

### **trust-anchor-profile** *reference*

Synopsis Trust anchor profile name  
 Context **configure** *router string interface string ipsec ipsec-tunnel string key-exchange dynamic cert trust-anchor-profile reference*  
 Tree [trust-anchor-profile](#)  
 Reference **configure** *ipsec trust-anchor-profile string*  
 Introduced 22.7.R1  
 Platforms VSR

### **id**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **id** context  
 Context **configure** *router string interface string ipsec ipsec-tunnel string key-exchange dynamic id*  
 Tree [id](#)  
 Description Commands in this context specify the local ID used for IDi or IDr for IKEv2 negotiation. The default behavior depends on the local authentication method as follows:
 

- Psk: local tunnel IP address
- Cert-auth: subject of the local certificate

 Introduced 22.7.R1  
 Platforms VSR

### **fqdn** *string*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis FQDN used as the local ID IKE type

Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string key-exchange dynamic id fqdn string</i>
Tree	<a href="#">fqdn</a>
String Length	1 to 255
Notes	The following elements are part of a choice: <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .
Introduced	22.7.R1
Platforms	VSR

### **ipv4 string**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv4 as the local ID type
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string key-exchange dynamic id ipv4 string</i>
Tree	<a href="#">ipv4</a>
Notes	The following elements are part of a choice: <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .
Introduced	22.7.R1
Platforms	VSR

### **ipv6** (*ipv4-address-no-zone | ipv6-address-no-zone*)



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 used as the local IKE ID type
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string key-exchange dynamic id ipv6 (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<a href="#">ipv6</a>
Notes	The following elements are part of a choice: <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .
Introduced	22.7.R1
Platforms	VSR



## ike-policy *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IKE policy ID
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic</a> <a href="#">ike-policy</a> <i>reference</i>
Tree	<a href="#">ike-policy</a>
Description	This command specifies the ID of the IKE policy used for IKE negotiation. The <b>ipsec-transport-mode-profile</b> configuration only supports IKEv2.
Reference	<b>configure</b> <a href="#">ipsec</a> <a href="#">ike-policy</a> <i>number</i>
Introduced	22.7.R1
Platforms	VSR

## ipsec-transform *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPsec transform IDs used by the dynamic key
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic</a> <a href="#">ipsec-transform</a> <i>reference</i>
Tree	<a href="#">ipsec-transform</a>
Description	This command specifies IPsec transform IDs used for CHILD_SA negotiation.
Reference	<b>configure</b> <a href="#">ipsec</a> <a href="#">ipsec-transform</a> <i>number</i>
Max. Instances	4
Introduced	22.7.R1
Platforms	VSR

## pre-shared-key *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Pre-shared key for authentication
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic</a> <a href="#">pre-shared-key</a> <i>string</i>
Tree	<a href="#">pre-shared-key</a>
String Length	1 to 115
Introduced	22.7.R1
Platforms	VSR

## manual



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>manual</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">manual</a>
Tree	<a href="#">manual</a>
Description	Commands in this context configure settings for manually configured security associations for the IPsec tunnel.
Notes	The following elements are part of a choice: <b>dynamic</b> or <b>manual</b> .
Introduced	22.7.R1
Platforms	VSR

## keys [[security-association](#)] *number direction keyword*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>keys</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">manual</a> <a href="#">keys</a> <i>number direction keyword</i>
Tree	<a href="#">keys</a>
Description	Commands in this context configure the security association list for the tunnel.
Introduced	22.7.R1
Platforms	VSR

**[security-association] number**

Synopsis	SA entry ID
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>key-exchange</b> <b>manual</b> <b>keys</b> <i>number</i> <b>direction</b> <i>keyword</i>
Tree	<b>keys</b>
Range	1 to 16
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

**direction keyword**

Synopsis	Direction of the IPsec tunnel
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>key-exchange</b> <b>manual</b> <b>keys</b> <i>number</i> <b>direction</b> <i>keyword</i>
Tree	<b>keys</b>
Options	inbound, outbound
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

**authentication-key string****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key used for the authentication algorithm
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>key-exchange</b> <b>manual</b> <b>keys</b> <i>number</i> <b>direction</b> <i>keyword</i> <b>authentication-key</b> <i>string</i>
Tree	<b>authentication-key</b>
String Length	1 to 130

Introduced 22.7.R1  
 Platforms VSR

### encryption-key *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Key used for the encryption algorithm  
 Context **configure** [router](#) *string* [interface](#) *string* [ipsec](#) [ipsec-tunnel](#) *string* [key-exchange](#) [manual](#) [keys](#) *number* [direction](#) *keyword* [encryption-key](#) *string*  
 Tree [encryption-key](#)  
 String Length 1 to 66  
 Introduced 22.7.R1  
 Platforms VSR

### ipsec-transform *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Transform entry used by manual SAs  
 Context **configure** [router](#) *string* [interface](#) *string* [ipsec](#) [ipsec-tunnel](#) *string* [key-exchange](#) [manual](#) [keys](#) *number* [direction](#) *keyword* [ipsec-transform](#) *reference*  
 Tree [ipsec-transform](#)  
 Reference **configure** [ipsec](#) [ipsec-transform](#) *number*  
 Notes This element is mandatory.  
 Introduced 22.7.R1  
 Platforms VSR

**spi number****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SPI of inbound and outbound packets
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string key-exchange manual keys number direction keyword spi number</i>
Tree	<i>spi</i>
Description	This command specifies the Security Parameter Index (SPI) used to look up the instruction to verify and decrypt the incoming IPsec packets when the direction is inbound. When the direction is outbound, the SPI is used in the encoding of the outgoing packets.  The remote node can use the SPI to look up the instruction to verify and decrypt the packet.
Range	256 to 16383
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

**local-gateway-address-override** (*ipv4-address-no-zone | ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IPsec tunnel endpoint address
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string local-gateway-address-override (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<i>local-gateway-address-override</i>
Description	This command configures the local IPsec tunnel endpoint address. This overrides the default endpoint address, which is the interface address.
Introduced	22.7.R1
Platforms	VSR

## max-history-key-records



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>max-history-key-records</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec</a> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">max-history-key-records</a>
Tree	<a href="#">max-history-key-records</a>
Description	Commands in this context configure the settings for recording historical IPsec keys.
Introduced	22.7.R1
Platforms	VSR

## esp number



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of recent records
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec</a> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">max-history-key-records</a> <a href="#">esp</a> <i>number</i>
Tree	<a href="#">esp</a>
Range	1 to 48
Introduced	22.7.R1
Platforms	VSR

## ike number



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of historical IKE key records
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec</a> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">max-history-key-records</a> <a href="#">ike</a> <i>number</i>
Tree	<a href="#">ike</a>
Range	1 to 3

Introduced 22.7.R1  
 Platforms VSR

### **pmtu-discovery-aging** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Aging out time of the learned path MTU  
 Context **configure** *router string interface string ipsec ipsec-tunnel string pmtu-discovery-aging number*  
 Tree [pmtu-discovery-aging](#)  
 Description This command configures the temporary public and private MTU expiration time. The temporary MTU is used for MTU propagation.  
 Range 900 to 3600  
 Units seconds  
 Default 900  
 Introduced 22.7.R1  
 Platforms VSR

### **private-sap** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Private SAP ID  
 Context **configure** *router string interface string ipsec ipsec-tunnel string private-sap number*  
 Tree [private-sap](#)  
 Range 0 to 4094  
 Notes This element is mandatory.  
 Introduced 22.7.R1  
 Platforms VSR

**private-service** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Private service name
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string private-service string</i>
Tree	<i>private-service</i>
Description	This command configures the private service name. If unconfigured, the private service is the service where the secured interface resides.
String Length	1 to 64
Introduced	22.7.R1
Platforms	VSR

**private-tcp-mss-adjust** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP maximum segment size (MSS) adjustment
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string private-tcp-mss-adjust number</i>
Tree	<i>private-tcp-mss-adjust</i>
Description	This command specifies the TCP MSS to adjust for the tunnel on the private side. When configured, the system may use the value to update the MSS option in the received TCP SYN packet on the private side.
Range	512 to 9000
Units	bytes
Introduced	22.7.R1
Platforms	VSR



**propagate-pmtu-v4** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv4 hosts
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string propagate-pmtu-v4 boolean</i>
Tree	<a href="#">propagate-pmtu-v4</a>
Description	When configured to <b>true</b> , the system propagates the path MTU learned from the public side to the private side (IPv4 hosts).
Default	true
Introduced	22.7.R1
Platforms	VSR

**propagate-pmtu-v6** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv6 hosts
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string propagate-pmtu-v6 boolean</i>
Tree	<a href="#">propagate-pmtu-v6</a>
Description	When configured to <b>true</b> , the system propagates the path MTU learned from the public side to the private side (IPv6 hosts).
Default	true
Introduced	22.7.R1
Platforms	VSR

**public-tcp-mss-adjust** (*number | keyword*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP maximum segment size (MSS) on the public network
----------	--

Context	<b>configure</b> <i>router string</i> <i>interface string</i> <i>ipsec ipsec-tunnel string</i> <i>public-tcp-mss-adjust (number   keyword)</i>
Tree	<a href="#">public-tcp-mss-adjust</a>
Description	This command configures the MSS for the TCP traffic in an IPsec tunnel that is sent from the public network to the private network. The system may use this value to adjust or insert the MSS option in the TCP SYN packet.
Range	512 to 9000
Units	bytes
Options	auto
Introduced	22.7.R1
Platforms	VSR

### **remote-gateway-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote IPsec tunnel endpoint address
Context	<b>configure</b> <i>router string</i> <i>interface string</i> <i>ipsec ipsec-tunnel string</i> <i>remote-gateway-address (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<a href="#">remote-gateway-address</a>
Introduced	22.7.R1
Platforms	VSR

### **replay-window** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Anti-replay window size
Context	<b>configure</b> <i>router string</i> <i>interface string</i> <i>ipsec ipsec-tunnel string</i> <i>replay-window number</i>
Tree	<a href="#">replay-window</a>
Description	This command specifies the size of an IPsec anti-replay window. If unconfigured, IPsec anti-replay is disabled.
Range	32   64   128   256   512
Units	packets

Introduced 22.7.R1  
 Platforms VSR

## security-policy



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **security-policy** context  
 Context **configure** *router string interface string ipsec ipsec-tunnel string security-policy*  
 Tree [security-policy](#)  
 Description Commands in this context specify a security policy used by the tunnel.  
 Introduced 22.7.R1  
 Platforms VSR

## id number



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Security policy ID for use by the tunnel  
 Context **configure** *router string interface string ipsec ipsec-tunnel string security-policy id number*  
 Tree [id](#)  
 Max. Range 0 to 4294967295  
 Introduced 22.7.R1  
 Platforms VSR

## strict-match *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable strict match of the security policy entry

Context	<b>configure router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>security-policy strict-match</b> <i>boolean</i>
Tree	<b>strict-match</b>
Description	<p>When configured to <b>true</b>, this command enables strict match of the security policy entry.</p> <p>When a CREATE_CHILD exchange request is received for a static IPsec tunnel, and this request is not a rekey request, ISA matches the received TSi and TSr with the configured security policy. This can be a match only when a received TS (in TSi or TSr) address range matches exactly with the subnet in a security policy entry.</p> <p>If there is no match, the setup fails, and TS_UNACCEPTABLE is sent.</p> <p>If there is a match, but there is an existing CHILD_SA for the matched security policy, the setup fails, and NO_PROPOSAL_CHOSEN is sent.</p> <p>If there is a match, and there is not a CHILD_SA for the matched entry, the subnet is sent in the matched security policy entry as TSi and TSr, and the CHILD_SA is created.</p>
Default	false
Introduced	22.7.R1
Platforms	VSR

### **ipv6-exception** *reference*

Synopsis	IPv6 filter exception used to bypass encryption
Context	<b>configure router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipv6-exception</b> <i>reference</i>
Tree	<b>ipv6-exception</b>
Description	<p>This command specifies the IPv6 filter exception for an IPsec-secured IPv6 interface. When an IPv6 filter exception is added, clear text packets that match the exception criteria in the IPv6 filter exception can ingress the interface, even when IPsec is enabled on the interface.</p>
Reference	<b>configure filter</b> <b>ipv6-exception</b> <i>string</i>
Introduced	22.7.R1
Platforms	VSR

### **public-sap** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Public SAP ID
Context	<b>configure router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec public-sap</b> <i>number</i>

Tree	<a href="#">public-sap</a>
Range	0 to 4094
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

## tunnel-group *reference*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tunnel group ID
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec tunnel-group</a> <i>reference</i>
Tree	<a href="#">tunnel-group</a>
Reference	<b>configure</b> <a href="#">isa tunnel-group</a> <i>number</i>
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	All

## allow-directed-broadcasts *boolean*

Synopsis	Forward directed broadcasts
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 allow-directed-broadcasts</a> <i>boolean</i>
Tree	<a href="#">allow-directed-broadcasts</a>
Description	When configured to <b>true</b> , the router forwards packets received on a local router interface to the subnet broadcast address of another IP interface.

When configured to **false**, this router does not allow directed broadcasts and the packets are discarded.

Allowing directed broadcasts is a well-known mechanism used for denial-of-service attacks.

Default	false
Introduced	16.0.R1
Platforms	All

## bfd

Synopsis	Enter the <b>bfd</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">bfd</a>
Tree	<a href="#">bfd</a>
Description	Commands in this context configure the Bidirectional Forwarding Detection (BFD) settings for the associated IP interface.
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of BFD sessions
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">bfd</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

## echo-receive *number*

Synopsis	Minimum echo interval over this interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">bfd</a> <a href="#">echo-receive</a> <i>number</i>
Tree	<a href="#">echo-receive</a>
Range	100 to 100000
Units	milliseconds
Introduced	16.0.R1

Platforms All

### **multiplier** *number*

Synopsis Number of consecutive BFD messages missed from the peer

Context **configure** *router string interface string ipv4 bfd multiplier number*

Tree [multiplier](#)

Description This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.

Range 1 to 20

Default 3

Introduced 16.0.R1

Platforms All

### **receive** *number*

Synopsis BFD receive interval over this interface

Context **configure** *router string interface string ipv4 bfd receive number*

Tree [receive](#)

Description This command specifies the receive interval for the BFD session.  
On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.

Range 10 to 100000

Units milliseconds

Default 100

Introduced 16.0.R1

Platforms All

### **transmit-interval** *number*

Synopsis BFD transmit interval over this interface

Context **configure** *router string interface string ipv4 bfd transmit-interval number*

Tree [transmit-interval](#)

Description This command configures the transmit intervals.

On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.

Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

### **type** keyword

Synopsis	Local termination point for the BFD session
Context	<b>configure</b> <i>router string</i> <i>interface string</i> <i>ipv4 bfd type keyword</i>
Tree	<i>type</i>
Description	This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity. The options to specify where the BFD session runs are: <ul style="list-style-type: none"> <li>• <b>auto</b> (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the <b>cpm-np</b>.</li> <li>• <b>cpm-np</b> – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems.</li> <li>• <b>fp</b> – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.</li> </ul>
Options	cpm-np, auto, fp
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **dhcp**

Synopsis	Enter the <b>dhcp</b> context
Context	<b>configure</b> <i>router string</i> <i>interface string</i> <i>ipv4 dhcp</i>
Tree	<i>dhcp</i>
Introduced	16.0.R1
Platforms	All



**admin-state** *keyword*

Synopsis	Administrative state of DHCP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**gi-address** *string*

Synopsis	GI address for the DHCP relay
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>gi-address</b> <i>string</i>
Tree	<b>gi-address</b>
Description	<p>This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay.</p> <p>By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.</p>
Introduced	16.0.R1
Platforms	All

**option-82**

Synopsis	Enter the <b>option-82</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>option-82</b>

Tree	<a href="#">option-82</a>
Description	Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet.
Introduced	16.0.R1
Platforms	All

### **action** *keyword*

Synopsis	Action to take with received DHCP Option 82
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">action</a> <i>keyword</i>
Tree	<a href="#">action</a>
Options	replace, drop, keep
Default	keep
Introduced	16.0.R1
Platforms	All

### **circuit-id**

Synopsis	Enter the <b>circuit-id</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">circuit-id</a>
Tree	<a href="#">circuit-id</a>
Introduced	16.0.R1
Platforms	All

### **ascii-tuple**

Synopsis	Use the ASCII-encoded tuple for the circuit ID
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">circuit-id</a> <a href="#">ascii-tuple</a>
Tree	<a href="#">ascii-tuple</a>
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-name</b> , <b>ifindex</b> , <b>none</b> , <b>port-id</b> , or <b>vlan-ascii-tuple</b> .
Introduced	16.0.R1
Platforms	All

## if-name

Synopsis	Use the interface name for the circuit ID
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 dhcp option-82 circuit-id if-name</b>
Tree	<a href="#">if-name</a>
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-name</b> , <b>ifindex</b> , <b>none</b> , <b>port-id</b> , or <b>vlan-ascii-tuple</b> .
Introduced	16.0.R1
Platforms	All

## ifindex

Synopsis	Use the interface index for the circuit ID
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 dhcp option-82 circuit-id ifindex</b>
Tree	<a href="#">ifindex</a>
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-name</b> , <b>ifindex</b> , <b>none</b> , <b>port-id</b> , or <b>vlan-ascii-tuple</b> .
Introduced	16.0.R1
Platforms	All

## none

Synopsis	Do not include the circuit ID
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 dhcp option-82 circuit-id none</b>
Tree	<a href="#">none</a>
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-name</b> , <b>ifindex</b> , <b>none</b> , <b>port-id</b> , or <b>vlan-ascii-tuple</b> .
Introduced	16.0.R1
Platforms	All

## port-id

Synopsis	Use the port ID for the circuit ID
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 dhcp option-82 circuit-id port-id</b>
Tree	<a href="#">port-id</a>
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-name</b> , <b>ifindex</b> , <b>none</b> , <b>port-id</b> , or <b>vlan-ascii-tuple</b> .

Introduced	16.0.R1
Platforms	All

## vlan-ascii-tuple

Synopsis	Include the VLAN ID and dot1p bits in the ASCII tuple
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82 circuit-id</a> <a href="#">vlan-ascii-tuple</a>
Tree	<a href="#">vlan-ascii-tuple</a>
Description	When configured, the router includes the VLAN ID and dot1p bits with the ASCII-tuple information. This only occurs on dot1q and QinQ-encapsulated ports. When the Option 82 bits are stripped, dot1p bits are copied to the Ethernet header of the outgoing packet. When unconfigured, the router leaves the circuit ID sub-option of the DHCP packet empty.
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-name</b> , <b>ifindex</b> , <b>none</b> , <b>port-id</b> , or <b>vlan-ascii-tuple</b> .
Introduced	16.0.R1
Platforms	All

## remote-id

Synopsis	Enter the <b>remote-id</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82 remote-id</a>
Tree	<a href="#">remote-id</a>
Description	Commands in this context configure the remote IP sub-option of the DHCP packet with the identity of the remote host end (typically the DHCP client).
Introduced	16.0.R1
Platforms	All

## ascii-string *string*

Synopsis	User-defined ASCII string for the remote ID
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82 remote-id ascii-string</a> <i>string</i>
Tree	<a href="#">ascii-string</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>ascii-string</b> , <b>mac</b> , or <b>none</b> .
Introduced	16.0.R1

Platforms All

### mac

Synopsis Use the MAC address for the remote ID

Context **configure** [router](#) *string* [interface](#) *string* [ipv4](#) [dhcp](#) [option-82](#) [remote-id](#) [mac](#)

Tree [mac](#)

Notes The following elements are part of a choice: **ascii-string**, **mac**, or **none**.

Introduced 16.0.R1

Platforms All

### none

Synopsis Do not include the remote ID

Context **configure** [router](#) *string* [interface](#) *string* [ipv4](#) [dhcp](#) [option-82](#) [remote-id](#) [none](#)

Tree [none](#)

Notes The following elements are part of a choice: **ascii-string**, **mac**, or **none**.

Introduced 16.0.R1

Platforms All

### vendor-specific-option

Synopsis Enter the **vendor-specific-option** context

Context **configure** [router](#) *string* [interface](#) *string* [ipv4](#) [dhcp](#) [option-82](#) [vendor-specific-option](#)

Tree [vendor-specific-option](#)

Description Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.

Introduced 16.0.R1

Platforms All

### client-mac-address *boolean*

Synopsis Send the MAC address in the VSO

Context **configure** [router](#) *string* [interface](#) *string* [ipv4](#) [dhcp](#) [option-82](#) [vendor-specific-option](#) [client-mac-address](#) *boolean*

Tree [client-mac-address](#)

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Default	false
Introduced	16.0.R1
Platforms	All

### **pool-name** *boolean*

Synopsis	Send the pool name in the VSO
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>option-82</b> <b>vendor-specific-option</b> <b>pool-name</b> <i>boolean</i>
Tree	<a href="#">pool-name</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **port-id** *boolean*

Synopsis	Send the port ID in the VSO
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>option-82</b> <b>vendor-specific-option</b> <b>port-id</b> <i>boolean</i>
Tree	<a href="#">port-id</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **service-id** *boolean*

Synopsis	Send the service ID in the Vendor Specific Option
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>option-82</b> <b>vendor-specific-option</b> <b>service-id</b> <i>boolean</i>
Tree	<a href="#">service-id</a>
Default	false
Introduced	16.0.R1
Platforms	All

**string** *string*

Synopsis	User-defined ASCII string for the VSO
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">vendor-specific-option</a> <a href="#">string</a> <a href="#">string</a>
Tree	<a href="#">string</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

**system-id** *boolean*

Synopsis	Send the system ID in the VSO
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">vendor-specific-option</a> <a href="#">system-id</a> <a href="#">boolean</a>
Tree	<a href="#">system-id</a>
Default	false
Introduced	16.0.R1
Platforms	All

**python-policy** *reference*

Synopsis	Python policy name
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">python-policy</a> <a href="#">reference</a>
Tree	<a href="#">python-policy</a>
Description	This command associates a Python policy name with the interface.
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <a href="#">string</a>
Introduced	16.0.R1
Platforms	All

**relay-plain-bootp** *boolean*

Synopsis	Relay plain BOOTP messages
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">relay-plain-bootp</a> <a href="#">boolean</a>
Tree	<a href="#">relay-plain-bootp</a>
Description	When configured to <b>true</b> , the system relays plain BOOTP messages.

When configured to **false**, the system considers the plain BOOTP packets as malformed DHCP packets; therefore, the system does not relay the messages.

Default	false
Introduced	16.0.R1
Platforms	All

### **release-include-gi-address** *boolean*

Synopsis	Include gateway IP address in DHCP Release messages
Context	<b>configure</b> <i>router</i> <i>string</i> <i>interface</i> <i>string</i> <i>ipv4</i> <i>dhcp</i> <i>release-include-gi-address</i> <i>boolean</i>
Tree	<a href="#">release-include-gi-address</a>
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **server** *string*

Synopsis	IP addresses for DHCP server requests
Context	<b>configure</b> <i>router</i> <i>string</i> <i>interface</i> <i>string</i> <i>ipv4</i> <i>dhcp</i> <i>server</i> <i>string</i>
Tree	<a href="#">server</a>
Description	This command configures a list of servers that this interface forwards requests to.  The operator can enter the list of servers as either IP addresses or fully qualified domain names. The operator must specify at least one server specified for DHCP relay to work. If there are multiple servers, the system forwards the request to all the servers in the list.
Max. Instances	8
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **src-ip-addr** *keyword*

Synopsis	Type of source address to use for DHCP relay
Context	<b>configure</b> <i>router</i> <i>string</i> <i>interface</i> <i>string</i> <i>ipv4</i> <i>dhcp</i> <i>src-ip-addr</i> <i>keyword</i>
Tree	<a href="#">src-ip-addr</a>
Options	auto, gi-address



Default	auto
Introduced	16.0.R1
Platforms	All

### **trusted** *boolean*

Synopsis	Relay untrusted packets
Context	<b>configure</b> <i>router string interface string ipv4 dhcp trusted boolean</i>
Tree	<a href="#">trusted</a>
Description	<p>When configured to <b>true</b>, the router enables the trusted mode on the interface. When enabled, the relay agent changes the existing GI address (of the request) to the ingress interface, and forwards the request.</p> <p>A DHCP request that contains a GI address of 0.0.0.0 and an Option 82 field in the packet is discarded unless it arrives on a trusted circuit.</p> <p>This behavior only applies if the Relay Agent Information Option action is to keep the existing information. When the Option 82 field is replaced by the relay agent, the original Option 82 information is lost, and there is no reason to enable the trusted option.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **icmp**

Synopsis	Enter the <b>icmp</b> context
Context	<b>configure</b> <i>router string interface string ipv4 icmp</i>
Tree	<a href="#">icmp</a>
Description	Commands in this context configure Internet Control Message Protocol (ICMP) parameters on a network IP interface.
Introduced	16.0.R1
Platforms	All

### **mask-reply** *boolean*

Synopsis	Allow responses to ICMP mask requests on the interface
Context	<b>configure</b> <i>router string interface string ipv4 icmp mask-reply boolean</i>
Tree	<a href="#">mask-reply</a>
Default	true

---

Introduced	16.0.R1
Platforms	All

### **param-problem**

Synopsis	Enter the <b>param-problem</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 icmp param-problem</a>
Tree	<a href="#">param-problem</a>
Description	Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of sent Parameter Problem messages
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 icmp param-problem admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **number** *number*

Synopsis	Maximum number of Parameter Problem messages to send
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 icmp param-problem number</a> <i>number</i>
Tree	<a href="#">number</a>
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

**seconds** *number*

Synopsis	Time used to limit number of Parameter Problem messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 icmp param-problem seconds</b> <i>number</i>
Tree	<b>seconds</b>
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

**redirects**

Synopsis	Enter the <b>redirects</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 icmp redirects</b>
Tree	<b>redirects</b>
Description	<p>Commands in this context configure the settings for ICMP redirect messages generated by the interface.</p> <p>The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.</p>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of sending ICMP redirect messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 icmp redirects admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**number** *number*

Synopsis	Maximum number of ICMP redirect messages to send
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Context	<b>configure</b> <i>router string interface string ipv4 icmp redirects number number</i>
Tree	<i>number</i>
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

### **seconds** *number*

Synopsis	Time used to limit the number of ICMP redirect messages
Context	<b>configure</b> <i>router string interface string ipv4 icmp redirects seconds number</i>
Tree	<i>seconds</i>
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

### **ttl-expired**

Synopsis	Enter the <b>ttl-expired</b> context
Context	<b>configure</b> <i>router string interface string ipv4 icmp ttl-expired</i>
Tree	<i>ttl-expired</i>
Description	Commands in this context configure the settings for ICMP TTL expired messages generated by the interface.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of sending TTL expired messages
Context	<b>configure</b> <i>router string interface string ipv4 icmp ttl-expired admin-state keyword</i>
Tree	<i>admin-state</i>
Options	enable, disable
Default	enable

---

Introduced	16.0.R1
Platforms	All

### **number** *number*

Synopsis	Maximum number of TTL expired messages to send
Context	<b>configure</b> <i>router string interface string ipv4 icmp ttl-expired number number</i>
Tree	<i>number</i>
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	All

### **seconds** *number*

Synopsis	Time used to limit the number of TTL expired messages
Context	<b>configure</b> <i>router string interface string ipv4 icmp ttl-expired seconds number</i>
Tree	<i>seconds</i>
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

### **unreachables**

Synopsis	Enter the <b>unreachables</b> context
Context	<b>configure</b> <i>router string interface string ipv4 icmp unreachables</i>
Tree	<i>unreachables</i>
Description	Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of sending unreachable messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>icmp</b> <b>unreachables</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**number** *number*

Synopsis	Maximum number of unreachable messages to send
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>icmp</b> <b>unreachables</b> <b>number</b> <i>number</i>
Tree	<b>number</b>
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	All

**seconds** *number*

Synopsis	Time to limit the number of ICMP unreachable messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>icmp</b> <b>unreachables</b> <b>seconds</b> <i>number</i>
Tree	<b>seconds</b>
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

**ip-helper-address** *string*

Synopsis	IP address of the target UDP broadcast gateway
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>ip-helper-address</b> <i>string</i>
Tree	<b>ip-helper-address</b>

Description	This command configures the redirection of broadcast UDP packets received on the associated interface to the specified helper gateway address, and then to the gateway.
Introduced	16.0.R1
Platforms	All

### local-dhcp-server *reference*

Synopsis	DHCP server for the interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">local-dhcp-server</a> <i>reference</i>
Tree	<a href="#">local-dhcp-server</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### neighbor-discovery

Synopsis	Enter the <b>neighbor-discovery</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a>
Tree	<a href="#">neighbor-discovery</a>
Introduced	16.0.R1
Platforms	All

### learn-unsolicited *boolean*

Synopsis	Learn new entries from any received NA message
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">learn-unsolicited</a> <i>boolean</i>
Tree	<a href="#">learn-unsolicited</a>
Description	<p>When configured to <b>true</b>, the router can learn neighbor entries from received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited (S) flag set. The command can be enabled for global addresses, link-local addresses, or for both.</p> <p>When configured to <b>false</b>, the router follows standard behavior for learning neighbor entries.</p> <ul style="list-style-type: none"> <li>• If an unsolicited NA (regardless of the S flag) is received from a neighbor that is not yet in the Neighbor Discovery (ND) cache, the NA is ignored.</li> <li>• If an NS, RS, RA, or Redirect message with a Link Layer Address (MAC) is received from a neighbor that is not yet in the ND cache, a new neighbor entry is created in</li> </ul>

the cache to store the received Link Layer MAC. The neighbor is put in the STALE state.

Default	false
Introduced	16.0.R1
Platforms	All

## limit

Synopsis	Enter the <b>limit</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <b>limit</b>
Tree	<a href="#">limit</a>
Description	<p>Commands in this context configure the maximum number of dynamic neighbor entries that can be learned on the interface</p> <p>When the number of entries reaches the threshold (the configured percentage) of this limit, the system sends an SNMP trap.</p> <p>When the limit is exceeded, the system learns no new entries until an entry expires and traffic to these destinations is dropped. Already learned entries are refreshed.</p>
Introduced	16.0.R1
Platforms	All

## log-only *boolean*

Synopsis	Generate log entries only if limit is reached
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <b>limit</b> <a href="#">log-only</a> <i>boolean</i>
Tree	<a href="#">log-only</a>
Default	false
Introduced	16.0.R1
Platforms	All

## max-entries *number*

Synopsis	Maximum number of entries learned on an IP interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <b>limit</b> <a href="#">max-entries</a> <i>number</i>
Tree	<a href="#">max-entries</a>
Range	0 to 524288
Introduced	16.0.R1



Platforms All

### **threshold** *number*

Synopsis Threshold value that triggers a warning message

Context **configure** *router string interface string ipv4 neighbor-discovery limit threshold number*

Tree [threshold](#)

Range 1 to 100

Units percent

Default 90

Introduced 16.0.R1

Platforms All

### **local-proxy-arp** *boolean*

Synopsis Enable local proxy ARP on interface

Context **configure** *router string interface string ipv4 neighbor-discovery local-proxy-arp boolean*

Tree [local-proxy-arp](#)

Description When configured to **true**, the router enables local proxy ARP on the interface.  
When configured to **false**, the router does not respond to ARP requests for addresses on the same subnet.

Introduced 16.0.R1

Platforms All

### **proactive-refresh** *boolean*

Synopsis Send a single refresh message before entry timeout

Context **configure** *router string interface string ipv4 neighbor-discovery proactive-refresh boolean*

Tree [proactive-refresh](#)

Description When configured to **true**, the router always sends a refresh message 30 seconds before the timeout of the entry (a single refresh message with no retries).  
When configured to **false**, the router marks an entry as stale 30 seconds before age-out, and the router only sends an ARP request to refresh the entry if the IOM receives traffic that uses it. Then, the IOM asks the ARP application to send a refresh message. With ARP proactive refresh enabled, the ARP module sends a refresh message regardless of the IOM receiving traffic.

Default	false
Introduced	16.0.R1
Platforms	All

### **proxy-arp-policy** *reference*

Synopsis	Proxy ARP policy name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">proxy-arp-policy</a> <i>reference</i>
Tree	<a href="#">proxy-arp-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **remote-proxy-arp** *boolean*

Synopsis	Enable remote proxy ARP on the interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">remote-proxy-arp</a> <i>boolean</i>
Tree	<a href="#">remote-proxy-arp</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **retry-timer** *number*

Synopsis	ARP retry interval
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">retry-timer</a> <i>number</i>
Tree	<a href="#">retry-timer</a>
Range	1 to 300
Units	deciseconds
Default	50
Introduced	16.0.R1

Platforms All

### **static-neighbor** [*ipv4-address*] *string*

Synopsis Enter the **static-neighbor** list instance

Context **configure** *router string interface string ipv4 neighbor-discovery static-neighbor string*

Tree [static-neighbor](#)

Description Commands in this context configure a static ARP entry that associates an IP address with a MAC address for the core router instance.

Introduced 16.0.R1

Platforms All

### **[ipv4-address]** *string*

Synopsis IPv4 address that corresponds to the physical address

Context **configure** *router string interface string ipv4 neighbor-discovery static-neighbor string*

Tree [static-neighbor](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **mac-address** *string*

Synopsis MAC address for the static neighbor

Context **configure** *router string interface string ipv4 neighbor-discovery static-neighbor string mac-address string*

Tree [mac-address](#)

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

### **static-neighbor-unnumbered**

Synopsis Enable the **static-neighbor-unnumbered** context

Context **configure** *router string interface string ipv4 neighbor-discovery static-neighbor-unnumbered*

Tree	<a href="#">static-neighbor-unnumbered</a>
Description	Commands in this context configure the static ARP MAC for an unnumbered interface. This entry overrides the dynamic ARP entry on the unnumbered interface.
Introduced	16.0.R1
Platforms	All

### **mac-address** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MAC address for the static neighbor
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">static-neighbor-unnumbered</a> <a href="#">mac-address</a> <i>string</i>
Tree	<a href="#">mac-address</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **timeout** *number*

Synopsis	Timeout for an ARP entry learned on the interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Description	This command configures the minimum time an ARP entry learned on the IP interface is stored in the ARP table. ARP entries are automatically refreshed when an ARP request or gratuitous ARP is seen by an IP host. Otherwise, the ARP entry is aged from the ARP table.
Range	0 to 65535
Units	seconds
Default	14400
Introduced	16.0.R1
Platforms	All

**primary**

Synopsis	Enable the <b>primary</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <b>primary</b>
Tree	<a href="#">primary</a>
Introduced	16.0.R1
Platforms	All

**address** *string*

Synopsis	Primary IPv4 address assigned to the interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <b>primary</b> <a href="#">address</a> <i>string</i>
Tree	<a href="#">address</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**broadcast** *keyword*

Synopsis	Broadcast address format
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <b>primary</b> <a href="#">broadcast</a> <i>keyword</i>
Tree	<a href="#">broadcast</a>
Description	This command overrides the default broadcast address that the IP interface uses when sourcing IP broadcasts.  This command does not affect the type of broadcasts the IP interface can receive. The IP interface can receive either the local broadcast or the valid subnet broadcast address sent by a host.
Options	all-ones, host-ones
Default	host-ones
Introduced	16.0.R1
Platforms	All

**gre-termination** *boolean*

Synopsis	Enable GRE termination
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <b>primary</b> <a href="#">gre-termination</a> <i>boolean</i>
Tree	<a href="#">gre-termination</a>

Description	When configured to <b>true</b> , the router terminates MPLS-over-GRE and IP-over-GRE packets for destination IP addresses from a user-defined subnet. The user defines a subnet for the termination of GRE packets by executing this command on a numbered network IP interface or a loopback interface.
Default	false
Introduced	19.10.R1
Platforms	VSR

### **prefix-length** *number*

Synopsis	IPv4 address prefix length
Context	<b>configure</b> <i>router</i> <i>string</i> <i>interface</i> <i>string</i> <i>ipv4</i> <i>primary</i> <i>prefix-length</i> <i>number</i>
Tree	<a href="#">prefix-length</a>
Range	0 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **track-srrp** *number*

Synopsis	SRRP instance whose state is tracked on this IP address
Context	<b>configure</b> <i>router</i> <i>string</i> <i>interface</i> <i>string</i> <i>ipv4</i> <i>primary</i> <i>track-srrp</i> <i>number</i>
Tree	<a href="#">track-srrp</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **qos-route-lookup** *keyword*

Synopsis	QoS route lookup of ingress IP packets
Context	<b>configure</b> <i>router</i> <i>string</i> <i>interface</i> <i>string</i> <i>ipv4</i> <i>qos-route-lookup</i> <i>keyword</i>
Tree	<a href="#">qos-route-lookup</a>
Options	destination, source
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**secondary** [[address](#)] *string*

Synopsis	Enter the <b>secondary</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">secondary</a> <i>string</i>
Tree	<a href="#">secondary</a>
Introduced	16.0.R1
Platforms	All

**[address]** *string*

Synopsis	Secondary IPv4 address assigned to the interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">secondary</a> <i>string</i>
Tree	<a href="#">secondary</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**broadcast** *keyword*

Synopsis	Broadcast address format
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">secondary</a> <i>string</i> <a href="#">broadcast</a> <i>keyword</i>
Tree	<a href="#">broadcast</a>
Description	This command overrides the default broadcast address that the IP interface uses when sourcing IP broadcasts.  This command does not affect the type of broadcasts the IP interface can receive. The IP interface can receive either the local broadcast or the valid subnet broadcast address sent by a host.
Options	all-ones, host-ones
Default	host-ones
Introduced	16.0.R1
Platforms	All

**igp-inhibit** *boolean*

Synopsis	Disable the running IGP from recognizing secondary IP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">secondary</a> <i>string</i> <a href="#">igp-inhibit</a> <i>boolean</i>

Tree	<a href="#">igp-inhibit</a>
Description	When configured to <b>true</b> , the running IGP does not recognize the secondary IP address as a local interface.
Default	false
Introduced	16.0.R1
Platforms	All

### **prefix-length** *number*

Synopsis	IPv4 address prefix length
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">secondary</a> <i>string</i> <a href="#">prefix-length</a> <i>number</i>
Tree	<a href="#">prefix-length</a>
Range	0 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **track-srrp** *number*

Synopsis	SRRP instance whose state is tracked on this IP address
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">secondary</a> <i>string</i> <a href="#">track-srrp</a> <i>number</i>
Tree	<a href="#">track-srrp</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **tcp-mss** *number*

Synopsis	TCP maximum segment size for the interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">tcp-mss</a> <i>number</i>
Tree	<a href="#">tcp-mss</a>
Range	384 to 9746
Introduced	16.0.R1
Platforms	All



## unnumbered

Synopsis	Enter the <b>unnumbered</b> context
Context	<b>configure</b> <i>router string interface string ipv4 unnumbered</i>
Tree	<i>unnumbered</i>
Description	Commands in this context configure an IP interface as an unnumbered interface and specify the IP address to use for the interface. An operator can configure unnumbered interfaces to conserve IP addresses.
Introduced	16.0.R1
Platforms	All

## ip-address *string*

Synopsis	IP address to associate with unnumbered IP interface
Context	<b>configure</b> <i>router string interface string ipv4 unnumbered ip-address string</i>
Tree	<i>ip-address</i>
Notes	The following elements are part of a choice: <b>ip-address</b> , <b>ip-int-name</b> , or <b>system</b> .
Introduced	16.0.R1
Platforms	All

## ip-int-name *string*

Synopsis	Unnumbered IP interface name
Context	<b>configure</b> <i>router string interface string ipv4 unnumbered ip-int-name string</i>
Tree	<i>ip-int-name</i>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>ip-address</b> , <b>ip-int-name</b> , or <b>system</b> .
Introduced	16.0.R1
Platforms	All

## system

Synopsis	Use system IP address for the unnumbered IP interface
Context	<b>configure</b> <i>router string interface string ipv4 unnumbered system</i>
Tree	<i>system</i>

Notes	The following elements are part of a choice: <b>ip-address</b> , <b>ip-int-name</b> , or <b>system</b> .
Introduced	16.0.R1
Platforms	All

## urpf-check

Synopsis	Enable the <b>urpf-check</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>urpf-check</b>
Tree	<b>urpf-check</b>
Introduced	16.0.R1
Platforms	All

## ignore-default *boolean*

Synopsis	Ignore default routes when performing a uRPF check
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>urpf-check</b> <b>ignore-default</b> <i>boolean</i>
Tree	<b>ignore-default</b>
Description	When configured to <b>true</b> , the router ignores default routes while performing a uRPF check to determine the validity of incoming packets. When configured to <b>false</b> , default routes are considered eligible.
Default	false
Introduced	16.0.R1
Platforms	All

## mode *keyword*

Synopsis	Unicast RPF check mode
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>urpf-check</b> <b>mode</b> <i>keyword</i>
Tree	<b>mode</b>
Options	strict, loose, strict-no-ecmp
Default	strict
Introduced	16.0.R1
Platforms	All

**vrrp** [*virtual-router-id*] *number*

Synopsis	Enter the <b>vrrp</b> list instance
Context	<b>configure</b> <i>router string interface string ipv4 vrrp number</i>
Tree	<i>vrrp</i>
Description	Commands in this context configure a VRRP virtual router instance. A virtual router is defined by its Virtual Router Identifier (VRID) and a set of IP addresses.
Introduced	16.0.R1
Platforms	All

**[virtual-router-id]** *number*

Synopsis	Virtual Router Identifier (VRID) for the IP interface
Context	<b>configure</b> <i>router string interface string ipv4 vrrp number</i>
Tree	<i>vrrp</i>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of VRRP
Context	<b>configure</b> <i>router string interface string ipv4 vrrp number admin-state keyword</i>
Tree	<i>admin-state</i>
Description	<p>The command determines the administrative state of non-owner virtual router instances.</p> <p>Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes.</p> <p>When <b>disabled</b>, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing.</p> <p>Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated.</p> <p>An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the <b>admin-state</b> command within the parent IP interface node which administratively disables the IP interface.</p>

Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **authentication-key *string***

Synopsis	Password for simple text authentication
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>vrrp</b> <i>number</i> <b>authentication-key</b> <i>string</i>
Tree	<b>authentication-key</b>
Description	This command optionally assigns a simple text password authentication key to generate master VRRP advertisement messages and validate received VRRP advertisement messages.  If this command is re-executed with a different password key defined, the new key immediately replaces the old key. This command may be executed at any time.
String Length	1 to 38
Introduced	16.0.R1
Platforms	All

### **backup *string***

Synopsis	Virtual router IP addresses for the interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>vrrp</b> <i>number</i> <b>backup</b> <i>string</i>
Tree	<b>backup</b>
Description	This command associates virtual router IP addresses with those of the parental IP interface.  This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance.  Non-owner virtual router instances create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup). This command, when executed on an owner virtual router instance, does not create a routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance.  For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is advertising to backup virtual routers receiving the messages. The specified <i>unicast-ipv4-address</i> must be equal to one of the existing IP addresses in the parental IP interface (primary or secondary) or this command fails.

See "Owner and non-owner VRRP" in the *7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide* for more information about owner and non-owner virtual router instances.

Max. Instances	16
Introduced	16.0.R1
Platforms	All

## bfd-liveness

Synopsis	Enable the <b>bfd-liveness</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 vrrp number</b> <b>bfd-liveness</b>
Tree	<b>bfd-liveness</b>
Description	<p>Commands in this context assign a Bidirectional Forwarding Detection (BFD) session to a specific VRRP or SRRP instance. This BFD session provides a heartbeat mechanism that speeds up the transition of the standby VRRP router to an active state. If the associated BFD session fails, the VRRP routers immediately send a VRRP advertisement message. In addition, the standby VRRP routers transition to a master state to speed up convergence.</p> <p>The VRRP election process takes place based on the advertisement messages sent by all VRRP routers.</p> <p>Only one BFD session can be assigned to any VRRP or SRRP instance, but multiple SRRP or VRRP sessions can use the same BFD session.</p>
Introduced	16.0.R1
Platforms	All

## dest-ip *string*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Destination IP address to use for BFD session
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 vrrp number</b> <b>bfd-liveness</b> <b>dest-ip</b> <i>string</i>
Tree	<b>dest-ip</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**interface-name** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the interface running BFD
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 vrrp</a> <i>number</i> <a href="#">bfd-liveness</a> <a href="#">interface-name</a> <i>string</i>
Tree	<a href="#">interface-name</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**service-name** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 vrrp</a> <i>number</i> <a href="#">bfd-liveness</a> <a href="#">service-name</a> <i>string</i>
Tree	<a href="#">service-name</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

**init-delay** *number*

Synopsis	VRRP initialization delay timer
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 vrrp</a> <i>number</i> <a href="#">init-delay</a> <i>number</i>
Tree	<a href="#">init-delay</a>
Range	1 to 65535
Units	seconds
Introduced	16.0.R1

Platforms All

### **mac string**

**Synopsis** Virtual MAC address to use in ARP responses

**Context** **configure** **router** *string* **interface** *string* **ipv4 vrrp** *number* **mac** *string*

**Tree** **mac**

**Description** This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID.

Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address.

Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with *unicast-mac-address* as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts results. All VRRP advertisement messages are transmitted with *unicast-mac-address* as the source MAC.

An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.

**Introduced** 16.0.R1

**Platforms** All

### **master-int-inherit boolean**

**Synopsis** Allow master instance to dictate the master down timer

**Context** **configure** **router** *string* **interface** *string* **ipv4 vrrp** *number* **master-int-inherit** *boolean*

**Tree** **master-int-inherit**

**Description** When configured to **true**, the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer.

When configured to **false**, the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded.

**Introduced** 16.0.R1

**Platforms** All

**message-interval** *number*

Synopsis	Interval for sending VRRP advertisement messages
Context	<b>configure</b> <i>router string interface string ipv4 vrrp number message-interval number</i>
Tree	<a href="#">message-interval</a>
Description	<p>This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command.</p> <p>The usage of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the <b>master-int-inherit</b> command:</p> <ul style="list-style-type: none"> <li>• When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar to an owner virtual router instance. The <b>master-int-inherit</b> command has no effect when operating as master.</li> <li>• When a non-owner is in the backup state with <b>master-int-inherit</b> disabled, the system uses the configured value of this command to match the incoming advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement.</li> <li>• When a non-owner is in the backup state with <b>master-int-inherit</b> enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message.</li> </ul>
Range	1 to 2559
Units	deciseconds
Default	10
Introduced	16.0.R1
Platforms	All

**monitor-oper-group** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VRRP instance to follow a specified operational group
Context	<b>configure</b> <i>router string interface string ipv4 vrrp number monitor-oper-group reference</i>
Tree	<a href="#">monitor-oper-group</a>
Description	This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other



protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states.

Reference	<b>configure service oper-group</b> <i>string</i>
Introduced	22.2.R1
Platforms	All

### **ntp-reply** *boolean*

Synopsis	Allow processing of NTP requests
Context	<b>configure router</b> <i>string interface string ipv4 vrrp number ntp-reply boolean</i>
Tree	<a href="#">ntp-reply</a>
Description	When configured to <b>true</b> , the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router. When configured to <b>false</b> , the router does not process NTP requests.
Default	false
Introduced	20.2.R1
Platforms	All

### **oper-group** *reference*

Synopsis	Operational group name associated with the VRRP
Context	<b>configure router</b> <i>string interface string ipv4 vrrp number oper-group reference</i>
Tree	<a href="#">oper-group</a>
Description	This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router (MR), the operational group is up. The operational group is down for all other VRRP states.
Reference	<b>configure service oper-group</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

**owner boolean****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Designate the virtual router instance as owner
Context	<b>configure router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 vrrp number</b> <b>owner boolean</b>
Tree	<b>owner</b>
Description	When configured to <b>true</b> , the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router.  When configured to <b>false</b> , this virtual router instance is designated as a non-owner.
Default	false
Introduced	16.0.R1
Platforms	All

**passive boolean****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Suppress the processing of VRRP advertisement messages
Context	<b>configure router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 vrrp number</b> <b>passive boolean</b>
Tree	<b>passive</b>
Description	When configured to <b>true</b> , the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down).  When configured to <b>false</b> , this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages.
Default	false
Introduced	16.0.R1
Platforms	All

## ping-reply *boolean*

Synopsis	Allow non-owner master to reply to ICMP echo requests
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 vrrp</b> <i>number</i> <b>ping-reply</b> <i>boolean</i>
Tree	<a href="#">ping-reply</a>
Description	<p>When configured to <b>true</b>, the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address).</p> <p>When configured to <b>false</b>, ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded.</p> <p>Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.</p>
Default	false
Introduced	16.0.R1
Platforms	All

## policy *reference*

Synopsis	VRRP priority control policy
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 vrrp</b> <i>number</i> <b>policy</b> <i>reference</i>
Tree	<a href="#">policy</a>
Description	<p>This command configures a VRRP priority control policy to associate with the virtual router instance.</p> <p>VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis.</p> <p>An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with the <b>priority</b> command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value.</p> <p>For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.</p>
Reference	<b>configure</b> <b>vrrp</b> <a href="#">policy</a> <i>number</i>
Introduced	16.0.R1
Platforms	All

## preempt *boolean*

Synopsis	Allow the VRRP to override an existing non-owner master
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Context	<b>configure router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 vrrp</b> <i>number</i> <b>preempt</b> <i>boolean</i>
Tree	<b>preempt</b>
Description	<p>When configured to <b>true</b>, this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router.</p> <p>When configured to <b>false</b>, this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router.</p>
Default	true
Introduced	16.0.R1
Platforms	All

### **priority** *number*

Synopsis	Base priority for the VRRP
Context	<b>configure router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 vrrp</b> <i>number</i> <b>priority</b> <i>number</i>
Tree	<b>priority</b>
Description	<p>This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process.</p> <p>The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis.</p>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **ssh-reply** *boolean*

Synopsis	Allow the non-owner master to reply to SSH requests
Context	<b>configure router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 vrrp</b> <i>number</i> <b>ssh-reply</b> <i>boolean</i>
Tree	<b>ssh-reply</b>
Description	<p>When configured to <b>true</b>, the router allows the non-owner master to reply to SSH requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the SSH request. SSH cannot be disabled at the management security level (either on the parental IP interface or on the SSH source host address).</p> <p>When configure to <b>false</b>, SSH requests to non-owner master virtual IP addresses are silently discarded.</p>

Default	false
Introduced	16.0.R1
Platforms	All

### **standby-forwarding** *boolean*

Synopsis	Allow standby router to forward traffic
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 vrrp</b> <i>number</i> <b>standby-forwarding</b> <i>boolean</i>
Tree	<a href="#">standby-forwarding</a>
Description	When configured to <b>true</b> , the standby router forwards all traffic. When configured to <b>false</b> , the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address.
Default	false
Introduced	16.0.R1
Platforms	All

### **telnet-reply** *boolean*

Synopsis	Allow non-owner master to reply to Telnet requests
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 vrrp</b> <i>number</i> <b>telnet-reply</b> <i>boolean</i>
Tree	<a href="#">telnet-reply</a>
Description	When configured to <b>true</b> , the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address). When configured to <b>false</b> , the router silently discards Telnet requests sent to non-owner master virtual IP addresses.
Default	false
Introduced	16.0.R1
Platforms	All

### **traceroute-reply** *boolean*

Synopsis	Allow non-owner master to reply to traceroute requests
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 vrrp</b> <i>number</i> <b>traceroute-reply</b> <i>boolean</i>
Tree	<a href="#">traceroute-reply</a>

Description	<p>When configured to <b>true</b>, the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance.</p> <p>When configured to <b>false</b>, the router silently discards traceroute requests sent to non-owner master virtual IP addresses.</p> <p>Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address).</p>
Default	false
Introduced	16.0.R1
Platforms	All

## ipv6

Synopsis	Enable the <b>ipv6</b> context
Context	<b>configure</b> <i>router string interface string ipv6</i>
Tree	<i>ipv6</i>
Introduced	16.0.R1
Platforms	All

## address [*ipv6-address*] *string*

Synopsis	Enter the <b>address</b> list instance
Context	<b>configure</b> <i>router string interface string ipv6 address string</i>
Tree	<i>address</i>
Introduced	16.0.R1
Platforms	All

## [*ipv6-address*] *string*

Synopsis	IPv6 address assigned to the interface
Context	<b>configure</b> <i>router string interface string ipv6 address string</i>
Tree	<i>address</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**duplicate-address-detection** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable Duplicate Address Detection
Context	<b>configure</b> <i>router string interface string ipv6 address string duplicate-address-detection boolean</i>
Tree	<a href="#">duplicate-address-detection</a>
Description	When configured to <b>true</b> , the router enables Duplicate Address Detection (DAD). When configured to <b>false</b> , the router disables DAD and sets the address to preferred, even if there is a duplicated address.
Default	true
Introduced	16.0.R1
Platforms	All

**eui-64** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Form IPv6 address from prefix and 64-bit interface ID
Context	<b>configure</b> <i>router string interface string ipv6 address string eui-64 boolean</i>
Tree	<a href="#">eui-64</a>
Description	When configured to <b>true</b> , the router forms a complete IPv6 address from the supplied prefix and 64-bit interface identifier. The 64-bit interface identifier is derived from the MAC address on Ethernet interfaces. For interfaces without a MAC address, for example POS interfaces, use the base MAC address of the chassis.
Default	false
Introduced	16.0.R1
Platforms	All

**prefix-length** *number*

Synopsis	IPv6 address prefix length
Context	<b>configure</b> <i>router string interface string ipv6 address string prefix-length number</i>
Tree	<a href="#">prefix-length</a>

Range	4 to 128
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **primary-preference** *number*

Synopsis	Index assigned to the IPv6 address of the interface
Context	<b>configure</b> <i>router string interface string ipv6 address string primary-preference number</i>
Tree	<a href="#">primary-preference</a>
Description	<p>This command assigns a primary preference index to an IPv6 address of the interface to enforce the order in which the address is used by control plane protocols and applications that require a fixed address of the interface, such as LDP and Segment Routing. In cases where a fixed address is required when originating packets from the interface, the IPv6 address with the lowest primary preference index is selected. If the selected address is removed, the next IPv6 address with the next lowest primary preference index is selected.</p> <p>If this index is not specified for the IPv6 address, the system assigns the next available index value to the address. The address index space is unique across all addresses of a given interface.</p>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **track-srrp** *number*

Synopsis	SRRP ID whose state is tracked on this IP address
Context	<b>configure</b> <i>router string interface string ipv6 address string track-srrp number</i>
Tree	<a href="#">track-srrp</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **bfd**

Synopsis	Enter the <b>bfd</b> context
Context	<b>configure</b> <i>router string interface string ipv6 bfd</i>



Tree	<a href="#">bfd</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of BFD sessions
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">bfd</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**echo-receive** *number*

Synopsis	Minimum echo interval over this interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">bfd</a> <a href="#">echo-receive</a> <i>number</i>
Tree	<a href="#">echo-receive</a>
Range	100 to 100000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

**multiplier** *number*

Synopsis	Number of consecutive BFD messages missed from the peer
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">bfd</a> <a href="#">multiplier</a> <i>number</i>
Tree	<a href="#">multiplier</a>
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	16.0.R1

Platforms All

### **receive number**

Synopsis BFD receive interval over this interface

Context **configure router string interface string ipv6 bfd receive number**

Tree [receive](#)

Description This command specifies the receive interval for the BFD session.  
On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.

Range 10 to 100000

Units milliseconds

Default 100

Introduced 16.0.R1

Platforms All

### **transmit-interval number**

Synopsis BFD transmit interval over this interface

Context **configure router string interface string ipv6 bfd transmit-interval number**

Tree [transmit-interval](#)

Description This command configures the transmit intervals.  
On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.

Range 10 to 100000

Units milliseconds

Default 100

Introduced 16.0.R1

Platforms All

### **type keyword**

Synopsis Local termination point for the BFD session

Context **configure router string interface string ipv6 bfd type keyword**

Tree [type](#)

Description	This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity. The options to specify where the BFD session runs are: <ul style="list-style-type: none"> <li>• <b>auto</b> (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the <b>cpm-np</b>.</li> <li>• <b>cpm-np</b> – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems.</li> <li>• <b>fp</b> – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.</li> </ul>
Options	cpm-np, auto, fp
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **duplicate-address-detection** *boolean*

Synopsis	Enable Duplicate Address Detection
Context	<b>configure</b> <i>router string interface string ipv6 duplicate-address-detection boolean</i>
Tree	<a href="#">duplicate-address-detection</a>
Description	When configured to <b>true</b> , the router enables Duplicate Address Detection (DAD) on the interface.  When configured to <b>false</b> , the router disables DAD on a per-interface basis. This prevents the router from performing a DAD check on the interface. All IPv6 addresses on an interface with DAD disabled, immediately enter a preferred state, without checking for uniqueness on the interface. This is useful for interfaces that enter a looped state during troubleshooting and are operationally disabled when the loop is detected, requiring manual intervention to clear the DAD violation.
Default	true
Introduced	16.0.R1
Platforms	All

### **forward-ipv4-packets** *boolean*

Synopsis	Forward unencapsulated IPv4 packets
Context	<b>configure</b> <i>router string interface string ipv6 forward-ipv4-packets boolean</i>
Tree	<a href="#">forward-ipv4-packets</a>
Description	When configured to <b>true</b> , the router can use an IPv6-only interface, with no configured IPv4 addresses, to forward IPv4 packets that originate or terminate locally.

The interface reports that its IPv4 operational state is up if its IPv6 operational state is up. Not all protocols observe the interface as up from an IPv4 perspective. This command mostly supports BGP routing use cases; see RFC 5549 for details.

When configured to **false**, the router prevents IPv4 packets from being forwarded if there are no configured IPv4 subnets.

Default	false
Introduced	19.5.R1
Platforms	All

## icmp6

Synopsis	Enter the <b>icmp6</b> context
Context	<b>configure</b> <i>router string interface string ipv6 icmp6</i>
Tree	<a href="#">icmp6</a>
Introduced	16.0.R1
Platforms	All

## packet-too-big

Synopsis	Enter the <b>packet-too-big</b> context
Context	<b>configure</b> <i>router string interface string ipv6 icmp6 packet-too-big</i>
Tree	<a href="#">packet-too-big</a>
Description	Commands in this context configure limiting the number of ICMPv6 Packet Too Big messages.
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of Packet Too Big message sends
Context	<b>configure</b> <i>router string interface string ipv6 icmp6 packet-too-big admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**number** *number*

Synopsis	Number of Packet Too big Messages issued per time frame
Context	<b>configure</b> <i>router string interface string ipv6 icmp6 packet-too-big number number</i>
Tree	<i>number</i>
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

**seconds** *number*

Synopsis	Time used to limit Packet Too Big messages
Context	<b>configure</b> <i>router string interface string ipv6 icmp6 packet-too-big seconds number</i>
Tree	<i>seconds</i>
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

**param-problem**

Synopsis	Enter the <b>param-problem</b> context
Context	<b>configure</b> <i>router string interface string ipv6 icmp6 param-problem</i>
Tree	<i>param-problem</i>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of Parameter Problem message sends
Context	<b>configure</b> <i>router string interface string ipv6 icmp6 param-problem admin-state keyword</i>
Tree	<i>admin-state</i>
Options	enable, disable
Default	enable

Introduced 16.0.R1  
Platforms All

### **number** *number*

Synopsis Number used to limit ICMPv6 Parameter Problem messages  
Context **configure** *router string interface string ipv6 icmp6 param-problem number number*  
Tree *number*  
Range 10 to 1000  
Default 100  
Introduced 16.0.R1  
Platforms All

### **seconds** *number*

Synopsis Time used to limit ICMPv6 Parameter Problem messages  
Context **configure** *router string interface string ipv6 icmp6 param-problem seconds number*  
Tree *seconds*  
Range 1 to 60  
Default 10  
Introduced 16.0.R1  
Platforms All

### **redirects**

Synopsis Enter the **redirects** context  
Context **configure** *router string interface string ipv6 icmp6 redirects*  
Tree *redirects*  
Introduced 16.0.R1  
Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of Redirect message sends  
Context **configure** *router string interface string ipv6 icmp6 redirects admin-state keyword*

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **number** *number*

Synopsis	Number to limit ICMPv6 Redirect messages per time frame
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 icmp6 redirects</a> <a href="#">number</a> <i>number</i>
Tree	<a href="#">number</a>
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

### **seconds** *number*

Synopsis	Time used to limit ICMPv6 Redirect messages
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 icmp6 redirects</a> <a href="#">seconds</a> <i>number</i>
Tree	<a href="#">seconds</a>
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

### **time-exceeded**

Synopsis	Enter the <b>time-exceeded</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 icmp6</a> <a href="#">time-exceeded</a>
Tree	<a href="#">time-exceeded</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of Time Exceeded message sends
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>icmp6</b> <b>time-exceeded</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**number** *number*

Synopsis	Number to limit Time Exceeded messages per time frame
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>icmp6</b> <b>time-exceeded</b> <b>number</b> <i>number</i>
Tree	<b>number</b>
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	All

**seconds** *number*

Synopsis	Time used to limit ICMPv6 Time Exceeded messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>icmp6</b> <b>time-exceeded</b> <b>seconds</b> <i>number</i>
Tree	<b>seconds</b>
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

**unreachables**

Synopsis	Enter the <b>unreachables</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>icmp6</b> <b>unreachables</b>
Tree	<b>unreachables</b>
Introduced	16.0.R1



Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of Unreachable message sends  
 Context **configure** *router string interface string ipv6 icmp6 unreachablees admin-state keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 16.0.R1  
 Platforms All

### **number** *number*

Synopsis Number to limit Unreachable messages per time frame  
 Context **configure** *router string interface string ipv6 icmp6 unreachablees number number*  
 Tree [number](#)  
 Range 10 to 2000  
 Default 100  
 Introduced 16.0.R1  
 Platforms All

### **seconds** *number*

Synopsis Time used to limit ICMPv6 Unreachable messages  
 Context **configure** *router string interface string ipv6 icmp6 unreachablees seconds number*  
 Tree [seconds](#)  
 Range 1 to 60  
 Default 10  
 Introduced 16.0.R1  
 Platforms All

### **link-local-address**

Synopsis Enter the **link-local-address** context

Context	<b>configure</b> <i>router string interface string ipv6 link-local-address</i>
Tree	<a href="#">link-local-address</a>
Description	<p>Commands in this context configure the IPv6 link-local address that is used as a virtual SRRP IPv6 address by the master SRRP node. This address is sent in the Router Advertisements initiated by the master SRRP node. Clients use this address as IPv6 default-gateway. Both SRRP nodes, master and backup, must be configured with the same link-local address.</p> <p>Only one link-local address is allowed per interface.</p> <p><b>Caution:</b> Removing a manually configured link-local address may impact routing protocols or static routes that have a dependency on that address. Nokia does not recommend removing a link-local address when there are active IPv6 subscriber hosts on an IES or VPRN interface.</p>
Introduced	16.0.R1
Platforms	All

### **address** *string*

Synopsis	IPv6 link-local address
Context	<b>configure</b> <i>router string interface string ipv6 link-local-address address string</i>
Tree	<a href="#">address</a>
Introduced	16.0.R1
Platforms	All

### **duplicate-address-detection** *boolean*

Synopsis	Enable Duplicate Address Detection
Context	<b>configure</b> <i>router string interface string ipv6 link-local-address duplicate-address-detection boolean</i>
Tree	<a href="#">duplicate-address-detection</a>
Description	<p>When configured to <b>true</b>, the router enables Duplicate Address Detection (DAD) on the interface.</p> <p>When configured to <b>false</b>, the router disables DAD and sets the address to preferred, even if there is a duplicated address.</p>
Default	true
Introduced	16.0.R1
Platforms	All

**local-dhcp-server** *reference*

Synopsis	DHCP server for the interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">local-dhcp-server</a> <i>reference</i>
Tree	<a href="#">local-dhcp-server</a>
Description	This command instantiates a local DHCP server. A local DHCP server can serve multiple interfaces but is limited to the routing context in which it was created.
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**neighbor-discovery**

Synopsis	Enter the <b>neighbor-discovery</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a>
Tree	<a href="#">neighbor-discovery</a>
Introduced	16.0.R1
Platforms	All

**learn-unsolicited** *keyword*

Synopsis	Type of entries learned from unsolicited NA messages
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">learn-unsolicited</a> <i>keyword</i>
Tree	<a href="#">learn-unsolicited</a>
Description	This command enables the ability to learn neighbor entries out of received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited flag set.  When unconfigured, the router follows standard RFC 4861 behavior for learning of neighbor entries. The neighbor is put in the stale state. This is the standard RFC behavior.
Options	global, link-local, both
Introduced	16.0.R1
Platforms	All

**limit**

Synopsis	Enter the <b>limit</b> context
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Context	<b>configure</b> <i>router string interface string ipv6 neighbor-discovery limit</i>
Tree	<a href="#">limit</a>
Description	<p>Commands in this context configure the maximum amount of dynamic IPv6 neighbor entries that can be learned on an IP interface.</p> <p>When the number of dynamic neighbor entries reaches the configured percentage of this limit the system sends an SNMP trap. When the limit is exceeded, no new entries are learned until an entry expires and traffic to these destinations is dropped. Entries that have already been learned are refreshed.</p>
Introduced	16.0.R1
Platforms	All

### **log-only** *boolean*

Synopsis	Generate log entries when limit is reached
Context	<b>configure</b> <i>router string interface string ipv6 neighbor-discovery limit log-only boolean</i>
Tree	<a href="#">log-only</a>
Description	<p>When configured to <b>true</b>, the router sends the warning message at the specified threshold percentage or upon exceeding the specified limit. Entries that exceed the limit are learned.</p> <p>When configured to <b>false</b>, the router does not send the warning message.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **max-entries** *number*

Synopsis	Maximum number of entries learned on an IP interface
Context	<b>configure</b> <i>router string interface string ipv6 neighbor-discovery limit max-entries number</i>
Tree	<a href="#">max-entries</a>
Description	<p>This command configures the maximum number of entries that can be learned on an IP interface.</p> <p>When unconfigured, no maximum limit is imposed.</p>
Range	0 to 102400
Introduced	16.0.R1
Platforms	All

**threshold** *number*

Synopsis	Threshold percentage that triggers a warning message
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>neighbor-discovery</b> <b>limit</b> <b>threshold</b> <i>number</i>
Tree	<b>threshold</b>
Range	1 to 100
Units	percent
Default	90
Introduced	16.0.R1
Platforms	All

**local-proxy-nd** *boolean*

Synopsis	Enable local proxy neighbor discovery on the interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>neighbor-discovery</b> <b>local-proxy-nd</b> <i>boolean</i>
Tree	<b>local-proxy-nd</b>
Description	When configured to <b>true</b> , the router enables local proxy neighbor discovery on the interface and replies to neighbor solicitation requests when both the hosts are on the same subnet. In this case, ICMP redirects are disabled.  When configured to <b>false</b> , the router disables local proxy neighbor discovery on the interface and does not reply to neighbor solicitation requests if both the hosts are on the same subnet.
Default	false
Introduced	16.0.R1
Platforms	All

**proactive-refresh** *keyword*

Synopsis	Proactive refresh of neighbor entries
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>neighbor-discovery</b> <b>proactive-refresh</b> <i>keyword</i>
Tree	<b>proactive-refresh</b>
Description	This command enables a proactive refresh of the neighbor entries. After the stale timer expires, the router sends an NUD message to the host (regardless of the existence of traffic to the IP address on the IOM), so the entry can be refreshed or removed.
Options	global, link-local, both
Introduced	16.0.R1
Platforms	All

**proxy-nd-policy** *reference*

Synopsis	Proxy Neighbor Discovery policy name for the interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">proxy-nd-policy</a> <i>reference</i>
Tree	<a href="#">proxy-nd-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

**reachable-time** *number*

Synopsis	Neighbor reachability detection timer
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">reachable-time</a> <i>number</i>
Tree	<a href="#">reachable-time</a>
Range	30 to 3600
Introduced	16.0.R1
Platforms	All

**secure-nd**

Synopsis	Enter the <b>secure-nd</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">secure-nd</a>
Tree	<a href="#">secure-nd</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of Secure Neighbor Discovery
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">secure-nd</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>

Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **allow-unsecured-msgs** *boolean*

Synopsis	Accept unsecured messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>neighbor-discovery</b> <b>secure-nd</b> <b>allow-unsecured-msgs</b> <i>boolean</i>
Tree	<a href="#">allow-unsecured-msgs</a>
Description	When configured to <b>true</b> , the router accepts unsecured messages. When Secure Neighbor Discovery (SeND) is enabled, only secure messages are accepted. When configured to <b>false</b> , the router disables the acceptance of unsecured messages.
Default	true
Introduced	16.0.R1
Platforms	All

### **public-key-min-bits** *number*

Synopsis	Minimum acceptable key length for public keys in CGA
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>neighbor-discovery</b> <b>secure-nd</b> <b>public-key-min-bits</b> <i>number</i>
Tree	<a href="#">public-key-min-bits</a>
Range	512 to 1024
Default	1024
Introduced	16.0.R1
Platforms	All

### **security-parameter** *number*

Synopsis	Security parameter used in the generation of a CGA
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>neighbor-discovery</b> <b>secure-nd</b> <b>security-parameter</b> <i>number</i>
Tree	<a href="#">security-parameter</a>
Range	0 to 1

Default	1
Introduced	16.0.R1
Platforms	All

**stale-time** *number*

Synopsis	Time a Neighbor Discovery cache entry remains stale
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 neighbor-discovery</b> <b>stale-time</b> <i>number</i>
Tree	<b>stale-time</b>
Range	60 to 65535
Introduced	16.0.R1
Platforms	All

**static-neighbor** [**ipv6-address**] *string*

Synopsis	Enter the <b>static-neighbor</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 neighbor-discovery</b> <b>static-neighbor</b> <i>string</i>
Tree	<b>static-neighbor</b>
Description	<p>Commands in this context configure an IPv6-to-MAC address mapping on the interface. Use this command if a directly attached IPv6 node does not support ICMPv6 neighbor discovery, or for some reason, a static address must be used. This command can only be used on Ethernet media.</p> <p>The IPv6 address must be on the subnet that was configured from the IPv6 <b>address</b> or a <b>link-local-address</b> commands.</p>
Introduced	16.0.R1
Platforms	All

**[ipv6-address]** *string*

Synopsis	IPv6 address corresponding to the physical address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 neighbor-discovery</b> <b>static-neighbor</b> <i>string</i>
Tree	<b>static-neighbor</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All



**mac-address** *string*

Synopsis	MAC address for the static neighbor
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>neighbor-discovery</b> <b>static-neighbor</b> <i>string</i> <b>mac-address</b> <i>string</i>
Tree	<b>mac-address</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**qos-route-lookup** *keyword*

Synopsis	QoS route lookup of ingress IP packets
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>qos-route-lookup</b> <i>keyword</i>
Tree	<b>qos-route-lookup</b>
Description	This command enables QoS classification of the ingress IP packets on an interface based on the QoS information associated with routes in the forwarding table.
Options	destination, source
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**tcp-mss** *number*

Synopsis	TCP maximum segment size for the IPv6 interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>tcp-mss</b> <i>number</i>
Tree	<b>tcp-mss</b>
Range	1220 to 9726
Introduced	16.0.R1
Platforms	All

**urpf-check**

Synopsis	Enable the <b>urpf-check</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>urpf-check</b>
Tree	<b>urpf-check</b>
Introduced	16.0.R1

Platforms All

### **ignore-default** *boolean*

Synopsis Ignore default route when performing a uRPF check  
 Context **configure** *router string interface string ipv6 urpf-check ignore-default boolean*  
 Tree [ignore-default](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **mode** *keyword*

Synopsis Unicast RPF check mode  
 Context **configure** *router string interface string ipv6 urpf-check mode keyword*  
 Tree [mode](#)  
 Options strict, loose, strict-no-ecmp  
 Default strict  
 Introduced 16.0.R1  
 Platforms All

### **vrrp** [[virtual-router-id](#)] *number*

Synopsis Enter the **vrrp** list instance  
 Context **configure** *router string interface string ipv6 vrrp number*  
 Tree [vrrp](#)  
 Description Commands in this context configure a VRRP virtual router instance. A virtual router is defined by its virtual router identifier (VRID) and a set of IP addresses.  
 Max. Instances 4  
 Introduced 16.0.R1  
 Platforms All

### **[virtual-router-id]** *number*

Synopsis Virtual Router Identifier (VRID) for the IP interface

Context	<b>configure</b> <i>router string interface string ipv6 vrrp number</i>
Tree	<a href="#">vrrp</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of VRRP
Context	<b>configure</b> <i>router string interface string ipv6 vrrp number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Description	<p>The command determines the administrative state of non-owner virtual router instances. Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes.</p> <p>When <b>disabled</b>, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing.</p> <p>Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated.</p> <p>An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the <b>admin-state</b> command within the parent IP interface node which administratively disables the IP interface.</p>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **backup** *string*

Synopsis	Virtual router IP addresses for the interface
Context	<b>configure</b> <i>router string interface string ipv6 vrrp number backup string</i>
Tree	<a href="#">backup</a>
Description	This command associates router IPv6 virtual router IP addresses with those of the parental IP interface.

This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance.

Non-owner virtual router instance create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup). This command, when executed on an owner virtual router instance, does not create a routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance.

For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is representing to backup virtual routers receiving the messages. The specified IPv6 address must be equal to one of the existing parental IP addresses in the parental IP interface (primary or secondary) or this command fails.

See "Owner and non-owner VRRP" in the *7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide* for more information about owner and non-owner virtual router instances.

Max. Instances	4
Introduced	16.0.R1
Platforms	All

## bfd-liveness

Synopsis	Enable the <b>bfd-liveness</b> context
Context	<b>configure router string interface string ipv6 vrrp number bfd-liveness</b>
Tree	<b>bfd-liveness</b>
Description	<p>Commands in this context assign a bidirectional forwarding detect (BFD) session to a specific VRRP or SRRP instance. This BFD session provides a heartbeat mechanism for use in speeding up the transition of the standby VRRP router to an active state. If the associated BFD session fails, the VRRP routers immediately send a VRRP Advertisement message. In addition, the standby VRRP routers transition to a Master state to speed convergence.</p> <p>The normal VRRP election process takes place based on the Advertisement messages sent by all VRRP routers.</p> <p>There can be only one BFD session assigned to any specific VRRP or SRRP instance, but there can be multiple SRRP or VRRP sessions using the same BFD session.</p>
Introduced	16.0.R1
Platforms	All

**dest-ip** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Destination address for the BFD session
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>vrrp</b> <i>number</i> <b>bfd-liveness</b> <b>dest-ip</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>dest-ip</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**interface-name** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the interface running BFD
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>vrrp</b> <i>number</i> <b>bfd-liveness</b> <b>interface-name</b> <i>string</i>
Tree	<b>interface-name</b>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**service-name** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>vrrp</b> <i>number</i> <b>bfd-liveness</b> <b>service-name</b> <i>string</i>
Tree	<b>service-name</b>

String Length	1 to 64
Introduced	16.0.R1
Platforms	All

### **init-delay number**

Synopsis	VRRP initialization delay timer
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 vrrp</b> <i>number</i> <b>init-delay</b> <i>number</i>
Tree	<b>init-delay</b>
Range	1 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

### **mac string**

Synopsis	Virtual MAC address to use in ARP responses
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 vrrp</b> <i>number</i> <b>mac</b> <i>string</i>
Tree	<b>mac</b>
Description	<p>This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID.</p> <p>Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address.</p> <p>Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with <i>unicast-mac-address</i> as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts results. All VRRP advertisement messages are transmitted with <i>unicast-mac-address</i> as the source MAC.</p> <p>An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.</p>
Introduced	16.0.R1
Platforms	All

**master-int-inherit** *boolean*

Synopsis	Allow master instance to dictate the master down timer
Context	<b>configure</b> <i>router string interface string ipv6 vrrp number</i> <b>master-int-inherit</b> <i>boolean</i>
Tree	<b>master-int-inherit</b>
Description	<p>When configured to <b>true</b>, the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer.</p> <p>When configured to <b>false</b>, the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded.</p>
Introduced	16.0.R1
Platforms	All

**message-interval** *number*

Synopsis	Interval for sending VRRP advertisement messages
Context	<b>configure</b> <i>router string interface string ipv6 vrrp number</i> <b>message-interval</b> <i>number</i>
Tree	<b>message-interval</b>
Description	<p>This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command.</p> <p>The use of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the <b>master-int-inherit</b> command:</p> <ul style="list-style-type: none"> <li>• When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar to an owner virtual router instance. The <b>master-int-inherit</b> command has no effect when operating as the master.</li> <li>• When a non-owner is in the backup state with <b>master-int-inherit</b> disabled, the system uses the configured value of this command to match the incoming advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement.</li> <li>• When a non-owner is in the backup state with <b>master-int-inherit</b> enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message.</li> </ul>
Range	10 to 4095
Units	centiseconds

Default	100
Introduced	16.0.R1
Platforms	All

### **monitor-oper-group** *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VRRP instance to follow a specified operational group
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrrp</a> <i>number</i> <b>monitor-oper-group</b> <i>reference</i>
Tree	<a href="#">monitor-oper-group</a>
Description	This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states.
Reference	<b>configure</b> <a href="#">service oper-group</a> <i>string</i>
Introduced	22.2.R1
Platforms	All

### **ntp-reply** *boolean*

Synopsis	Allow processing of NTP requests
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrrp</a> <i>number</i> <b>ntp-reply</b> <i>boolean</i>
Tree	<a href="#">ntp-reply</a>
Description	When configured to <b>true</b> , the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router. When configured to <b>false</b> , the router does not process NTP requests.
Default	false
Introduced	20.2.R1
Platforms	All

### **oper-group** *reference*

Synopsis	Operational group name associated with the VRRP
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Context	<b>configure router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 vrrp</b> <i>number</i> <b>oper-group</b> <i>reference</i>
Tree	<b>oper-group</b>
Description	This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router (MR), the operational group is up. The operational group is down for all other VRRP states.
Reference	<b>configure service</b> <b>oper-group</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **owner** *boolean*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Designate the virtual router instance as owner
Context	<b>configure router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 vrrp</b> <i>number</i> <b>owner</b> <i>boolean</i>
Tree	<b>owner</b>
Description	When configured to <b>true</b> , the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router.  When configured to <b>false</b> , this virtual router instance is designated as a non-owner.
Default	false
Introduced	16.0.R1
Platforms	All

### **passive** *boolean*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Suppress the processing of VRRP advertisement messages
Context	<b>configure router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 vrrp</b> <i>number</i> <b>passive</b> <i>boolean</i>
Tree	<b>passive</b>

Description	<p>When configured to <b>true</b>, the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down).</p> <p>When configured to <b>false</b>, this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### ping-reply *boolean*

Synopsis	Allow non-owner master to reply to ICMP echo requests
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 vrrp</b> <i>number</i> <b>ping-reply</b> <i>boolean</i>
Tree	<a href="#">ping-reply</a>
Description	<p>When configured to <b>true</b>, the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address).</p> <p>When configured to <b>false</b>, ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded.</p> <p>Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### policy *reference*

Synopsis	VRRP priority control policy
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 vrrp</b> <i>number</i> <b>policy</b> <i>reference</i>
Tree	<a href="#">policy</a>
Description	<p>This command configures a VRRP priority control policy to associate with the virtual router instance.</p> <p>VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis.</p> <p>An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with</p>

the **priority** command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value.

For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.

Reference	<b>configure vrrp policy number</b>
Introduced	16.0.R1
Platforms	All

### **preempt boolean**

Synopsis	Allow the VRRP to override an existing non-owner master
Context	<b>configure router string interface string ipv6 vrrp number preempt boolean</b>
Tree	<b>preempt</b>
Description	<p>When configured to <b>true</b>, this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router.</p> <p>When configured to <b>false</b>, this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router.</p>
Default	true
Introduced	16.0.R1
Platforms	All

### **priority number**

Synopsis	Base priority for the VRRP
Context	<b>configure router string interface string ipv6 vrrp number priority number</b>
Tree	<b>priority</b>
Description	<p>This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process.</p> <p>The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis.</p>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

**standby-forwarding *boolean***

Synopsis	Allow standby router to forward traffic
Context	<b>configure</b> <i>router string interface string ipv6 vrrp number standby-forwarding boolean</i>
Tree	<a href="#">standby-forwarding</a>
Description	When configured to <b>true</b> , the standby router forwards all traffic.  When configured to <b>false</b> , the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address.
Default	false
Introduced	16.0.R1
Platforms	All

**telnet-reply *boolean***

Synopsis	Allow non-owner master to reply to Telnet requests
Context	<b>configure</b> <i>router string interface string ipv6 vrrp number telnet-reply boolean</i>
Tree	<a href="#">telnet-reply</a>
Description	When configured to <b>true</b> , the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address).  When configured to <b>false</b> , the router silently discards Telnet requests sent to non-owner master virtual IP addresses.
Default	false
Introduced	16.0.R1
Platforms	All

**traceroute-reply *boolean***

Synopsis	Allow non-owner master to reply to traceroute requests
Context	<b>configure</b> <i>router string interface string ipv6 vrrp number traceroute-reply boolean</i>
Tree	<a href="#">traceroute-reply</a>
Description	When configured to <b>true</b> , the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance.  When configured to <b>false</b> , the router silently discards traceroute requests sent to non-owner master virtual IP addresses.

Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address).

Default	false
Introduced	16.0.R1
Platforms	All

## lag

Synopsis	Enter the <b>lag</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">lag</a>
Tree	<a href="#">lag</a>
Introduced	16.0.R1
Platforms	All

## link-map-profile *number*

Synopsis	LAG link map profile for a SAP or network interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">lag</a> <a href="#">link-map-profile</a> <i>number</i>
Tree	<a href="#">link-map-profile</a>
Description	<p>This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator assigns a LAG link map profile, the system reshapes the SAP or network interface egress traffic over the LAG as required by the new configuration.</p> <p>If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.</p>
Range	1 to 64
Introduced	16.0.R1
Platforms	All

## per-link-hash

Synopsis	Enter the <b>per-link-hash</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">lag</a> <a href="#">per-link-hash</a>
Tree	<a href="#">per-link-hash</a>
Introduced	16.0.R1
Platforms	All

**class number**

Synopsis	Class used on LAG egress using weighted per-link-hash
Context	<b>configure</b> <i>router string interface string lag per-link-hash class number</i>
Tree	<a href="#">class</a>
Range	1 to 3
Default	1
Introduced	16.0.R1
Platforms	All

**weight number**

Synopsis	Weight used on LAG egress using weighted per-link-hash
Context	<b>configure</b> <i>router string interface string lag per-link-hash weight number</i>
Tree	<a href="#">weight</a>
Range	1 to 1024
Default	1
Introduced	16.0.R1
Platforms	All

**ldp-sync-timer**

Synopsis	Enter the <b>ldp-sync-timer</b> context
Context	<b>configure</b> <i>router string interface string ldp-sync-timer</i>
Tree	<a href="#">ldp-sync-timer</a>
Description	This command enables the synchronization of an IGP and LDP and enters the context to set associated parameters.
Introduced	16.0.R1
Platforms	All

**end-of-lib boolean**

Synopsis	Terminate LDP synchronization timer
Context	<b>configure</b> <i>router string interface string ldp-sync-timer end-of-lib boolean</i>
Tree	<a href="#">end-of-lib</a>

Description	This command configures the system to terminate the LDP synchronization timer early for a specific session to an LDP peer, if the IGP interface receives LDP End-of-LIB Typed Wildcard FEC messages for every FEC type negotiated.
Default	false
Introduced	16.0.R1
Platforms	All

### **seconds** *number*

Synopsis	Time interval for the LDP synchronization timer
Context	<b>configure</b> <i>router string interface string ldp-sync-timer seconds number</i>
Tree	<a href="#">seconds</a>
Range	1 to 1800
Introduced	16.0.R1
Platforms	All

### **load-balancing**

Synopsis	Enter the <b>load-balancing</b> context
Context	<b>configure</b> <i>router string interface string load-balancing</i>
Tree	<a href="#">load-balancing</a>
Description	Commands in this context configure interface per-flow load-balancing options that apply to traffic that enters this interface and that egresses over a LAG or ECMP. This is a per-interface setting. Load-balancing options enabled on the interface level overwrite options that can also be enabled on the system level.
Introduced	16.0.R1
Platforms	All

### **flow-label-load-balancing** *boolean*

Synopsis	Enable flow label load balancing
Context	<b>configure</b> <i>router string interface string load-balancing flow-label-load-balancing boolean</i>
Tree	<a href="#">flow-label-load-balancing</a>
Description	When configured to <b>true</b> , the router enables load balancing in ECMP and LAG based on the output of a hash performed on the triplet (SA, DA, flow label) in the header of an IPv6 packet received on an IES, VPRN, R-VPLS, CSC, or network interface. When configured to <b>false</b> , the router disables load balancing in ECMP and LAG.

Default	false
Introduced	21.5.R1
Platforms	All

### **ip-load-balancing** *keyword*

Synopsis	IP load-balancing algorithm
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">load-balancing</a> <a href="#">ip-load-balancing</a> <i>keyword</i>
Tree	<a href="#">ip-load-balancing</a>
Description	This command specifies whether to include the source address, destination address, or both in LAG or ECMP hash on IP interfaces. Additionally, when the <b>l4-load-balancing</b> command is enabled, this command also includes the source or destination port in the hash inputs.
Options	both, destination, source, inner-ip
Default	both
Introduced	16.0.R3
Platforms	All

### **lsr-load-balancing** *keyword*

Synopsis	LSR load-balancing algorithm
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">load-balancing</a> <a href="#">lsr-load-balancing</a> <i>keyword</i>
Tree	<a href="#">lsr-load-balancing</a>
Description	This command specifies whether the IP header is used in the LAG and ECMP LSR hashing algorithm. This is the per-interface setting.
Options	lbl-only, lbl-ip, ip-only, eth-encap-ip, lbl-ip-l4-teid
Introduced	16.0.R1
Platforms	All

### **spi-load-balancing** *boolean*

Synopsis	Enable SPI use in hashing
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">load-balancing</a> <a href="#">spi-load-balancing</a> <i>boolean</i>
Tree	<a href="#">spi-load-balancing</a>
Description	When configured to <b>true</b> , the router uses the Security Parameter Index (SPI) in hashing for ESP and AH encrypted IPv4 and IPv6 traffic. This is a per-interface setting.



Default	false
Introduced	16.0.R1
Platforms	All

### **teid-load-balancing** *boolean*

Synopsis	Enable use of TEID in hashing
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">load-balancing</a> <a href="#">teid-load-balancing</a> <i>boolean</i>
Tree	<a href="#">teid-load-balancing</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **loopback**

Synopsis	Use interface as a loopback interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">loopback</a>
Tree	<a href="#">loopback</a>
Description	When configured, this interface is used as a loopback interface. This command and the <b>vas-if-type</b> command are mutually exclusive.
Notes	The following elements are part of a choice: <b>loopback</b> or <b>port</b> .
Introduced	16.0.R1
Platforms	All

### **mac** *string*

Synopsis	MAC address of the interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">mac</a> <i>string</i>
Tree	<a href="#">mac</a>
Description	This command assigns a specific MAC address to an IP interface. Only one MAC address can be assigned to an IP interface. When multiple <b>mac</b> commands are entered, the last command overwrites the previous command.
Introduced	16.0.R1
Platforms	All

**mac-accounting** *boolean*

Synopsis	Enable MAC accounting functionality
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>mac-accounting</b> <i>boolean</i>
Tree	<a href="#">mac-accounting</a>
Description	When configured to <b>true</b> , the router enables MAC accounting functionality.
Default	false
Introduced	16.0.R1
Platforms	All

**network-domains**

Synopsis	Enter the <b>network-domains</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>network-domains</b>
Tree	<a href="#">network-domains</a>
Introduced	16.0.R4
Platforms	All

**network-domain** [[domain-name](#)] *reference*

Synopsis	Add a list entry for <b>network-domain</b>
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>network-domains</b> <b>network-domain</b> <i>reference</i>
Tree	<a href="#">network-domain</a>
Description	<p>Commands in this context assign an interface to a network domain. The router then takes the network domain into account during SAP ingress queue allocation for VPLS SAP.</p> <p>The network domain association can only be done in the base routing context. An operator can associate a network domain with an interface without a physical port being specified, but the configuration has no effect until a corresponding port, or LAG, is defined.</p> <p>Single interfaces can be associated with multiple network domains.</p>
Max. Instances	5
Introduced	16.0.R4
Platforms	All

**[domain-name] reference**

Synopsis	Network domain name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>network-domains</b> <b>network-domain</b> <i>reference</i>
Tree	<a href="#">network-domain</a>
Reference	<b>configure</b> <b>router</b> <i>string</i> <b>network-domains</b> <b>network-domain</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**port (port-and-encap | keyword)**

Synopsis	Port to bind to this interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>port</b> ( <i>port-and-encap</i>   <i>keyword</i> )
Tree	<a href="#">port</a>
Description	This command creates an association between a logical IP interface and a physical port. An operator can also associate an interface with the system (loopback address).
String Length	1 to 45
Options	system
Notes	The following elements are part of a choice: <b>loopback</b> or <b>port</b> .
Introduced	16.0.R1
Platforms	All

**ptp-hw-assist**

Synopsis	Enter the <b>ptp-hw-assist</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ptp-hw-assist</b>
Tree	<a href="#">ptp-hw-assist</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**admin-state keyword**

Synopsis	Administrative state of the PTP time stamping assist
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ptp-hw-assist</b> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>

Description	This command controls the administrative state of port-based time stamping assist of PTP packets at the physical interface. This capability is supported on specific hardware. The command may be blocked if not all hardware has the required level of support.  Only one interface per physical port can have <code>ptp-hw-assist</code> enabled. This feature cannot be enabled if the physical port supporting the interface is configured as a PTP port.
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <b>interface</b> <i>string</i> <b>qos</b>
Tree	<b>qos</b>
Description	Commands in this context associate a network QoS policy with a network IP interface. Only one network QoS policy can be associated with an IP interface at one time. Attempts to associate a second QoS policy return an error.
Introduced	16.0.R1
Platforms	All

## egress-instance *number*

Synopsis	Port egress queue group instance for this interface
Context	<b>configure</b> <i>router</i> <i>string</i> <b>interface</b> <i>string</i> <b>qos</b> <b>egress-instance</b> <i>number</i>
Tree	<b>egress-instance</b>
Description	This command specifies which instance to associate with this specific network IP interface since multiple instances of the same egress queue-group can be applied to the same port.
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

## egress-port-redirect-group *reference*

Synopsis	QoS queue group name
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Context	<b>configure</b> <i>router string interface string qos egress-port-redirect-group reference</i>
Tree	<a href="#">egress-port-redirect-group</a>
Description	This command configures the egress queue group used for all egress forwarding-class redirections specified within the network QoS policy ID. The specified queue group name must exist as an egress queue group applied to the egress context of the port associated with the IP interface.
Reference	<b>configure</b> <a href="#">qos queue-group-templates egress queue-group string</a>
Introduced	16.0.R1
Platforms	All

### **ingress-fp-redirect-group** *reference*

Synopsis	Forwarding plane queue group policy for the interface
Context	<b>configure</b> <i>router string interface string qos ingress-fp-redirect-group reference</i>
Tree	<a href="#">ingress-fp-redirect-group</a>
Description	This command configures the ingress queue-group used for all ingress forwarding-class redirections specified within the network QoS policy ID. The specified queue group name must exist as an ingress queue group applied to the ingress context of the forwarding plane associated with the IP interface.
Reference	<b>configure</b> <a href="#">qos queue-group-templates ingress queue-group string</a>
Introduced	16.0.R1
Platforms	All

### **ingress-instance** *number*

Synopsis	Forwarding plane ingress queue group for this interface
Context	<b>configure</b> <i>router string interface string qos ingress-instance number</i>
Tree	<a href="#">ingress-instance</a>
Description	This command configures which instance to associate with this specific network IP interface. An operator can apply multiple instances of the same ingress queue group to the same forwarding plane.
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

**network-policy** *reference*

Synopsis	Network policy name associated with a network interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>qos</b> <b>network-policy</b> <i>reference</i>
Tree	<a href="#">network-policy</a>
Description	This command associates an existing network policy name with the IP interface.
Reference	<b>configure</b> <b>qos</b> <b>network</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

**strip-label** *boolean*

Synopsis	Strip all MPLS labels before PBR processing
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>strip-label</b> <i>boolean</i>
Tree	<a href="#">strip-label</a>
Description	<p>When configured to <b>true</b>, the router forces packets to be stripped of all (maximum 5) MPLS labels before the packets are handed over for possible filter (PBR) processing.</p> <p>This command is supported on:</p> <ul style="list-style-type: none"> <li>• optical ports for the 7750 SR and 7450 ESS</li> <li>• IOM3 XP cards for the 7750 SR and 7450 ESS</li> <li>• null/dot1q encaps</li> <li>• network ports</li> <li>• IPv4</li> <li>• IPv6</li> </ul>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**tos-marking-state** *keyword*

Synopsis	TOS marking state
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>tos-marking-state</b> <i>keyword</i>
Tree	<a href="#">tos-marking-state</a>
Description	<p>This command configures the ToS marking state.</p> <p>This command is used to alter the default trusted state to a non-trusted state. When configured to <b>trusted</b> or default, the ToS field is not remarked by egress network IP interfaces unless the egress network IP interface has the remark-trusted state set, in</p>

which case the egress network interface treats all VPRN and network IP interfaces as untrusted.

When configured to **untrusted**, all egress network IP interfaces remark IP packets received on the network interface according to the egress marking definitions on each network interface.

Options	trusted, untrusted
Default	trusted
Introduced	16.0.R1
Platforms	All

## untrusted

Synopsis	Enable the <b>untrusted</b> context
Context	<b>configure</b> <i>router string interface string untrusted</i>
Tree	<i>untrusted</i>
Description	<p>Commands in this context configure the untrusted state for a network IP interface.</p> <p>The untrusted state identifies the participating interfaces in the label security feature for prefixes of a VPN family at an inter-AS boundary. The router supports a maximum of 15 network interfaces that can participate in this feature.</p> <p>The user normally applies this command to an inter-AS interface. PIP keeps track of the untrusted status of each interface.</p>
Introduced	16.0.R4
Platforms	All

## default-forwarding *keyword*

Synopsis	Default action for selective ILM
Context	<b>configure</b> <i>router string interface string untrusted default-forwarding keyword</i>
Tree	<i>default-forwarding</i>
Description	<p>This command specifies the default forwarding behavior of labeled packets received on this interface.</p> <p>This command sets the default behavior for an untrusted interface in the datapath and for all ILMs. When enabling the label security for VPN IPv4 or VPN IPv6 prefixes, BGP programs the data path to provide an exception to the normal way of forwarding away from the default for those VPRN ILMs.</p> <p>When the default behavior is to forward packets, the router checks labeled packets in the normal way against the table of programmed ILMs to decide if packets are dropped or forwarded in a GRT, a VRF, or a L2 service context.</p>

When the specified behavior is to drop packets, all labeled packets received on the interface are automatically dropped.

Options	forward, drop
Default	forward
Introduced	16.0.R4
Platforms	All

### **urpf-selected-vprns** *boolean*

Synopsis	Enable uRPF checking of incoming traffic on interface
Context	<b>configure</b> <i>router string interface string urpf-selected-vprns boolean</i>
Tree	<a href="#">urpf-selected-vprns</a>
Description	<p>When configured to <b>true</b>, the router performs uRPF checks of incoming traffic on the network interface for the following:</p> <ul style="list-style-type: none"> <li>• Packets associated with the global routing table (base router) context</li> <li>• Packets associated with VPRNs that have enabled the uRPF check using the <b>configure service vprn network ingress urpf-check</b> command</li> </ul> <p>When configured to <b>false</b>, the router performs uRPF checks for all ingress traffic on the network interface (associated with the base router and all VPRNs) based on the IPv4 and IPv6 <b>urpf-check</b> command configuration options of the network interface.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **vas-if-type** *keyword*

Synopsis	VAS interface type
Context	<b>configure</b> <i>router string interface string vas-if-type keyword</i>
Tree	<a href="#">vas-if-type</a>
Description	This command configures the type of a Value Added Service (VAS) facing interface. This command and <b>loopback</b> command
Options	to-from-access, to-from-network, to-from-both
Introduced	16.0.R1
Platforms	All



## ipsec

Synopsis	Enter the <b>ipsec</b> context
Context	<b>configure</b> <i>router string ipsec</i>
Tree	<i>ipsec</i>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## multi-chassis-shunt-interface [*name*] *string*

Synopsis	Enter the <b>multi-chassis-shunt-interface</b> list instance
Context	<b>configure</b> <i>router string ipsec multi-chassis-shunt-interface string</i>
Tree	<i>multi-chassis-shunt-interface</i>
Description	This command configures the multi-chassis shunting interface name for the peer.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## [*name*] *string*

Synopsis	Multi-chassis shunt interface name
Context	<b>configure</b> <i>router string ipsec multi-chassis-shunt-interface string</i>
Tree	<i>multi-chassis-shunt-interface</i>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## next-hop

Synopsis	Enter the <b>next-hop</b> context
Context	<b>configure</b> <i>router string ipsec multi-chassis-shunt-interface string next-hop</i>
Tree	<i>next-hop</i>
Description	Commands in this context configure the next hop for shunting over the interface.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Next hop address
Context	<b>configure</b> <i>router string ipsec multi-chassis-shunt-interface string next-hop address (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<a href="#">address</a>
Description	This command configures the next-hop address for the shunting interface.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**multi-chassis-shunting-profile** [[name](#)] *string*

Synopsis	Enter the <b>multi-chassis-shunting-profile</b> list instance
Context	<b>configure</b> <i>router string ipsec multi-chassis-shunting-profile string</i>
Tree	<a href="#">multi-chassis-shunting-profile</a>
Max. Instances	64
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	Multi-chassis shunting profile name
Context	<b>configure</b> <i>router string ipsec multi-chassis-shunting-profile string</i>
Tree	<a href="#">multi-chassis-shunting-profile</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**peer** [[ip-address](#)] *reference*

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure</b> <i>router string ipsec multi-chassis-shunting-profile string peer reference</i>
Tree	<a href="#">peer</a>

Max. Instances	3
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[ip-address] reference**

Synopsis	Peer address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ipsec</b> <b>multi-chassis-shunting-profile</b> <i>string</i> <b>peer</b> <i>reference</i>
Tree	<a href="#">peer</a>
Reference	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **multi-chassis-shunt-interface reference**

Synopsis	Multi-chassis shunt interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ipsec</b> <b>multi-chassis-shunting-profile</b> <i>string</i> <b>peer</b> <i>reference</i> <b>multi-chassis-shunt-interface</b> <i>reference</i>
Tree	<a href="#">multi-chassis-shunt-interface</a>
Description	This command configures the shunting interface name for the peer.
Reference	<b>configure</b> <b>router</b> <i>string</i> <b>ipsec</b> <b>multi-chassis-shunt-interface</b> <i>string</i>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **security-policy [id] number**

Synopsis	Enter the <b>security-policy</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ipsec</b> <b>security-policy</b> <i>number</i>
Tree	<a href="#">security-policy</a>
Introduced	22.7.R1
Platforms	VSR

**[id] number**

Synopsis	IPsec security policy ID
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ipsec</b> <b>security-policy</b> <i>number</i>
Tree	<b>security-policy</b>
Range	1 to 32768
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

**entry [entry-id] number**

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ipsec</b> <b>security-policy</b> <i>number</i> <b>entry</b> <i>number</i>
Tree	<b>entry</b>
Introduced	22.7.R1
Platforms	VSR

**[entry-id] number**

Synopsis	IPsec security policy entry ID
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ipsec</b> <b>security-policy</b> <i>number</i> <b>entry</b> <i>number</i>
Tree	<b>entry</b>
Range	1 to 16
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

**local-ip**

Synopsis	Enter the <b>local-ip</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ipsec</b> <b>security-policy</b> <i>number</i> <b>entry</b> <i>number</i> <b>local-ip</b>
Tree	<b>local-ip</b>
Description	Commands in this context configure the local (from the VPN) IPv4 prefix/mask for the policy entry.

The system evaluates the local IP as the source IP when traffic is examined in the direction of the flows from private to public and as the destination IP when traffic flows from public to private.

Introduced 22.7.R1

Platforms VSR

### **address string**

Synopsis Destination IPv4 address of the aggregate route

Context **configure** [router string](#) [ipsec security-policy number entry number local-ip address string](#)

Tree [address](#)

Notes The following elements are part of a choice: **address** or **any**.

Introduced 22.7.R1

Platforms VSR

### **any boolean**

Synopsis Use any IP address

Context **configure** [router string](#) [ipsec security-policy number entry number local-ip any boolean](#)

Tree [any](#)

Default false

Notes The following elements are part of a choice: **address** or **any**.

Introduced 22.7.R1

Platforms VSR

### **local-ipv6**

Synopsis Enter the **local-ipv6** context

Context **configure** [router string](#) [ipsec security-policy number entry number local-ipv6](#)

Tree [local-ipv6](#)

Description Commands in this context configure the local (from the VPN) IPv6 prefix/mask for the policy entry.

The system evaluates the local IP as the source IP when traffic is examined in the direction of the flows from private to public and as the destination IP when traffic flows from public to private.

Introduced 22.7.R1

Platforms VSR

### **address string**

Synopsis Destination IPv6 address of the aggregate route

Context **configure** [router string](#) [ipsec security-policy number entry number local-ipv6 address string](#)

Tree [address](#)

Notes The following elements are part of a choice: **address** or **any**.

Introduced 22.7.R1

Platforms VSR

### **any boolean**

Synopsis Use any IP address

Context **configure** [router string](#) [ipsec security-policy number entry number local-ipv6 any boolean](#)

Tree [any](#)

Default false

Notes The following elements are part of a choice: **address** or **any**.

Introduced 22.7.R1

Platforms VSR

### **remote-ip**

Synopsis Enter the **remote-ip** context

Context **configure** [router string](#) [ipsec security-policy number entry number remote-ip](#)

Tree [remote-ip](#)

Description Commands in this context configure the remote (from the tunnel) IP prefix/mask for the policy entry.

The system evaluates the remote IP as the source IP when traffic flows public to private and as the destination IP when traffic flows from private to public.

Introduced 22.7.R1

Platforms VSR

**address string**

Synopsis	Destination IPv4 address of the aggregate route
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ipsec</a> <a href="#">security-policy</a> <i>number</i> <a href="#">entry</a> <i>number</i> <a href="#">remote-ip</a> <a href="#">address</a> <i>string</i>
Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: <b>address</b> or <b>any</b> .
Introduced	22.7.R1
Platforms	VSR

**any boolean**

Synopsis	Use any IP address
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ipsec</a> <a href="#">security-policy</a> <i>number</i> <a href="#">entry</a> <i>number</i> <a href="#">remote-ip</a> <a href="#">any</a> <i>boolean</i>
Tree	<a href="#">any</a>
Default	false
Notes	The following elements are part of a choice: <b>address</b> or <b>any</b> .
Introduced	22.7.R1
Platforms	VSR

**remote-ipv6**

Synopsis	Enter the <b>remote-ipv6</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ipsec</a> <a href="#">security-policy</a> <i>number</i> <a href="#">entry</a> <i>number</i> <a href="#">remote-ipv6</a>
Tree	<a href="#">remote-ipv6</a>
Description	<p>Commands in this context configure the remote (from the tunnel) IPv6 prefix/mask for the policy entry.</p> <p>The system evaluates the remote IP as the source IP when traffic flows from public to private and as the destination IP when traffic flows from private to public.</p>
Introduced	22.7.R1
Platforms	VSR

**address string**

Synopsis	Destination IPv6 address of the aggregate route
----------	---

Context	<b>configure</b> <i>router string ipsec security-policy number entry number remote-ipv6 address string</i>
Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: <b>address</b> or <b>any</b> .
Introduced	22.7.R1
Platforms	VSR

### **any** *boolean*

Synopsis	Use any IP address
Context	<b>configure</b> <i>router string ipsec security-policy number entry number remote-ipv6 any boolean</i>
Tree	<a href="#">any</a>
Default	false
Notes	The following elements are part of a choice: <b>address</b> or <b>any</b> .
Introduced	22.7.R1
Platforms	VSR

### **ipv6**

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure</b> <i>router string ipv6</i>
Tree	<a href="#">ipv6</a>
Introduced	16.0.R1
Platforms	All

### **neighbor-discovery**

Synopsis	Enter the <b>neighbor-discovery</b> context
Context	<b>configure</b> <i>router string ipv6 neighbor-discovery</i>
Tree	<a href="#">neighbor-discovery</a>
Introduced	16.0.R1
Platforms	All



### **reachable-time** *number*

Synopsis	Neighbor reachability detection timer
Context	<b>configure</b> <b>router</b> <i>string ipv6 neighbor-discovery reachable-time number</i>
Tree	<a href="#">reachable-time</a>
Range	30 to 3600
Default	30
Introduced	16.0.R1
Platforms	All

### **stale-time** *number*

Synopsis	Neighbor discovery cache entry stale time
Context	<b>configure</b> <b>router</b> <i>string ipv6 neighbor-discovery stale-time number</i>
Tree	<a href="#">stale-time</a>
Range	60 to 65535
Default	14400
Introduced	16.0.R1
Platforms	All

### **router-advertisement**

Synopsis	Enter the <b>router-advertisement</b> context
Context	<b>configure</b> <b>router</b> <i>string ipv6 router-advertisement</i>
Tree	<a href="#">router-advertisement</a>
Introduced	16.0.R1
Platforms	All

### **dns-options**

Synopsis	Enable the <b>dns-options</b> context
Context	<b>configure</b> <b>router</b> <i>string ipv6 router-advertisement dns-options</i>
Tree	<a href="#">dns-options</a>
Introduced	16.0.R1
Platforms	All

**rdnss-lifetime** (*keyword* | *number*)

Synopsis	Maximum time over which the RDNSS address is valid
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ipv6</i> <i>router-advertisement</i> <i>dns-options</i> <i>rdnss-lifetime</i> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">rdnss-lifetime</a>
Description	This command specifies the maximum time that the RDNSS address is used for name resolution by the client.
Range	0   4 to 3600
Units	seconds
Options	infinite
Default	infinite
Introduced	16.0.R1
Platforms	All

**server** *string*

Synopsis	RAs that are forwarded to IPv6 DNS servers
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ipv6</i> <i>router-advertisement</i> <i>dns-options</i> <i>server</i> <i>string</i>
Tree	<a href="#">server</a>
Max. Instances	4
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

**interface** [*ip-int-name*] *string*

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ipv6</i> <i>router-advertisement</i> <i>interface</i> <i>string</i>
Tree	<a href="#">interface</a>
Introduced	16.0.R1
Platforms	All

**[ip-int-name]** *string*

Synopsis	Router interface name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisement</a> <a href="#">interface</a> <i>string</i>
Tree	<a href="#">interface</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of router advertisement
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisement</a> <a href="#">interface</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**current-hop-limit** *number*

Synopsis	Hop limit advertised in RA messages
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisement</a> <a href="#">interface</a> <i>string</i> <a href="#">current-hop-limit</a> <i>number</i>
Tree	<a href="#">current-hop-limit</a>
Range	0 to 255
Default	64
Introduced	16.0.R1
Platforms	All

**dns-options**

Synopsis	Enable the <b>dns-options</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisement</a> <a href="#">interface</a> <i>string</i> <a href="#">dns-options</a>
Tree	<a href="#">dns-options</a>

Introduced	16.0.R1
Platforms	All

### **include-rdnss** *boolean*

Synopsis	Include the RDNSS option in the RA
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ipv6</b> <b>router-advertisement</b> <b>interface</b> <i>string</i> <b>dns-options</b> <b>include-rdnss</b> <i>boolean</i>
Tree	<a href="#">include-rdnss</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **rdnss-lifetime** (*number* | *keyword*)

Synopsis	Maximum time over which the RDNSS address 25 is valid
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ipv6</b> <b>router-advertisement</b> <b>interface</b> <i>string</i> <b>dns-options</b> <b>rdnss-lifetime</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">rdnss-lifetime</a>
Range	0   4 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	All

### **server** *string*

Synopsis	RAs that are forwarded to IPv6 DNS servers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ipv6</b> <b>router-advertisement</b> <b>interface</b> <i>string</i> <b>dns-options</b> <b>server</b> <i>string</i>
Tree	<a href="#">server</a>
Max. Instances	4
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

**managed-configuration** *boolean*

Synopsis	Set the managed address configuration flag
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ipv6</i> <i>router-advertisement</i> <i>interface</i> <i>string</i> <i>managed-configuration</i> <i>boolean</i>
Tree	<a href="#">managed-configuration</a>
Default	false
Introduced	16.0.R1
Platforms	All

**max-advertisement-interval** *number*

Synopsis	Maximum time between sending advertisement messages
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ipv6</i> <i>router-advertisement</i> <i>interface</i> <i>string</i> <i>max-advertisement-interval</i> <i>number</i>
Tree	<a href="#">max-advertisement-interval</a>
Range	4 to 1800
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	All

**min-advertisement-interval** *number*

Synopsis	Minimum interval between router advertisement messages
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ipv6</i> <i>router-advertisement</i> <i>interface</i> <i>string</i> <i>min-advertisement-interval</i> <i>number</i>
Tree	<a href="#">min-advertisement-interval</a>
Range	3 to 1350
Units	seconds
Default	200
Introduced	16.0.R1
Platforms	All

**mtu number**

Synopsis	MTU for sending packets to the router
Context	<b>configure router string ipv6 router-advertisement interface string mtu number</b>
Tree	<a href="#">mtu</a>
Range	1280 to 9800
Introduced	16.0.R1
Platforms	All

**other-stateful-configuration boolean**

Synopsis	Set the other configuration flag
Context	<b>configure router string ipv6 router-advertisement interface string other-stateful-configuration boolean</b>
Tree	<a href="#">other-stateful-configuration</a>
Default	false
Introduced	16.0.R1
Platforms	All

**prefix [ipv6-prefix] string**

Synopsis	Enter the <b>prefix</b> list instance
Context	<b>configure router string ipv6 router-advertisement interface string prefix string</b>
Tree	<a href="#">prefix</a>
Max. Instances	254
Introduced	16.0.R1
Platforms	All

**[ipv6-prefix] string**

Synopsis	IPv6 address prefix
Context	<b>configure router string ipv6 router-advertisement interface string prefix string</b>
Tree	<a href="#">prefix</a>
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **autonomous** *boolean*

Synopsis Set the autonomous flag value

Context **configure** **router** *string* **ipv6** **router-advertisement** **interface** *string* **prefix** *string* **autonomous** *boolean*

Tree **autonomous**

Default true

Introduced 16.0.R1

Platforms All

### **on-link** *boolean*

Synopsis Use prefix for on-link determination

Context **configure** **router** *string* **ipv6** **router-advertisement** **interface** *string* **prefix** *string* **on-link** *boolean*

Tree **on-link**

Default true

Introduced 16.0.R1

Platforms All

### **preferred-lifetime** (*keyword* | *number*)

Synopsis Remaining time that the prefix remains preferred

Context **configure** **router** *string* **ipv6** **router-advertisement** **interface** *string* **prefix** *string* **preferred-lifetime** (*keyword* | *number*)

Tree **preferred-lifetime**

Range 0 to 4294967294

Units seconds

Options infinite

Default 604800

Introduced 16.0.R1

Platforms All

**valid-lifetime** (*keyword | number*)

Synopsis	Remaining time in which the prefix is still valid
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ipv6</b> <b>router-advertisement</b> <b>interface</b> <i>string</i> <b>prefix</b> <i>string</i> <b>valid-lifetime</b> ( <i>keyword   number</i> )
Tree	<b>valid-lifetime</b>
Range	0 to 4294967294
Units	seconds
Options	infinite
Default	2592000
Introduced	16.0.R1
Platforms	All

**reachable-time** *number*

Synopsis	Time the router is reachable by other hosts or nodes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ipv6</b> <b>router-advertisement</b> <b>interface</b> <i>string</i> <b>reachable-time</b> <i>number</i>
Tree	<b>reachable-time</b>
Range	0 to 3600000
Units	milliseconds
Default	0
Introduced	16.0.R1
Platforms	All

**retransmit-time** *number*

Synopsis	Time to advertise neighbor advertisement messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ipv6</b> <b>router-advertisement</b> <b>interface</b> <i>string</i> <b>retransmit-time</b> <i>number</i>
Tree	<b>retransmit-time</b>
Range	0 to 1800000
Units	milliseconds
Default	0
Introduced	16.0.R1
Platforms	All



**router-lifetime** *number*

Synopsis	Lifetime value in neighbor advertisement messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ipv6</b> <b>router-advertisement</b> <b>interface</b> <i>string</i> <b>router-lifetime</b> <i>number</i>
Tree	<b>router-lifetime</b>
Range	0   4 to 9000
Units	seconds
Default	1800
Introduced	16.0.R1
Platforms	All

**use-virtual-mac** *boolean*

Synopsis	Use VRRP virtual MAC address for advertisement message
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ipv6</b> <b>router-advertisement</b> <b>interface</b> <i>string</i> <b>use-virtual-mac</b> <i>boolean</i>
Tree	<b>use-virtual-mac</b>
Default	false
Introduced	16.0.R1
Platforms	All

**ipv6-te-router-id**

Synopsis	Enter the <b>ipv6-te-router-id</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ipv6-te-router-id</b>
Tree	<b>ipv6-te-router-id</b>
Introduced	19.10.R1
Platforms	All

**interface** *reference*

Synopsis	Network IP interface name to obtain IP address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ipv6-te-router-id</b> <b>interface</b> <i>reference</i>
Tree	<b>interface</b>

Description	This command specifies the interface name from which to obtain the IP address to use as the IPv6 TE Router ID. This router ID uniquely identifies the router to other routers as IPv6 TE capable in an IGP TE domain. IS-IS advertises this information using the IPv6 TE Router ID TLV.
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i>
Introduced	19.10.R1
Platforms	All

### isa-service-chaining

Synopsis	Enable the <b>isa-service-chaining</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isa-service-chaining</a>
Tree	<a href="#">isa-service-chaining</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### nat-group [[id](#)] *number*

Synopsis	Add a list entry for <b>nat-group</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isa-service-chaining</a> <a href="#">nat-group</a> <i>number</i>
Tree	<a href="#">nat-group</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### [\[id\]](#) *number*

Synopsis	ISA NAT group/ISA WLAN GW group ID for the EVPN pools
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isa-service-chaining</a> <a href="#">nat-group</a> <i>number</i>
Tree	<a href="#">nat-group</a>
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**vxlan-vtep-range**

Synopsis	Enable the <b>vxlan-vtep-range</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isa-service-chaining</b> <b>vxlan-vtep-range</b>
Tree	<b>vxlan-vtep-range</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	End address of the VXLAN VTEP range
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isa-service-chaining</b> <b>vxlan-vtep-range</b> <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>end</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Start address of the VXLAN VTEP range
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isa-service-chaining</b> <b>vxlan-vtep-range</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>start</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**isis** [**isis-instance**] *number*

Synopsis	Enter the <b>isis</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i>
Tree	<b>isis</b>
Introduced	16.0.R1
Platforms	All

**[isis-instance] number**

Synopsis	Instance ID for the IS-IS instance
Context	<b>configure router string isis number</b>
Tree	<a href="#">isis</a>
Range	0 to 127
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the IS-IS instance
Context	<b>configure router string isis number admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**advertise-passive-only boolean**

Synopsis	Advertise prefixes that belong to passive interfaces
Context	<b>configure router string isis number advertise-passive-only boolean</b>
Tree	<a href="#">advertise-passive-only</a>
Default	false
Introduced	16.0.R1
Platforms	All

**advertise-router-capability keyword**

Synopsis	Router capabilities advertisement to neighbors
Context	<b>configure router string isis number advertise-router-capability keyword</b>
Tree	<a href="#">advertise-router-capability</a>
Options	area, as
Introduced	16.0.R1

Platforms All

### **advertise-tunnel-link** *boolean*

Synopsis Allow use of forwarding adjacency  
Context **configure** *router string isis number advertise-tunnel-link boolean*  
Tree [advertise-tunnel-link](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **all-l1isis** *string*

Synopsis Destination MAC address for all L1 IS-IS routers  
Context **configure** *router string isis number all-l1isis string*  
Tree [all-l1isis](#)  
Default 01:80:C2:00:00:14  
Introduced 16.0.R1  
Platforms All

### **all-l2isis** *string*

Synopsis Destination MAC address for all L2 IS-IS routers  
Context **configure** *router string isis number all-l2isis string*  
Tree [all-l2isis](#)  
Default 01:80:C2:00:00:15  
Introduced 16.0.R1  
Platforms All

### **area-address** *string*

Synopsis Area address portion of the NSAP address  
Context **configure** *router string isis number area-address string*  
Tree [area-address](#)  
String Length 2 to 38

Max. Instances	3
Introduced	16.0.R1
Platforms	All

### **authentication-check** *boolean*

Synopsis	Perform authentication check to reject mismatch PDUs
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>authentication-check</b> <i>boolean</i>
Tree	<a href="#">authentication-check</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **authentication-key** *string*

Synopsis	Authentication key to verify PDUs sent from neighbors
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>authentication-key</b> <i>string</i>
Tree	<a href="#">authentication-key</a>
String Length	1 to 366
Introduced	16.0.R1
Platforms	All

### **authentication-keychain** *reference*

Synopsis	Keychain used to sign and authenticate
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>authentication-keychain</b> <i>reference</i>
Tree	<a href="#">authentication-keychain</a>
Reference	<b>configure</b> <b>system</b> <b>security</b> <b>keychains</b> <b>keychain</b> <i>string</i>
Introduced	16.0.R3
Platforms	All

### **authentication-type** *keyword*

Synopsis	Authentication type
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Context	<b>configure router string isis number authentication-type keyword</b>
Tree	<a href="#">authentication-type</a>
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

### **csnp-authentication boolean**

Synopsis	Authenticate individual IS-IS packets of the CSNP type
Context	<b>configure router string isis number csnp-authentication boolean</b>
Tree	<a href="#">csnp-authentication</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **database-export**

Synopsis	Enable the <b>database-export</b> context
Context	<b>configure router string isis number database-export</b>
Tree	<a href="#">database-export</a>
Introduced	16.0.R1
Platforms	All

### **bgp-ls-identifier**

Synopsis	Enable the <b>bgp-ls-identifier</b> context
Context	<b>configure router string isis number database-export bgp-ls-identifier</b>
Tree	<a href="#">bgp-ls-identifier</a>
Introduced	16.0.R1
Platforms	All

### **value number**

Synopsis	BGP-LS identifier sent in the BGP-LS NLRI
Context	<b>configure router string isis number database-export bgp-ls-identifier value number</b>

Tree	<a href="#">value</a>
Max. Range	0 to 4294967295
Default	0
Introduced	16.0.R1
Platforms	All

### **igp-identifier** *number*

Synopsis	Unique ID of the IGP instance in the BGP-LS NLRI
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">database-export</a> <a href="#">igp-identifier</a> <i>number</i>
Tree	<a href="#">igp-identifier</a>
Max. Range	0 to 18446744073709551615
Introduced	16.0.R1
Platforms	All

### **default-route-tag** *number*

Synopsis	Route tag for the default route
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">default-route-tag</a> <i>number</i>
Tree	<a href="#">default-route-tag</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **entropy-label**

Synopsis	Enter the <b>entropy-label</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">entropy-label</a>
Tree	<a href="#">entropy-label</a>
Introduced	16.0.R1
Platforms	All

### **override-tunnel-elic** *boolean*

Synopsis	Enable override of received ELC advertisements
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Context	<b>configure</b> <i>router string isis number entropy-label override-tunnel-etc boolean</i>
Tree	<i>override-tunnel-etc</i>
Default	false
Introduced	16.0.R1
Platforms	All

### **export-limit**

Synopsis	Enable the <b>export-limit</b> context
Context	<b>configure</b> <i>router string isis number export-limit</i>
Tree	<i>export-limit</i>
Introduced	16.0.R1
Platforms	All

### **log-percent** *number*

Synopsis	Export limit before warning and SNMP notification sent
Context	<b>configure</b> <i>router string isis number export-limit log-percent number</i>
Tree	<i>log-percent</i>
Range	1 to 100
Introduced	16.0.R1
Platforms	All

### **number** *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	<b>configure</b> <i>router string isis number export-limit number number</i>
Tree	<i>number</i>
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**export-policy** *reference*

Synopsis	Export policies that determine exported routes
Context	<b>configure</b> <b>router</b> <i>string</i> <i>isis</i> <i>number</i> <b>export-policy</b> <i>reference</i>
Tree	<b>export-policy</b>
Description	<p>This command configures export routing policies for the routes exported from the routing table to IS-IS.</p> <p>If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p> <p>If the <b>aggregate</b> command is also configured in the <b>configure router</b> context, the aggregation is applied before the export policy is applied.</p> <p>Routing policies are created in the <b>configure router policy-options</b> context.</p>
Reference	<b>configure</b> <b>policy-options</b> <b>policy-statement</b> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

**flexible-algorithms**

Synopsis	Enter the <b>flexible-algorithms</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <i>isis</i> <i>number</i> <b>flexible-algorithms</b>
Tree	<b>flexible-algorithms</b>
Description	Commands in this context configure IS-IS parameters for flexible algorithm participation.
Introduced	20.7.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of flexible algorithm support
Context	<b>configure</b> <b>router</b> <i>string</i> <i>isis</i> <i>number</i> <b>flexible-algorithms</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Description	This command specifies the administrative state of the support of flexible algorithm IGP LSDB extensions.

Options	enable, disable
Default	disable
Introduced	20.7.R1
Platforms	All

### **flex-algo** [**flex-algo-id**] *number*

Synopsis	Enter the <b>flex-algo</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>flexible-algorithms</b> <b>flex-algo</b> <i>number</i>
Tree	<b>flex-algo</b>
Description	Commands in this context configure an IS-IS flexible algorithm. When flexible algorithm is configured in an IS-IS instance, the IS-IS instance is configured for all levels (Level 1 and Level 2).
Max. Instances	7
Introduced	20.7.R1
Platforms	All

### **[flex-algo-id]** *number*

Synopsis	Flexible algorithm ID
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>flexible-algorithms</b> <b>flex-algo</b> <i>number</i>
Tree	<b>flex-algo</b>
Range	128 to 255
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

### **advertise** *reference*

Synopsis	Flexible Algorithm Definition advertisement
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>flexible-algorithms</b> <b>flex-algo</b> <i>number</i> <b>advertise</b> <i>reference</i>
Tree	<b>advertise</b>
Description	This command enables the advertisement of a locally configured Flexible Algorithm Definition (FAD).

The winning FAD that a router uses must be consistent with the winning FAD on all other routers, which avoids routing loops and traffic blackholing. The winning FAD is selected using a tiebreaker algorithm that first selects the highest advertised FAD priority followed by the highest system ID.

Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">flexible-algorithm-definitions</a> <a href="#">flex-algo</a> <i>string</i>
Introduced	20.7.R1
Platforms	All

### loopfree-alternate

Synopsis	Enable the <b>loopfree-alternate</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">flexible-algorithms</a> <a href="#">flex-algo</a> <i>number</i> <a href="#">loopfree-alternate</a>
Tree	<a href="#">loopfree-alternate</a>
Introduced	20.7.R1
Platforms	All

### micro-loop-avoidance

Synopsis	Enable the <b>micro-loop-avoidance</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">flexible-algorithms</a> <a href="#">flex-algo</a> <i>number</i> <a href="#">micro-loop-avoidance</a>
Tree	<a href="#">micro-loop-avoidance</a>
Introduced	21.7.R1
Platforms	All

### participate *boolean*

Synopsis	Allow participation in the Flexible Algorithm
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">flexible-algorithms</a> <a href="#">flex-algo</a> <i>number</i> <a href="#">participate</a> <i>boolean</i>
Tree	<a href="#">participate</a>
Description	When configured to <b>true</b> , the router advertises the capability to participate in a flexible algorithm within the IS-IS Router Capability TLV. A router only advertises participation when the winning FAD can be supported, which includes segment routing support.  When configured to <b>false</b> , flexible algorithm participation is not enabled.
Default	false

Introduced 20.7.R1  
Platforms All

### **graceful-restart**

Synopsis Enable the **graceful-restart** context  
Context **configure** [router](#) *string* [isis](#) *number* [graceful-restart](#)  
Tree [graceful-restart](#)  
Introduced 16.0.R1  
Platforms All

### **helper-mode** *boolean*

Synopsis Enable the Graceful Restart helper for IS-IS  
Context **configure** [router](#) *string* [isis](#) *number* [graceful-restart](#) [helper-mode](#) *boolean*  
Tree [helper-mode](#)  
Default true  
Introduced 16.0.R1  
Platforms All

### **hello-authentication** *boolean*

Synopsis Authenticate Hello type IS-IS protocol packets  
Context **configure** [router](#) *string* [isis](#) *number* [hello-authentication](#) *boolean*  
Tree [hello-authentication](#)  
Default true  
Introduced 16.0.R1  
Platforms All

### **hello-padding** *keyword*

Synopsis IS-IS Hello message padding  
Context **configure** [router](#) *string* [isis](#) *number* [hello-padding](#) *keyword*  
Tree [hello-padding](#)  
Options adaptive, loose, strict, none

Introduced 16.0.R1  
Platforms All

### **ignore-attached-bit** *boolean*

Synopsis Ignore attached bit on received Layer 1 LSPs  
Context **configure** **router** *string isis number* **ignore-attached-bit** *boolean*  
Tree [ignore-attached-bit](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **ignore-lsp-errors** *boolean*

Synopsis Ignore LSP packets with errors  
Context **configure** **router** *string isis number* **ignore-lsp-errors** *boolean*  
Tree [ignore-lsp-errors](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **ignore-narrow-metric** *boolean*

Synopsis Ignore links with narrow metrics  
Context **configure** **router** *string isis number* **ignore-narrow-metric** *boolean*  
Tree [ignore-narrow-metric](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **igp-shortcut**

Synopsis Enter the **igp-shortcut** context  
Context **configure** **router** *string isis number* **igp-shortcut**  
Tree [igp-shortcut](#)

Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of RSVP-TE or SR-TE shortcut
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">igp-shortcut</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **tunnel-next-hop**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>tunnel-next-hop</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">igp-shortcut</a> <b>tunnel-next-hop</b>
Tree	<a href="#">tunnel-next-hop</a>
Introduced	16.0.R1
Platforms	All

### **family** [[family-type](#)] *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>family</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">igp-shortcut</a> <b>tunnel-next-hop</b> <b>family</b> <i>keyword</i>
Tree	<a href="#">family</a>
Introduced	16.0.R1
Platforms	All

**[family-type]** *keyword*

Synopsis	Address family type for tunnel next hop
Context	<b>configure</b> <i>router string isis number igp-shortcut tunnel-next-hop family keyword</i>
Tree	<i>family</i>
Options	ipv4, ipv6, srv4, srv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**resolution** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Resolution mode for IGP shortcut tunnels
Context	<b>configure</b> <i>router string isis number igp-shortcut tunnel-next-hop family keyword resolution keyword</i>
Tree	<i>resolution</i>
Options	none, filter, any, match-family-ip
Default	none
Introduced	16.0.R1
Platforms	All

**resolution-filter****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>resolution-filter</b> context
Context	<b>configure</b> <i>router string isis number igp-shortcut tunnel-next-hop family keyword resolution-filter</i>
Tree	<i>resolution-filter</i>
Introduced	16.0.R1
Platforms	All



**rsvp** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use RSVP tunneling for next-hop resolution
Context	<b>configure</b> <i>router string isis number igp-shortcut tunnel-next-hop family keyword resolution-filter rsvp boolean</i>
Tree	<a href="#">rsvp</a>
Default	false
Introduced	16.0.R1
Platforms	All

**sr-te** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	<b>configure</b> <i>router string isis number igp-shortcut tunnel-next-hop family keyword resolution-filter sr-te boolean</i>
Tree	<a href="#">sr-te</a>
Default	false
Introduced	16.0.R1
Platforms	All

**iid-tlv** *boolean*

Synopsis	Use IID TLVs with IS-IS multi-instance
Context	<b>configure</b> <i>router string isis number iid-tlv boolean</i>
Tree	<a href="#">iid-tlv</a>
Default	false
Introduced	16.0.R1
Platforms	All

**import-policy** *reference*

Synopsis	Import policy names for routes from IGP to route table
Context	<b>configure</b> <b>router</b> <i>string</i> <i>isis</i> <i>number</i> <b>import-policy</b> <i>reference</i>
Tree	<b>import-policy</b>
Reference	<b>configure</b> <b>policy-options</b> <b>policy-statement</b> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

**interface** [**interface-name**] *string*

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <i>isis</i> <i>number</i> <b>interface</b> <i>string</i>
Tree	<b>interface</b>
Introduced	16.0.R1
Platforms	All

**[interface-name]** *string*

Synopsis	Router interface name
Context	<b>configure</b> <b>router</b> <i>string</i> <i>isis</i> <i>number</i> <b>interface</b> <i>string</i>
Tree	<b>interface</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**adjacency-set** [**id**] *reference*

Synopsis	Add a list entry for <b>adjacency-set</b>
Context	<b>configure</b> <b>router</b> <i>string</i> <i>isis</i> <i>number</i> <b>interface</b> <i>string</i> <b>adjacency-set</b> <i>reference</i>
Tree	<b>adjacency-set</b>
Introduced	16.0.R1

Platforms All

### [id] reference

Synopsis Adjacency set ID

Context **configure** **router** *string* **isis** *number* **interface** *string* **adjacency-set** *reference*

Tree [adjacency-set](#)

Reference **configure** **router** *string* **isis** *number* **segment-routing** **adjacency-set** *number*

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### admin-state keyword

Synopsis Administrative state of the IS-IS interface

Context **configure** **router** *string* **isis** *number* **interface** *string* **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 16.0.R1

Platforms All

### bfd-liveness

Synopsis Enter the **bfd-liveness** context

Context **configure** **router** *string* **isis** *number* **interface** *string* **bfd-liveness**

Tree [bfd-liveness](#)

Description Commands in this context enable the use of bidirectional forwarding (BFD) to control IPv4 and IPv6 adjacencies. Enabling BFD on an IPv4 or IPv6 protocol interface ties the protocol interface state to the BFD session state between the local and remote nodes. BFD must be enabled on the applicable IP interface.

Introduced 16.0.R1

Platforms All

## ipv4

Synopsis	Enable the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">isis</a> <a href="#">number</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">bfd-liveness</a> <a href="#">ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	All

## include-bfd-tlv *boolean*

Synopsis	Enable IS-IS BFD TLVs on the interface
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">isis</a> <a href="#">number</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">bfd-liveness</a> <a href="#">ipv4</a> <a href="#">include-bfd-tlv</a> <a href="#">boolean</a>
Tree	<a href="#">include-bfd-tlv</a>
Default	false
Introduced	16.0.R1
Platforms	All

## ipv6

Synopsis	Enable the <b>ipv6</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">isis</a> <a href="#">number</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">bfd-liveness</a> <a href="#">ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	16.0.R1
Platforms	All

## include-bfd-tlv *boolean*

Synopsis	Enable IS-IS BFD TLVs on the interface
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">isis</a> <a href="#">number</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">bfd-liveness</a> <a href="#">ipv6</a> <a href="#">include-bfd-tlv</a> <a href="#">boolean</a>
Tree	<a href="#">include-bfd-tlv</a>
Default	false
Introduced	16.0.R1
Platforms	All

**csnp-interval** *number*

Synopsis	Time interval between successive CSN PDUs sent
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>interface</b> <i>string</i> <b>csnp-interval</b> <i>number</i>
Tree	<b>csnp-interval</b>
Range	1 to 65535
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

**default-instance** *boolean*

Synopsis	Allow non-MI capable router to establish an adjacency
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>interface</b> <i>string</i> <b>default-instance</b> <i>boolean</i>
Tree	<b>default-instance</b>
Default	false
Introduced	16.0.R1
Platforms	All

**flex-algo** [**flex-algo-id**] *number*

Synopsis	Enter the <b>flex-algo</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>interface</b> <i>string</i> <b>flex-algo</b> <i>number</i>
Tree	<b>flex-algo</b>
Max. Instances	7
Introduced	20.7.R1
Platforms	All

**[flex-algo-id]** *number*

Synopsis	Flexible algorithm ID
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>interface</b> <i>string</i> <b>flex-algo</b> <i>number</i>
Tree	<b>flex-algo</b>
Range	128 to 255

Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

## ipv4-node-sid

Synopsis	Enable the <b>ipv4-node-sid</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>interface</b> <i>string</i> <b>flex-algo</b> <i>number</i> <b>ipv4-node-sid</b>
Tree	<a href="#">ipv4-node-sid</a>
Introduced	20.7.R1
Platforms	All

## index *number*

Synopsis	Node SID index for this interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>interface</b> <i>string</i> <b>flex-algo</b> <i>number</i> <b>ipv4-node-sid</b> <b>index</b> <i>number</i>
Tree	<a href="#">index</a>
Range	0 to 4294967295
Notes	The following elements are part of a choice: <b>index</b> or <b>label</b> .
Introduced	20.7.R1
Platforms	All

## label *number*

Synopsis	Label value for the node SID
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>interface</b> <i>string</i> <b>flex-algo</b> <i>number</i> <b>ipv4-node-sid</b> <b>label</b> <i>number</i>
Tree	<a href="#">label</a>
Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>index</b> or <b>label</b> .
Introduced	20.7.R1
Platforms	All

## ipv6-node-sid

Synopsis	Enable the <b>ipv6-node-sid</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <i>isis</i> <i>number</i> <i>interface</i> <i>string</i> <i>flex-algo</i> <i>number</i> <b>ipv6-node-sid</b>
Tree	<b>ipv6-node-sid</b>
Introduced	20.7.R1
Platforms	All

## index *number*

Synopsis	Node SID index for this interface
Context	<b>configure</b> <b>router</b> <i>string</i> <i>isis</i> <i>number</i> <i>interface</i> <i>string</i> <i>flex-algo</i> <i>number</i> <b>ipv6-node-sid</b> <b>index</b> <i>number</i>
Tree	<b>index</b>
Range	0 to 4294967295
Notes	The following elements are part of a choice: <b>index</b> or <b>label</b> .
Introduced	20.7.R1
Platforms	All

## label *number*

Synopsis	Label value for the node SID
Context	<b>configure</b> <b>router</b> <i>string</i> <i>isis</i> <i>number</i> <i>interface</i> <i>string</i> <i>flex-algo</i> <i>number</i> <b>ipv6-node-sid</b> <b>label</b> <i>number</i>
Tree	<b>label</b>
Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>index</b> or <b>label</b> .
Introduced	20.7.R1
Platforms	All

## hello-authentication *boolean*

Synopsis	Authenticate Hello type IS-IS protocol packets
Context	<b>configure</b> <b>router</b> <i>string</i> <i>isis</i> <i>number</i> <i>interface</i> <i>string</i> <b>hello-authentication</b> <i>boolean</i>
Tree	<b>hello-authentication</b>
Default	true

Introduced 16.0.R1  
Platforms All

### **hello-authentication-key** *string*

Synopsis Authentication key or hash string for Hello PDUs  
Context **configure** [router](#) *string* [isis](#) *number* [interface](#) *string* **hello-authentication-key** *string*  
Tree [hello-authentication-key](#)  
String Length 1 to 366  
Introduced 16.0.R1  
Platforms All

### **hello-authentication-keychain** *reference*

Synopsis Authentication keychain to use for the session  
Context **configure** [router](#) *string* [isis](#) *number* [interface](#) *string* **hello-authentication-keychain** *reference*  
Tree [hello-authentication-keychain](#)  
Reference **configure** [system](#) [security](#) [keychains](#) **keychain** *string*  
Introduced 16.0.R3  
Platforms All

### **hello-authentication-type** *keyword*

Synopsis Hello authentication type  
Context **configure** [router](#) *string* [isis](#) *number* [interface](#) *string* **hello-authentication-type** *keyword*  
Tree [hello-authentication-type](#)  
Options password, message-digest  
Introduced 16.0.R1  
Platforms All

### **hello-padding** *keyword*

Synopsis Padding on IS-IS Hello packets  
Context **configure** [router](#) *string* [isis](#) *number* [interface](#) *string* **hello-padding** *keyword*



Tree	<a href="#">hello-padding</a>
Options	adaptive, loose, strict, none
Introduced	16.0.R1
Platforms	All

### **interface-type** *keyword*

Synopsis	Interface type to broadcast, point-to-point, or to be default
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">interface-type</a> <i>keyword</i>
Tree	<a href="#">interface-type</a>
Options	point-to-point, broadcast
Introduced	16.0.R1
Platforms	All

### **ipv4-adjacency-sid**

Synopsis	Enable the <b>ipv4-adjacency-sid</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4-adjacency-sid</a>
Tree	<a href="#">ipv4-adjacency-sid</a>
Introduced	16.0.R1
Platforms	All

### **label** *number*

Synopsis	Adjacency SID label
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4-adjacency-sid</a> <a href="#">label</a> <i>number</i>
Tree	<a href="#">label</a>
Range	1 to 1048575
Introduced	16.0.R1
Platforms	All

### **ipv4-multicast** *boolean*

Synopsis	Enable IPv4 multicast routing for the interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4-multicast</a> <i>boolean</i>

Tree	<a href="#">ipv4-multicast</a>
Default	true
Introduced	16.0.R1
Platforms	All

## ipv4-node-sid

Synopsis	Enable the <b>ipv4-node-sid</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4-node-sid</a>
Tree	<a href="#">ipv4-node-sid</a>
Introduced	16.0.R1
Platforms	All

## clear-n-flag *boolean*

Synopsis	Clear the node-sid flag (N-flag)
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4-node-sid</a> <b>clear-n-flag</b> <i>boolean</i>
Tree	<a href="#">clear-n-flag</a>
Default	false
Introduced	16.0.R1
Platforms	All

## index *number*

Synopsis	Node SID index for this interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4-node-sid</a> <b>index</b> <i>number</i>
Tree	<a href="#">index</a>
Range	0 to 4294967295
Notes	The following elements are part of a choice: <b>index</b> or <b>label</b> .
Introduced	16.0.R1
Platforms	All

## label *number*

Synopsis	Label value for the node SID
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Context	<b>configure router string isis number interface string ipv4-node-sid label number</b>
Tree	<a href="#">label</a>
Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>index</b> or <b>label</b> .
Introduced	16.0.R1
Platforms	All

### **ipv6-adjacency-sid**

Synopsis	Enable the <b>ipv6-adjacency-sid</b> context
Context	<b>configure router string isis number interface string ipv6-adjacency-sid</b>
Tree	<a href="#">ipv6-adjacency-sid</a>
Introduced	16.0.R1
Platforms	All

### **label number**

Synopsis	Adjacency SID label
Context	<b>configure router string isis number interface string ipv6-adjacency-sid label number</b>
Tree	<a href="#">label</a>
Range	1 to 1048575
Introduced	16.0.R1
Platforms	All

### **ipv6-multicast boolean**

Synopsis	Enable IPv6 multicast routing for the interface
Context	<b>configure router string isis number interface string ipv6-multicast boolean</b>
Tree	<a href="#">ipv6-multicast</a>
Default	true
Introduced	16.0.R1
Platforms	All

## ipv6-node-sid

Synopsis	Enable the <b>ipv6-node-sid</b> context
Context	<b>configure</b> <b>router</b> <i>string isis number interface string</i> <b>ipv6-node-sid</b>
Tree	<b>ipv6-node-sid</b>
Introduced	16.0.R1
Platforms	All

## clear-n-flag *boolean*

Synopsis	Clear the node-sid flag (N-flag)
Context	<b>configure</b> <b>router</b> <i>string isis number interface string</i> <b>ipv6-node-sid</b> <b>clear-n-flag</b> <i>boolean</i>
Tree	<b>clear-n-flag</b>
Default	false
Introduced	16.0.R1
Platforms	All

## index *number*

Synopsis	Node SID index for this interface
Context	<b>configure</b> <b>router</b> <i>string isis number interface string</i> <b>ipv6-node-sid</b> <b>index</b> <i>number</i>
Tree	<b>index</b>
Range	0 to 4294967295
Notes	The following elements are part of a choice: <b>index</b> or <b>label</b> .
Introduced	16.0.R1
Platforms	All

## label *number*

Synopsis	Label value for the node SID
Context	<b>configure</b> <b>router</b> <i>string isis number interface string</i> <b>ipv6-node-sid</b> <b>label</b> <i>number</i>
Tree	<b>label</b>
Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>index</b> or <b>label</b> .
Introduced	16.0.R1

Platforms All

### **ipv6-unicast** *boolean*

Synopsis Enable IPv6 unicast routing for the interface  
 Context **configure** *router string isis number interface string ipv6-unicast boolean*  
 Tree [ipv6-unicast](#)  
 Default true  
 Introduced 16.0.R1  
 Platforms All

### **level** [[level-number](#)] *keyword*

Synopsis Enter the **level** list instance  
 Context **configure** *router string isis number interface string level keyword*  
 Tree [level](#)  
 Max. Instances 2  
 Introduced 16.0.R1  
 Platforms All

### **[level-number]** *keyword*

Synopsis ISIS protocol level number  
 Context **configure** *router string isis number interface string level keyword*  
 Tree [level](#)  
 Options 1, 2  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **hello-authentication-key** *string*

Synopsis Authentication key for Hello PDUs  
 Context **configure** *router string isis number interface string level keyword hello-authentication-key string*

Tree	<a href="#">hello-authentication-key</a>
Description	This command configures the authentication key (password) for Hello PDUs. Both the Hello authentication key and the Hello authentication type on a segment must match.  If both IS-IS and Hello authentication are configured, Hello messages are validated using Hello authentication. If only IS-IS authentication is configured, it is used to authenticate all IS-IS (including Hello) protocol PDUs.
String Length	1 to 366
Introduced	16.0.R1
Platforms	All

### **hello-authentication-keychain** *reference*

Synopsis	Authentication keychain to use for the session
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">level</a> <i>keyword</i> <a href="#">hello-authentication-keychain</a> <i>reference</i>
Tree	<a href="#">hello-authentication-keychain</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i>
Introduced	16.0.R3
Platforms	All

### **hello-authentication-type** *keyword*

Synopsis	Hello authentication enabled on the context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">level</a> <i>keyword</i> <a href="#">hello-authentication-type</a> <i>keyword</i>
Tree	<a href="#">hello-authentication-type</a>
Description	This command enables Hello authentication at the level context. Both the Hello authentication key and the Hello authentication type on a segment must match. The Hello <b>authentication-key</b> statement must also be included.
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

### **hello-interval** *number*

Synopsis	Interval between Hello messages sent on this level
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">level</a> <i>keyword</i> <a href="#">hello-interval</a> <i>number</i>

Tree	<a href="#">hello-interval</a>
Range	1 to 20000
Units	seconds
Default	9
Introduced	16.0.R1
Platforms	All

### **hello-multiplier** *number*

Synopsis	Hello messages missed from neighbor before router declares adjacency down
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">level</a> <i>keyword</i> <a href="#">hello-multiplier</a> <i>number</i>
Tree	<a href="#">hello-multiplier</a>
Range	2 to 100
Default	3
Introduced	16.0.R1
Platforms	All

### **hello-padding** *keyword*

Synopsis	Padding on IS-IS Hello packets
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">level</a> <i>keyword</i> <a href="#">hello-padding</a> <i>keyword</i>
Tree	<a href="#">hello-padding</a>
Options	adaptive, loose, strict, none
Introduced	16.0.R1
Platforms	All

### **ipv4-multicast-metric** *number*

Synopsis	IS-IS interface metric applied for IPv4 multicast
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">level</a> <i>keyword</i> <a href="#">ipv4-multicast-metric</a> <i>number</i>
Tree	<a href="#">ipv4-multicast-metric</a>
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

**ipv6-multicast-metric** *number*

Synopsis	IS-IS interface metric applied for IPv6 multicast
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>interface</b> <i>string</i> <b>level</b> <i>keyword</i> <b>ipv6-multicast-metric</b> <i>number</i>
Tree	<b>ipv6-multicast-metric</b>
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

**ipv6-unicast-metric** *number*

Synopsis	IS-IS interface metric applied for IPv6 unicast
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>interface</b> <i>string</i> <b>level</b> <i>keyword</i> <b>ipv6-unicast-metric</b> <i>number</i>
Tree	<b>ipv6-unicast-metric</b>
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

**metric** *number*

Synopsis	IS-IS interface metric applied for IPv4 unicast
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>interface</b> <i>string</i> <b>level</b> <i>keyword</i> <b>metric</b> <i>number</i>
Tree	<b>metric</b>
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

**passive** *boolean*

Synopsis	Passive interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>interface</b> <i>string</i> <b>level</b> <i>keyword</i> <b>passive</b> <i>boolean</i>
Tree	<b>passive</b>
Default	false
Introduced	16.0.R1



Platforms All

### **priority** *number*

Synopsis Router to become the designated router on a multi-access network

Context **configure** [router](#) *string* [isis](#) *number* [interface](#) *string* [level](#) *keyword* [priority](#) *number*

Tree [priority](#)

Range 0 to 127

Default 64

Introduced 16.0.R1

Platforms All

### **sd-offset** *number*

Synopsis Value of the signal degrade offset

Context **configure** [router](#) *string* [isis](#) *number* [interface](#) *string* [level](#) *keyword* [sd-offset](#) *number*

Tree [sd-offset](#)

Range 1 to 16777215

Introduced 16.0.R1

Platforms All

### **sf-offset** *number*

Synopsis Value of the signal fail offset

Context **configure** [router](#) *string* [isis](#) *number* [interface](#) *string* [level](#) *keyword* [sf-offset](#) *number*

Tree [sf-offset](#)

Range 1 to 16777215

Introduced 16.0.R1

Platforms All

### **level-capability** *keyword*

Synopsis IS-IS levels for this interface

Context **configure** [router](#) *string* [isis](#) *number* [interface](#) *string* [level-capability](#) *keyword*

Tree [level-capability](#)

Options	1, 2, 1/2
Default	1/2
Introduced	16.0.R1
Platforms	All

### **load-balancing-weight** *number*

Synopsis	Load balancing weight
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <b>load-balancing-weight</b> <i>number</i>
Tree	<a href="#">load-balancing-weight</a>
Max. Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

### **loopfree-alternate**

Synopsis	Enter the <b>loopfree-alternate</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <b>loopfree-alternate</b>
Tree	<a href="#">loopfree-alternate</a>
Introduced	16.0.R3
Platforms	All

### **exclude** *boolean*

Synopsis	Enable/disable Loopfree Alternative at interface level.
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <b>loopfree-alternate</b> <b>exclude</b> <i>boolean</i>
Tree	<a href="#">exclude</a>
Default	false
Introduced	16.0.R3
Platforms	All

### **policy-map**

Synopsis	Enable the <b>policy-map</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <b>loopfree-alternate</b> <b>policy-map</b>

Tree	<a href="#">policy-map</a>
Introduced	16.0.R3
Platforms	All

### **route-nh-template** *reference*

Synopsis	Route next hop policy template name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">loopfree-alternate</a> <a href="#">policy-map</a> <a href="#">route-nh-template</a> <i>reference</i>
Tree	<a href="#">route-nh-template</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">route-next-hop-policy</a> <a href="#">template</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R3
Platforms	All

### **lsp-pacing-interval** *number*

Synopsis	Interval for sending LSPs from interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">lsp-pacing-interval</a> <i>number</i>
Tree	<a href="#">lsp-pacing-interval</a>
Range	0 to 65535
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

### **mesh-group**

Synopsis	Enable the <b>mesh-group</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">mesh-group</a>
Tree	<a href="#">mesh-group</a>
Introduced	16.0.R1
Platforms	All

**blocked**

Synopsis	Prevent the interface from flooding LSPs
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">mesh-group</a> <b>blocked</b>
Tree	<a href="#">blocked</a>
Notes	The following elements are part of a choice: <b>blocked</b> or <b>value</b> .
Introduced	16.0.R1
Platforms	All

**value** *number*

Synopsis	Mesh group for the interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">mesh-group</a> <b>value</b> <i>number</i>
Tree	<a href="#">value</a>
Range	1 to 2000000000
Notes	The following elements are part of a choice: <b>blocked</b> or <b>value</b> .
Introduced	16.0.R1
Platforms	All

**passive** *boolean*

Synopsis	Passive interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">passive</a> <i>boolean</i>
Tree	<a href="#">passive</a>
Default	false
Introduced	16.0.R1
Platforms	All

**retransmit-interval** *number*

Synopsis	Minimum time between LSP PDU retransmissions on point-to-point interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">retransmit-interval</a> <i>number</i>
Tree	<a href="#">retransmit-interval</a>
Range	1 to 65535
Units	seconds
Default	5

Introduced 16.0.R1  
 Platforms All

### **sid-protection** *boolean*

Synopsis Allow adjacency SID protection by LFA and remote LFA  
 Context **configure** *router string isis number interface string sid-protection boolean*  
 Tree [sid-protection](#)  
 Default true  
 Introduced 16.0.R1  
 Platforms All

### **tag** *number*

Synopsis Route tag for IP address of interface  
 Context **configure** *router string isis number interface string tag number*  
 Tree [tag](#)  
 Range 1 to 4294967295  
 Introduced 16.0.R1  
 Platforms All

### **ipv4-multicast-routing** *keyword*

Synopsis IS-IS topology for IPv4 multicast routing  
 Context **configure** *router string isis number ipv4-multicast-routing keyword*  
 Tree [ipv4-multicast-routing](#)  
 Options false, native, mt  
 Default native  
 Introduced 16.0.R1  
 Platforms All

### **ipv4-routing** *boolean*

Synopsis Support IPv4 routing for IS-IS instance  
 Context **configure** *router string isis number ipv4-routing boolean*

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Tree	<a href="#">ipv4-routing</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **ipv6-multicast-routing** *keyword*

Synopsis	Topology to populate the IPv6 multicast RTM
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">ipv6-multicast-routing</a> <i>keyword</i>
Tree	<a href="#">ipv6-multicast-routing</a>
Options	false, native, mt
Introduced	16.0.R1
Platforms	All

### **ipv6-routing** *keyword*

Synopsis	Routing topology for IPv6
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">ipv6-routing</a> <i>keyword</i>
Tree	<a href="#">ipv6-routing</a>
Options	false, native, mt
Default	false
Introduced	16.0.R1
Platforms	All

### **ldp-over-rsvp** *boolean*

Synopsis	Allow LDP over RSVP processing
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">ldp-over-rsvp</a> <i>boolean</i>
Tree	<a href="#">ldp-over-rsvp</a>
Default	false
Introduced	16.0.R1
Platforms	All

**ldp-sync** *boolean*

Synopsis	Use IGP-LDP synchronization feature on all interfaces participating in IS-IS routing protocol
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">ldp-sync</a> <i>boolean</i>
Tree	<a href="#">ldp-sync</a>
Default	true
Introduced	16.0.R1
Platforms	All

**level** [[level-number](#)] *keyword*

Synopsis	Enter the <b>level</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">level</a> <i>keyword</i>
Tree	<a href="#">level</a>
Max. Instances	2
Introduced	16.0.R1
Platforms	All

**[level-number]** *keyword*

Synopsis	ISIS protocol level number
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">level</a> <i>keyword</i>
Tree	<a href="#">level</a>
Options	1, 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**advertise-router-capability** *boolean*

Synopsis	Allow router advertisement capabilities
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">level</a> <i>keyword</i> <a href="#">advertise-router-capability</a> <i>boolean</i>
Tree	<a href="#">advertise-router-capability</a>
Default	true

Introduced	16.0.R1
Platforms	All

### **authentication-key *string***

Synopsis	Authentication key to verify PDUs sent on the interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">level</a> <i>keyword</i> <a href="#">authentication-key</a> <i>string</i>
Tree	<a href="#">authentication-key</a>
Description	This command sets the authentication key used to verify PDUs sent by neighboring routers on the interface.  Neighboring routers use passwords to authenticate PDUs sent from an interface. For authentication to work, both the authentication key and the authentication type on a segment must match. The <b>authentication-type</b> command must also be included.
String Length	1 to 366
Introduced	16.0.R1
Platforms	All

### **authentication-keychain *reference***

Synopsis	Keychain used to sign and authenticate
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">level</a> <i>keyword</i> <a href="#">authentication-keychain</a> <i>reference</i>
Tree	<a href="#">authentication-keychain</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i>
Introduced	16.0.R3
Platforms	All

### **authentication-type *keyword***

Synopsis	Authentication type to be used
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">level</a> <i>keyword</i> <a href="#">authentication-type</a> <i>keyword</i>
Tree	<a href="#">authentication-type</a>
Options	password, message-digest
Introduced	16.0.R1
Platforms	All



**bier**

Synopsis	Enter the <b>bier</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">isis</a> <a href="#">number</a> <a href="#">level</a> <a href="#">keyword</a> <a href="#">bier</a>
Tree	<a href="#">bier</a>
Introduced	16.0.R4
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of BIER
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">isis</a> <a href="#">number</a> <a href="#">level</a> <a href="#">keyword</a> <a href="#">bier</a> <a href="#">admin-state</a> <a href="#">keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

**template** *reference*

Synopsis	BIER template name
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">isis</a> <a href="#">number</a> <a href="#">level</a> <a href="#">keyword</a> <a href="#">bier</a> <a href="#">template</a> <a href="#">reference</a>
Tree	<a href="#">template</a>
Reference	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">bier</a> <a href="#">template</a> <a href="#">string</a>
Introduced	16.0.R4
Platforms	All

**csnp-authentication** *boolean*

Synopsis	Enable authentication of CSNP IS-IS protocol packets
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">isis</a> <a href="#">number</a> <a href="#">level</a> <a href="#">keyword</a> <a href="#">csnp-authentication</a> <a href="#">boolean</a>
Tree	<a href="#">csnp-authentication</a>
Default	true
Introduced	16.0.R1
Platforms	All

**database-export-exclude** *boolean*

Synopsis	Exclude IGP link-state information of a specific IS-IS level from being exported into extended TE-DB
Context	<b>configure</b> <i>router string isis number level keyword database-export-exclude boolean</i>
Tree	<a href="#">database-export-exclude</a>
Default	false
Introduced	16.0.R1
Platforms	All

**default-ipv4-multicast-metric** *number*

Synopsis	Default metric for IPv4 unicast
Context	<b>configure</b> <i>router string isis number level keyword default-ipv4-multicast-metric number</i>
Tree	<a href="#">default-ipv4-multicast-metric</a>
Range	1 to 16777215
Default	10
Introduced	16.0.R1
Platforms	All

**default-ipv6-multicast-metric** *number*

Synopsis	Default metric for IPv6 unicast
Context	<b>configure</b> <i>router string isis number level keyword default-ipv6-multicast-metric number</i>
Tree	<a href="#">default-ipv6-multicast-metric</a>
Range	1 to 16777215
Default	10
Introduced	16.0.R1
Platforms	All

**default-ipv6-unicast-metric** *number*

Synopsis	Default metric for IPv6 unicast
Context	<b>configure</b> <i>router string isis number level keyword default-ipv6-unicast-metric number</i>
Tree	<a href="#">default-ipv6-unicast-metric</a>

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Range	1 to 16777215
Default	10
Introduced	16.0.R1
Platforms	All

**default-metric** *number*

Synopsis	Default metric
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>level</b> <i>keyword</i> <b>default-metric</b> <i>number</i>
Tree	<b>default-metric</b>
Range	1 to 16777215
Default	10
Introduced	16.0.R1
Platforms	All

**external-preference** *number*

Synopsis	External route preference for IS-IS level
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>level</b> <i>keyword</i> <b>external-preference</b> <i>number</i>
Tree	<b>external-preference</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

**hello-authentication** *boolean*

Synopsis	Authenticate Hello type IS-IS protocol packets
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>level</b> <i>keyword</i> <b>hello-authentication</b> <i>boolean</i>
Tree	<b>hello-authentication</b>
Default	true
Introduced	16.0.R1
Platforms	All

**hello-padding** *keyword*

Synopsis	Padding on IS-IS Hello packets
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>level</b> <i>keyword</i> <b>hello-padding</b> <i>keyword</i>
Tree	<a href="#">hello-padding</a>
Options	adaptive, loose, strict, none
Introduced	16.0.R1
Platforms	All

**loopfree-alternate-exclude** *boolean*

Synopsis	Exclude interface participating in specific IS-IS level in SPF LFA computation
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>level</b> <i>keyword</i> <b>loopfree-alternate-exclude</b> <i>boolean</i>
Tree	<a href="#">loopfree-alternate-exclude</a>
Default	false
Introduced	16.0.R1
Platforms	All

**lsp-mtu-size** *number***WARNING:**

Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

Synopsis	LSP MTU size
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>level</b> <i>keyword</i> <b>lsp-mtu-size</b> <i>number</i>
Tree	<a href="#">lsp-mtu-size</a>
Range	490 to 9778
Units	bytes
Default	1492
Introduced	16.0.R1
Platforms	All

**preference** *number*

Synopsis	External route preference at level
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>level</b> <i>keyword</i> <b>preference</b> <i>number</i>

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Tree	<a href="#">preference</a>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **psnp-authentication** *boolean*

Synopsis	Enable authentication on PSNP IS-IS protocol packets
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">level</a> <i>keyword</i> <a href="#">psnp-authentication</a> <i>boolean</i>
Tree	<a href="#">psnp-authentication</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **wide-metrics-only** *boolean*

Synopsis	Use wide metrics advertisements in the LSPs
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">level</a> <i>keyword</i> <a href="#">wide-metrics-only</a> <i>boolean</i>
Tree	<a href="#">wide-metrics-only</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **level-capability** *keyword*

Synopsis	Routing level for instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">level-capability</a> <i>keyword</i>
Tree	<a href="#">level-capability</a>
Options	1, 2, 1/2
Default	1/2
Introduced	16.0.R1
Platforms	All

**link-group** [[link-group-name](#)] *string*

Synopsis	Enter the <b>link-group</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">link-group</a> <i>string</i>
Tree	<a href="#">link-group</a>
Introduced	16.0.R1
Platforms	All

**[link-group-name]** *string*

Synopsis	Link group name for the IS-IS protocol
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">link-group</a> <i>string</i>
Tree	<a href="#">link-group</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">link-group</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

**level** [[level-number](#)] *keyword*

Synopsis	Enter the <b>level</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">link-group</a> <i>string</i> <a href="#">level</a> <i>keyword</i>
Tree	<a href="#">level</a>
Max. Instances	2
Introduced	16.0.R1
Platforms	All

**[level-number]** *keyword*

Synopsis	ISIS protocol level number
Context	<b>configure router</b> <i>string isis number link-group string level keyword</i>
Tree	<a href="#">level</a>
Options	1, 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**ipv4-multicast-metric-offset** *number*

Synopsis	Offset value for the IPv4 multicast address family
Context	<b>configure router</b> <i>string isis number link-group string level keyword ipv4-multicast-metric-offset number</i>
Tree	<a href="#">ipv4-multicast-metric-offset</a>
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

**ipv4-unicast-metric-offset** *number*

Synopsis	Offset value for the IPv4 unicast address family
Context	<b>configure router</b> <i>string isis number link-group string level keyword ipv4-unicast-metric-offset number</i>
Tree	<a href="#">ipv4-unicast-metric-offset</a>
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

**ipv6-multicast-metric-offset** *number*

Synopsis	Offset value for the IPv6 multicast address family
Context	<b>configure router</b> <i>string isis number link-group string level keyword ipv6-multicast-metric-offset number</i>
Tree	<a href="#">ipv6-multicast-metric-offset</a>

Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

### **ipv6-unicast-metric-offset** *number*

Synopsis	Offset value for the IPv6 unicast address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>link-group</b> <i>string</i> <b>level</b> <i>keyword</i> <b>ipv6-unicast-metric-offset</b> <i>number</i>
Tree	<a href="#">ipv6-unicast-metric-offset</a>
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

### **member** [[interface-name](#)] *reference*

Synopsis	Add a list entry for <b>member</b>
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>link-group</b> <i>string</i> <b>level</b> <i>keyword</i> <b>member</b> <i>reference</i>
Tree	<a href="#">member</a>
Max. Instances	8
Introduced	16.0.R1
Platforms	All

### **[interface-name]** *reference*

Synopsis	Router interface name for this link group
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>link-group</b> <i>string</i> <b>level</b> <i>keyword</i> <b>member</b> <i>reference</i>
Tree	<a href="#">member</a>
Reference	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>interface</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All



**oper-members** *number*

Synopsis	Minimum number of operational links
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>link-group</b> <i>string</i> <b>level</b> <i>keyword</i> <b>oper-members</b> <i>number</i>
Tree	<b>oper-members</b>
Range	1 to 8
Introduced	16.0.R1
Platforms	All

**revert-members** *number*

Synopsis	Minimum number of operational links to return link group to normal state and remove offsets
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>link-group</b> <i>string</i> <b>level</b> <i>keyword</i> <b>revert-members</b> <i>number</i>
Tree	<b>revert-members</b>
Range	1 to 8
Introduced	16.0.R1
Platforms	All

**loopfree-alternate**

Synopsis	Enable the <b>loopfree-alternate</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>loopfree-alternate</b>
Tree	<b>loopfree-alternate</b>
Introduced	16.0.R1
Platforms	All

**augment-route-table** *boolean*

Synopsis	Attach remote LFA information to RTM entries
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>loopfree-alternate</b> <b>augment-route-table</b> <i>boolean</i>
Tree	<b>augment-route-table</b>
Description	When configured to <b>true</b> , this command enables IS-IS to attach remote LFA-specific information to RTM entries for use by protocols such as LDP. When configured to <b>false</b> , rLFA-specific information is not added to RTM entries.

Default	false
Introduced	19.10.R1
Platforms	All

## exclude

Synopsis	Enter the <b>exclude</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">loopfree-alternate</a> <a href="#">exclude</a>
Tree	<a href="#">exclude</a>
Introduced	16.0.R3
Platforms	All

## prefix-policy *reference*

Synopsis	Policy to exclude prefixes from LFA SPF calculation
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">loopfree-alternate</a> <a href="#">exclude</a> <a href="#">prefix-policy</a> <i>reference</i>
Tree	<a href="#">prefix-policy</a>
Description	This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation.  An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF.
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R3
Platforms	All

## multi-homed-prefix

Synopsis	Enable the <b>multi-homed-prefix</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">loopfree-alternate</a> <a href="#">multi-homed-prefix</a>
Tree	<a href="#">multi-homed-prefix</a>
Description	Commands in this context enable multihomed prefix LFA for IS-IS routes (IP FRR), SR-ISIS tunnels, and SRv6-ISIS tunnels.

This feature uses the multihomed prefix model described in RFC 8518 to compute a backup IP next hop using an alternate ABR or ASBR for external prefixes and to an alternate router owner for local anycast prefixes.

This feature further enhances the multihomed prefix backup path calculation beyond RFC 8518 with the addition of repair tunnels that make use of a PQ node or a P-Q set to reach the alternate exit ABR or ASBR of external prefixes or the alternate owner router of intra-area anycast prefixes.

The computed IP next hop-based backup path is added to IS-IS routes of external /32 prefixes or /128 prefixes and intra-area /32 or /128 anycast prefixes in the RTM if the prefix is not protected by the base LFA or if the user set leaf preference command option is configured to all. The user must enable the **configure routing-options ip-fast-reroute** command to have these backup paths programmed into the FIB in the datapath.

The computed IP next hop or repair tunnel-based backup path is also programmed for:

- SR-ISIS node SID tunnels of external /32 IPv4 prefixes and /128 IPv6 prefixes, and node SID tunnels of intra-area /32 IPv4 anycast prefixes and /128 anycast IPv6 prefixes, in both algorithm 0 and flexible-algorithms
- SRv6-ISIS locator routes and tunnels of external prefixes and of intra-area anycast prefixes of any size, in both algorithm 0 and flexible algorithm numbers.

As a result, an SR-TE LSP, an SR-MPLS policy, or an SRv6 policy which uses an SR-ISIS SID or an SRv6-ISIS SID of those same prefixes in its configured or computed SID list benefits from the multihomed prefix LFA protection.

Once the IP next-hop based multihomed prefix LFA is enabled, the extensions to compute an SR-TE repair tunnel for the multihomed prefix LFA in the case of SR-ISIS and SRv6-ISIS are automatically enabled if the user also enabled TI-LFA or Remote LFA. The computation reuses the SID list of the primary path or of the TI-LFA or Remote LFA backup path of the alternate ABR or ASBR or alternate owner router.

Introduced	22.7.R1
Platforms	All

### **preference** *keyword*

Synopsis	Multihomed prefix LFA backup path preference
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>loopfree-alternate</b> <b>multi-homed-prefix</b> <b>preference</b> <i>keyword</i>
Tree	<a href="#">preference</a>
Options	none, all
Default	none
Introduced	22.7.R1
Platforms	All

**remote-lfa**

Synopsis	Enable the <b>remote-lfa</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">loopfree-alternate</a> <a href="#">remote-lfa</a>
Tree	<a href="#">remote-lfa</a>
Introduced	16.0.R1
Platforms	All

**max-pq-cost** *number*

Synopsis	Maximum cost of destination node during reverse SPF calculation
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">loopfree-alternate</a> <a href="#">remote-lfa</a> <a href="#">max-pq-cost</a> <i>number</i>
Tree	<a href="#">max-pq-cost</a>
Max. Range	0 to 4294967295
Default	4261412864
Introduced	16.0.R1
Platforms	All

**node-protect**

Synopsis	Enable the <b>node-protect</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">loopfree-alternate</a> <a href="#">remote-lfa</a> <a href="#">node-protect</a>
Tree	<a href="#">node-protect</a>
Introduced	16.0.R4
Platforms	All

**max-pq-nodes** *number*

Synopsis	Maximum number of PQ nodes found in the LFA SPF's
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">loopfree-alternate</a> <a href="#">remote-lfa</a> <a href="#">node-protect</a> <a href="#">max-pq-nodes</a> <i>number</i>
Tree	<a href="#">max-pq-nodes</a>
Range	1 to 32
Default	16
Introduced	16.0.R4
Platforms	All

**ti-lfa**

Synopsis	Enable the <b>ti-lfa</b> context
Context	<b>configure</b> <i>router string isis number loopfree-alternate ti-lfa</i>
Tree	<a href="#">ti-lfa</a>
Description	Commands in this context enable the use of the Topology-Independent LFA algorithm in the LFA SPF calculation for this IS-IS instance.
Introduced	16.0.R1
Platforms	All

**max-sr-frr-labels** *number*

Synopsis	Maximum number of labels the TI-LFA backup path can use
Context	<b>configure</b> <i>router string isis number loopfree-alternate ti-lfa max-sr-frr-labels number</i>
Tree	<a href="#">max-sr-frr-labels</a>
Description	This command configures the maximum number of labels allowed in the segment list of the TI-LFA repair tunnel. A higher value results in better coverage by TI-LFA at the expense of increased packet encapsulation overhead. The TI-LFA algorithm uses this value to limit the search for the Q-node from the P-node on the post-convergence path.
Range	0 to 3
Default	2
Introduced	16.0.R1
Platforms	All

**max-srv6-frr-sids** *number*

Synopsis	Maximum number of SIDs the TI-LFA backup path can use
Context	<b>configure</b> <i>router string isis number loopfree-alternate ti-lfa max-srv6-frr-sids number</i>
Tree	<a href="#">max-srv6-frr-sids</a>
Description	This command configures the maximum number of SRv6 SIDs allowed in the segment list of the TI-LFA repair tunnel. A higher value results in better coverage by TI-LFA at the expense of increased packet encapsulation overhead. The TI-LFA algorithm uses this value to limit the search for the Q-node from the P-node on the post-convergence path.
Range	0 to 3
Default	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## node-protect

Synopsis	Enable the <b>node-protect</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">loopfree-alternate</a> <a href="#">ti-lfa</a> <b>node-protect</b>
Tree	<a href="#">node-protect</a>
Introduced	16.0.R5
Platforms	All

## **lsp-lifetime** *number*

**WARNING:**

Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

Synopsis	Amount of time during which an LSP is considered valid
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <b>lsp-lifetime</b> <i>number</i>
Tree	<a href="#">lsp-lifetime</a>
Range	350 to 65535
Units	seconds
Default	1200
Introduced	16.0.R1
Platforms	All

## **lsp-minimum-remaining-lifetime** *number*

Synopsis	Minimum value for the Remaining Lifetime of an LSP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <b>lsp-minimum-remaining-lifetime</b> <i>number</i>
Tree	<a href="#">lsp-minimum-remaining-lifetime</a>
Range	350 to 65535
Units	seconds
Introduced	19.7.R1
Platforms	All

**lsp-mtu-size** *number***WARNING:**

Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

Synopsis	LSP MTU size
Context	<b>configure</b> <i>router string isis number lsp-mtu-size number</i>
Tree	<a href="#">lsp-mtu-size</a>
Range	490 to 9778
Units	bytes
Default	1492
Introduced	16.0.R1
Platforms	All

**lsp-refresh**

Synopsis	Enter the <b>lsp-refresh</b> context
Context	<b>configure</b> <i>router string isis number lsp-refresh</i>
Tree	<a href="#">lsp-refresh</a>
Introduced	16.0.R1
Platforms	All

**half-lifetime** *boolean*

Synopsis	Set the refresh interval to always be half the LSP lifetime
Context	<b>configure</b> <i>router string isis number lsp-refresh half-lifetime boolean</i>
Tree	<a href="#">half-lifetime</a>
Default	true
Introduced	16.0.R1
Platforms	All

**interval** *number*

Synopsis	Refresh timer interval
Context	<b>configure</b> <i>router string isis number lsp-refresh interval number</i>
Tree	<a href="#">interval</a>

Range	150 to 65535
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	All

### **mru-mismatch-detection** *boolean*

Synopsis	Enable detection of MRU mismatch
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <b>mru-mismatch-detection</b> <i>boolean</i>
Tree	<a href="#">mru-mismatch-detection</a>
Description	<p>When configured to <b>true</b>, this command verifies that the received IS-IS Hello (IIH) packet size does not exceed the configured maximum port MTU size. The received IIH packet is dropped when its size exceeds the maximum port MTU size.</p> <p>When configured to <b>false</b>, the IS-IS router instance will not drop oversized IIH packets.</p> <p>By default, FP-based hardware can receive oversized packets but it will not originate them.</p>
Default	false
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **multi-topology**

Synopsis	Enable the <b>multi-topology</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <b>multi-topology</b>
Tree	<a href="#">multi-topology</a>
Introduced	16.0.R1
Platforms	All

### **ipv4-multicast** *boolean*

Synopsis	Support IPv4 topology (MT3)
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">multi-topology</a> <b>ipv4-multicast</b> <i>boolean</i>
Tree	<a href="#">ipv4-multicast</a>
Default	false
Introduced	16.0.R1



Platforms All

### **ipv6-multicast** *boolean*

Synopsis Support IPv6 topology (MT4)  
 Context **configure** *router string isis number multi-topology ipv6-multicast boolean*  
 Tree [ipv6-multicast](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **ipv6-unicast** *boolean*

Synopsis Support multi-topology TLVs  
 Context **configure** *router string isis number multi-topology ipv6-unicast boolean*  
 Tree [ipv6-unicast](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **multicast-import**

Synopsis Enter the **multicast-import** context  
 Context **configure** *router string isis number multicast-import*  
 Tree [multicast-import](#)  
 Introduced 16.0.R1  
 Platforms All

### **ipv4** *boolean*

Synopsis Submit IPv4 routes into the multicast RPF of the RTM  
 Context **configure** *router string isis number multicast-import ipv4 boolean*  
 Tree [ipv4](#)  
 Default false  
 Introduced 16.0.R1

Platforms All

### **ipv6** *boolean*

Synopsis Submit IPv6 routes into the multicast RPF of the RTM  
Context **configure** [router](#) [string](#) [isis](#) [number](#) [multicast-import](#) [ipv6](#) *boolean*  
Tree [ipv6](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **overload**

Synopsis Enable the **overload** context  
Context **configure** [router](#) [string](#) [isis](#) [number](#) [overload](#)  
Tree [overload](#)  
Introduced 16.0.R1  
Platforms All

### **max-metric** *boolean*

Synopsis Advertise transit links with maximum metric instead of setting overload bit  
Context **configure** [router](#) [string](#) [isis](#) [number](#) [overload](#) [max-metric](#) *boolean*  
Tree [max-metric](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **overload-export-external** *boolean*

Synopsis Advertise the external routes when router is in overloaded  
Context **configure** [router](#) [string](#) [isis](#) [number](#) [overload-export-external](#) *boolean*  
Tree [overload-export-external](#)  
Default false  
Introduced 16.0.R1

Platforms All

### **overload-export-interlevel** *boolean*

Synopsis Advertise the inter-level routes when router is overloaded  
Context **configure** *router string isis number* **overload-export-interlevel** *boolean*  
Tree [overload-export-interlevel](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **overload-on-boot**

Synopsis Enable the **overload-on-boot** context  
Context **configure** *router string isis number* **overload-on-boot**  
Tree [overload-on-boot](#)  
Introduced 16.0.R1  
Platforms All

### **max-metric** *boolean*

Synopsis Advertise transit links with maximum metric instead of setting overload bit  
Context **configure** *router string isis number* **overload-on-boot max-metric** *boolean*  
Tree [max-metric](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **timeout** *number*

Synopsis Time during which the router operates in overload state after reboot  
Context **configure** *router string isis number* **overload-on-boot timeout** *number*  
Tree [timeout](#)  
Range 60 to 1800  
Units seconds

Introduced 16.0.R1  
 Platforms All

### **poi-tlv** *boolean*

Synopsis Purge Originator Identification TLV  
 Context **configure** *router string isis number poi-tlv boolean*  
 Tree [poi-tlv](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **prefix-attributes-tlv** *boolean*

Synopsis Use IS-IS Prefix Attributes TLV to exchange extended IPv4 and IPv6 reachability information  
 Context **configure** *router string isis number prefix-attributes-tlv boolean*  
 Tree [prefix-attributes-tlv](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **prefix-limit**

Synopsis Enable the **prefix-limit** context  
 Context **configure** *router string isis number prefix-limit*  
 Tree [prefix-limit](#)  
 Introduced 16.0.R1  
 Platforms All

### **limit** *number*

Synopsis Maximum number of prefixes for IS-IS instance  
 Context **configure** *router string isis number prefix-limit limit number*  
 Tree [limit](#)  
 Range 1 to 4294967295

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **log-only** *boolean*

Synopsis	Send warning message when the prefix limit is reached
Context	<b>configure</b> <b>router</b> <i>string isis number prefix-limit log-only boolean</i>
Tree	<a href="#">log-only</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **overload-timeout** (*number | keyword*)

Synopsis	Time in overload state when prefix limit is reached
Context	<b>configure</b> <b>router</b> <i>string isis number prefix-limit overload-timeout (number   keyword)</i>
Tree	<a href="#">overload-timeout</a>
Range	1 to 1800
Units	seconds
Options	forever
Default	forever
Introduced	16.0.R1
Platforms	All

### **warning-threshold** *number*

Synopsis	Threshold value to trigger a warning message to be sent
Context	<b>configure</b> <b>router</b> <i>string isis number prefix-limit warning-threshold number</i>
Tree	<a href="#">warning-threshold</a>
Range	0 to 100
Units	percent
Default	0
Introduced	16.0.R1
Platforms	All

### **psnp-authentication** *boolean*

Synopsis	Authenticate individual IS-IS protocol packets of partial sequence number PDU (PSNP) type
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>psnp-authentication</b> <i>boolean</i>
Tree	<b>psnp-authentication</b>
Default	true
Introduced	16.0.R1
Platforms	All

### **reference-bandwidth** *number*

Synopsis	Reference bandwidth for bandwidth relative costing
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>reference-bandwidth</b> <i>number</i>
Tree	<b>reference-bandwidth</b>
Range	1 to 18446744073709551615
Units	kilobps
Introduced	16.0.R1
Platforms	All

### **rib-priority**

Synopsis	Enter the <b>rib-priority</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>rib-priority</b>
Tree	<b>rib-priority</b>
Introduced	16.0.R1
Platforms	All

### **high**

Synopsis	Enter the <b>high</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>rib-priority</b> <b>high</b>
Tree	<b>high</b>
Introduced	16.0.R1
Platforms	All

**prefix-list reference**

Synopsis	List used to select routes processed at higher priority through OSPF route calculation process
Context	<b>configure router string isis number rib-priority high prefix-list reference</b>
Tree	<a href="#">prefix-list</a>
Reference	<b>configure policy-options prefix-list string</b>
Notes	The following elements are part of a choice: <b>prefix-list</b> or <b>tag</b> .
Introduced	16.0.R1
Platforms	All

**tag number**

Synopsis	Tag value that is used to match IS-IS routes
Context	<b>configure router string isis number rib-priority high tag number</b>
Tree	<a href="#">tag</a>
Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>prefix-list</b> or <b>tag</b> .
Introduced	16.0.R1
Platforms	All

**router-id string****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Unique router ID for the ISIS instance
Context	<b>configure router string isis number router-id string</b>
Tree	<a href="#">router-id</a>
Introduced	16.0.R1
Platforms	All

**segment-routing**

Synopsis	Enter the <b>segment-routing</b> context
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing</a>
Tree	<a href="#">segment-routing</a>
Introduced	16.0.R1
Platforms	All

### **adj-sid-hold** (*number* | *keyword*)

Synopsis	Adjacency SID hold time
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing</a> <b>adj-sid-hold</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">adj-sid-hold</a>
Description	<p>This command configures a timer to hold the ILM or LTN of an adjacency SID following a failure of the adjacency.</p> <p>When an adjacency to a neighbor fails, the following procedure is followed for both an LFA protected and the LFA unprotected SID of this adjacency in SR-MPLS. An adjacency can have both types of SIDs assigned by configuration. An LFA protected adjacency SID is eligible for LFA protection, however, the following procedure applies even if an LFA backup is not programmed at the time of the failure. An LFA unprotected adjacency SID is not eligible for LFA protection.</p> <ul style="list-style-type: none"> <li>• IGP withdraws the advertisement of the link TLV as well as its adjacency SID sub-TLV.</li> <li>• The adjacency SID hold timer starts.</li> <li>• The LTN and ILM records of the adjacency are kept in the datapath for as long as the adjacency SID hold time is running. This allows packets to flow over the LFA backup path, when the adjacency is protected, and allows the ingress LER or PCE time to compute a new path of the SR-TE LSP after IGP converges.</li> <li>• If the adjacency is restored while the adjacency SID hold timer is running, the timer is aborted, and the adjacency SID remains programmed in the datapath with the retained SID values. However, the backup NHLFE may change if a new LFA SPF runs while the adjacency SID hold timer running. An update to the backup NHLFE is performed immediately following the LFA SPF. In all cases, the adjacency keeps its assigned SID label value.</li> <li>• If the adjacency SID hold timer expires before the adjacency is restored, the SID is deprogrammed from the datapath and the label returned into the common pool where it was drawn from. Users of the adjacency (for example, SR policy and SR-TE LSP) are also informed. When the adjacency is subsequently restored, it gets assigned its allocated static-label value or a new dynamic-label value.</li> <li>• A new PG-ID is assigned each time an adjacency comes back up. This PG-ID is used by the ILM and LTN of the adjacency SID and of all downstream node SIDs that resolve to a next hop over this adjacency.</li> </ul>
Range	1 to 300
Units	seconds
Options	none



Default	15
Introduced	16.0.R1
Platforms	All

### **adjacency-set** [*id*] *number*

Synopsis	Enter the <b>adjacency-set</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>segment-routing</b> <b>adjacency-set</b> <i>number</i>
Tree	<b>adjacency-set</b>
Introduced	16.0.R1
Platforms	All

### **[id]** *number*

Synopsis	Identifier for specified adjacency set
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>segment-routing</b> <b>adjacency-set</b> <i>number</i>
Tree	<b>adjacency-set</b>
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **advertise** *boolean*

Synopsis	Advertise the adjacency set when all links terminate on the same neighboring node
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>segment-routing</b> <b>adjacency-set</b> <i>number</i> <b>advertise</b> <i>boolean</i>
Tree	<b>advertise</b>
Default	true
Introduced	16.0.R1
Platforms	All

### **family** *keyword*

Synopsis	Address family for the adjacency set
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Context	<b>configure</b> <i>router string isis number segment-routing adjacency-set number family keyword</i>
Tree	<i>family</i>
Options	ipv4, ipv6
Default	ipv4
Introduced	16.0.R1
Platforms	All

### **parallel** *boolean*

Synopsis	Require all members of the adjacency set to terminate on the same neighboring node
Context	<b>configure</b> <i>router string isis number segment-routing adjacency-set number parallel boolean</i>
Tree	<i>parallel</i>
Default	true
Introduced	16.0.R1
Platforms	All

### **sid**

Synopsis	Enable the <b>sid</b> context
Context	<b>configure</b> <i>router string isis number segment-routing adjacency-set number sid</i>
Tree	<i>sid</i>
Introduced	16.0.R1
Platforms	All

### **label** *number*

Synopsis	Adjacency SID label
Context	<b>configure</b> <i>router string isis number segment-routing adjacency-set number sid label number</i>
Tree	<i>label</i>
Range	1 to 1048575
Introduced	16.0.R1
Platforms	All

**adjacency-sid**

Synopsis	Enter the <b>adjacency-sid</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">isis</a> <a href="#">number</a> <a href="#">segment-routing</a> <a href="#">adjacency-sid</a>
Tree	<a href="#">adjacency-sid</a>
Introduced	22.7.R1
Platforms	All

**allocate-dual-sids** *boolean*

Synopsis	Allocate dual adjacency SIDs per interface
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">isis</a> <a href="#">number</a> <a href="#">segment-routing</a> <a href="#">adjacency-sid</a> <a href="#">allocate-dual-sids</a> <i>boolean</i>
Tree	<a href="#">allocate-dual-sids</a>
Description	<p>When configured to <b>true</b>, the router supports two SR-MPLS adjacency SIDs per interface. A protected and unprotected adjacency SID is instantiated and advertised. If an SR-MPLS adjacency SID already exists, an additional complementary (protected or unprotected) adjacency SID is created on the interface.</p> <p>When configured to <b>false</b>, the router disables the support of two SR-MPLS adjacency SIDs per interface.</p>
Default	false
Introduced	22.7.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of segment routing
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">isis</a> <a href="#">number</a> <a href="#">segment-routing</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**class-forwarding** *boolean*

Synopsis	Allow CBF with ECMP over RSVP-TE LSPs as IGP shortcuts
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Context	<b>configure</b> <i>router string isis number segment-routing class-forwarding boolean</i>
Tree	<a href="#">class-forwarding</a>
Description	<p>When configured to <b>true</b>, this command enables Class-Based Forwarding (CBF) with ECMP for SR-ISIS resolved to RSVP-TE LSPs as IGP shortcuts.</p> <p>For CBF with ECMP to be effective, a class forwarding policy must be defined, as well as FC to set associations and RSVP-TE LSPs to set associations.</p> <p>When configured to <b>false</b>, CBF over IGP shortcuts is disabled.</p>
Default	false
Introduced	20.2.R1
Platforms	All

### egress-statistics

Synopsis	Enter the <b>egress-statistics</b> context
Context	<b>configure</b> <i>router string isis number segment-routing egress-statistics</i>
Tree	<a href="#">egress-statistics</a>
Introduced	19.10.R1
Platforms	All

### adj-set *boolean*

Synopsis	Enable the allocation of statistics on adjacency sets
Context	<b>configure</b> <i>router string isis number segment-routing egress-statistics adj-set boolean</i>
Tree	<a href="#">adj-set</a>
Description	<p>When configured to <b>true</b>, this command enables the allocation of statistic indices to each adjacency set. All adjacencies of a set share the same statistics index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.</p>
Default	false
Introduced	19.10.R1
Platforms	All

### adj-sid *boolean*

Synopsis	Enable the allocation of statistics on adjacency SIDs
Context	<b>configure</b> <i>router string isis number segment-routing egress-statistics adj-sid boolean</i>

Tree	<a href="#">adj-sid</a>
Description	When configured to <b>true</b> , this command enables the allocation of statistic indexes to each programmed NHLFE corresponding to Adjacency SIDs (local and received by means of IGP advertisement). All NHLFEs associated to a given SID share the same index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

### **node-sid** *boolean*

Synopsis	Enable the allocation of statistics on node SIDs
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">egress-statistics</a> <a href="#">node-sid</a> <i>boolean</i>
Tree	<a href="#">node-sid</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **entropy-label** *boolean*

Synopsis	Enable processing of received ELC signaled in the IGP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">entropy-label</a> <i>boolean</i>
Tree	<a href="#">entropy-label</a>
Introduced	16.0.R1
Platforms	All

### **export-tunnel-table** *keyword*

Synopsis	Tunnel table export policies to export tunneled routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">export-tunnel-table</a> <i>keyword</i>
Tree	<a href="#">export-tunnel-table</a>
Options	ldp
Introduced	16.0.R1
Platforms	All

## ingress-statistics

Synopsis	Enter the <b>ingress-statistics</b> context
Context	<b>configure</b> <i>router string isis number segment-routing ingress-statistics</i>
Tree	<a href="#">ingress-statistics</a>
Introduced	19.10.R1
Platforms	All

## adj-set *boolean*

Synopsis	Enable the allocation of statistics on adjacency sets
Context	<b>configure</b> <i>router string isis number segment-routing ingress-statistics adj-set boolean</i>
Tree	<a href="#">adj-set</a>
Description	When configured to <b>true</b> , this command enables the allocation of statistic indices to each adjacency set. All adjacencies of a set share the same statistics index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

## adj-sid *boolean*

Synopsis	Enable the allocation of statistics on adjacency SIDs
Context	<b>configure</b> <i>router string isis number segment-routing ingress-statistics adj-sid boolean</i>
Tree	<a href="#">adj-sid</a>
Description	When configured to <b>true</b> , this command enables the allocation of statistic indexes to each programmed NHLFE corresponding to Adjacency SIDs (local and received by means of IGP advertisement). All NHLFEs associated to a given SID share the same index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

### **node-sid** *boolean*

Synopsis	Enable the allocation of statistics on node SIDs
Context	<b>configure</b> <b>router</b> <i>string</i> <i>isis</i> <i>number</i> <b>segment-routing</b> <b>ingress-statistics</b> <b>node-sid</b> <i>boolean</i>
Tree	<b>node-sid</b>
Default	false
Introduced	19.10.R1
Platforms	All

### **mapping-server**

Synopsis	Enter the <b>mapping-server</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <i>isis</i> <i>number</i> <b>segment-routing</b> <b>mapping-server</b>
Tree	<b>mapping-server</b>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the IS-IS mapping server
Context	<b>configure</b> <b>router</b> <i>string</i> <i>isis</i> <i>number</i> <b>segment-routing</b> <b>mapping-server</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **node-sid-map** [*sid-index*] *number*

Synopsis	Enter the <b>node-sid-map</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <i>isis</i> <i>number</i> <b>segment-routing</b> <b>mapping-server</b> <b>node-sid-map</b> <i>number</i>
Tree	<b>node-sid-map</b>
Introduced	16.0.R1
Platforms	All

**[sid-index] number**

Synopsis	SID index of a mapping server Prefix-SID
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">isis</a> <a href="#">number</a> <a href="#">segment-routing</a> <a href="#">mapping-server</a> <a href="#">node-sid-map</a> <a href="#">number</a>
Tree	<a href="#">node-sid-map</a>
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**clear-n-flag boolean**

Synopsis	Clear the node-sid flag (N-flag)
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">isis</a> <a href="#">number</a> <a href="#">segment-routing</a> <a href="#">mapping-server</a> <a href="#">node-sid-map</a> <a href="#">number</a> <a href="#">clear-n-flag</a> <a href="#">boolean</a>
Tree	<a href="#">clear-n-flag</a>
Default	false
Introduced	16.0.R1
Platforms	All

**ip-prefix string**

Synopsis	Prefix of a mapping server Prefix-SID
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">isis</a> <a href="#">number</a> <a href="#">segment-routing</a> <a href="#">mapping-server</a> <a href="#">node-sid-map</a> <a href="#">number</a> <a href="#">ip-prefix</a> <a href="#">string</a>
Tree	<a href="#">ip-prefix</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**level-capability keyword**

Synopsis	Flags to assign in SID Label Binding TLV advertised by Segment Routing Mapping Server
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Context	<b>configure</b> <i>router</i> <i>string</i> <i>isis</i> <i>number</i> <i>segment-routing</i> <i>mapping-server</i> <i>node-sid-map</i> <i>number</i> <i>level-capability</i> <i>keyword</i>
Tree	<a href="#">level-capability</a>
Options	1, 2, 1/2
Default	1/2
Introduced	16.0.R1
Platforms	All

### **range** *number*

Synopsis	Range of addresses and their associated prefix SIDs
Context	<b>configure</b> <i>router</i> <i>string</i> <i>isis</i> <i>number</i> <i>segment-routing</i> <i>mapping-server</i> <i>node-sid-map</i> <i>number</i> <a href="#">range</a> <i>number</i>
Tree	<a href="#">range</a>
Range	0 to 65535
Default	1
Introduced	16.0.R1
Platforms	All

### **set-flags**

Synopsis	Enter the <b>set-flags</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <i>isis</i> <i>number</i> <i>segment-routing</i> <i>mapping-server</i> <i>node-sid-map</i> <i>number</i> <a href="#">set-flags</a>
Tree	<a href="#">set-flags</a>
Introduced	16.0.R1
Platforms	All

### **bit-s** *boolean*

Synopsis	SID Label Binding TLV to be flooded across the entire routing domain
Context	<b>configure</b> <i>router</i> <i>string</i> <i>isis</i> <i>number</i> <i>segment-routing</i> <i>mapping-server</i> <i>node-sid-map</i> <i>number</i> <a href="#">set-flags</a> <a href="#">bit-s</a> <i>boolean</i>
Tree	<a href="#">bit-s</a>
Default	false
Introduced	16.0.R1

Platforms All

### maximum-sid-depth

Synopsis Enter the **maximum-sid-depth** context

Context **configure** [router](#) [string](#) [isis](#) [number](#) [segment-routing](#) [maximum-sid-depth](#)

Tree [maximum-sid-depth](#)

Introduced 20.2.R1

Platforms All

### override-bmi *number*

Synopsis Value to override the announced node MSD-BMI value

Context **configure** [router](#) [string](#) [isis](#) [number](#) [segment-routing](#) [maximum-sid-depth](#) [override-bmi](#) *number*

Tree [override-bmi](#)

Description This command overrides the announced MSD node Base MPLS Imposition (BMI) value. The MSD-BMI value announced by a router can be used by recipients to understand the number of MPLS labels that can be imposed inclusive of all service, transport, or special labels.

When unconfigured, the router announces the maximum supported BMI of the node assuming the most simple services and Layer 2 encapsulation.

Range 0 to 12

Introduced 20.2.R1

Platforms All

### override-erld *number*

Synopsis Value to override the announced node MSD-ERLD value

Context **configure** [router](#) [string](#) [isis](#) [number](#) [segment-routing](#) [maximum-sid-depth](#) [override-erld](#) *number*

Tree [override-erld](#)

Description This command configures the override Entropy Readable Label Depth (ERLD) Maximum Sid Depth (MSD) value. Information about the capability of each intermediate LSR of reading the maximum label stack depth is used by ingress LSRs to perform EL-based load balancing.

When unconfigured, the router announces the node maximum supported ERLD assuming the most simple Layer 2 encapsulation.

Range	0 to 15
Introduced	20.2.R1
Platforms	All

### micro-loop-avoidance

Synopsis	Enable the <b>micro-loop-avoidance</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">micro-loop-avoidance</a>
Tree	<a href="#">micro-loop-avoidance</a>
Introduced	19.10.R1
Platforms	All

### fib-delay *number*

Synopsis	FIB delay before programming new primary next-hops
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">micro-loop-avoidance</a> <a href="#">fib-delay</a> <i>number</i>
Tree	<a href="#">fib-delay</a>
Description	This command specifies the delay time before programming the new next-hops for the SR tunnel.
Range	1 to 300
Units	deciseconds
Default	15
Introduced	19.10.R1
Platforms	All

### prefix-sid-range

Synopsis	Enable the <b>prefix-sid-range</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">prefix-sid-range</a>
Tree	<a href="#">prefix-sid-range</a>
Description	Commands in this context configure the label block BGP segment routing can use.
Introduced	16.0.R1
Platforms	All

## global

Synopsis	BGP global SR range allocation
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">prefix-sid-range</a> <a href="#">global</a>
Tree	<a href="#">global</a>
Description	When configured, the system allows BGP to allocate labels from the SRGB space, as defined under the <b>configure router mpls-labels sr-labels</b> context.
Notes	The following elements are part of a choice: <b>global</b> or ( <b>max-index</b> and <b>start-label</b> ).
Introduced	16.0.R1
Platforms	All

## max-index *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Upper bound value for the local SID index
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">prefix-sid-range</a> <a href="#">max-index</a> <i>number</i>
Tree	<a href="#">max-index</a>
Range	0 to 524287
Default	1
Notes	The following elements are part of a choice: <b>global</b> or ( <b>max-index</b> and <b>start-label</b> ).
Introduced	16.0.R1
Platforms	All

## start-label *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Lower bound value for the local label offset
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">prefix-sid-range</a> <a href="#">start-label</a> <i>number</i>
Tree	<a href="#">start-label</a>
Range	0 to 524287
Default	0

Notes	The following elements are part of a choice: <b>global</b> or ( <b>max-index</b> and <b>start-label</b> ).
Introduced	16.0.R1
Platforms	All

### **srlb reference**

Synopsis	Segment routing local block
Context	<b>configure router string isis number segment-routing srlb reference</b>
Tree	<a href="#">srlb</a>
Reference	<b>configure router string mpls-labels reserved-label-block string</b>
Introduced	16.0.R1
Platforms	All

### **tunnel-mtu number**

Synopsis	Tunnel MTU size
Context	<b>configure router string isis number segment-routing tunnel-mtu number</b>
Tree	<a href="#">tunnel-mtu</a>
Range	512 to 9786
Introduced	16.0.R1
Platforms	All

### **tunnel-table-pref number**

Synopsis	Preference of SR tunnels created by the IGP instance
Context	<b>configure router string isis number segment-routing tunnel-table-pref number</b>
Tree	<a href="#">tunnel-table-pref</a>
Description	This command configures the TTM preference of SR tunnels created by the IGP instance. This is used in the case of BGP shortcuts, VPRN auto-bind, or BGP transport tunnel when the new tunnel binding commands are configured to the <b>any</b> value which parses the TTM for tunnels in the protocol preference order. The user can choose to either go with the global TTM preference or list explicitly the tunnel types they want to use. When they list the tunnel types explicitly, the TTM preference will still be used to select one type over the other. In both cases, a fallback to the next preferred tunnel type is performed if the selected one fails. Also, a reversion to a more preferred tunnel type is performed as soon as one is available.

The segment routing module adds to TTM a SR tunnel entry for each resolved remote node SID prefix and programs the data path with the corresponding LTN with the push operation pointing to the primary and LFA backup NHLFEs.

The default preference for SR tunnels in the TTM is set lower than LDP tunnels but higher than BGP tunnels to allow controlled migration of customers without disrupting their current deployment when they enable segment routing. The following is the setting of the default preference of the various tunnel types. This includes the preference of SR tunnels based on shortest path (referred to as **SR-ISIS** and **SR-OSPF**).

The global default TTM preference for the tunnel types is as follows:

- ROUTE\_PREF\_RSVP 7
- ROUTE\_PREF\_SR\_TE 8
- ROUTE\_PREF\_LDP 9
- ROUTE\_PREF\_OSPF\_TTM 10
- ROUTE\_PREF\_ISIS\_TTM 11
- ROUTE\_PREF\_BGP\_TTM 12
- ROUTE\_PREF\_GRE 255

The default value for SR-ISIS or SR-OSPF is the same regardless if one or more IS-ISIS or OSPF instances programmed a tunnel for the same prefix. The selection of a SR tunnel in this case will be based on lowest IGP instance-id.

It is recommended to not set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.

Range	1 to 255
Default	11
Introduced	16.0.R1
Platforms	All

## segment-routing-v6

Synopsis	Enter the <b>segment-routing-v6</b> context
Context	<b>configure</b> <i>router string isis number</i> <b>segment-routing-v6</b>
Tree	<b>segment-routing-v6</b>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## adj-sid-hold (*number* | *keyword*)

Synopsis	Adjacency SID hold time
Context	<b>configure</b> <i>router string isis number</i> <b>segment-routing-v6 adj-sid-hold</b> ( <i>number</i>   <i>keyword</i> )

Tree	<a href="#">adj-sid-hold</a>
Description	<p>This command specifies the length of time the system holds the SRv6 adjacency route and tunnel entries programmed in datapath while the adjacency is down.</p> <p>When an adjacency to a neighbor fails, the following procedure is followed for both an LFA protected and the LFA unprotected SID of this adjacency in SR-MPLS. An adjacency can have both types of SIDs assigned by configuration. An LFA protected adjacency SID is eligible for LFA protection, however, the following procedure applies even if an LFA backup is not programmed at the time of the failure. An LFA unprotected adjacency SID is not eligible for LFA protection.</p> <ul style="list-style-type: none"> <li>• IGP withdraws the advertisement of the link TLV as well as its SRv6 End.X SID sub-TLV</li> <li>• The adjacency SID hold timer starts.</li> <li>• The route table, FIB, and tunnel table entries are kept for as long as the adjacency SID hold timer is running. This allows packets to flow over the LFA backup path, if the adjacency is protected, and allows the ingress LER or PCE time to compute a new path of a SRv6 policy after IGP converges.</li> <li>• If the adjacency is restored while the adjacency SID hold timer is running, the timer is aborted, and the adjacency SID remains programmed in the datapath with the retained SID values. However, the backup NHLFE may change when a new LFA SPF is run while the adjacency SID hold timer is running. An update to the backup NHLFE is performed immediately following the LFA SPF. In all cases, the adjacency keeps its assigned SID value.</li> <li>• If the adjacency SID hold timer expires before the adjacency is restored, the SID is deprogrammed from the datapath and the SID value returned into the locator subnet where it was drawn from. Users of the adjacency (for example, SRv6 policy) are also informed. When the adjacency is subsequently restored, it gets assigned its allocated static SID value or a new dynamic SID value.</li> <li>• A new PG-ID is assigned each time an adjacency comes back up. This PG-ID is used by tunnel of the local adjacency SID and of all remote locator routes that resolve to a next hop over this adjacency.</li> </ul> <p>Each IS-IS instance runs a single timer per adjacency that IPv4 SR-MPLS, IPv6 SR-MPLS, and SRv6 adjacency SIDs share. When you enable both SR-MPLS (<b>configure router isis segment-routing</b>) and SRv6 (<b>configure router isis segment-routing-v6</b>) in the IS-IS instance, the system programs the higher of the two timer values for all SIDs on the adjacency.</p>
Range	1 to 300
Units	seconds
Options	none
Default	15
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**admin-state** *keyword*

Synopsis	Administrative state of segment routing SRv6
Context	<b>configure</b> <b>router</b> <i>string</i> <i>isis</i> <i>number</i> <b>segment-routing-v6</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**locator** [**locator-name**] *reference*

Synopsis	Enter the <b>locator</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <i>isis</i> <i>number</i> <b>segment-routing-v6</b> <b>locator</b> <i>reference</i>
Tree	<b>locator</b>
Description	This command adds a reference to a locator for each algorithm in this IS-IS instance. The same algorithm locator can be shared with other IGP instances and BGP instances in IP-VPN or EVPN.
Max. Instances	8
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**[locator-name]** *reference*

Synopsis	Locator name
Context	<b>configure</b> <b>router</b> <i>string</i> <i>isis</i> <i>number</i> <b>segment-routing-v6</b> <b>locator</b> <i>reference</i>
Tree	<b>locator</b>
Reference	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>segment-routing-v6</b> <b>locator</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**level** [**level-number**] *keyword*

Synopsis	Enter the <b>level</b> list instance
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Context	<b>configure</b> <i>router string isis number segment-routing-v6 locator reference level keyword</i>
Tree	<a href="#">level</a>
Max. Instances	2
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **[level-number]** *keyword*

Synopsis	ISIS protocol level number
Context	<b>configure</b> <i>router string isis number segment-routing-v6 locator reference level keyword</i>
Tree	<a href="#">level</a>
Options	1, 2
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **metric** *number*

Synopsis	IS-IS metric to advertise in the locator level list
Context	<b>configure</b> <i>router string isis number segment-routing-v6 locator reference level keyword metric number</i>
Tree	<a href="#">metric</a>
Range	1 to 16777215
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **level-capability** *keyword*

Synopsis	IS-IS routing level capability
Context	<b>configure</b> <i>router string isis number segment-routing-v6 locator reference level-capability keyword</i>
Tree	<a href="#">level-capability</a>
Description	This command configures the routing level capability for an instance of the IS-IS routing process.

The level capability configured on the instance must match the level capability on the interface to form an adjacency.

Options	1, 2, 1/2
Default	1/2
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## multi-topology

Synopsis	Enter the <b>multi-topology</b> context
Context	<b>configure</b> <i>router string isis number segment-routing-v6 locator reference multi-topology</i>
Tree	<a href="#">multi-topology</a>
Description	<p>Commands in this context enable the use of a local SRv6 locator in an IS-IS IPv6 topology. A user can enable one or more locators in an IS-IS instance. Each locator can be enabled in a single topology of an IS-IS instance, topology 0 (MT0) or topology 2 (MT2). A local locator can be used in multiple IS-IS instances, but can only be assigned to at most one IPv6 topology independently within each IS-IS instance.</p> <p>Use the <b>configure router isis segment-routing-v6 admin-state</b> command to enable the processing of local and remote IPv6 prefixes and SRv6 locators in MT0 and MT2. In addition, to enable SRv6 forwarding in the MT0, MT2, or both topologies, set the <b>configure router isis ipv6-routing</b> command to <b>native</b>, the <b>configure router isis multi-topology ipv6-unicast</b> command to <b>true</b>, or both.</p>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## mt0 boolean

Synopsis	Support standard topology (MT0)
Context	<b>configure</b> <i>router string isis number segment-routing-v6 locator reference multi-topology mt0 boolean</i>
Tree	<a href="#">mt0</a>
Default	true
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## mt2 boolean

Synopsis	Support IPv6 routing topology (MT2)
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Context	<b>configure</b> <i>router</i> <i>string</i> <i>isis</i> <i>number</i> <i>segment-routing-v6</i> <i>locator</i> <i>reference</i> <i>multi-topology</i> <i>mt2</i> <i>boolean</i>
Tree	<i>mt2</i>
Default	false
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**tag** *number*

Synopsis	Route tag to advertise in the locator
Context	<b>configure</b> <i>router</i> <i>string</i> <i>isis</i> <i>number</i> <i>segment-routing-v6</i> <i>locator</i> <i>reference</i> <i>tag</i> <i>number</i>
Tree	<i>tag</i>
Range	1 to 4294967295
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**micro-segment-locator** [*locator-name*] *reference*

Synopsis	Enter the <b>micro-segment-locator</b> list instance
Context	<b>configure</b> <i>router</i> <i>string</i> <i>isis</i> <i>number</i> <i>segment-routing-v6</i> <i>micro-segment-locator</i> <i>reference</i>
Tree	<i>micro-segment-locator</i>
Max. Instances	8
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**[locator-name]** *reference*

Synopsis	Micro-segment SRv6 locator name
Context	<b>configure</b> <i>router</i> <i>string</i> <i>isis</i> <i>number</i> <i>segment-routing-v6</i> <i>micro-segment-locator</i> <i>reference</i>
Tree	<i>micro-segment-locator</i>
Reference	<b>configure</b> <i>router</i> <i>string</i> <i>segment-routing</i> <i>segment-routing-v6</i> <i>micro-segment-locator</i> <i>string</i>
Notes	This element is part of a list key.

Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **level** [[level-number](#)] *keyword*

Synopsis	Enter the <b>level</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing-v6</a> <a href="#">micro-segment-locator</a> <i>reference</i> <a href="#">level</a> <i>keyword</i>
Tree	<a href="#">level</a>
Max. Instances	2
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **[level-number]** *keyword*

Synopsis	ISIS protocol level number
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing-v6</a> <a href="#">micro-segment-locator</a> <i>reference</i> <a href="#">level</a> <i>keyword</i>
Tree	<a href="#">level</a>
Options	1, 2
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **metric** *number*

Synopsis	IS-IS metric to advertise in the locator level list
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing-v6</a> <a href="#">micro-segment-locator</a> <i>reference</i> <a href="#">level</a> <i>keyword</i> <a href="#">metric</a> <i>number</i>
Tree	<a href="#">metric</a>
Range	1 to 16777215
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**level-capability** *keyword*

Synopsis	IS-IS routing level capability
Context	<b>configure</b> <b>router</b> <i>string</i> <i>isis</i> <i>number</i> <b>segment-routing-v6</b> <b>micro-segment-locator</b> <i>reference</i> <b>level-capability</b> <i>keyword</i>
Tree	<b>level-capability</b>
Description	This command configures the routing level capability for an instance of the IS-IS routing process.  The level capability configured on the instance must match the level capability on the interface to form an adjacency.
Options	1, 2, 1/2
Default	1/2
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**multi-topology**

Synopsis	Enter the <b>multi-topology</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <i>isis</i> <i>number</i> <b>segment-routing-v6</b> <b>micro-segment-locator</b> <i>reference</i> <b>multi-topology</b>
Tree	<b>multi-topology</b>
Description	Commands in this context enable the use of a local SRv6 locator in an IS-IS IPv6 topology. A user can enable one or more locators in an IS-IS instance. Each locator can be enabled in a single topology of an IS-IS instance, topology 0 (MT0) or topology 2 (MT2). A local locator can be used in multiple IS-IS instances, but can only be assigned to at most one IPv6 topology independently within each IS-IS instance.  Use the <b>configure router isis segment-routing-v6 admin-state</b> command to enable the processing of local and remote IPv6 prefixes and SRv6 locators in MT0 and MT2. In addition, to enable SRv6 forwarding in the MT0, MT2, or both topologies, set the <b>configure router isis ipv6-routing</b> command to <b>native</b> , the <b>configure router isis multi-topology ipv6-unicast</b> command to <b>true</b> , or both.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**mt0** *boolean*

Synopsis	Support standard topology (MT0)
Context	<b>configure</b> <b>router</b> <i>string</i> <i>isis</i> <i>number</i> <b>segment-routing-v6</b> <b>micro-segment-locator</b> <i>reference</i> <b>multi-topology</b> <b>mt0</b> <i>boolean</i>
Tree	<b>mt0</b>

Default	true
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**mt2 boolean**

Synopsis	Support IPv6 routing topology (MT2)
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">isis</a> <a href="#">number</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment-locator</a> <a href="#">reference</a> <a href="#">multi-topology</a> <b>mt2</b> <i>boolean</i>
Tree	<a href="#">mt2</a>
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**tag number**

Synopsis	Route tag to advertise in the locator
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">isis</a> <a href="#">number</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment-locator</a> <a href="#">reference</a> <b>tag</b> <i>number</i>
Tree	<a href="#">tag</a>
Range	1 to 4294967295
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**standard-multi-instance boolean**

Synopsis	Enable RFC standards compliant multi-instance behavior
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">isis</a> <a href="#">number</a> <a href="#">standard-multi-instance</a> <i>boolean</i>
Tree	<a href="#">standard-multi-instance</a>
Default	false
Introduced	16.0.R1
Platforms	All

**strict-adjacency-check boolean**

Synopsis	Enable strict checking of address families for IS-IS adjacencies
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Context	<b>configure</b> <i>router string isis number strict-adjacency-check boolean</i>
Tree	<a href="#">strict-adjacency-check</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **summary-address** [[ip-prefix](#)] (*ipv4-prefix | ipv6-prefix*)

Synopsis	Enter the <b>summary-address</b> list instance
Context	<b>configure</b> <i>router string isis number summary-address (ipv4-prefix   ipv6-prefix)</i>
Tree	<a href="#">summary-address</a>
Introduced	16.0.R1
Platforms	All

### **[ip-prefix]** (*ipv4-prefix | ipv6-prefix*)

Synopsis	IP prefix for the summary address
Context	<b>configure</b> <i>router string isis number summary-address (ipv4-prefix   ipv6-prefix)</i>
Tree	<a href="#">summary-address</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **algorithm** *number*

Synopsis	Algorithm topology for the summary address
Context	<b>configure</b> <i>router string isis number summary-address (ipv4-prefix   ipv6-prefix) algorithm number</i>
Tree	<a href="#">algorithm</a>
Range	0   128 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**level-capability** *keyword*

Synopsis	IS-IS level for the summary address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>summary-address</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>level-capability</b> <i>keyword</i>
Tree	<b>level-capability</b>
Options	1, 2, 1/2
Default	1/2
Introduced	16.0.R1
Platforms	All

**route-tag** *number*

Synopsis	Route tag assigned to the summary address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>summary-address</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-tag</b> <i>number</i>
Tree	<b>route-tag</b>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

**suppress-attached-bit** *boolean*

Synopsis	Allow IS-IS to suppress setting attached bit on LSPs
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>suppress-attached-bit</b> <i>boolean</i>
Tree	<b>suppress-attached-bit</b>
Default	false
Introduced	16.0.R1
Platforms	All

**system-id** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

Synopsis	System ID
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">system-id</a> <i>string</i>
Tree	<a href="#">system-id</a>
String Length	14
Default	0000.0000.0000
Introduced	16.0.R1
Platforms	All

**timers**

Synopsis	Enter the <b>timers</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">timers</a>
Tree	<a href="#">timers</a>
Introduced	16.0.R1
Platforms	All

**lsp-wait**

Synopsis	Enter the <b>lsp-wait</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">timers</a> <a href="#">lsp-wait</a>
Tree	<a href="#">lsp-wait</a>
Introduced	16.0.R1
Platforms	All

**lsp-initial-wait** *number*

Synopsis	Initial LSP generation delay
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">timers</a> <a href="#">lsp-wait</a> <a href="#">lsp-initial-wait</a> <i>number</i>
Tree	<a href="#">lsp-initial-wait</a>
Range	10 to 100000
Units	milliseconds
Default	10

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Introduced	16.0.R1
Platforms	All

### **lsp-max-wait** *number*

Synopsis	Maximum time between two consecutive LSP occurrences
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">timers</a> <a href="#">lsp-wait</a> <a href="#">lsp-max-wait</a> <i>number</i>
Tree	<a href="#">lsp-max-wait</a>
Range	10 to 120000
Units	milliseconds
Default	5000
Introduced	16.0.R1
Platforms	All

### **lsp-second-wait** *number*

Synopsis	Delay between first and second LSP generation
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">timers</a> <a href="#">lsp-wait</a> <a href="#">lsp-second-wait</a> <i>number</i>
Tree	<a href="#">lsp-second-wait</a>
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

### **spf-wait**

Synopsis	Enter the <b>spf-wait</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">timers</a> <a href="#">spf-wait</a>
Tree	<a href="#">spf-wait</a>
Introduced	16.0.R1
Platforms	All

**spf-initial-wait** *number*

Synopsis	Initial SPF calculation delay after topology change
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>timers</b> <b>spf-wait</b> <b>spf-initial-wait</b> <i>number</i>
Tree	<b>spf-initial-wait</b>
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

**spf-max-wait** *number*

Synopsis	Maximum interval amid two consecutive SPF calculations
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>timers</b> <b>spf-wait</b> <b>spf-max-wait</b> <i>number</i>
Tree	<b>spf-max-wait</b>
Range	10 to 120000
Units	milliseconds
Default	10000
Introduced	16.0.R1
Platforms	All

**spf-second-wait** *number*

Synopsis	Hold time between first and second SPF calculations
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>timers</b> <b>spf-wait</b> <b>spf-second-wait</b> <i>number</i>
Tree	<b>spf-second-wait</b>
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

**traffic-engineering** *boolean*

Synopsis	Enable traffic engineering for the router
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Context	<b>configure</b> <i>router string isis number traffic-engineering boolean</i>
Tree	<a href="#">traffic-engineering</a>
Default	false
Introduced	16.0.R1
Platforms	All

### traffic-engineering-options

Synopsis	Enter the <b>traffic-engineering-options</b> context
Context	<b>configure</b> <i>router string isis number traffic-engineering-options</i>
Tree	<a href="#">traffic-engineering-options</a>
Introduced	19.10.R1
Platforms	All

### advertise-delay *boolean*

Synopsis	Enable the advertisement of link delay for TE
Context	<b>configure</b> <i>router string isis number traffic-engineering-options advertise-delay boolean</i>
Tree	<a href="#">advertise-delay</a>
Description	<p>When configured to <b>true</b>, the router advertises link delay in the IGP LSDB within legacy Traffic Engineering (TE) attributes in IS-IS or within the Application-Specific Link Attribute (ASLA) when ASLA is enabled for SR-TE or RSVP-TE applications.</p> <p>When the <b>application-link-attributes legacy</b> command is configured for SR-TE or RSVP-TE, link delay is advertised as a legacy TE TLV with the ASLA legacy bit set.</p> <p>When configured to <b>false</b>, the router disables link delay advertisement.</p>
Default	false
Introduced	22.10.R1
Platforms	All

### application-link-attributes

Synopsis	Enable the <b>application-link-attributes</b> context
Context	<b>configure</b> <i>router string isis number traffic-engineering-options application-link-attributes</i>
Tree	<a href="#">application-link-attributes</a>
Introduced	19.10.R1
Platforms	All

**legacy** *boolean*

Synopsis	Advertise legacy TE attributes
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">isis</a> <a href="#">number</a> <a href="#">traffic-engineering-options</a> <a href="#">application-link-attributes</a> <b>legacy</b> <i>boolean</i>
Tree	<a href="#">legacy</a>
Description	When configured to <b>true</b> , the router supports the legacy mode of advertising TE attributes. When configured to <b>false</b> , legacy mode is disabled.
Default	false
Introduced	19.10.R1
Platforms	All

**ipv6** *boolean*

Synopsis	Advertise IS-IS IPv6 Traffic Engineering
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">isis</a> <a href="#">number</a> <a href="#">traffic-engineering-options</a> <a href="#">ipv6</a> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	19.10.R1
Platforms	All

**unicast-import**

Synopsis	Enter the <b>unicast-import</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">isis</a> <a href="#">number</a> <b>unicast-import</b>
Tree	<a href="#">unicast-import</a>
Introduced	16.0.R1
Platforms	All

**ipv4** *boolean*

Synopsis	Submit IPv4 routes into unicast RTM
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">isis</a> <a href="#">number</a> <a href="#">unicast-import</a> <a href="#">ipv4</a> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	true

Introduced 16.0.R1  
Platforms All

### **ipv6** *boolean*

Synopsis Submit IPv6 routes into unicast RTM  
Context **configure** *router string isis number unicast-import ipv6 boolean*  
Tree [ipv6](#)  
Default true  
Introduced 16.0.R1  
Platforms All

### **l2tp**

Synopsis Enter the **l2tp** context  
Context **configure** *router string l2tp*  
Tree [l2tp](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of L2TP  
Context **configure** *router string l2tp admin-state keyword*  
Tree [admin-state](#)  
Options enable, disable  
Default disable  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **avp-hiding** *keyword*

Synopsis Attribute of the Value Pair (AVP) hiding algorithm  
Context **configure** *router string l2tp avp-hiding keyword*  
Tree [avp-hiding](#)

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Options	sensitive, always
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **challenge** *boolean*

Synopsis	Use challenge-response authentication
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>challenge</b> <i>boolean</i>
Tree	<b>challenge</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **destruct-timeout** *number*

Synopsis	Destruction timeout
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>destruct-timeout</b> <i>number</i>
Tree	<b>destruct-timeout</b>
Range	60 to 86400
Units	seconds
Default	60
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ethernet-tunnel**

Synopsis	Enter the <b>ethernet-tunnel</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>ethernet-tunnel</b>
Tree	<b>ethernet-tunnel</b>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **reconnect-timeout** (*number* | *keyword*)

Synopsis	Timeout for a session setup retry
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Context	<b>configure</b> <i>router string l2tp ethernet-tunnel reconnect-timeout</i> ( <i>number   keyword</i> )
Tree	<a href="#">reconnect-timeout</a>
Range	10 to 3600
Units	seconds
Options	infinite
Default	infinite
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### exclude-avps

Synopsis	Enter the <b>exclude-avps</b> context
Context	<b>configure</b> <i>router string l2tp exclude-avps</i>
Tree	<a href="#">exclude-avps</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### calling-number *boolean*

Synopsis	Calling Number AVP to exclude
Context	<b>configure</b> <i>router string l2tp exclude-avps calling-number boolean</i>
Tree	<a href="#">calling-number</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### initial-rx-lcp-conf-req *boolean*

Synopsis	Exclude the Initial Received LCP CONFREQ AVP
Context	<b>configure</b> <i>router string l2tp exclude-avps initial-rx-lcp-conf-req boolean</i>
Tree	<a href="#">initial-rx-lcp-conf-req</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



## failover

Synopsis	Enter the <b>failover</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">failover</a>
Tree	<a href="#">failover</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## recovery-max-session-lifetime *number*

Synopsis	Subset of sessions that this system attempts to synchronize in the Session State Synchronization phase
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">failover</a> <a href="#">recovery-max-session-lifetime</a> <i>number</i>
Tree	<a href="#">recovery-max-session-lifetime</a>
Range	2 to 4294967295
Units	centiseconds
Default	2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## recovery-method *keyword*

Synopsis	Recovery method of the sequence numbers after failover
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">failover</a> <a href="#">recovery-method</a> <i>keyword</i>
Tree	<a href="#">recovery-method</a>
Options	mcs, recovery-tunnel
Default	mcs
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## recovery-time *number*

Synopsis	Time requested from the L2TP peer before assuming failover as failed
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">failover</a> <a href="#">recovery-time</a> <i>number</i>
Tree	<a href="#">recovery-time</a>

Range	0 to 900
Units	seconds
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **track-srrp** [*id*] *reference*

Synopsis	Enter the <b>track-srrp</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp failover track-srrp reference</a>
Tree	<a href="#">track-srrp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[id]** *reference*

Synopsis	SRRP instance ID for multi-chassis redundancy failover
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp failover track-srrp reference</a>
Tree	<a href="#">track-srrp</a>
Reference	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">sync track-srrp number</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **peer** *reference*

Synopsis	Multi-chassis peer address
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp failover track-srrp reference peer reference</a>
Tree	<a href="#">peer</a>
Reference	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sync-tag** *string*

Synopsis	Synchronization tag on the multi-chassis peer
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>failover</b> <b>track-srrp</b> <i>reference</i> <b>sync-tag</b> <i>string</i>
Tree	<b>sync-tag</b>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**group** [**tunnel-group-name**] *string*

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i>
Tree	<b>group</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[tunnel-group-name]** *string*

Synopsis	Tunnel group name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i>
Tree	<b>group</b>
String Length	1 to 63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the L2TP tunnel group
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **avp-hiding** *keyword*

Synopsis The AVP hiding algorithm  
Context **configure** *router string l2tp group string avp-hiding keyword*  
Tree [avp-hiding](#)  
Options never, sensitive, always  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **challenge** *keyword*

Synopsis Enable use of challenge-response authentication  
Context **configure** *router string l2tp group string challenge keyword*  
Tree [challenge](#)  
Options false, true  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
Context **configure** *router string l2tp group string description string*  
Tree [description](#)  
String Length 1 to 80  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **destruct-timeout** *number*

Synopsis Destruction timeout  
Context **configure** *router string l2tp group string destruct-timeout number*  
Tree [destruct-timeout](#)

Range	60 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ethernet-tunnel

Synopsis	Enter the <b>ethernet-tunnel</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">ethernet-tunnel</a>
Tree	<a href="#">ethernet-tunnel</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## reconnect-timeout (*number* | *keyword*)

Synopsis	Timeout for a session setup retry at group level
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">ethernet-tunnel</a> <a href="#">reconnect-timeout</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">reconnect-timeout</a>
Range	10 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## failover

Synopsis	Enter the <b>failover</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">failover</a>
Tree	<a href="#">failover</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## recovery-method *keyword*

Synopsis	Recovery method of the sequence numbers after failover
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Context	<b>configure</b> <i>router string l2tp group string failover recovery-method keyword</i>
Tree	<a href="#">recovery-method</a>
Options	mcs, recovery-tunnel
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **recovery-time** *number*

Synopsis	Time requested from the L2TP peer before assuming failover as failed
Context	<b>configure</b> <i>router string l2tp group string failover recovery-time number</i>
Tree	<a href="#">recovery-time</a>
Range	0 to 900
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **hello-interval** (*number | keyword*)

Synopsis	Hello interval
Context	<b>configure</b> <i>router string l2tp group string hello-interval (number   keyword)</i>
Tree	<a href="#">hello-interval</a>
Range	10 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **idle-timeout** (*number | keyword*)

Synopsis	Idle timeout
Context	<b>configure</b> <i>router string l2tp group string idle-timeout (number   keyword)</i>
Tree	<a href="#">idle-timeout</a>
Range	0 to 3600
Units	seconds
Options	infinite

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **I2tpv3**

Synopsis	Enter the <b>I2tpv3</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">I2tp</a> <a href="#">group</a> <a href="#">string</a> <a href="#">I2tpv3</a>
Tree	<a href="#">I2tpv3</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **cookie-length** (*number* | *keyword*)

Synopsis	Cookie field length
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">I2tp</a> <a href="#">group</a> <a href="#">string</a> <a href="#">I2tpv3</a> <a href="#">cookie-length</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cookie-length</a>
Range	4   8
Options	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **digest-type** *keyword*

Synopsis	Hashing algorithm that calculates the message digest
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">I2tp</a> <a href="#">group</a> <a href="#">string</a> <a href="#">I2tpv3</a> <a href="#">digest-type</a> <i>keyword</i>
Tree	<a href="#">digest-type</a>
Options	none, md5, sha1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **nonce-length** *number*

Synopsis	Length for the local L2TPv3 nonce (random number)
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">I2tp</a> <a href="#">group</a> <a href="#">string</a> <a href="#">I2tpv3</a> <a href="#">nonce-length</a> <i>number</i>
Tree	<a href="#">nonce-length</a>

Range	0   16 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **password** *string*

Synopsis	L2TPv3 password
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <i>group</i> <i>string</i> <a href="#">l2tpv3</a> <a href="#">password</a> <i>string</i>
Tree	<a href="#">password</a>
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **private-tcp-mss-adjust** (*number* | *keyword*)

Synopsis	TCP maximum segment size (MSS) on private network
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <i>group</i> <i>string</i> <a href="#">l2tpv3</a> <a href="#">private-tcp-mss-adjust</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">private-tcp-mss-adjust</a>
Range	512 to 9000
Units	octets
Options	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **public-tcp-mss-adjust** (*number* | *keyword*)

Synopsis	TCP Maximum Segment Size (MSS) on public network
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <i>group</i> <i>string</i> <a href="#">l2tpv3</a> <a href="#">public-tcp-mss-adjust</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">public-tcp-mss-adjust</a>
Range	512 to 9000
Units	octets
Options	disable
Introduced	16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## pw-cap-list

Synopsis Enter the **pw-cap-list** context

Context **configure** [router](#) [string l2tp group](#) [string l2tpv3](#) [pw-cap-list](#)

Tree [pw-cap-list](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ethernet *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Advertise Ethernet pseudowire type

Context **configure** [router](#) [string l2tp group](#) [string l2tpv3](#) [pw-cap-list](#) [ethernet](#) *boolean*

Tree [ethernet](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ethernet-vlan *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Advertise Ethernet VLAN pseudowire type

Context **configure** [router](#) [string l2tp group](#) [string l2tpv3](#) [pw-cap-list](#) [ethernet-vlan](#) *boolean*

Tree [ethernet-vlan](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**rem-router-id** *string*

Synopsis	Filter on remote router ID
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>l2tpv3</b> <b>rem-router-id</b> <i>string</i>
Tree	<b>rem-router-id</b>
Default	0.0.0.0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**track-password-change** *boolean*

Synopsis	Enable tracking of password changes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>l2tpv3</b> <b>track-password-change</b> <i>boolean</i>
Tree	<b>track-password-change</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**lac**

Synopsis	Enter the <b>lac</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>lac</b>
Tree	<b>lac</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**df-bit** *keyword*

Synopsis	DF (do not fragment) bit in data traffic transmitted as LAC
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>lac</b> <b>df-bit</b> <i>keyword</i>
Tree	<b>df-bit</b>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## Ins

Synopsis	Enter the <b>Ins</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <i>group</i> <i>string</i> <a href="#">Ins</a>
Tree	<a href="#">Ins</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## Ins-group *reference*

Synopsis	ISA LNS group
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <i>group</i> <i>string</i> <a href="#">Ins</a> <a href="#">Ins-group</a> <i>reference</i>
Tree	<a href="#">Ins-group</a>
Reference	<b>configure</b> <a href="#">isa</a> <a href="#">Ins-group</a> <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## load-balance-method *keyword*

Synopsis	New sessions for L2TP ISA MDA
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <i>group</i> <i>string</i> <a href="#">Ins</a> <a href="#">load-balance-method</a> <i>keyword</i>
Tree	<a href="#">load-balance-method</a>
Options	per-session, per-tunnel
Default	per-session
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## mlppp

Synopsis	Enter the <b>mlppp</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <i>group</i> <i>string</i> <a href="#">Ins</a> <a href="#">mlppp</a>
Tree	<a href="#">mlppp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

**admin-state** *keyword*

Synopsis	Administrative state of MLPPP in the L2TP tunnel group
Context	<b>configure</b> <b>router</b> <i>string l2tp group string lns mlppp admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

**endpoint**

Synopsis	Enter the <b>endpoint</b> context
Context	<b>configure</b> <b>router</b> <i>string l2tp group string lns mlppp endpoint</i>
Tree	<a href="#">endpoint</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

**ip** (*ipv4-address* | *keyword*)

Synopsis	Endpoint ID as an IP address
Context	<b>configure</b> <b>router</b> <i>string l2tp group string lns mlppp endpoint ip (ipv4-address   keyword)</i>
Tree	<a href="#">ip</a>
Options	system
Notes	The following elements are part of a choice: <b>ip</b> or <b>mac</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

**mac** (*mac-address* | *keyword*)

Synopsis	Endpoint ID as a MAC address
Context	<b>configure</b> <b>router</b> <i>string l2tp group string lns mlppp endpoint mac (mac-address   keyword)</i>
Tree	<a href="#">mac</a>
Options	system
Notes	The following elements are part of a choice: <b>ip</b> or <b>mac</b> .

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **interleave** *boolean*

Synopsis Enable link fragmentation and interleaving  
Context **configure** *router string l2tp group string lns mlppp interleave boolean*  
Tree [interleave](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **max-fragment-delay** (*number | keyword*)

Synopsis Maximum fragment delay caused by transmission on a link  
Context **configure** *router string l2tp group string lns mlppp max-fragment-delay (number | keyword)*  
Tree [max-fragment-delay](#)  
Range 5 to 1000  
Units milliseconds  
Options no-fragmentation  
Default no-fragmentation  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **max-links** *number*

Synopsis Maximum MLPPP links  
Context **configure** *router string l2tp group string lns mlppp max-links number*  
Tree [max-links](#)  
Range 1 to 8  
Default 1  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

**reassemble-timeout** *number*

Synopsis	Reassembly timeout
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <i>group</i> <i>string</i> <b>lns</b> <b>mlppp</b> <b>reassemble-timeout</b> <i>number</i>
Tree	<a href="#">reassemble-timeout</a>
Range	100   1000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

**short-sequence-numbers** *boolean*

Synopsis	Request a peer to send short sequence numbers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <i>group</i> <i>string</i> <b>lns</b> <b>mlppp</b> <b>short-sequence-numbers</b> <i>boolean</i>
Tree	<a href="#">short-sequence-numbers</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

**ppp**

Synopsis	Enter the <b>ppp</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <i>group</i> <i>string</i> <b>lns</b> <b>ppp</b>
Tree	<a href="#">ppp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**authentication** *keyword*

Synopsis	PPP authentication protocol to negotiate
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <i>group</i> <i>string</i> <b>lns</b> <b>ppp</b> <b>authentication</b> <i>keyword</i>
Tree	<a href="#">authentication</a>
Options	pap, chap, pref-chap, pref-pap
Default	pref-chap
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **authentication-policy** *string*

Synopsis Authentication policy when a DHCP message is received  
 Context **configure** [router](#) *string* [l2tp group](#) *string* [lns ppp authentication-policy](#) *string*  
 Tree [authentication-policy](#)  
 String Length 1 to 32  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **chap-challenge-length**

Synopsis Enter the **chap-challenge-length** context  
 Context **configure** [router](#) *string* [l2tp group](#) *string* [lns ppp chap-challenge-length](#)  
 Tree [chap-challenge-length](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **end** *number*

Synopsis Upper bound of the PPP CHAP challenge length  
 Context **configure** [router](#) *string* [l2tp group](#) *string* [lns ppp chap-challenge-length](#) *end number*  
 Tree [end](#)  
 Range 8 to 64  
 Units octets  
 Default 64  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **start** *number*

Synopsis Lower bound of the PPP CHAP challenge length  
 Context **configure** [router](#) *string* [l2tp group](#) *string* [lns ppp chap-challenge-length](#) *start number*  
 Tree [start](#)

Range	8 to 64
Units	octets
Default	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **default-group-interface**

Synopsis	Enter the <b>default-group-interface</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">ins</a> <a href="#">ppp</a> <a href="#">default-group-interface</a>
Tree	<a href="#">default-group-interface</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **interface** *string*

Synopsis	Group interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">ins</a> <a href="#">ppp</a> <a href="#">default-group-interface</a> <a href="#">interface</a> <i>string</i>
Tree	<a href="#">interface</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **service-name** *string*

Synopsis	Administrative service name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">ins</a> <a href="#">ppp</a> <a href="#">default-group-interface</a> <a href="#">service-name</a> <i>string</i>
Tree	<a href="#">service-name</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipcp-subnet-negotiation** *boolean*

Synopsis	Allow IPCP subnet negotiation for PPPoE hosts
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Context	<b>configure</b> <i>router string l2tp group string lns ppp ipcp-subnet-negotiation boolean</i>
Tree	<a href="#">ipcp-subnet-negotiation</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## keepalive

Synopsis	Enter the <b>keepalive</b> context
Context	<b>configure</b> <i>router string l2tp group string lns ppp keepalive</i>
Tree	<a href="#">keepalive</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## interval *number*

Synopsis	PPP keepalive interval
Context	<b>configure</b> <i>router string l2tp group string lns ppp keepalive interval number</i>
Tree	<a href="#">interval</a>
Range	10 to 300
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## multiplier *number*

Synopsis	PPP keepalive multiplier
Context	<b>configure</b> <i>router string l2tp group string lns ppp keepalive multiplier number</i>
Tree	<a href="#">multiplier</a>
Range	1 to 5
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **lcp-force-ack-accm** *boolean*

Synopsis	Force acknowledgement of the LCP Asynchronous Control Character Map (ACCM) option
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>ins</b> <b>ppp</b> <b>lcp-force-ack-accm</b> <i>boolean</i>
Tree	<a href="#">lcp-force-ack-accm</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **lcp-ignore-magic-numbers** *boolean*

Synopsis	Check magic number in echo request and reply messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>ins</b> <b>ppp</b> <b>lcp-ignore-magic-numbers</b> <i>boolean</i>
Tree	<a href="#">lcp-ignore-magic-numbers</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mtu** *number*

Synopsis	Maximum PPP MTU size
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>ins</b> <b>ppp</b> <b>mtu</b> <i>number</i>
Tree	<a href="#">mtu</a>
Range	512 to 9212
Units	octets
Default	1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **proxy-authentication** *boolean*

Synopsis	Use authentication AVPs that are received from LAC
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>ins</b> <b>ppp</b> <b>proxy-authentication</b> <i>boolean</i>
Tree	<a href="#">proxy-authentication</a>

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**proxy-lcp** *boolean*

Synopsis	Proxy LCP AVPs that are received from LAC
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <i>group</i> <i>string</i> <a href="#">ins</a> <a href="#">ppp</a> <a href="#">proxy-lcp</a> <i>boolean</i>
Tree	<a href="#">proxy-lcp</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**reject-disabled-ncp** *boolean*

Synopsis	Force LCP Protocol Reject for IPv6CP Configure Request
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <i>group</i> <i>string</i> <a href="#">ins</a> <a href="#">ppp</a> <a href="#">reject-disabled-ncp</a> <i>boolean</i>
Tree	<a href="#">reject-disabled-ncp</a>
Default	false
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**user-db** *string*

Synopsis	Local user database for PPP PAP and CHAP authentication
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <i>group</i> <i>string</i> <a href="#">ins</a> <a href="#">ppp</a> <a href="#">user-db</a> <i>string</i>
Tree	<a href="#">user-db</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**local-address** *string*

Synopsis	Local address
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <i>group</i> <i>string</i> <a href="#">local-address</a> <i>string</i>

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Tree	<a href="#">local-address</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **local-name** *string*

Synopsis	Local host name used to distinguish tunnels
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">local-name</a> <i>string</i>
Tree	<a href="#">local-name</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max-retries-estab** *number*

Synopsis	Maximum retries for established tunnels
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">max-retries-estab</a> <i>number</i>
Tree	<a href="#">max-retries-estab</a>
Range	2 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max-retries-not-estab** *number*

Synopsis	Maximum retries for unestablished tunnels
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">max-retries-not-estab</a> <i>number</i>
Tree	<a href="#">max-retries-not-estab</a>
Range	2 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **password** *string*

Synopsis	Password between L2TP LAC and LNS
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">password</a> <i>string</i>

Tree	<a href="#">password</a>
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **protocol** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Protocol version
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">protocol</a> <i>keyword</i>
Tree	<a href="#">protocol</a>
Options	v2, v3, v3draft
Default	v2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-accounting-policy** *reference*

Synopsis	RADIUS accounting policy
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">radius-accounting-policy</a> <i>reference</i>
Tree	<a href="#">radius-accounting-policy</a>
Reference	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">l2tp-accounting-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **receive-window-size** *number*

Synopsis	L2TP receive window size
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">receive-window-size</a> <i>number</i>
Tree	<a href="#">receive-window-size</a>
Range	4 to 1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**session-assign-method** *keyword*

Synopsis	Session assignment method
Context	<b>configure</b> <i>router string l2tp group string session-assign-method keyword</i>
Tree	<a href="#">session-assign-method</a>
Options	existing-first, weighted, weighted-random
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**session-limit** (*number | keyword*)

Synopsis	Session limit
Context	<b>configure</b> <i>router string l2tp group string session-limit (number   keyword)</i>
Tree	<a href="#">session-limit</a>
Range	1 to 250000
Options	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**tunnel** [*tunnel-name*] *string*

Synopsis	Enter the <b>tunnel</b> list instance
Context	<b>configure</b> <i>router string l2tp group string tunnel string</i>
Tree	<a href="#">tunnel</a>
Max. Instances	31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[tunnel-name]** *string*

Synopsis	Tunnel name
Context	<b>configure</b> <i>router string l2tp group string tunnel string</i>
Tree	<a href="#">tunnel</a>
String Length	1 to 32

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the L2TP tunnel
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <i>group</i> <i>string</i> <b>tunnel</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **auto-establish** *boolean*

Synopsis	Allow the tunnel to be automatically set up by the system
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <i>group</i> <i>string</i> <b>tunnel</b> <i>string</i> <b>auto-establish</b> <i>boolean</i>
Tree	<b>auto-establish</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **avp-hiding** *keyword*

Synopsis	The AVP hiding algorithm
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <i>group</i> <i>string</i> <b>tunnel</b> <i>string</i> <b>avp-hiding</b> <i>keyword</i>
Tree	<b>avp-hiding</b>
Options	never, sensitive, always
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **challenge** *keyword*

Synopsis	Enable use of challenge-response authentication
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">challenge</a> <i>keyword</i>
Tree	<a href="#">challenge</a>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **destruct-timeout** *number*

Synopsis	Destruction timeout
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">destruct-timeout</a> <i>number</i>
Tree	<a href="#">destruct-timeout</a>
Range	60 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **failover**

Synopsis	Enter the <b>failover</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">failover</a>
Tree	<a href="#">failover</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**recovery-method** *keyword*

Synopsis	Recovery method of the sequence numbers after failover
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <i>group</i> <i>string</i> <b>tunnel</b> <i>string</i> <b>failover</b> <b>recovery-method</b> <i>keyword</i>
Tree	<b>recovery-method</b>
Options	mcs, recovery-tunnel
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**recovery-time** *number*

Synopsis	Time requested from the L2TP peer before assuming failover as failed
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <i>group</i> <i>string</i> <b>tunnel</b> <i>string</i> <b>failover</b> <b>recovery-time</b> <i>number</i>
Tree	<b>recovery-time</b>
Range	0 to 900
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**hello-interval** (*number* | *keyword*)

Synopsis	Hello interval
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <i>group</i> <i>string</i> <b>tunnel</b> <i>string</i> <b>hello-interval</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>hello-interval</b>
Range	10 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**idle-timeout** (*number* | *keyword*)

Synopsis	Idle timeout
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <i>group</i> <i>string</i> <b>tunnel</b> <i>string</i> <b>idle-timeout</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>idle-timeout</b>
Range	0 to 3600

Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## I2tpv3

Synopsis	Enter the <b>I2tpv3</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">I2tp</a> <i>group</i> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">I2tpv3</a>
Tree	<a href="#">I2tpv3</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## private-tcp-mss-adjust (*number* | *keyword*)

Synopsis	TCP maximum segment size (MSS) on private network
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">I2tp</a> <i>group</i> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">I2tpv3</a> <a href="#">private-tcp-mss-adjust</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">private-tcp-mss-adjust</a>
Range	512 to 9000
Units	octets
Options	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## public-tcp-mss-adjust (*number* | *keyword*)

Synopsis	TCP maximum segment size (MSS) on public network
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">I2tp</a> <i>group</i> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">I2tpv3</a> <a href="#">public-tcp-mss-adjust</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">public-tcp-mss-adjust</a>
Range	512 to 9000
Units	octets
Options	disable
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## lac

Synopsis Enter the **lac** context

Context **configure** *router string l2tp group string tunnel string lac*

Tree [lac](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## df-bit keyword

Synopsis DF (do not fragment) bit in data traffic transmitted as LAC

Context **configure** *router string l2tp group string tunnel string lac df-bit keyword*

Tree [df-bit](#)

Options false, true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## lns

Synopsis Enter the **lns** context

Context **configure** *router string l2tp group string tunnel string lns*

Tree [lns](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## lns-group reference

Synopsis ISA LNS group

Context **configure** *router string l2tp group string tunnel string lns lns-group reference*

Tree [lns-group](#)

Reference **configure** *isa lns-group number*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**load-balance-method** *keyword*

Synopsis	New sessions for L2TP ISA MDA
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns</b> <b>load-balance-method</b> <i>keyword</i>
Tree	<b>load-balance-method</b>
Options	per-session, per-tunnel
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mlppp**

Synopsis	Enter the <b>mlppp</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns</b> <b>mlppp</b>
Tree	<b>mlppp</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

**admin-state** *keyword*

Synopsis	Administrative state of MLPPP in the L2TP tunnel
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns</b> <b>mlppp</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

**endpoint**

Synopsis	Enter the <b>endpoint</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns</b> <b>mlppp</b> <b>endpoint</b>
Tree	<b>endpoint</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

**ip** (*ipv4-address* | *keyword*)

Synopsis	Endpoint ID as an IP address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns mlppp endpoint ip</b> ( <i>ipv4-address</i>   <i>keyword</i> )
Tree	<a href="#">ip</a>
Options	system
Notes	The following elements are part of a choice: <b>ip</b> or <b>mac</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

**mac** (*mac-address* | *keyword*)

Synopsis	Endpoint ID as a MAC address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns mlppp endpoint mac</b> ( <i>mac-address</i>   <i>keyword</i> )
Tree	<a href="#">mac</a>
Options	system
Notes	The following elements are part of a choice: <b>ip</b> or <b>mac</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

**interleave** *keyword*

Synopsis	Use of Link fragmentation and interleaving
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns mlppp interleave</b> <i>keyword</i>
Tree	<a href="#">interleave</a>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

**max-fragment-delay** *number*

Synopsis	Maximum fragment delay caused by transmission on a link
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns mlppp max-fragment-delay</b> <i>number</i>
Tree	<a href="#">max-fragment-delay</a>

Range	5 to 1000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **max-links** *number*

Synopsis	Maximum MLPPP links
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lns</a> <a href="#">mlppp</a> <b>max-links</b> <i>number</i>
Tree	<a href="#">max-links</a>
Range	1 to 8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **reassemble-timeout** *number*

Synopsis	Reassembly timeout
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lns</a> <a href="#">mlppp</a> <b>reassemble-timeout</b> <i>number</i>
Tree	<a href="#">reassemble-timeout</a>
Range	100   1000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **short-sequence-numbers** *keyword*

Synopsis	Request a peer to send short sequence numbers
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lns</a> <a href="#">mlppp</a> <b>short-sequence-numbers</b> <i>keyword</i>
Tree	<a href="#">short-sequence-numbers</a>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

## ppp

Synopsis	Enter the <b>ppp</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <i>group</i> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">Ins</a> <a href="#">ppp</a>
Tree	<a href="#">ppp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## authentication *keyword*

Synopsis	PPP authentication protocol to negotiate
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <i>group</i> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">Ins</a> <a href="#">ppp</a> <a href="#">authentication</a> <i>keyword</i>
Tree	<a href="#">authentication</a>
Options	pap, chap, pref-chap, pref-pap
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## authentication-policy *string*

Synopsis	Authentication policy when a DHCP message is received
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <i>group</i> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">Ins</a> <a href="#">ppp</a> <a href="#">authentication-policy</a> <i>string</i>
Tree	<a href="#">authentication-policy</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## chap-challenge-length

Synopsis	Enter the <b>chap-challenge-length</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <i>group</i> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">Ins</a> <a href="#">ppp</a> <a href="#">chap-challenge-length</a>
Tree	<a href="#">chap-challenge-length</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end number**

Synopsis	Upper bound of the PPP CHAP challenge length
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>ins</b> <b>ppp</b> <b>chap-challenge-length</b> <b>end</b> <b>number</b>
Tree	<b>end</b>
Range	8 to 64
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**start number**

Synopsis	Lower bound of the PPP CHAP challenge length
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>ins</b> <b>ppp</b> <b>chap-challenge-length</b> <b>start</b> <b>number</b>
Tree	<b>start</b>
Range	8 to 64
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**default-group-interface**

Synopsis	Enter the <b>default-group-interface</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>ins</b> <b>ppp</b> <b>default-group-interface</b>
Tree	<b>default-group-interface</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**interface string**

Synopsis	Group interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>ins</b> <b>ppp</b> <b>default-group-interface</b> <b>interface</b> <i>string</i>
Tree	<b>interface</b>
String Length	1 to 32



Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **service-name** *string*

Synopsis Administrative service name  
 Context **configure** [router](#) *string* [l2tp](#) [group](#) *string* [tunnel](#) *string* [lns](#) [ppp](#) [default-group-interface](#) [service-name](#) *string*  
 Tree [service-name](#)  
 String Length 1 to 64  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipcp-subnet-negotiation** *keyword*

Synopsis Use of IPCP subnet negotiation for PPPoE hosts  
 Context **configure** [router](#) *string* [l2tp](#) [group](#) *string* [tunnel](#) *string* [lns](#) [ppp](#) [ipcp-subnet-negotiation](#) *keyword*  
 Tree [ipcp-subnet-negotiation](#)  
 Options false, true  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **keepalive**

Synopsis Enter the **keepalive** context  
 Context **configure** [router](#) *string* [l2tp](#) [group](#) *string* [tunnel](#) *string* [lns](#) [ppp](#) [keepalive](#)  
 Tree [keepalive](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **interval** *number*

Synopsis PPP keepalive interval  
 Context **configure** [router](#) *string* [l2tp](#) [group](#) *string* [tunnel](#) *string* [lns](#) [ppp](#) [keepalive](#) *interval* *number*  
 Tree [interval](#)

Range	10 to 300
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **multiplier** *number*

Synopsis	PPP keepalive multiplier
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">ins</a> <a href="#">ppp</a> <a href="#">keepalive</a> <a href="#">multiplier</a> <i>number</i>
Tree	<a href="#">multiplier</a>
Range	1 to 5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **lcp-force-ack-accm** *keyword*

Synopsis	Forced acknowledgement of the LCP Asynchronous Control Character Map (ACCM) option
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">ins</a> <a href="#">ppp</a> <a href="#">lcp-force-ack-accm</a> <i>keyword</i>
Tree	<a href="#">lcp-force-ack-accm</a>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **lcp-ignore-magic-numbers** *keyword*

Synopsis	Magic-Number field in LCP Echo-Request and LCP Echo-Reply messages that are checked
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">ins</a> <a href="#">ppp</a> <a href="#">lcp-ignore-magic-numbers</a> <i>keyword</i>
Tree	<a href="#">lcp-ignore-magic-numbers</a>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mtu number**

Synopsis	Maximum PPP MTU size
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lns</a> <a href="#">ppp</a> <i>mtu number</i>
Tree	<a href="#">mtu</a>
Range	512 to 9212
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**proxy-authentication keyword**

Synopsis	Authentication AVPs that are received from LAC
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lns</a> <a href="#">ppp</a> <a href="#">proxy-authentication</a> <i>keyword</i>
Tree	<a href="#">proxy-authentication</a>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**proxy-lcp keyword**

Synopsis	Use the Proxy LCP AVPs that are received from the LAC
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lns</a> <a href="#">ppp</a> <a href="#">proxy-lcp</a> <i>keyword</i>
Tree	<a href="#">proxy-lcp</a>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**reject-disabled-ncp keyword**

Synopsis	Force LCP Project Reject for IPv6CP Configure Request
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lns</a> <a href="#">ppp</a> <a href="#">reject-disabled-ncp</a> <i>keyword</i>
Tree	<a href="#">reject-disabled-ncp</a>
Options	false, true

Introduced 16.0.R6  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **user-db** *string*

Synopsis Local user database for PPP PAP and CHAP authentication  
Context **configure** [router](#) *string* [l2tp](#) [group](#) *string* [tunnel](#) *string* [ins](#) [ppp](#) **user-db** *string*  
Tree [user-db](#)  
String Length 1 to 32  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **local-address** *string*

Synopsis Local address  
Context **configure** [router](#) *string* [l2tp](#) [group](#) *string* [tunnel](#) *string* **local-address** *string*  
Tree [local-address](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **local-name** *string*

Synopsis Local host name used to distinguish tunnels  
Context **configure** [router](#) *string* [l2tp](#) [group](#) *string* [tunnel](#) *string* **local-name** *string*  
Tree [local-name](#)  
String Length 1 to 64  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max-retries-estab** *number*

Synopsis Maximum retries for established tunnels  
Context **configure** [router](#) *string* [l2tp](#) [group](#) *string* [tunnel](#) *string* **max-retries-estab** *number*  
Tree [max-retries-estab](#)  
Range 2 to 7

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max-retries-not-estab** *number*

Synopsis Maximum retries for unestablished tunnels  
 Context **configure** *router string l2tp group string tunnel string max-retries-not-estab number*  
 Tree [max-retries-not-estab](#)  
 Range 2 to 7  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **password** *string*

Synopsis Password between L2TP LAC and LNS  
 Context **configure** *router string l2tp group string tunnel string password string*  
 Tree [password](#)  
 String Length 1 to 115  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **peer** *string*

Synopsis Peer address  
 Context **configure** *router string l2tp group string tunnel string peer string*  
 Tree [peer](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **preference** *number*

Synopsis Tunnel preference number with its group  
 Context **configure** *router string l2tp group string tunnel string preference number*  
 Tree [preference](#)  
 Range 0 to 16777215

Default	50
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-accounting-policy** *reference*

Synopsis	RADIUS accounting policy
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <i>group</i> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">radius-accounting-policy</a> <i>reference</i>
Tree	<a href="#">radius-accounting-policy</a>
Reference	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">l2tp-accounting-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **receive-window-size** *number*

Synopsis	L2TP receive window size
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <i>group</i> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">receive-window-size</a> <i>number</i>
Tree	<a href="#">receive-window-size</a>
Range	4 to 1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **remote-name** *string*

Synopsis	Remote tunnel host name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <i>group</i> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">remote-name</a> <i>string</i>
Tree	<a href="#">remote-name</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **session-limit** (*number* | *keyword*)

Synopsis	L2TP session limit for each tunnel of this router
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <i>group</i> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">session-limit</a> ( <i>number</i>   <i>keyword</i> )

Tree	<a href="#">session-limit</a>
Range	1 to 65534
Options	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **group-session-limit** *number*

Synopsis	L2TP session limit for each group of this router
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group-session-limit</a> <i>number</i>
Tree	<a href="#">group-session-limit</a>
Range	1 to 250000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **hello-interval** (*number* | *keyword*)

Synopsis	Hello interval
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">hello-interval</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">hello-interval</a>
Range	10 to 3600
Units	seconds
Options	infinite
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **idle-timeout** (*number* | *keyword*)

Synopsis	Idle timeout
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">idle-timeout</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">idle-timeout</a>
Range	0 to 3600
Units	seconds
Options	infinite

Default	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### ignore-avps

Synopsis	Enter the <b>ignore-avps</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">ignore-avps</a>
Tree	<a href="#">ignore-avps</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### sequencing-required *boolean*

Synopsis	Ignore Sequencing Required AVP
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">ignore-avps</a> <a href="#">sequencing-required</a> <i>boolean</i>
Tree	<a href="#">sequencing-required</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### l2tpv3

Synopsis	Enter the <b>l2tpv3</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">l2tpv3</a>
Tree	<a href="#">l2tpv3</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### cookie-length *number*

Synopsis	Cookie field length
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">l2tpv3</a> <a href="#">cookie-length</a> <i>number</i>
Tree	<a href="#">cookie-length</a>
Range	4   8



Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **digest-type** *keyword*

Synopsis Hashing algorithm that calculates the message digest  
Context **configure** *router string l2tp l2tpv3 digest-type keyword*  
Tree [digest-type](#)  
Options md5, sha1  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **nonce-length** *number*

Synopsis Length of the local L2TPv3 nonce (random number)  
Context **configure** *router string l2tp l2tpv3 nonce-length number*  
Tree [nonce-length](#)  
Range 0 | 16 to 64  
Default 0  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **password** *string*

Synopsis L2TPv3 password  
Context **configure** *router string l2tp l2tpv3 password string*  
Tree [password](#)  
String Length 1 to 115  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **private-tcp-mss-adjust** *number*

Synopsis TCP maximum segment size (MSS) on private network  
Context **configure** *router string l2tp l2tpv3 private-tcp-mss-adjust number*

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Tree	<a href="#">private-tcp-mss-adjust</a>
Range	512 to 9000
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **public-tcp-mss-adjust** *number*

Synopsis	TCP maximum segment size (MSS) on public network
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">l2tpv3</a> <a href="#">public-tcp-mss-adjust</a> <i>number</i>
Tree	<a href="#">public-tcp-mss-adjust</a>
Range	512 to 9000
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **transport-type**

Synopsis	Enter the <b>transport-type</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">l2tpv3</a> <a href="#">transport-type</a>
Tree	<a href="#">transport-type</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ip** *boolean*

Synopsis	Use IP as the transport type for the L2TPv3 tunnel
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">l2tpv3</a> <a href="#">transport-type</a> <a href="#">ip</a> <i>boolean</i>
Tree	<a href="#">ip</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## lac

Synopsis	Enter the <b>lac</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">lac</a>
Tree	<a href="#">lac</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## calling-number-format *string*

Synopsis	Calling Number AVP for L2TP control messages
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">lac</a> <a href="#">calling-number-format</a> <a href="#">string</a>
Tree	<a href="#">calling-number-format</a>
String Length	1 to 255
Default	%S %s
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## cisco-nas-port

Synopsis	Enter the <b>cisco-nas-port</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">lac</a> <a href="#">cisco-nas-port</a>
Tree	<a href="#">cisco-nas-port</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ethernet *string*

Synopsis	L2TP Cisco NAS port AVP with binary patterns for Ethernet
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">lac</a> <a href="#">cisco-nas-port</a> <a href="#">ethernet</a> <a href="#">string</a>
Tree	<a href="#">ethernet</a>
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**df-bit** *boolean*

Synopsis	Send all L2TP packets with DF bit set to 1
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp lac df-bit</b> <i>boolean</i>
Tree	<b>df-bit</b>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**local-address** *string*

Synopsis	Local address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp local-address</b> <i>string</i>
Tree	<b>local-address</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**local-name** *string*

Synopsis	Local host name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp local-name</b> <i>string</i>
Tree	<b>local-name</b>
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**max-retries-estab** *number*

Synopsis	Maximum retries for established tunnels
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp max-retries-estab</b> <i>number</i>
Tree	<b>max-retries-estab</b>
Range	2 to 7
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**max-retries-not-estab** *number*

Synopsis	Maximum retries for unestablished tunnels
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>max-retries-not-estab</b> <i>number</i>
Tree	<b>max-retries-not-estab</b>
Range	2 to 7
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**next-attempt** *keyword*

Synopsis	Tunnel that is selected when previous session setup failed
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>next-attempt</b> <i>keyword</i>
Tree	<b>next-attempt</b>
Options	same-preference-level, next-preference-level
Default	next-preference-level
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**password** *string*

Synopsis	L2TP password
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>password</b> <i>string</i>
Tree	<b>password</b>
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**peer-address-change-policy** *keyword*

Synopsis	Reaction for L2TP response from a different address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>peer-address-change-policy</b> <i>keyword</i>
Tree	<b>peer-address-change-policy</b>
Options	accept, ignore, reject

Default	reject
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-accounting-policy** *reference*

Synopsis	RADIUS accounting policy
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp radius-accounting-policy</a> <i>reference</i>
Tree	<a href="#">radius-accounting-policy</a>
Reference	<b>configure</b> <a href="#">aaa radius l2tp-accounting-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **receive-window-size** *number*

Synopsis	L2TP receive window size
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp receive-window-size</a> <i>number</i>
Tree	<a href="#">receive-window-size</a>
Range	4 to 1024
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **replace-result-code**

Synopsis	Enter the <b>replace-result-code</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp replace-result-code</a>
Tree	<a href="#">replace-result-code</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cdn-invalid-dst** *boolean*

Synopsis	Replace result code with general error code
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp replace-result-code</a> <a href="#">cdn-invalid-dst</a> <i>boolean</i>

Tree	<a href="#">cdn-invalid-dst</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cdn-permanent-no-facilities** *boolean*

Synopsis	Replace result code with general error
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">replace-result-code</a> <a href="#">cdn-permanent-no-facilities</a> <i>boolean</i>
Tree	<a href="#">cdn-permanent-no-facilities</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cdn-temporary-no-facilities** *boolean*

Synopsis	Replace result code with general error
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">replace-result-code</a> <a href="#">cdn-temporary-no-facilities</a> <i>boolean</i>
Tree	<a href="#">cdn-temporary-no-facilities</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **rtm-debounce-time** (*number* | *keyword*)

Synopsis	Debounce timer that declares L2TP action for route table management events
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">rtm-debounce-time</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">rtm-debounce-time</a>
Range	0 to 5000
Units	milliseconds
Options	infinite
Default	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**session-assign-method** *keyword*

Synopsis	Session assignment method
Context	<b>configure</b> <i>router string l2tp session-assign-method keyword</i>
Tree	<a href="#">session-assign-method</a>
Options	existing-first, weighted, weighted-random
Default	existing-first
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**session-limit** *number*

Synopsis	L2TP session limit of this router
Context	<b>configure</b> <i>router string l2tp session-limit number</i>
Tree	<a href="#">session-limit</a>
Range	1 to 250000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**tunnel-selection-blacklist**

Synopsis	Enter the <b>tunnel-selection-blacklist</b> context
Context	<b>configure</b> <i>router string l2tp tunnel-selection-blacklist</i>
Tree	<a href="#">tunnel-selection-blacklist</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**add-tunnel-on**

Synopsis	Enter the <b>add-tunnel-on</b> context
Context	<b>configure</b> <i>router string l2tp tunnel-selection-blacklist add-tunnel-on</i>
Tree	<a href="#">add-tunnel-on</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**address-change-timeout** *boolean*

Synopsis	Enable a timed-out tunnel to be forced to the denylist
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">l2tp tunnel-selection-blacklist</a> <a href="#">add-tunnel-on</a> <a href="#">address-change-timeout</a> <i>boolean</i>
Tree	<a href="#">address-change-timeout</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**cdn-err-code** *boolean*

Synopsis	Add to deny if CDN is received with code: General error
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">l2tp tunnel-selection-blacklist</a> <a href="#">add-tunnel-on</a> <a href="#">cdn-err-code</a> <i>boolean</i>
Tree	<a href="#">cdn-err-code</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**cdn-invalid-dst** *boolean*

Synopsis	Force tunnel to the denylist in case of Result Codes 6
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">l2tp tunnel-selection-blacklist</a> <a href="#">add-tunnel-on</a> <a href="#">cdn-invalid-dst</a> <i>boolean</i>
Tree	<a href="#">cdn-invalid-dst</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**cdn-permanent-no-facilities** *boolean*

Synopsis	Force tunnel to the denylist in case of Result Codes 5
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">l2tp tunnel-selection-blacklist</a> <a href="#">add-tunnel-on</a> <a href="#">cdn-permanent-no-facilities</a> <i>boolean</i>
Tree	<a href="#">cdn-permanent-no-facilities</a>

Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cdn-temporary-no-facilities** *boolean*

Synopsis	Force tunnel to the denylist in case of Result Codes 4
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">l2tp tunnel-selection-blacklist add-tunnel-on cdn-temporary-no-facilities</a> <i>boolean</i>
Tree	<a href="#">cdn-temporary-no-facilities</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **stop-ccn-err-code** *boolean*

Synopsis	Add to denylist if received with general error code
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">l2tp tunnel-selection-blacklist add-tunnel-on stop-ccn-err-code</a> <i>boolean</i>
Tree	<a href="#">stop-ccn-err-code</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **stop-ccn-other** *boolean*

Synopsis	Add to denylist if StopCCN received with general error
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">l2tp tunnel-selection-blacklist add-tunnel-on stop-ccn-other</a> <i>boolean</i>
Tree	<a href="#">stop-ccn-other</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**tx-cdn-not-established-in-time** *boolean*

Synopsis	Add to denylist if CDN transmitted with result code
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp tunnel-selection-blacklist add-tunnel-on tx-cdn-not-established-in-time</b> <i>boolean</i>
Tree	<b>tx-cdn-not-established-in-time</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**max-list-length** (*number* | *keyword*)

Synopsis	Number of tunnels or peers in the denylist
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp tunnel-selection-blacklist max-list-length</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>max-list-length</b>
Range	1 to 65535
Options	infinite
Default	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**max-time** *number*

Synopsis	Time that a tunnel or peer can remain in the denylist
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp tunnel-selection-blacklist max-time</b> <i>number</i>
Tree	<b>max-time</b>
Range	1 to 60
Units	minutes
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**timeout-action** *keyword*

Synopsis	Action when a tunnel or peer exceeds time in denylist
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp tunnel-selection-blacklist timeout-action</b> <i>keyword</i>

Tree	<a href="#">timeout-action</a>
Options	remove-from-blacklist, try-one-session
Default	remove-from-blacklist
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **tunnel-session-limit** *number*

Synopsis	L2TP session limit for each tunnel of this router
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <b>tunnel-session-limit</b> <i>number</i>
Tree	<a href="#">tunnel-session-limit</a>
Range	1 to 65534
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ldp**

Synopsis	Enable the <b>ldp</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a>
Tree	<a href="#">ldp</a>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of LDP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**aggregate-prefix-match**

Synopsis	Enable the <b>aggregate-prefix-match</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">aggregate-prefix-match</a>
Tree	<a href="#">aggregate-prefix-match</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the LDP aggregate prefix match
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">aggregate-prefix-match</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**prefix-exclude** *reference*

Synopsis	Import policies to filter LDP label bindings received from LDP peers
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">aggregate-prefix-match</a> <a href="#">prefix-exclude</a> <i>reference</i>
Tree	<a href="#">prefix-exclude</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

**class-forwarding** *keyword*

Synopsis	Forwarding mode for LDP over RSVP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">class-forwarding</a> <i>keyword</i>
Tree	<a href="#">class-forwarding</a>
Options	lsr, ler, lsr-and-ler

Introduced 16.0.R1  
 Platforms All

### **consider-system-ip-in-gep** *boolean*

Synopsis Apply global export policy for system IP FEC creation  
 Context **configure** *router string ldp consider-system-ip-in-gep boolean*  
 Tree [consider-system-ip-in-gep](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **egress-statistics**

Synopsis Enter the **egress-statistics** context  
 Context **configure** *router string ldp egress-statistics*  
 Tree [egress-statistics](#)  
 Introduced 16.0.R1  
 Platforms All

### **fec-prefix** [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Enter the **fec-prefix** list instance  
 Context **configure** *router string ldp egress-statistics fec-prefix (ipv4-prefix | ipv6-prefix)*  
 Tree [fec-prefix](#)  
 Introduced 16.0.R1  
 Platforms All

### **[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis IP prefix  
 Context **configure** *router string ldp egress-statistics fec-prefix (ipv4-prefix | ipv6-prefix)*  
 Tree [fec-prefix](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R1

Platforms All

### **accounting-policy** *reference*

Synopsis Accounting policy ID

Context **configure** **router** *string* **ldp** **egress-statistics** **fec-prefix** (*ipv4-prefix | ipv6-prefix*) **accounting-policy** *reference*

Tree **accounting-policy**

Reference **configure** **log** **accounting-policy** *number*

Introduced 16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the LDP egress statistics

Context **configure** **router** *string* **ldp** **egress-statistics** **fec-prefix** (*ipv4-prefix | ipv6-prefix*) **admin-state** *keyword*

Tree **admin-state**

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms All

### **collect-stats** *boolean*

Synopsis Collect statistics

Context **configure** **router** *string* **ldp** **egress-statistics** **fec-prefix** (*ipv4-prefix | ipv6-prefix*) **collect-stats** *boolean*

Tree **collect-stats**

Default false

Introduced 16.0.R1

Platforms All

### **entropy-label-capability** *boolean*

Synopsis Enable entropy label capability on the LDP instance

Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">entropy-label-capability</a> <i>boolean</i>
Tree	<a href="#">entropy-label-capability</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **export-policy** *reference*

Synopsis	Export policies to determine routes exported to LDP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">export-policy</a> <i>reference</i>
Tree	<a href="#">export-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **export-tunnel-table** *reference*

Synopsis	Tunnel table export policies to export tunneled routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">export-tunnel-table</a> <i>reference</i>
Tree	<a href="#">export-tunnel-table</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **fast-reroute**

Synopsis	Enable the <b>fast-reroute</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">fast-reroute</a>
Tree	<a href="#">fast-reroute</a>



Introduced 16.0.R1  
 Platforms All

### **backup-sr-tunnel** *boolean*

Synopsis Use SR tunnel as a remote LFA backup tunnel next-hop by an LDP FEC  
 Context **configure** **router** *string* **ldp fast-reroute backup-sr-tunnel** *boolean*  
 Tree **backup-sr-tunnel**  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **fec-originate** [**fec-prefix**] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Enter the **fec-originate** list instance  
 Context **configure** **router** *string* **ldp fec-originate** (*ipv4-prefix* | *ipv6-prefix*)  
 Tree **fec-originate**  
 Introduced 16.0.R1  
 Platforms All

### [**fec-prefix**] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Static FEC IP prefix  
 Context **configure** **router** *string* **ldp fec-originate** (*ipv4-prefix* | *ipv6-prefix*)  
 Tree **fec-originate**  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **advertised-label** *number*

Synopsis Label that is advertised to upstream peer  
 Context **configure** **router** *string* **ldp fec-originate** (*ipv4-prefix* | *ipv6-prefix*) **advertised-label** *number*  
 Tree **advertised-label**

Range	32 to 1048575
Introduced	16.0.R1
Platforms	All

### **interface** *string*

Synopsis	Interface name for this static FEC prefix
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>fec-originate</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>interface</b> <i>string</i>
Tree	<b>interface</b>
String Length	0 to 32
Notes	The following elements are part of a choice: ( <b>interface</b> , <b>next-hop</b> , and <b>swap-label</b> ) or <b>pop</b> .
Introduced	16.0.R1
Platforms	All

### **next-hop** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the next hop
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>fec-originate</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>next-hop</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>next-hop</b>
Notes	The following elements are part of a choice: ( <b>interface</b> , <b>next-hop</b> , and <b>swap-label</b> ) or <b>pop</b> .
Introduced	16.0.R1
Platforms	All

### **pop** *boolean*

Synopsis	Pop the label and transmit without the label
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>fec-originate</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>pop</b> <i>boolean</i>
Tree	<b>pop</b>
Notes	The following elements are part of a choice: ( <b>interface</b> , <b>next-hop</b> , and <b>swap-label</b> ) or <b>pop</b> .
Introduced	16.0.R1
Platforms	All

### **swap-label** *number*

Synopsis	Value mapped to egress label associated with next-hop entry that LSR uses to swap incoming label
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>fec-originate</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>swap-label</b> <i>number</i>
Tree	<a href="#">swap-label</a>
Range	6 to 1048575
Notes	The following elements are part of a choice: ( <b>interface</b> , <b>next-hop</b> , and <b>swap-label</b> ) or <b>pop</b> .
Introduced	16.0.R1
Platforms	All

### **generate-basic-fec-only** *boolean*

Synopsis	Enable mLDP to generate a basic FEC
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>generate-basic-fec-only</b> <i>boolean</i>
Tree	<a href="#">generate-basic-fec-only</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **graceful-restart**

Synopsis	Enter the <b>graceful-restart</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>graceful-restart</b>
Tree	<a href="#">graceful-restart</a>
Introduced	16.0.R1
Platforms	All

### **helper-mode** *boolean*

Synopsis	Enable graceful restart helper
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>graceful-restart</b> <b>helper-mode</b> <i>boolean</i>
Tree	<a href="#">helper-mode</a>
Default	false
Introduced	16.0.R1

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Platforms All

### **maximum-recovery-time** *number*

Synopsis Value for the local maximum recovery time

Context **configure** *router string ldp graceful-restart maximum-recovery-time number*

Tree [maximum-recovery-time](#)

Range 15 to 1800

Units seconds

Default 120

Introduced 16.0.R1

Platforms All

### **neighbor-liveness-time** *number*

Synopsis Value for the neighbor liveness timer

Context **configure** *router string ldp graceful-restart neighbor-liveness-time number*

Tree [neighbor-liveness-time](#)

Range 5 to 300

Units seconds

Default 120

Introduced 16.0.R1

Platforms All

### **implicit-null-label** *boolean*

Synopsis Signal the implicit null label value for all LDP FECs for which the node is the egress LER

Context **configure** *router string ldp implicit-null-label boolean*

Tree [implicit-null-label](#)

Default false

Introduced 16.0.R1

Platforms All

**import-mcast-policy** *reference*

Synopsis	Import policy for mLDP FECs arriving on the node
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">import-mcast-policy</a> <i>reference</i>
Tree	<a href="#">import-mcast-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.5.R1
Platforms	All

**import-pmsi-routes**

Synopsis	Enter the <b>import-pmsi-routes</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">import-pmsi-routes</a>
Tree	<a href="#">import-pmsi-routes</a>
Introduced	19.5.R1
Platforms	All

**mvpn** *boolean*

Synopsis	Import BGP MVPN inter-AS routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">import-pmsi-routes</a> <a href="#">mvpn</a> <i>boolean</i>
Tree	<a href="#">mvpn</a>
Default	false
Introduced	19.5.R1
Platforms	All

**mvpn-no-export-community** *boolean*

Synopsis	Import BGP MVPN intra-AS routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">import-pmsi-routes</a> <a href="#">mvpn-no-export-community</a> <i>boolean</i>
Tree	<a href="#">mvpn-no-export-community</a>
Default	false
Introduced	19.5.R1

Platforms All

### **import-policy** *reference*

Synopsis Import policies to filter LDP label bindings received from LDP peers

Context **configure** [router](#) *string* [ldp](#) [import-policy](#) *reference*

Tree [import-policy](#)

Reference **configure** [policy-options](#) [policy-statement](#) *string*

Max. Instances 5

Notes This element is ordered by the user.

Introduced 16.0.R1

Platforms All

### **import-tunnel-table** *reference*

Synopsis Tunnel table import policies for non-host prefixes

Context **configure** [router](#) *string* [ldp](#) [import-tunnel-table](#) *reference*

Tree [import-tunnel-table](#)

Reference **configure** [policy-options](#) [policy-statement](#) *string*

Max. Instances 5

Notes This element is ordered by the user.

Introduced 16.0.R1

Platforms All

### **interface-parameters**

Synopsis Enter the **interface-parameters** context

Context **configure** [router](#) *string* [ldp](#) [interface-parameters](#)

Tree [interface-parameters](#)

Introduced 16.0.R1

Platforms All

**interface** [ip-int-name] *reference*

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i>
Tree	<a href="#">interface</a>
Introduced	16.0.R1
Platforms	All

**[ip-int-name]** *reference*

Synopsis	Interface name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i>
Tree	<a href="#">interface</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the LDP interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**bfd-liveness**

Synopsis	Enter the <b>bfd-liveness</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">bfd-liveness</a>
Tree	<a href="#">bfd-liveness</a>
Introduced	16.0.R1
Platforms	All

**ipv4 boolean**

Synopsis	Allow BFD tracking of IPv4 LDP Session for interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">bfd-liveness</a> <a href="#">ipv4</a> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**ipv6 boolean**

Synopsis	Allow BFD tracking of IPv6 LDP session for interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">bfd-liveness</a> <a href="#">ipv6</a> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**ipv4**

Synopsis	Enable the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the LDP interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">ipv4</a> <i>admin-state</i> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable



Introduced	16.0.R1
Platforms	All

### **fec-type-capability**

Synopsis	Enter the <b>fec-type-capability</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <a href="#">reference</a> <a href="#">ipv4</a> <a href="#">fec-type-capability</a>
Tree	<a href="#">fec-type-capability</a>
Introduced	16.0.R1
Platforms	All

### **p2mp-ipv4** *boolean*

Synopsis	Enable IPv4 P2MP FEC capability
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <a href="#">reference</a> <a href="#">ipv4</a> <a href="#">fec-type-capability</a> <a href="#">p2mp-ipv4</a> <i>boolean</i>
Tree	<a href="#">p2mp-ipv4</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **p2mp-ipv6** *boolean*

Synopsis	Enable IPv6 P2MP FEC capability
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <a href="#">reference</a> <a href="#">ipv4</a> <a href="#">fec-type-capability</a> <a href="#">p2mp-ipv6</a> <i>boolean</i>
Tree	<a href="#">p2mp-ipv6</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **prefix-ipv4** *boolean*

Synopsis	Enable IPv4 prefix FEC capability
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <a href="#">reference</a> <a href="#">ipv4</a> <a href="#">fec-type-capability</a> <a href="#">prefix-ipv4</a> <i>boolean</i>

Tree	<a href="#">prefix-ipv4</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **prefix-ipv6** *boolean*

Synopsis	Enable IPv6 prefix FEC capability
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">ipv4</a> <a href="#">fec-type-capability</a> <a href="#">prefix-ipv6</a> <i>boolean</i>
Tree	<a href="#">prefix-ipv6</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **hello**

Synopsis	Enable the <b>hello</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">ipv4</a> <a href="#">hello</a>
Tree	<a href="#">hello</a>
Introduced	16.0.R1
Platforms	All

### **factor** *number*

Synopsis	Factor value for Hello
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">ipv4</a> <a href="#">hello</a> <a href="#">factor</a> <i>number</i>
Tree	<a href="#">factor</a>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **timeout** *number*

Synopsis	Timeout value for Hello
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">ipv4</a> <a href="#">hello</a> <a href="#">timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

## keepalive

Synopsis	Enable the <b>keepalive</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">ipv4</a> <a href="#">keepalive</a>
Tree	<a href="#">keepalive</a>
Introduced	16.0.R1
Platforms	All

## factor *number*

Synopsis	Factor value for keepalive
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">ipv4</a> <a href="#">keepalive</a> <a href="#">factor</a> <i>number</i>
Tree	<a href="#">factor</a>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

## timeout *number*

Synopsis	Time that LDP waits before tearing down session
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">ipv4</a> <a href="#">keepalive</a> <a href="#">timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

## local-lsr-id

Synopsis	Enter the <b>local-lsr-id</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>interface-parameters</b> <b>interface</b> <i>reference</i> <b>ipv4</b> <b>local-lsr-id</b>
Tree	<b>local-lsr-id</b>
Introduced	16.0.R1
Platforms	All

## interface-name *reference*

Synopsis	Name of network IP interface from which to obtain IP address to use as LSR-ID of LDP LSP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>interface-parameters</b> <b>interface</b> <i>reference</i> <b>ipv4</b> <b>local-lsr-id</b> <b>interface-name</b> <i>reference</i>
Tree	<b>interface-name</b>
Reference	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

## transport-address *keyword*

Synopsis	Transport address to set up the LDP TCP sessions
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>interface-parameters</b> <b>interface</b> <i>reference</i> <b>ipv4</b> <b>transport-address</b> <i>keyword</i>
Tree	<b>transport-address</b>
Options	interface, system
Introduced	16.0.R1
Platforms	All

## ipv6

Synopsis	Enable the <b>ipv6</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>interface-parameters</b> <b>interface</b> <i>reference</i> <b>ipv6</b>
Tree	<b>ipv6</b>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the LDP interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">ipv6</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**fec-type-capability**

Synopsis	Enter the <b>fec-type-capability</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">ipv6</a> <b>fec-type-capability</b>
Tree	<a href="#">fec-type-capability</a>
Introduced	16.0.R1
Platforms	All

**p2mp-ipv4** *boolean*

Synopsis	Enable IPv4 P2MP FEC capability
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">ipv6</a> <b>fec-type-capability</b> <b>p2mp-ipv4</b> <i>boolean</i>
Tree	<a href="#">p2mp-ipv4</a>
Default	true
Introduced	16.0.R1
Platforms	All

**p2mp-ipv6** *boolean*

Synopsis	Enable IPv6 P2MP FEC capability
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">ipv6</a> <b>fec-type-capability</b> <b>p2mp-ipv6</b> <i>boolean</i>
Tree	<a href="#">p2mp-ipv6</a>

Default	true
Introduced	16.0.R1
Platforms	All

**prefix-ipv4** *boolean*

Synopsis	Enable IPv4 prefix FEC capability
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">ipv6</a> <a href="#">fec-type-capability</a> <a href="#">prefix-ipv4</a> <i>boolean</i>
Tree	<a href="#">prefix-ipv4</a>
Default	true
Introduced	16.0.R1
Platforms	All

**prefix-ipv6** *boolean*

Synopsis	Enable IPv6 prefix FEC capability
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">ipv6</a> <a href="#">fec-type-capability</a> <a href="#">prefix-ipv6</a> <i>boolean</i>
Tree	<a href="#">prefix-ipv6</a>
Default	true
Introduced	16.0.R1
Platforms	All

**hello**

Synopsis	Enable the <b>hello</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">ipv6</a> <a href="#">hello</a>
Tree	<a href="#">hello</a>
Introduced	16.0.R1
Platforms	All

**factor** *number*

Synopsis	Factor value for Hello
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">ipv6</a> <a href="#">hello</a> <a href="#">factor</a> <i>number</i>
Tree	<a href="#">factor</a>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **timeout** *number*

Synopsis	Timeout value for Hello
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">ipv6</a> <a href="#">hello</a> <a href="#">timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

### **keepalive**

Synopsis	Enable the <b>keepalive</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">ipv6</a> <a href="#">keepalive</a>
Tree	<a href="#">keepalive</a>
Introduced	16.0.R1
Platforms	All

### **factor** *number*

Synopsis	Factor value for keepalive
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">ipv6</a> <a href="#">keepalive</a> <a href="#">factor</a> <i>number</i>
Tree	<a href="#">factor</a>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

**timeout** *number*

Synopsis	Time that LDP waits before tearing down session
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">ipv6</a> <a href="#">keepalive</a> <b>timeout</b> <i>number</i>
Tree	<a href="#">timeout</a>
Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

**local-lsr-id**

Synopsis	Enter the <b>local-lsr-id</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">ipv6</a> <a href="#">local-lsr-id</a>
Tree	<a href="#">local-lsr-id</a>
Introduced	16.0.R1
Platforms	All

**format-32bit** *boolean*

Synopsis	Use IPv4 address of local LSR-ID interface as LSR-ID of the LDP LSR
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">ipv6</a> <a href="#">local-lsr-id</a> <b>format-32bit</b> <i>boolean</i>
Tree	<a href="#">format-32bit</a>
Default	false
Introduced	16.0.R1
Platforms	All

**interface-name** *reference*

Synopsis	Name of network IP interface from which to obtain IP address to use as LSR-ID of LDP LSP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">ipv6</a> <a href="#">local-lsr-id</a> <b>interface-name</b> <i>reference</i>
Tree	<a href="#">interface-name</a>



Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **transport-address** *keyword*

Synopsis	Transport address to set up the LDP TCP sessions
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">ipv6</a> <a href="#">transport-address</a> <i>keyword</i>
Tree	<a href="#">transport-address</a>
Options	interface, system
Introduced	16.0.R1
Platforms	All

### **load-balancing-weight** *number*

Synopsis	Load balancing weight for the LDP interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">load-balancing-weight</a> <i>number</i>
Tree	<a href="#">load-balancing-weight</a>
Max. Range	0 to 4294967295
Introduced	20.2.R1
Platforms	All

### **ipv4**

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	All

### **hello**

Synopsis	Enter the <b>hello</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">ipv4</a> <a href="#">hello</a>

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Tree	<a href="#">hello</a>
Introduced	16.0.R1
Platforms	All

### **factor number**

Synopsis	Value for the Hello factor
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">ipv4</a> <a href="#">hello</a> <i>factor number</i>
Tree	<a href="#">factor</a>
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

### **timeout number**

Synopsis	Timeout value for Hello
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">ipv4</a> <a href="#">hello</a> <i>timeout number</i>
Tree	<a href="#">timeout</a>
Range	3 to 65535
Units	seconds
Default	15
Introduced	16.0.R1
Platforms	All

### **keepalive**

Synopsis	Enter the <b>keepalive</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">ipv4</a> <a href="#">keepalive</a>
Tree	<a href="#">keepalive</a>
Introduced	16.0.R1
Platforms	All

**factor number**

Synopsis	Value for the keep-alive factor
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>interface-parameters</b> <b>ipv4</b> <b>keepalive</b> <b>factor</b> <i>number</i>
Tree	<b>factor</b>
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

**timeout number**

Synopsis	Timeout value for keepalive
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>interface-parameters</b> <b>ipv4</b> <b>keepalive</b> <b>timeout</b> <i>number</i>
Tree	<b>timeout</b>
Range	3 to 65535
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	All

**transport-address keyword**

Synopsis	Transport address to set up the LDP TCP sessions
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>interface-parameters</b> <b>ipv4</b> <b>transport-address</b> <i>keyword</i>
Tree	<b>transport-address</b>
Options	interface, system
Default	system
Introduced	16.0.R1
Platforms	All

**ipv6**

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>interface-parameters</b> <b>ipv6</b>
Tree	<b>ipv6</b>

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Introduced	16.0.R1
Platforms	All

## hello

Synopsis	Enter the <b>hello</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">ipv6</a> <a href="#">hello</a>
Tree	<a href="#">hello</a>
Introduced	16.0.R1
Platforms	All

## factor *number*

Synopsis	Value for the Hello factor
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">ipv6</a> <a href="#">hello</a> <a href="#">factor</a> <i>number</i>
Tree	<a href="#">factor</a>
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

## timeout *number*

Synopsis	Timeout value for Hello
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">ipv6</a> <a href="#">hello</a> <a href="#">timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	3 to 65535
Units	seconds
Default	15
Introduced	16.0.R1
Platforms	All

## keepalive

Synopsis	Enter the <b>keepalive</b> context
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Context	<b>configure</b> <i>router</i> <i>string</i> <i>ldp</i> <i>interface-parameters</i> <i>ipv6</i> <i>keepalive</i>
Tree	<a href="#">keepalive</a>
Introduced	16.0.R1
Platforms	All

**factor** *number*

Synopsis	Value for the keep-alive factor
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ldp</i> <i>interface-parameters</i> <i>ipv6</i> <i>keepalive</i> <i>factor</i> <i>number</i>
Tree	<a href="#">factor</a>
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

**timeout** *number*

Synopsis	Timeout value for keepalive
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ldp</i> <i>interface-parameters</i> <i>ipv6</i> <i>keepalive</i> <i>timeout</i> <i>number</i>
Tree	<a href="#">timeout</a>
Range	3 to 65535
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	All

**transport-address** *keyword*

Synopsis	Transport address to set up the LDP TCP sessions
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ldp</i> <i>interface-parameters</i> <i>ipv6</i> <i>transport-address</i> <i>keyword</i>
Tree	<a href="#">transport-address</a>
Options	interface, system
Default	system
Introduced	16.0.R1
Platforms	All

### **label-withdrawal-delay** *number*

Synopsis	Time interval during which LDP delays for the withdrawal of FEC-label binding
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>label-withdrawal-delay</b> <i>number</i>
Tree	<a href="#">label-withdrawal-delay</a>
Range	3 to 120
Units	seconds
Introduced	16.0.R1
Platforms	All

### **ldp-shortcut**

Synopsis	Enter the <b>ldp-shortcut</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>ldp-shortcut</b>
Tree	<a href="#">ldp-shortcut</a>
Introduced	16.0.R1
Platforms	All

### **ipv4** *boolean*

Synopsis	Forward IPv4 packets by using LDP shortcuts
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>ldp-shortcut</b> <b>ipv4</b> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **ipv6** *boolean*

Synopsis	Forward IPv6 packets by using LDP shortcuts
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>ldp-shortcut</b> <b>ipv6</b> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**legacy-ipv4-lsr-interop** *boolean*

Synopsis	Allow interoperability with legacy IPv4 LSR implementations
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>legacy-ipv4-lsr-interop</b> <i>boolean</i>
Tree	<a href="#">legacy-ipv4-lsr-interop</a>
Default	false
Introduced	16.0.R1
Platforms	All

**lsp-bfd** [[prefix-list](#)] *reference*

Synopsis	Enter the <b>lsp-bfd</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>lsp-bfd</b> <i>reference</i>
Tree	<a href="#">lsp-bfd</a>
Max. Instances	16
Introduced	16.0.R1
Platforms	All

**[prefix-list]** *reference*

Synopsis	Name of a router policy options prefix list
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>lsp-bfd</b> <i>reference</i>
Tree	<a href="#">lsp-bfd</a>
Reference	<b>configure</b> <b>policy-options</b> <b>prefix-list</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**bfd-liveness** *boolean*

Synopsis	Enable BFD on LDP LSPs with FECs that match the prefix list
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>lsp-bfd</b> <i>reference</i> <b>bfd-liveness</b> <i>boolean</i>
Tree	<a href="#">bfd-liveness</a>
Default	false

Introduced 16.0.R1  
 Platforms All

### **bfd-template** *reference*

Synopsis BFD template to apply to BFD sessions associated with the prefix list  
 Context **configure** [router](#) *string* [ldp](#) [lsp-bfd](#) *reference* [bfd-template](#) *reference*  
 Tree [bfd-template](#)  
 Reference **configure** [bfd](#) [bfd-template](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### **failure-action** *keyword*

Synopsis Reaction to BFD session failure for the prefix list  
 Context **configure** [router](#) *string* [ldp](#) [lsp-bfd](#) *reference* [failure-action](#) *keyword*  
 Tree [failure-action](#)  
 Options down  
 Introduced 16.0.R1  
 Platforms All

### **lsp-ping-interval** (*number* | *keyword*)

Synopsis LSP ping transmit interval for periodic verification  
 Context **configure** [router](#) *string* [ldp](#) [lsp-bfd](#) *reference* [lsp-ping-interval](#) (*number* | *keyword*)  
 Tree [lsp-ping-interval](#)  
 Range 60 to 300  
 Units seconds  
 Options none  
 Default 60  
 Introduced 16.0.R1  
 Platforms All



**priority number**

Synopsis	Prefix list to control the search order
Context	<b>configure router</b> <i>string ldp lsp-bfd reference</i> <b>priority number</b>
Tree	<b>priority</b>
Range	1 to 99
Default	1
Introduced	16.0.R1
Platforms	All

**source-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Source address in LSP ping packets and BFD control packets associated with prefix list
Context	<b>configure router</b> <i>string ldp lsp-bfd reference</i> <b>source-address</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<b>source-address</b>
Introduced	16.0.R1
Platforms	All

**max-ecmp-routes number**

Synopsis	Maximum ECMP value for LDP
Context	<b>configure router</b> <i>string ldp</i> <b>max-ecmp-routes number</b>
Tree	<b>max-ecmp-routes</b>
Description	<p>This command sets the maximum number of ECMP routes that LDP may use to resolve the next hop for a FEC as permitted by the RTM or TTM.</p> <p>The system-wide maximum number of ECMP routes is set by the <b>configure router ecmp</b> command; therefore, the operational maximum number used by LDP is set to the lesser of the values configured by this command and the <b>configure router ecmp</b> command.</p>
Range	1 to 64
Default	32
Introduced	19.10.R1
Platforms	All

**mcast-upstream-asbr-frr** *boolean*

Synopsis	Enable ASBR MoFRR to allow local leaf to perform MoFRR for multiple ASBRs
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>mcast-upstream-asbr-frr</b> <i>boolean</i>
Tree	<b>mcast-upstream-asbr-frr</b>
Default	false
Introduced	16.0.R1
Platforms	All

**mcast-upstream-frr** *boolean*

Synopsis	Use fast upstream switchover for mLDP FECs
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>mcast-upstream-frr</b> <i>boolean</i>
Tree	<b>mcast-upstream-frr</b>
Default	false
Introduced	16.0.R1
Platforms	All

**mp-mbb-time** *number*

Synopsis	MP MBB time
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>mp-mbb-time</b> <i>number</i>
Tree	<b>mp-mbb-time</b>
Range	0 to 10
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	All

**prefer-mcast-tunnel-in-tunnel** *boolean*

Synopsis	Use T-LDP session to the peer for FEC resolution
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>prefer-mcast-tunnel-in-tunnel</b> <i>boolean</i>
Tree	<b>prefer-mcast-tunnel-in-tunnel</b>
Default	true
Introduced	21.2.R1

Platforms All

### **prefer-protocol-stitching** *boolean*

Synopsis Stitch LDP ILM to SR NHLFE even if LDP NHLFE exists

Context **configure** *router string ldp prefer-protocol-stitching boolean*

Tree [prefer-protocol-stitching](#)

Description When configured to **true**, an LDP ILM stitches to an SR NHLFE, even if an LDP NHLFE exists.  
When configured to **false**, the stitching preference of an LDP ILM is to an LDP NHLFE.

Default false

Introduced 21.7.R1

Platforms All

### **prefer-tunnel-in-tunnel** *boolean*

Synopsis Preference tunnel-in-tunnel over a simple LDP tunnel

Context **configure** *router string ldp prefer-tunnel-in-tunnel boolean*

Tree [prefer-tunnel-in-tunnel](#)

Default true

Introduced 16.0.R1

Platforms All

### **resolve-root-using** *keyword*

Synopsis Resolution route table for multicast FECs

Context **configure** *router string ldp resolve-root-using keyword*

Tree [resolve-root-using](#)

Options ucast-rtm, mcast-rtm

Default ucast-rtm

Introduced 16.0.R1

Platforms All

**session-parameters**

Synopsis	Enter the <b>session-parameters</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>session-parameters</b>
Tree	<b>session-parameters</b>
Introduced	16.0.R1
Platforms	All

**peer** [*ip-address*] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>session-parameters</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>peer</b>
Introduced	16.0.R1
Platforms	All

**[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the LDP peer
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>session-parameters</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>peer</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**adv-adj-addr-only** *boolean*

Synopsis	Distribute only the local addresses used to establish the Hello adjacencies with a peer
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>session-parameters</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>adv-adj-addr-only</b> <i>boolean</i>
Tree	<b>adv-adj-addr-only</b>
Default	false
Introduced	16.0.R1
Platforms	All

**adv-local-lsr-id** *boolean*

Synopsis	Advertise local LSR ID over a specified LDP session
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp session-parameters peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>adv-local-lsr-id</b> <i>boolean</i>
Tree	<a href="#">adv-local-lsr-id</a>
Default	false
Introduced	16.0.R1
Platforms	All

**community** *string*

Synopsis	Community string associated with a session to a specified peer
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp session-parameters peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>community</b> <i>string</i>
Tree	<a href="#">community</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

**dod-label-distribution** *boolean*

Synopsis	Use LDP Downstream-on-Demand (DoD) label distribution procedures
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp session-parameters peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>dod-label-distribution</b> <i>boolean</i>
Tree	<a href="#">dod-label-distribution</a>
Default	false
Introduced	16.0.R1
Platforms	All

**export-addresses** *reference*

Synopsis	Export policies to determine which local addresses should be distributed to this peer
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp session-parameters peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>export-addresses</b> <i>reference</i>
Tree	<a href="#">export-addresses</a>

Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **export-prefixes** *reference*

Synopsis	Export policies to determine which FEC prefixes are redistributed to LDP and TLDP peers
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">session-parameters</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">export-prefixes</a> <i>reference</i>
Tree	<a href="#">export-prefixes</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **fec-limit**

Synopsis	Enter the <b>fec-limit</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">session-parameters</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">fec-limit</a>
Tree	<a href="#">fec-limit</a>
Introduced	16.0.R1
Platforms	All

### **limit** *number*

Synopsis	Maximum number of FECs to be accepted from this peer LSR
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">session-parameters</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">fec-limit</a> <a href="#">limit</a> <i>number</i>
Tree	<a href="#">limit</a>

Range	0   1 to 4294967295
Default	0
Introduced	16.0.R1
Platforms	All

### **log-only** *boolean*

Synopsis	Trap and syslog message to generate when reaching the threshold and limit
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp session-parameters peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>fec-limit log-only boolean</b>
Tree	<b>log-only</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **threshold** *number*

Synopsis	Threshold that generates trap and warning when reached
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp session-parameters peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>fec-limit threshold number</b>
Tree	<b>threshold</b>
Range	1 to 100
Default	90
Introduced	16.0.R1
Platforms	All

### **fec-type-capability**

Synopsis	Enter the <b>fec-type-capability</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp session-parameters peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>fec-type-capability</b>
Tree	<b>fec-type-capability</b>
Introduced	16.0.R1
Platforms	All

### **p2mp** *boolean*

Synopsis	Enable P2MP FEC capability for the session
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp session-parameters peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>fec-type-capability p2mp</b> <i>boolean</i>
Tree	<b>p2mp</b>
Default	true
Introduced	16.0.R1
Platforms	All

### **prefix-ipv4** *boolean*

Synopsis	Enable IPv4 prefix FEC capability for the session
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp session-parameters peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>fec-type-capability prefix-ipv4</b> <i>boolean</i>
Tree	<b>prefix-ipv4</b>
Default	true
Introduced	16.0.R1
Platforms	All

### **prefix-ipv6** *boolean*

Synopsis	Enable IPv6 prefix FEC capability
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp session-parameters peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>fec-type-capability prefix-ipv6</b> <i>boolean</i>
Tree	<b>prefix-ipv6</b>
Default	true
Introduced	16.0.R1
Platforms	All

### **fec129-cisco-interop** *boolean*

Synopsis	Allow translation between non-compliant FEC 129 formats of Cisco
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp session-parameters peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>fec129-cisco-interop</b> <i>boolean</i>
Tree	<b>fec129-cisco-interop</b>
Default	false



Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **import-prefixes** *reference*

Synopsis	FEC prefixes to be redistributed to this LDP peer
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp session-parameters peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">import-prefixes</a> <i>reference</i>
Tree	<a href="#">import-prefixes</a>
Reference	<b>configure</b> <a href="#">policy-options policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **pe-id-mac-flush-interop** *boolean*

Synopsis	Send PE-ID TLV in LDP MAC withdrawal message
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp session-parameters peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">pe-id-mac-flush-interop</a> <i>boolean</i>
Tree	<a href="#">pe-id-mac-flush-interop</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **shortcut-local-ttl-propagate** *boolean*

Synopsis	Propagate TTL over LSP shortcut for local packets
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp shortcut-local-ttl-propagate</a> <i>boolean</i>
Tree	<a href="#">shortcut-local-ttl-propagate</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **shortcut-transit-ttl-propagate** *boolean*

Synopsis	Enable TTL propagation over LSP shortcut
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>shortcut-transit-ttl-propagate</b> <i>boolean</i>
Tree	<b>shortcut-transit-ttl-propagate</b>
Default	true
Introduced	16.0.R1
Platforms	All

### **targeted-session**

Synopsis	Enter the <b>targeted-session</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b>
Tree	<b>targeted-session</b>
Introduced	16.0.R1
Platforms	All

### **auto-rx**

Synopsis	Enter the <b>auto-rx</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>auto-rx</b>
Tree	<b>auto-rx</b>
Description	Commands in this context specify the LDP session configuration to accept targeted Hello messages from any peer.
Introduced	20.10.R1
Platforms	All

### **ipv4**

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>auto-rx</b> <b>ipv4</b>
Tree	<b>ipv4</b>
Introduced	20.10.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of IPv4 capabilities for peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>auto-rx</b> <b>ipv4</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	All

**tunneling** *boolean*

Synopsis	Enable tunneling for targeted peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>auto-rx</b> <b>ipv4</b> <b>tunneling</b> <i>boolean</i>
Tree	<b>tunneling</b>
Description	<p>When configured to <b>true</b>, this command enables the local system to use the targeted LDP session to send FEC label bindings that are advertised to other LDP peers. For LDP rLFA, the source node requires the PQ node's label binding information in order to reach the destination.</p> <p>If the <b>auto-rx</b> and <b>auto-tx</b> contexts are both administratively enabled, this command must be set to <b>true</b> for LDP rLFA to function properly.</p> <p>When configured to <b>false</b>, FEC label bindings are not sent via the LDP session.</p>
Default	false
Introduced	20.10.R1
Platforms	All

**auto-tx**

Synopsis	Enter the <b>auto-tx</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>auto-tx</b>
Tree	<b>auto-tx</b>
Description	Commands in this context specify the LDP session configuration to send targeted Hello messages toward PQ nodes determined by the rLFA algorithm.
Introduced	20.10.R1
Platforms	All

**ipv4**

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>auto-tx</b> <b>ipv4</b>
Tree	<b>ipv4</b>
Introduced	20.10.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of IPv4 capabilities for peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>auto-tx</b> <b>ipv4</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	All

**tunneling** *boolean*

Synopsis	Enable tunneling for targeted peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>auto-tx</b> <b>ipv4</b> <b>tunneling</b> <i>boolean</i>
Tree	<b>tunneling</b>
Description	<p>When configured to <b>true</b>, this command enables the local system to use the targeted LDP session to send FEC label bindings that are advertised to other LDP peers. For LDP rLFA, the source node requires the PQ node's label binding information in order to reach the destination.</p> <p>If the <b>auto-rx</b> context is administratively disabled, this command should be set to <b>true</b> for LDP rLFA to function properly.</p> <p>When configured to <b>false</b>, FEC label bindings are not sent via the LDP session.</p>
Default	false
Introduced	20.10.R1
Platforms	All

**export-prefixes** *reference*

Synopsis	Export route policy to determine which routes are exported to this targeted LDP session
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">targeted-session</a> <a href="#">export-prefixes</a> <i>reference</i>
Tree	<a href="#">export-prefixes</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **import-prefixes** *reference*

Synopsis	Import route policy to determine which routes are accepted from targeted LDP neighbors
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">targeted-session</a> <a href="#">import-prefixes</a> <i>reference</i>
Tree	<a href="#">import-prefixes</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **ipv4**

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">targeted-session</a> <b>ipv4</b>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	All

### **hello**

Synopsis	Enter the <b>hello</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">targeted-session</a> <b>ipv4</b> <b>hello</b>
Tree	<a href="#">hello</a>
Introduced	16.0.R1

Platforms All

### **factor** *number*

Synopsis Factor value for Hello

Context **configure** [router](#) *string* [ldp targeted-session ipv4 hello factor](#) *number*

Tree [factor](#)

Range 1 to 255

Default 3

Introduced 16.0.R1

Platforms All

### **timeout** *number*

Synopsis Timeout value for Hello

Context **configure** [router](#) *string* [ldp targeted-session ipv4 hello timeout](#) *number*

Tree [timeout](#)

Range 3 to 65535

Units seconds

Default 45

Introduced 16.0.R1

Platforms All

### **hello-reduction**

Synopsis Enter the **hello-reduction** context

Context **configure** [router](#) *string* [ldp targeted-session ipv4 hello-reduction](#)

Tree [hello-reduction](#)

Introduced 16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of suppression of Hello messages

Context **configure** [router](#) *string* [ldp targeted-session ipv4 hello-reduction admin-state](#) *keyword*

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R3
Platforms	All

### **factor number**

Synopsis	Hello reduction dampening factor
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">targeted-session</a> <a href="#">ipv4</a> <a href="#">hello-reduction</a> <a href="#">factor</a> <i>number</i>
Tree	<a href="#">factor</a>
Range	3 to 20
Default	3
Introduced	16.0.R1
Platforms	All

### **keepalive**

Synopsis	Enter the <b>keepalive</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">targeted-session</a> <a href="#">ipv4</a> <a href="#">keepalive</a>
Tree	<a href="#">keepalive</a>
Introduced	16.0.R1
Platforms	All

### **factor number**

Synopsis	Factor value for keepalive
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">targeted-session</a> <a href="#">ipv4</a> <a href="#">keepalive</a> <a href="#">factor</a> <i>number</i>
Tree	<a href="#">factor</a>
Range	1 to 255
Default	4
Introduced	16.0.R1
Platforms	All

### **timeout** *number*

Synopsis	Timeout value for keepalive
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>ipv4</b> <b>keepalive</b> <b>timeout</b> <i>number</i>
Tree	<b>timeout</b>
Range	3 to 65535
Units	seconds
Default	40
Introduced	16.0.R1
Platforms	All

### **ipv6**

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>ipv6</b>
Tree	<b>ipv6</b>
Introduced	16.0.R1
Platforms	All

### **hello**

Synopsis	Enter the <b>hello</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>ipv6</b> <b>hello</b>
Tree	<b>hello</b>
Introduced	16.0.R1
Platforms	All

### **factor** *number*

Synopsis	Factor value for Hello
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>ipv6</b> <b>hello</b> <b>factor</b> <i>number</i>
Tree	<b>factor</b>
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All



**timeout** *number*

Synopsis	Timeout value for Hello
Context	<b>configure</b> <i>router string ldp targeted-session ipv6 hello timeout number</i>
Tree	<a href="#">timeout</a>
Range	3 to 65535
Units	seconds
Default	45
Introduced	16.0.R1
Platforms	All

**hello-reduction**

Synopsis	Enter the <b>hello-reduction</b> context
Context	<b>configure</b> <i>router string ldp targeted-session ipv6 hello-reduction</i>
Tree	<a href="#">hello-reduction</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of suppression of Hello messages
Context	<b>configure</b> <i>router string ldp targeted-session ipv6 hello-reduction admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R3
Platforms	All

**factor** *number*

Synopsis	Hello reduction dampening factor
Context	<b>configure</b> <i>router string ldp targeted-session ipv6 hello-reduction factor number</i>
Tree	<a href="#">factor</a>
Range	3 to 20

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Default	3
Introduced	16.0.R1
Platforms	All

### **keepalive**

Synopsis	Enter the <b>keepalive</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ldp</a> <a href="#">targeted-session</a> <a href="#">ipv6</a> <a href="#">keepalive</a>
Tree	<a href="#">keepalive</a>
Introduced	16.0.R1
Platforms	All

### **factor** *number*

Synopsis	Factor value for keepalive
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ldp</a> <a href="#">targeted-session</a> <a href="#">ipv6</a> <a href="#">keepalive</a> <a href="#">factor</a> <i>number</i>
Tree	<a href="#">factor</a>
Range	1 to 255
Default	4
Introduced	16.0.R1
Platforms	All

### **timeout** *number*

Synopsis	Timeout value for keepalive
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ldp</a> <a href="#">targeted-session</a> <a href="#">ipv6</a> <a href="#">keepalive</a> <a href="#">timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	3 to 65535
Units	seconds
Default	40
Introduced	16.0.R1
Platforms	All

**peer** [*ip-address*] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>peer</b>
Introduced	16.0.R1
Platforms	All

**[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the LDP peer
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>peer</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the LDP peer
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**bfd-liveness** *boolean*

Synopsis	Enable BFD tracking of LDP session for the peer
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>bfd-liveness</b> <i>boolean</i>
Tree	<b>bfd-liveness</b>
Default	false

Introduced 16.0.R1  
Platforms All

## hello

Synopsis Enable the **hello** context  
Context **configure** **router** *string* **ldp** **targeted-session** **peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **hello**  
Tree **hello**  
Introduced 16.0.R1  
Platforms All

## factor number

Synopsis Factor value for Hello  
Context **configure** **router** *string* **ldp** **targeted-session** **peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **hello** **factor** *number*  
Tree **factor**  
Range 1 to 255  
Introduced 16.0.R1  
Platforms All

## timeout number

Synopsis Timeout value for Hello  
Context **configure** **router** *string* **ldp** **targeted-session** **peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **hello** **timeout** *number*  
Tree **timeout**  
Range 3 to 65535  
Units seconds  
Introduced 16.0.R1  
Platforms All

## hello-reduction

Synopsis Enable the **hello-reduction** context

Context	<b>configure</b> <i>router string ldp targeted-session peer</i> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>hello-reduction</b>
Tree	<b>hello-reduction</b>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of suppression of Hello messages
Context	<b>configure</b> <i>router string ldp targeted-session peer</i> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>hello-reduction admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Introduced	16.0.R3
Platforms	All

### **factor** *number*

Synopsis	Hello reduction dampening factor
Context	<b>configure</b> <i>router string ldp targeted-session peer</i> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>hello-reduction factor</b> <i>number</i>
Tree	<b>factor</b>
Range	3 to 20
Introduced	16.0.R1
Platforms	All

### **keepalive**

Synopsis	Enable the <b>keepalive</b> context
Context	<b>configure</b> <i>router string ldp targeted-session peer</i> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>keepalive</b>
Tree	<b>keepalive</b>
Introduced	16.0.R1
Platforms	All

**factor number**

Synopsis	Factor value for keepalive
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>keepalive</b> <b>factor</b> <i>number</i>
Tree	<b>factor</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

**timeout number**

Synopsis	Time that LDP waits before tearing down session
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>keepalive</b> <b>timeout</b> <i>number</i>
Tree	<b>timeout</b>
Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

**local-lsr-id**

Synopsis	Enter the <b>local-lsr-id</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>local-lsr-id</b>
Tree	<b>local-lsr-id</b>
Introduced	16.0.R1
Platforms	All

**format-32bit boolean**

Synopsis	Use IPv4 address of local LSR-ID interface as LSR-ID of the LDP LSR
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>local-lsr-id</b> <b>format-32bit</b> <i>boolean</i>
Tree	<b>format-32bit</b>
Default	false

Introduced 16.0.R1  
 Platforms All

### **interface-name** *reference*

Synopsis Name of network IP interface from which to obtain IP address to use as LSR-ID of LDP LSP

Context **configure** *router string ldp targeted-session peer* (*ipv4-address-no-zone | ipv6-address-no-zone*) *local-lsr-id interface-name reference*

Tree [interface-name](#)

Reference **configure** *router string interface string*

Introduced 16.0.R1  
 Platforms All

### **mcast-tunneling**

Synopsis Enable the **mcast-tunneling** context

Context **configure** *router string ldp targeted-session peer* (*ipv4-address-no-zone | ipv6-address-no-zone*) *mcast-tunneling*

Tree [mcast-tunneling](#)

Introduced 21.2.R1  
 Platforms All

### **lsp** [*lsp-name*] *string*

Synopsis Add a list entry for **lsp**

Context **configure** *router string ldp targeted-session peer* (*ipv4-address-no-zone | ipv6-address-no-zone*) *mcast-tunneling lsp string*

Tree [lsp](#)

Max. Instances 4

Introduced 21.2.R1  
 Platforms All

### **[lsp-name]** *string*

Synopsis LSP name

Context	<b>configure</b> <i>router string ldp targeted-session peer</i> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <i>mcast-tunneling lsp string</i>
Tree	<a href="#">lsp</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

## tunneling

Synopsis	Enable the <b>tunneling</b> context
Context	<b>configure</b> <i>router string ldp targeted-session peer</i> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <i>tunneling</i>
Tree	<a href="#">tunneling</a>
Introduced	16.0.R1
Platforms	All

## **lsp** [[lsp-name](#)] *string*

Synopsis	Add a list entry for <b>lsp</b>
Context	<b>configure</b> <i>router string ldp targeted-session peer</i> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <i>tunneling lsp string</i>
Tree	<a href="#">lsp</a>
Max. Instances	4
Introduced	16.0.R1
Platforms	All

## **[lsp-name]** *string*

Synopsis	LSP name
Context	<b>configure</b> <i>router string ldp targeted-session peer</i> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <i>tunneling lsp string</i>
Tree	<a href="#">lsp</a>
String Length	1 to 64
Notes	This element is part of a list key.



Introduced 16.0.R1  
Platforms All

### **peer-template** [[template-name](#)] *string*

Synopsis Enter the **peer-template** list instance  
Context **configure** [router](#) *string* [ldp](#) [targeted-session](#) [peer-template](#) *string*  
Tree [peer-template](#)  
Max. Instances 500  
Introduced 16.0.R1  
Platforms All

### **[template-name]** *string*

Synopsis Name for the targeted peer template  
Context **configure** [router](#) *string* [ldp](#) [targeted-session](#) [peer-template](#) *string*  
Tree [peer-template](#)  
String Length 1 to 32  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the peer template  
Context **configure** [router](#) *string* [ldp](#) [targeted-session](#) [peer-template](#) *string* [admin-state](#) *keyword*  
Tree [admin-state](#)  
Options enable, disable  
Default enable  
Introduced 16.0.R1  
Platforms All

**adv-local-lsr-id** *boolean*

Synopsis	Advertise local LSR ID over a specified LDP session
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer-template</b> <i>string</i> <b>adv-local-lsr-id</b> <i>boolean</i>
Tree	<a href="#">adv-local-lsr-id</a>
Default	false
Introduced	16.0.R1
Platforms	All

**bfd-liveness** *boolean*

Synopsis	Enable BFD tracking of LDP session for sessions created by peer template
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer-template</b> <i>string</i> <b>bfd-liveness</b> <i>boolean</i>
Tree	<a href="#">bfd-liveness</a>
Default	false
Introduced	16.0.R1
Platforms	All

**community** *string*

Synopsis	Community string associated with a session to a specified peer
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer-template</b> <i>string</i> <b>community</b> <i>string</i>
Tree	<a href="#">community</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

**hello**

Synopsis	Enable the <b>hello</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer-template</b> <i>string</i> <b>hello</b>
Tree	<a href="#">hello</a>
Introduced	16.0.R1
Platforms	All

**factor number**

Synopsis	Factor value for Hello
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer-template</b> <i>string</i> <b>hello</b> <b>factor</b> <i>number</i>
Tree	<b>factor</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

**timeout number**

Synopsis	Timeout value for Hello
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer-template</b> <i>string</i> <b>hello</b> <b>timeout</b> <i>number</i>
Tree	<b>timeout</b>
Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

**hello-reduction**

Synopsis	Enable the <b>hello-reduction</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer-template</b> <i>string</i> <b>hello-reduction</b>
Tree	<b>hello-reduction</b>
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of suppression of Hello messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer-template</b> <i>string</i> <b>hello-reduction</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Introduced	16.0.R3
Platforms	All

**factor number**

Synopsis	Hello reduction dampening factor
Context	<b>configure</b> <i>router string ldp targeted-session peer-template string</i> hello-reduction factor number
Tree	<b>factor</b>
Range	3 to 20
Introduced	16.0.R1
Platforms	All

**keepalive**

Synopsis	Enable the <b>keepalive</b> context
Context	<b>configure</b> <i>router string ldp targeted-session peer-template string</i> keepalive
Tree	<b>keepalive</b>
Introduced	16.0.R1
Platforms	All

**factor number**

Synopsis	Factor value for keepalive
Context	<b>configure</b> <i>router string ldp targeted-session peer-template string</i> keepalive factor number
Tree	<b>factor</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

**timeout number**

Synopsis	Time that LDP waits before tearing down session
Context	<b>configure</b> <i>router string ldp targeted-session peer-template string</i> keepalive timeout number
Tree	<b>timeout</b>
Range	3 to 65535
Units	seconds

Introduced 16.0.R1  
 Platforms All

### **local-lsr-id**

Synopsis Enter the **local-lsr-id** context  
 Context **configure** [router](#) *string* [ldp](#) [targeted-session](#) [peer-template](#) *string* [local-lsr-id](#)  
 Tree [local-lsr-id](#)  
 Introduced 16.0.R1  
 Platforms All

### **interface-name** *reference*

Synopsis Name of network IP interface from which to obtain IP address to use as LSR-ID of LDP LSP  
 Context **configure** [router](#) *string* [ldp](#) [targeted-session](#) [peer-template](#) *string* [local-lsr-id](#) [interface-name](#) *reference*  
 Tree [interface-name](#)  
 Reference **configure** [router](#) *string* [interface](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### **mcast-tunneling** *boolean*

Synopsis Enable MLDP over RSVP-TE tunnels for the template  
 Context **configure** [router](#) *string* [ldp](#) [targeted-session](#) [peer-template](#) *string* [mcast-tunneling](#) *boolean*  
 Tree [mcast-tunneling](#)  
 Default false  
 Introduced 21.2.R1  
 Platforms All

### **tunneling** *boolean*

Synopsis Allow LDP over tunnels  
 Context **configure** [router](#) *string* [ldp](#) [targeted-session](#) [peer-template](#) *string* [tunneling](#) *boolean*

Tree	<a href="#">tunneling</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **peer-template-map** [[template-map-name](#)] *reference*

Synopsis	Enter the <b>peer-template-map</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">targeted-session</a> <a href="#">peer-template-map</a> <i>reference</i>
Tree	<a href="#">peer-template-map</a>
Max. Instances	500
Introduced	16.0.R1
Platforms	All

### **[template-map-name]** *reference*

Synopsis	Name to identify the targeted peer template
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">targeted-session</a> <a href="#">peer-template-map</a> <i>reference</i>
Tree	<a href="#">peer-template-map</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">targeted-session</a> <a href="#">peer-template</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **policy-map** *reference*

Synopsis	Targeted peer template to apply to the given policies
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">targeted-session</a> <a href="#">peer-template-map</a> <i>reference</i> <a href="#">policy-map</a> <i>reference</i>
Tree	<a href="#">policy-map</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Min. Instances	1

Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **resolve-v6-prefix-over-shortcut** *boolean*

Synopsis	Resolve IPv6 prefix over IGP shortcuts
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>resolve-v6-prefix-over-shortcut</b> <i>boolean</i>
Tree	<a href="#">resolve-v6-prefix-over-shortcut</a>
Description	When configured to <b>true</b> , the system enables the resolution of IPv6 LDP unicast prefix FECs over IGP shortcuts. When configured to <b>false</b> , the resolution is not allowed.
Default	false
Introduced	22.7.R1
Platforms	All

### **sdp-auto-targeted-session** *boolean*

Synopsis	Allow auto-creation of targeted sessions by SDP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>sdp-auto-targeted-session</b> <i>boolean</i>
Tree	<a href="#">sdp-auto-targeted-session</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **tcp-session-parameters**

Synopsis	Enter the <b>tcp-session-parameters</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>tcp-session-parameters</b>
Tree	<a href="#">tcp-session-parameters</a>
Introduced	16.0.R1
Platforms	All

**authentication-key *string***

Synopsis	Authentication key between LDP peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp tcp-session-parameters</b> <b>authentication-key</b> <i>string</i>
Tree	<a href="#">authentication-key</a>
Description	<p>This command specifies the authentication key used to establish a session between LDP peers.</p> <p>Authentication uses the MD-5 message-based digest. The peer address used in authentication must be the TCP session transport address. If one or more transport addresses used in the Hello adjacencies to the same peer LSR are different from the LSR ID value, the user must add each transport address to the authentication key configuration as a separate peer. As a result, when the TCP connection is bootstrapped by a specific Hello adjacency, the authentication can operate over that TCP connection by using its specific transport address.</p> <p>The per-peer authentication configuration takes precedence over global authentication configuration, and authentication keychain configuration takes precedence over authentication key configuration.</p>
String Length	1 to 370
Introduced	21.2.R1
Platforms	All

**authentication-keychain *reference***

Synopsis	Authentication keychain to use for the TCP session
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp tcp-session-parameters</b> <b>authentication-keychain</b> <i>reference</i>
Tree	<a href="#">authentication-keychain</a>
Description	<p>This command configures the authentication keychain to use for the TCP session.</p> <p>The per-peer authentication configuration takes precedence over the global authentication configuration.</p>
Reference	<b>configure</b> <b>system security</b> <b>keychains</b> <b>keychain</b> <i>string</i>
Introduced	21.2.R1
Platforms	All

**peer-transport** [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the <b>peer-transport</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp tcp-session-parameters</b> <b>peer-transport</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">peer-transport</a>



Introduced 16.0.R1  
 Platforms All

### [**ip-address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP address of the TCP connection to the LDP peer  
 Context **configure** **router** *string* **ldp** **tcp-session-parameters** **peer-transport** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)  
 Tree [peer-transport](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **authentication-key** *string*

Synopsis Authentication key for the peer  
 Context **configure** **router** *string* **ldp** **tcp-session-parameters** **peer-transport** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **authentication-key** *string*  
 Tree [authentication-key](#)  
 String Length 1 to 370  
 Introduced 16.0.R1  
 Platforms All

### **authentication-keychain** *reference*

Synopsis TCP authentication keychain to use for the session  
 Context **configure** **router** *string* **ldp** **tcp-session-parameters** **peer-transport** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **authentication-keychain** *reference*  
 Tree [authentication-keychain](#)  
 Reference **configure** **system** **security** **keychains** **keychain** *string*  
 Introduced 16.0.R3  
 Platforms All

### **path-mtu-discovery** *boolean*

Synopsis Allow Path MTU Discovery for associated TCP connections

Context	<b>configure router</b> <i>string</i> <a href="#">ldp tcp-session-parameters peer-transport</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">path-mtu-discovery</a> <i>boolean</i>
Tree	<a href="#">path-mtu-discovery</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **ttl-security** *number*

Synopsis	Minimum TTL value for incoming packets
Context	<b>configure router</b> <i>string</i> <a href="#">ldp tcp-session-parameters peer-transport</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">ttl-security</a> <i>number</i>
Tree	<a href="#">ttl-security</a>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **tunnel-down-damp-time** *number*

Synopsis	Time interval for an LDP to damp a tunnel down event before posting to the Route Table Manager (RTM)
Context	<b>configure router</b> <i>string</i> <a href="#">ldp tunnel-down-damp-time</a> <i>number</i>
Tree	<a href="#">tunnel-down-damp-time</a>
Range	0 to 20
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	All

### **tunnel-table-pref** *number*

Synopsis	Tunnel table preference value for address FECs
Context	<b>configure router</b> <i>string</i> <a href="#">ldp tunnel-table-pref</a> <i>number</i>
Tree	<a href="#">tunnel-table-pref</a>
Description	This command configures the tunnel table preference for an LDP tunnel type.

The tunnel table preference applies to next-hop resolution of BGP routes for: EVPN, IPv4, IPv6, VPN-IPv4, VPN-IPv6, label-IPv4, and label-IPV6 in the tunnel table.

This feature does not apply to a VPRN, VPLS, or VLL service with explicit binding to an SDP that enabled the **mixed-lsp-mode** option. The service manager controls and fixes the tunnel preference in such an SDP. The tunnel table preference configuration does not modify the SDP behavior, nor the services that bind to it.

It is recommended to not set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.

Range	1 to 255
Default	9
Introduced	21.10.R1
Platforms	All

### **weighted-ecmp** *boolean*

Synopsis	Allow weighted ECMP load-balancing
Context	<b>configure</b> <i>router</i> <i>string</i> <b>ldp</b> <b>weighted-ecmp</b> <i>boolean</i>
Tree	<a href="#">weighted-ecmp</a>
Description	When configured to <b>true</b> , the system allows weighted ECMP on LDP using RSVP LSPs or SR-TE LSPs. LDP labeled packets are sprayed across the RSVP or SR-TE LSP ECMP set in proportion to the configured load-balancing weight of LSPs. When configured to <b>false</b> , the system removes weighted ECMP load-balancing.
Default	false
Introduced	16.0.R1
Platforms	All

### **leak-export**

Synopsis	Enter the <b>leak-export</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <b>leak-export</b>
Tree	<a href="#">leak-export</a>
Introduced	16.0.R4
Platforms	All

### **leak-export-limit** *number*

Synopsis	Maximum limit on number of GRT routes leaked into VPRNs
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Context	<b>configure router</b> <i>string</i> <b>leak-export</b> <b>leak-export-limit</b> <i>number</i>
Tree	<b>leak-export-limit</b>
Range	1 to 10000
Default	5
Introduced	16.0.R4
Platforms	All

### **policy-name** (*policy-expr-string* | *string*)

Synopsis	Route policy name
Context	<b>configure router</b> <i>string</i> <b>leak-export</b> <b>policy-name</b> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<b>policy-name</b>
String Length	1 to 255
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

### **lsp-bfd**

Synopsis	Enter the <b>lsp-bfd</b> context
Context	<b>configure router</b> <i>string</i> <b>lsp-bfd</b>
Tree	<b>lsp-bfd</b>
Introduced	16.0.R1
Platforms	All

### **bfd-sessions** *number*

Synopsis	Maximum number of LSP BFD session tail-ends
Context	<b>configure router</b> <i>string</i> <b>lsp-bfd</b> <b>bfd-sessions</b> <i>number</i>
Tree	<b>bfd-sessions</b>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

## tail-end

Synopsis	Enter the <b>tail-end</b> context
Context	<b>configure router</b> <i>string</i> <a href="#">lsp-bfd tail-end</a>
Tree	<a href="#">tail-end</a>
Introduced	20.10.R1
Platforms	All

## multiplier *number*

Synopsis	Missed message threshold before session is set to down
Context	<b>configure router</b> <i>string</i> <a href="#">lsp-bfd tail-end multiplier</a> <i>number</i>
Tree	<a href="#">multiplier</a>
Range	1 to 20
Default	3
Introduced	20.10.R1
Platforms	All

## receive-interval *number*

Synopsis	The BFD receive interval for LSP tail-end
Context	<b>configure router</b> <i>string</i> <a href="#">lsp-bfd tail-end receive-interval</a> <i>number</i>
Tree	<a href="#">receive-interval</a>
Range	100 to 1000
Units	milliseconds
Default	1000
Introduced	20.10.R1
Platforms	All

## transmit-interval *number*

Synopsis	The BFD transmit interval for LSP tail-end
Context	<b>configure router</b> <i>string</i> <a href="#">lsp-bfd tail-end transmit-interval</a> <i>number</i>
Tree	<a href="#">transmit-interval</a>
Range	100 to 1000

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Units	milliseconds
Default	1000
Introduced	20.10.R1
Platforms	All

### **mc-maximum-routes**

Synopsis	Enter the <b>mc-maximum-routes</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mc-maximum-routes</a>
Tree	<a href="#">mc-maximum-routes</a>
Introduced	16.0.R1
Platforms	All

### **log-only** *boolean*

Synopsis	Log and allow learning of new multicast routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mc-maximum-routes</a> <a href="#">log-only</a> <i>boolean</i>
Tree	<a href="#">log-only</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **threshold** *number*

Synopsis	Maximum multicast routes which the VRF holds
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mc-maximum-routes</a> <a href="#">threshold</a> <i>number</i>
Tree	<a href="#">threshold</a>
Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

### **value** *number*

Synopsis	Maximum multicast routes configured on virtual router
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Context	<b>configure router</b> <i>string mc-maximum-routes value number</i>
Tree	<a href="#">value</a>
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

## mld

Synopsis	Enable the <b>mld</b> context
Context	<b>configure router</b> <i>string mld</i>
Tree	<a href="#">mld</a>
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of MLD
Context	<b>configure router</b> <i>string mld admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## forwarding-group-interface *forwarding-service string group-interface-name reference*

Synopsis	Enter the <b>forwarding-group-interface</b> list instance
Context	<b>configure router</b> <i>string mld forwarding-group-interface forwarding-service string group-interface-name reference</i>
Tree	<a href="#">forwarding-group-interface</a>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## forwarding-service *string*

Synopsis	Forwarding service for the subscriber interface
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Context	<b>configure</b> <i>router</i> <i>string</i> <i>mld</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i>
Tree	<a href="#">forwarding-group-interface</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **group-interface-name** *reference*

Synopsis	Group interface name
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mld</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i>
Tree	<a href="#">forwarding-group-interface</a>
Reference	<b>configure</b> <i>service</i> <i>vpn</i> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i>
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the MLD interface
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mld</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> <i>admin-state</i> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **import-policy** *reference*

Synopsis	Import policy to filter MLD packets
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mld</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> <i>import-policy</i> <i>reference</i>
Tree	<a href="#">import-policy</a>



Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-group-sources** *number*

Synopsis	Maximum number of group sources for this interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld forwarding-group-interface</a> <a href="#">forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <a href="#">maximum-number-group-sources</a> <i>number</i>
Tree	<a href="#">maximum-number-group-sources</a>
Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-groups** *number*

Synopsis	Maximum number of groups for this interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld forwarding-group-interface</a> <a href="#">forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <a href="#">maximum-number-groups</a> <i>number</i>
Tree	<a href="#">maximum-number-groups</a>
Range	1 to 16000
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-sources** *number*

Synopsis	Maximum number of sources that are allowed per group
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld forwarding-group-interface</a> <a href="#">forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <a href="#">maximum-number-sources</a> <i>number</i>
Tree	<a href="#">maximum-number-sources</a>
Range	1 to 1000
Introduced	21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## mcac

Synopsis Enter the **mcac** context

Context **configure** [router](#) *string* [mld forwarding-group-interface forwarding-service](#) *string* [group-interface-name](#) *reference* [mcac](#)

Tree [mcac](#)

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## bandwidth

Synopsis Enter the **bandwidth** context

Context **configure** [router](#) *string* [mld forwarding-group-interface forwarding-service](#) *string* [group-interface-name](#) *reference* [mcac bandwidth](#)

Tree [bandwidth](#)

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## mandatory (*number* | *keyword*)

Synopsis Pre-reserved bandwidth for all mandatory channels

Context **configure** [router](#) *string* [mld forwarding-group-interface forwarding-service](#) *string* [group-interface-name](#) *reference* [mcac bandwidth mandatory](#) (*number* | *keyword*)

Tree [mandatory](#)

Range 0 to 2147483647

Options unlimited

Default unlimited

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## total (*number* | *keyword*)

Synopsis Maximum allowed bandwidth

Context **configure** [router](#) *string* [mld forwarding-group-interface forwarding-service](#) *string* [group-interface-name](#) *reference* [mcac bandwidth total](#) (*number* | *keyword*)

Tree	<a href="#">total</a>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **interface-policy** *reference*

Synopsis	Name of multicast CAC interface policy
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld forwarding-group-interface forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <a href="#">mcac interface-policy</a> <i>reference</i>
Tree	<a href="#">interface-policy</a>
Reference	<b>configure</b> <a href="#">mcac interface-policy</a> <i>string</i>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **policy** *reference*

Synopsis	Multicast CAC policy name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld forwarding-group-interface forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <a href="#">mcac policy</a> <i>reference</i>
Tree	<a href="#">policy</a>
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> <li>• subscriber level and redirected interface when redirection is configured</li> <li>• subscriber level and group-interface level when redirection is unconfigured</li> </ul> <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p>
Reference	<b>configure</b> <a href="#">mcac policy</a> <i>string</i>

Introduced 21.7.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-interval** *number*

Synopsis Time between two consecutive host-query messages  
Context **configure** **router** *string* **mld** **forwarding-group-interface** **forwarding-service** *string* **group-interface-name** *reference* **query-interval** *number*  
Tree [query-interval](#)  
Range 2 to 1024  
Introduced 21.7.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-last-member-interval** *number*

Synopsis Time between group-specific query messages  
Context **configure** **router** *string* **mld** **forwarding-group-interface** **forwarding-service** *string* **group-interface-name** *reference* **query-last-member-interval** *number*  
Tree [query-last-member-interval](#)  
Range 1 to 1023  
Introduced 21.7.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-response-interval** *number*

Synopsis Time to wait for a response to the host-query messages  
Context **configure** **router** *string* **mld** **forwarding-group-interface** **forwarding-service** *string* **group-interface-name** *reference* **query-response-interval** *number*  
Tree [query-response-interval](#)  
Range 1 to 1023  
Introduced 21.7.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-source-address** *string*

Synopsis Source address for MLD queries

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Context	<b>configure</b> <i>router</i> <i>string</i> <i>mld</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> <i>query-source-address</i> <i>string</i>
Tree	<a href="#">query-source-address</a>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **router-alert-check** *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mld</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> <i>router-alert-check</i> <i>boolean</i>
Tree	<a href="#">router-alert-check</a>
Default	true
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sub-hosts-only** *boolean*

Synopsis	Allow MLD traffic from known hosts only
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mld</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> <i>sub-hosts-only</i> <i>boolean</i>
Tree	<a href="#">sub-hosts-only</a>
Default	true
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **subnet-check** *boolean*

Synopsis	Enable subnet checking
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mld</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> <i>subnet-check</i> <i>boolean</i>
Tree	<a href="#">subnet-check</a>
Default	true
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**version** *keyword*

Synopsis	MLD protocol version
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>version</b> <i>keyword</i>
Tree	<b>version</b>
Options	1, 2
Default	2
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**group-if-query-source-address** *string*

Synopsis	Source address in queries for group interfaces when not configured at group interface level
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>group-if-query-source-address</b> <i>string</i>
Tree	<b>group-if-query-source-address</b>
Introduced	16.0.R1
Platforms	All

**group-interface** [**group-interface-name**] *reference*

Synopsis	Enter the <b>group-interface</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>group-interface</b> <i>reference</i>
Tree	<b>group-interface</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[group-interface-name]** *reference*

Synopsis	Group interface name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>group-interface</b> <i>reference</i>
Tree	<b>group-interface</b>
Reference	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the MLD interface

Context **configure** *router string mld group-interface reference admin-state keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **import-policy** *reference*

Synopsis Import policy to filter MLD packets

Context **configure** *router string mld group-interface reference import-policy reference*

Tree [import-policy](#)

Reference **configure** *policy-options policy-statement string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-group-sources** *number*

Synopsis Maximum number of group sources for this interface

Context **configure** *router string mld group-interface reference maximum-number-group-sources number*

Tree [maximum-number-group-sources](#)

Description This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.

Range 1 to 32000

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-groups** *number*

Synopsis	Maximum number of groups for this interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld group-interface</a> <i>reference</i> <a href="#">maximum-number-groups</a> <i>number</i>
Tree	<a href="#">maximum-number-groups</a>
Range	1 to 16000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-sources** *number*

Synopsis	Maximum number of sources that are allowed per group
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld group-interface</a> <i>reference</i> <a href="#">maximum-number-sources</a> <i>number</i>
Tree	<a href="#">maximum-number-sources</a>
Range	1 to 1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mcac**

Synopsis	Enter the <b>mcac</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld group-interface</a> <i>reference</i> <a href="#">mcac</a>
Tree	<a href="#">mcac</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **bandwidth**

Synopsis	Enter the <b>bandwidth</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld group-interface</a> <i>reference</i> <a href="#">mcac</a> <a href="#">bandwidth</a>
Tree	<a href="#">bandwidth</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**mandatory** (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>group-interface</b> <i>reference</i> <b>mcac</b> <b>bandwidth</b> <b>mandatory</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>mandatory</b>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**total** (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>group-interface</b> <i>reference</i> <b>mcac</b> <b>bandwidth</b> <b>total</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>total</b>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**interface-policy** *reference*

Synopsis	Name of multicast CAC interface policy
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>group-interface</b> <i>reference</i> <b>mcac</b> <b>interface-policy</b> <i>reference</i>
Tree	<b>interface-policy</b>
Reference	<b>configure</b> <b>mcac</b> <b>interface-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**policy** *reference*

Synopsis	Multicast CAC policy name
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld group-interface</a> <i>reference</i> <a href="#">mcac policy</a> <i>reference</i>
Tree	<a href="#">policy</a>
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> <li>• subscriber level and redirected interface when redirection is configured</li> <li>• subscriber level and group-interface level when redirection is unconfigured</li> </ul> <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p>
Reference	<b>configure</b> <a href="#">mcac policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-interval** *number*

Synopsis	Time between two consecutive host-query messages
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld group-interface</a> <i>reference</i> <a href="#">query-interval</a> <i>number</i>
Tree	<a href="#">query-interval</a>
Range	2 to 1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-last-member-interval** *number*

Synopsis	Time between group-specific query messages
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld group-interface</a> <i>reference</i> <a href="#">query-last-member-interval</a> <i>number</i>
Tree	<a href="#">query-last-member-interval</a>
Range	1 to 1023
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-response-interval** *number*

Synopsis Time to wait for a response to the host-query messages  
Context **configure** **router** *string* **mld** **group-interface** *reference* **query-response-interval** *number*  
Tree [query-response-interval](#)  
Range 1 to 1023  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-source-address** *string*

Synopsis Source address for MLD queries  
Context **configure** **router** *string* **mld** **group-interface** *reference* **query-source-address** *string*  
Tree [query-source-address](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **router-alert-check** *boolean*

Synopsis Enable router alert checking for IGMP or MLD messages  
Context **configure** **router** *string* **mld** **group-interface** *reference* **router-alert-check** *boolean*  
Tree [router-alert-check](#)  
Default true  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sub-hosts-only** *boolean*

Synopsis Allow MLD traffic from known hosts only  
Context **configure** **router** *string* **mld** **group-interface** *reference* **sub-hosts-only** *boolean*  
Tree [sub-hosts-only](#)  
Default true  
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **subnet-check** *boolean*

Synopsis Enable subnet checking  
 Context **configure** *router string mld group-interface reference subnet-check boolean*  
 Tree [subnet-check](#)  
 Default true  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **version** *keyword*

Synopsis MLD protocol version  
 Context **configure** *router string mld group-interface reference version keyword*  
 Tree [version](#)  
 Options 1, 2  
 Default 2  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **interface** [[ip-interface-name](#)] *string*

Synopsis Enter the **interface** list instance  
 Context **configure** *router string mld interface string*  
 Tree [interface](#)  
 Introduced 16.0.R1  
 Platforms All

### **[ip-interface-name]** *string*

Synopsis IP interface name  
 Context **configure** *router string mld interface string*  
 Tree [interface](#)  
 String Length 1 to 32

Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the MLD interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>interface</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **import-policy** *reference*

Synopsis	Import policy to filter MLD packets
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>interface</b> <i>string</i> <b>import-policy</b> <i>reference</i>
Tree	<b>import-policy</b>
Reference	<b>configure</b> <b>policy-options</b> <b>policy-statement</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **maximum-number-group-sources** *number*

Synopsis	Maximum number of group sources for this interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>interface</b> <i>string</i> <b>maximum-number-group-sources</b> <i>number</i>
Tree	<b>maximum-number-group-sources</b>
Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	16.0.R1
Platforms	All

### **maximum-number-groups** *number*

Synopsis	Maximum number of groups for this interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <b>maximum-number-groups</b> <i>number</i>
Tree	<a href="#">maximum-number-groups</a>
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

### **maximum-number-sources** *number*

Synopsis	Maximum number of sources that are allowed per group
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <b>maximum-number-sources</b> <i>number</i>
Tree	<a href="#">maximum-number-sources</a>
Range	1 to 1000
Introduced	16.0.R1
Platforms	All

### **mcac**

Synopsis	Enter the <b>mcac</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <b>mcac</b>
Tree	<a href="#">mcac</a>
Introduced	16.0.R1
Platforms	All

### **bandwidth**

Synopsis	Enter the <b>bandwidth</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <b>bandwidth</b>
Tree	<a href="#">bandwidth</a>
Introduced	16.0.R1
Platforms	All

**mandatory** (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>interface</b> <i>string</i> <b>mcac</b> <b>bandwidth</b> <b>mandatory</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>mandatory</b>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

**total** (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>interface</b> <i>string</i> <b>mcac</b> <b>bandwidth</b> <b>total</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>total</b>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

**interface-policy** *reference*

Synopsis	Name of multicast CAC interface policy
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>interface</b> <i>string</i> <b>mcac</b> <b>interface-policy</b> <i>reference</i>
Tree	<b>interface-policy</b>
Reference	<b>configure</b> <b>mcac</b> <b>interface-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

**mc-constraints**

Synopsis	Enter the <b>mc-constraints</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>interface</b> <i>string</i> <b>mcac</b> <b>mc-constraints</b>

Tree	<a href="#">mc-constraints</a>
Introduced	16.0.R1
Platforms	All

### **level** [[level-id](#)] *number*

Synopsis	Enter the <b>level</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">level</a> <i>number</i>
Tree	<a href="#">level</a>
Introduced	16.0.R1
Platforms	All

### **[level-id]** *number*

Synopsis	Bandwidth level ID for an MCAC constraint
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">level</a> <i>number</i>
Tree	<a href="#">level</a>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **bandwidth** *number*

Synopsis	Bandwidth available for this level
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">level</a> <i>number</i> <a href="#">bandwidth</a> <i>number</i>
Tree	<a href="#">bandwidth</a>
Range	0 to 2147483647
Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All



**number-down** [**number-lag-port-down**] *number*

Synopsis	Enter the <b>number-down</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>interface</b> <i>string</i> <b>mcac</b> <b>mc-constraints</b> <b>number-down</b> <i>number</i>
Tree	<b>number-down</b>
Introduced	16.0.R1
Platforms	All

**[number-lag-port-down]** *number*

Synopsis	Number of ports that are down in this LAG link
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>interface</b> <i>string</i> <b>mcac</b> <b>mc-constraints</b> <b>number-down</b> <i>number</i>
Tree	<b>number-down</b>
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**level** *number*

Synopsis	Level ID to associate with number of down LAG ports
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>interface</b> <i>string</i> <b>mcac</b> <b>mc-constraints</b> <b>number-down</b> <i>number</i> <b>level</b> <i>number</i>
Tree	<b>level</b>
Description	This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.
Range	1 to 8
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**use-lag-port-weight** *boolean*

Synopsis	Use LAG port weight in calculating MCAC constraints
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>interface</b> <i>string</i> <b>mcac</b> <b>mc-constraints</b> <b>use-lag-port-weight</b> <i>boolean</i>

Tree	<a href="#">use-lag-port-weight</a>
Description	When configured to <b>true</b> , port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs.
Default	false
Introduced	16.0.R1
Platforms	All

### **policy reference**

Synopsis	Multicast CAC policy name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld interface</a> <i>string</i> <a href="#">mcac policy reference</a>
Tree	<a href="#">policy</a>
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> <li>• subscriber level and redirected interface when redirection is configured</li> <li>• subscriber level and group-interface level when redirection is unconfigured</li> </ul> <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p>
Reference	<b>configure</b> <a href="#">mcac policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **query-interval** *number*

Synopsis	Time between two consecutive host-query messages
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld interface</a> <i>string</i> <a href="#">query-interval</a> <i>number</i>
Tree	<a href="#">query-interval</a>
Range	2 to 1024

Introduced 16.0.R1  
Platforms All

### **query-last-member-interval** *number*

Synopsis Time between group-specific query messages  
Context **configure** [router string mld interface string query-last-member-interval number](#)  
Tree [query-last-member-interval](#)  
Range 1 to 1023  
Introduced 16.0.R1  
Platforms All

### **query-response-interval** *number*

Synopsis Time to wait for a response to the host-query messages  
Context **configure** [router string mld interface string query-response-interval number](#)  
Tree [query-response-interval](#)  
Range 1 to 1023  
Introduced 16.0.R1  
Platforms All

### **router-alert-check** *boolean*

Synopsis Enable router alert checking for IGMP or MLD messages  
Context **configure** [router string mld interface string router-alert-check boolean](#)  
Tree [router-alert-check](#)  
Default true  
Introduced 16.0.R1  
Platforms All

### **ssm-translate**

Synopsis Enter the **ssm-translate** context  
Context **configure** [router string mld interface string ssm-translate](#)  
Tree [ssm-translate](#)

Introduced 16.0.R1  
 Platforms All

### **group-range** *start string end string*

Synopsis Enter the **group-range** list instance  
 Context **configure** *router string mld interface string ssm-translate group-range start string end string*  
 Tree [group-range](#)  
 Introduced 16.0.R1  
 Platforms All

### **start string**

Synopsis Lower bound of the group range  
 Context **configure** *router string mld interface string ssm-translate group-range start string end string*  
 Tree [group-range](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **end string**

Synopsis Upper bound of the group range  
 Context **configure** *router string mld interface string ssm-translate group-range start string end string*  
 Tree [group-range](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **source** [[source-address](#)] *string*

Synopsis Add a list entry for **source**

Context	<b>configure</b> <i>router string mld interface string ssm-translate group-range start string end string source string</i>
Tree	<a href="#">source</a>
Min. Instances	1
Introduced	16.0.R1
Platforms	All

### **[source-address]** *string*

Synopsis	Source IP address
Context	<b>configure</b> <i>router string mld interface string ssm-translate group-range start string end string source string</i>
Tree	<a href="#">source</a>
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

### **static**

Synopsis	Enter the <b>static</b> context
Context	<b>configure</b> <i>router string mld interface string static</i>
Tree	<a href="#">static</a>
Introduced	16.0.R1
Platforms	All

### **group** [[group-address](#)] *string*

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure</b> <i>router string mld interface string static group string</i>
Tree	<a href="#">group</a>
Introduced	16.0.R1
Platforms	All

**[group-address]** *string*

Synopsis	Group address of multicast channel
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>interface</b> <i>string</i> <b>static</b> <b>group</b> <i>string</i>
Tree	<b>group</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**source** [**source-address**] *string*

Synopsis	Add a list entry for <b>source</b>
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>interface</b> <i>string</i> <b>static</b> <b>group</b> <i>string</i> <b>source</b> <i>string</i>
Tree	<b>source</b>
Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .
Introduced	16.0.R1
Platforms	All

**[source-address]** *string*

Synopsis	Source IP address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>interface</b> <i>string</i> <b>static</b> <b>group</b> <i>string</i> <b>source</b> <i>string</i>
Tree	<b>source</b>
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

**starg**

Synopsis	any source address (*,G)
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>interface</b> <i>string</i> <b>static</b> <b>group</b> <i>string</i> <b>starg</b>
Tree	<b>starg</b>
Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .
Introduced	16.0.R2
Platforms	All

**group-range** *start string end string step string*

Synopsis	Enter the <b>group-range</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld interface</b> <i>string</i> <b>static group-range start string end string step string</b>
Tree	<b>group-range</b>
Introduced	16.0.R1
Platforms	All

**start string**

Synopsis	Lower bound of the static multicast group
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld interface</b> <i>string</i> <b>static group-range start string end string step string</b>
Tree	<b>group-range</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**end string**

Synopsis	Upper bound of the static multicast group
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld interface</b> <i>string</i> <b>static group-range start string end string step string</b>
Tree	<b>group-range</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**step string**

Synopsis	Step interval for the group-range addresses
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld interface</b> <i>string</i> <b>static group-range start string end string step string</b>
Tree	<b>group-range</b>
Notes	This element is part of a list key.

Introduced 16.0.R1  
 Platforms All

### **source** [*source-address*] *string*

Synopsis Add a list entry for **source**  
 Context **configure** *router string mld interface string static group-range start string end string step string source string*  
 Tree [source](#)  
 Notes The following elements are part of a mandatory choice: **source** or **starg**.  
 Introduced 16.0.R1  
 Platforms All

### **[source-address]** *string*

Synopsis Source IP address  
 Context **configure** *router string mld interface string static group-range start string end string step string source string*  
 Tree [source](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R2  
 Platforms All

### **starg**

Synopsis any source address (\*,G)  
 Context **configure** *router string mld interface string static group-range start string end string step string starg*  
 Tree [starg](#)  
 Notes The following elements are part of a mandatory choice: **source** or **starg**.  
 Introduced 16.0.R2  
 Platforms All

### **version** *keyword*

Synopsis MLD protocol version



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Context	<b>configure</b> <i>router string mld interface string version keyword</i>
Tree	<a href="#">version</a>
Options	1, 2
Default	2
Introduced	16.0.R1
Platforms	All

### **query-interval** *number*

Synopsis	Time between two consecutive host-query messages
Context	<b>configure</b> <i>router string mld query-interval number</i>
Tree	<a href="#">query-interval</a>
Range	2 to 1024
Units	seconds
Default	125
Introduced	16.0.R1
Platforms	All

### **query-last-member-interval** *number*

Synopsis	Time between group-specific query messages
Context	<b>configure</b> <i>router string mld query-last-member-interval number</i>
Tree	<a href="#">query-last-member-interval</a>
Range	1 to 1023
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

### **query-response-interval** *number*

Synopsis	Time to wait for a response to the host-query messages
Context	<b>configure</b> <i>router string mld query-response-interval number</i>
Tree	<a href="#">query-response-interval</a>
Range	1 to 1023

Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

### **robust-count** *number*

Synopsis	Number of retries after expected message loss
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld</a> <b>robust-count</b> <i>number</i>
Tree	<a href="#">robust-count</a>
Range	2 to 10
Default	2
Introduced	16.0.R1
Platforms	All

### **ssm-translate**

Synopsis	Enter the <b>ssm-translate</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld</a> <b>ssm-translate</b>
Tree	<a href="#">ssm-translate</a>
Introduced	16.0.R1
Platforms	All

### **group-range** [start](#) *string* [end](#) *string*

Synopsis	Enter the <b>group-range</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld</a> <a href="#">ssm-translate</a> <a href="#">group-range</a> <a href="#">start</a> <i>string</i> <a href="#">end</a> <i>string</i>
Tree	<a href="#">group-range</a>
Introduced	16.0.R1
Platforms	All

### **start** *string*

Synopsis	Lower bound of the group range
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld</a> <a href="#">ssm-translate</a> <a href="#">group-range</a> <a href="#">start</a> <i>string</i> <a href="#">end</a> <i>string</i>

Tree	<a href="#">group-range</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**end string**

Synopsis	Upper bound of the group range
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">mld</a> <a href="#">ssm-translate</a> <a href="#">group-range</a> <a href="#">start</a> <a href="#">string</a> <a href="#">end</a> <a href="#">string</a>
Tree	<a href="#">group-range</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**source** [[source-address](#)] [string](#)

Synopsis	Add a list entry for <b>source</b>
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">mld</a> <a href="#">ssm-translate</a> <a href="#">group-range</a> <a href="#">start</a> <a href="#">string</a> <a href="#">end</a> <a href="#">string</a> <a href="#">source</a> <a href="#">string</a>
Tree	<a href="#">source</a>
Min. Instances	1
Introduced	16.0.R1
Platforms	All

**[source-address]** [string](#)

Synopsis	Source IP address
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">mld</a> <a href="#">ssm-translate</a> <a href="#">group-range</a> <a href="#">start</a> <a href="#">string</a> <a href="#">end</a> <a href="#">string</a> <a href="#">source</a> <a href="#">string</a>
Tree	<a href="#">source</a>
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

## mpls

Synopsis	Enable the <b>mpls</b> context
Context	<b>configure router string mpls</b>
Tree	<b>mpls</b>
Introduced	16.0.R1
Platforms	All

## admin-group-frr *boolean*

Synopsis	Use admin group constraints for FRR path computation
Context	<b>configure router string mpls admin-group-frr boolean</b>
Tree	<b>admin-group-frr</b>
Default	false
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of the MPLS instance
Context	<b>configure router string mpls admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

## auto-bandwidth-multipliers

Synopsis	Enter the <b>auto-bandwidth-multipliers</b> context
Context	<b>configure router string mpls auto-bandwidth-multipliers</b>
Tree	<b>auto-bandwidth-multipliers</b>
Introduced	16.0.R1
Platforms	All

**adjust-multiplier** *number*

Synopsis	Collection intervals in a sample interval
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls auto-bandwidth-multipliers</b> <b>adjust-multiplier</b> <i>number</i>
Tree	<b>adjust-multiplier</b>
Range	1 to 16383
Default	288
Introduced	16.0.R1
Platforms	All

**sample-multiplier** *number*

Synopsis	Collection intervals in a sample interval
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls auto-bandwidth-multipliers</b> <b>sample-multiplier</b> <i>number</i>
Tree	<b>sample-multiplier</b>
Range	1 to 511
Default	1
Introduced	16.0.R1
Platforms	All

**auto-lsp** [**template-name**] *reference*

Synopsis	Enter the <b>auto-lsp</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls auto-lsp</b> <i>reference</i>
Tree	<b>auto-lsp</b>
Max. Instances	500
Introduced	16.0.R1
Platforms	All

**[template-name]** *reference*

Synopsis	LSP template name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls auto-lsp</b> <i>reference</i>
Tree	<b>auto-lsp</b>
Reference	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp-template</b> <i>string</i>

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **one-hop** *boolean*

Synopsis	Enable one-hop point-to-point LSP automatic signaling
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls auto-lsp</a> <i>reference</i> <b>one-hop</b> <i>boolean</i>
Tree	<a href="#">one-hop</a>
Description	This command enables the automatic signaling of one-hop point-to-point LSPs.
Default	false
Notes	The following elements are part of a choice: <b>one-hop</b> or <b>policy</b> .
Introduced	16.0.R1
Platforms	All

### **policy** *reference*

Synopsis	Peer prefix policy name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls auto-lsp</a> <i>reference</i> <a href="#">policy</a> <i>reference</i>
Tree	<a href="#">policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	The following elements are part of a choice: <b>one-hop</b> or <b>policy</b> . This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **aux-stats**

Synopsis	Enable the <b>aux-stats</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls aux-stats</a>
Tree	<a href="#">aux-stats</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

**sr boolean**

Synopsis	Traffic type count in MPLS statistics table
Context	<b>configure router string mpls aux-stats sr boolean</b>
Tree	<b>sr</b>
Description	This command configures the type of traffic to count in the auxiliary MPLS statistics table. It refers to any type of segment routing traffic (SR-OSPF, SR-ISIS, SR-TE, and so on).
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

**bypass-resignal-timer number**

Synopsis	Resignal timer for bypass
Context	<b>configure router string mpls bypass-resignal-timer number</b>
Tree	<b>bypass-resignal-timer</b>
Range	1 to 10080
Units	minutes
Introduced	16.0.R1
Platforms	All

**class-forwarding-policy [policy-name] string**

Synopsis	Enter the <b>class-forwarding-policy</b> list instance
Context	<b>configure router string mpls class-forwarding-policy string</b>
Tree	<b>class-forwarding-policy</b>
Max. Instances	15
Introduced	16.0.R1
Platforms	All

**[policy-name] string**

Synopsis	Name of class forwarding policy
Context	<b>configure router string mpls class-forwarding-policy string</b>

Tree	<a href="#">class-forwarding-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **default-set** *number*

Synopsis	Default forwarding set ID
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls class-forwarding-policy</a> <i>string</i> <b>default-set</b> <i>number</i>
Tree	<a href="#">default-set</a>
Range	1 to 6
Default	1
Introduced	16.0.R1
Platforms	All

### **fc** [[fc-name](#)] *keyword*

Synopsis	Enter the <b>fc</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls class-forwarding-policy</a> <i>string</i> <b>fc</b> <i>keyword</i>
Tree	<a href="#">fc</a>
Introduced	16.0.R1
Platforms	All

### [[fc-name](#)] *keyword*

Synopsis	Forwarding class name for LSP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls class-forwarding-policy</a> <i>string</i> <b>fc</b> <i>keyword</i>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All



### **forwarding-set** *number*

Synopsis	Forwarding set ID for forwarding classes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls class-forwarding-policy</b> <i>string</i> <b>fc</b> <i>keyword</i> <b>forwarding-set</b> <i>number</i>
Tree	<b>forwarding-set</b>
Range	1 to 6
Default	1
Introduced	16.0.R1
Platforms	All

### **cspf-on-loose-hop** *boolean*

Synopsis	Calculate CSPF until next loose hop on LSR
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls cspf-on-loose-hop</b> <i>boolean</i>
Tree	<b>cspf-on-loose-hop</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **dynamic-bypass** *boolean*

Synopsis	Create dynamic bypass LSPs in FRR
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls dynamic-bypass</b> <i>boolean</i>
Tree	<b>dynamic-bypass</b>
Default	true
Introduced	16.0.R1
Platforms	All

### **entropy-label**

Synopsis	Enter the <b>entropy-label</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls entropy-label</b>
Tree	<b>entropy-label</b>
Introduced	16.0.R1
Platforms	All

**rsvp-te boolean**

Synopsis	Apply entropy labels to RSVP-TE LSPs
Context	<b>configure</b> <i>router string mpls entropy-label rsvp-te boolean</i>
Tree	<a href="#">rsvp-te</a>
Introduced	16.0.R1
Platforms	All

**sr-te boolean**

Synopsis	Apply entropy labels to SR-TE LSPs
Context	<b>configure</b> <i>router string mpls entropy-label sr-te boolean</i>
Tree	<a href="#">sr-te</a>
Introduced	16.0.R1
Platforms	All

**exponential-backoff-retry boolean**

Synopsis	Use exponential back-off timer when retrying an LSP
Context	<b>configure</b> <i>router string mpls exponential-backoff-retry boolean</i>
Tree	<a href="#">exponential-backoff-retry</a>
Default	false
Introduced	16.0.R1
Platforms	All

**forwarding-policies**

Synopsis	Enable the <b>forwarding-policies</b> context
Context	<b>configure</b> <i>router string mpls forwarding-policies</i>
Tree	<a href="#">forwarding-policies</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of MPLS forwarding policies
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls forwarding-policies</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**forwarding-policy** [**policy-name**] *string*

Synopsis	Enter the <b>forwarding-policy</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls forwarding-policies</b> <b>forwarding-policy</b> <i>string</i>
Tree	<b>forwarding-policy</b>
Max. Instances	65536
Introduced	16.0.R1
Platforms	All

**[policy-name]** *string*

Synopsis	Forwarding policy name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls forwarding-policies</b> <b>forwarding-policy</b> <i>string</i>
Tree	<b>forwarding-policy</b>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the MPLS forwarding policy
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls forwarding-policies</b> <b>forwarding-policy</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>

Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

## **binding-label** *number*



### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Binding label
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls forwarding-policies forwarding-policy</b> <i>string</i> <b>binding-label</b> <i>number</i>
Tree	<b>binding-label</b>
Range	32 to 1048575
Introduced	16.0.R1
Platforms	All

## **egress-statistics**

Synopsis	Enable the <b>egress-statistics</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls forwarding-policies forwarding-policy</b> <i>string</i> <b>egress-statistics</b>
Tree	<b>egress-statistics</b>
Introduced	19.7.R1
Platforms	All

## **admin-state** *keyword*

Synopsis	Administrative state of egress or ingress statistics
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls forwarding-policies forwarding-policy</b> <i>string</i> <b>egress-statistics admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	19.7.R1

Platforms All

## endpoint (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Configure endpoint address.

Context **configure** router *string* mpls forwarding-policies forwarding-policy *string* endpoint (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [endpoint](#)

Introduced 16.0.R4

Platforms All

## ingress-statistics

Synopsis Enable the **ingress-statistics** context

Context **configure** router *string* mpls forwarding-policies forwarding-policy *string* ingress-statistics

Tree [ingress-statistics](#)

Introduced 16.0.R1

Platforms All

## admin-state *keyword*

Synopsis Administrative state of egress or ingress statistics

Context **configure** router *string* mpls forwarding-policies forwarding-policy *string* ingress-statistics **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms All

**metric** *number*

Synopsis	Metric of an MPLS forwarding policy
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls forwarding-policies forwarding-policy</b> <i>string</i> <b>metric</b> <i>number</i>
Tree	<b>metric</b>
Range	1 to 16777215
Introduced	16.0.R4
Platforms	All

**next-hop-group** [*index*] *number*

Synopsis	Enter the <b>next-hop-group</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls forwarding-policies forwarding-policy</b> <i>string</i> <b>next-hop-group</b> <i>number</i>
Tree	<b>next-hop-group</b>
Max. Instances	32
Introduced	16.0.R1
Platforms	All

**[index]** *number*

Synopsis	Index for next hop group
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls forwarding-policies forwarding-policy</b> <i>string</i> <b>next-hop-group</b> <i>number</i>
Tree	<b>next-hop-group</b>
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of NHG in MPLS forwarding policy
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls forwarding-policies forwarding-policy</b> <i>string</i> <b>next-hop-group</b> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>

Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

## backup-next-hop

Synopsis	Enable the <b>backup-next-hop</b> context
Context	<b>configure</b> <i>router string mpls forwarding-policies forwarding-policy string next-hop-group number backup-next-hop</i>
Tree	<a href="#">backup-next-hop</a>
Introduced	16.0.R1
Platforms	All

## next-hop (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Next hop address
Context	<b>configure</b> <i>router string mpls forwarding-policies forwarding-policy string next-hop-group number backup-next-hop next-hop (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<a href="#">next-hop</a>
Introduced	16.0.R1
Platforms	All

## pushed-labels [[index](#)] *number*

Synopsis	Enter the <b>pushed-labels</b> list instance
Context	<b>configure</b> <i>router string mpls forwarding-policies forwarding-policy string next-hop-group number backup-next-hop pushed-labels number</i>
Tree	<a href="#">pushed-labels</a>
Max. Instances	10
Introduced	16.0.R4
Platforms	All

## [[index](#)] *number*

Synopsis	Index for push label
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Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls forwarding-policies forwarding-policy</i> <i>string</i> <i>next-hop-group number backup-next-hop pushed-labels number</i>
Tree	<a href="#">pushed-labels</a>
Range	1 to 10
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **label** *number*

Synopsis	Label value
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls forwarding-policies forwarding-policy</i> <i>string</i> <i>next-hop-group number backup-next-hop pushed-labels number label number</i>
Tree	<a href="#">label</a>
Range	1 to 1048575
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **load-balancing-weight** *number*

Synopsis	Load balancing weight of an NHG entry
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls forwarding-policies forwarding-policy</i> <i>string</i> <i>next-hop-group number load-balancing-weight number</i>
Tree	<a href="#">load-balancing-weight</a>
Range	1 to 4294967295
Introduced	16.0.R4
Platforms	All

### **primary-next-hop**

Synopsis	Enable the <b>primary-next-hop</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls forwarding-policies forwarding-policy</i> <i>string</i> <i>next-hop-group number primary-next-hop</i>
Tree	<a href="#">primary-next-hop</a>
Introduced	16.0.R1



Platforms All

### **next-hop** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Next hop address

Context **configure** *router string mpls forwarding-policies forwarding-policy string next-hop-group number primary-next-hop next-hop* (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [next-hop](#)

Introduced 16.0.R1

Platforms All

### **pushed-labels** [[index](#)] *number*

Synopsis Enter the **pushed-labels** list instance

Context **configure** *router string mpls forwarding-policies forwarding-policy string next-hop-group number primary-next-hop pushed-labels number*

Tree [pushed-labels](#)

Max. Instances 10

Introduced 16.0.R4

Platforms All

### [[index](#)] *number*

Synopsis Index for push label

Context **configure** *router string mpls forwarding-policies forwarding-policy string next-hop-group number primary-next-hop pushed-labels number*

Tree [pushed-labels](#)

Range 1 to 10

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms All

### **label** *number*

Synopsis Label value

Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls forwarding-policies forwarding-policy</i> <i>string</i> <i>next-hop-group</i> <i>number</i> <i>primary-next-hop pushed-labels</i> <i>number</i> <i>label</i> <i>number</i>
Tree	<a href="#">label</a>
Range	1 to 1048575
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### resolution-type *keyword*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Resolution type for next hop group
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls forwarding-policies forwarding-policy</i> <i>string</i> <i>next-hop-group</i> <i>number</i> <a href="#">resolution-type</a> <i>keyword</i>
Tree	<a href="#">resolution-type</a>
Options	direct, indirect
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### preference *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Preference number
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls forwarding-policies forwarding-policy</i> <i>string</i> <a href="#">preference</a> <i>number</i>
Tree	<a href="#">preference</a>
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	All

**revert-timer** *number*

Synopsis	Revert timer
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls forwarding-policies forwarding-policy</b> <i>string</i> <b>revert-timer</b> <i>number</i>
Tree	<a href="#">revert-timer</a>
Range	1 to 600
Units	seconds
Introduced	16.0.R1
Platforms	All

**tunnel-table-pref** *number*

Synopsis	Tunnel table preference
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls forwarding-policies forwarding-policy</b> <i>string</i> <b>tunnel-table-pref</b> <i>number</i>
Tree	<a href="#">tunnel-table-pref</a>
Description	<p>This command configures the TTM preference value of an MPLS forwarding policy.</p> <p>The <i>preference-value</i> parameter is used by applications to select one tunnel type to bind to in TTM when multiple tunnel types are enabled for the application.</p> <p>It is recommended to not set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.</p>
Range	1 to 255
Default	255
Introduced	16.0.R4
Platforms	All

**reserved-label-block** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reserved label block
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls forwarding-policies reserved-label-block</b> <i>reference</i>
Tree	<a href="#">reserved-label-block</a>

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Reference	<b>configure</b> <i>router string mpls-labels reserved-label-block string</i>
Introduced	16.0.R1
Platforms	All

### **frr-object** *boolean*

Synopsis	Signal with fast reroute object
Context	<b>configure</b> <i>router string mpls frr-object boolean</i>
Tree	<a href="#">frr-object</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **hold-timer** *number*

Synopsis	Hold timer value
Context	<b>configure</b> <i>router string mpls hold-timer number</i>
Tree	<a href="#">hold-timer</a>
Range	0 to 1000
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

### **ingress-statistics**

Synopsis	Enter the <b>ingress-statistics</b> context
Context	<b>configure</b> <i>router string mpls ingress-statistics</i>
Tree	<a href="#">ingress-statistics</a>
Introduced	16.0.R1
Platforms	All

### **lsp sender** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **lsp-name** *string*

Synopsis	Enter the <b>lsp</b> list instance
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Context	<b>configure router string mpls ingress-statistics lsp sender</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <i>lsp-name string</i>
Tree	<a href="#">lsp</a>
Introduced	16.0.R1
Platforms	All

### **sender** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Sender address
Context	<b>configure router string mpls ingress-statistics lsp sender</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <i>lsp-name string</i>
Tree	<a href="#">lsp</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **lsp-name** *string*

Synopsis	LSP name
Context	<b>configure router string mpls ingress-statistics lsp sender</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <i>lsp-name string</i>
Tree	<a href="#">lsp</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **accounting-policy** *reference*

Synopsis	Accounting policy ID
Context	<b>configure router string mpls ingress-statistics lsp sender</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <i>lsp-name string accounting-policy reference</i>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure log accounting-policy</b> <i>number</i>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of statistics for the LSP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>ingress-statistics</b> <b>lsp</b> <b>sender</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>lsp-name</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**collect-stats** *boolean*

Synopsis	Collect statistics
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>ingress-statistics</b> <b>lsp</b> <b>sender</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>lsp-name</b> <i>string</i> <b>collect-stats</b> <i>boolean</i>
Tree	<b>collect-stats</b>
Default	false
Introduced	16.0.R1
Platforms	All

**stat-mode** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Stat mode
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>ingress-statistics</b> <b>lsp</b> <b>sender</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>lsp-name</b> <i>string</i> <b>stat-mode</b> <i>keyword</i>
Tree	<b>stat-mode</b>
Options	per-fc, aggregate
Introduced	21.10.R1
Platforms	All

**p2mp-template-lsp sender** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **rsvp-session-name** *string*

Synopsis	Enter the <b>p2mp-template-lsp</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls ingress-statistics</b> <b>p2mp-template-lsp sender</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>rsvp-session-name</b> <i>string</i>
Tree	<b>p2mp-template-lsp</b>
Introduced	16.0.R1
Platforms	All

**sender** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Sender address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls ingress-statistics</b> <b>p2mp-template-lsp sender</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>rsvp-session-name</b> <i>string</i>
Tree	<b>p2mp-template-lsp</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**rsvp-session-name** *string*

Synopsis	RSVP session name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls ingress-statistics</b> <b>p2mp-template-lsp sender</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>rsvp-session-name</b> <i>string</i>
Tree	<b>p2mp-template-lsp</b>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**accounting-policy** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accounting policy ID
----------	----------------------

Context	<b>configure</b> <i>router string mpls ingress-statistics p2mp-template-lsp sender (ipv4-address-no-zone   ipv6-address-no-zone) rsvp-session-name string accounting-policy reference</i>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <i>log accounting-policy number</i>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of statistics for the LSP
Context	<b>configure</b> <i>router string mpls ingress-statistics p2mp-template-lsp sender (ipv4-address-no-zone   ipv6-address-no-zone) rsvp-session-name string admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **collect-stats** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Collect statistics
Context	<b>configure</b> <i>router string mpls ingress-statistics p2mp-template-lsp sender (ipv4-address-no-zone   ipv6-address-no-zone) rsvp-session-name string collect-stats boolean</i>
Tree	<a href="#">collect-stats</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **max-stats** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



Synopsis	Maximum number of statistic indices
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls ingress-statistics p2mp-template-lsp sender</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <i>rsvp-session-name</i> <i>string</i> <i>max-stats</i> <i>number</i>
Tree	<a href="#">max-stats</a>
Range	1 to 8191
Default	8191
Introduced	16.0.R1
Platforms	All

### **stat-mode** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Stat mode
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls ingress-statistics p2mp-template-lsp sender</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <i>rsvp-session-name</i> <i>string</i> <i>stat-mode</i> <i>keyword</i>
Tree	<a href="#">stat-mode</a>
Options	per-fc, aggregate
Introduced	21.10.R1
Platforms	All

### **p2p-template-lsp** *sender* (*ipv4-address-no-zone* | *ipv6-address-no-zone*) *rsvp-session-name* *string*

Synopsis	Enter the <b>p2p-template-lsp</b> list instance
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls ingress-statistics p2p-template-lsp sender</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <i>rsvp-session-name</i> <i>string</i>
Tree	<a href="#">p2p-template-lsp</a>
Introduced	16.0.R1
Platforms	All

### **sender** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Sender address
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls ingress-statistics</a> <a href="#">p2p-template-lsp</a> <a href="#">sender</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">rsvp-session-name</a> <i>string</i>
Tree	<a href="#">p2p-template-lsp</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **rsvp-session-name** *string*

Synopsis	RSVP session name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls ingress-statistics</a> <a href="#">p2p-template-lsp</a> <a href="#">sender</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">rsvp-session-name</a> <i>string</i>
Tree	<a href="#">p2p-template-lsp</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **accounting-policy** *reference*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accounting policy ID
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls ingress-statistics</a> <a href="#">p2p-template-lsp</a> <a href="#">sender</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">rsvp-session-name</a> <i>string</i> <a href="#">accounting-policy</a> <i>reference</i>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of statistics for the LSP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls ingress-statistics</a> <a href="#">p2p-template-lsp</a> <a href="#">sender</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">rsvp-session-name</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **collect-stats** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Collect statistics
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls ingress-statistics</a> <a href="#">p2p-template-lsp sender</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">rsvp-session-name</a> <i>string</i> <b>collect-stats</b> <i>boolean</i>
Tree	<a href="#">collect-stats</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **max-stats** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of statistic indices
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls ingress-statistics</a> <a href="#">p2p-template-lsp sender</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">rsvp-session-name</a> <i>string</i> <b>max-stats</b> <i>number</i>
Tree	<a href="#">max-stats</a>
Range	1 to 8191
Default	8191
Introduced	16.0.R1
Platforms	All

**stat-mode** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Stat mode
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls ingress-statistics p2p-template-lsp sender</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <i>rsvp-session-name</i> <i>string</i> <b>stat-mode</b> <i>keyword</i>
Tree	<a href="#">stat-mode</a>
Options	per-fc, aggregate
Introduced	21.10.R1
Platforms	All

**interface** [[interface-name](#)] *reference*

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls interface</i> <i>reference</i>
Tree	<a href="#">interface</a>
Description	<p>Commands in this context configure the attributes for MPLS protocol support on an IP interface.</p> <p>MPLS commands are not executed on an IP interface where MPLS is not enabled. An MPLS interface must be explicitly enabled (admin-state enabled).</p> <p>The MPLS interface must be admin-state disabled to delete the interface definition.</p> <p>A corresponding RSVP interface must also be configured. The MPLS interface cannot be deleted without also deleting the RSVP interface.</p>
Introduced	16.0.R1
Platforms	All

**[interface-name]** *reference*

Synopsis	Router interface name
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls interface</i> <i>reference</i>
Tree	<a href="#">interface</a>
Reference	<b>configure</b> <i>router</i> <i>string</i> <i>interface</i> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **admin-group** *reference*

Synopsis	Administrative groups supported by the interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls interface</a> <i>reference</i> <a href="#">admin-group</a> <i>reference</i>
Tree	<a href="#">admin-group</a>
Description	<p>This command specifies the administrative groups that the interface supports.</p> <p>This information is advertised as part of OSPF and IS-IS to help CSPF compute constrained LSPs that must include or exclude certain administrative groups. An MPLS interface is assumed to belong to all the administrative groups unless this command is issued under the interface configuration. With this command configured, the interface is assumed to belong to only the groups specifically configured in this command.</p> <p>Only the administrative groups bound to an MPLS interface are advertised in TE link TLVs and sub-TLVs when the <b>traffic-engineering</b> option is enabled in IS-IS or OSPF. IES and VPRN interfaces do not have their attributes advertised in TE TLVs.</p>
Reference	<b>configure</b> <a href="#">routing-options</a> <i>if-attribute</i> <a href="#">admin-group</a> <i>string</i>
Max. Instances	32
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the MPLS interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls interface</a> <i>reference</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **label-map** [[in-label](#)] *number*

Synopsis	Enter the <b>label-map</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls interface</a> <i>reference</i> <a href="#">label-map</a> <i>number</i>
Tree	<a href="#">label-map</a>

Introduced 16.0.R1  
 Platforms All

### **[in-label]** *number*

Synopsis Match the incoming MPLS label  
 Context **configure** *router string mpls interface reference label-map number*  
 Tree [label-map](#)  
 Range 32 to 1048575  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the label map  
 Context **configure** *router string mpls interface reference label-map number admin-state keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 16.0.R1  
 Platforms All

### **pop**



**WARNING:**  
 Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**  
 Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Pop (remove) the incoming label and forward packet based on service header  
 Context **configure** *router string mpls interface reference label-map number pop*  
 Tree [pop](#)

Notes	The following elements are part of a choice: <b>pop</b> or <b>swap</b> .
Introduced	16.0.R1
Platforms	All

## swap



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>swap</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">mpls interface reference</a> <a href="#">label-map</a> <a href="#">number</a> <a href="#">swap</a>
Tree	<a href="#">swap</a>
Notes	The following elements are part of a choice: <b>pop</b> or <b>swap</b> .
Introduced	16.0.R1
Platforms	All

## next-hop *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP address for the next hop
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">mpls interface reference</a> <a href="#">label-map</a> <a href="#">number</a> <a href="#">swap</a> <a href="#">next-hop</a> <a href="#">string</a>
Tree	<a href="#">next-hop</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## out-label (*number* | *keyword*)



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Push specific label onto the top of the outgoing packet's label stack
----------	---

Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls interface</a> <i>reference</i> <a href="#">label-map</a> <i>number</i> <a href="#">swap</a> <a href="#">out-label</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">out-label</a>
Range	16 to 1048575
Options	implicit-null-label
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **srlg-group** [[name](#)] *reference*

Synopsis	Add a list entry for <b>srlg-group</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls interface</a> <i>reference</i> <a href="#">srlg-group</a> <i>reference</i>
Tree	<a href="#">srlg-group</a>
Max. Instances	64
Introduced	16.0.R1
Platforms	All

### **[name]** *reference*

Synopsis	Shared Risk Link Group (SRLG) name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls interface</a> <i>reference</i> <a href="#">srlg-group</a> <i>reference</i>
Tree	<a href="#">srlg-group</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <i>if-attribute</i> <a href="#">srlg-group</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **te-metric** *number*

Synopsis	TE metric for the interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls interface</a> <i>reference</i> <a href="#">te-metric</a> <i>number</i>
Tree	<a href="#">te-metric</a>
Range	1 to 16777215



Introduced 16.0.R1  
 Platforms All

### **least-fill-min-thd** *number*

Synopsis Percentage of the least fill minimum threshold value  
 Context **configure** *router string mpls least-fill-min-thd number*  
 Tree [least-fill-min-thd](#)  
 Range 0 to 100  
 Units percent  
 Default 5  
 Introduced 16.0.R1  
 Platforms All

### **least-fill-reoptim-thd** *number*

Synopsis Percentage of the least fill reoptimization threshold value  
 Context **configure** *router string mpls least-fill-reoptim-thd number*  
 Tree [least-fill-reoptim-thd](#)  
 Range 0 to 100  
 Units percent  
 Default 10  
 Introduced 16.0.R1  
 Platforms All

### **logger-event-bundling** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Merge and bundle MPLS traps  
 Context **configure** *router string mpls logger-event-bundling boolean*  
 Tree [logger-event-bundling](#)  
 Default false  
 Introduced 16.0.R1

Platforms All

### **lsp** [*lsp-name*] *string*

Synopsis Enter the **lsp** list instance  
Context **configure** *router string mpls lsp string*  
Tree *lsp*  
Introduced 16.0.R1  
Platforms All

### **[lsp-name]** *string*

Synopsis Labeled Switch path name  
Context **configure** *router string mpls lsp string*  
Tree *lsp*  
String Length 1 to 64  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms All

### **adaptive** *boolean*

Synopsis Enable make-before-break functionality  
Context **configure** *router string mpls lsp string adaptive boolean*  
Tree *adaptive*  
Default true  
Introduced 16.0.R1  
Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the LSP  
Context **configure** *router string mpls lsp string admin-state keyword*  
Tree *admin-state*  
Options enable, disable

Default	disable
Introduced	16.0.R1
Platforms	All

### **admin-tag** [[name](#)] *reference*

Synopsis	Add a list entry for <b>admin-tag</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">admin-tag</a> <i>reference</i>
Tree	<a href="#">admin-tag</a>
Max. Instances	4
Introduced	16.0.R1
Platforms	All

### **[name]** *reference*

Synopsis	Name of the admin tags
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">admin-tag</a> <i>reference</i>
Tree	<a href="#">admin-tag</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">admin-tags</a> <a href="#">admin-tag</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **adspec** *boolean*

Synopsis	Include ADSPEC object in RSVP messages
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">adspec</a> <i>boolean</i>
Tree	<a href="#">adspec</a>
Default	false
Introduced	16.0.R1
Platforms	All

## auto-bandwidth

Synopsis	Enable the <b>auto-bandwidth</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">auto-bandwidth</a>
Tree	<a href="#">auto-bandwidth</a>
Introduced	16.0.R1
Platforms	All

## adjust-down

Synopsis	Enter the <b>adjust-down</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">auto-bandwidth</a> <a href="#">adjust-down</a>
Tree	<a href="#">adjust-down</a>
Introduced	16.0.R1
Platforms	All

## bw *number*

Synopsis	Minimum difference in absolute bandwidth
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">auto-bandwidth</a> <a href="#">adjust-down</a> <a href="#">bw</a> <i>number</i>
Tree	<a href="#">bw</a>
Range	0 to 6400000
Units	megabps
Default	0
Introduced	16.0.R1
Platforms	All

## percent *number*

Synopsis	Minimum difference in percent
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">auto-bandwidth</a> <a href="#">adjust-down</a> <a href="#">percent</a> <i>number</i>
Tree	<a href="#">percent</a>
Range	0 to 100
Units	percent
Default	5
Introduced	16.0.R1

Platforms All

## **adjust-up**

Synopsis Enter the **adjust-up** context  
Context **configure** [router](#) *string* [mpls lsp](#) *string* [auto-bandwidth](#) [adjust-up](#)  
Tree [adjust-up](#)  
Introduced 16.0.R1  
Platforms All

## **bw number**

Synopsis Minimum difference in absolute bandwidth  
Context **configure** [router](#) *string* [mpls lsp](#) *string* [auto-bandwidth](#) [adjust-up](#) [bw](#) *number*  
Tree [bw](#)  
Range 0 to 6400000  
Units megabps  
Default 0  
Introduced 16.0.R1  
Platforms All

## **percent number**

Synopsis Minimum difference in percent  
Context **configure** [router](#) *string* [mpls lsp](#) *string* [auto-bandwidth](#) [adjust-up](#) [percent](#) *number*  
Tree [percent](#)  
Range 0 to 100  
Units percent  
Default 5  
Introduced 16.0.R1  
Platforms All

## **fc [fc-name] keyword**

Synopsis Enter the **fc** list instance

Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls lsp</i> <i>string</i> <i>auto-bandwidth fc</i> <i>keyword</i>
Tree	<i>fc</i>
Max. Instances	8
Introduced	16.0.R1
Platforms	All

**[fc-name]** *keyword*

Synopsis	Forwarding class name for LSP
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls lsp</i> <i>string</i> <i>auto-bandwidth fc</i> <i>keyword</i>
Tree	<i>fc</i>
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**sampling-weight** *number*

Synopsis	Forwarding class weight for LSP
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls lsp</i> <i>string</i> <i>auto-bandwidth fc</i> <i>keyword</i> <i>sampling-weight number</i>
Tree	<i>sampling-weight</i>
Range	0 to 100
Units	percent
Default	100
Introduced	16.0.R1
Platforms	All

**max-bandwidth** *number*

Synopsis	Maximum bandwidth of auto-bandwidth to request for LSP
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls lsp</i> <i>string</i> <i>auto-bandwidth max-bandwidth number</i>
Tree	<i>max-bandwidth</i>
Range	0 to 6400000

Units	megabps
Default	100000
Introduced	16.0.R1
Platforms	All

### **min-bandwidth** *number*

Synopsis	Minimum bandwidth of auto-bandwidth to request for the LSP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">auto-bandwidth</a> <a href="#">min-bandwidth</a> <i>number</i>
Tree	<a href="#">min-bandwidth</a>
Range	0 to 6400000
Units	megabps
Default	0
Introduced	16.0.R1
Platforms	All

### **monitor-bandwidth** *boolean*

Synopsis	Collect and display auto-bandwidth measurements for the LSP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">auto-bandwidth</a> <a href="#">monitor-bandwidth</a> <i>boolean</i>
Tree	<a href="#">monitor-bandwidth</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **multipliers**

Synopsis	Enter the <b>multipliers</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">auto-bandwidth</a> <a href="#">multipliers</a>
Tree	<a href="#">multipliers</a>
Introduced	16.0.R1
Platforms	All

**adjust-multiplier** *number*

Synopsis	Number of collection intervals in the adjust interval
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">auto-bandwidth</a> <a href="#">multipliers</a> <a href="#">adjust-multiplier</a> <i>number</i>
Tree	<a href="#">adjust-multiplier</a>
Range	1 to 16383
Introduced	16.0.R1
Platforms	All

**sample-multiplier** *number*

Synopsis	Multiplier for collection intervals in a sample interval
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">auto-bandwidth</a> <a href="#">multipliers</a> <a href="#">sample-multiplier</a> <i>number</i>
Tree	<a href="#">sample-multiplier</a>
Range	1 to 511
Introduced	16.0.R1
Platforms	All

**overflow-limit**

Synopsis	Enable the <b>overflow-limit</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">auto-bandwidth</a> <a href="#">overflow-limit</a>
Tree	<a href="#">overflow-limit</a>
Introduced	16.0.R1
Platforms	All

**bw** *number*

Synopsis	Minimum difference in absolute bandwidth
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">auto-bandwidth</a> <a href="#">overflow-limit</a> <a href="#">bw</a> <i>number</i>
Tree	<a href="#">bw</a>
Range	1 to 6400000
Units	megabps
Introduced	16.0.R1



Platforms All

### **number** *number*

Synopsis Number of overflow samples to trigger an overflow auto-bandwidth adjustment attempt

Context **configure** [router](#) *string* [mpls lsp](#) *string* [auto-bandwidth overflow-limit](#) **number** *number*

Tree [number](#)

Range 1 to 10

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

### **threshold** *number*

Synopsis Minimum difference in percent between the LSP bandwidth and the sampled data rate

Context **configure** [router](#) *string* [mpls lsp](#) *string* [auto-bandwidth overflow-limit](#) **threshold** *number*

Tree [threshold](#)

Range 0 to 100

Units percent

Default 0

Introduced 16.0.R1

Platforms All

### **underflow-limit**

Synopsis Enable the **underflow-limit** context

Context **configure** [router](#) *string* [mpls lsp](#) *string* [auto-bandwidth underflow-limit](#)

Tree [underflow-limit](#)

Introduced 16.0.R1

Platforms All

### **bw** *number*

Synopsis Minimum difference in absolute bandwidth

Context **configure** [router](#) *string* [mpls lsp](#) *string* [auto-bandwidth underflow-limit](#) **bw** *number*

Tree	<a href="#">bw</a>
Range	1 to 6400000
Units	megabps
Introduced	16.0.R1
Platforms	All

### **number** *number*

Synopsis	Number of overflow samples to trigger an overflow auto-bandwidth adjustment attempt
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">auto-bandwidth underflow-limit</a> <a href="#">number</a> <i>number</i>
Tree	<a href="#">number</a>
Range	1 to 10
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **threshold** *number*

Synopsis	Minimum difference in percent between the LSP bandwidth and the sampled data rate
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">auto-bandwidth underflow-limit</a> <a href="#">threshold</a> <i>number</i>
Tree	<a href="#">threshold</a>
Range	0 to 100
Units	percent
Default	0
Introduced	16.0.R1
Platforms	All

### **use-last-adj-bw**

Synopsis	Enable the <b>use-last-adj-bw</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">auto-bandwidth</a> <a href="#">use-last-adj-bw</a>
Tree	<a href="#">use-last-adj-bw</a>
Introduced	16.0.R5
Platforms	All

**secondary-retry-limit** (*number* | *keyword*)

Synopsis	Maximum number of retry limits for secondary paths
Context	<b>configure</b> <i>router string mpls lsp string auto-bandwidth use-last-adj-bw secondary-retry-limit (number   keyword)</i>
Tree	<a href="#">secondary-retry-limit</a>
Description	This command configures the maximum number of retry attempts for secondary paths. After each successful attempt, the counter is reset to zero.
Range	1 to 10000
Options	infinite
Default	5
Introduced	16.0.R5
Platforms	All

**bfd**

Synopsis	Enter the <b>bfd</b> context
Context	<b>configure</b> <i>router string mpls lsp string bfd</i>
Tree	<a href="#">bfd</a>
Description	Commands in this context configure BFD on RSVP LSPs or Seamless BFD on SR-TE LSPs.
Introduced	16.0.R1
Platforms	All

**bfd-liveness** *boolean*

Synopsis	Enable BFD on the RSVP LSP or S-BFD on the SR-TE LSP
Context	<b>configure</b> <i>router string mpls lsp string bfd bfd-liveness boolean</i>
Tree	<a href="#">bfd-liveness</a>
Default	false
Introduced	16.0.R1
Platforms	All

**bfd-template** *reference*

Synopsis	BFD template to be used by LSP BFD sessions
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">bfd</a> <a href="#">bfd-template</a> <i>reference</i>
Tree	<a href="#">bfd-template</a>
Reference	<b>configure</b> <a href="#">bfd</a> <a href="#">bfd-template</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **failure-action** *keyword*

Synopsis	Action when LSP BFD fails on the RSVP SR-TE LSP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">bfd</a> <a href="#">failure-action</a> <i>keyword</i>
Tree	<a href="#">failure-action</a>
Description	The command specifies the action when LSP BFD fails on an RSVP, SR-TE, or LDP LSP.  Regardless of the failure action specified, when the BFD session goes down on the LSP, the system generates an SNMP trap.
Options	none, down, failover, failover-or-down
Default	none
Introduced	16.0.R1
Platforms	All

### **lsp-ping-interval** (*number* | *keyword*)

Synopsis	Interval for periodic LSP ping for BFD bootstrapping
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">bfd</a> <a href="#">lsp-ping-interval</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">lsp-ping-interval</a>
Range	60 to 300
Units	seconds
Options	none
Default	60
Introduced	16.0.R1
Platforms	All

### **return-path-label** *number*

Synopsis	S-BFD return-path label
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Context	<b>configure router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>bfd return-path-label</b> <i>number</i>
Tree	<b>return-path-label</b>
Description	<p>This command configures the S-BFD session to echo mode and adds an additional MPLS label to the bottom of the label stack for the S-BFD packet.</p> <p>The command applies to the initiator of the S-BFD sessions. The return-path label may be a binding SID for an SR policy or other MPLS path configured on the reflector router. Instead of being routed through the IGP path, the S-BFD packet returns to the initiator through this MPLS return path.</p> <p>If the command is deleted, S-BFD returns to asynchronous mode and no return-path label is pushed by the initiator node. Any S-BFD packets for this LSP or path that the reflector receives are routed through the IGP path.</p>
Range	32 to 1048512
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **wait-for-up-timer** *number*

Synopsis	Time to wait for BFD to become operationally available
Context	<b>configure router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>bfd wait-for-up-timer</b> <i>number</i>
Tree	<b>wait-for-up-timer</b>
Description	<p>This command configures the time to wait for BFD to become operationally up. The timer is applicable to SR-TE LSPs, including auto LSPs and PCE-initiated LSPs, as well as RSVP-TE LSPs.</p> <p>For SR-TE LSPs, the timer takes effect when BFD is first enabled on a path or when BFD transitions from up to down. Upon expiration, if BFD is not up, the path is torn down, removed from the TTM and the IOM, and the system starts the retry timer.</p> <p>For RSVP-TE LSPs, the timer controls the following:</p> <ul style="list-style-type: none"> <li>• a path undergoing MBB when BFD is up</li> <li>• the initial administrative state of the LSP</li> <li>• the retry signaling of non-standby secondary paths</li> </ul>
Range	1 to 60
Units	seconds
Default	4
Introduced	19.7.R1
Platforms	All

**bgp-shortcut** *boolean*

Synopsis	Include LSP for BGP routes
Context	<b>configure</b> <i>router string mpls lsp string bgp-shortcut boolean</i>
Tree	<a href="#">bgp-shortcut</a>
Introduced	16.0.R1
Platforms	All

**bgp-transport-tunnel** *boolean*

Synopsis	Include LSP as transport LSP for labeled BGP routes
Context	<b>configure</b> <i>router string mpls lsp string bgp-transport-tunnel boolean</i>
Tree	<a href="#">bgp-transport-tunnel</a>
Introduced	16.0.R1
Platforms	All

**binding-sid** *number*

Synopsis	Binding SID for the LSP
Context	<b>configure</b> <i>router string mpls lsp string binding-sid number</i>
Tree	<a href="#">binding-sid</a>
Description	This command binds a label to the LSP. The label value must belong to the reserved label block that is configured with the <b>configure router mpls lsp-bsid-block</b> command.
Range	32 to 1048575
Introduced	22.10.R1
Platforms	All

**class-forwarding**

Synopsis	Enable the <b>class-forwarding</b> context
Context	<b>configure</b> <i>router string mpls lsp string class-forwarding</i>
Tree	<a href="#">class-forwarding</a>
Introduced	16.0.R1
Platforms	All

## forwarding-set

Synopsis	Enter the <b>forwarding-set</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">class-forwarding</a> <a href="#">forwarding-set</a>
Tree	<a href="#">forwarding-set</a>
Notes	The following elements are part of a choice: ( <b>default-lsp</b> and <b>fc</b> ) or <b>forwarding-set</b> .
Introduced	16.0.R1
Platforms	All

## policy reference

Synopsis	Name for the class based forwarding policy for LSP instances
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">class-forwarding</a> <a href="#">forwarding-set</a> <a href="#">policy</a> <i>reference</i>
Tree	<a href="#">policy</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">class-forwarding-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

## set number

Synopsis	Forwarding set ID
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">class-forwarding</a> <a href="#">forwarding-set</a> <a href="#">set</a> <i>number</i>
Tree	<a href="#">set</a>
Range	1 to 6
Introduced	16.0.R1
Platforms	All

## class-type number

Synopsis	Class type for an LSP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">class-type</a> <i>number</i>
Tree	<a href="#">class-type</a>
Range	0 to 7
Default	0
Introduced	16.0.R1

Platforms All

### **egress-statistics**

Synopsis Enable the **egress-statistics** context  
 Context **configure** [router](#) *string* [mpls lsp](#) *string* [egress-statistics](#)  
 Tree [egress-statistics](#)  
 Introduced 16.0.R1  
 Platforms All

### **accounting-policy** *reference*

Synopsis Accounting policy ID  
 Context **configure** [router](#) *string* [mpls lsp](#) *string* [egress-statistics](#) [accounting-policy](#) *reference*  
 Tree [accounting-policy](#)  
 Reference **configure** [log](#) [accounting-policy](#) *number*  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of statistics for the LSP  
 Context **configure** [router](#) *string* [mpls lsp](#) *string* [egress-statistics](#) [admin-state](#) *keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 16.0.R1  
 Platforms All

### **collect-stats** *boolean*

Synopsis Collect LSP statistics  
 Context **configure** [router](#) *string* [mpls lsp](#) *string* [egress-statistics](#) [collect-stats](#) *boolean*  
 Tree [collect-stats](#)



Description	When configured to <b>true</b> , this command enables LSP statistics collection. When you apply accounting policies, the forwarding engine collects data in the appropriate records and by default the CPU obtains and writes the results to the designated billing file.  When configured to <b>false</b> , the forwarding engine still accumulates statistics. However, the CPU does not write them to the billing file. If you subsequently re-enable this command, the counters written to the billing file include all the traffic collected while the command was disabled.
Default	false
Introduced	16.0.R1
Platforms	All

### **stat-mode** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Statistics collection mode
Context	<b>configure</b> <i>router string mpls lsp string egress-statistics stat-mode keyword</i>
Tree	<a href="#">stat-mode</a>
Options	per-fc, aggregate
Introduced	21.10.R1
Platforms	All

### **entropy-label** *keyword*

Synopsis	Entropy label
Context	<b>configure</b> <i>router string mpls lsp string entropy-label keyword</i>
Tree	<a href="#">entropy-label</a>
Options	false, true
Introduced	16.0.R1
Platforms	All

### **exclude-admin-group** *reference*

Synopsis	Name of admin group excluded when LSP is set up
Context	<b>configure</b> <i>router string mpls lsp string exclude-admin-group reference</i>

Tree	<a href="#">exclude-admin-group</a>
Reference	<b>configure</b> <a href="#">routing-options if-attribute admin-group string</a>
Max. Instances	32
Introduced	16.0.R1
Platforms	All

### **exclude-node** ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#))

Synopsis	Exclude Routers object to be included in the bypass path message
Context	<b>configure</b> <a href="#">router string mpls lsp string exclude-node</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> )
Tree	<a href="#">exclude-node</a>
Introduced	16.0.R1
Platforms	All

### **fallback-path-computation-method** *keyword*

Synopsis	Fallback path computation method
Context	<b>configure</b> <a href="#">router string mpls lsp string fallback-path-computation-method keyword</a>
Tree	<a href="#">fallback-path-computation-method</a>
Description	This command specifies the fallback path computation method used if all configured PCEs are down or are signaling overload and the redelegation timer has expired. This method is used regardless of whether the LSP is PCE-controlled and PCE-computed, or only PCE-computed.
Options	none, local-cspf
Introduced	21.2.R1
Platforms	All

### **fast-reroute**

Synopsis	Enable the <b>fast-reroute</b> context
Context	<b>configure</b> <a href="#">router string mpls lsp string fast-reroute</a>
Tree	<a href="#">fast-reroute</a>
Introduced	16.0.R1
Platforms	All

**frr-method** *keyword*

Synopsis	Fast Reroute method
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>fast-reroute</b> <b>frr-method</b> <i>keyword</i>
Tree	<b>frr-method</b>
Options	one-to-one, facility
Introduced	16.0.R1
Platforms	All

**hop-limit** *number*

Synopsis	Total number of hops a detour or backup LSP can take
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>fast-reroute</b> <b>hop-limit</b> <i>number</i>
Tree	<b>hop-limit</b>
Range	0 to 255
Default	16
Introduced	16.0.R1
Platforms	All

**node-protect** *boolean*

Synopsis	Enable node and link protection for the specified LSP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>fast-reroute</b> <b>node-protect</b> <i>boolean</i>
Tree	<b>node-protect</b>
Introduced	16.0.R1
Platforms	All

**propagate-admin-group** *boolean*

Synopsis	Enable admin group constraints on a FRR backup LSP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>fast-reroute</b> <b>propagate-admin-group</b> <i>boolean</i>
Tree	<b>propagate-admin-group</b>
Default	false
Introduced	16.0.R1
Platforms	All

**from** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Source IP address of this LSP
Context	<b>configure</b> <i>router string mpls lsp string from (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<i>from</i>
Introduced	16.0.R1
Platforms	All

**hop-limit** *number*

Synopsis	Maximum number of hops that an LSP can traverse including ingress and egress routers
Context	<b>configure</b> <i>router string mpls lsp string hop-limit number</i>
Tree	<i>hop-limit</i>
Range	2 to 255
Default	255
Introduced	16.0.R1
Platforms	All

**igp-shortcut**

Synopsis	Enter the <b>igp-shortcut</b> context
Context	<b>configure</b> <i>router string mpls lsp string igp-shortcut</i>
Tree	<i>igp-shortcut</i>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of LSP for shortcut or forwarding
Context	<b>configure</b> <i>router string mpls lsp string igp-shortcut admin-state keyword</i>
Tree	<i>admin-state</i>

Options	enable, disable
Introduced	16.0.R1
Platforms	All

### **lfa-type** *keyword*

Synopsis	LSP usage in LFA SPF
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">igp-shortcut</a> <b>lfa-type</b> <i>keyword</i>
Tree	<a href="#">lfa-type</a>
Options	lfa-protect, lfa-only
Notes	The following elements are part of a choice: <b>lfa-type</b> or <b>relative-metric</b> .
Introduced	16.0.R1
Platforms	All

### **relative-metric** *number*

Synopsis	Shortest IGP cost between the endpoints of the LSP plus the configured offset
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">igp-shortcut</a> <b>relative-metric</b> <i>number</i>
Tree	<a href="#">relative-metric</a>
Range	-10 to 10
Notes	The following elements are part of a choice: <b>lfa-type</b> or <b>relative-metric</b> .
Introduced	16.0.R1
Platforms	All

### **include-admin-group** *reference*

Synopsis	Admin group name included when LSP is set up
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <b>include-admin-group</b> <i>reference</i>
Tree	<a href="#">include-admin-group</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute</a> <a href="#">admin-group</a> <i>string</i>
Max. Instances	32
Introduced	16.0.R1
Platforms	All

**label-stack-reduction** *boolean*

Synopsis	Enable/disable label compression for LSP path.
Context	<b>configure</b> <i>router string mpls lsp string label-stack-reduction boolean</i>
Tree	<a href="#">label-stack-reduction</a>
Default	false
Introduced	19.7.R1
Platforms	All

**ldp-over-rsvp** *boolean*

Synopsis	Include this LSP in LDP over RSVP
Context	<b>configure</b> <i>router string mpls lsp string ldp-over-rsvp boolean</i>
Tree	<a href="#">ldp-over-rsvp</a>
Introduced	16.0.R1
Platforms	All

**least-fill** *boolean*

Synopsis	Enable least-fill path selection for this LSP
Context	<b>configure</b> <i>router string mpls lsp string least-fill boolean</i>
Tree	<a href="#">least-fill</a>
Default	false
Introduced	16.0.R1
Platforms	All

**load-balancing-weight** *number*

Synopsis	Load balancing weight for an MPLS LSP
Context	<b>configure</b> <i>router string mpls lsp string load-balancing-weight number</i>
Tree	<a href="#">load-balancing-weight</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

**local-sr-protection** *keyword*

Synopsis	Local SR protection preference for LSP path computation
Context	<b>configure router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>local-sr-protection</b> <i>keyword</i>
Tree	<b>local-sr-protection</b>
Options	none, preferred, mandatory
Default	preferred
Introduced	19.7.R1
Platforms	All

**lsp-self-ping** *keyword*

Synopsis	LSP Self Ping activation status on the RSVP-TE LSP
Context	<b>configure router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>lsp-self-ping</b> <i>keyword</i>
Tree	<b>lsp-self-ping</b>
Description	When configured, the system uses this setting for the LSP regardless of the value configured under <b>configure router mpls lsp-self-ping rsvp-te</b> . When unconfigured, the command inherits the value configured under <b>configure router mpls lsp-self-ping rsvp-te</b> .
Options	false, true
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**main-ct-retry-limit** *number*

Synopsis	Maximum number of retries before reverting to backup CT
Context	<b>configure router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>main-ct-retry-limit</b> <i>number</i>
Tree	<b>main-ct-retry-limit</b>
Range	1 to 10000
Introduced	16.0.R1
Platforms	All

**max-sr-labels**

Synopsis	Enter the <b>max-sr-labels</b> context
Context	<b>configure router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>max-sr-labels</b>

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Tree	<a href="#">max-sr-labels</a>
Introduced	16.0.R1
Platforms	All

### **additional-frr-labels** *number*

Synopsis	Value for the maximum additional overhead labels
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">max-sr-labels</a> <a href="#">additional-frr-labels</a> <i>number</i>
Tree	<a href="#">additional-frr-labels</a>
Range	0 to 4
Default	1
Introduced	16.0.R1
Platforms	All

### **label-stack-size** *number*

Synopsis	Maximum label stack size
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">max-sr-labels</a> <a href="#">label-stack-size</a> <i>number</i>
Tree	<a href="#">label-stack-size</a>
Description	This command configures the maximum label stack size of the primary path of the SR-TE LSP.
Range	1 to 11
Introduced	16.0.R1
Platforms	All

### **metric** *number*

Synopsis	LSP metric that forces to a constant value
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">metric</a> <i>number</i>
Tree	<a href="#">metric</a>
Range	0 to 16777215
Introduced	16.0.R1
Platforms	All



**metric-type** *keyword*

Synopsis	Metric type used for LSP path computation
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>metric-type</b> <i>keyword</i>
Tree	<b>metric-type</b>
Options	igp, te
Default	igp
Introduced	19.7.R1
Platforms	All

**override-tunnel-elc** *boolean*

Synopsis	Override any received entropy label capability
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>override-tunnel-elc</b> <i>boolean</i>
Tree	<b>override-tunnel-elc</b>
Description	When configured to <b>true</b> , this command allows the system to override any received entropy label capability advertisement. When configured to <b>false</b> , this command disables the override.
Default	false
Introduced	21.10.R1
Platforms	All

**p2mp-id** *number*

Synopsis	Unique identifier as Point-to-Multipoint (P2MP) identifier
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>p2mp-id</b> <i>number</i>
Tree	<b>p2mp-id</b>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

**path-computation-method** *keyword*

Synopsis	Path computation method
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>path-computation-method</b> <i>keyword</i>
Tree	<b>path-computation-method</b>

Description	This command configures the path computation method of an RSVP-TE or SR-TE LSP. If this command is not configured to one of the supported options, the default path computation method is used depending on the type of LSP; the <b>hop-to-label</b> translation is used for for the SR-TE LSP template and the IGP-based path is used for the RSVP-TE-LSP.
Options	local-cspf, pce
Introduced	19.7.R1
Platforms	All

### **path-profile** [[profile-id](#)] *number*

Synopsis	Enter the <b>path-profile</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">path-profile</a> <i>number</i>
Tree	<a href="#">path-profile</a>
Description	Commands in this context configure the attributes of the PCE path profile.
Max. Instances	5
Introduced	16.0.R1
Platforms	All

### [\[profile-id\]](#) *number*

Synopsis	Profile ID for the specified LSP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">path-profile</a> <i>number</i>
Tree	<a href="#">path-profile</a>
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **path-group** *number*

Synopsis	Path-group ID for the specified LSP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">path-profile</a> <i>number</i> <a href="#">path-group</a> <i>number</i>
Tree	<a href="#">path-group</a>
Max. Range	0 to 4294967295

Default	0
Introduced	16.0.R1
Platforms	All

## **pce-associations**

Synopsis	Enter the <b>pce-associations</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">pce-associations</a>
Tree	<a href="#">pce-associations</a>
Description	Commands in this context configure the LSP binding with one or more PCEP associations.
Introduced	22.5.R1
Platforms	All

## **diversity** [[diversity-name](#)] *reference*

Synopsis	Add a list entry for <b>diversity</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">pce-associations</a> <a href="#">diversity</a> <i>reference</i>
Tree	<a href="#">diversity</a>
Description	Commands in this context bind the LSP to a named diversity association. The diversity association must exist under the PCC.
Max. Instances	5
Introduced	22.5.R1
Platforms	All

## **[diversity-name]** *reference*

Synopsis	Name of the PCE association configured under the PCC
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">pce-associations</a> <a href="#">diversity</a> <i>reference</i>
Tree	<a href="#">diversity</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pcep pcc</a> <a href="#">pce-associations</a> <a href="#">diversity</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

**policy** [*policy-name*] *reference*

Synopsis	Add a list entry for <b>policy</b>
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls lsp</i> <i>string</i> <i>pce-associations</i> <i>policy</i> <i>reference</i>
Tree	<i>policy</i>
Description	Commands in this context bind the LSP to a named policy association. The policy association name must exist under the PCC.
Max. Instances	5
Introduced	22.5.R1
Platforms	All

**[policy-name]** *reference*

Synopsis	Name of the PCE association configured under the PCC
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls lsp</i> <i>string</i> <i>pce-associations</i> <i>policy</i> <i>reference</i>
Tree	<i>policy</i>
Reference	<b>configure</b> <i>router</i> <i>string</i> <i>pcep pcc</i> <i>pce-associations</i> <i>policy</i> <i>string</i>
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

**pce-control** *boolean*

Synopsis	Enable PCE controlled LSP mode of operation
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls lsp</i> <i>string</i> <i>pce-control</i> <i>boolean</i>
Tree	<i>pce-control</i>
Description	<p>When configured to <b>true</b>, this command enables a PCE-controlled mode of operation for the LSP. In this mode, the router delegates full control of the LSP to the PCE (PCE controlled). The PCE acts in stateful-active mode for this LSP and is able to reroute the path following a failure or to re-optimize the path and update the router without a request from the router.</p> <p>When configured to <b>false</b>, the PCE-controlled mode of operation for the LSP has no effect.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**pce-report** *keyword*

Synopsis	Global configuration of reporting to PCE to override
Context	<b>configure</b> <i>router string mpls lsp string pce-report keyword</i>
Tree	<a href="#">pce-report</a>
Options	false, true
Introduced	16.0.R1
Platforms	All

**primary** [[path-name](#)] *reference*

Synopsis	Enter the <b>primary</b> list instance
Context	<b>configure</b> <i>router string mpls lsp string primary reference</i>
Tree	<a href="#">primary</a>
Max. Instances	1
Introduced	16.0.R1
Platforms	All

**[path-name]** *reference*

Synopsis	Path name
Context	<b>configure</b> <i>router string mpls lsp string primary reference</i>
Tree	<a href="#">primary</a>
Reference	<b>configure</b> <i>router string mpls path string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**adaptive** *boolean*

Synopsis	Enable make-before-break functionality
Context	<b>configure</b> <i>router string mpls lsp string primary reference adaptive boolean</i>
Tree	<a href="#">adaptive</a>
Introduced	16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the LSP path  
 Context **configure** [router](#) *string* [mpls lsp](#) *string* [primary](#) *reference* [admin-state](#) *keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 16.0.R1  
 Platforms All

### **backup-class-type** *number*

Synopsis Class-type for the LSP or LSP path  
 Context **configure** [router](#) *string* [mpls lsp](#) *string* [primary](#) *reference* [backup-class-type](#) *number*  
 Tree [backup-class-type](#)  
 Range 0 to 7  
 Introduced 16.0.R1  
 Platforms All

### **bandwidth** *number*

Synopsis Amount of bandwidth to be reserved  
 Context **configure** [router](#) *string* [mpls lsp](#) *string* [primary](#) *reference* [bandwidth](#) *number*  
 Tree [bandwidth](#)  
 Range 0 to 6400000  
 Units megabps  
 Default 0  
 Introduced 16.0.R1  
 Platforms All

### **bfd**

Synopsis Enter the **bfd** context

Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">primary</a> <i>reference</i> <a href="#">bfd</a>
Tree	<a href="#">bfd</a>
Description	Commands in this context configure BFD on RSVP LSPs or Seamless BFD on SR-TE LSPs.
Introduced	16.0.R1
Platforms	All

**bfd-liveness** *boolean*

Synopsis	Enable BFD on the RSVP LSP or S-BFD on the SR-TE LSP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">primary</a> <i>reference</i> <a href="#">bfd</a> <a href="#">bfd-liveness</a> <i>boolean</i>
Tree	<a href="#">bfd-liveness</a>
Default	false
Introduced	16.0.R1
Platforms	All

**bfd-template** *reference*

Synopsis	BFD template to be used by LSP BFD sessions
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">primary</a> <i>reference</i> <a href="#">bfd</a> <a href="#">bfd-template</a> <i>reference</i>
Tree	<a href="#">bfd-template</a>
Reference	<b>configure</b> <a href="#">bfd</a> <a href="#">bfd-template</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**lsp-ping-interval** (*number* | *keyword*)

Synopsis	Interval for periodic LSP ping for BFD bootstrapping
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">primary</a> <i>reference</i> <a href="#">bfd</a> <a href="#">lsp-ping-interval</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">lsp-ping-interval</a>
Range	60 to 300
Units	seconds
Options	none
Default	60

Introduced	16.0.R1
Platforms	All

### **return-path-label** *number*

Synopsis	S-BFD return-path label
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>primary</b> <i>reference</i> <b>bfd return-path-label</b> <i>number</i>
Tree	<b>return-path-label</b>
Description	<p>This command configures the S-BFD session to echo mode and adds an additional MPLS label to the bottom of the label stack for the S-BFD packet.</p> <p>The command applies to the initiator of the S-BFD sessions. The return-path label may be a binding SID for an SR policy or other MPLS path configured on the reflector router. Instead of being routed through the IGP path, the S-BFD packet returns to the initiator through this MPLS return path.</p> <p>If the command is deleted, S-BFD returns to asynchronous mode and no return-path label is pushed by the initiator node. Any S-BFD packets for this LSP or path that the reflector receives are routed through the IGP path.</p>
Range	32 to 1048512
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **wait-for-up-timer** *number*

Synopsis	Time to wait for BFD to become operationally available
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>primary</b> <i>reference</i> <b>bfd wait-for-up-timer</b> <i>number</i>
Tree	<b>wait-for-up-timer</b>
Description	<p>This command configures the time to wait for BFD to become operationally up. The timer is applicable to SR-TE LSPs, including auto LSPs and PCE-initiated LSPs, as well as RSVP-TE LSPs.</p> <p>For SR-TE LSPs, the timer takes effect when BFD is first enabled on a path or when BFD transitions from up to down. Upon expiration, if BFD is not up, the path is torn down, removed from the TTM and the IOM, and the system starts the retry timer.</p> <p>For RSVP-TE LSPs, the timer controls the following:</p> <ul style="list-style-type: none"> <li>• a path undergoing MBB when BFD is up</li> <li>• the initial administrative state of the LSP</li> <li>• the retry signaling of non-standby secondary paths</li> </ul>
Range	1 to 60
Units	seconds



Default	4
Introduced	19.7.R1
Platforms	All

### **class-type** *number*

Synopsis	Class-type
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">primary</a> <i>reference</i> <a href="#">class-type</a> <i>number</i>
Tree	<a href="#">class-type</a>
Range	0 to 7
Introduced	16.0.R1
Platforms	All

### **exclude-admin-group**

Synopsis	Enable the <b>exclude-admin-group</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">primary</a> <i>reference</i> <a href="#">exclude-admin-group</a>
Tree	<a href="#">exclude-admin-group</a>
Introduced	16.0.R1
Platforms	All

### **group** *reference*

Synopsis	Groups to exclude when the LSP path is setup
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">primary</a> <i>reference</i> <a href="#">exclude-admin-group</a> <a href="#">group</a> <i>reference</i>
Tree	<a href="#">group</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute</a> <a href="#">admin-group</a> <i>string</i>
Max. Instances	32
Min. Instances	1
Introduced	16.0.R1
Platforms	All

**hop-limit** *number*

Synopsis	Total number of hops that an LSP traverses
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">primary</a> <i>reference</i> <a href="#">hop-limit</a> <i>number</i>
Tree	<a href="#">hop-limit</a>
Range	2 to 255
Introduced	16.0.R1
Platforms	All

**include-admin-group**

Synopsis	Enable the <b>include-admin-group</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">primary</a> <i>reference</i> <a href="#">include-admin-group</a>
Tree	<a href="#">include-admin-group</a>
Introduced	16.0.R1
Platforms	All

**group** *reference*

Synopsis	Groups that are included when LSP path is setup
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">primary</a> <i>reference</i> <a href="#">include-admin-group</a> <a href="#">group</a> <i>reference</i>
Tree	<a href="#">group</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute</a> <a href="#">admin-group</a> <i>string</i>
Max. Instances	32
Min. Instances	1
Introduced	16.0.R1
Platforms	All

**priority**

Synopsis	Enter the <b>priority</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">primary</a> <i>reference</i> <a href="#">priority</a>
Tree	<a href="#">priority</a>
Introduced	16.0.R1

Platforms All

### **hold-priority** *number*

Synopsis Priority of an LSP session at preemption action

Context **configure** [router](#) *string* [mpls lsp](#) *string* [primary](#) *reference* [priority](#) [hold-priority](#) *number*

Tree [hold-priority](#)

Range 0 to 7

Default 0

Introduced 16.0.R1

Platforms All

### **setup-priority** *number*

Synopsis Priority when insufficient bandwidth for LSP setup

Context **configure** [router](#) *string* [mpls lsp](#) *string* [primary](#) *reference* [priority](#) [setup-priority](#) *number*

Tree [setup-priority](#)

Range 0 to 7

Default 7

Introduced 16.0.R1

Platforms All

### **record** *boolean*

Synopsis Enable recording of all hops that an LSP path traverses

Context **configure** [router](#) *string* [mpls lsp](#) *string* [primary](#) *reference* [record](#) *boolean*

Tree [record](#)

Default true

Introduced 16.0.R1

Platforms All

### **record-label** *boolean*

Synopsis Enable recording of labels at each node or instance

Context **configure** [router](#) *string* [mpls lsp](#) *string* [primary](#) *reference* [record-label](#) *boolean*

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Tree	<a href="#">record-label</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **primary-p2mp-instance** [[instance-name](#)] *string*

Synopsis	Enter the <b>primary-p2mp-instance</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">primary-p2mp-instance</a> <i>string</i>
Tree	<a href="#">primary-p2mp-instance</a>
Max. Instances	1
Introduced	16.0.R4
Platforms	All

### **[instance-name]** *string*

Synopsis	P2MP LSP instance name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">primary-p2mp-instance</a> <i>string</i>
Tree	<a href="#">primary-p2mp-instance</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **adaptive** *boolean*

Synopsis	Enable make-before-break functionality
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">primary-p2mp-instance</a> <i>string</i> <a href="#">adaptive</a> <i>boolean</i>
Tree	<a href="#">adaptive</a>
Introduced	16.0.R4
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the LSP path
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>primary-p2mp-instance</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

**bandwidth** *number*

Synopsis	Amount of bandwidth to be reserved
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>primary-p2mp-instance</b> <i>string</i> <b>bandwidth</b> <i>number</i>
Tree	<a href="#">bandwidth</a>
Range	0 to 6400000
Units	megabps
Default	0
Introduced	16.0.R4
Platforms	All

**exclude-admin-group**

Synopsis	Enable the <b>exclude-admin-group</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>primary-p2mp-instance</b> <i>string</i> <b>exclude-admin-group</b>
Tree	<a href="#">exclude-admin-group</a>
Introduced	16.0.R4
Platforms	All

**group** *reference*

Synopsis	Groups to exclude when the LSP path is setup
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>primary-p2mp-instance</b> <i>string</i> <b>exclude-admin-group</b> <i>group reference</i>
Tree	<a href="#">group</a>

Reference	<b>configure</b> <a href="#">routing-options if-attribute admin-group</a> <i>string</i>
Max. Instances	32
Min. Instances	1
Introduced	16.0.R4
Platforms	All

### hop-limit *number*

Synopsis	Total number of hops that an LSP traverses
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">primary-p2mp-instance</a> <i>string</i> <a href="#">hop-limit</a> <i>number</i>
Tree	<a href="#">hop-limit</a>
Range	2 to 255
Introduced	16.0.R4
Platforms	All

### include-admin-group

Synopsis	Enable the <b>include-admin-group</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">primary-p2mp-instance</a> <i>string</i> <a href="#">include-admin-group</a>
Tree	<a href="#">include-admin-group</a>
Introduced	16.0.R4
Platforms	All

### group *reference*

Synopsis	Groups that are included when LSP path is setup
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">primary-p2mp-instance</a> <i>string</i> <a href="#">include-admin-group</a> <a href="#">group</a> <i>reference</i>
Tree	<a href="#">group</a>
Reference	<b>configure</b> <a href="#">routing-options if-attribute admin-group</a> <i>string</i>
Max. Instances	32
Min. Instances	1

---

Introduced	16.0.R4
Platforms	All

## priority

Synopsis	Enter the <b>priority</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">primary-p2mp-instance</a> <i>string</i> <a href="#">priority</a>
Tree	<a href="#">priority</a>
Introduced	21.10.R1
Platforms	All

## hold-priority *number*

Synopsis	Hold priority when not enough bandwidth for LSP setup
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">primary-p2mp-instance</a> <i>string</i> <a href="#">priority</a> <a href="#">hold-priority</a> <i>number</i>
Tree	<a href="#">hold-priority</a>
Range	0 to 7
Default	0
Introduced	21.10.R1
Platforms	All

## setup-priority *number*

Synopsis	Priority when insufficient bandwidth for LSP setup
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">primary-p2mp-instance</a> <i>string</i> <a href="#">priority</a> <a href="#">setup-priority</a> <i>number</i>
Tree	<a href="#">setup-priority</a>
Range	0 to 7
Default	7
Introduced	21.10.R1
Platforms	All

## record *boolean*

Synopsis	Enable recording of all hops that an LSP path traverses
----------	---

Context	<b>configure</b> <i>router string mpls lsp string primary-p2mp-instance string record boolean</i>
Tree	<a href="#">record</a>
Default	true
Introduced	16.0.R4
Platforms	All

**record-label** *boolean*

Synopsis	Enable recording of labels at each node or instance
Context	<b>configure</b> <i>router string mpls lsp string primary-p2mp-instance string record-label boolean</i>
Tree	<a href="#">record-label</a>
Default	true
Introduced	16.0.R4
Platforms	All

**s2l-path** [[path-name](#)] *reference to (ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the <b>s2l-path</b> list instance
Context	<b>configure</b> <i>router string mpls lsp string primary-p2mp-instance string s2l-path reference to (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<a href="#">s2l-path</a>
Max. Instances	650
Introduced	16.0.R4
Platforms	All

**[path-name]** *reference*

Synopsis	P2MP LSP name
Context	<b>configure</b> <i>router string mpls lsp string primary-p2mp-instance string s2l-path reference to (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<a href="#">s2l-path</a>
Reference	<b>configure</b> <i>router string mpls path string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4



Platforms All

### **to** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis System IP address of the egress router

Context **configure** **router** *string* **mpls lsp** *string* **primary-p2mp-instance** *string* **s2l-path** *reference* **to** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree **s2l-path**

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the S2L sub-LSP for a P2MP LSP

Context **configure** **router** *string* **mpls lsp** *string* **primary-p2mp-instance** *string* **s2l-path** *reference* **to** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **admin-state** *keyword*

Tree **admin-state**

Options enable, disable

Default enable

Introduced 16.0.R4

Platforms All

### **propagate-admin-group** *boolean*

Synopsis Enable admin groups via session attribute object

Context **configure** **router** *string* **mpls lsp** *string* **propagate-admin-group** *boolean*

Tree **propagate-admin-group**

Default false

Introduced 16.0.R1

Platforms All

### **retry-limit** *number*

Synopsis Number of attempts to re-establish LSP after it fails

Context **configure** **router** *string* **mpls lsp** *string* **retry-limit** *number*

---

Tree	<a href="#">retry-limit</a>
Range	1 to 10000
Introduced	16.0.R1
Platforms	All

### **retry-timer** *number*

Synopsis	Time for LSP re-establishment attempts after failure
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">retry-timer</a> <i>number</i>
Tree	<a href="#">retry-timer</a>
Range	1 to 600
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	All

### **revert-timer** *number*

Synopsis	Revert timer for the LSP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">revert-timer</a> <i>number</i>
Tree	<a href="#">revert-timer</a>
Range	1 to 4320
Units	minutes
Introduced	16.0.R1
Platforms	All

### **rsvp-resv-style** *keyword*

Synopsis	Reservation style for RSVP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">rsvp-resv-style</a> <i>keyword</i>
Tree	<a href="#">rsvp-resv-style</a>
Options	se, ff
Default	se
Introduced	16.0.R1
Platforms	All

**secondary** [[path-name](#)] *reference*

Synopsis	Enter the <b>secondary</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">secondary</a> <i>reference</i>
Tree	<a href="#">secondary</a>
Max. Instances	8
Introduced	16.0.R1
Platforms	All

**[path-name]** *reference*

Synopsis	Path name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">secondary</a> <i>reference</i>
Tree	<a href="#">secondary</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls path</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**adaptive** *boolean*

Synopsis	Enable make-before-break functionality
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">secondary</a> <i>reference</i> <a href="#">adaptive</a> <i>boolean</i>
Tree	<a href="#">adaptive</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the LSP path
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">secondary</a> <i>reference</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable

Introduced	16.0.R1
Platforms	All

**bandwidth** *number*

Synopsis	Amount of bandwidth to be reserved
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">secondary</a> <i>reference</i> <a href="#">bandwidth</a> <i>number</i>
Tree	<a href="#">bandwidth</a>
Range	0 to 6400000
Units	megabps
Default	0
Introduced	16.0.R1
Platforms	All

**bfd**

Synopsis	Enter the <b>bfd</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">secondary</a> <i>reference</i> <a href="#">bfd</a>
Tree	<a href="#">bfd</a>
Description	Commands in this context configure BFD on RSVP LSPs or Seamless BFD on SR-TE LSPs.
Introduced	19.7.R1
Platforms	All

**bfd-liveness** *boolean*

Synopsis	Enable BFD on the RSVP LSP or S-BFD on the SR-TE LSP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">secondary</a> <i>reference</i> <a href="#">bfd</a> <a href="#">bfd-liveness</a> <i>boolean</i>
Tree	<a href="#">bfd-liveness</a>
Default	false
Introduced	19.7.R1
Platforms	All

**bfd-template** *reference*

Synopsis	BFD template to be used by LSP BFD sessions
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>lsp</b> <i>string</i> <b>secondary</b> <i>reference</i> <b>bfd</b> <b>bfd-template</b> <i>reference</i>
Tree	<b>bfd-template</b>
Reference	<b>configure</b> <b>bfd</b> <b>bfd-template</b> <i>string</i>
Introduced	19.7.R1
Platforms	All

**lsp-ping-interval** (*number* | *keyword*)

Synopsis	Interval for periodic LSP ping for BFD bootstrapping
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>lsp</b> <i>string</i> <b>secondary</b> <i>reference</i> <b>bfd</b> <b>lsp-ping-interval</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>lsp-ping-interval</b>
Range	60 to 300
Units	seconds
Options	none
Default	60
Introduced	19.7.R1
Platforms	All

**return-path-label** *number*

Synopsis	S-BFD return-path label
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>lsp</b> <i>string</i> <b>secondary</b> <i>reference</i> <b>bfd</b> <b>return-path-label</b> <i>number</i>
Tree	<b>return-path-label</b>
Description	<p>This command configures the S-BFD session to echo mode and adds an additional MPLS label to the bottom of the label stack for the S-BFD packet.</p> <p>The command applies to the initiator of the S-BFD sessions. The return-path label may be a binding SID for an SR policy or other MPLS path configured on the reflector router. Instead of being routed through the IGP path, the S-BFD packet returns to the initiator through this MPLS return path.</p> <p>If the command is deleted, S-BFD returns to asynchronous mode and no return-path label is pushed by the initiator node. Any S-BFD packets for this LSP or path that the reflector receives are routed through the IGP path.</p>
Range	32 to 1048512

Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **wait-for-up-timer** *number*

Synopsis	Time to wait for BFD to become operationally available
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>secondary</b> <i>reference</i> <b>bfd wait-for-up-timer</b> <i>number</i>
Tree	<b>wait-for-up-timer</b>
Description	<p>This command configures the time to wait for BFD to become operationally up. The timer is applicable to SR-TE LSPs, including auto LSPs and PCE-initiated LSPs, as well as RSVP-TE LSPs.</p> <p>For SR-TE LSPs, the timer takes effect when BFD is first enabled on a path or when BFD transitions from up to down. Upon expiration, if BFD is not up, the path is torn down, removed from the TTM and the IOM, and the system starts the retry timer.</p> <p>For RSVP-TE LSPs, the timer controls the following:</p> <ul style="list-style-type: none"> <li>• a path undergoing MBB when BFD is up</li> <li>• the initial administrative state of the LSP</li> <li>• the retry signaling of non-standby secondary paths</li> </ul>
Range	1 to 60
Units	seconds
Default	4
Introduced	19.7.R1
Platforms	All

### **class-type** *number*

Synopsis	Class-type
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>secondary</b> <i>reference</i> <b>class-type</b> <i>number</i>
Tree	<b>class-type</b>
Range	0 to 7
Introduced	16.0.R1
Platforms	All

### **exclude-admin-group**

Synopsis	Enable the <b>exclude-admin-group</b> context
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Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">mpls</a> <a href="#">lsp</a> <a href="#">string</a> <a href="#">secondary</a> <a href="#">reference</a> <a href="#">exclude-admin-group</a>
Tree	<a href="#">exclude-admin-group</a>
Introduced	16.0.R1
Platforms	All

### **group** *reference*

Synopsis	Groups to exclude when the LSP path is setup
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">mpls</a> <a href="#">lsp</a> <a href="#">string</a> <a href="#">secondary</a> <a href="#">reference</a> <a href="#">exclude-admin-group</a> <a href="#">group</a> <a href="#">reference</a>
Tree	<a href="#">group</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute</a> <a href="#">admin-group</a> <a href="#">string</a>
Max. Instances	32
Min. Instances	1
Introduced	16.0.R1
Platforms	All

### **hop-limit** *number*

Synopsis	Total number of hops that an LSP traverses
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">mpls</a> <a href="#">lsp</a> <a href="#">string</a> <a href="#">secondary</a> <a href="#">reference</a> <a href="#">hop-limit</a> <a href="#">number</a>
Tree	<a href="#">hop-limit</a>
Range	2 to 255
Introduced	16.0.R1
Platforms	All

### **include-admin-group**

Synopsis	Enable the <b>include-admin-group</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">mpls</a> <a href="#">lsp</a> <a href="#">string</a> <a href="#">secondary</a> <a href="#">reference</a> <a href="#">include-admin-group</a>
Tree	<a href="#">include-admin-group</a>
Introduced	16.0.R1
Platforms	All

**group reference**

Synopsis	Groups that are included when LSP path is setup
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">secondary reference</a> <a href="#">include-admin-group</a> <a href="#">group reference</a>
Tree	<a href="#">group</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute</a> <a href="#">admin-group</a> <i>string</i>
Max. Instances	32
Min. Instances	1
Introduced	16.0.R1
Platforms	All

**path-preference number**

Synopsis	Path preference for the secondary standby path
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">secondary reference</a> <a href="#">path-preference</a> <i>number</i>
Tree	<a href="#">path-preference</a>
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	All

**priority**

Synopsis	Enter the <b>priority</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">secondary reference</a> <a href="#">priority</a>
Tree	<a href="#">priority</a>
Introduced	16.0.R1
Platforms	All

**hold-priority number**

Synopsis	Priority of an LSP session at preemption action
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">secondary reference</a> <a href="#">priority</a> <a href="#">hold-priority</a> <i>number</i>



Tree	<a href="#">hold-priority</a>
Range	0 to 7
Default	0
Introduced	16.0.R1
Platforms	All

### **setup-priority** *number*

Synopsis	Priority when insufficient bandwidth for LSP setup
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">secondary</a> <i>reference</i> <a href="#">priority</a> <a href="#">setup-priority</a> <i>number</i>
Tree	<a href="#">setup-priority</a>
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	All

### **record** *boolean*

Synopsis	Enable recording of all hops that an LSP path traverses
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">secondary</a> <i>reference</i> <a href="#">record</a> <i>boolean</i>
Tree	<a href="#">record</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **record-label** *boolean*

Synopsis	Enable recording of labels at each node or instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">secondary</a> <i>reference</i> <a href="#">record-label</a> <i>boolean</i>
Tree	<a href="#">record-label</a>
Default	true
Introduced	16.0.R1
Platforms	All

**srlg** *boolean*

Synopsis	Use SRLG constraint in secondary path computation for an LSP at the head-end LER
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>secondary</b> <i>reference</i> <b>srlg</b> <i>boolean</i>
Tree	<b>srlg</b>
Default	false
Introduced	16.0.R1
Platforms	All

**standby** *boolean*

Synopsis	Keep secondary path indefinitely in hot standby state
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>secondary</b> <i>reference</i> <b>standby</b> <i>boolean</i>
Tree	<b>standby</b>
Default	false
Introduced	16.0.R1
Platforms	All

**soft-preemption** *boolean*

Synopsis	Enable soft preemption
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>soft-preemption</b> <i>boolean</i>
Tree	<b>soft-preemption</b>
Description	When configured to <b>true</b> , the P2MP LSP preemption is governed by the <b>configure router rsvp preemption-timer</b> value. When configured to <b>false</b> , the preemption timer value is set to 0 and the P2MP LSPs are hard preempted. For P2P LSPs, soft preemption is always enabled and cannot be disabled.
Introduced	22.2.R1
Platforms	All

**to** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination IP address or the egress router for the LSP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>lsp</b> <i>string</i> <b>to</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>to</b>
Introduced	16.0.R1
Platforms	All

### **type** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	LSP for bypass protection, point to multipoint, segment routing or MPLS-TP static LSP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>lsp</b> <i>string</i> <b>type</b> <i>keyword</i>
Tree	<b>type</b>
Options	p2p-rsvp, p2p-static-mpls, p2p-rsvp-bypass, p2mp-rsvp, p2mp-rsvp-auto, p2p-rsvp-mesh, p2p-rsvp-one-hop, p2p-sr-te, p2p-sr-te-mesh, p2p-sr-te-one-hop, p2p-sr-te-pce-init, p2p-sr-te-on-demand
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **vprn-auto-bind** *boolean*

Synopsis	Include this LSP in auto-bind for VPRN services
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>lsp</b> <i>string</i> <b>vprn-auto-bind</b> <i>boolean</i>
Tree	<b>vprn-auto-bind</b>
Introduced	16.0.R1
Platforms	All

### **lsp-bsid-block** *reference*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reserved label block for binding SIDs
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Context	<b>configure router</b> <i>string</i> <a href="#">mpls lsp-bsid-block</a> <i>reference</i>
Tree	<a href="#">lsp-bsid-block</a>
Description	This command references a pre-existing reserved label block for statically configured binding SIDs.
Reference	<b>configure router</b> <i>string</i> <a href="#">mpls-labels reserved-label-block</a> <i>string</i>
Introduced	22.7.R1
Platforms	All

## **lsp-history**

Synopsis	Enable the <b>lsp-history</b> context
Context	<b>configure router</b> <i>string</i> <a href="#">mpls lsp-history</a>
Tree	<a href="#">lsp-history</a>
Description	Commands in this context control the recording of LSP history events. When the context is created, memory is allocated for storing up to 100 of the most recent LSP history events. When the context is deleted, memory is deallocated.
Introduced	22.10.R1
Platforms	All

## **admin-state** *keyword*

Synopsis	Administrative state of LSP history recording
Context	<b>configure router</b> <i>string</i> <a href="#">mpls lsp-history admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	22.10.R1
Platforms	All

## **lsp-init-retry-timeout** *number*

Synopsis	LSP initial retry timeout
Context	<b>configure router</b> <i>string</i> <a href="#">mpls lsp-init-retry-timeout</a> <i>number</i>
Tree	<a href="#">lsp-init-retry-timeout</a>

Range	10 to 600
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	All

## **lsp-self-ping**

Synopsis	Enter the <b>lsp-self-ping</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <b>lsp-self-ping</b>
Tree	<a href="#">lsp-self-ping</a>
Description	<p>Commands in this context configure LSP Self Ping parameters.</p> <p>LSP Self Ping checks that the datapath of an RSVP LSP has been programmed by all LSRs along its path before switching the traffic to it. If enabled, LSP Self Ping packets are sent periodically at a configurable interval following the receipt of the RESV message for an RSVP LSP path following an MBB or other event where the active path changes while the previous active path stayed up. The router will not switch traffic to the new path until an LSP Self Ping reply is received from the far-end LER.</p> <p>When configured under the MPLS context, LSP Self Ping is enabled for all RSVP LSPs, unless it is explicitly disabled for a given LSP.</p>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## **interval number**

Synopsis	MPLS periodic LSP Self Ping interval
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <b>lsp-self-ping</b> <i>interval number</i>
Tree	<a href="#">interval</a>
Description	<p>This command configures the interval at which LSP Self Ping packets are periodically sent on a candidate path of an RSVP LSP.</p> <p>This value is used for all LSPs that have LSP Self Ping enabled.</p>
Range	1 to 10
Units	seconds
Default	1
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**rsvp-te boolean**

Synopsis	Activate LSP Self Ping on RSVP-TE LSPs
Context	<b>configure router</b> <i>string</i> <b>mpls lsp-self-ping rsvp-te boolean</b>
Tree	<b>rsvp-te</b>
Description	When configured to <b>true</b> , this command enables LSP Self Ping on all RSVP-TE LSPs, unless an individual LSP has this explicitly disabled under the <b>configure router mpls lsp lsp-self-ping</b> command or in the LSP template. When configured to <b>false</b> , this command disables LSP Self Ping on all RSVP-TE LSPs.
Default	false
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**timeout number**

Synopsis	MPLS LSP Self Ping timeout
Context	<b>configure router</b> <i>string</i> <b>mpls lsp-self-ping timeout number</b>
Tree	<b>timeout</b>
Description	This command configures a timeout value for the LSP Self Ping timer. The LSP Self Ping timer starts when the RESV message is received for an LSP. The system periodically sends LSP Self Ping packets until the timer expires or the first LSP Self Ping reply is received, whichever comes first. If the timer expires before an LSP Self Ping packet is received, the configured timeout action is performed.
Range	3 to 3600
Units	seconds
Default	300
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**timeout-action keyword**

Synopsis	Action taken when LSP Self Ping timer expires
Context	<b>configure router</b> <i>string</i> <b>mpls lsp-self-ping timeout-action keyword</b>
Tree	<b>timeout-action</b>
Options	retry, switch
Default	retry

Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **lsp-template** [*template-name*] *string*

Synopsis	Enter the <b>lsp-template</b> list instance
Context	<b>configure</b> <i>router string mpls lsp-template string</i>
Tree	<a href="#">lsp-template</a>
Description	Commands in this context configure the attributes of an LSP template that can be referenced by a client application when dynamic LSPs must be created.
Max. Instances	4096
Introduced	16.0.R1
Platforms	All

### **[template-name]** *string*

Synopsis	LSP template name
Context	<b>configure</b> <i>router string mpls lsp-template string</i>
Tree	<a href="#">lsp-template</a>
Description	This command specifies the name of the LSP template. An LSP template name and LSP name must not be the same.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **adaptive** *boolean*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable make-before-break functionality
Context	<b>configure</b> <i>router string mpls lsp-template string adaptive boolean</i>
Tree	<a href="#">adaptive</a>

Default	true
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the LSP template
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **admin-tag** [[name](#)] *reference*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Add a list entry for <b>admin-tag</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <b>admin-tag</b> <i>reference</i>
Tree	<a href="#">admin-tag</a>
Max. Instances	4
Introduced	16.0.R1
Platforms	All

### **[name]** *reference*

Synopsis	Name of the admin tags
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <b>admin-tag</b> <i>reference</i>
Tree	<a href="#">admin-tag</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">admin-tags</a> <b>admin-tag</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1



Platforms All

## adspec *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Include ADSPEC objects in RSVP messages

Context **configure** *router string mpls lsp-template string adspec boolean*

Tree [adspec](#)

Default false

Introduced 16.0.R1

Platforms All

## auto-bandwidth



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable the **auto-bandwidth** context

Context **configure** *router string mpls lsp-template string auto-bandwidth*

Tree [auto-bandwidth](#)

Introduced 16.0.R1

Platforms All

## adjust-down



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **adjust-down** context

Context **configure** *router string mpls lsp-template string auto-bandwidth adjust-down*

Tree [adjust-down](#)

Introduced 16.0.R1

Platforms All

### **bw** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Minimum difference in absolute bandwidth
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">auto-bandwidth adjust-down</a> <b>bw</b> <i>number</i>
Tree	<a href="#">bw</a>
Range	0 to 6400000
Units	megabps
Default	0
Introduced	16.0.R1
Platforms	All

### **percent** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Minimum difference in percent
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">auto-bandwidth adjust-down</a> <b>percent</b> <i>number</i>
Tree	<a href="#">percent</a>
Range	0 to 100
Units	percent
Default	5
Introduced	16.0.R1
Platforms	All

## adjust-up

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>adjust-up</b> context
Context	<b>configure</b> <i>router string mpls lsp-template string auto-bandwidth adjust-up</i>
Tree	<i>adjust-up</i>
Introduced	16.0.R1
Platforms	All

## bw number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Minimum difference in absolute bandwidth
Context	<b>configure</b> <i>router string mpls lsp-template string auto-bandwidth adjust-up bw number</i>
Tree	<i>bw</i>
Range	0 to 6400000
Units	megabps
Default	0
Introduced	16.0.R1
Platforms	All

## percent number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Minimum difference in percent
Context	<b>configure</b> <i>router string mpls lsp-template string auto-bandwidth adjust-up percent number</i>
Tree	<i>percent</i>
Range	0 to 100

Units	percent
Default	5
Introduced	16.0.R1
Platforms	All

### **fc** [*fc-name*] *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>fc</b> list instance
Context	<b>configure</b> <i>router string mpls lsp-template string auto-bandwidth fc keyword</i>
Tree	<b>fc</b>
Max. Instances	8
Introduced	16.0.R1
Platforms	All

### **[fc-name]** *keyword*

Synopsis	Forwarding class name for LSP
Context	<b>configure</b> <i>router string mpls lsp-template string auto-bandwidth fc keyword</i>
Tree	<b>fc</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **sampling-weight** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Forwarding class weight for LSP
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Context	<b>configure</b> <i>router string mpls lsp-template string auto-bandwidth fc keyword</i> <b>sampling-weight number</b>
Tree	<b>sampling-weight</b>
Range	0 to 100
Units	percent
Default	100
Introduced	16.0.R1
Platforms	All

### **max-bandwidth** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum bandwidth of auto-bandwidth to request for LSP
Context	<b>configure</b> <i>router string mpls lsp-template string auto-bandwidth</i> <b>max-bandwidth number</b>
Tree	<b>max-bandwidth</b>
Range	0 to 6400000
Units	megabps
Default	100000
Introduced	16.0.R1
Platforms	All

### **min-bandwidth** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Minimum bandwidth of auto-bandwidth to request for the LSP
Context	<b>configure</b> <i>router string mpls lsp-template string auto-bandwidth</i> <b>min-bandwidth number</b>
Tree	<b>min-bandwidth</b>
Range	0 to 6400000
Units	megabps
Default	0
Introduced	16.0.R1

Platforms All

### monitor-bandwidth *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Collect and display auto-bandwidth measurements for the LSP

Context **configure** [router](#) [string](#) [mpls lsp-template](#) [string](#) [auto-bandwidth](#) [monitor-bandwidth](#) [boolean](#)

Tree [monitor-bandwidth](#)

Default false

Introduced 16.0.R1

Platforms All

### multipliers



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **multipliers** context

Context **configure** [router](#) [string](#) [mpls lsp-template](#) [string](#) [auto-bandwidth](#) [multipliers](#)

Tree [multipliers](#)

Introduced 16.0.R1

Platforms All

### adjust-multiplier *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Number of collection intervals in the adjust interval

Context **configure** [router](#) [string](#) [mpls lsp-template](#) [string](#) [auto-bandwidth](#) [multipliers](#) [adjust-multiplier](#) [number](#)

Tree [adjust-multiplier](#)

Range	1 to 16383
Introduced	16.0.R1
Platforms	All

### **sample-multiplier** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Multiplier for collection intervals in a sample interval
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">auto-bandwidth</a> <a href="#">multipliers</a> <a href="#">sample-multiplier</a> <i>number</i>
Tree	<a href="#">sample-multiplier</a>
Range	1 to 511
Introduced	16.0.R1
Platforms	All

### **overflow-limit**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>overflow-limit</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">auto-bandwidth</a> <a href="#">overflow-limit</a>
Tree	<a href="#">overflow-limit</a>
Introduced	16.0.R1
Platforms	All

### **bw** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Minimum difference in absolute bandwidth
----------	--

Context	<b>configure</b> <i>router string mpls lsp-template string auto-bandwidth overflow-limit bw number</i>
Tree	<i>bw</i>
Range	1 to 6400000
Units	megabps
Introduced	16.0.R1
Platforms	All

### **number** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of overflow samples to trigger an overflow auto-bandwidth adjustment attempt
Context	<b>configure</b> <i>router string mpls lsp-template string auto-bandwidth overflow-limit number number</i>
Tree	<i>number</i>
Range	1 to 10
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **threshold** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Minimum difference in percent between the LSP bandwidth and the sampled data rate
Context	<b>configure</b> <i>router string mpls lsp-template string auto-bandwidth overflow-limit threshold number</i>
Tree	<i>threshold</i>
Range	0 to 100
Units	percent
Default	0
Introduced	16.0.R1



Platforms All

## underflow-limit



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable the **underflow-limit** context

Context **configure** *router string mpls lsp-template string auto-bandwidth underflow-limit*

Tree [underflow-limit](#)

Introduced 16.0.R1

Platforms All

## bw number



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Minimum difference in absolute bandwidth

Context **configure** *router string mpls lsp-template string auto-bandwidth underflow-limit bw number*

Tree [bw](#)

Range 1 to 6400000

Units megabps

Introduced 16.0.R1

Platforms All

## number number



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Number of overflow samples to trigger an overflow auto-bandwidth adjustment attempt

Context **configure** *router string mpls lsp-template string auto-bandwidth underflow-limit number number*

Tree	<a href="#">number</a>
Range	1 to 10
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **threshold** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Minimum difference in percent between the LSP bandwidth and the sampled data rate
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">auto-bandwidth underflow-limit</a> <a href="#">threshold</a> <i>number</i>
Tree	<a href="#">threshold</a>
Range	0 to 100
Units	percent
Default	0
Introduced	16.0.R1
Platforms	All

### **backup-class-type** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Backup class type for this LSP template
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">backup-class-type</a> <i>number</i>
Tree	<a href="#">backup-class-type</a>
Range	0 to 7
Default	0
Introduced	16.0.R1
Platforms	All

**bandwidth** *number*

Synopsis	Amount of bandwidth reserved for the P2MP instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp-template</b> <i>string</i> <b>bandwidth</b> <i>number</i>
Tree	<b>bandwidth</b>
Range	0 to 6400000
Units	megabps
Default	0
Introduced	16.0.R1
Platforms	All

**bfd****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>bfd</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp-template</b> <i>string</i> <b>bfd</b>
Tree	<b>bfd</b>
Description	Commands in this context configure BFD on RSVP LSPs or Seamless BFD on SR-TE LSPs.
Introduced	16.0.R1
Platforms	All

**bfd-liveness** *boolean*

Synopsis	Enable BFD on the RSVP LSP or S-BFD on the SR-TE LSP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp-template</b> <i>string</i> <b>bfd bfd-liveness</b> <i>boolean</i>
Tree	<b>bfd-liveness</b>
Default	false
Introduced	16.0.R1
Platforms	All

**bfd-template** *reference*

Synopsis	BFD template to be used by LSP BFD sessions
----------	---

Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">lsp-template</a> <i>string</i> <a href="#">bfd</a> <a href="#">bfd-template</a> <i>reference</i>
Tree	<a href="#">bfd-template</a>
Reference	<b>configure</b> <a href="#">bfd</a> <a href="#">bfd-template</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **failure-action** *keyword*

Synopsis	Action to take when LSP BFD session fails
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">lsp-template</a> <i>string</i> <a href="#">bfd</a> <a href="#">failure-action</a> <i>keyword</i>
Tree	<a href="#">failure-action</a>
Options	none, down, failover-or-down
Default	none
Introduced	16.0.R1
Platforms	All

### **lsp-ping-interval** (*number* | *keyword*)

Synopsis	Interval for periodic LSP ping for BFD bootstrapping
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">lsp-template</a> <i>string</i> <a href="#">bfd</a> <a href="#">lsp-ping-interval</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">lsp-ping-interval</a>
Range	60 to 300
Units	seconds
Options	none
Default	60
Introduced	16.0.R1
Platforms	All

### **return-path-label** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	S-BFD return-path label
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">lsp-template</a> <i>string</i> <a href="#">bfd</a> <a href="#">return-path-label</a> <i>number</i>

Tree	<a href="#">return-path-label</a>
Description	<p>This command configures the S-BFD session to echo mode and adds an additional MPLS label to the bottom of the label stack for the S-BFD packet.</p> <p>The command applies to the initiator of the S-BFD sessions. The return-path label may be a binding SID for an SR policy or other MPLS path configured on the reflector router. Instead of being routed through the IGP path, the S-BFD packet returns to the initiator through this MPLS return path.</p> <p>If the command is deleted, S-BFD returns to asynchronous mode and no return-path label is pushed by the initiator node. Any S-BFD packets for this LSP or path that the reflector receives are routed through the IGP path.</p>
Range	32 to 1048512
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **wait-for-up-timer** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time to wait for BFD to become operationally available
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <i>lsp-template</i> <i>string</i> <b>bfd</b> <b>wait-for-up-timer</b> <i>number</i>
Tree	<a href="#">wait-for-up-timer</a>
Description	<p>This command configures the time to wait for BFD to become operationally up. The timer is applicable to SR-TE LSPs, including auto LSPs and PCE-initiated LSPs, as well as RSVP-TE LSPs.</p> <p>For SR-TE LSPs, the timer takes effect when BFD is first enabled on a path or when BFD transitions from up to down. Upon expiration, if BFD is not up, the path is torn down, removed from the TTM and the IOM, and the system starts the retry timer.</p> <p>For RSVP-TE LSPs, the timer controls the following:</p> <ul style="list-style-type: none"> <li>• a path undergoing MBB when BFD is up</li> <li>• the initial administrative state of the LSP</li> <li>• the retry signaling of non-standby secondary paths</li> </ul>
Range	1 to 60
Units	seconds
Default	4
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**bgp-shortcut** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable/disable use of RSVP LSP for IPv4 BGP routes.
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <i>bgp-shortcut</i> <i>boolean</i>
Tree	<a href="#">bgp-shortcut</a>
Introduced	16.0.R1
Platforms	All

**bgp-transport-tunnel** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow use of RSVP-TE LSP as transport for tunnel routes
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <i>bgp-transport-tunnel</i> <i>boolean</i>
Tree	<a href="#">bgp-transport-tunnel</a>
Default	true
Introduced	16.0.R1
Platforms	All

**binding-sid** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Request to allocate and bind a label
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <i>binding-sid</i> <i>boolean</i>
Tree	<a href="#">binding-sid</a>
Description	<p>When configured to <b>true</b>, the system allocates and binds a label to any LSP that is created using the template.</p> <p>When configured to <b>false</b>, this command removes the configuration but this does not affect LSPs that were already created using the template.</p>

Default	false
Introduced	22.10.R1
Platforms	All

## class-forwarding



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>class-forwarding</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">class-forwarding</a>
Tree	<a href="#">class-forwarding</a>
Introduced	16.0.R1
Platforms	All

## forwarding-set



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>forwarding-set</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">class-forwarding</a> <a href="#">forwarding-set</a>
Tree	<a href="#">forwarding-set</a>
Notes	The following elements are part of a choice: ( <b>default-lsp</b> and <b>fc</b> ) or <b>forwarding-set</b> .
Introduced	16.0.R1
Platforms	All

## policy reference



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name for the class based forwarding policy for LSP instances
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">class-forwarding</a> <a href="#">forwarding-set</a> <a href="#">policy reference</a>

Tree	<a href="#">policy</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">class-forwarding-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **set** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Forwarding set ID
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">lsp-template</a> <i>string</i> <a href="#">class-forwarding</a> <a href="#">forwarding-set</a> <a href="#">set</a> <i>number</i>
Tree	<a href="#">set</a>
Range	1 to 6
Introduced	16.0.R1
Platforms	All

### **class-type** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Class type for an LSP template
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">lsp-template</a> <i>string</i> <a href="#">class-type</a> <i>number</i>
Tree	<a href="#">class-type</a>
Range	0 to 7
Default	0
Introduced	16.0.R1
Platforms	All



**default-path** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Default path to be used for signaling LSP instances
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">default-path</a> <i>reference</i>
Tree	<a href="#">default-path</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls path</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**egress-statistics****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>egress-statistics</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">egress-statistics</a>
Tree	<a href="#">egress-statistics</a>
Introduced	16.0.R1
Platforms	All

**accounting-policy** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accounting policy ID
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">egress-statistics</a> <a href="#">accounting-policy</a> <i>reference</i>
Tree	<a href="#">accounting-policy</a>

Reference	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i>
Introduced	16.0.R1
Platforms	All

### **collect-stats** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Collect LSP statistics
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">egress-statistics</a> <a href="#">collect-stats</a> <i>boolean</i>
Tree	<a href="#">collect-stats</a>
Description	<p>When configured to <b>true</b>, this command enables LSP statistics collection. When you apply accounting policies, the forwarding engine collects data in the appropriate records and by default the CPU obtains and writes the results to the designated billing file.</p> <p>When configured to <b>false</b>, the forwarding engine still accumulates statistics. However, the CPU does not write them to the billing file. If you subsequently re-enable this command, the counters written to the billing file include all the traffic collected while the command was disabled.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **stat-mode** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Statistics collection mode
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">egress-statistics</a> <a href="#">stat-mode</a> <i>keyword</i>
Tree	<a href="#">stat-mode</a>
Options	per-fc, aggregate
Introduced	21.10.R1
Platforms	All

**entropy-label** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Entropy label for an LSP template
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">entropy-label</a> <i>keyword</i>
Tree	<a href="#">entropy-label</a>
Options	false, true
Introduced	16.0.R1
Platforms	All

**exclude-admin-group** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Admin group name excluded when LSP is set up
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">exclude-admin-group</a> <i>reference</i>
Tree	<a href="#">exclude-admin-group</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <i>if-attribute</i> <a href="#">admin-group</a> <i>string</i>
Max. Instances	32
Introduced	16.0.R1
Platforms	All

**fallback-path-computation-method** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Fallback path computation method
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">fallback-path-computation-method</a> <i>keyword</i>
Tree	<a href="#">fallback-path-computation-method</a>

Description	This command specifies the fallback path computation method used if all configured PCEs are down or are signaling overload and the redelegation timer has expired. This method is used regardless of whether the LSP is PCE-controlled and PCE-computed, or only PCE-computed.
Options	none, local-cspf
Introduced	21.10.R1
Platforms	All

### family keyword



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Address family that specifies template use in SR-TE LSP
Context	<b>configure router string mpls lsp-template string family keyword</b>
Tree	<b>family</b>
Description	This command specifies the address family for which the LSP template applies in an SR-TE LSP. An LSP template is required for each address family.
Options	ipv4, ipv6
Default	ipv4
Introduced	20.5.R1
Platforms	All

### fast-reroute



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>fast-reroute</b> context
Context	<b>configure router string mpls lsp-template string fast-reroute</b>
Tree	<b>fast-reroute</b>
Introduced	16.0.R1
Platforms	All

**frr-method** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Fast Reroute method for the LSPs that are dynamically created using this LSP template
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp-template</b> <i>string</i> <b>fast-reroute</b> <b>frr-method</b> <i>keyword</i>
Tree	<b>frr-method</b>
Options	one-to-one, facility
Default	facility
Introduced	16.0.R1
Platforms	All

**hop-limit** *number*

Synopsis	Total number of hops a detour or backup LSP can take
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp-template</b> <i>string</i> <b>fast-reroute</b> <b>hop-limit</b> <i>number</i>
Tree	<b>hop-limit</b>
Range	0 to 255
Default	16
Introduced	16.0.R1
Platforms	All

**node-protect** *boolean*

Synopsis	Enable node and link protection for the specified LSP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp-template</b> <i>string</i> <b>fast-reroute</b> <b>node-protect</b> <i>boolean</i>
Tree	<b>node-protect</b>
Default	false
Introduced	16.0.R1
Platforms	All

**propagate-admin-group** *boolean*

Synopsis	Enable admin group constraints on a FRR backup LSP
----------	--

Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <i>fast-reroute</i> <i>propagate-admin-group</i> <i>boolean</i>
Tree	<a href="#">propagate-admin-group</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **from** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP address of the ingress router for the LSP template
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <b>from</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">from</a>
Introduced	16.0.R1
Platforms	All

### **hop-limit** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum hops for an LSP created using this LSP template
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <b>hop-limit</b> <i>number</i>
Tree	<a href="#">hop-limit</a>
Range	2 to 255
Introduced	16.0.R1
Platforms	All

## igp-shortcut



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>igp-shortcut</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">igp-shortcut</a>
Tree	<a href="#">igp-shortcut</a>
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of LSP for shortcut or forwarding
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">igp-shortcut</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## lfa-type *keyword*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	LSP usage in LFA SPF
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">igp-shortcut</a> <a href="#">lfa-type</a> <i>keyword</i>
Tree	<a href="#">lfa-type</a>
Options	lfa-protect, lfa-only
Notes	The following elements are part of a choice: <b>lfa-type</b> or <b>relative-metric</b> .
Introduced	16.0.R1

Platforms All

### **relative-metric** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Shortest IGP cost between the endpoints of the LSP plus the configured offset

Context **configure** *router string mpls lsp-template string igp-shortcut relative-metric number*

Tree [relative-metric](#)

Range -10 to 10

Notes The following elements are part of a choice: **lfa-type** or **relative-metric**.

Introduced 16.0.R1

Platforms All

### **include-admin-group** *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Admin group name included when LSP is set up

Context **configure** *router string mpls lsp-template string include-admin-group reference*

Tree [include-admin-group](#)

Reference **configure** *routing-options if-attribute admin-group string*

Max. Instances 32

Introduced 16.0.R1

Platforms All

### **label-stack-reduction** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable label compression for LSP path



Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">lsp-template</a> <i>string</i> <a href="#">label-stack-reduction</a> <i>boolean</i>
Tree	<a href="#">label-stack-reduction</a>
Default	false
Introduced	19.7.R1
Platforms	All

### **ldp-over-rsvp** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Include this LSP in LDP over RSVP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">lsp-template</a> <i>string</i> <a href="#">ldp-over-rsvp</a> <i>boolean</i>
Tree	<a href="#">ldp-over-rsvp</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **least-fill** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable least-fill path selection for this LSP template
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">lsp-template</a> <i>string</i> <a href="#">least-fill</a> <i>boolean</i>
Tree	<a href="#">least-fill</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **load-balancing-weight** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Load balancing weight for an MPLS LSP template
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <i>load-balancing-weight</i> <i>number</i>
Tree	<a href="#">load-balancing-weight</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **local-sr-protection** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local SR protection preference for LSP path computation
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <i>local-sr-protection</i> <i>keyword</i>
Tree	<a href="#">local-sr-protection</a>
Options	none, preferred, mandatory
Default	preferred
Introduced	19.7.R1
Platforms	All

### **lsp-self-ping** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	LSP Self Ping activation status on RSVP-TE LSP template
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <i>lsp-self-ping</i> <i>keyword</i>
Tree	<a href="#">lsp-self-ping</a>
Description	When configured, the system uses this setting for the LSP template regardless of the value configured under <b>configure router mpls lsp-self-ping rsvp-te</b> . When unconfigured, the command inherits the value configured under <b>configure router mpls lsp-self-ping rsvp-te</b> .
Options	false, true
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## main-ct-retry-limit *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of retries before reverting to backup CT
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">main-ct-retry-limit</a> <i>number</i>
Tree	<a href="#">main-ct-retry-limit</a>
Range	1 to 10000
Introduced	16.0.R1
Platforms	All

## max-sr-labels

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>max-sr-labels</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">max-sr-labels</a>
Tree	<a href="#">max-sr-labels</a>
Introduced	16.0.R1
Platforms	All

## additional-frr-labels *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of additional overhead labels
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">max-sr-labels</a> <a href="#">additional-frr-labels</a> <i>number</i>
Tree	<a href="#">additional-frr-labels</a>
Range	0 to 4
Default	1
Introduced	16.0.R1

Platforms All

### label-stack-size *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Size for the maximum segment routing label stack

Context **configure** *router string mpls lsp-template string max-sr-labels label-stack-size number*

Tree [label-stack-size](#)

Range 1 to 11

Introduced 16.0.R1

Platforms All

### metric *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis LSP template metric

Context **configure** *router string mpls lsp-template string metric number*

Tree [metric](#)

Range 0 to 16777215

Default 0

Introduced 16.0.R1

Platforms All

### metric-type *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Metric type used for LSP path computation

Context **configure** *router string mpls lsp-template string metric-type keyword*

Tree [metric-type](#)

Options	igp, te
Default	igp
Introduced	19.7.R1
Platforms	All

### **override-tunnel-elic** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Override any received entropy label capability
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <b>override-tunnel-elic</b> <i>boolean</i>
Tree	<b>override-tunnel-elic</b>
Description	When configured to <b>true</b> , this command allows the system to override any received entropy label capability advertisement. When configured to <b>false</b> , this command disables the override.
Default	false
Introduced	21.10.R1
Platforms	All

### **path-computation-method** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Path computation method
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <b>path-computation-method</b> <i>keyword</i>
Tree	<b>path-computation-method</b>
Description	This command configures the path computation method of an RSVP-TE or SR-TE LSP. If this command is not configured to one of the supported options, the default path computation method is used depending on the type of LSP; the <b>hop-to-label</b> translation is used for for the SR-TE LSP template and the IGP-based path is used for the RSVP-TE-LSP.
Options	local-cspf, pce
Introduced	19.7.R1
Platforms	All

**path-profile** [[profile-id](#)] *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>path-profile</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">path-profile</a> <i>number</i>
Tree	<a href="#">path-profile</a>
Description	Commands in this context configure the attributes of the PCE path profile.
Max. Instances	5
Introduced	21.10.R1
Platforms	All

**[profile-id]** *number*

Synopsis	Profile ID for the specified LSP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">path-profile</a> <i>number</i>
Tree	<a href="#">path-profile</a>
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

**path-group** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Path-group ID for the specified LSP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">path-profile</a> <i>number</i> <a href="#">path-group</a> <i>number</i>
Tree	<a href="#">path-group</a>
Max. Range	0 to 4294967295
Default	0
Introduced	21.10.R1

Platforms All

## pce-associations



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **pce-associations** context

Context **configure** [router](#) [string](#) [mpls lsp-template](#) [string](#) [pce-associations](#)

Tree [pce-associations](#)

Description Commands in this context configure the LSP binding with one or more PCEP associations.

Introduced 22.5.R1

Platforms All

## diversity [[diversity-name](#)] *reference*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Add a list entry for **diversity**

Context **configure** [router](#) [string](#) [mpls lsp-template](#) [string](#) [pce-associations](#) [diversity](#) *reference*

Tree [diversity](#)

Description Commands in this context bind the LSP to a named diversity association. The diversity association must exist under the PCC.

Max. Instances 5

Introduced 22.5.R1

Platforms All

## [[diversity-name](#)] *reference*

Synopsis Name of the PCE association configured under the PCC

Context **configure** [router](#) [string](#) [mpls lsp-template](#) [string](#) [pce-associations](#) [diversity](#) *reference*

Tree [diversity](#)

Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pcep</a> <a href="#">pcc</a> <a href="#">pce-associations</a> <a href="#">diversity</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

### **policy** [[policy-name](#)] *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Add a list entry for <b>policy</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">lsp-template</a> <i>string</i> <a href="#">pce-associations</a> <a href="#">policy</a> <i>reference</i>
Tree	<a href="#">policy</a>
Description	Commands in this context bind the LSP to a named policy association. The policy association name must exist under the PCC.
Max. Instances	5
Introduced	22.5.R1
Platforms	All

### **[policy-name]** *reference*

Synopsis	Name of the PCE association configured under the PCC
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">lsp-template</a> <i>string</i> <a href="#">pce-associations</a> <a href="#">policy</a> <i>reference</i>
Tree	<a href="#">policy</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pcep</a> <a href="#">pcc</a> <a href="#">pce-associations</a> <a href="#">policy</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

### **pce-control** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



Synopsis	Enable PCE controlled LSP mode of operation
Context	<b>configure</b> <i>router string mpls lsp-template string pce-control boolean</i>
Tree	<i>pce-control</i>
Description	<p>When configured to <b>true</b>, this command enables a PCE-controlled mode of operation for the LSP. In this mode, the router delegates full control of the LSP to the PCE (PCE controlled). The PCE acts in stateful-active mode for this LSP and is able to reroute the path following a failure or to re-optimize the path and update the router without a request from the router.</p> <p>When configured to <b>false</b>, the PCE-controlled mode of operation for the LSP has no effect.</p>
Default	false
Introduced	21.10.R1
Platforms	All

### **pce-report** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable reporting modes to PCE for RSVP-TE or SR-TE LSPs
Context	<b>configure</b> <i>router string mpls lsp-template string pce-report keyword</i>
Tree	<i>pce-report</i>
Options	false, true
Introduced	16.0.R1
Platforms	All

### **priority**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>priority</b> context
Context	<b>configure</b> <i>router string mpls lsp-template string priority</i>
Tree	<i>priority</i>
Introduced	16.0.R1
Platforms	All

## hold-priority *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Hold priority when insufficient bandwidth is available to set up LSP
Context	<b>configure</b> <i>router string mpls lsp-template string priority hold-priority number</i>
Tree	<i>hold-priority</i>
Range	0 to 7
Default	0
Introduced	16.0.R1
Platforms	All

## setup-priority *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Setup priority when insufficient bandwidth is available to set up LSP
Context	<b>configure</b> <i>router string mpls lsp-template string priority setup-priority number</i>
Tree	<i>setup-priority</i>
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	All

## propagate-admin-group *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable admin groups via session attribute object
Context	<b>configure</b> <i>router string mpls lsp-template string propagate-admin-group boolean</i>
Tree	<i>propagate-admin-group</i>

Default	false
Introduced	16.0.R1
Platforms	All

### **record** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable recording of all hops for this LSP template
Context	<b>configure</b> <i>router string mpls lsp-template string record boolean</i>
Tree	<i>record</i>
Default	true
Introduced	16.0.R1
Platforms	All

### **record-label** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable recording of labels at each node or instance
Context	<b>configure</b> <i>router string mpls lsp-template string record-label boolean</i>
Tree	<i>record-label</i>
Default	true
Introduced	16.0.R1
Platforms	All

### **retry-limit** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of attempts to re-establish LSP after it fails
Context	<b>configure</b> <i>router string mpls lsp-template string retry-limit number</i>

Tree	<a href="#">retry-limit</a>
Range	1 to 10000
Introduced	16.0.R1
Platforms	All

### **retry-timer** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time for LSP re-establishment attempts after failure
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">retry-timer</a> <i>number</i>
Tree	<a href="#">retry-timer</a>
Range	1 to 600
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	All

### **soft-preemption** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable soft preemption
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">soft-preemption</a> <i>boolean</i>
Tree	<a href="#">soft-preemption</a>
Description	<p>When configured to <b>true</b>, the P2MP LSP preemption is governed by the <b>configure router rsvp preemption-timer</b> value.</p> <p>When configured to <b>false</b>, the preemption timer value is set to 0 and the P2MP LSPs are hard preempted.</p> <p>For P2P LSPs, soft preemption is always enabled and cannot be disabled.</p>
Introduced	22.2.R1
Platforms	All

**template-id** (*number* | *keyword*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Template ID
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp-template</b> <i>string</i> <b>template-id</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>template-id</b>
Description	This command specifies the value that is signaled in the PCE to identify the LSP template.
Range	1 to 4294967295
Options	default
Introduced	16.0.R5
Platforms	All

**type** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	LSP template type
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp-template</b> <i>string</i> <b>type</b> <i>keyword</i>
Tree	<b>type</b>
Description	This command configures the type of a template that can be referenced by a client application where dynamic LSP creation is required. The LSP template type is mandatory.
Options	p2mp-rsvp, p2p-rsvp-one-hop, p2p-rsvp-mesh, p2p-sr-te-one-hop, p2p-sr-te-mesh, p2p-sr-te-pce-init, p2p-sr-te-on-demand
Notes	This element is mandatory.

Introduced 16.0.R1  
 Platforms All

### **vprn-auto-bind** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Include LSP template in auto-bind for VPRN services  
 Context **configure** *router* *string* *mpls lsp-template* *string* *vprn-auto-bind* *boolean*  
 Tree [vprn-auto-bind](#)  
 Default true  
 Introduced 16.0.R1  
 Platforms All

### **max-bypass-associations** *number*

Synopsis Maximum number of LSPs associated with a bypass tunnel  
 Context **configure** *router* *string* *mpls max-bypass-associations* *number*  
 Tree [max-bypass-associations](#)  
 Range 100 to 131072  
 Default 1000  
 Introduced 16.0.R1  
 Platforms All

### **max-bypass-plr-associations** *number*

Synopsis Maximum number of PLRs per RSVP-TE bypass LSP  
 Context **configure** *router* *string* *mpls max-bypass-plr-associations* *number*  
 Tree [max-bypass-plr-associations](#)  
 Range 1 to 16  
 Default 16  
 Introduced 19.10.R1  
 Platforms All

**mbb-prefer-current-hops** *boolean*

Synopsis	Select preference to use the current hops for Make-Before-Break (MBB)
Context	<b>configure</b> <i>router string mpls mbb-prefer-current-hops boolean</i>
Tree	<a href="#">mbb-prefer-current-hops</a>
Default	false
Introduced	16.0.R1
Platforms	All

**p2mp-resignal-timer** *number*

Synopsis	Resignal timer for P2MP LSPs
Context	<b>configure</b> <i>router string mpls p2mp-resignal-timer number</i>
Tree	<a href="#">p2mp-resignal-timer</a>
Range	60 to 10080
Units	minutes
Introduced	16.0.R1
Platforms	All

**p2mp-s2l-fast-retry** *number*

Synopsis	Fast retry timer for P2MP S2L paths
Context	<b>configure</b> <i>router string mpls p2mp-s2l-fast-retry number</i>
Tree	<a href="#">p2mp-s2l-fast-retry</a>
Range	1 to 10
Units	seconds
Introduced	16.0.R1
Platforms	All

**p2p-active-path-fast-retry** *number*

Synopsis	Fast retry timer for P2P active paths
Context	<b>configure</b> <i>router string mpls p2p-active-path-fast-retry number</i>
Tree	<a href="#">p2p-active-path-fast-retry</a>
Range	1 to 10

Units	seconds
Introduced	16.0.R1
Platforms	All

### **path** [*path-name*] *string*

Synopsis	Enter the <b>path</b> list instance
Context	<b>configure</b> <i>router string mpls path string</i>
Tree	<i>path</i>
Max. Instances	65535
Introduced	16.0.R1
Platforms	All

### **[path-name]** *string*

Synopsis	Name for this LSP path
Context	<b>configure</b> <i>router string mpls path string</i>
Tree	<i>path</i>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the path used for LSPs
Context	<b>configure</b> <i>router string mpls path string admin-state keyword</i>
Tree	<i>admin-state</i>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All



**hop** [*hop-index*] *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>hop</b> list instance
Context	<b>configure</b> <i>router string mpls path string hop number</i>
Tree	<i>hop</i>
Max. Instances	255
Introduced	16.0.R1
Platforms	All

**[hop-index]** *number*

Synopsis	Index to identify a particular hop
Context	<b>configure</b> <i>router string mpls path string hop number</i>
Tree	<i>hop</i>
Range	1 to 1024
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP address of the transit router
Context	<b>configure</b> <i>router string mpls path string hop number ip-address (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<i>ip-address</i>

Notes	The following elements are part of a mandatory choice: ( <b>ip-address</b> and <b>type</b> ) or <b>sid-label</b> .
Introduced	16.0.R1
Platforms	All

### **sid-label** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MPLS label for tunnel hop in the path of an SR-TE LSP
Context	<b>configure</b> <i>router string mpls path string hop number sid-label number</i>
Tree	<i>sid-label</i>
Range	32 to 1048575
Notes	The following elements are part of a mandatory choice: ( <b>ip-address</b> and <b>type</b> ) or <b>sid-label</b> .
Introduced	19.10.R1
Platforms	All

### **type** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Tunnel hop type
Context	<b>configure</b> <i>router string mpls path string hop number type keyword</i>
Tree	<i>type</i>
Options	strict, loose
Notes	The following elements are part of a mandatory choice: ( <b>ip-address</b> and <b>type</b> ) or <b>sid-label</b> .
Introduced	16.0.R1
Platforms	All

## pce-init-lsp

Synopsis	Enable the <b>pce-init-lsp</b> context
Context	<b>configure</b> <i>router string mpls pce-init-lsp</i>
Tree	<a href="#">pce-init-lsp</a>
Introduced	16.0.R5
Platforms	All

## sr-te

Synopsis	Enable the <b>sr-te</b> context
Context	<b>configure</b> <i>router string mpls pce-init-lsp sr-te</i>
Tree	<a href="#">sr-te</a>
Introduced	16.0.R5
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of SR-TE PCE-initiated LSP support
Context	<b>configure</b> <i>router string mpls pce-init-lsp sr-te admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R5
Platforms	All

## pce-report

Synopsis	Enter the <b>pce-report</b> context
Context	<b>configure</b> <i>router string mpls pce-report</i>
Tree	<a href="#">pce-report</a>
Introduced	16.0.R1
Platforms	All

**rsvp-te boolean**

Synopsis	Allow PCE reporting for all TE LSPs of RSVP-TE type
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>pce-report</b> <b>rsvp-te</b> <i>boolean</i>
Tree	<b>rsvp-te</b>
Default	false
Introduced	16.0.R1
Platforms	All

**sr-te boolean**

Synopsis	Allow PCE reporting for all TE LSPs of SR-TE type
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>pce-report</b> <b>sr-te</b> <i>boolean</i>
Tree	<b>sr-te</b>
Default	false
Introduced	16.0.R1
Platforms	All

**resignal-on-igp-overload boolean**

Synopsis	Resignal all RSVP-TE LSPs upon IGP overload
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>resignal-on-igp-overload</b> <i>boolean</i>
Tree	<b>resignal-on-igp-overload</b>
Description	<p>When configured to <b>true</b>, the receipt of the IS-IS overload bit in the TE-DB triggers the immediate resignaling of all RSVP-TE LSPs. MPLS forces the expiry of the resignal timer and the TE-DB computes a new CSPF for each RSVP-TE LSP active path. The re-optimization causes the immediate transition of RSVP-TE LSP paths away from the IS-IS node in overload using the MBB operation.</p> <p>This command cannot be configured to <b>true</b> when the <b>retry-on-igp-overload</b> command is configured to <b>true</b>.</p> <p>When configured to <b>false</b>, the default behavior is maintained where MBB re-optimization occurs only when a timer-based resignal is performed or a manual resignal is executed.</p>
Default	false
Introduced	20.10.R1
Platforms	All

**resignal-timer** *number*

Synopsis	Resignal timer for RSVP LSPs
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>resignal-timer</b> <i>number</i>
Tree	<b>resignal-timer</b>
Range	30 to 10080
Units	minutes
Introduced	16.0.R1
Platforms	All

**retry-on-igp-overload** *boolean*

Synopsis	Tear down LSPs when IGP is in overload state
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>retry-on-igp-overload</b> <i>boolean</i>
Tree	<b>retry-on-igp-overload</b>
Default	false
Introduced	16.0.R1
Platforms	All

**secondary-fast-retry-timer** *number*

Synopsis	Fast retry timer for secondary paths
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>secondary-fast-retry-timer</b> <i>number</i>
Tree	<b>secondary-fast-retry-timer</b>
Range	1 to 10
Units	seconds
Introduced	16.0.R1
Platforms	All

**shortcut-local-ttl-propagate** *boolean*

Synopsis	Propagate TTL over LSP shortcut for local packets
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>shortcut-local-ttl-propagate</b> <i>boolean</i>
Tree	<b>shortcut-local-ttl-propagate</b>
Default	true
Introduced	16.0.R1

Platforms All

### **shortcut-transit-ttl-propagate** *boolean*

Synopsis Propagate TTL over LSP shortcut for local packets for transit packets  
 Context **configure** *router string mpls shortcut-transit-ttl-propagate boolean*  
 Tree [shortcut-transit-ttl-propagate](#)  
 Default true  
 Introduced 16.0.R1  
 Platforms All

### **sr-te-resignal**

Synopsis Enter the **sr-te-resignal** context  
 Context **configure** *router string mpls sr-te-resignal*  
 Tree [sr-te-resignal](#)  
 Introduced 19.10.R1  
 Platforms All

### **resignal-on-igp-event** *boolean*

Synopsis Re-optimize SR-TE LSPs upon IGP link events  
 Context **configure** *router string mpls sr-te-resignal resignal-on-igp-event boolean*  
 Tree [resignal-on-igp-event](#)  
 Description When configured to **true**, the system signals the re-optimization of all SR-TE LSPs when one or more IGP link down events are received in theTE-DB. The triggered behavior is identical to the timer-based or resignal behavior or the manual-based resignal behavior used with a delay option. MPLS forces the expiry of the resignal timer and all active paths of all SR-TE LSPs are re-evaluated.  
 When configured to **false**, re-optimization is not triggered by IGP events.  
 Default false  
 Introduced 19.10.R1  
 Platforms All

**resignal-timer** *number*

Synopsis	Resignal timer for SR-TE LSPs
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>sr-te-resignal</b> <b>resignal-timer</b> <i>number</i>
Tree	<b>resignal-timer</b>
Description	This command configures the time the system waits before signaling the re-optimization of all SR-TE LSPs.
Range	30 to 10080
Units	minutes
Introduced	19.10.R1
Platforms	All

**srlg-database**

Synopsis	Enter the <b>srlg-database</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>srlg-database</b>
Tree	<b>srlg-database</b>
Introduced	16.0.R1
Platforms	All

**router-id** [**router-address**] *string*

Synopsis	Enter the <b>router-id</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>srlg-database</b> <b>router-id</b> <i>string</i>
Tree	<b>router-id</b>
Introduced	16.0.R1
Platforms	All

**[router-address]** *string*

Synopsis	Router ID for the system
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>srlg-database</b> <b>router-id</b> <i>string</i>
Tree	<b>router-id</b>
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the interface entry
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls srlg-database</b> <b>router-id</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**interface** [**interface-address**] *string* **srlg-group** *reference*

Synopsis	Add a list entry for <b>interface</b>
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls srlg-database</b> <b>router-id</b> <i>string</i> <b>interface</b> <i>string</i> <b>srlg-group</b> <i>reference</i>
Tree	<b>interface</b>
Introduced	16.0.R1
Platforms	All

**[interface-address]** *string*

Synopsis	IP address of the interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls srlg-database</b> <b>router-id</b> <i>string</i> <b>interface</b> <i>string</i> <b>srlg-group</b> <i>reference</i>
Tree	<b>interface</b>
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

**srlg-group** *reference*

Synopsis	SRLG group name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls srlg-database</b> <b>router-id</b> <i>string</i> <b>interface</b> <i>string</i> <b>srlg-group</b> <i>reference</i>
Tree	<b>interface</b>
Reference	<b>configure</b> <b>routing-options</b> <b>if-attribute</b> <b>srlg-group</b> <i>string</i>



Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **srlg-frr** *keyword*

Synopsis	Use of SRLG constraint for FRR path computation
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>srlg-frr</b> <i>keyword</i>
Tree	<b>srlg-frr</b>
Options	loose, strict
Introduced	16.0.R1
Platforms	All

### **static-lsp** [**lsp-name**] *string*

Synopsis	Enter the <b>static-lsp</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>static-lsp</b> <i>string</i>
Tree	<b>static-lsp</b>
Max. Instances	1000
Introduced	16.0.R1
Platforms	All

### [**lsp-name**] *string*

Synopsis	Labeled Switch path name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>static-lsp</b> <i>string</i>
Tree	<b>static-lsp</b>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the static LSP
Context	<b>configure</b> <i>router string mpls static-lsp string admin-state keyword</i>
Tree	<i>admin-state</i>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**metric** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MPLS static LSP metric to select an LSP
Context	<b>configure</b> <i>router string mpls static-lsp string metric number</i>
Tree	<i>metric</i>
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

**push****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>push</b> context
Context	<b>configure</b> <i>router string mpls static-lsp string push</i>
Tree	<i>push</i>
Introduced	16.0.R1
Platforms	All

**next-hop string****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP address for the next hop
Context	<b>configure</b> <i>router string mpls static-lsp string push next-hop string</i>
Tree	<a href="#">next-hop</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**out-label (number | keyword)****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Push specific label onto the top of the outgoing packet's label stack
Context	<b>configure</b> <i>router string mpls static-lsp string push out-label (number   keyword)</i>
Tree	<a href="#">out-label</a>
Range	16 to 1048575
Options	implicit-null-label
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**to string****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination IP address or the egress router for the LSP
Context	<b>configure</b> <i>router string mpls static-lsp string to string</i>
Tree	<a href="#">to</a>
Introduced	16.0.R1

Platforms All

### **static-lsp-fast-retry** *number*

Synopsis Fast retry timer for static LSPs

Context **configure** *router string mpls static-lsp-fast-retry number*

Tree [static-lsp-fast-retry](#)

Range 1 to 30

Units seconds

Default 30

Introduced 16.0.R1

Platforms All

### **strict-ero-nhop-direct-resolution** *boolean*

Synopsis Resolves RSVP-TE LSP ERO to local and host routes only

Context **configure** *router string mpls strict-ero-nhop-direct-resolution boolean*

Tree [strict-ero-nhop-direct-resolution](#)

Description When configured to **true**, the router enables the strict Explicit Route Object (ERO) next-hop direct resolution. The feature restricts the routes used to resolve the next hop of an ERO address to local and host routes. This command avoids using a next hop over a parallel link when a half link is up in the routing table.

This command applies to an ERO when all of the following conditions are met:

- the ERO next hop is an IPv4 address
- the ERO object is a strict hop
- the IPv4 address matches the primary subnet of a local numbered interface

If no such route exists, RSVP rejects the PATH message with ErrCode = Routing Error (24) and SubErrCode = Bad Strict Node (2).

When configured to **false**, the router disables the strict ERO next-hop direct resolution.

Default false

Introduced 22.5.R1

Platforms All

### **tunnel-table-pref**

Synopsis Enter the **tunnel-table-pref** context

Context	<b>configure</b> <i>router string mpls tunnel-table-pref</i>
Tree	<a href="#">tunnel-table-pref</a>
Description	Commands in this context configure the tunnel table preference for RSVP-TE LSP and SR-TE LSP tunnel types.
Introduced	21.10.R1
Platforms	All

### **rsvp-te number**

Synopsis	RSVP-TE tunnel table preference
Context	<b>configure</b> <i>router string mpls tunnel-table-pref rsvp-te number</i>
Tree	<a href="#">rsvp-te</a>
Description	<p>This command configures the tunnel table preference for RSVP-TE LSP tunnel type.</p> <p>The tunnel table preference applies to next-hop resolution of BGP routes for: EVPN, IPv4, IPv6, VPN-IPv4, VPN-IPv6, label-IPv4, and label-IPV6 in the tunnel table.</p> <p>This feature does not apply to a VPRN, VPLS, or VLL service with explicit binding to an SDP that enabled the <b>mixed-lsp-mode</b> option. The service manager controls and fixes the tunnel preference in such an SDP. The tunnel table preference configuration does not modify the SDP behavior, nor the services that bind to it.</p> <p>Nokia recommends that tunnel types have unique preference values. In a situation where two or more tunnel types are set to the same preference value, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.</p>
Range	1 to 255
Default	7
Introduced	21.10.R1
Platforms	All

### **sr-te number**

Synopsis	SR-TE tunnel table preference
Context	<b>configure</b> <i>router string mpls tunnel-table-pref sr-te number</i>
Tree	<a href="#">sr-te</a>
Description	<p>This command configures the tunnel table preference for SR-TE LSP tunnel type.</p> <p>The tunnel table preference applies to next-hop resolution of BGP routes for: EVPN, IPv4, IPv6, VPN-IPv4, VPN-IPv6, label-IPv4, and label-IPV6 in the tunnel table.</p> <p>This feature does not apply to a VPRN, VPLS, or VLL service with explicit binding to an SDP that enabled the <b>mixed-lsp-mode</b> option. The service manager controls and fixes the tunnel preference in such an SDP. The tunnel table preference configuration does not modify the SDP behavior, nor the services that bind to it.</p>

It is recommended to not set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.

Range	1 to 255
Default	8
Introduced	21.10.R1
Platforms	All

### **user-srlg-db** *boolean*

Synopsis	Enable the use of user SRLG database
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>user-srlg-db</b> <i>boolean</i>
Tree	<a href="#">user-srlg-db</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **mpls-labels**

Synopsis	Enter the <b>mpls-labels</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls-labels</b>
Tree	<a href="#">mpls-labels</a>
Introduced	16.0.R1
Platforms	All

### **bgp-labels-hold-timer** *number*

Synopsis	BGP labels hold timer for the ingress router
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls-labels</b> <b>bgp-labels-hold-timer</b> <i>number</i>
Tree	<a href="#">bgp-labels-hold-timer</a>
Range	0 to 255
Default	0
Introduced	16.0.R1
Platforms	All

**reserved-label-block** [[label-block-name](#)] *string*

Synopsis	Enter the <b>reserved-label-block</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls-labels</a> <a href="#">reserved-label-block</a> <i>string</i>
Tree	<a href="#">reserved-label-block</a>
Max. Instances	16
Introduced	16.0.R1
Platforms	All

**[label-block-name]** *string*

Synopsis	Name for the reserved label block
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls-labels</a> <a href="#">reserved-label-block</a> <i>string</i>
Tree	<a href="#">reserved-label-block</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**end-label** *number*

Synopsis	End label for the reserved label block
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls-labels</a> <a href="#">reserved-label-block</a> <i>string</i> <a href="#">end-label</a> <i>number</i>
Tree	<a href="#">end-label</a>
Range	32 to 1048575
Introduced	16.0.R1
Platforms	All

**start-label** *number*

Synopsis	Start label value for the reserved label block
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls-labels</a> <a href="#">reserved-label-block</a> <i>string</i> <a href="#">start-label</a> <i>number</i>
Tree	<a href="#">start-label</a>
Range	32 to 1048575
Introduced	16.0.R1

Platforms All

### **sr-labels**

Synopsis Enter the **sr-labels** context  
 Context **configure** [router](#) *string* [mpls-labels](#) [sr-labels](#)  
 Tree [sr-labels](#)  
 Introduced 16.0.R1  
 Platforms All

### **end number**

Synopsis End label for the SRGB  
 Context **configure** [router](#) *string* [mpls-labels](#) [sr-labels](#) [end](#) *number*  
 Tree [end](#)  
 Range 32 to 1048575  
 Introduced 16.0.R1  
 Platforms All

### **start number**

Synopsis Start label value for the SRGB  
 Context **configure** [router](#) *string* [mpls-labels](#) [sr-labels](#) [start](#) *number*  
 Tree [start](#)  
 Range 32 to 1048575  
 Introduced 16.0.R1  
 Platforms All

### **static-label-range number**

Synopsis Static label range on the ingress router  
 Context **configure** [router](#) *string* [mpls-labels](#) [static-label-range](#) *number*  
 Tree [static-label-range](#)  
 Range 0 to 1048544  
 Default 18400



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Introduced	16.0.R1
Platforms	All

## **msdp**

Synopsis	Enable the <b>msdp</b> context
Context	<b>configure router string msdp</b>
Tree	<b>msdp</b>
Introduced	19.10.R1
Platforms	All

## **active-source-limit *number***

Synopsis	Maximum number of active messages accepted by MSDP
Context	<b>configure router string msdp active-source-limit <i>number</i></b>
Tree	<b>active-source-limit</b>
Range	0 to 1000000
Introduced	19.10.R1
Platforms	All

## **admin-state *keyword***

Synopsis	Administrative state of MSDP
Context	<b>configure router string msdp admin-state <i>keyword</i></b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	19.10.R1
Platforms	All

## **data-encapsulation *boolean***

Synopsis	Enable encapsulation of multicast data used by MSDP
Context	<b>configure router string msdp data-encapsulation <i>boolean</i></b>
Tree	<b>data-encapsulation</b>

Default	true
Introduced	19.10.R1
Platforms	All

### **export-policy** *reference*

Synopsis	Policies to export source active state into MSDP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">msdp</a> <a href="#">export-policy</a> <i>reference</i>
Tree	<a href="#">export-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

### **group** [[name](#)] *string*

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">msdp</a> <a href="#">group</a> <i>string</i>
Tree	<a href="#">group</a>
Introduced	19.10.R1
Platforms	All

### **[name]** *string*

Synopsis	MSDP group name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">msdp</a> <a href="#">group</a> <i>string</i>
Tree	<a href="#">group</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**active-source-limit** *number*

Synopsis	Maximum number of active messages accepted by MSDP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>active-source-limit</b> <i>number</i>
Tree	<a href="#">active-source-limit</a>
Range	0 to 1000000
Introduced	19.10.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of MSDP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	19.10.R1
Platforms	All

**export-policy** *reference*

Synopsis	Policies to export source active state into MSDP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>export-policy</b> <i>reference</i>
Tree	<a href="#">export-policy</a>
Reference	<b>configure</b> <b>policy-options</b> <b>policy-statement</b> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

**import-policy** *reference*

Synopsis	Policy to import source active state from MSDP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>import-policy</b> <i>reference</i>
Tree	<a href="#">import-policy</a>

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Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

### **local-address** *string*

Synopsis	Local end of an MSDP session
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">msdp group</a> <i>string</i> <a href="#">local-address</a> <i>string</i>
Tree	<a href="#">local-address</a>
Introduced	19.10.R1
Platforms	All

### **mode** *keyword*

Synopsis	Topology of groups of peers
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">msdp group</a> <i>string</i> <a href="#">mode</a> <i>keyword</i>
Tree	<a href="#">mode</a>
Options	standard, mesh-group
Default	standard
Introduced	19.10.R1
Platforms	All

### **peer** [[ip-address](#)] *string*

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">msdp group</a> <i>string</i> <a href="#">peer</a> <i>string</i>
Tree	<a href="#">peer</a>
Introduced	19.10.R1
Platforms	All

**[ip-address] string**

Synopsis	IP address of the remote MSDP router for peering
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>peer</b> <i>string</i>
Tree	<b>peer</b>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**active-source-limit number**

Synopsis	Maximum number of active messages accepted by MSDP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>peer</b> <i>string</i> <b>active-source-limit</b> <i>number</i>
Tree	<b>active-source-limit</b>
Range	0 to 1000000
Introduced	19.10.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of MSDP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>peer</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	19.10.R1
Platforms	All

**authentication-key string**

Synopsis	MD5 authentication key for the MSDP peering session
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>peer</b> <i>string</i> <b>authentication-key</b> <i>string</i>
Tree	<b>authentication-key</b>
String Length	1 to 370
Introduced	19.10.R1
Platforms	All

**default-peer** *boolean*

Synopsis	Enable/Disable default peer as MSDP peer
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>peer</b> <i>string</i> <b>default-peer</b> <i>boolean</i>
Tree	<a href="#">default-peer</a>
Default	false
Introduced	19.10.R1
Platforms	All

**export-policy** *reference*

Synopsis	Policies to export source active state into MSDP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>peer</b> <i>string</i> <b>export-policy</b> <i>reference</i>
Tree	<a href="#">export-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

**import-policy** *reference*

Synopsis	Policy to import source active state from MSDP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>peer</b> <i>string</i> <b>import-policy</b> <i>reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

**local-address** *string*

Synopsis	Local end of an MSDP session
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>peer</b> <i>string</i> <b>local-address</b> <i>string</i>
Tree	<b>local-address</b>
Introduced	19.10.R1
Platforms	All

**receive-message-rate**

Synopsis	Enter the <b>receive-message-rate</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>peer</b> <i>string</i> <b>receive-message-rate</b>
Tree	<b>receive-message-rate</b>
Introduced	19.10.R1
Platforms	All

**rate** *number*

Synopsis	Number of MSDP messages read from the TCP session
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>peer</b> <i>string</i> <b>receive-message-rate</b> <b>rate</b> <i>number</i>
Tree	<b>rate</b>
Range	10 to 10000
Introduced	19.10.R1
Platforms	All

**threshold** *number*

Synopsis	Limit for MSDP messages read from the TCP session
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>peer</b> <i>string</i> <b>receive-message-rate</b> <b>threshold</b> <i>number</i>
Tree	<b>threshold</b>
Range	1 to 1000000
Introduced	19.10.R1
Platforms	All

**time** *number*

Synopsis	Limit of MSDP messages read from the TCP session
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>peer</b> <i>string</i> <b>receive-message-rate</b> <b>time</b> <i>number</i>
Tree	<b>time</b>
Range	1 to 600
Units	seconds
Introduced	19.10.R1
Platforms	All

**receive-message-rate**

Synopsis	Enter the <b>receive-message-rate</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>receive-message-rate</b>
Tree	<b>receive-message-rate</b>
Introduced	19.10.R1
Platforms	All

**rate** *number*

Synopsis	Number of MSDP messages read from the TCP session
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>receive-message-rate</b> <b>rate</b> <i>number</i>
Tree	<b>rate</b>
Range	10 to 10000
Introduced	19.10.R1
Platforms	All

**threshold** *number*

Synopsis	Limit for MSDP messages read from the TCP session
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>receive-message-rate</b> <b>threshold</b> <i>number</i>
Tree	<b>threshold</b>
Range	1 to 1000000
Introduced	19.10.R1
Platforms	All



**time number**

Synopsis	Limit of MSDP messages read from the TCP session
Context	<b>configure router</b> <i>string msdp group string receive-message-rate time number</i>
Tree	<a href="#">time</a>
Range	1 to 600
Units	seconds
Introduced	19.10.R1
Platforms	All

**import-policy reference**

Synopsis	Policy to import source active state from MSDP
Context	<b>configure router</b> <i>string msdp import-policy reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure policy-options policy-statement</b> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

**local-address string**

Synopsis	Local end of an MSDP session
Context	<b>configure router</b> <i>string msdp local-address string</i>
Tree	<a href="#">local-address</a>
Introduced	19.10.R1
Platforms	All

**peer [ip-address] string**

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure router</b> <i>string msdp peer string</i>
Tree	<a href="#">peer</a>

Introduced 19.10.R1  
Platforms All

### **[ip-address]** *string*

Synopsis IP address of the remote MSDP router for peering  
Context **configure** *router string msdp peer string*  
Tree *peer*  
Notes This element is part of a list key.  
Introduced 19.10.R1  
Platforms All

### **active-source-limit** *number*

Synopsis Maximum number of active messages accepted by MSDP  
Context **configure** *router string msdp peer string active-source-limit number*  
Tree *active-source-limit*  
Range 0 to 1000000  
Introduced 19.10.R1  
Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of MSDP  
Context **configure** *router string msdp peer string admin-state keyword*  
Tree *admin-state*  
Options enable, disable  
Default enable  
Introduced 19.10.R1  
Platforms All

### **authentication-key** *string*

Synopsis MD5 authentication key for the MSDP peering session  
Context **configure** *router string msdp peer string authentication-key string*

Tree	<a href="#">authentication-key</a>
String Length	1 to 370
Introduced	19.10.R1
Platforms	All

**default-peer** *boolean*

Synopsis	Enable/Disable default peer as MSDP peer
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">msdp peer</a> <i>string</i> <a href="#">default-peer</a> <i>boolean</i>
Tree	<a href="#">default-peer</a>
Default	false
Introduced	19.10.R1
Platforms	All

**export-policy** *reference*

Synopsis	Policies to export source active state into MSDP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">msdp peer</a> <i>string</i> <a href="#">export-policy</a> <i>reference</i>
Tree	<a href="#">export-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

**import-policy** *reference*

Synopsis	Policy to import source active state from MSDP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">msdp peer</a> <i>string</i> <a href="#">import-policy</a> <i>reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.

Introduced 19.10.R1  
Platforms All

### **local-address** *string*

Synopsis Local end of an MSDP session  
Context **configure** *router string msdp peer string local-address string*  
Tree [local-address](#)  
Introduced 19.10.R1  
Platforms All

### **receive-message-rate**

Synopsis Enter the **receive-message-rate** context  
Context **configure** *router string msdp peer string receive-message-rate*  
Tree [receive-message-rate](#)  
Introduced 19.10.R1  
Platforms All

### **rate** *number*

Synopsis Number of MSDP messages read from the TCP session  
Context **configure** *router string msdp peer string receive-message-rate rate number*  
Tree [rate](#)  
Range 10 to 10000  
Introduced 19.10.R1  
Platforms All

### **threshold** *number*

Synopsis Limit for MSDP messages read from the TCP session  
Context **configure** *router string msdp peer string receive-message-rate threshold number*  
Tree [threshold](#)  
Range 1 to 1000000  
Introduced 19.10.R1

Platforms All

### **time** *number*

Synopsis Limit of MSDP messages read from the TCP session  
Context **configure** *router string msdp peer string receive-message-rate time number*  
Tree [time](#)  
Range 1 to 600  
Units seconds  
Introduced 19.10.R1  
Platforms All

### **receive-message-rate**

Synopsis Enter the **receive-message-rate** context  
Context **configure** *router string msdp receive-message-rate*  
Tree [receive-message-rate](#)  
Introduced 19.10.R1  
Platforms All

### **rate** *number*

Synopsis Number of MSDP messages read from the TCP session  
Context **configure** *router string msdp receive-message-rate rate number*  
Tree [rate](#)  
Range 10 to 10000  
Introduced 19.10.R1  
Platforms All

### **threshold** *number*

Synopsis Limit for MSDP messages read from the TCP session  
Context **configure** *router string msdp receive-message-rate threshold number*  
Tree [threshold](#)  
Range 1 to 1000000

Introduced 19.10.R1  
Platforms All

### **time** *number*

Synopsis Limit of MSDP messages read from the TCP session  
Context **configure** *router string msdp receive-message-rate time number*  
Tree *time*  
Range 1 to 600  
Units seconds  
Introduced 19.10.R1  
Platforms All

### **rpf-table** *keyword*

Synopsis Route tables for RPF lookup  
Context **configure** *router string msdp rpf-table keyword*  
Tree *rpf-table*  
Options rtable-m, rtable-u, both  
Default rtable-u  
Introduced 19.10.R1  
Platforms All

### **source** [*ip-prefix*] *string*

Synopsis Enter the **source** list instance  
Context **configure** *router string msdp source string*  
Tree *source*  
Introduced 19.10.R1  
Platforms All

### [*ip-prefix*] *string*

Synopsis Source IP address for accepted active source messages  
Context **configure** *router string msdp source string*

Tree	<a href="#">source</a>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

### **active-source-limit** *number*

Synopsis	Number of active source messages accepted by MSDP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">msdp</a> <a href="#">source</a> <i>string</i> <a href="#">active-source-limit</a> <i>number</i>
Tree	<a href="#">active-source-limit</a>
Range	0 to 1000000
Introduced	19.10.R1
Platforms	All

### **source-active-cache-lifetime** *number*

Synopsis	Lifetime of SA entries in the cache
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">msdp</a> <a href="#">source-active-cache-lifetime</a> <i>number</i>
Tree	<a href="#">source-active-cache-lifetime</a>
Range	90 to 600
Units	seconds
Default	90
Introduced	19.10.R1
Platforms	All

### **mss-adjust**

Synopsis	Enable the <b>mss-adjust</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mss-adjust</a>
Tree	<a href="#">mss-adjust</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nat-group** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT group used for TCP-MSS adjustment
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mss-adjust</i> <i>nat-group</i> <i>number</i>
Tree	<a href="#">nat-group</a>
Max. Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**segment-size** *number*

Synopsis	TCP-MSS option value in transmitted TCP SYN requests
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mss-adjust</i> <i>segment-size</i> <i>number</i>
Tree	<a href="#">segment-size</a>
Range	160 to 10240
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mtrace2**

Synopsis	Enter the <b>mtrace2</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mtrace2</i>
Tree	<a href="#">mtrace2</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of multicast path tracing
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mtrace2</i> <i>admin-state</i> <i>keyword</i>



Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **udp-port** *number*

Synopsis	Destination and listening port for the mtrace2 command
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mtrace2</a> <a href="#">udp-port</a> <i>number</i>
Tree	<a href="#">udp-port</a>
Range	1024 to 49151
Default	5000
Introduced	16.0.R1
Platforms	All

### **multicast-info-policy** *reference*

Synopsis	Multicast policy name for virtual router
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">multicast-info-policy</a> <i>reference</i>
Tree	<a href="#">multicast-info-policy</a>
Reference	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **nat**

Synopsis	Enable the <b>nat</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a>
Tree	<a href="#">nat</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## inside

Synopsis	Enter the <b>inside</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a>
Tree	<a href="#">inside</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## I2-aware

Synopsis	Enter the <b>I2-aware</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">I2-aware</a>
Tree	<a href="#">I2-aware</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## subscribers [[prefix](#)] *string*

Synopsis	Add a list entry for <b>subscribers</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">I2-aware</a> <a href="#">subscribers</a> <i>string</i>
Tree	<a href="#">subscribers</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## [[prefix](#)] *string*

Synopsis	Layer-2 Aware NAT subscriber prefix
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">I2-aware</a> <a href="#">subscribers</a> <i>string</i>
Tree	<a href="#">subscribers</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## large-scale

Synopsis	Enter the <b>large-scale</b> context
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a>
Tree	<a href="#">large-scale</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dnat-only**

Synopsis	Enter the <b>dnat-only</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dnat-only</a>
Tree	<a href="#">dnat-only</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **source-prefix-list** *reference*

Synopsis	NAT prefix list that contains source IP addresses
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dnat-only</a> <a href="#">source-prefix-list</a> <i>reference</i>
Tree	<a href="#">source-prefix-list</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">nat</a> <a href="#">prefix-list</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dual-stack-lite**

Synopsis	Enter the <b>dual-stack-lite</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dual-stack-lite</a>
Tree	<a href="#">dual-stack-lite</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of Dual Stack Lite
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dual-stack-lite</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>

Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## deterministic

Synopsis	Enter the <b>deterministic</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dual-stack-lite</a> <a href="#">deterministic</a>
Tree	<a href="#">deterministic</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## policy-map [[source-prefix](#)] *string*



### WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	Enter the <b>policy-map</b> list instance
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dual-stack-lite</a> <a href="#">deterministic</a> <a href="#">policy-map</a> <a href="#">string</a>
Tree	<a href="#">policy-map</a>
Introduced	16.0.R1
Deprecated	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## [[source-prefix](#)] *string*



### WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	Source prefix that adds traffic to NAT pool
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dual-stack-lite</a> <a href="#">deterministic</a> <a href="#">policy-map</a> <a href="#">string</a>
Tree	<a href="#">policy-map</a>
Notes	This element is part of a list key.
Introduced	16.0.R1

Deprecated 22.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*



**WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis Administrative state of the prefix  
 Context **configure** *router string nat inside large-scale dual-stack-lite deterministic policy-map string admin-state keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 16.0.R1  
 Deprecated 22.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **map** [*from*] *string to string*



**WARNING:**

This element is deprecated and will be removed in a future release.



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **map** list instance  
 Context **configure** *router string nat inside large-scale dual-stack-lite deterministic policy-map string map string to string*  
 Tree [map](#)  
 Introduced 16.0.R1  
 Deprecated 22.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[from]** *string***WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	Beginning of the range for IPv6 addresses
Context	<b>configure</b> <b>router</b> <i>string</i> <b>nat</b> <b>inside</b> <b>large-scale</b> <b>dual-stack-lite</b> <b>deterministic</b> <b>policy-map</b> <i>string</i> <b>map</b> <i>string</i> <b>to</b> <i>string</i>
Tree	<b>map</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Deprecated	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**to** *string***WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	Inside end IPv6 address to map to outside IP addresses
Context	<b>configure</b> <b>router</b> <i>string</i> <b>nat</b> <b>inside</b> <b>large-scale</b> <b>dual-stack-lite</b> <b>deterministic</b> <b>policy-map</b> <i>string</i> <b>map</b> <i>string</i> <b>to</b> <i>string</i>
Tree	<b>map</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Deprecated	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**first-outside-address** *string***WARNING:**

This element is deprecated and will be removed in a future release.

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Outside IP address mapped to inside IP address range
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dual-stack-lite</a> <a href="#">deterministic</a> <a href="#">policy-map</a> <a href="#">string</a> <a href="#">map</a> <i>string</i> <a href="#">to</a> <a href="#">string</a> <a href="#">first-outside-address</a> <i>string</i>
Tree	<a href="#">first-outside-address</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Deprecated	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nat-policy** *reference***WARNING:**

This element is deprecated and will be removed in a future release.

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT policy
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dual-stack-lite</a> <a href="#">deterministic</a> <a href="#">policy-map</a> <a href="#">string</a> <a href="#">nat-policy</a> <i>reference</i>
Tree	<a href="#">nat-policy</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">nat</a> <a href="#">nat-policy</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Deprecated	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**prefix-map** [[source-prefix](#)] *string nat-policy reference*

Synopsis	Enter the <b>prefix-map</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string nat inside large-scale dual-stack-lite deterministic prefix-map string nat-policy reference</i>
Tree	<a href="#">prefix-map</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[source-prefix]** *string*

Synopsis	List containing source IP addresses on the private side
Context	<b>configure</b> <a href="#">router</a> <i>string nat inside large-scale dual-stack-lite deterministic prefix-map string nat-policy reference</i>
Tree	<a href="#">prefix-map</a>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nat-policy** *reference*

Synopsis	NAT policy
Context	<b>configure</b> <a href="#">router</a> <i>string nat inside large-scale dual-stack-lite deterministic prefix-map string nat-policy reference</i>
Tree	<a href="#">prefix-map</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">nat</a> <a href="#">nat-policy</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the prefix
Context	<b>configure</b> <a href="#">router</a> <i>string nat inside large-scale dual-stack-lite deterministic prefix-map string nat-policy reference admin-state keyword</i>
Tree	<a href="#">admin-state</a>



Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **map** [[from](#)] [string](#) [to](#) [string](#)



### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>map</b> list instance
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dual-stack-lite</a> <a href="#">deterministic</a> <a href="#">prefix-map</a> <a href="#">string</a> <a href="#">nat-policy</a> <a href="#">reference</a> <a href="#">map</a> <a href="#">string</a> <a href="#">to</a> <a href="#">string</a>
Tree	<a href="#">map</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **[from]** [string](#)

Synopsis	Beginning of the range for IPv6 addresses
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dual-stack-lite</a> <a href="#">deterministic</a> <a href="#">prefix-map</a> <a href="#">string</a> <a href="#">nat-policy</a> <a href="#">reference</a> <a href="#">map</a> <a href="#">string</a> <a href="#">to</a> <a href="#">string</a>
Tree	<a href="#">map</a>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **to** [string](#)

Synopsis	End of the range for IPv6 addresses
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dual-stack-lite</a> <a href="#">deterministic</a> <a href="#">prefix-map</a> <a href="#">string</a> <a href="#">nat-policy</a> <a href="#">reference</a> <a href="#">map</a> <a href="#">string</a> <a href="#">to</a> <a href="#">string</a>
Tree	<a href="#">map</a>
Notes	This element is part of a list key.
Introduced	21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **first-outside-address** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Outside IP address mapped to inside IP address range

Context **configure** [router](#) *string* [nat](#) [inside](#) [large-scale](#) [dual-stack-lite](#) [deterministic](#) [prefix-map](#) *string* [nat-policy](#) [reference](#) [map](#) *string* [to](#) *string* **first-outside-address** *string*

Tree [first-outside-address](#)

Notes This element is mandatory.

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **endpoint** [[address](#)] *string*

Synopsis Enter the **endpoint** list instance

Context **configure** [router](#) *string* [nat](#) [inside](#) [large-scale](#) [dual-stack-lite](#) **endpoint** *string*

Tree [endpoint](#)

Max. Instances 128

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[address]** *string*

Synopsis Dual Stack Lite IPv6 address

Context **configure** [router](#) *string* [nat](#) [inside](#) [large-scale](#) [dual-stack-lite](#) **endpoint** *string*

Tree [endpoint](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-fragmentation** *keyword*

Synopsis Fragmentation control of the AFTR originated downstream IPv6 traffic

Context **configure** **router** *string* **nat** **inside** **large-scale** **dual-stack-lite** **endpoint** *string* **ip-fragmentation** *keyword*

Tree **ip-fragmentation**

Options fragment-ipv6, fragment-ipv6-unless-ipv4-df-set

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **min-first-fragment-size-rx** *number*

Synopsis Minimum MTU size for upstream packets

Context **configure** **router** *string* **nat** **inside** **large-scale** **dual-stack-lite** **endpoint** *string* **min-first-fragment-size-rx** *number*

Tree **min-first-fragment-size-rx**

Description This command configures the minimum MTU size for the first fragment in the upstream direction. This command can be used to enable processing of first IPv6 fragments smaller than 1280 bytes. RFC 8200 recommends the minimum MTU in IPv6 be 1280 bytes which allows fragmentation only for packets that are larger than 1280 bytes. If a first fragment is smaller than 1280 bytes, DS-lite implementation in the SR OS, by default, drops the first fragment.

Range 512 to 1280

Default 1280

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **reassemble** *boolean*

Synopsis Reassembly of IPv6 payload datagrams

Context **configure** **router** *string* **nat** **inside** **large-scale** **dual-stack-lite** **endpoint** *string* **reassemble** *boolean*

Tree **reassemble**

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tunnel-mtu** *number*

Synopsis DS-Lite tunnel MTU for this address

Context **configure** *router string nat inside large-scale dual-stack-lite endpoint string tunnel-mtu number*

Tree [tunnel-mtu](#)

Description This command configures the Dual Stack Lite (DS-Lite) tunnel MTU for this address.

Range 464 to 9212

Default 1500

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **max-subscriber-limit** *number*



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis Largest value for all subscriber limits in each deterministic pool

Context **configure** *router string nat inside large-scale dual-stack-lite max-subscriber-limit number*

Tree [max-subscriber-limit](#)

Range 1 | 2 | 4 | 8 | 16 | 32 | 64 | 128 | 256 | 512 | 1024 | 2048 | 4096 | 8192 | 16384 | 32768

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **subscriber-prefix-length** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis IPv6 prefix length of the Dual Stack Lite subscribers

Context	<b>configure</b> <i>router string nat inside large-scale dual-stack-lite subscriber-prefix-length number</i>
Tree	<a href="#">subscriber-prefix-length</a>
Range	32 to 64   128
Default	128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nat-policy** *reference*



#### **WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	NAT policy for LSN
Context	<b>configure</b> <i>router string nat inside large-scale nat-policy reference</i>
Tree	<a href="#">nat-policy</a>
Reference	<b>configure</b> <i>service nat nat-policy string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nat44**

Synopsis	Enter the <b>nat44</b> context
Context	<b>configure</b> <i>router string nat inside large-scale nat44</i>
Tree	<a href="#">nat44</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **destination-prefix** [[ip-prefix-length](#)] *string*

Synopsis	Enter the <b>destination-prefix</b> list instance
Context	<b>configure</b> <i>router string nat inside large-scale nat44 destination-prefix string</i>
Tree	<a href="#">destination-prefix</a>
Max. Instances	6144
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[ip-prefix-length]** *string*

Synopsis Traffic sent to destinations within this prefix will be NATed

Context **configure** [router](#) *string* [nat](#) [inside](#) [large-scale](#) [nat44](#) [destination-prefix](#) *string*

Tree [destination-prefix](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nat-policy** *reference*



#### **WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis NAT policy

Context **configure** [router](#) *string* [nat](#) [inside](#) [large-scale](#) [nat44](#) [destination-prefix](#) *string* [nat-policy](#) *reference*

Tree [nat-policy](#)

Reference **configure** [service](#) [nat](#) [nat-policy](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **deterministic**

Synopsis Enter the **deterministic** context

Context **configure** [router](#) *string* [nat](#) [inside](#) [large-scale](#) [nat44](#) [deterministic](#)

Tree [deterministic](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**policy-map** [[source-prefix](#)] *string***WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	Enter the <b>policy-map</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat44</a> <a href="#">deterministic</a> <a href="#">policy-map</a> <i>string</i>
Tree	<a href="#">policy-map</a>
Introduced	16.0.R1
Deprecated	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[source-prefix]** *string***WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	Source prefix that adds traffic to NAT pool
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat44</a> <a href="#">deterministic</a> <a href="#">policy-map</a> <i>string</i>
Tree	<a href="#">policy-map</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Deprecated	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword***WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	Administrative state of the prefix
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat44</a> <a href="#">deterministic</a> <a href="#">policy-map</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1

Deprecated 22.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **map** [*from*] *string to string*



**WARNING:**

This element is deprecated and will be removed in a future release.



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **map** list instance  
 Context **configure** *router string nat inside large-scale nat44 deterministic policy-map string map string to string*  
 Tree [map](#)  
 Introduced 16.0.R1  
 Deprecated 22.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[from]** *string*



**WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis Beginning of the range for IPv4 addresses  
 Context **configure** *router string nat inside large-scale nat44 deterministic policy-map string map string to string*  
 Tree [map](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Deprecated 22.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**to string****WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis	End of the range for IPv4 addresses
Context	<b>configure</b> <a href="#">router string</a> <a href="#">nat inside large-scale nat44 deterministic policy-map string map string to string</a>
Tree	<a href="#">map</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Deprecated	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**first-outside-address string****WARNING:**

This element is deprecated and will be removed in a future release.

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Outside IP address mapped to inside IP address range
Context	<b>configure</b> <a href="#">router string</a> <a href="#">nat inside large-scale nat44 deterministic policy-map string map string to string first-outside-address string</a>
Tree	<a href="#">first-outside-address</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Deprecated	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nat-policy** *reference***WARNING:**

This element is deprecated and will be removed in a future release.

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT policy
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat44</a> <a href="#">deterministic</a> <a href="#">policy-map</a> <i>string</i> <a href="#">nat-policy</a> <i>reference</i>
Tree	<a href="#">nat-policy</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">nat</a> <a href="#">nat-policy</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Deprecated	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**prefix-map** [[source-prefix](#)] *string* [nat-policy](#) *reference*

Synopsis	Enter the <b>prefix-map</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat44</a> <a href="#">deterministic</a> <a href="#">prefix-map</a> <i>string</i> <a href="#">nat-policy</a> <i>reference</i>
Tree	<a href="#">prefix-map</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[source-prefix]** *string*

Synopsis	Traffic sent from sources within this prefix will be NATed
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat44</a> <a href="#">deterministic</a> <a href="#">prefix-map</a> <i>string</i> <a href="#">nat-policy</a> <a href="#">reference</a>
Tree	<a href="#">prefix-map</a>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nat-policy** *reference*

Synopsis	NAT policy
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat44</a> <a href="#">deterministic</a> <a href="#">prefix-map</a> <i>string</i> <a href="#">nat-policy</a> <a href="#">reference</a>
Tree	<a href="#">prefix-map</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">nat</a> <a href="#">nat-policy</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the prefix
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat44</a> <a href="#">deterministic</a> <a href="#">prefix-map</a> <i>string</i> <a href="#">nat-policy</a> <a href="#">reference</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **map** [[from](#)] *string to string*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>map</b> list instance
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Context	<b>configure</b> <i>router string nat inside large-scale nat44 deterministic prefix-map string nat-policy reference map string to string</i>
Tree	<a href="#">map</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[from]** *string*

Synopsis	Beginning of the range for IPv4 addresses
Context	<b>configure</b> <i>router string nat inside large-scale nat44 deterministic prefix-map string nat-policy reference map string to string</i>
Tree	<a href="#">map</a>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**to** *string*

Synopsis	End of the range for IPv4 addresses
Context	<b>configure</b> <i>router string nat inside large-scale nat44 deterministic prefix-map string nat-policy reference map string to string</i>
Tree	<a href="#">map</a>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**first-outside-address** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Outside IP address mapped to inside IP address range
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Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat44</a> <a href="#">deterministic</a> <a href="#">prefix-map</a> <a href="#">string</a> <a href="#">nat-policy</a> <a href="#">reference</a> <a href="#">map</a> <a href="#">string</a> <a href="#">to</a> <a href="#">string</a> <a href="#">first-outside-address</a> <a href="#">string</a>
Tree	<a href="#">first-outside-address</a>
Notes	This element is mandatory.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **max-subscriber-limit** *number*



#### **WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Largest value for all subscriber limits in each deterministic pool
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat44</a> <a href="#">max-subscriber-limit</a> <i>number</i>
Tree	<a href="#">max-subscriber-limit</a>
Range	1   2   4   8   16   32   64   128   256   512   1024   2048   4096   8192   16384   32768
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nat-import** *reference*

Synopsis	Import BGP-VPN routes in NAT inside routing context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat44</a> <a href="#">nat-import</a> <i>reference</i>
Tree	<a href="#">nat-import</a>
Description	<p>This command references an import policy to determine the routes that should be installed in the routing table as NAT routes, which are used to steer traffic to NAT.</p> <p>A dynamic route obtained by BGP-VPN can be imported into an inside (private side) routing context in NAT environment. This route is associated with a NAT policy that maps traffic destined into a NAT pool and outside routing context. If the NAT policy is not explicitly configured in the import route-policy, the imported NAT route is, by default, associated with the default NAT policy defined in the NAT inside routing context.</p> <p>All BGP-VPN routes that are destined to be imported into NAT inside routing context must be configured with action-type accept in the route policy.</p>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## nat64

Synopsis Enable the **nat64** context  
 Context **configure** *router string nat inside large-scale nat64*  
 Tree [nat64](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis Administrative state of NAT64  
 Context **configure** *router string nat inside large-scale nat64 admin-state keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## drop-zero-ipv4-checksum *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Drop UDP datagrams with zero IPv4 checksum  
 Context **configure** *router string nat inside large-scale nat64 drop-zero-ipv4-checksum boolean*  
 Tree [drop-zero-ipv4-checksum](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**insert-ipv6-fragment-header** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Include IPv6 fragment header to indicate that the sender allows fragmentation
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat64</a> <a href="#">insert-ipv6-fragment-header</a> <i>boolean</i>
Tree	<a href="#">insert-ipv6-fragment-header</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip-fragmentation** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Control fragmentation of originated downstream IPv6 traffic
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat64</a> <a href="#">ip-fragmentation</a> <i>keyword</i>
Tree	<a href="#">ip-fragmentation</a>
Options	fragment-ipv6, fragment-ipv6-unless-ipv4-df-set
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ipv6-mtu** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Size of the IPv6 downstream packet in NAT64
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat64</a> <a href="#">ipv6-mtu</a> <i>number</i>
Tree	<a href="#">ipv6-mtu</a>
Range	1280 to 9212
Default	1520
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **prefix string**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis IPv6 prefix to derive the IPv6 address from the IPv4 address  
 Context **configure router string nat inside large-scale nat64 prefix string**  
 Tree [prefix](#)  
 Default 64:ff9b::/96  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **subscriber-prefix-length number**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis IPv6 prefix length for the NAT64 subscribers  
 Context **configure router string nat inside large-scale nat64 subscriber-prefix-length number**  
 Tree [subscriber-prefix-length](#)  
 Range 32 to 64 | 128  
 Default 128  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



## tos

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>tos</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat64</a> <a href="#">tos</a>
Tree	<a href="#">tos</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## downstream

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>downstream</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat64</a> <a href="#">tos</a> <a href="#">downstream</a>
Tree	<a href="#">downstream</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## use-ipv4 *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Copy TOS/DSCP bits from the incoming IPv4 frame to the outgoing IPv6 frame
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat64</a> <a href="#">tos</a> <a href="#">downstream</a> <a href="#">use-ipv4</a> <a href="#">boolean</a>
Tree	<a href="#">use-ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## upstream



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>upstream</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat64</a> <a href="#">tos</a> <a href="#">upstream</a>
Tree	<a href="#">upstream</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## set-tos (*keyword* | *number*)



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TOS/DSCP bits in IPv4 frame in the upstream direction
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat64</a> <a href="#">tos</a> <a href="#">upstream</a> <a href="#">set-tos</a> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">set-tos</a>
Range	0 to 255
Options	use-ipv6
Default	use-ipv6
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## redundancy

Synopsis	Enter the <b>redundancy</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">redundancy</a>
Tree	<a href="#">redundancy</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**peer string**

Synopsis	IP address of the NAT redundancy peer for this virtual router instance
Context	<b>configure</b> <a href="#">router string nat inside large-scale redundancy peer string</a>
Tree	<a href="#">peer</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**peer6 string**

Synopsis	IPv6 address of the NAT redundancy peer for this virtual router instance
Context	<b>configure</b> <a href="#">router string nat inside large-scale redundancy peer6 string</a>
Tree	<a href="#">peer6</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**steering-route string**

Synopsis	IP address and prefix length of the steering route
Context	<b>configure</b> <a href="#">router string nat inside large-scale redundancy steering-route string</a>
Tree	<a href="#">steering-route</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**subscriber-identification**

Synopsis	Enter the <b>subscriber-identification</b> context
Context	<b>configure</b> <a href="#">router string nat inside large-scale subscriber-identification</a>
Tree	<a href="#">subscriber-identification</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of subscriber identification
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Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">subscriber-identification</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## attribute

Synopsis	Enter the <b>attribute</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">subscriber-identification</a> <a href="#">attribute</a>
Tree	<a href="#">attribute</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## type *keyword*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	RADIUS attribute used as subscriber identifier
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">subscriber-identification</a> <a href="#">attribute</a> <a href="#">type</a> <i>keyword</i>
Tree	<a href="#">type</a>
Options	alc-sub-string, user-name, class, station-id, imsi, imei
Default	alc-sub-string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## vendor *keyword*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	The RADIUS Vendor
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">subscriber-identification</a> <a href="#">attribute</a> <a href="#">vendor</a> <a href="#">keyword</a>
Tree	<a href="#">vendor</a>
Options	standard, nokia, 3gpp
Default	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">subscriber-identification</a> <a href="#">description</a> <a href="#">string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **drop-unidentified-traffic** *boolean*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Drop traffic from unidentified flows
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">subscriber-identification</a> <a href="#">drop-unidentified-traffic</a> <a href="#">boolean</a>
Tree	<a href="#">drop-unidentified-traffic</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **radius-proxy-server**

Synopsis	Enable the <b>radius-proxy-server</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">subscriber-identification</a> <a href="#">radius-proxy-server</a>

Tree	<a href="#">radius-proxy-server</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### router-instance *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">subscriber-identification</a> <a href="#">radius-proxy-server</a> <a href="#">router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### server *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Server name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">subscriber-identification</a> <a href="#">radius-proxy-server</a> <a href="#">server</a> <i>string</i>
Tree	<a href="#">server</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### map

Synopsis	Enter the <b>map</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">map</a>

Tree	<a href="#">map</a>
Introduced	16.0.R1
Platforms	VSR

### **map-domain** [\[domain-name\]](#) *reference*

Synopsis	Add a list entry for <b>map-domain</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">map</a> <a href="#">map-domain</a> <i>reference</i>
Tree	<a href="#">map-domain</a>
Introduced	16.0.R1
Platforms	VSR

### **[domain-name]** *reference*

Synopsis	MAP domain template name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">map</a> <a href="#">map-domain</a> <i>reference</i>
Tree	<a href="#">map-domain</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">nat</a> <a href="#">map-t</a> <a href="#">domain</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	VSR

### **outside**

Synopsis	Enter the <b>outside</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a>
Tree	<a href="#">outside</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dnat-only**

Synopsis	Enter the <b>dnat-only</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">dnat-only</a>
Tree	<a href="#">dnat-only</a>

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **route-limit** *number*

Synopsis	Limit for internal routes for downstream traffic
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">dnat-only</a> <b>route-limit</b> <i>number</i>
Tree	<a href="#">route-limit</a>
Range	1 to 131072
Default	32768
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **filters**

Synopsis	Enter the <b>filters</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">filters</a>
Tree	<a href="#">filters</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **downstream**

Synopsis	Enter the <b>downstream</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">filters</a> <a href="#">downstream</a>
Tree	<a href="#">downstream</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipv4** *reference*

Synopsis	IPv4 filter policy name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">filters</a> <a href="#">downstream</a> <b>ipv4</b> <i>reference</i>
Tree	<a href="#">ipv4</a>
Reference	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i>



Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipv6 reference**

Synopsis IPv6 filter policy name  
Context **configure** [router](#) [string](#) [nat](#) [outside](#) [filters](#) [downstream](#) [ipv6](#) [reference](#)  
Tree [ipv6](#)  
Reference **configure** [filter](#) [ipv6-filter](#) [string](#)  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **upstream**

Synopsis Enter the **upstream** context  
Context **configure** [router](#) [string](#) [nat](#) [outside](#) [filters](#) [upstream](#)  
Tree [upstream](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipv4 reference**

Synopsis IPv4 filter policy name  
Context **configure** [router](#) [string](#) [nat](#) [outside](#) [filters](#) [upstream](#) [ipv4](#) [reference](#)  
Tree [ipv4](#)  
Reference **configure** [filter](#) [ip-filter](#) [string](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipv6 reference**

Synopsis IPv6 filter policy name  
Context **configure** [router](#) [string](#) [nat](#) [outside](#) [filters](#) [upstream](#) [ipv6](#) [reference](#)  
Tree [ipv6](#)  
Reference **configure** [filter](#) [ipv6-filter](#) [string](#)

Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mtu number**

Synopsis	MTU for downstream traffic
Context	<b>configure</b> <a href="#">router string nat outside</a> <a href="#">mtu number</a>
Tree	<a href="#">mtu</a>
Range	512 to 9000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **pool [name] string**

Synopsis	Enter the <b>pool</b> list instance
Context	<b>configure</b> <a href="#">router string nat outside</a> <a href="#">pool string</a>
Tree	<a href="#">pool</a>
Max. Instances	4096
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[name] string**

Synopsis	NAT pool name
Context	<b>configure</b> <a href="#">router string nat outside</a> <a href="#">pool string</a>
Tree	<a href="#">pool</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **address-range [start] string end string**

Synopsis	Enter the <b>address-range</b> list instance
----------	--

Context	<b>configure</b> <i>router string nat outside pool string address-range string end string</i>
Tree	<a href="#">address-range</a>
Max. Instances	4096
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[start]** *string*

Synopsis	Lower bound of the NAT address range
Context	<b>configure</b> <i>router string nat outside pool string address-range string end string</i>
Tree	<a href="#">address-range</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end** *string*

Synopsis	Upper bound of the NAT address range
Context	<b>configure</b> <i>router string nat outside pool string address-range string end string</i>
Tree	<a href="#">address-range</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <i>router string nat outside pool string address-range string end string description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**drain** *boolean*

Synopsis	Start or stop draining this NAT address range
Context	<b>configure</b> <b>router</b> <i>string</i> <b>nat</b> <b>outside</b> <b>pool</b> <i>string</i> <b>address-range</b> <i>string</i> <b>end</b> <i>string</i> <b>drain</b> <i>boolean</i>
Tree	<b>drain</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the outside routing NAT pool
Context	<b>configure</b> <b>router</b> <i>string</i> <b>nat</b> <b>outside</b> <b>pool</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**applications**

Synopsis	Enter the <b>applications</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>nat</b> <b>outside</b> <b>pool</b> <i>string</i> <b>applications</b>
Tree	<b>applications</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**agnostic** *boolean***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT pool to create in the outside routing context
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Context	<b>configure</b> <i>router string nat outside pool string applications agnostic boolean</i>
Tree	<i>agnostic</i>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <i>router string nat outside pool string description string</i>
Tree	<i>description</i>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **icmp-echo-reply** *boolean*

Synopsis	Allow NAT pool IP addresses to respond to ICMP PINGs
Context	<b>configure</b> <i>router string nat outside pool string icmp-echo-reply boolean</i>
Tree	<i>icmp-echo-reply</i>
Description	<p>This command allows IP addresses in the NAT pool to respond to ICMP Echo requests (PINGs). The configuration can be toggled while the pool is in use.</p> <p>In L2-aware NAT when port-block-extensions is disabled, the reply from an outside IP address is generated only when this IP address has at least one host (binding) behind it.</p> <p>In L2-aware NAT when port-block-extensions is enabled, the reply from an outside IP address is generated regardless if a binding is present.</p> <p>In LSN, the reply from an outside IP address is generated regardless if a binding is present.</p>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **l2-aware**

Synopsis	Enter the <b>l2-aware</b> context
Context	<b>configure</b> <i>router string nat outside pool string l2-aware</i>

Tree	<a href="#">l2-aware</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## default-host

Synopsis	Enable the <b>default-host</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <i>string</i> <a href="#">l2-aware</a> <a href="#">default-host</a>
Tree	<a href="#">default-host</a>
Description	<p>Commands in this context configure the default DMZ host options. A default DMZ host is a node on the inside to which all unknown traffic is redirected by changing the destination IPv4 address in the traffic header. During this operation, the checksums in the Layer 3 and Layer 4 header (UDP and TCP) are recalculated.</p> <p>Unknown traffic in NAT represent all unmatched traffic arriving from the outside (where there is no pinhole or a matching flow record created by traffic initiated from the inside). The purpose of the default DMZ host is to capture and analyze the unknown traffic as part of threat analysis.</p> <p>The rate of redirected unknown traffic can be restricted by configuration.</p>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## inside-router-instance *string*

Synopsis	Router instance of the DMZ
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <i>string</i> <a href="#">l2-aware</a> <a href="#">default-host</a> <a href="#">inside-router-instance</a> <i>string</i>
Tree	<a href="#">inside-router-instance</a>
Description	This command configures the router instance on the inside where the default DMZ host resides.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ip-address *string*

Synopsis	IP address of the default DMZ host
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <i>string</i> <a href="#">l2-aware</a> <a href="#">default-host</a> <a href="#">ip-address</a> <i>string</i>
Tree	<a href="#">ip-address</a>

Description	This command configures the IP address of the default DMZ host. Redirection to the default DMZ host is achieved by replacing the destination IP address in the traffic header in the unknown traffic initiated from the outside with the one of the default DMZ host.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rate-limit** *number*

Synopsis	Rate limit for unknown traffic sent to default DMZ host
Context	<b>configure</b> <b>router</b> <i>string</i> <b>nat</b> <b>outside</b> <b>pool</b> <i>string</i> <b>l2-aware</b> <b>default-host</b> <b>rate-limit</b> <i>number</i>
Tree	<b>rate-limit</b>
Description	This command configures the rate limit of the unknown traffic sent to the default DMZ host.  Unknown traffic sent to the default DMZ host is rate limited by a configurable value expressed in mbps. The rate limit is configurable per NAT pool per ISA, vISA, or ESA-VM.
Range	1 to 10000
Default	10
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **external-assignment** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	External IP address for Layer-2-aware
Context	<b>configure</b> <b>router</b> <i>string</i> <b>nat</b> <b>outside</b> <b>pool</b> <i>string</i> <b>l2-aware</b> <b>external-assignment</b> <i>boolean</i>
Tree	<b>external-assignment</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## port-block-extension



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>port-block-extension</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">l2-aware</a> <a href="#">port-block-extension</a>
Tree	<a href="#">port-block-extension</a>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ports *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of ports per dynamic port-block
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">l2-aware</a> <a href="#">port-block-extension</a> <a href="#">ports</a> <i>number</i>
Tree	<a href="#">ports</a>
Range	10 to 5000
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## subscriber

Synopsis	Enter the <b>subscriber</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">l2-aware</a> <a href="#">port-block-extension</a> <a href="#">subscriber</a>
Tree	<a href="#">subscriber</a>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



## watermarks

Synopsis	Enable the <b>watermarks</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>nat</b> <b>outside</b> <b>pool</b> <i>string</i> <b>l2-aware</b> <b>port-block-extension</b> <b>subscriber</b> <b>watermarks</b>
Tree	<b>watermarks</b>
Description	This command configures watermarks for NAT resources.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## high number

Synopsis	High watermark percentage
Context	<b>configure</b> <b>router</b> <i>string</i> <b>nat</b> <b>outside</b> <b>pool</b> <i>string</i> <b>l2-aware</b> <b>port-block-extension</b> <b>subscriber</b> <b>watermarks</b> <b>high</b> <i>number</i>
Tree	<b>high</b>
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## low number

Synopsis	Low watermark percentage
Context	<b>configure</b> <b>router</b> <i>string</i> <b>nat</b> <b>outside</b> <b>pool</b> <i>string</i> <b>l2-aware</b> <b>port-block-extension</b> <b>subscriber</b> <b>watermarks</b> <b>low</b> <i>number</i>
Tree	<b>low</b>
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## subscriber-limit *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of L2-Aware NAT subscribers per outside address
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">l2-aware</a> <a href="#">port-block-extension</a> <a href="#">subscriber-limit</a> <i>number</i>
Tree	<a href="#">subscriber-limit</a>
Description	<p>When port-block extensions for the L2-Aware subscribers are enabled, the port space for an outside IP address is divided into the following:</p> <ul style="list-style-type: none"> <li>• well-known port (this is a fixed and permanently allocated block of ports for all NAT types)</li> <li>• static port-forwarding range (if enabled by configuration)</li> <li>• port range allocated for initial port blocks of each L2-Aware subscriber</li> <li>• port range allocated for extended port blocks for the remainder after the three previous port ranges</li> </ul> <p>The number of L2-Aware NAT subscribers per an outside IP address multiplied by the size of the initial port-block size determines the size of the port range reserved for initial port-blocks of each subscriber.</p> <p>The lower boundary of the extended port range is determined by adding the upper boundary of the configured port forwarding range and the size of the port range allocated for initial port blocks.</p>
Range	2 to 2000
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## watermarks

Synopsis	Enable the <b>watermarks</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">l2-aware</a> <a href="#">port-block-extension</a> <a href="#">watermarks</a>
Tree	<a href="#">watermarks</a>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### high number

Synopsis	High watermark percentage
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">l2-aware</a> <a href="#">port-block-extension</a> <a href="#">watermarks</a> <a href="#">high</a> <a href="#">number</a>
Tree	<a href="#">high</a>
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### low number

Synopsis	Low watermark percentage
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">l2-aware</a> <a href="#">port-block-extension</a> <a href="#">watermarks</a> <a href="#">low</a> <a href="#">number</a>
Tree	<a href="#">low</a>
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### large-scale

Synopsis	Enter the <b>large-scale</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">large-scale</a>
Tree	<a href="#">large-scale</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## default-host

Synopsis	Enable the <b>default-host</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <i>string</i> <a href="#">large-scale</a> <a href="#">default-host</a>
Tree	<a href="#">default-host</a>
Description	<p>Commands in this context configure the default DMZ host options. A default DMZ host is a node on the inside to which all unknown traffic is redirected by changing the destination IPv4 address in the traffic header. During this operation, the checksums in the Layer 3 and Layer 4 header (UDP and TCP) are recalculated.</p> <p>Unknown traffic in NAT represent all unmatched traffic arriving from the outside (where there is no pinhole or a matching flow record created by traffic initiated from the inside). The purpose of the default DMZ host is to capture and analyze the unknown traffic as part of threat analysis.</p> <p>The rate of redirected unknown traffic can be restricted by configuration.</p>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## inside-router-instance *string*

Synopsis	Router instance of the DMZ
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <i>string</i> <a href="#">large-scale</a> <a href="#">default-host</a> <a href="#">inside-router-instance</a> <i>string</i>
Tree	<a href="#">inside-router-instance</a>
Description	This command configures the router instance on the inside where the default DMZ host resides.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ip-address *string*

Synopsis	IP address of the default DMZ host
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <i>string</i> <a href="#">large-scale</a> <a href="#">default-host</a> <a href="#">ip-address</a> <i>string</i>
Tree	<a href="#">ip-address</a>
Description	This command configures the IP address of the default DMZ host. Redirection to the default DMZ host is achieved by replacing the destination IP address in the traffic header in the unknown traffic initiated from the outside with the one of the default DMZ host.
Introduced	22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rate-limit** *number*

Synopsis Rate limit for unknown traffic sent to default DMZ host

Context **configure** [router](#) *string* [nat](#) [outside](#) [pool](#) *string* [large-scale](#) [default-host](#) **rate-limit** *number*

Tree [rate-limit](#)

Description This command configures the rate limit of the unknown traffic sent to the default DMZ host.

Unknown traffic sent to the default DMZ host is rate limited by a configurable value expressed in mbps. The rate limit is configurable per NAT pool per ISA, vISA, or ESA-VM.

Range 1 to 10000

Default 10

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **deterministic**

Synopsis Enter the **deterministic** context

Context **configure** [router](#) *string* [nat](#) [outside](#) [pool](#) *string* [large-scale](#) **deterministic**

Tree [deterministic](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port-reservation** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis Number of ports per deterministic port-block

Context **configure** [router](#) *string* [nat](#) [outside](#) [pool](#) *string* [large-scale](#) [deterministic](#) **port-reservation** *number*

Tree [port-reservation](#)

Range	1 to 65536
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## watermarks

Synopsis	Enable the <b>watermarks</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <i>string</i> <a href="#">large-scale</a> <a href="#">deterministic</a> <a href="#">watermarks</a>
Tree	<a href="#">watermarks</a>
Description	<p>Commands in this context monitor extended (dynamic) port-block utilization per outside IP in a NAT pool in deterministic LSN.</p> <p>High and low thresholds are configured in percentages of total available extended port-blocks per outside IP in a pool. Both values represent extended port-block utilization or occupancy per outside IP in a pool.</p> <p>For the system to generate those events, the NAT event-id 2045 must be enabled through configuration in the log event-control.</p>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## high number

Synopsis	High watermark percentage
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <i>string</i> <a href="#">large-scale</a> <a href="#">deterministic</a> <a href="#">watermarks</a> <a href="#">high</a> <a href="#">number</a>
Tree	<a href="#">high</a>
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## low number

Synopsis	Low watermark percentage
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Context	<b>configure router string nat outside pool string large-scale deterministic watermarks low number</b>
Tree	<a href="#">low</a>
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## redundancy

Synopsis	Enter the <b>redundancy</b> context
Context	<b>configure router string nat outside pool string large-scale redundancy</b>
Tree	<a href="#">redundancy</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of NAT pool redundancy
Context	<b>configure router string nat outside pool string large-scale redundancy admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Notes	The following elements are part of a choice: ( <b>admin-state</b> , <b>export-route</b> , and <b>monitor-route</b> ) or <b>follow</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## export-route *string*

Synopsis	Route to export to the peer
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <i>string</i> <a href="#">large-scale</a> <a href="#">redundancy</a> <a href="#">export-route</a> <i>string</i>
Tree	<a href="#">export-route</a>
Notes	The following elements are part of a choice: ( <b>admin-state</b> , <b>export-route</b> , and <b>monitor-route</b> ) or <b>follow</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **follow**

Synopsis	Enter the <b>follow</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <i>string</i> <a href="#">large-scale</a> <a href="#">redundancy</a> <a href="#">follow</a>
Tree	<a href="#">follow</a>
Notes	The following elements are part of a choice: ( <b>admin-state</b> , <b>export-route</b> , and <b>monitor-route</b> ) or <b>follow</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **name** *string*

Synopsis	Name of the pool where activity is shared
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <i>string</i> <a href="#">large-scale</a> <a href="#">redundancy</a> <a href="#">follow</a> <a href="#">name</a> <i>string</i>
Tree	<a href="#">name</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **router-instance** *string*

Synopsis	Router instance where the lead pool resides
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <i>string</i> <a href="#">large-scale</a> <a href="#">redundancy</a> <a href="#">follow</a> <a href="#">router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**monitor-route** *string*

Synopsis	Monitor the peer route
Context	<b>configure</b> <i>router string nat outside pool string large-scale redundancy monitor-route string</i>
Tree	<a href="#">monitor-route</a>
Notes	The following elements are part of a choice: ( <b>admin-state</b> , <b>export-route</b> , and <b>monitor-route</b> ) or <b>follow</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**subscriber-limit** *number***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Maximum number of subscribers per IP address
Context	<b>configure</b> <i>router string nat outside pool string large-scale subscriber-limit number</i>
Tree	<a href="#">subscriber-limit</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mode** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Mode of operation of this NAT address pool
Context	<b>configure</b> <i>router string nat outside pool string mode keyword</i>
Tree	<a href="#">mode</a>
Options	auto, napt, one-to-one
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## nat-group *reference*



### WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Create a NAT group

Context **configure** *router* *string* *nat* *outside* *pool* *string* *nat-group* *reference*

Tree [nat-group](#)

Reference **configure** *isa* *nat-group* *number*

Notes The following elements are part of a mandatory choice: **nat-group** or **wlan-gw-group**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## port-forwarding

Synopsis Enter the **port-forwarding** context

Context **configure** *router* *string* *nat* *outside* *pool* *string* *port-forwarding*

Tree [port-forwarding](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dynamic-block-reservation *boolean*



### WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis Reserve dynamic block for subscriber

Context **configure** *router* *string* *nat* *outside* *pool* *string* *port-forwarding* *dynamic-block-reservation* *boolean*

Tree [dynamic-block-reservation](#)

Description When configured to **true**, the system reserves dynamic port block when the first port forward for the subscriber is created. The dynamic port block allocation is logged only if

the block is being used and mappings are created. Dynamic port block reservation due to the port forward creation but without any dynamic mapping, is not logged.

The reserved port block is released only when the last mapping in the block expires and there are no port forwards associated with the subscriber. The de-allocation log (syslog or RADIUS) is generated when the dynamic port block is completely released.

Dynamic port block reservations can be enabled only if the configured maximum number of subscribers per outside IP addresses are less than or equal to the maximum number of configured port blocks per outside IP address.

When configured to **false**, dynamic port blocks are not reserved when the first port forward for the subscriber is created.

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **range-end** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



#### **WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	End of the wildcard range for port forwards
Context	<b>configure</b> <i>router string nat outside pool string port-forwarding range-end number</i>
Tree	<i>range-end</i>
Description	<p>This command configures the upper boundary of the wildcard port range dedicated to port forwarding in a NAT pool, whereas the <b>range-start</b> command configures the lower boundary (the starting port) of the wildcard port range dedicated to port forwarding in a NAT pool.</p> <p>If left unconfigured, the <b>range-end</b> implicit value is set to 1023, that represents the end of the well-known port range that is always enabled.</p> <p>Port forwards are supported only in pools in NAPT mode. Pools in 1:1 mode do not support port-forwards.</p>
Range	0   1023 to 65535
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**range-start** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Start of the wildcard range for port forwards
Context	<b>configure</b> <i>router string nat outside pool string port-forwarding range-start number</i>
Tree	<a href="#">range-start</a>
Description	<p>This command configures the lower boundary (the starting port) of the wildcard port range dedicated to port forwarding in a NAT pool, whereas the <b>range-end</b> command configures the upper boundary of the wildcard port range dedicated to port forwarding in a NAT pool.</p> <p>If left unconfigured, the <b>range-start</b> implicit value is set to 1. Port 0 is always excluded from the port forwarding range.</p> <p>Port forwards are supported only in pools in Network Address and Port Translation (NAPT) mode. Pools in 1:1 mode do not support configured port forwards.</p>
Range	0   1   1025 to 65535
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port-reservation**

Synopsis	Enter the <b>port-reservation</b> context
Context	<b>configure</b> <i>router string nat outside pool string port-reservation</i>
Tree	<a href="#">port-reservation</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port-blocks** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Port block size for NAT subscribers
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Context	<b>configure</b> <i>router string nat outside pool string port-reservation port-blocks number</i>
Tree	<a href="#">port-blocks</a>
Description	<p>In CGN, this specifies the number of port-blocks per outside IP address in the NAT pool. The available ports per outside IP address (the end port minus the upper bound value of the static port-forwarding range) are divided into the number of port blocks specified in this command. This implicitly determines the size of each port block.</p> <p>For L2-aware NAT, this command can be configured only if the port block extensions (extended port blocks) are disabled. You must disable the <b>l2-aware port-block-extension</b> hierarchy in the NAT pool.</p>
Range	1 to 64512
Notes	The following elements are part of a choice: <b>port-blocks</b> or <b>ports</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ports** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Size of the port block for NAT subscribers
Context	<b>configure</b> <i>router string nat outside pool string port-reservation ports number</i>
Tree	<a href="#">ports</a>
Description	<p>For carrier-grade NAT (CGN), this command specifies the size of port blocks for NAT subscribers in the NAT pool.</p> <p>For L2-aware NAT, this command specifies the size of the initial port-block of a subscriber in the pool. Additional port blocks (extended port blocks) for the L2-aware subscriber must be explicitly enabled under the <b>l2-aware port-block-extension</b> hierarchy in the NAT pool.</p> <p>This command does not affect the size of extended port blocks.</p>
Range	1 to 64512
Notes	The following elements are part of a choice: <b>port-blocks</b> or <b>ports</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**type** *keyword***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT pool type
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">type</a> <a href="#">keyword</a>
Tree	<a href="#">type</a>
Options	large-scale, l2-aware, wlan-gw-anchor
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**watermarks**

Synopsis	Enable the <b>watermarks</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">watermarks</a>
Tree	<a href="#">watermarks</a>
Description	This command configures watermarks for NAT resources.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**high** *number*

Synopsis	High watermark percentage
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">watermarks</a> <a href="#">high</a> <a href="#">number</a>
Tree	<a href="#">high</a>
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### low number

Synopsis Low watermark percentage

Context **configure** *router string nat outside pool string watermarks low number*

Tree [low](#)

Description This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.

Range 0 to 100

Units percent

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### wlan-gw-group reference



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Create a WLAN GW group for NAT

Context **configure** *router string nat outside pool string wlan-gw-group reference*

Tree [wlan-gw-group](#)

Reference **configure** *isa wlan-gw-group number*

Notes The following elements are part of a mandatory choice: **nat-group** or **wlan-gw-group**.

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### network-domains

Synopsis Enter the **network-domains** context

Context **configure** *router string network-domains*

Tree	<a href="#">network-domains</a>
Introduced	16.0.R4
Platforms	All

### **network-domain** [[domain-name](#)] *string*

Synopsis	Enter the <b>network-domain</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">network-domains</a> <a href="#">network-domain</a> <i>string</i>
Tree	<a href="#">network-domain</a>
Max. Instances	5
Introduced	16.0.R4
Platforms	All

### **[domain-name]** *string*

Synopsis	Network domain name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">network-domains</a> <a href="#">network-domain</a> <i>string</i>
Tree	<a href="#">network-domain</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">network-domains</a> <a href="#">network-domain</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	All



## origin-validation

Synopsis	Enter the <b>origin-validation</b> context
Context	<b>configure router</b> <i>string</i> <b>origin-validation</b>
Tree	<b>origin-validation</b>
Introduced	19.5.R1
Platforms	All

## rpki-session [*ip-address*] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the <b>rpki-session</b> list instance
Context	<b>configure router</b> <i>string</i> <b>origin-validation rpki-session</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>rpki-session</b>
Introduced	19.5.R1
Platforms	All

## [*ip-address*] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IPv4 or IPv6 address for the RPKI local cache server
Context	<b>configure router</b> <i>string</i> <b>origin-validation rpki-session</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>rpki-session</b>
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of the RPKI session
Context	<b>configure router</b> <i>string</i> <b>origin-validation rpki-session</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	19.5.R1
Platforms	All

**connect-retry** *number*

Synopsis	RPKI Connect Retry timer value
Context	<b>configure</b> <b>router</b> <i>string</i> <b>origin-validation</b> <b>rpki-session</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>connect-retry</b> <i>number</i>
Tree	<b>connect-retry</b>
Range	1 to 65535
Units	seconds
Default	120
Introduced	19.5.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>router</b> <i>string</i> <b>origin-validation</b> <b>rpki-session</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	19.5.R1
Platforms	All

**local-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local address for the TCP connection setup
Context	<b>configure</b> <b>router</b> <i>string</i> <b>origin-validation</b> <b>rpki-session</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>local-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>local-address</b>
Introduced	19.5.R1
Platforms	All

**port number****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination port number used to contact cache server
Context	<b>configure</b> <b>router</b> <i>string</i> <b>origin-validation</b> <b>rpki-session</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>port number</b>
Tree	<b>port</b>
Range	0 to 65535
Default	323
Introduced	19.5.R1
Platforms	All

**refresh-time**

Synopsis	Enter the <b>refresh-time</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>origin-validation</b> <b>rpki-session</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>refresh-time</b>
Tree	<b>refresh-time</b>
Introduced	19.5.R1
Platforms	All

**hold-time number**

Synopsis	Length of time that the session is to be considered UP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>origin-validation</b> <b>rpki-session</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>refresh-time</b> <b>hold-time number</b>
Tree	<b>hold-time</b>
Range	60 to 65535
Units	seconds
Default	600
Introduced	19.5.R1
Platforms	All

**value number**

Synopsis	Periodic Serial Query PDUs sent for liveness detection
Context	<b>configure router</b> <i>string</i> <b>origin-validation rpki-session</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>refresh-time value number</b>
Tree	<b>value</b>
Range	30 to 32767
Units	seconds
Default	300
Introduced	19.5.R1
Platforms	All

**stale-time number**

Synopsis	Maximum time prefix origin validation remains usable
Context	<b>configure router</b> <i>string</i> <b>origin-validation rpki-session</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>stale-time number</b>
Tree	<b>stale-time</b>
Range	60 to 3600
Units	seconds
Default	3600
Introduced	19.5.R1
Platforms	All

**static-entry [ip-prefix] (ipv4-prefix | ipv6-prefix) upto number origin-as number**

Synopsis	Enter the <b>static-entry</b> list instance
Context	<b>configure router</b> <i>string</i> <b>origin-validation static-entry</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>upto number origin-as number</b>
Tree	<b>static-entry</b>
Introduced	19.5.R1
Platforms	All

**[ip-prefix] (ipv4-prefix | ipv6-prefix)**

Synopsis	IPv4 or IPv6 address with the minimum prefix and length
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Context	<b>configure router string origin-validation static-entry (ipv4-prefix   ipv6-prefix) upto number origin-as number</b>
Tree	<a href="#">static-entry</a>
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

**upto number**

Synopsis	Maximum prefix length
Context	<b>configure router string origin-validation static-entry (ipv4-prefix   ipv6-prefix) upto number origin-as number</b>
Tree	<a href="#">static-entry</a>
Range	1 to 128
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

**origin-as number**

Synopsis	Origin AS number
Context	<b>configure router string origin-validation static-entry (ipv4-prefix   ipv6-prefix) upto number origin-as number</b>
Tree	<a href="#">static-entry</a>
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

**valid boolean**

Synopsis	Designate mix of origin AS and prefix range as valid
Context	<b>configure router string origin-validation static-entry (ipv4-prefix   ipv6-prefix) upto number origin-as number valid boolean</b>
Tree	<a href="#">valid</a>
Default	true

Introduced	19.5.R1
Platforms	All

### **ospf** [*ospf-instance*] *number*

Synopsis	Enter the <b>ospf</b> list instance
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ospf</i> <i>number</i>
Tree	<i>ospf</i>
Max. Instances	32
Introduced	16.0.R1
Platforms	All

### **[ospf-instance]** *number*

Synopsis	Value for the integrated OSPF instance
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ospf</i> <i>number</i>
Tree	<i>ospf</i>
Range	0 to 31
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the OSPF instance
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ospf</i> <i>number</i> <i>admin-state</i> <i>keyword</i>
Tree	<i>admin-state</i>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**advertise-router-capability** *keyword*

Synopsis	Allow router advertisement capabilities
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>advertise-router-capability</b> <i>keyword</i>
Tree	<a href="#">advertise-router-capability</a>
Options	false, link, area, as
Default	false
Introduced	16.0.R1
Platforms	All

**advertise-tunnel-link** *boolean*

Synopsis	Allow router advertisement capabilities
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>advertise-tunnel-link</b> <i>boolean</i>
Tree	<a href="#">advertise-tunnel-link</a>
Default	false
Introduced	16.0.R1
Platforms	All

**area** [[area-id](#)] *string*

Synopsis	Enter the <b>area</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i>
Tree	<a href="#">area</a>
Introduced	16.0.R1
Platforms	All

**[area-id]** *string*

Synopsis	Area-ID attribute
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i>
Tree	<a href="#">area</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**advertise-router-capability** *boolean*

Synopsis	Allow router advertisement capabilities
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ospf</i> <i>number</i> <i>area</i> <i>string</i> <b>advertise-router-capability</b> <i>boolean</i>
Tree	<a href="#">advertise-router-capability</a>
Default	true
Introduced	16.0.R1
Platforms	All

**area-range** [[ip-prefix-mask](#)] *string*

Synopsis	Enter the <b>area-range</b> list instance
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ospf</i> <i>number</i> <i>area</i> <i>string</i> <b>area-range</b> <i>string</i>
Tree	<a href="#">area-range</a>
Introduced	16.0.R1
Platforms	All

**[ip-prefix-mask]** *string*

Synopsis	IP prefix and subnet mask for the range used by the ABR
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ospf</i> <i>number</i> <i>area</i> <i>string</i> <b>area-range</b> <i>string</i>
Tree	<a href="#">area-range</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**advertise** *boolean*

Synopsis	Advertise summarized range of addresses to other areas
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ospf</i> <i>number</i> <i>area</i> <i>string</i> <b>area-range</b> <i>string</i> <b>advertise</b> <i>boolean</i>
Tree	<a href="#">advertise</a>
Default	true
Introduced	16.0.R1
Platforms	All



## **bier**

Synopsis	Enter the <b>bier</b> context
Context	<b>configure router string ospf number area string bier</b>
Tree	<b>bier</b>
Description	Commands in this context configure the administrative state of BIER and the BIER template assigned to the OSPF area.
Introduced	20.5.R1
Platforms	All

## **admin-state keyword**

Synopsis	Administrative state of BIER
Context	<b>configure router string ospf number area string bier admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	20.5.R1
Platforms	All

## **template reference**

Synopsis	BIER template name
Context	<b>configure router string ospf number area string bier template reference</b>
Tree	<b>template</b>
Reference	<b>configure router string bier template string</b>
Introduced	20.5.R1
Platforms	All

## **blackhole-aggregate boolean**

Synopsis	Install a low priority blackhole route to avoid loops
Context	<b>configure router string ospf number area string blackhole-aggregate boolean</b>
Tree	<b>blackhole-aggregate</b>
Default	true

Introduced 16.0.R1  
 Platforms All

### **database-export-exclude** *boolean*

Synopsis Exclude IGP link-state OSPF area info into TE-DB  
 Context **configure** [router](#) *string* [ospf](#) *number* [area](#) *string* **database-export-exclude** *boolean*  
 Tree [database-export-exclude](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **export-policy** *reference*

Synopsis Type 3 Summary-LSA/OSPFv3 inter-area-prefix-LSA route  
 Context **configure** [router](#) *string* [ospf](#) *number* [area](#) *string* **export-policy** *reference*  
 Tree [export-policy](#)  
 Reference **configure** [policy-options](#) [policy-statement](#) *string*  
 Max. Instances 5  
 Notes This element is ordered by the user.  
 Introduced 16.0.R1  
 Platforms All

### **import-policy** *reference*

Synopsis Route imported as Summary Type 3/Inter-Area-Prefix-LSA  
 Context **configure** [router](#) *string* [ospf](#) *number* [area](#) *string* **import-policy** *reference*  
 Tree [import-policy](#)  
 Reference **configure** [policy-options](#) [policy-statement](#) *string*  
 Max. Instances 5  
 Notes This element is ordered by the user.  
 Introduced 16.0.R1  
 Platforms All

**interface** [*interface-name*] *string*

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure router</b> <i>string ospf number area string interface string</i>
Tree	<i>interface</i>
Description	Commands in this context configure the attributes of the OSPF area interface. Unless they are explicitly configured, interfaces are not activated by default in any interior gateway protocol such as OSPF.
Introduced	16.0.R1
Platforms	All

**[interface-name]** *string*

Synopsis	Router interface name
Context	<b>configure router</b> <i>string ospf number area string interface string</i>
Tree	<i>interface</i>
Description	This command specifies the IP interface name. Interface names must be unique within the group of defined IP interfaces for <b>configure router interface</b> and <b>configure services interface</b> commands. An interface name cannot be in the form of an IP address. Interface names can be a string composed of printable, 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.  If the IP interface name does not exist or does not have an IP address configured, an error message is returned.  If the IP interface exists in a different area it is moved to this area.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**adjacency-set** [*id*] *reference*

Synopsis	Add a list entry for <b>adjacency-set</b>
Context	<b>configure router</b> <i>string ospf number area string interface string adjacency-set reference</i>
Tree	<i>adjacency-set</i>
Max. Instances	1024

Introduced 16.0.R1  
 Platforms All

### [id] *reference*

Synopsis Adjacency set identity  
 Context **configure** *router string ospf number area string interface string adjacency-set reference*  
 Tree [adjacency-set](#)  
 Reference **configure** *router string ospf number segment-routing adjacency-set number*  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **adjacency-sid**

Synopsis Enable the **adjacency-sid** context  
 Context **configure** *router string ospf number area string interface string adjacency-sid*  
 Tree [adjacency-sid](#)  
 Introduced 16.0.R1  
 Platforms All

### **label** *number*

Synopsis Adjacency SID label  
 Context **configure** *router string ospf number area string interface string adjacency-sid label number*  
 Tree [label](#)  
 Range 1 to 1048575  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the OSPF interface  
 Context **configure** *router string ospf number area string interface string admin-state keyword*

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **advertise-router-capability** *boolean*

Synopsis	Allow router advertisement capabilities
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">advertise-router-capability</a> <i>boolean</i>
Tree	<a href="#">advertise-router-capability</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **advertise-subnet** *boolean*

Synopsis	Advertise point-to-point interfaces as subnet routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">advertise-subnet</a> <i>boolean</i>
Tree	<a href="#">advertise-subnet</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **authentication-key** *string*

Synopsis	Authentication key
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">authentication-key</a> <i>string</i>
Tree	<a href="#">authentication-key</a>
String Length	1 to 38
Introduced	16.0.R1
Platforms	All

**authentication-keychain** *reference*

Synopsis	TCP authentication keychain for the session
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>authentication-keychain</b> <i>reference</i>
Tree	<a href="#">authentication-keychain</a>
Reference	<b>configure</b> <b>system</b> <b>security</b> <b>keychains</b> <b>keychain</b> <i>string</i>
Introduced	16.0.R3
Platforms	All

**authentication-type** *keyword*

Synopsis	Authentication type used on OSPF interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>authentication-type</b> <i>keyword</i>
Tree	<a href="#">authentication-type</a>
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

**bfd-liveness**

Synopsis	Enable the <b>bfd-liveness</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>bfd-liveness</b>
Tree	<a href="#">bfd-liveness</a>
Introduced	16.0.R1
Platforms	All

**remain-down-on-failure** *boolean*

Synopsis	Force adjacency down on failure until session returns
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>bfd-liveness</b> <b>remain-down-on-failure</b> <i>boolean</i>
Tree	<a href="#">remain-down-on-failure</a>
Default	false
Introduced	16.0.R1
Platforms	All

**dead-interval** *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>dead-interval</b> <i>number</i>
Tree	<b>dead-interval</b>
Range	2 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

**flex-algo** [**flex-algo-id**] *number*

Synopsis	Enter the <b>flex-algo</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>flex-algo</b> <i>number</i>
Tree	<b>flex-algo</b>
Description	Commands in this context configure the attributes of OSPFv2 flexible algorithms interface.
Max. Instances	7
Introduced	21.7.R1
Platforms	All

**[flex-algo-id]** *number*

Synopsis	Flexible algorithm ID
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>flex-algo</b> <i>number</i>
Tree	<b>flex-algo</b>
Range	128 to 255
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	All

**node-sid**

Synopsis	Enable the <b>node-sid</b> context
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Context	<b>configure router</b> <i>string ospf number area string interface string flex-algo number node-sid</i>
Tree	<a href="#">node-sid</a>
Introduced	21.7.R1
Platforms	All

### **index** *number*

Synopsis	Node SID index for this interface
Context	<b>configure router</b> <i>string ospf number area string interface string flex-algo number node-sid index number</i>
Tree	<a href="#">index</a>
Range	0 to 4294967295
Notes	The following elements are part of a choice: <b>index</b> or <b>label</b> .
Introduced	21.7.R1
Platforms	All

### **label** *number*

Synopsis	Label value for the node SID
Context	<b>configure router</b> <i>string ospf number area string interface string flex-algo number node-sid label number</i>
Tree	<a href="#">label</a>
Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>index</b> or <b>label</b> .
Introduced	21.7.R1
Platforms	All

### **hello-interval** *number*

Synopsis	Time between OSPF Hellos of this interface
Context	<b>configure router</b> <i>string ospf number area string interface string hello-interval number</i>
Tree	<a href="#">hello-interval</a>
Range	1 to 65535
Units	seconds
Default	10



Introduced	16.0.R1
Platforms	All

## interface-type *keyword*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Interface type
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>interface-type</b> <i>keyword</i>
Tree	<b>interface-type</b>
Description	This command specifies the interface type. <b>broadcast</b> - Broadcast network To significantly improve adjacency forming and network convergence, configure a network as point-to-point if only two routers are connected, even if the network is a broadcast media such as Ethernet. <b>non-broadcast</b> - Non-broadcast network <b>point-to-point</b> - Point-to-point link Set the interface type of an Ethernet link to <b>point-to-point</b> to avoid having to carry the broadcast adjacency maintenance overhead if the Ethernet link provided is used as a point-to-point. Set the interface type of an Ethernet link to <b>point-to-point</b> to avoid having to carry the broadcast adjacency maintenance overhead if the Ethernet link provided is used as a point-to-point. <b>secondary</b> - Multiple secondary adjacencies allowed A <b>secondary</b> interface allows multiple secondary adjacencies, in addition to the primary adjacency, to be established over a single IP interface. This interface type can also be applied to the system interface and to loopback interfaces to allow them to participate in multiple areas, although no adjacencies are formed over these types of interfaces.
Options	broadcast, non-broadcast, point-to-point, secondary
Introduced	16.0.R1
Platforms	All

## load-balancing-weight *number*

Synopsis	Load balancing weight for an OSPF interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>load-balancing-weight</b> <i>number</i>
Tree	<b>load-balancing-weight</b>

Range	1 to 4294967295
Introduced	20.2.R1
Platforms	All

## loopfree-alternate

Synopsis	Enter the <b>loopfree-alternate</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>loopfree-alternate</b>
Tree	<a href="#">loopfree-alternate</a>
Introduced	16.0.R3
Platforms	All

## exclude *boolean*

Synopsis	Enable fast reroute at OSPF primary interface level
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>loopfree-alternate</b> <a href="#">exclude</a> <i>boolean</i>
Tree	<a href="#">exclude</a>
Default	false
Introduced	16.0.R3
Platforms	All

## policy-map

Synopsis	Enable the <b>policy-map</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>loopfree-alternate</b> <a href="#">policy-map</a>
Tree	<a href="#">policy-map</a>
Introduced	16.0.R3
Platforms	All

## route-nh-template *reference*

Synopsis	Route next hop policy template name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>loopfree-alternate</b> <a href="#">policy-map</a> <a href="#">route-nh-template</a> <i>reference</i>

Tree	<a href="#">route-nh-template</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">route-next-hop-policy</a> <a href="#">template</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R3
Platforms	All

### **lsa-filter-out** *keyword*

Synopsis	LSA flooding reduction
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">lsa-filter-out</a> <i>keyword</i>
Tree	<a href="#">lsa-filter-out</a>
Options	none, all, except-own-rtrlsa, except-own-rtrlsa-and-defaults
Default	none
Introduced	16.0.R1
Platforms	All

### **message-digest-key** [[key-id](#)] *number*

Synopsis	Enter the <b>message-digest-key</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">message-digest-key</a> <i>number</i>
Tree	<a href="#">message-digest-key</a>
Introduced	16.0.R1
Platforms	All

### **[key-id]** *number*

Synopsis	Message digest index
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">message-digest-key</a> <i>number</i>
Tree	<a href="#">message-digest-key</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **md5 string**

Synopsis	MD5 hash key
Context	<b>configure</b> <a href="#">router string ospf number area string interface string message-digest-key number md5 string</a>
Tree	<a href="#">md5</a>
String Length	1 to 51
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **metric number**

Synopsis	Route cost metric for the interface
Context	<b>configure</b> <a href="#">router string ospf number area string interface string metric number</a>
Tree	<a href="#">metric</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

### **mtu number**

Synopsis	MTU for the OSPF to use on the interface
Context	<b>configure</b> <a href="#">router string ospf number area string interface string mtu number</a>
Tree	<a href="#">mtu</a>
Range	512 to 9786
Introduced	16.0.R1
Platforms	All

### **neighbor [address] string**

Synopsis	Add a list entry for <b>neighbor</b>
Context	<b>configure</b> <a href="#">router string ospf number area string interface string neighbor string</a>
Tree	<a href="#">neighbor</a>
Introduced	16.0.R1

Platforms All

### [address] *string*

Synopsis IPv4 address of the OSPFv2 neighbor  
 Context **configure** *router string ospf number area string interface string neighbor string*  
 Tree *neighbor*  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### node-sid

Synopsis Enable the **node-sid** context  
 Context **configure** *router string ospf number area string interface string node-sid*  
 Tree *node-sid*  
 Description Commands in this context configure a node SID index or label value for the prefix representing the primary address of a network interface of type system or loopback. A separate SID value can be configured for each IPv4 and IPv6 primary address of the interface. The secondary address of an IPv4 interface cannot be assigned a node SID index and does not inherit the SID of the primary IPv4 address.

In OSPFv2 and OSPFv3, the node SID is configured in the primary area but is inherited in any other area in which the interface is added as secondary.

This command fails if the network interface is not a loopback type or if the interface is defined in an IES or VPRN context. Assigning the same SID index or label value to the same interface in two different IGP instances is not allowed within the same node.

The value of the label or index SID is taken from the range configured for this IGP instance. When using the global mode of operation, the segment routing module checks that the same index or label value is not assigned to more than one loopback interface address. When using the per-instance mode of operation, this check is not required because the index and, therefore, the label ranges of IGP instances are not allowed to overlap.

The **clear-n-flag** option allows the user to clear the N-flag (node-sid flag) in an OSPF or OSPF3 prefix SID sub-TLV originated for the prefix of a loopback interface on the system. By default, the prefix SID sub-TLV for the prefix of a loopback interface is tagged as a node SID; that is, it belongs to this node only. However, to configure and advertise an anycast SID using the same loopback interface prefix on multiple nodes, the user must clear the N-flag to assure interoperability with third-party implementations. This may perform a strict check on the receive end and drop duplicate prefix SID sub-TLVs when the N-flag is set.

The SR OS implementation is relaxed on the receive end and accepts duplicate prefix SIDs with the N-flag set or clear. SR OS resolves to the closest owner, or owners if ECMP, of the prefix SID cost-wise.

Introduced 16.0.R1

Platforms All

### **clear-n-flag** *boolean*

Synopsis Clear the N-flag in an OSPF prefix

Context **configure** *router string ospf number area string interface string node-sid clear-n-flag boolean*

Tree [clear-n-flag](#)

Description When configured to **true**, this command allows the user to clear the N-flag in an OSPF prefix SID sub-TLV originated for the prefix of a loopback interface on the system.

When configured to **false**, the N-flag in an OSPF prefix SID sub-TLV originated for the prefix of a loopback interface on the system is not cleared.

When the user wants to configure and advertise an anycast SID using the same loopback interface prefix on multiple nodes, the user must clear the N-flag to assure interoperability with third-party implementations. This may perform a strict check on the receive end and drop duplicate prefix SID sub-TLVs when the N-flag is set.

Default false

Introduced 16.0.R1

Platforms All

### **index** *number*

Synopsis Node SID index for this interface

Context **configure** *router string ospf number area string interface string node-sid index number*

Tree [index](#)

Range 0 to 4294967295

Notes The following elements are part of a choice: **index** or **label**.

Introduced 16.0.R1

Platforms All

### **label** *number*

Synopsis Label value for the node SID

Context **configure** *router string ospf number area string interface string node-sid label number*

Tree	<a href="#">label</a>
Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>index</b> or <b>label</b> .
Introduced	16.0.R1
Platforms	All

### **passive** *boolean*

Synopsis	Advertise passive interfaces as OSPF interfaces
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">passive</a> <i>boolean</i>
Tree	<a href="#">passive</a>
Introduced	16.0.R1
Platforms	All

### **poll-interval** *number*

Synopsis	Interval for Hellos to non-adjacent OSPF NBMA neighbor
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">poll-interval</a> <i>number</i>
Tree	<a href="#">poll-interval</a>
Max. Range	0 to 4294967295
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	All

### **priority** *number*

Synopsis	Interface priority in the DR election on the subnet
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">priority</a> <i>number</i>
Tree	<a href="#">priority</a>
Range	0 to 255
Default	1
Introduced	16.0.R1
Platforms	All

**retransmit-interval** *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>retransmit-interval</b> <i>number</i>
Tree	<b>retransmit-interval</b>
Range	1 to 1800
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	All

**rib-priority** *keyword*

Synopsis	RIB priority for OSPF
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>rib-priority</b> <i>keyword</i>
Tree	<b>rib-priority</b>
Options	high
Introduced	16.0.R1
Platforms	All

**sid-protection** *boolean*

Synopsis	Allow adjacency SID protection by LFA and remote LFA
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>sid-protection</b> <i>boolean</i>
Tree	<b>sid-protection</b>
Default	true
Introduced	16.0.R1
Platforms	All

**transit-delay** *number*

Synopsis	Required LSA transmit time
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>transit-delay</b> <i>number</i>
Tree	<b>transit-delay</b>



Range	1 to 1800
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

### **loopfree-alternate-exclude** *boolean*

Synopsis	Exclude interfaces in OSPF areas in SPF LFA computation
Context	<b>configure</b> <i>router string ospf number area string loopfree-alternate-exclude boolean</i>
Tree	<a href="#">loopfree-alternate-exclude</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **nssa**

Synopsis	Enable the <b>nssa</b> context
Context	<b>configure</b> <i>router string ospf number area string nssa</i>
Tree	<a href="#">nssa</a>
Introduced	16.0.R1
Platforms	All

### **area-range** [[ip-prefix-mask](#)] *string*

Synopsis	Enter the <b>area-range</b> list instance
Context	<b>configure</b> <i>router string ospf number area string nssa area-range string</i>
Tree	<a href="#">area-range</a>
Introduced	16.0.R1
Platforms	All

### **[ip-prefix-mask]** *string*

Synopsis	IP prefix and subnet mask for the range used by the ABR
Context	<b>configure</b> <i>router string ospf number area string nssa area-range string</i>

Tree	<a href="#">area-range</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **advertise** *boolean*

Synopsis	Advertise summarized range of addresses to other areas
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">nssa</a> <a href="#">area-range</a> <i>string</i> <a href="#">advertise</a> <i>boolean</i>
Tree	<a href="#">advertise</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **originate-default-route**

Synopsis	Enable the <b>originate-default-route</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">nssa</a> <a href="#">originate-default-route</a>
Tree	<a href="#">originate-default-route</a>
Introduced	16.0.R1
Platforms	All

### **adjacency-check** *boolean*

Synopsis	Default route to remove if there is no adjacency
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">nssa</a> <a href="#">originate-default-route</a> <a href="#">adjacency-check</a> <i>boolean</i>
Tree	<a href="#">adjacency-check</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **type-nssa** *boolean*

Synopsis	Generate a default route using NSSA-LSA type
----------	--

Context	<b>configure</b> <i>router</i> <i>string</i> <i>ospf</i> <i>number</i> <i>area</i> <i>string</i> <i>nssa</i> <i>originate-default-route</i> <i>type-nssa</i> <i>boolean</i>
Tree	<a href="#">type-nssa</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **redistribute-external** *boolean*

Synopsis	Redistribute external routes into the NSSA
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ospf</i> <i>number</i> <i>area</i> <i>string</i> <i>nssa</i> <i>redistribute-external</i> <i>boolean</i>
Tree	<a href="#">redistribute-external</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **summaries** *boolean*

Synopsis	Send summary (Type 3) LSAs into the NSSA on an ABR
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ospf</i> <i>number</i> <i>area</i> <i>string</i> <i>nssa</i> <i>summaries</i> <i>boolean</i>
Tree	<a href="#">summaries</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **stub**

Synopsis	Enable the <b>stub</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ospf</i> <i>number</i> <i>area</i> <i>string</i> <i>stub</i>
Tree	<a href="#">stub</a>
Introduced	16.0.R1
Platforms	All

### **default-metric** *number*

Synopsis	Metric used by ABR for default route into the stub area
----------	---

Context	<b>configure router</b> <i>string ospf number area string stub default-metric number</i>
Tree	<a href="#">default-metric</a>
Range	1 to 16777214
Default	1
Introduced	16.0.R1
Platforms	All

### **summaries** *boolean*

Synopsis	Send summary (Type 3) LSAs into the stub area on an ABR
Context	<b>configure router</b> <i>string ospf number area string stub summaries boolean</i>
Tree	<a href="#">summaries</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **virtual-link** [[router-id](#)] *string transit-area reference*

Synopsis	Enter the <b>virtual-link</b> list instance
Context	<b>configure router</b> <i>string ospf number area string virtual-link string transit-area reference</i>
Tree	<a href="#">virtual-link</a>
Introduced	16.0.R1
Platforms	All

### **[router-id]** *string*

Synopsis	Router identity of the virtual link neighbor
Context	<b>configure router</b> <i>string ospf number area string virtual-link string transit-area reference</i>
Tree	<a href="#">virtual-link</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**transit-area** *reference*

Synopsis	Transit area linking the backbone to not-connected area
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>virtual-link</b> <i>string</i> <b>transit-area</b> <i>reference</i>
Tree	<b>virtual-link</b>
Reference	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the OSPF interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>virtual-link</b> <i>string</i> <b>transit-area</b> <i>reference</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**authentication-key** *string*

Synopsis	Authentication key
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>virtual-link</b> <i>string</i> <b>transit-area</b> <i>reference</i> <b>authentication-key</b> <i>string</i>
Tree	<b>authentication-key</b>
String Length	1 to 38
Introduced	16.0.R1
Platforms	All

**authentication-keychain** *reference*

Synopsis	TCP authentication keychain for the session
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>virtual-link</b> <i>string</i> <b>transit-area</b> <i>reference</i> <b>authentication-keychain</b> <i>reference</i>
Tree	<b>authentication-keychain</b>

Reference	<b>configure system security keychains keychain</b> <i>string</i>
Introduced	16.0.R3
Platforms	All

### **authentication-type** *keyword*

Synopsis	Authentication type used on OSPF interface
Context	<b>configure router</b> <i>string ospf number area string virtual-link string transit-area reference authentication-type keyword</i>
Tree	<a href="#">authentication-type</a>
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

### **dead-interval** *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	<b>configure router</b> <i>string ospf number area string virtual-link string transit-area reference dead-interval number</i>
Tree	<a href="#">dead-interval</a>
Range	2 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

### **hello-interval** *number*

Synopsis	Time between OSPF Hellos of this interface
Context	<b>configure router</b> <i>string ospf number area string virtual-link string transit-area reference hello-interval number</i>
Tree	<a href="#">hello-interval</a>
Range	1 to 65535
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

**message-digest-key** [[key-id](#)] *number*

Synopsis	Enter the <b>message-digest-key</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">virtual-link</a> <i>string</i> <a href="#">transit-area</a> <i>reference</i> <a href="#">message-digest-key</a> <i>number</i>
Tree	<a href="#">message-digest-key</a>
Introduced	16.0.R1
Platforms	All

**[key-id]** *number*

Synopsis	Message digest index
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">virtual-link</a> <i>string</i> <a href="#">transit-area</a> <i>reference</i> <a href="#">message-digest-key</a> <i>number</i>
Tree	<a href="#">message-digest-key</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**md5** *string*

Synopsis	MD5 hash key
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">virtual-link</a> <i>string</i> <a href="#">transit-area</a> <i>reference</i> <a href="#">message-digest-key</a> <i>number</i> <a href="#">md5</a> <i>string</i>
Tree	<a href="#">md5</a>
String Length	1 to 51
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**retransmit-interval** *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">virtual-link</a> <i>string</i> <a href="#">transit-area</a> <i>reference</i> <a href="#">retransmit-interval</a> <i>number</i>

Tree	<a href="#">retransmit-interval</a>
Range	1 to 1800
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	All

### **transit-delay** *number*

Synopsis	Required LSA transmit time
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">virtual-link</a> <i>string</i> <a href="#">transit-area</a> <i>reference</i> <a href="#">transit-delay</a> <i>number</i>
Tree	<a href="#">transit-delay</a>
Range	1 to 1800
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

### **asbr**

Synopsis	Enable the <b>asbr</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">asbr</a>
Tree	<a href="#">asbr</a>
Introduced	16.0.R1
Platforms	All

### **trace-path** (*number* | *keyword*)

Synopsis	Domain identity
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">asbr</a> <a href="#">trace-path</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">trace-path</a>
Range	0 to 31
Options	none
Default	none



Introduced 16.0.R1  
Platforms All

### **compatible-rfc1583** *boolean*

Synopsis OSPF summary and external route calculations  
Context **configure** *router string ospf number compatible-rfc1583 boolean*  
Tree [compatible-rfc1583](#)  
Default true  
Introduced 16.0.R1  
Platforms All

### **database-export**

Synopsis Enable the **database-export** context  
Context **configure** *router string ospf number database-export*  
Tree [database-export](#)  
Introduced 16.0.R1  
Platforms All

### **bgp-ls-identifier**

Synopsis Enable the **bgp-ls-identifier** context  
Context **configure** *router string ospf number database-export bgp-ls-identifier*  
Tree [bgp-ls-identifier](#)  
Introduced 16.0.R1  
Platforms All

### **value** *number*

Synopsis BGP-LS identifier sent in the BGP-LS NLRI  
Context **configure** *router string ospf number database-export bgp-ls-identifier value number*  
Tree [value](#)  
Max. Range 0 to 4294967295  
Default 0

Introduced 16.0.R1  
Platforms All

### **igp-identifier** *number*

Synopsis IGP instance in the BGP-LS NLRI  
Context **configure** [router](#) *string* [ospf](#) *number* [database-export](#) [igp-identifier](#) *number*  
Tree [igp-identifier](#)  
Max. Range 0 to 18446744073709551615  
Introduced 16.0.R1  
Platforms All

### **entropy-label**

Synopsis Enter the **entropy-label** context  
Context **configure** [router](#) *string* [ospf](#) *number* [entropy-label](#)  
Tree [entropy-label](#)  
Introduced 16.0.R1  
Platforms All

### **override-tunnel-elc** *boolean*

Synopsis Enable override of received ELC advertisements  
Context **configure** [router](#) *string* [ospf](#) *number* [entropy-label](#) [override-tunnel-elc](#) *boolean*  
Tree [override-tunnel-elc](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **export-limit**

Synopsis Enable the **export-limit** context  
Context **configure** [router](#) *string* [ospf](#) *number* [export-limit](#)  
Tree [export-limit](#)  
Introduced 16.0.R1

Platforms All

### **log-percent** *number*

Synopsis Export limit before warning and SNMP notification sent  
 Context **configure** *router string ospf number export-limit log-percent number*  
 Tree [log-percent](#)  
 Range 1 to 100  
 Introduced 16.0.R1  
 Platforms All

### **number** *number*

Synopsis Maximum routes or prefixes exported from route table  
 Context **configure** *router string ospf number export-limit number number*  
 Tree [number](#)  
 Range 1 to 4294967295  
 Notes This element is mandatory.  
 Introduced 16.0.R1  
 Platforms All

### **export-policy** *reference*

Synopsis Export policies that determine exported routes  
 Context **configure** *router string ospf number export-policy reference*  
 Tree [export-policy](#)  
 Description This command configures export routing policies for the routes exported from the routing table to IS-IS.  
 If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS.  
 If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.  
 If the **aggregate** command is also configured in the **configure router** context, the aggregation is applied before the export policy is applied.  
 Routing policies are created in the **configure router policy-options** context.  
 Reference **configure** [policy-options policy-statement string](#)

Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **external-db-overflow**

Synopsis	Enable the <b>external-db-overflow</b> context
Context	<b>configure</b> <i>router string ospf number external-db-overflow</i>
Tree	<a href="#">external-db-overflow</a>
Introduced	16.0.R1
Platforms	All

### **interval** *number*

Synopsis	Time during which the router operates in overload
Context	<b>configure</b> <i>router string ospf number external-db-overflow interval number</i>
Tree	<a href="#">interval</a>
Range	0 to 2147483647
Units	seconds
Default	0
Introduced	16.0.R1
Platforms	All

### **limit** *number*

Synopsis	Number of external LSA at which overload is triggered
Context	<b>configure</b> <i>router string ospf number external-db-overflow limit number</i>
Tree	<a href="#">limit</a>
Range	0 to 2147483647
Default	0
Introduced	16.0.R1
Platforms	All

**external-preference** *number*

Synopsis	Preference for OSPF external routes
Context	<b>configure</b> <b>router</b> <i>string ospf number external-preference number</i>
Tree	<a href="#">external-preference</a>
Range	1 to 255
Default	150
Introduced	16.0.R1
Platforms	All

**flexible-algorithms**

Synopsis	Enter the <b>flexible-algorithms</b> context
Context	<b>configure</b> <b>router</b> <i>string ospf number flexible-algorithms</i>
Tree	<a href="#">flexible-algorithms</a>
Description	Commands in this context configure the OSPFv2 parameters for flexible algorithm participation.
Introduced	21.7.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of flexible algorithm support
Context	<b>configure</b> <b>router</b> <i>string ospf number flexible-algorithms admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Description	This command specifies the administrative state of the support of flexible algorithm IGP LSDB extensions.
Options	enable, disable
Default	disable
Introduced	21.7.R1
Platforms	All

**flex-algo** [[flex-algo-id](#)] *number*

Synopsis	Enter the <b>flex-algo</b> list instance
Context	<b>configure</b> <b>router</b> <i>string ospf number flexible-algorithms flex-algo number</i>

Tree	<a href="#">flex-algo</a>
Description	<p>Commands in this context configure the attributes of the OSPFv2 flexible algorithm.</p> <p>The maximum unique flexible algorithms can be configured on a router across all configured OSPFv2 instances. In each OSPF flexible algorithm configuration context, the OSPFv2 instance participation can be either enabled or disabled, and it configures the advertising of a locally-configured flexible algorithm definition.</p> <p>When flexible algorithm is enabled in an OSPF instance, it is enabled for all areas within the OSPF instance.</p>
Max. Instances	7
Introduced	21.7.R1
Platforms	All

### **[flex-algo-id] number**

Synopsis	Flexible algorithm ID
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">flexible-algorithms</a> <a href="#">flex-algo</a> <i>number</i>
Tree	<a href="#">flex-algo</a>
Range	128 to 255
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	All

### **advertise reference**

Synopsis	Flexible Algorithm Definition advertisement
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">flexible-algorithms</a> <a href="#">flex-algo</a> <i>number</i> <a href="#">advertise</a> <i>reference</i>
Tree	<a href="#">advertise</a>
Description	<p>This command enables the advertisement of a locally configured Flexible Algorithm Definition (FAD).</p> <p>The winning FAD that a router uses must be consistent with the winning FAD on all other routers, which avoids routing loops and traffic blackholing. The winning FAD is selected using a tiebreaker algorithm that first selects the highest advertised FAD priority followed by the highest system ID.</p>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">flexible-algorithm-definitions</a> <a href="#">flex-algo</a> <i>string</i>
Introduced	21.7.R1
Platforms	All

## loopfree-alternate

Synopsis	Enable the <b>loopfree-alternate</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">flexible-algorithms</a> <a href="#">flex-algo</a> <i>number</i> <a href="#">loopfree-alternate</a>
Tree	<a href="#">loopfree-alternate</a>
Introduced	21.7.R1
Platforms	All

## participate *boolean*

Synopsis	Allow participation in the Flexible Algorithm
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">flexible-algorithms</a> <a href="#">flex-algo</a> <i>number</i> <a href="#">participate</a> <i>boolean</i>
Tree	<a href="#">participate</a>
Description	When configured to <b>true</b> , the router advertises the capability to participate in a flexible algorithm within the IS-IS Router Capability TLV. A router only advertises participation when the winning FAD can be supported, which includes segment routing support.  When configured to <b>false</b> , flexible algorithm participation is not enabled.
Default	false
Introduced	21.7.R1
Platforms	All

## graceful-restart

Synopsis	Enable the <b>graceful-restart</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">graceful-restart</a>
Tree	<a href="#">graceful-restart</a>
Introduced	16.0.R1
Platforms	All

## helper-mode *boolean*

Synopsis	Enable graceful restart helper for OSPF
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">graceful-restart</a> <a href="#">helper-mode</a> <i>boolean</i>
Tree	<a href="#">helper-mode</a>

Default	true
Introduced	16.0.R1
Platforms	All

### **strict-lsa-checking** *boolean*

Synopsis	Perform strict LSA checking during graceful restart
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">graceful-restart</a> <a href="#">strict-lsa-checking</a> <i>boolean</i>
Tree	<a href="#">strict-lsa-checking</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **igp-shortcut**

Synopsis	Enter the <b>igp-shortcut</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">igp-shortcut</a>
Tree	<a href="#">igp-shortcut</a>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the IGP shortcuts
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">igp-shortcut</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **tunnel-next-hop**

Synopsis	Enter the <b>tunnel-next-hop</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">igp-shortcut</a> <a href="#">tunnel-next-hop</a>



Tree	<a href="#">tunnel-next-hop</a>
Introduced	16.0.R1
Platforms	All

### **family** [[family-type](#)] *keyword*

Synopsis	Enter the <b>family</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">igp-shortcut</a> <a href="#">tunnel-next-hop</a> <a href="#">family</a> <i>keyword</i>
Tree	<a href="#">family</a>
Introduced	16.0.R1
Platforms	All

### **[family-type]** *keyword*

Synopsis	Address family type for tunnel next-hop
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">igp-shortcut</a> <a href="#">tunnel-next-hop</a> <a href="#">family</a> <i>keyword</i>
Tree	<a href="#">family</a>
Options	ipv4, srv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **resolution** *keyword*

Synopsis	Resolution state for IGP shortcut tunnels
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">igp-shortcut</a> <a href="#">tunnel-next-hop</a> <a href="#">family</a> <i>keyword</i> <a href="#">resolution</a> <i>keyword</i>
Tree	<a href="#">resolution</a>
Options	none, filter, any, match-family-ip
Default	none
Introduced	16.0.R1
Platforms	All

**resolution-filter**

Synopsis	Enter the <b>resolution-filter</b> context
Context	<b>configure</b> <b>router</b> <i>string ospf number igp-shortcut tunnel-next-hop family keyword resolution-filter</i>
Tree	<a href="#">resolution-filter</a>
Introduced	16.0.R1
Platforms	All

**rsvp boolean**

Synopsis	Use RSVP tunneling for next-hop resolution
Context	<b>configure</b> <b>router</b> <i>string ospf number igp-shortcut tunnel-next-hop family keyword resolution-filter rsvp boolean</i>
Tree	<a href="#">rsvp</a>
Default	false
Introduced	16.0.R1
Platforms	All

**sr-te boolean**

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	<b>configure</b> <b>router</b> <i>string ospf number igp-shortcut tunnel-next-hop family keyword resolution-filter sr-te boolean</i>
Tree	<a href="#">sr-te</a>
Default	false
Introduced	16.0.R1
Platforms	All

**import-policy reference**

Synopsis	Import policy names for routes from IGP to route table
Context	<b>configure</b> <b>router</b> <i>string ospf number import-policy reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <b>policy-options</b> <b>policy-statement</b> <i>string</i>
Max. Instances	5

Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **ldp-over-rsvp** *boolean*

Synopsis	Allow LSP over RSVP in this OSPF instance
Context	<b>configure</b> <b>router</b> <i>string ospf number</i> <b>ldp-over-rsvp</b> <i>boolean</i>
Tree	<a href="#">ldp-over-rsvp</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **ldp-sync** *boolean*

Synopsis	Configure IGP-LDP synchronization for interfaces
Context	<b>configure</b> <b>router</b> <i>string ospf number</i> <b>ldp-sync</b> <i>boolean</i>
Tree	<a href="#">ldp-sync</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **loopfree-alternate**

Synopsis	Enable the <b>loopfree-alternate</b> context
Context	<b>configure</b> <b>router</b> <i>string ospf number</i> <b>loopfree-alternate</b>
Tree	<a href="#">loopfree-alternate</a>
Introduced	16.0.R1
Platforms	All

### **augment-route-table** *boolean*

Synopsis	Attach remote LFA information to RTM entries
Context	<b>configure</b> <b>router</b> <i>string ospf number</i> <b>loopfree-alternate</b> <b>augment-route-table</b> <i>boolean</i>
Tree	<a href="#">augment-route-table</a>

Description	When configured to <b>true</b> , this command enables IS-IS to attach remote LFA-specific information to RTM entries for use by protocols such as LDP. When configured to <b>false</b> , rLFA-specific information is not added to RTM entries.
Default	false
Introduced	21.10.R1
Platforms	All

## exclude

Synopsis	Enter the <b>exclude</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">loopfree-alternate</a> <b>exclude</b>
Tree	<a href="#">exclude</a>
Introduced	16.0.R3
Platforms	All

## prefix-policy *reference*

Synopsis	Policy to exclude prefixes from LFA SPF calculation
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">loopfree-alternate</a> <b>exclude</b> <a href="#">prefix-policy</a> <i>reference</i>
Tree	<a href="#">prefix-policy</a>
Description	This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation.  An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF.
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R3
Platforms	All

## multi-homed-prefix

Synopsis	Enable the <b>multi-homed-prefix</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">loopfree-alternate</a> <b>multi-homed-prefix</b>
Tree	<a href="#">multi-homed-prefix</a>

Description	<p>Commands in this context configure a multihomed prefix LFA for both RTM routes (IP FRR) and SR-OSPF tunnels. SR-OSPF tunnels enable multihomed prefix extension in both algorithm 0 and flexible-algorithm numbers.</p> <p>This feature makes use of the multihomed prefix model described in RFC 8518 to compute a backup IP next hop using an alternate ABR or ASBR for external prefixes and to an alternate router owner for local anycast prefixes.</p> <p>This feature further enhances the multihomed prefix backup path calculation beyond RFC 8518 with the addition of repair tunnels that make use of a PQ node or a P-Q set to reach the alternate exit ABR or ASBR of external prefixes or the alternate owner router of local anycast prefixes.</p> <p>The computed IP next-hop based backup path is added to OSPF routes of external /32 prefixes (OSPFv2 routes types 3, 4, 5, and 7) and local /32 anycast prefixes in the RTM if the prefix is not protected by base LFA or if the user set leaf preference value to all. The user must enable the ip-fast-reroute leaf to have these backup paths programmed into the FIB in datapath.</p> <p>The computed IP next hop or repair tunnel based backup path is also programmed for SR-OSPF node SID tunnels of external /32 prefixes and to /32 prefixes in same area as the computing node S and which are advertised by multiple routers (anycast prefix) in both algorithm 0 and flexible-algorithm numbers.</p>
Introduced	22.2.R1
Platforms	All

### **preference** *keyword*

Synopsis	Multi-homed prefix LFA backup path preference
Context	<b>configure</b> <i>router string ospf number loopfree-alternate multi-homed-prefix preference keyword</i>
Tree	<a href="#">preference</a>
Options	none, all
Default	none
Introduced	22.2.R1
Platforms	All

### **remote-lfa**

Synopsis	Enable the <b>remote-lfa</b> context
Context	<b>configure</b> <i>router string ospf number loopfree-alternate remote-lfa</i>
Tree	<a href="#">remote-lfa</a>
Introduced	16.0.R1
Platforms	All

### **max-pq-cost** *number*

Synopsis	Destination max cost for reverse SPF calculation
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">loopfree-alternate</a> <a href="#">remote-lfa</a> <b>max-pq-cost</b> <i>number</i>
Tree	<a href="#">max-pq-cost</a>
Max. Range	0 to 4294967295
Default	65535
Introduced	16.0.R1
Platforms	All

### **node-protect**

Synopsis	Enable the <b>node-protect</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">loopfree-alternate</a> <a href="#">remote-lfa</a> <b>node-protect</b>
Tree	<a href="#">node-protect</a>
Introduced	16.0.R4
Platforms	All

### **max-pq-nodes** *number*

Synopsis	Maximum number of PQ nodes found in the LFA SPF's
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">loopfree-alternate</a> <a href="#">remote-lfa</a> <a href="#">node-protect</a> <b>max-pq-nodes</b> <i>number</i>
Tree	<a href="#">max-pq-nodes</a>
Range	1 to 32
Default	16
Introduced	16.0.R4
Platforms	All

### **ti-lfa**

Synopsis	Enable the <b>ti-lfa</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">loopfree-alternate</a> <b>ti-lfa</b>
Tree	<a href="#">ti-lfa</a>
Introduced	16.0.R1

Platforms All

### **max-sr-frr-labels** *number*

Synopsis Maximum number of labels the TI-LFA backup path can use

Context **configure** *router string ospf number loopfree-alternate ti-lfa max-sr-frr-labels number*

Tree [max-sr-frr-labels](#)

Description This command configures the maximum number of labels allowed in the segment list of the TI-LFA repair tunnel. A higher value results in better coverage by TI-LFA at the expense of increased packet encapsulation overhead. The TI-LFA algorithm uses this value to limit the search for the Q-node from the P-node on the post-convergence path.

Range 0 to 3

Default 2

Introduced 16.0.R1

Platforms All

### **node-protect**

Synopsis Enable the **node-protect** context

Context **configure** *router string ospf number loopfree-alternate ti-lfa node-protect*

Tree [node-protect](#)

Introduced 16.0.R5

Platforms All

### **multi-instance** *boolean*

Synopsis Enable OSPF Multi Instance Extensions

Context **configure** *router string ospf number multi-instance boolean*

Tree [multi-instance](#)

Description When configured to **true**, the Base router supports RFC 6549, OSPFv2 Multi-Instance Extensions.

This support is enabled per instance and allows flexibility when migrating a particular instance from classic OSPFv2 to a multi-instance OSPFv2.

Default false

Introduced 19.10.R1

Platforms All

**multicast-import** *boolean*

Synopsis	Submit routes into the multicast Route Table Manager
Context	<b>configure</b> <i>router string ospf number multicast-import boolean</i>
Tree	<a href="#">multicast-import</a>
Default	false
Introduced	16.0.R1
Platforms	All

**overload** *boolean*

Synopsis	Change local router state to appear overloaded
Context	<b>configure</b> <i>router string ospf number overload boolean</i>
Tree	<a href="#">overload</a>
Default	false
Introduced	16.0.R1
Platforms	All

**overload-include-ext-1** *boolean*

Synopsis	Advertise routes with maximum metric value for overload
Context	<b>configure</b> <i>router string ospf number overload-include-ext-1 boolean</i>
Tree	<a href="#">overload-include-ext-1</a>
Default	false
Introduced	19.7.R1
Platforms	All

**overload-include-ext-2** *boolean*

Synopsis	Advertise routes with maximum metric value for overload
Context	<b>configure</b> <i>router string ospf number overload-include-ext-2 boolean</i>
Tree	<a href="#">overload-include-ext-2</a>
Default	false
Introduced	16.0.R1
Platforms	All



**overload-include-stub** *boolean*

Synopsis	Advertise all stub interfaces with max metric value
Context	<b>configure</b> <i>router string ospf number overload-include-stub boolean</i>
Tree	<a href="#">overload-include-stub</a>
Default	false
Introduced	16.0.R1
Platforms	All

**overload-on-boot**

Synopsis	Enable the <b>overload-on-boot</b> context
Context	<b>configure</b> <i>router string ospf number overload-on-boot</i>
Tree	<a href="#">overload-on-boot</a>
Introduced	16.0.R1
Platforms	All

**timeout** *number*

Synopsis	Time during which the router operates in overload state
Context	<b>configure</b> <i>router string ospf number overload-on-boot timeout number</i>
Tree	<a href="#">timeout</a>
Range	1 to 1800
Units	seconds
Introduced	16.0.R1
Platforms	All

**preference** *number*

Synopsis	Preference for OSPF internal routes
Context	<b>configure</b> <i>router string ospf number preference number</i>
Tree	<a href="#">preference</a>
Range	1 to 255
Default	10
Introduced	16.0.R1

Platforms All

### **reference-bandwidth** *number*

Synopsis Bandwidth to reference default costing of interfaces  
 Context **configure** *router string ospf number reference-bandwidth number*  
 Tree [reference-bandwidth](#)  
 Range 1 to 18446744073709551615  
 Units kilobps  
 Default 100000000  
 Introduced 16.0.R1  
 Platforms All

### **rib-priority**

Synopsis Enter the **rib-priority** context  
 Context **configure** *router string ospf number rib-priority*  
 Tree [rib-priority](#)  
 Introduced 16.0.R1  
 Platforms All

### **high**

Synopsis Enter the **high** context  
 Context **configure** *router string ospf number rib-priority high*  
 Tree [high](#)  
 Introduced 16.0.R1  
 Platforms All

### **prefix-list** *reference*

Synopsis Higher priority list used during OSPF route calculation  
 Context **configure** *router string ospf number rib-priority high prefix-list reference*  
 Tree [prefix-list](#)  
 Reference **configure** *policy-options prefix-list string*

Introduced	16.0.R1
Platforms	All

### **router-id** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Unique router ID for the OSPF instance
Context	<b>configure</b> <i>router string ospf number router-id string</i>
Tree	<a href="#">router-id</a>
Introduced	16.0.R1
Platforms	All

### **rtr-adv-lsa-limit**

Synopsis	Enable the <b>rtr-adv-lsa-limit</b> context
Context	<b>configure</b> <i>router string ospf number rtr-adv-lsa-limit</i>
Tree	<a href="#">rtr-adv-lsa-limit</a>
Introduced	16.0.R1
Platforms	All

### **log-only** *boolean*

Synopsis	Log the event without triggering overload
Context	<b>configure</b> <i>router string ospf number rtr-adv-lsa-limit log-only boolean</i>
Tree	<a href="#">log-only</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **max-lsa-count** *number*

Synopsis	Max number of LSAs one router can advertise
Context	<b>configure</b> <i>router string ospf number rtr-adv-lsa-limit max-lsa-count number</i>

Tree	<a href="#">max-lsa-count</a>
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **overload-timeout** (*number* | *keyword*)

Synopsis	Maximum time in overload after LSA limit is reached
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>rtr-adv-lsa-limit</b> <b>overload-timeout</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">overload-timeout</a>
Range	1 to 1800
Units	seconds
Options	forever
Default	forever
Introduced	16.0.R1
Platforms	All

### **warning-threshold** *number*

Synopsis	Percentage of the max LSA count that causes a warning
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>rtr-adv-lsa-limit</b> <b>warning-threshold</b> <i>number</i>
Tree	<a href="#">warning-threshold</a>
Range	0 to 100
Units	percent
Default	0
Introduced	16.0.R1
Platforms	All

### **segment-routing**

Synopsis	Enter the <b>segment-routing</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>segment-routing</b>
Tree	<a href="#">segment-routing</a>

Introduced	16.0.R1
Platforms	All

### **adj-sid-hold** (*number* | *keyword*)

Synopsis	Adjacency SID hold time
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>segment-routing</b> <b>adj-sid-hold</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>adj-sid-hold</b>

**Description** This command configures a timer to hold the ILM or LTN of an adjacency SID following a failure of the adjacency.

When an adjacency to a neighbor fails, the following procedure is followed for both an LFA protected and the LFA unprotected SID of this adjacency in SR-MPLS. An adjacency can have both types of SIDs assigned by configuration. An LFA protected adjacency SID is eligible for LFA protection, however, the following procedure applies even if an LFA backup is not programmed at the time of the failure. An LFA unprotected adjacency SID is not eligible for LFA protection.

- IGP withdraws the advertisement of the link TLV as well as its adjacency SID sub-TLV.
- The adjacency SID hold timer starts.
- The LTN and ILM records of the adjacency are kept in the datapath for as long as the adjacency SID hold time is running. This allows packets to flow over the LFA backup path, when the adjacency is protected, and allows the ingress LER or PCE time to compute a new path of the SR-TE LSP after IGP converges.
- If the adjacency is restored while the adjacency SID hold timer is running, the timer is aborted, and the adjacency SID remains programmed in the datapath with the retained SID values. However, the backup NHLFE may change if a new LFA SPF runs while the adjacency SID hold timer running. An update to the backup NHLFE is performed immediately following the LFA SPF. In all cases, the adjacency keeps its assigned SID label value.
- If the adjacency SID hold timer expires before the adjacency is restored, the SID is deprogrammed from the datapath and the label returned into the common pool where it was drawn from. Users of the adjacency (for example, SR policy and SR-TE LSP) are also informed. When the adjacency is subsequently restored, it gets assigned its allocated static-label value or a new dynamic-label value.
- A new PG-ID is assigned each time an adjacency comes back up. This PG-ID is used by the ILM and LTN of the adjacency SID and of all downstream node SIDs that resolve to a next hop over this adjacency.

Range	1 to 300
Units	seconds
Options	none
Default	15
Introduced	16.0.R1

Platforms All

### **adjacency-set** [*id*] *number*

Synopsis Enter the **adjacency-set** list instance

Context **configure** *router string ospf number segment-routing adjacency-set number*

Tree [adjacency-set](#)

Introduced 16.0.R1

Platforms All

### **[id]** *number*

Synopsis Non-zero identifier for a given adjacency set

Context **configure** *router string ospf number segment-routing adjacency-set number*

Tree [adjacency-set](#)

Range 1 to 4294967295

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **advertise** *boolean*

Synopsis Advertise adjacency for links terminating on same node

Context **configure** *router string ospf number segment-routing adjacency-set number advertise boolean*

Tree [advertise](#)

Default true

Introduced 16.0.R1

Platforms All

### **parallel** *boolean*

Synopsis Require adjacency members to terminate on same neighbor

Context **configure** *router string ospf number segment-routing adjacency-set number parallel boolean*

Tree [parallel](#)

---

Default	true
Introduced	16.0.R1
Platforms	All

### **sid**

Synopsis	Enable the <b>sid</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">adjacency-set</a> <i>number</i> <a href="#">sid</a>
Tree	<a href="#">sid</a>
Introduced	16.0.R1
Platforms	All

### **label** *number*

Synopsis	Adjacency SID label
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">adjacency-set</a> <i>number</i> <a href="#">sid</a> <a href="#">label</a> <i>number</i>
Tree	<a href="#">label</a>
Range	1 to 1048575
Introduced	16.0.R1
Platforms	All

### **adjacency-sid**

Synopsis	Enter the <b>adjacency-sid</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">adjacency-sid</a>
Tree	<a href="#">adjacency-sid</a>
Introduced	22.7.R1
Platforms	All

### **allocate-dual-sids** *boolean*

Synopsis	Allocate dual adjacency SIDs per interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">adjacency-sid</a> <a href="#">allocate-dual-sids</a> <i>boolean</i>
Tree	<a href="#">allocate-dual-sids</a>

Description	When configured to <b>true</b> , the router supports two SR-MPLS adjacency SIDs per interface. A protected and unprotected adjacency SID is instantiated and advertised. If an SR-MPLS adjacency SID already exists, an additional complementary (protected or unprotected) adjacency SID is created on the interface.  When configured to <b>false</b> , the router disables the support of two SR-MPLS adjacency SIDs per interface.
Default	false
Introduced	22.7.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of segment routing
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **backup-node-sid**

Synopsis	Enable the <b>backup-node-sid</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">backup-node-sid</a>
Tree	<a href="#">backup-node-sid</a>
Introduced	16.0.R1
Platforms	All

### **index** *number*

Synopsis	Node SID index for this interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">backup-node-sid</a> <a href="#">index</a> <i>number</i>
Tree	<a href="#">index</a>
Range	0 to 4294967295
Notes	The following elements are part of a choice: <b>index</b> or <b>label</b> .
Introduced	16.0.R1



Platforms All

### **ip-prefix** *string*

Synopsis IP prefix and prefix length for the backup node SID

Context **configure** [router](#) *string* [ospf](#) *number* [segment-routing](#) [backup-node-sid](#) [ip-prefix](#) *string*

Tree [ip-prefix](#)

Introduced 16.0.R1

Platforms All

### **label** *number*

Synopsis Label value for the node SID

Context **configure** [router](#) *string* [ospf](#) *number* [segment-routing](#) [backup-node-sid](#) [label](#) *number*

Tree [label](#)

Range 1 to 4294967295

Notes The following elements are part of a choice: **index** or **label**.

Introduced 16.0.R1

Platforms All

### **class-forwarding** *boolean*

Synopsis Allow CBF with ECMP over RSVP-TE LSPs as IGP shortcuts

Context **configure** [router](#) *string* [ospf](#) *number* [segment-routing](#) [class-forwarding](#) *boolean*

Tree [class-forwarding](#)

Description When configured to **true**, this command enables Class-Based Forwarding (CBF) with ECMP for SR-OSPF resolved to RSVP-TE LSPs as IGP shortcuts.

For CBF with ECMP to be effective, a class forwarding policy must be defined, as well as FC to set associations and RSVP-TE LSPs to set associations.

When configured to **false**, CBF over IGP shortcuts is disabled.

Default false

Introduced 20.5.R1

Platforms All

## egress-statistics

Synopsis	Enter the <b>egress-statistics</b> context
Context	<b>configure</b> <i>router string ospf number segment-routing egress-statistics</i>
Tree	<a href="#">egress-statistics</a>
Introduced	19.10.R1
Platforms	All

## adj-set *boolean*

Synopsis	Enable the allocation of statistics on adjacency sets
Context	<b>configure</b> <i>router string ospf number segment-routing egress-statistics adj-set boolean</i>
Tree	<a href="#">adj-set</a>
Description	When configured to <b>true</b> , this command enables the allocation of statistic indices to each adjacency set. All adjacencies of a set share the same statistics index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

## adj-sid *boolean*

Synopsis	Enable the allocation of statistics on adjacency SIDs
Context	<b>configure</b> <i>router string ospf number segment-routing egress-statistics adj-sid boolean</i>
Tree	<a href="#">adj-sid</a>
Description	When configured to <b>true</b> , this command enables the allocation of statistic indexes to each programmed NHLFE corresponding to Adjacency SIDs (local and received by means of IGP advertisement). All NHLFEs associated to a given SID share the same index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

### **node-sid** *boolean*

Synopsis	Enable the allocation of statistics on node SIDs
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">egress-statistics</a> <a href="#">node-sid</a> <i>boolean</i>
Tree	<a href="#">node-sid</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **entropy-label** *boolean*

Synopsis	Enable processing of received ELC signaled in the IGP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">entropy-label</a> <i>boolean</i>
Tree	<a href="#">entropy-label</a>
Introduced	16.0.R1
Platforms	All

### **export-tunnel-table** *keyword*

Synopsis	Export tunnel table
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">export-tunnel-table</a> <i>keyword</i>
Tree	<a href="#">export-tunnel-table</a>
Options	ldp
Introduced	16.0.R1
Platforms	All

### **ingress-statistics**

Synopsis	Enter the <b>ingress-statistics</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">ingress-statistics</a>
Tree	<a href="#">ingress-statistics</a>
Introduced	19.10.R1
Platforms	All

**adj-set *boolean***

Synopsis	Enable the allocation of statistics on adjacency sets
Context	<b>configure</b> <i>router string ospf number segment-routing ingress-statistics adj-set boolean</i>
Tree	<a href="#">adj-set</a>
Description	When configured to <b>true</b> , this command enables the allocation of statistic indices to each adjacency set. All adjacencies of a set share the same statistics index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

**adj-sid *boolean***

Synopsis	Enable the allocation of statistics on adjacency SIDs
Context	<b>configure</b> <i>router string ospf number segment-routing ingress-statistics adj-sid boolean</i>
Tree	<a href="#">adj-sid</a>
Description	When configured to <b>true</b> , this command enables the allocation of statistic indexes to each programmed NHLFE corresponding to Adjacency SIDs (local and received by means of IGP advertisement). All NHLFEs associated to a given SID share the same index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

**node-sid *boolean***

Synopsis	Enable the allocation of statistics on node SIDs
Context	<b>configure</b> <i>router string ospf number segment-routing ingress-statistics node-sid boolean</i>
Tree	<a href="#">node-sid</a>
Default	false
Introduced	19.10.R1
Platforms	All

## mapping-server

Synopsis	Enter the <b>mapping-server</b> context
Context	<b>configure</b> <i>router string ospf number segment-routing mapping-server</i>
Tree	<a href="#">mapping-server</a>
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of the OSPF mapping server
Context	<b>configure</b> <i>router string ospf number segment-routing mapping-server admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

## node-sid-map [[sid-index](#)] *number*

Synopsis	Enter the <b>node-sid-map</b> list instance
Context	<b>configure</b> <i>router string ospf number segment-routing mapping-server node-sid-map number</i>
Tree	<a href="#">node-sid-map</a>
Introduced	16.0.R1
Platforms	All

## [\[sid-index\]](#) *number*

Synopsis	Start SID index for the node SID mapping
Context	<b>configure</b> <i>router string ospf number segment-routing mapping-server node-sid-map number</i>
Tree	<a href="#">node-sid-map</a>
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

## ip-prefix *string*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Starting prefix of the mapping

Context **configure** [router](#) *string* [ospf](#) *number* [segment-routing](#) [mapping-server](#) [node-sid-map](#) *number* [ip-prefix](#) *string*

Tree [ip-prefix](#)

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

## range *number*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Number of prefixes mapped by Extended Range Prefix TLV

Context **configure** [router](#) *string* [ospf](#) *number* [segment-routing](#) [mapping-server](#) [node-sid-map](#) *number* [range](#) *number*

Tree [range](#)

Range 1 to 65535

Default 1

Introduced 16.0.R1

Platforms All

## scope

Synopsis Enter the **scope** context

Context **configure** [router](#) *string* [ospf](#) *number* [segment-routing](#) [mapping-server](#) [node-sid-map](#) *number* [scope](#)

Tree [scope](#)

Introduced 16.0.R1

Platforms All

### **area** *reference*

Synopsis Area ID in which the advertise Extended Range TLV is advertised

Context **configure** [router](#) [string](#) [ospf](#) [number](#) [segment-routing](#) [mapping-server](#) [node-sid-map](#) [number](#) [scope](#) [area](#) [reference](#)

Tree [area](#)

Reference **configure** [router](#) [string](#) [ospf](#) [number](#) [area](#) [string](#)

Notes The following elements are part of a choice: **area** or **as**.

Introduced 16.0.R1

Platforms All

### **as**

Synopsis Advertise Extended Range TLV in whole autonomous system

Context **configure** [router](#) [string](#) [ospf](#) [number](#) [segment-routing](#) [mapping-server](#) [node-sid-map](#) [number](#) [scope](#) [as](#)

Tree [as](#)

Notes The following elements are part of a choice: **area** or **as**.

Introduced 16.0.R1

Platforms All

### **maximum-sid-depth**

Synopsis Enter the **maximum-sid-depth** context

Context **configure** [router](#) [string](#) [ospf](#) [number](#) [segment-routing](#) [maximum-sid-depth](#)

Tree [maximum-sid-depth](#)

Introduced 20.2.R1

Platforms All

### **override-bmi** *number*

Synopsis Value to override the announced node MSD-BMI value

Context **configure** [router](#) [string](#) [ospf](#) [number](#) [segment-routing](#) [maximum-sid-depth](#) [override-bmi](#) [number](#)

Tree	<a href="#">override-bmi</a>
Description	This command overrides the announced MSD node Base MPLS Imposition (BMI) value. The MSD-BMI value announced by a router can be used by recipients to understand the number of MPLS labels that can be imposed inclusive of all service, transport, or special labels.  When unconfigured, the router announces the maximum supported BMI of the node assuming the most simple services and Layer 2 encapsulation.
Range	0 to 12
Introduced	20.2.R1
Platforms	All

### **override-erld** *number*

Synopsis	Value to override the announced node MSD-ERLD value
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">maximum-sid-depth</a> <a href="#">override-erld</a> <i>number</i>
Tree	<a href="#">override-erld</a>
Description	This command configures the override Entropy Readable Label Depth (ERLD) Maximum Sid Depth (MSD) value. Information about the capability of each intermediate LSR of reading the maximum label stack depth is used by ingress LSRs to perform EL-based load balancing.  When unconfigured, the router announces the node maximum supported ERLD assuming the most simple Layer 2 encapsulation.
Range	0 to 15
Introduced	20.2.R1
Platforms	All

### **prefix-sid-range**

Synopsis	Enable the <b>prefix-sid-range</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">prefix-sid-range</a>
Tree	<a href="#">prefix-sid-range</a>
Description	Commands in this context configure the label block BGP segment routing can use.
Introduced	16.0.R1
Platforms	All



## global

Synopsis	BGP global SR range allocation
Context	<b>configure</b> <i>router string ospf number segment-routing prefix-sid-range global</i>
Tree	<a href="#">global</a>
Description	When configured, the system allows BGP to allocate labels from the SRGB space, as defined under the <b>configure router mpls-labels sr-labels</b> context.
Notes	The following elements are part of a choice: <b>global</b> or ( <b>max-index</b> and <b>start-label</b> ).
Introduced	16.0.R1
Platforms	All

## max-index *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Upper bound value for the local SID index
Context	<b>configure</b> <i>router string ospf number segment-routing prefix-sid-range max-index number</i>
Tree	<a href="#">max-index</a>
Range	0 to 524287
Default	1
Notes	The following elements are part of a choice: <b>global</b> or ( <b>max-index</b> and <b>start-label</b> ).
Introduced	16.0.R1
Platforms	All

## start-label *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Lower bound value for the local label offset
Context	<b>configure</b> <i>router string ospf number segment-routing prefix-sid-range start-label number</i>
Tree	<a href="#">start-label</a>
Range	0 to 524287
Default	0

Notes	The following elements are part of a choice: <b>global</b> or ( <b>max-index</b> and <b>start-label</b> ).
Introduced	16.0.R1
Platforms	All

### **srlb reference**

Synopsis	Segment routing local block
Context	<b>configure router string ospf number segment-routing srlb reference</b>
Tree	<a href="#">srlb</a>
Reference	<b>configure router string mpls-labels reserved-label-block string</b>
Introduced	16.0.R1
Platforms	All

### **tunnel-mtu number**

Synopsis	Tunnel MTU size
Context	<b>configure router string ospf number segment-routing tunnel-mtu number</b>
Tree	<a href="#">tunnel-mtu</a>
Range	512 to 9786
Introduced	16.0.R1
Platforms	All

### **tunnel-table-pref number**

Synopsis	Preference of SR tunnels created by the IGP instance
Context	<b>configure router string ospf number segment-routing tunnel-table-pref number</b>
Tree	<a href="#">tunnel-table-pref</a>
Description	This command configures the TTM preference of shortest path SR tunnels created by the IGP instance. This is used for BGP shortcuts, VPRN auto-bind, or BGP transport tunnel when the tunnel binding commands are configured to the <b>any</b> value, which parses the TTM for tunnels in the protocol preference order. The user can choose to either accept the global TTM preference or explicitly list the tunnel types they want to use. If the user lists the tunnel type explicitly, the TTM preference is still used to select one type over the other. In both cases, a fallback to the next preferred tunnel type is performed if the selected type fails. A reversion to a more preferred tunnel type is performed as soon as one is available.

The segment routing module adds to the TTM an SR tunnel entry for each resolved remote node SID prefix and programs the data path having the corresponding LTN with the push operation pointing to the primary and LFA backup NHLFEs.

The default preference for shortest path SR tunnels in the TTM is set lower than LDP tunnels but higher than BGP tunnels to allow controlled migration of customers without disrupting their current deployment when they enable segment routing. The following is the value of the default preference for the various tunnel types. This includes the preference of SR tunnels based on shortest path (referred to as SR-ISIS and SR-OSPF).

**Note:** The preference of an SR-TE LSP is not configurable and is the second most preferred tunnel type after RSVP-TE. The preference is the same whether if the SR-TE LSP was resolved in IS-IS or OSPF.

The global default TTM preference for the tunnel types is as follows:

- ROUTE\_PREF\_RSVP 7
- ROUTE\_PREF\_SR\_TE 8
- ROUTE\_PREF\_LDP 9
- ROUTE\_PREF\_OSPF\_TTM 10
- ROUTE\_PREF\_ISIS\_TTM 11
- ROUTE\_PREF\_BGP\_TTM 12
- ROUTE\_PREF\_GRE 255

The default value for SR-ISIS or SR-OSPF is the same regardless if one or more IS-IS or OSPF instances programmed a tunnel for the same prefix. The selection of a SR tunnel in this case will be based on the lowest IGP instance ID. Similarly, IPv6 SR-ISIS and SR-OSPF3 tunnels are programmed into TTMv6 with the same default preference value as IPv4 SR-ISIS and IPv4 SR-OSPF respectively.

Nokia recommends not to set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.

Range	1 to 255
Default	10
Introduced	16.0.R1
Platforms	All

## timers

Synopsis	Enter the <b>timers</b> context
Context	<b>configure</b> <i>router string ospf number timers</i>
Tree	<a href="#">timers</a>
Introduced	16.0.R1
Platforms	All

**incremental-spf-wait** *number*

Synopsis	Delay time before an incremental SPF calculation starts
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>timers</b> <b>incremental-spf-wait</b> <i>number</i>
Tree	<b>incremental-spf-wait</b>
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

**lsa-accumulate** *number*

Synopsis	Delay to gather LSAs before advertising to neighbors
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>timers</b> <b>lsa-accumulate</b> <i>number</i>
Tree	<b>lsa-accumulate</b>
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

**lsa-arrival** *number*

Synopsis	Min delay between receipt of same LSAs from neighbors
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>timers</b> <b>lsa-arrival</b> <i>number</i>
Tree	<b>lsa-arrival</b>
Range	0 to 600000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

## lsa-generate

Synopsis	Enter the <b>lsa-generate</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>timers</b> <b>lsa-generate</b>
Tree	<a href="#">lsa-generate</a>
Introduced	16.0.R1
Platforms	All

## lsa-initial-wait *number*

Synopsis	First wait period between OSPF LSA generation
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>timers</b> <b>lsa-generate</b> <b>lsa-initial-wait</b> <i>number</i>
Tree	<a href="#">lsa-initial-wait</a>
Range	10 to 600000
Units	milliseconds
Default	5000
Introduced	16.0.R1
Platforms	All

## lsa-second-wait *number*

Synopsis	Hold time between the first and second LSA generation
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>timers</b> <b>lsa-generate</b> <b>lsa-second-wait</b> <i>number</i>
Tree	<a href="#">lsa-second-wait</a>
Range	10 to 600000
Units	milliseconds
Default	5000
Introduced	16.0.R1
Platforms	All

## max-lsa-wait *number*

Synopsis	Max time between two LSAs being generated
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>timers</b> <b>lsa-generate</b> <b>max-lsa-wait</b> <i>number</i>
Tree	<a href="#">max-lsa-wait</a>
Range	10 to 600000

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Units	milliseconds
Default	5000
Introduced	16.0.R1
Platforms	All

### **redistribute-delay** *number*

Synopsis	Hold down timer for external routes into OSPF
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>timers</b> <b>redistribute-delay</b> <i>number</i>
Tree	<b>redistribute-delay</b>
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

### **spf-wait**

Synopsis	Enter the <b>spf-wait</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>timers</b> <b>spf-wait</b>
Tree	<b>spf-wait</b>
Introduced	16.0.R1
Platforms	All

### **spf-initial-wait** *number*

Synopsis	Initial SPF calculation delay after a topology change
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>timers</b> <b>spf-wait</b> <b>spf-initial-wait</b> <i>number</i>
Tree	<b>spf-initial-wait</b>
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

**spf-max-wait** *number*

Synopsis	Max interval between two consecutive SPF calculations
Context	<b>configure</b> <i>router string ospf number timers spf-wait spf-max-wait number</i>
Tree	<a href="#">spf-max-wait</a>
Range	10 to 120000
Units	milliseconds
Default	10000
Introduced	16.0.R1
Platforms	All

**spf-second-wait** *number*

Synopsis	Hold time between the first and second SPF calculation
Context	<b>configure</b> <i>router string ospf number timers spf-wait spf-second-wait number</i>
Tree	<a href="#">spf-second-wait</a>
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

**traffic-engineering** *boolean*

Synopsis	Calculate traffic engineering route
Context	<b>configure</b> <i>router string ospf number traffic-engineering boolean</i>
Tree	<a href="#">traffic-engineering</a>
Default	false
Introduced	16.0.R1
Platforms	All

**traffic-engineering-options**

Synopsis	Enter the <b>traffic-engineering-options</b> context
Context	<b>configure</b> <i>router string ospf number traffic-engineering-options</i>

Tree	<a href="#">traffic-engineering-options</a>
Introduced	20.7.R1
Platforms	All

### **advertise-delay** *boolean*

Synopsis	Enable the advertisement of link delay for TE
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">traffic-engineering-options</a> <a href="#">advertise-delay</a> <i>boolean</i>
Tree	<a href="#">advertise-delay</a>
Description	<p>When configured to <b>true</b>, the router advertises link delay in the IGP LSDB within the OSPF-TE TLV attribute or when the Application-Specific Link Attribute (ASLA) is enabled within SR-TE ASLA.</p> <p>When the router is configured under the <b>configure router ospf traffic-engineering-options sr-te application-specific-link-attributes</b> command to generate SR-TE ASLA attributes, link delay is advertised as a legacy RFC 3630 TLV when RSVP-TE is enabled and as an ASLA RFC 8920 TLV for SR-TE when MPLS is enabled for an interface.</p> <p>SR OS accepts and handles both legacy RSVP-TE TLVs and ASLAs for the RSVP application. However, SR OS only advertises RFC 3630 legacy RSVP-TE TLVs (as recommended by RFC 8920) to avoid compatibility issues.</p> <p>When configured to <b>false</b>, the router disables link delay advertisement.</p>
Default	false
Introduced	22.10.R1
Platforms	All

### **sr-te** *keyword*

Synopsis	Advertisement of link attributes for SR-TE
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">traffic-engineering-options</a> <a href="#">sr-te</a> <i>keyword</i>
Tree	<a href="#">sr-te</a>
Description	This command specifies the advertisement of TE attributes of each link on a per-application basis for RSVP-TE and SR-TE applications.
Options	false, legacy, application-specific-link-attributes
Default	false
Introduced	20.7.R1
Platforms	All



**unicast-import** *boolean*

Synopsis	Submit routes into the unicast Route Table Manager
Context	<b>configure</b> <b>router</b> <i>string ospf number unicast-import boolean</i>
Tree	<a href="#">unicast-import</a>
Default	true
Introduced	16.0.R1
Platforms	All

**ospf3** [[ospf-instance](#)] *number*

Synopsis	Enter the <b>ospf3</b> list instance
Context	<b>configure</b> <b>router</b> <i>string ospf3 number</i>
Tree	<a href="#">ospf3</a>
Max. Instances	32
Introduced	16.0.R1
Platforms	All

**[ospf-instance]** *number*

Synopsis	Value for the integrated OSPF instance
Context	<b>configure</b> <b>router</b> <i>string ospf3 number</i>
Tree	<a href="#">ospf3</a>
Range	0 to 31   64 to 95
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the OSPF instance
Context	<b>configure</b> <b>router</b> <i>string ospf3 number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable

Introduced 16.0.R1  
Platforms All

### **advertise-router-capability** *keyword*

Synopsis Allow router advertisement capabilities  
Context **configure** *router string ospf3 number advertise-router-capability keyword*  
Tree [advertise-router-capability](#)  
Options false, link, area, as  
Default false  
Introduced 16.0.R1  
Platforms All

### **area** [*area-id*] *string*

Synopsis Enter the **area** list instance  
Context **configure** *router string ospf3 number area string*  
Tree [area](#)  
Introduced 16.0.R1  
Platforms All

### [*area-id*] *string*

Synopsis Area-ID attribute  
Context **configure** *router string ospf3 number area string*  
Tree [area](#)  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms All

### **advertise-router-capability** *boolean*

Synopsis Allow router advertisement capabilities  
Context **configure** *router string ospf3 number area string advertise-router-capability boolean*  
Tree [advertise-router-capability](#)

Default	true
Introduced	16.0.R1
Platforms	All

### **area-range** [[ip-prefix-mask](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the <b>area-range</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">area-range</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">area-range</a>
Introduced	16.0.R1
Platforms	All

### **[ip-prefix-mask]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Address ranges to create on an ABR for route summarization or suppression
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">area-range</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">area-range</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **advertise** *boolean*

Synopsis	Advertise summarized range of addresses to other areas
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">area-range</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">advertise</a> <i>boolean</i>
Tree	<a href="#">advertise</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **blackhole-aggregate** *boolean*

Synopsis	Install a low priority blackhole route to avoid loops
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">blackhole-aggregate</a> <i>boolean</i>

Tree	<a href="#">blackhole-aggregate</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **database-export-exclude** *boolean*

Synopsis	Exclude IGP link-state OSPF area info into TE-DB
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">database-export-exclude</a> <i>boolean</i>
Tree	<a href="#">database-export-exclude</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **export-policy** *reference*

Synopsis	Type 3 Summary-LSA/OSPFv3 inter-area-prefix-LSA route
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">export-policy</a> <i>reference</i>
Tree	<a href="#">export-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **extended-lsa** *keyword*

Synopsis	Extended LSA format in an OSPFv3 area
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">extended-lsa</a> <i>keyword</i>
Tree	<a href="#">extended-lsa</a>
Options	only
Introduced	16.0.R1
Platforms	All

**import-policy** *reference*

Synopsis	Route imported as Summary Type 3/Inter-Area-Prefix-LSA
Context	<b>configure</b> <b>router</b> <i>string ospf3 number area string import-policy reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

**interface** [[interface-name](#)] *string*

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure</b> <b>router</b> <i>string ospf3 number area string interface string</i>
Tree	<a href="#">interface</a>
Introduced	16.0.R1
Platforms	All

**[interface-name]** *string*

Synopsis	Router interface name
Context	<b>configure</b> <b>router</b> <i>string ospf3 number area string interface string</i>
Tree	<a href="#">interface</a>
Description	<p>This command specifies the IP interface name. Interface names must be unique within the group of defined IP interfaces for <b>configure router interface</b> and <b>configure service ies interface</b> commands. An interface name cannot be in the form of an IP address. Interface names can be a string composed of printable, 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.</p> <p>If the IP interface name does not exist or does not have an IP address configured, an error message is returned.</p> <p>If the IP interface exists in a different area it is moved to this area.</p>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the OSPF interface

Context **configure** [router](#) *string* [ospf3](#) *number* [area](#) *string* [interface](#) *string* **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 16.0.R1

Platforms All

### **advertise-router-capability** *boolean*

Synopsis Allow router advertisement capabilities

Context **configure** [router](#) *string* [ospf3](#) *number* [area](#) *string* [interface](#) *string* **advertise-router-capability** *boolean*

Tree [advertise-router-capability](#)

Default true

Introduced 16.0.R1

Platforms All

### **authentication**

Synopsis Enable the **authentication** context

Context **configure** [router](#) *string* [ospf3](#) *number* [area](#) *string* [interface](#) *string* **authentication**

Tree [authentication](#)

Introduced 16.0.R6

Platforms All

### **inbound** *reference*

Synopsis sa-name

Context **configure** [router](#) *string* [ospf3](#) *number* [area](#) *string* [interface](#) *string* **authentication** **inbound** *reference*

Tree [inbound](#)

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Reference	<b>configure ipsec static-sa</b> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R6
Platforms	All

### **outbound** *reference*

Synopsis	sa-name
Context	<b>configure router</b> <i>string ospf3 number area string interface string authentication</i> <b>outbound</b> <i>reference</i>
Tree	<a href="#">outbound</a>
Reference	<b>configure ipsec static-sa</b> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R6
Platforms	All

### **bfd-liveness**

Synopsis	Enable the <b>bfd-liveness</b> context
Context	<b>configure router</b> <i>string ospf3 number area string interface string</i> <b>bfd-liveness</b>
Tree	<a href="#">bfd-liveness</a>
Introduced	16.0.R1
Platforms	All

### **remain-down-on-failure** *boolean*

Synopsis	Force adjacency down on failure until session returns
Context	<b>configure router</b> <i>string ospf3 number area string interface string</i> <b>bfd-liveness</b> <b>remain-down-on-failure</b> <i>boolean</i>
Tree	<a href="#">remain-down-on-failure</a>
Default	false
Introduced	16.0.R1
Platforms	All

**dead-interval** *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>dead-interval</b> <i>number</i>
Tree	<b>dead-interval</b>
Range	2 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

**hello-interval** *number*

Synopsis	Time between OSPF Hellos of this interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>hello-interval</b> <i>number</i>
Tree	<b>hello-interval</b>
Range	1 to 65535
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

**interface-type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Interface type
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>interface-type</b> <i>keyword</i>
Tree	<b>interface-type</b>
Description	This command specifies the interface type. <b>broadcast</b> - Broadcast network To significantly improve adjacency forming and network convergence, configure a network as point-to-point if only two routers are connected, even if the network is a broadcast media such as Ethernet. <b>non-broadcast</b> - Non-broadcast network <b>point-to-point</b> - Point-to-point link



Set the interface type of an Ethernet link to **point-to-point** to avoid having to carry the broadcast adjacency maintenance overhead if the Ethernet link provided is used as a point-to-point. Set the interface type of an Ethernet link to **point-to-point** to avoid having to carry the broadcast adjacency maintenance overhead if the Ethernet link provided is used as a point-to-point.

**secondary** - Multiple secondary adjacencies allowed

A **secondary** interface allows multiple secondary adjacencies, in addition to the primary adjacency, to be established over a single IP interface. This interface type can also be applied to the system interface and to loopback interfaces to allow them to participate in multiple areas, although no adjacencies are formed over these types of interfaces.

Options	broadcast, non-broadcast, point-to-point, secondary
Introduced	16.0.R1
Platforms	All

### **load-balancing-weight** *number*

Synopsis	Load balancing weight for an OSPF3 interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>load-balancing-weight</b> <i>number</i>
Tree	<a href="#">load-balancing-weight</a>
Range	1 to 4294967295
Introduced	20.2.R1
Platforms	All

### **loopfree-alternate**

Synopsis	Enter the <b>loopfree-alternate</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>loopfree-alternate</b>
Tree	<a href="#">loopfree-alternate</a>
Introduced	16.0.R3
Platforms	All

### **exclude** *boolean*

Synopsis	Enable fast reroute at OSPF primary interface level
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>loopfree-alternate</b> <b>exclude</b> <i>boolean</i>
Tree	<a href="#">exclude</a>

Default	false
Introduced	16.0.R3
Platforms	All

## policy-map

Synopsis	Enable the <b>policy-map</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">loopfree-alternate</a> <a href="#">policy-map</a>
Tree	<a href="#">policy-map</a>
Introduced	16.0.R3
Platforms	All

## route-nh-template *reference*

Synopsis	Route next hop policy template name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">loopfree-alternate</a> <a href="#">policy-map</a> <a href="#">route-nh-template</a> <i>reference</i>
Tree	<a href="#">route-nh-template</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">route-next-hop-policy</a> <a href="#">template</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R3
Platforms	All

## lsa-filter-out *keyword*

Synopsis	LSA flooding reduction
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">lsa-filter-out</a> <i>keyword</i>
Tree	<a href="#">lsa-filter-out</a>
Options	none, all, except-own-rtrlsa, except-own-rtrlsa-and-defaults
Default	none
Introduced	16.0.R1
Platforms	All

**metric number**

Synopsis	Route cost metric for the interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>metric</b> <i>number</i>
Tree	<b>metric</b>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

**mtu number**

Synopsis	MTU for the OSPF to use on the interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>mtu</b> <i>number</i>
Tree	<b>mtu</b>
Range	512 to 9786
Introduced	16.0.R1
Platforms	All

**neighbor [address] (ipv4-address-no-zone | ipv6-address-no-zone)**

Synopsis	Add a list entry for <b>neighbor</b>
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>neighbor</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>neighbor</b>
Introduced	16.0.R1
Platforms	All

**[address] (ipv4-address-no-zone | ipv6-address-no-zone)**

Synopsis	Neighbor link local address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>neighbor</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>neighbor</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**node-sid**

Synopsis	Enable the <b>node-sid</b> context
Context	<b>configure</b> <i>router string ospf3 number area string interface string node-sid</i>
Tree	<i>node-sid</i>
Description	<p>Commands in this context configure a node SID index or label value for the prefix representing the primary address of a network interface of type system or loopback. A separate SID value can be configured for each IPv4 and IPv6 primary address of the interface. The secondary address of an IPv4 interface cannot be assigned a node SID index and does not inherit the SID of the primary IPv4 address.</p> <p>In OSPFv2 and OSPFv3, the node SID is configured in the primary area but is inherited in any other area in which the interface is added as secondary.</p> <p>This command fails if the network interface is not a loopback type or if the interface is defined in an IES or VPRN context. Assigning the same SID index or label value to the same interface in two different IGP instances is not allowed within the same node.</p> <p>The value of the label or index SID is taken from the range configured for this IGP instance. When using the global mode of operation, the segment routing module checks that the same index or label value is not assigned to more than one loopback interface address. When using the per-instance mode of operation, this check is not required because the index and, therefore, the label ranges of IGP instances are not allowed to overlap.</p> <p>The <b>clear-n-flag</b> option allows the user to clear the N-flag (node-sid flag) in an OSPF or OSPF3 prefix SID sub-TLV originated for the prefix of a loopback interface on the system. By default, the prefix SID sub-TLV for the prefix of a loopback interface is tagged as a node SID; that is, it belongs to this node only. However, to configure and advertise an anycast SID using the same loopback interface prefix on multiple nodes, the user must clear the N-flag to assure interoperability with third-party implementations. This may perform a strict check on the receive end and drop duplicate prefix SID sub-TLVs when the N-flag is set.</p> <p>The SR OS implementation is relaxed on the receive end and accepts duplicate prefix SIDs with the N-flag set or clear. SR OS resolves to the closest owner, or owners if ECMP, of the prefix SID cost-wise.</p>
Introduced	16.0.R4
Platforms	All

**clear-n-flag** *boolean*

Synopsis	Clear the N-flag in an OSPF3 prefix
Context	<b>configure</b> <i>router string ospf3 number area string interface string node-sid clear-n-flag boolean</i>
Tree	<i>clear-n-flag</i>

Description	<p>When configured to <b>true</b>, this command allows the user to clear the N-flag in an OSPF3 prefix SID sub-TLV originated for the prefix of a loopback interface on the system.</p> <p>When configured to <b>false</b>, the N-flag in an OSPF3 prefix SID sub-TLV originated for the prefix of a loopback interface on the system is not cleared.</p> <p>When the user wants to configure and advertise an anycast SID using the same loopback interface prefix on multiple nodes, the user must clear the N-flag to assure interoperability with third-party implementations. This may perform a strict check on the receive end and drop duplicate prefix SID sub-TLVs when the N-flag is set.</p>
Default	false
Introduced	16.0.R5
Platforms	All

### **index number**

Synopsis	Node SID index for this interface
Context	<b>configure</b> <i>router string ospf3 number area string interface string node-sid index number</i>
Tree	<i>index</i>
Range	0 to 4294967295
Notes	The following elements are part of a choice: <b>index</b> or <b>label</b> .
Introduced	16.0.R4
Platforms	All

### **label number**

Synopsis	Node SID index for this interface
Context	<b>configure</b> <i>router string ospf3 number area string interface string node-sid label number</i>
Tree	<i>label</i>
Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>index</b> or <b>label</b> .
Introduced	16.0.R4
Platforms	All

### **passive boolean**

Synopsis	Advertise passive interfaces as OSPF interfaces
Context	<b>configure</b> <i>router string ospf3 number area string interface string passive boolean</i>

Tree	<a href="#">passive</a>
Introduced	16.0.R1
Platforms	All

### **poll-interval** *number*

Synopsis	Interval for Hellos to non-adjacent OSPF NBMA neighbor
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">poll-interval</a> <i>number</i>
Tree	<a href="#">poll-interval</a>
Max. Range	0 to 4294967295
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	All

### **priority** *number*

Synopsis	Interface priority in the DR election on the subnet
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">priority</a> <i>number</i>
Tree	<a href="#">priority</a>
Range	0 to 255
Default	1
Introduced	16.0.R1
Platforms	All

### **retransmit-interval** *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">retransmit-interval</a> <i>number</i>
Tree	<a href="#">retransmit-interval</a>
Range	1 to 1800
Units	seconds
Default	5
Introduced	16.0.R1

Platforms All

### **rib-priority** *keyword*

Synopsis RIB priority for OSPF  
 Context **configure** [router](#) *string* [ospf3](#) *number* [area](#) *string* [interface](#) *string* **rib-priority** *keyword*  
 Tree [rib-priority](#)  
 Options high  
 Introduced 16.0.R1  
 Platforms All

### **sid-protection** *boolean*

Synopsis Allow adjacency SID protection by LFA and remote LFA  
 Context **configure** [router](#) *string* [ospf3](#) *number* [area](#) *string* [interface](#) *string* **sid-protection** *boolean*  
 Tree [sid-protection](#)  
 Default true  
 Introduced 16.0.R4  
 Platforms All

### **transit-delay** *number*

Synopsis Required LSA transmit time  
 Context **configure** [router](#) *string* [ospf3](#) *number* [area](#) *string* [interface](#) *string* **transit-delay** *number*  
 Tree [transit-delay](#)  
 Range 1 to 1800  
 Units seconds  
 Default 1  
 Introduced 16.0.R1  
 Platforms All

### **key-rollover-interval** *number*

Synopsis Key rollover interval  
 Context **configure** [router](#) *string* [ospf3](#) *number* [area](#) *string* **key-rollover-interval** *number*

Tree	<a href="#">key-rollover-interval</a>
Range	10 to 300
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

### **loopfree-alternate-exclude** *boolean*

Synopsis	Exclude interfaces in OSPF areas in SPF LFA computation
Context	<b>configure</b> <a href="#">router</a> <i>string ospf3 number area string loopfree-alternate-exclude boolean</i>
Tree	<a href="#">loopfree-alternate-exclude</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **nssa**

Synopsis	Enable the <b>nssa</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string ospf3 number area string nssa</i>
Tree	<a href="#">nssa</a>
Introduced	16.0.R1
Platforms	All

### **area-range** [[ip-prefix-mask](#)] (*ipv4-prefix | ipv6-prefix*)

Synopsis	Enter the <b>area-range</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string ospf3 number area string nssa area-range (ipv4-prefix   ipv6-prefix)</i>
Tree	<a href="#">area-range</a>
Introduced	16.0.R1
Platforms	All

### **[ip-prefix-mask]** (*ipv4-prefix | ipv6-prefix*)

Synopsis	Addresses on ABR for route summarization or suppression
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Context	<b>configure router</b> <i>string ospf3 number area string nssa area-range (ipv4-prefix   ipv6-prefix)</i>
Tree	<a href="#">area-range</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **advertise** *boolean*

Synopsis	Advertise summarized range of addresses to other areas
Context	<b>configure router</b> <i>string ospf3 number area string nssa area-range (ipv4-prefix   ipv6-prefix) advertise boolean</i>
Tree	<a href="#">advertise</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **originate-default-route**

Synopsis	Enable the <b>originate-default-route</b> context
Context	<b>configure router</b> <i>string ospf3 number area string nssa originate-default-route</i>
Tree	<a href="#">originate-default-route</a>
Introduced	16.0.R1
Platforms	All

### **adjacency-check** *boolean*

Synopsis	Default route to remove if there is no adjacency
Context	<b>configure router</b> <i>string ospf3 number area string nssa originate-default-route adjacency-check boolean</i>
Tree	<a href="#">adjacency-check</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **type-nssa** *boolean*

Synopsis	Generate a default route using NSSA-LSA type
Context	<b>configure</b> <b>router</b> <i>string ospf3 number area string nssa originate-default-route type-nssa boolean</i>
Tree	<a href="#">type-nssa</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **redistribute-external** *boolean*

Synopsis	Redistribute external routes into the NSSA
Context	<b>configure</b> <b>router</b> <i>string ospf3 number area string nssa redistribute-external boolean</i>
Tree	<a href="#">redistribute-external</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **summaries** *boolean*

Synopsis	Send summary (Type 3) LSAs into the NSSA on an ABR
Context	<b>configure</b> <b>router</b> <i>string ospf3 number area string nssa summaries boolean</i>
Tree	<a href="#">summaries</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **stub**

Synopsis	Enable the <b>stub</b> context
Context	<b>configure</b> <b>router</b> <i>string ospf3 number area string stub</i>
Tree	<a href="#">stub</a>
Introduced	16.0.R1
Platforms	All

**default-metric** *number*

Synopsis	Metric used by ABR for default route into the stub area
Context	<b>configure</b> <b>router</b> <i>string ospf3 number area string stub default-metric number</i>
Tree	<a href="#">default-metric</a>
Range	1 to 16777214
Default	1
Introduced	16.0.R1
Platforms	All

**summaries** *boolean*

Synopsis	Send summary (Type 3) LSAs into the stub area on an ABR
Context	<b>configure</b> <b>router</b> <i>string ospf3 number area string stub summaries boolean</i>
Tree	<a href="#">summaries</a>
Default	true
Introduced	16.0.R1
Platforms	All

**virtual-link** [**router-id**] *string transit-area reference*

Synopsis	Enter the <b>virtual-link</b> list instance
Context	<b>configure</b> <b>router</b> <i>string ospf3 number area string virtual-link string transit-area reference</i>
Tree	<a href="#">virtual-link</a>
Introduced	16.0.R1
Platforms	All

**[router-id]** *string*

Synopsis	Router ID of the virtual link neighbor
Context	<b>configure</b> <b>router</b> <i>string ospf3 number area string virtual-link string transit-area reference</i>
Tree	<a href="#">virtual-link</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**transit-area** *reference*

Synopsis	Transit area linking backbone and non-connected area
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>area</b> <i>string</i> <b>virtual-link</b> <i>string</i> <b>transit-area</b> <i>reference</i>
Tree	<b>virtual-link</b>
Reference	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>area</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the OSPF interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>area</b> <i>string</i> <b>virtual-link</b> <i>string</i> <b>transit-area</b> <i>reference</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**authentication**

Synopsis	Enable the <b>authentication</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>area</b> <i>string</i> <b>virtual-link</b> <i>string</i> <b>transit-area</b> <i>reference</i> <b>authentication</b>
Tree	<b>authentication</b>
Introduced	16.0.R6
Platforms	All

**inbound** *reference*

Synopsis	sa-name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>area</b> <i>string</i> <b>virtual-link</b> <i>string</i> <b>transit-area</b> <i>reference</i> <b>authentication</b> <b>inbound</b> <i>reference</i>
Tree	<b>inbound</b>

Reference	<b>configure ipsec static-sa string</b>
Notes	This element is mandatory.
Introduced	16.0.R6
Platforms	All

### **outbound reference**

Synopsis	sa-name
Context	<b>configure router string ospf3 number area string virtual-link string transit-area reference authentication outbound reference</b>
Tree	<a href="#">outbound</a>
Reference	<b>configure ipsec static-sa string</b>
Notes	This element is mandatory.
Introduced	16.0.R6
Platforms	All

### **dead-interval number**

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	<b>configure router string ospf3 number area string virtual-link string transit-area reference dead-interval number</b>
Tree	<a href="#">dead-interval</a>
Range	2 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

### **hello-interval number**

Synopsis	Time between OSPF Hellos of this interface
Context	<b>configure router string ospf3 number area string virtual-link string transit-area reference hello-interval number</b>
Tree	<a href="#">hello-interval</a>
Range	1 to 65535
Units	seconds

Default	10
Introduced	16.0.R1
Platforms	All

### **retransmit-interval** *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	<b>configure</b> <b>router</b> <i>string ospf3 number area string virtual-link string transit-area reference retransmit-interval number</i>
Tree	<a href="#">retransmit-interval</a>
Range	1 to 1800
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	All

### **transit-delay** *number*

Synopsis	Required LSA transmit time
Context	<b>configure</b> <b>router</b> <i>string ospf3 number area string virtual-link string transit-area reference transit-delay number</i>
Tree	<a href="#">transit-delay</a>
Range	1 to 1800
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

### **asbr**

Synopsis	Enable the <b>asbr</b> context
Context	<b>configure</b> <b>router</b> <i>string ospf3 number asbr</i>
Tree	<a href="#">asbr</a>
Introduced	16.0.R1
Platforms	All

## database-export

Synopsis	Enable the <b>database-export</b> context
Context	<b>configure</b> <i>router string ospf3 number database-export</i>
Tree	<a href="#">database-export</a>
Introduced	16.0.R4
Platforms	All

## bgp-ls-identifier

Synopsis	Enable the <b>bgp-ls-identifier</b> context
Context	<b>configure</b> <i>router string ospf3 number database-export bgp-ls-identifier</i>
Tree	<a href="#">bgp-ls-identifier</a>
Introduced	16.0.R4
Platforms	All

## value *number*

Synopsis	BGP-LS identifier sent in the BGP-LS NLRI
Context	<b>configure</b> <i>router string ospf3 number database-export bgp-ls-identifier value number</i>
Tree	<a href="#">value</a>
Max. Range	0 to 4294967295
Default	0
Introduced	16.0.R4
Platforms	All

## igp-identifier *number*

Synopsis	IGP instance in the BGP-LS NLRI
Context	<b>configure</b> <i>router string ospf3 number database-export igp-identifier number</i>
Tree	<a href="#">igp-identifier</a>
Description	This command identifies the IGP instance in the BGP-LS NLRI when a router has interfaces participating in multiple IGP instances. The concept of an instance ID specified for OSPF is local subnet significant (RFC 6549). An IGP identifier value can be configured to be unique within a given IGP domain when the router sends the IGP link state information using BGP-LS.

Max. Range	0 to 18446744073709551615
Introduced	16.0.R4
Platforms	All

### **export-limit**

Synopsis	Enable the <b>export-limit</b> context
Context	<b>configure</b> <i>router string ospf3 number export-limit</i>
Tree	<a href="#">export-limit</a>
Introduced	16.0.R1
Platforms	All

### **log-percent** *number*

Synopsis	Export limit before warning and SNMP notification sent
Context	<b>configure</b> <i>router string ospf3 number export-limit log-percent number</i>
Tree	<a href="#">log-percent</a>
Range	1 to 100
Introduced	16.0.R1
Platforms	All

### **number** *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	<b>configure</b> <i>router string ospf3 number export-limit number number</i>
Tree	<a href="#">number</a>
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **export-policy** *reference*

Synopsis	Export policies that determine exported routes
Context	<b>configure</b> <i>router string ospf3 number export-policy reference</i>



Tree	<a href="#">export-policy</a>
Description	<p>This command configures export routing policies for the routes exported from the routing table to IS-IS.</p> <p>If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p> <p>If the <b>aggregate</b> command is also configured in the <b>configure router</b> context, the aggregation is applied before the export policy is applied.</p> <p>Routing policies are created in the <b>configure router policy-options</b> context.</p>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **extended-lsa** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Extended LSA format in an OSPFv3 area
Context	<b>configure router</b> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">extended-lsa</a> <i>keyword</i>
Tree	<a href="#">extended-lsa</a>
Options	sparse, only
Default	sparse
Introduced	16.0.R1
Platforms	All

### **external-db-overflow**

Synopsis	Enable the <b>external-db-overflow</b> context
Context	<b>configure router</b> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">external-db-overflow</a>
Tree	<a href="#">external-db-overflow</a>
Introduced	16.0.R1

Platforms All

### **interval** *number*

Synopsis Time during which the router operates in overload  
Context **configure** *router string ospf3 number external-db-overflow interval number*  
Tree [interval](#)  
Range 0 to 2147483647  
Units seconds  
Default 0  
Introduced 16.0.R1  
Platforms All

### **limit** *number*

Synopsis Number of external LSA at which overload is triggered  
Context **configure** *router string ospf3 number external-db-overflow limit number*  
Tree [limit](#)  
Range 0 to 2147483647  
Default 0  
Introduced 16.0.R1  
Platforms All

### **external-preference** *number*

Synopsis Preference for OSPF external routes  
Context **configure** *router string ospf3 number external-preference number*  
Tree [external-preference](#)  
Range 1 to 255  
Default 150  
Introduced 16.0.R1  
Platforms All

## graceful-restart

Synopsis	Enable the <b>graceful-restart</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">graceful-restart</a>
Tree	<a href="#">graceful-restart</a>
Introduced	16.0.R1
Platforms	All

## helper-mode *boolean*

Synopsis	Enable graceful restart helper for OSPF
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">graceful-restart</a> <a href="#">helper-mode</a> <i>boolean</i>
Tree	<a href="#">helper-mode</a>
Default	true
Introduced	16.0.R1
Platforms	All

## strict-lsa-checking *boolean*

Synopsis	Perform strict LSA checking during graceful restart
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">graceful-restart</a> <a href="#">strict-lsa-checking</a> <i>boolean</i>
Tree	<a href="#">strict-lsa-checking</a>
Default	true
Introduced	16.0.R1
Platforms	All

## igp-shortcut

Synopsis	Enter the <b>igp-shortcut</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">igp-shortcut</a>
Tree	<a href="#">igp-shortcut</a>
Introduced	16.0.R4
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the IGP shortcuts
Context	<b>configure</b> <b>router</b> <i>string ospf3 number igp-shortcut admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

**tunnel-next-hop**

Synopsis	Enter the <b>tunnel-next-hop</b> context
Context	<b>configure</b> <b>router</b> <i>string ospf3 number igp-shortcut tunnel-next-hop</i>
Tree	<a href="#">tunnel-next-hop</a>
Introduced	16.0.R4
Platforms	All

**family** [*family-type*] *keyword*

Synopsis	Enter the <b>family</b> list instance
Context	<b>configure</b> <b>router</b> <i>string ospf3 number igp-shortcut tunnel-next-hop family keyword</i>
Tree	<a href="#">family</a>
Introduced	16.0.R4
Platforms	All

**[family-type]** *keyword*

Synopsis	Address family type for the tunnel next hop
Context	<b>configure</b> <b>router</b> <i>string ospf3 number igp-shortcut tunnel-next-hop family keyword</i>
Tree	<a href="#">family</a>
Options	ipv4, ipv6, srv4, srv6
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**resolution keyword**

Synopsis	Resolution state for IGP shortcut tunnels
Context	<b>configure router</b> <i>string ospf3 number igp-shortcut tunnel-next-hop family keyword resolution keyword</i>
Tree	<b>resolution</b>
Options	none, filter, any, match-family-ip
Default	none
Introduced	16.0.R4
Platforms	All

**resolution-filter**

Synopsis	Enter the <b>resolution-filter</b> context
Context	<b>configure router</b> <i>string ospf3 number igp-shortcut tunnel-next-hop family keyword resolution-filter</i>
Tree	<b>resolution-filter</b>
Introduced	16.0.R4
Platforms	All

**rsvp boolean**

Synopsis	Use RSVP tunneling for next-hop resolution
Context	<b>configure router</b> <i>string ospf3 number igp-shortcut tunnel-next-hop family keyword resolution-filter rsvp boolean</i>
Tree	<b>rsvp</b>
Default	false
Introduced	16.0.R4
Platforms	All

**sr-te boolean**

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	<b>configure router</b> <i>string ospf3 number igp-shortcut tunnel-next-hop family keyword resolution-filter sr-te boolean</i>
Tree	<b>sr-te</b>

Default	false
Introduced	16.0.R4
Platforms	All

### **import-policy** *reference*

Synopsis	Import policy names for routes from IGP to route table
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">import-policy</a> <i>reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **ldp-sync** *boolean*

Synopsis	Configure IGP-LDP synchronization for interfaces
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">ldp-sync</a> <i>boolean</i>
Tree	<a href="#">ldp-sync</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **loopfree-alternate**

Synopsis	Enable the <b>loopfree-alternate</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">loopfree-alternate</a>
Tree	<a href="#">loopfree-alternate</a>
Introduced	16.0.R1
Platforms	All

## exclude

Synopsis	Enter the <b>exclude</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ospf3</i> <i>number</i> <i>loopfree-alternate</i> <b>exclude</b>
Tree	<a href="#">exclude</a>
Introduced	16.0.R3
Platforms	All

## prefix-policy *reference*

Synopsis	Policy to exclude prefixes from LFA SPF calculation
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ospf3</i> <i>number</i> <i>loopfree-alternate</i> <b>exclude</b> <a href="#">prefix-policy</a> <i>reference</i>
Tree	<a href="#">prefix-policy</a>
Description	This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation.  An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF.
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R3
Platforms	All

## remote-lfa

Synopsis	Enable the <b>remote-lfa</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ospf3</i> <i>number</i> <i>loopfree-alternate</i> <b>remote-lfa</b>
Tree	<a href="#">remote-lfa</a>
Introduced	16.0.R4
Platforms	All

## max-pq-cost *number*

Synopsis	Destination max cost for reverse SPF calculation
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ospf3</i> <i>number</i> <i>loopfree-alternate</i> <a href="#">remote-lfa</a> <b>max-pq-cost</b> <i>number</i>
Tree	<a href="#">max-pq-cost</a>

Max. Range	0 to 4294967295
Default	65535
Introduced	16.0.R4
Platforms	All

## node-protect

Synopsis	Enable the <b>node-protect</b> context
Context	<b>configure</b> <i>router string ospf3 number loopfree-alternate remote-lfa node-protect</i>
Tree	<a href="#">node-protect</a>
Introduced	16.0.R6
Platforms	All

## max-pq-nodes *number*

Synopsis	Maximum number of PQ nodes found in the LFA SPF's
Context	<b>configure</b> <i>router string ospf3 number loopfree-alternate remote-lfa node-protect max-pq-nodes number</i>
Tree	<a href="#">max-pq-nodes</a>
Range	1 to 32
Default	16
Introduced	16.0.R6
Platforms	All

## ti-lfa

Synopsis	Enable the <b>ti-lfa</b> context
Context	<b>configure</b> <i>router string ospf3 number loopfree-alternate ti-lfa</i>
Tree	<a href="#">ti-lfa</a>
Introduced	16.0.R5
Platforms	All

## max-sr-frr-labels *number*

Synopsis	Maximum number of labels the TI-LFA backup path can use
Context	<b>configure</b> <i>router string ospf3 number loopfree-alternate ti-lfa max-sr-frr-labels number</i>



Tree	<a href="#">max-sr-frr-labels</a>
Description	This command configures the maximum number of labels allowed in the segment list of the TI-LFA repair tunnel. A higher value results in better coverage by TI-LFA at the expense of increased packet encapsulation overhead. The TI-LFA algorithm uses this value to limit the search for the Q-node from the P-node on the post-convergence path.
Range	0 to 3
Default	2
Introduced	16.0.R5
Platforms	All

### **node-protect**

Synopsis	Enable the <b>node-protect</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">loopfree-alternate</a> <a href="#">ti-lfa</a> <a href="#">node-protect</a>
Tree	<a href="#">node-protect</a>
Introduced	16.0.R6
Platforms	All

### **multicast-import** *boolean*

Synopsis	Submit routes into the multicast Route Table Manager
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">multicast-import</a> <i>boolean</i>
Tree	<a href="#">multicast-import</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **overload** *boolean*

Synopsis	Change local router state to appear overloaded
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">overload</a> <i>boolean</i>
Tree	<a href="#">overload</a>
Default	false
Introduced	16.0.R1
Platforms	All

**overload-include-ext-1** *boolean*

Synopsis	Advertise routes with maximum metric value for overload
Context	<b>configure router</b> <i>string ospf3 number overload-include-ext-1 boolean</i>
Tree	<a href="#">overload-include-ext-1</a>
Default	false
Introduced	19.7.R1
Platforms	All

**overload-include-ext-2** *boolean*

Synopsis	Advertise routes with maximum metric value for overload
Context	<b>configure router</b> <i>string ospf3 number overload-include-ext-2 boolean</i>
Tree	<a href="#">overload-include-ext-2</a>
Default	false
Introduced	16.0.R1
Platforms	All

**overload-include-stub** *boolean*

Synopsis	Advertise all stub interfaces with max metric value
Context	<b>configure router</b> <i>string ospf3 number overload-include-stub boolean</i>
Tree	<a href="#">overload-include-stub</a>
Default	false
Introduced	16.0.R1
Platforms	All

**overload-on-boot**

Synopsis	Enable the <b>overload-on-boot</b> context
Context	<b>configure router</b> <i>string ospf3 number overload-on-boot</i>
Tree	<a href="#">overload-on-boot</a>
Introduced	16.0.R1
Platforms	All

**timeout** *number*

Synopsis	Router interval in overload before normal operations
Context	<b>configure</b> <i>router string ospf3 number overload-on-boot timeout number</i>
Tree	<a href="#">timeout</a>
Range	60 to 1800
Units	seconds
Introduced	16.0.R1
Platforms	All

**preference** *number*

Synopsis	Preference for OSPF internal routes
Context	<b>configure</b> <i>router string ospf3 number preference number</i>
Tree	<a href="#">preference</a>
Range	1 to 255
Default	10
Introduced	16.0.R1
Platforms	All

**reference-bandwidth** *number*

Synopsis	Bandwidth to reference default costing of interfaces
Context	<b>configure</b> <i>router string ospf3 number reference-bandwidth number</i>
Tree	<a href="#">reference-bandwidth</a>
Range	1 to 18446744073709551615
Units	kilobps
Default	100000000
Introduced	16.0.R1
Platforms	All

**rib-priority**

Synopsis	Enter the <b>rib-priority</b> context
Context	<b>configure</b> <i>router string ospf3 number rib-priority</i>

Tree	<a href="#">rib-priority</a>
Introduced	16.0.R1
Platforms	All

## high

Synopsis	Enter the <b>high</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">rib-priority</a> <b>high</b>
Tree	<a href="#">high</a>
Introduced	16.0.R1
Platforms	All

## prefix-list *reference*

Synopsis	Higher priority list used during OSPF route calculation
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">rib-priority</a> <b>high</b> <a href="#">prefix-list</a> <i>reference</i>
Tree	<a href="#">prefix-list</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">prefix-list</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

## router-id *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Unique router ID for the OSPF instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">router-id</a> <i>string</i>
Tree	<a href="#">router-id</a>
Introduced	16.0.R1
Platforms	All

## rtr-adv-lsa-limit

Synopsis	Enable the <b>rtr-adv-lsa-limit</b> context
----------	---

Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">rtr-adv-lsa-limit</a>
Tree	<a href="#">rtr-adv-lsa-limit</a>
Introduced	16.0.R1
Platforms	All

**log-only** *boolean*

Synopsis	Log the event without triggering overload
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">rtr-adv-lsa-limit</a> <a href="#">log-only</a> <i>boolean</i>
Tree	<a href="#">log-only</a>
Default	false
Introduced	16.0.R1
Platforms	All

**max-lsa-count** *number*

Synopsis	Max number of LSAs one router can advertise
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">rtr-adv-lsa-limit</a> <a href="#">max-lsa-count</a> <i>number</i>
Tree	<a href="#">max-lsa-count</a>
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**overload-timeout** (*number* | *keyword*)

Synopsis	Maximum time in overload after LSA limit is reached
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">rtr-adv-lsa-limit</a> <a href="#">overload-timeout</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">overload-timeout</a>
Range	1 to 1800
Units	seconds
Options	forever
Default	forever
Introduced	16.0.R1

Platforms All

### **warning-threshold** *number*

Synopsis Percentage of the max LSA count that causes a warning

Context **configure** *router string ospf3 number rtr-adv-lsa-limit warning-threshold number*

Tree [warning-threshold](#)

Range 0 to 100

Units percent

Default 0

Introduced 16.0.R1

Platforms All

### **segment-routing**

Synopsis Enter the **segment-routing** context

Context **configure** *router string ospf3 number segment-routing*

Tree [segment-routing](#)

Introduced 16.0.R4

Platforms All

### **adj-sid-hold** (*number | keyword*)

Synopsis Adjacency SID hold time

Context **configure** *router string ospf3 number segment-routing adj-sid-hold (number | keyword)*

Tree [adj-sid-hold](#)

Description This command configures a timer to hold the ILM or LTN of an adjacency SID following a failure of the adjacency.

When an adjacency to a neighbor fails, the following procedure is followed for both an LFA protected and the LFA unprotected SID of this adjacency in SR-MPLS. An adjacency can have both types of SIDs assigned by configuration. An LFA protected adjacency SID is eligible for LFA protection, however, the following procedure applies even if an LFA backup is not programmed at the time of the failure. An LFA unprotected adjacency SID is not eligible for LFA protection.

- IGP withdraws the advertisement of the link TLV as well as its adjacency SID sub-TLV.
- The adjacency SID hold timer starts.

- The LTN and ILM records of the adjacency are kept in the datapath for as long as the adjacency SID hold time is running. This allows packets to flow over the LFA backup path, when the adjacency is protected, and allows the ingress LER or PCE time to compute a new path of the SR-TE LSP after IGP converges.
- If the adjacency is restored while the adjacency SID hold timer is running, the timer is aborted, and the adjacency SID remains programmed in the datapath with the retained SID values. However, the backup NHLFE may change if a new LFA SPF runs while the adjacency SID hold timer running. An update to the backup NHLFE is performed immediately following the LFA SPF. In all cases, the adjacency keeps its assigned SID label value.
- If the adjacency SID hold timer expires before the adjacency is restored, the SID is deprogrammed from the datapath and the label returned into the common pool where it was drawn from. Users of the adjacency (for example, SR policy and SR-TE LSP) are also informed. When the adjacency is subsequently restored, it gets assigned its allocated static-label value or a new dynamic-label value.
- A new PG-ID is assigned each time an adjacency comes back up. This PG-ID is used by the ILM and LTN of the adjacency SID and of all downstream node SIDs that resolve to a next hop over this adjacency.

Range	1 to 300
Units	seconds
Options	none
Default	15
Introduced	16.0.R4
Platforms	All

## adjacency-sid

Synopsis	Enter the <b>adjacency-sid</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>segment-routing</b> <b>adjacency-sid</b>
Tree	<b>adjacency-sid</b>
Introduced	22.7.R1
Platforms	All

## allocate-dual-sids *boolean*

Synopsis	Allocate dual adjacency SIDs per interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>segment-routing</b> <b>adjacency-sid</b> <b>allocate-dual-sids</b> <i>boolean</i>
Tree	<b>allocate-dual-sids</b>

Description	When configured to <b>true</b> , the router supports two SR-MPLS adjacency SIDs per interface. A protected and unprotected adjacency SID is instantiated and advertised. If an SR-MPLS adjacency SID already exists, an additional complementary (protected or unprotected) adjacency SID is created on the interface.  When configured to <b>false</b> , the router disables the support of two SR-MPLS adjacency SIDs per interface.
Default	false
Introduced	22.7.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of segment routing
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">segment-routing</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

### **egress-statistics**

Synopsis	Enter the <b>egress-statistics</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">segment-routing</a> <b>egress-statistics</b>
Tree	<a href="#">egress-statistics</a>
Introduced	19.10.R1
Platforms	All

### **adj-sid** *boolean*

Synopsis	Enable the allocation of statistics on adjacency SIDs
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">egress-statistics</a> <b>adj-sid</b> <i>boolean</i>
Tree	<a href="#">adj-sid</a>
Description	When configured to <b>true</b> , this command enables the allocation of statistic indexes to each programmed NHLFE corresponding to Adjacency SIDs (local and received by means of IGP advertisement). All NHLFEs associated to a given SID share the same index. If a statistics index is not available at allocation time, the allocation fails and the



system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.

Default	false
Introduced	19.10.R1
Platforms	All

### **node-sid** *boolean*

Synopsis	Enable the allocation of statistics on node SIDs
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ospf3</a> <a href="#">number</a> <a href="#">segment-routing</a> <a href="#">egress-statistics</a> <a href="#">node-sid</a> <i>boolean</i>
Tree	<a href="#">node-sid</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **ingress-statistics**

Synopsis	Enter the <b>ingress-statistics</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ospf3</a> <a href="#">number</a> <a href="#">segment-routing</a> <a href="#">ingress-statistics</a>
Tree	<a href="#">ingress-statistics</a>
Introduced	19.10.R1
Platforms	All

### **adj-sid** *boolean*

Synopsis	Enable the allocation of statistics on adjacency SIDs
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ospf3</a> <a href="#">number</a> <a href="#">segment-routing</a> <a href="#">ingress-statistics</a> <a href="#">adj-sid</a> <i>boolean</i>
Tree	<a href="#">adj-sid</a>
Description	When configured to <b>true</b> , this command enables the allocation of statistic indexes to each programmed NHLFE corresponding to Adjacency SIDs (local and received by means of IGP advertisement). All NHLFEs associated to a given SID share the same index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1

Platforms All

### **node-sid** *boolean*

Synopsis Enable the allocation of statistics on node SIDs

Context **configure** *router string ospf3 number segment-routing ingress-statistics node-sid boolean*

Tree [node-sid](#)

Default false

Introduced 19.10.R1

Platforms All

### **prefix-sid-range**

Synopsis Enable the **prefix-sid-range** context

Context **configure** *router string ospf3 number segment-routing prefix-sid-range*

Tree [prefix-sid-range](#)

Description Commands in this context configure the label block BGP segment routing can use.

Introduced 16.0.R4

Platforms All

### **global**

Synopsis BGP global SR range allocation

Context **configure** *router string ospf3 number segment-routing prefix-sid-range global*

Tree [global](#)

Description When configured, the system allows BGP to allocate labels from the SRGB space, as defined under the **configure router mpls-labels sr-labels** context.

Notes The following elements are part of a choice: **global** or (**max-index** and **start-label**).

Introduced 16.0.R4

Platforms All

**max-index** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Upper bound value for the local SID index
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">prefix-sid-range</a> <a href="#">max-index</a> <i>number</i>
Tree	<a href="#">max-index</a>
Range	0 to 524287
Default	1
Notes	The following elements are part of a choice: <b>global</b> or ( <b>max-index</b> and <b>start-label</b> ).
Introduced	16.0.R4
Platforms	All

**start-label** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Lower bound value for the local label offset
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">prefix-sid-range</a> <a href="#">start-label</a> <i>number</i>
Tree	<a href="#">start-label</a>
Range	0 to 524287
Default	0
Notes	The following elements are part of a choice: <b>global</b> or ( <b>max-index</b> and <b>start-label</b> ).
Introduced	16.0.R4
Platforms	All

**tunnel-mtu** *number*

Synopsis	Tunnel MTU size
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">tunnel-mtu</a> <i>number</i>
Tree	<a href="#">tunnel-mtu</a>
Range	512 to 9786

Introduced	16.0.R4
Platforms	All

### **tunnel-table-pref** *number*

Synopsis	Preference of SR tunnels created by the IGP instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>segment-routing</b> <b>tunnel-table-pref</b> <i>number</i>
Tree	<b>tunnel-table-pref</b>

**Description** This command configures the TTM preference of shortest path SR tunnels created by the IGP instance. This is used for BGP shortcuts, VPRN auto-bind, or BGP transport tunnel when the tunnel binding commands are configured to the **any** value, which parses the TTM for tunnels in the protocol preference order. The user can choose to either accept the global TTM preference or explicitly list the tunnel types they want to use. If the user lists the tunnel type explicitly, the TTM preference is still used to select one type over the other. In both cases, a fallback to the next preferred tunnel type is performed if the selected type fails. A reversion to a more preferred tunnel type is performed as soon as one is available.

The segment routing module adds to the TTM an SR tunnel entry for each resolved remote node SID prefix and programs the data path having the corresponding LTN with the push operation pointing to the primary and LFA backup NHLFEs.

The default preference for shortest path SR tunnels in the TTM is set lower than LDP tunnels but higher than BGP tunnels to allow controlled migration of customers without disrupting their current deployment when they enable segment routing. The following is the value of the default preference for the various tunnel types. This includes the preference of SR tunnels based on shortest path (referred to as SR-ISIS and SR-OSPF).

**Note:** The preference of an SR-TE LSP is not configurable and is the second most preferred tunnel type after RSVP-TE. The preference is the same whether if the SR-TE LSP was resolved in IS-IS or OSPF.

The global default TTM preference for the tunnel types is as follows:

- ROUTE\_PREF\_RSVP 7
- ROUTE\_PREF\_SR\_TE 8
- ROUTE\_PREF\_LDP 9
- ROUTE\_PREF\_OSPF\_TTM 10
- ROUTE\_PREF\_ISIS\_TTM 11
- ROUTE\_PREF\_BGP\_TTM 12
- ROUTE\_PREF\_GRE 255

The default value for SR-ISIS or SR-OSPF is the same regardless if one or more IS-IS or OSPF instances programmed a tunnel for the same prefix. The selection of a SR tunnel in this case will be based on the lowest IGP instance ID. Similarly, IPv6 SR-ISIS and SR-OSPF3 tunnels are programmed into TTMv6 with the same default preference value as IPv4 SR-ISIS and IPv4 SR-OSPF respectively.

Nokia recommends not to set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.

Range	1 to 255
Default	10
Introduced	16.0.R4
Platforms	All

## timers

Synopsis	Enter the <b>timers</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <b>timers</b>
Tree	<a href="#">timers</a>
Introduced	16.0.R1
Platforms	All

## incremental-spf-wait *number*

Synopsis	Delay time before an incremental SPF calculation starts
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">timers</a> <b>incremental-spf-wait</b> <i>number</i>
Tree	<a href="#">incremental-spf-wait</a>
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

## lsa-accumulate *number*

Synopsis	Delay to gather LSAs before advertising to neighbors
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">timers</a> <b>lsa-accumulate</b> <i>number</i>
Tree	<a href="#">lsa-accumulate</a>
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	16.0.R1

Platforms All

### **lsa-arrival** *number*

Synopsis Min delay between receipt of same LSAs from neighbors  
Context **configure** [router](#) *string* [ospf3](#) *number* [timers](#) **lsa-arrival** *number*  
Tree [lsa-arrival](#)  
Range 0 to 600000  
Units milliseconds  
Default 1000  
Introduced 16.0.R1  
Platforms All

### **lsa-generate**

Synopsis Enter the **lsa-generate** context  
Context **configure** [router](#) *string* [ospf3](#) *number* [timers](#) **lsa-generate**  
Tree [lsa-generate](#)  
Introduced 16.0.R1  
Platforms All

### **lsa-initial-wait** *number*

Synopsis First wait period between OSPF LSA generation  
Context **configure** [router](#) *string* [ospf3](#) *number* [timers](#) **lsa-generate** **lsa-initial-wait** *number*  
Tree [lsa-initial-wait](#)  
Range 10 to 600000  
Units milliseconds  
Default 5000  
Introduced 16.0.R1  
Platforms All

### **lsa-second-wait** *number*

Synopsis Hold time between the first and second LSA generation

Context	<b>configure router</b> <i>string ospf3 number timers lsa-generate lsa-second-wait number</i>
Tree	<a href="#">lsa-second-wait</a>
Range	10 to 600000
Units	milliseconds
Default	5000
Introduced	16.0.R1
Platforms	All

### **max-lsa-wait** *number*

Synopsis	Max time between two LSAs being generated
Context	<b>configure router</b> <i>string ospf3 number timers lsa-generate max-lsa-wait number</i>
Tree	<a href="#">max-lsa-wait</a>
Range	10 to 600000
Units	milliseconds
Default	5000
Introduced	16.0.R1
Platforms	All

### **redistribute-delay** *number*

Synopsis	Hold down timer for external routes into OSPF
Context	<b>configure router</b> <i>string ospf3 number timers redistribute-delay number</i>
Tree	<a href="#">redistribute-delay</a>
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

### **spf-wait**

Synopsis	Enter the <b>spf-wait</b> context
Context	<b>configure router</b> <i>string ospf3 number timers spf-wait</i>
Tree	<a href="#">spf-wait</a>

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Introduced	16.0.R1
Platforms	All

**spf-initial-wait** *number*

Synopsis	Initial SPF calculation delay after a topology change
Context	<b>configure</b> <b>router</b> <i>string ospf3 number timers</i> <b>spf-wait</b> <b>spf-initial-wait</b> <i>number</i>
Tree	<a href="#">spf-initial-wait</a>
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

**spf-max-wait** *number*

Synopsis	Max interval between two consecutive SPF calculations
Context	<b>configure</b> <b>router</b> <i>string ospf3 number timers</i> <b>spf-wait</b> <b>spf-max-wait</b> <i>number</i>
Tree	<a href="#">spf-max-wait</a>
Range	10 to 120000
Units	milliseconds
Default	10000
Introduced	16.0.R1
Platforms	All

**spf-second-wait** *number*

Synopsis	Hold time between the first and second SPF calculation
Context	<b>configure</b> <b>router</b> <i>string ospf3 number timers</i> <b>spf-wait</b> <b>spf-second-wait</b> <i>number</i>
Tree	<a href="#">spf-second-wait</a>
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All



**unicast-import** *boolean*

Synopsis	Submit routes into the unicast Route Table Manager
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>unicast-import</b> <i>boolean</i>
Tree	<b>unicast-import</b>
Default	true
Introduced	16.0.R1
Platforms	All

**p2mp-sr-tree**

Synopsis	Enable the <b>p2mp-sr-tree</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b>
Tree	<b>p2mp-sr-tree</b>
Introduced	21.5.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the P2MP SR tree
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	All

**bfd-liveness** *keyword*

Synopsis	BFD-liveness for P2MP SR tree status entry
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>bfd-liveness</b> <i>keyword</i>
Tree	<b>bfd-liveness</b>
Options	ipv4, ipv6
Max. Instances	2

Introduced 21.5.R1  
 Platforms All

### **p2mp-policy** [[p2mp-policy-name](#)] *string*

Synopsis Enter the **p2mp-policy** list instance  
 Context **configure** [router](#) *string* [p2mp-sr-tree](#) [p2mp-policy](#) *string*  
 Tree [p2mp-policy](#)  
 Introduced 21.5.R1  
 Platforms All

### **[p2mp-policy-name]** *string*

Synopsis P2MP policy name  
 Context **configure** [router](#) *string* [p2mp-sr-tree](#) [p2mp-policy](#) *string*  
 Tree [p2mp-policy](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 21.5.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the P2MP policy  
 Context **configure** [router](#) *string* [p2mp-sr-tree](#) [p2mp-policy](#) *string* [admin-state](#) *keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 21.5.R1  
 Platforms All

### **candidate-path** [[candidate-path-name](#)] *string*

Synopsis Enter the **candidate-path** list instance  
 Context **configure** [router](#) *string* [p2mp-sr-tree](#) [p2mp-policy](#) *string* [candidate-path](#) *string*

Tree	<a href="#">candidate-path</a>
Introduced	21.5.R1
Platforms	All

**[candidate-path-name]** *string*

Synopsis	Candidate path name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">p2mp-sr-tree</a> <a href="#">p2mp-policy</a> <i>string</i> <a href="#">candidate-path</a> <i>string</i>
Tree	<a href="#">candidate-path</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	All

**active-instance** *reference*

Synopsis	Candidate path active instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">p2mp-sr-tree</a> <a href="#">p2mp-policy</a> <i>string</i> <a href="#">candidate-path</a> <i>string</i> <a href="#">active-instance</a> <i>reference</i>
Tree	<a href="#">active-instance</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">p2mp-sr-tree</a> <a href="#">p2mp-policy</a> <i>string</i> <a href="#">candidate-path</a> <i>string</i> <a href="#">path-instances</a> <i>number</i>
Introduced	21.5.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the P2MP SR tree
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">p2mp-sr-tree</a> <a href="#">p2mp-policy</a> <i>string</i> <a href="#">candidate-path</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	All

**path-instances** [*index*] *number*

Synopsis	Enter the <b>path-instances</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>p2mp-policy</b> <i>string</i> <b>candidate-path</b> <i>string</i> <b>path-instances</b> <i>number</i>
Tree	<b>path-instances</b>
Introduced	21.5.R1
Platforms	All

**[index]** *number*

Synopsis	Instance index
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>p2mp-policy</b> <i>string</i> <b>candidate-path</b> <i>string</i> <b>path-instances</b> <i>number</i>
Tree	<b>path-instances</b>
Range	1 to 2
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	All

**instance-id** *number*

Synopsis	Instance value
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>p2mp-policy</b> <i>string</i> <b>candidate-path</b> <i>string</i> <b>path-instances</b> <i>number</i> <b>instance-id</b> <i>number</i>
Tree	<b>instance-id</b>
Max. Range	0 to 4294967295
Introduced	21.5.R1
Platforms	All

**preference** *number*

Synopsis	Candidate-path preference
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>p2mp-policy</b> <i>string</i> <b>candidate-path</b> <i>string</i> <b>preference</b> <i>number</i>
Tree	<b>preference</b>

Range	0 to 1024
Default	100
Introduced	21.5.R1
Platforms	All

### **root-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Root address for the P2MP policy
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>p2mp-policy</b> <i>string</i> <b>root-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>root-address</b>
Default	0.0.0.0
Introduced	21.5.R1
Platforms	All

### **tree-id** *number*

Synopsis	Tree ID for the P2MP policy
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>p2mp-policy</b> <i>string</i> <b>tree-id</b> <i>number</i>
Tree	<b>tree-id</b>
Range	0   8193 to 16286
Default	0
Introduced	21.5.R1
Platforms	All

### **replication-segment** [**policy-name**] *string*

Synopsis	Enter the <b>replication-segment</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>replication-segment</b> <i>string</i>
Tree	<b>replication-segment</b>
Introduced	21.5.R1
Platforms	All

### **[policy-name]** *string*

Synopsis	P2MP policy name
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Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">p2mp-sr-tree</a> <a href="#">replication-segment</a> <i>string</i>
Tree	<a href="#">replication-segment</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the replication segment
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">p2mp-sr-tree</a> <a href="#">replication-segment</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	All

### **downstream-nodes** [[downstream-index](#)] *number*

Synopsis	Enter the <b>downstream-nodes</b> list instance
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">p2mp-sr-tree</a> <a href="#">replication-segment</a> <i>string</i> <a href="#">downstream-nodes</a> <i>number</i>
Tree	<a href="#">downstream-nodes</a>
Introduced	21.5.R1
Platforms	All

### **[downstream-index]** *number*

Synopsis	Downstream index
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">p2mp-sr-tree</a> <a href="#">replication-segment</a> <i>string</i> <a href="#">downstream-nodes</a> <i>number</i>
Tree	<a href="#">downstream-nodes</a>
Range	1 to 4096
Notes	This element is part of a list key.
Introduced	21.5.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of next-hop entries

Context **configure** *router* *string* *p2mp-sr-tree* *replication-segment* *string* *downstream-nodes* *number* **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 21.5.R1

Platforms All

### **label**

Synopsis Enter the **label** context

Context **configure** *router* *string* *p2mp-sr-tree* *replication-segment* *string* *downstream-nodes* *number* **label**

Tree [label](#)

Introduced 21.5.R1

Platforms All

### **sid-list** [[index](#)] *number*

Synopsis Enter the **sid-list** list instance

Context **configure** *router* *string* *p2mp-sr-tree* *replication-segment* *string* *downstream-nodes* *number* **label** **sid-list** *number*

Tree [sid-list](#)

Introduced 21.5.R1

Platforms All

### [[index](#)] *number*

Synopsis SID list index

Context **configure** *router* *string* *p2mp-sr-tree* *replication-segment* *string* *downstream-nodes* *number* **label** **sid-list** *number*

Tree [sid-list](#)

Range	1 to 11
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	All

### **replication-sid** *number*

Synopsis	Segment ID for the SID list entry
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>replication-segment</b> <i>string</i> <b>downstream-nodes</b> <i>number</i> <b>label</b> <b>sid-list</b> <i>number</i> <b>replication-sid</b> <i>number</i>
Tree	<a href="#">replication-sid</a>
Range	3   16 to 1048575   4294967295
Notes	This element is mandatory.
Introduced	21.5.R1
Platforms	All

### **next-hop-address** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	Next-hop address for replication segment next hops
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>replication-segment</b> <i>string</i> <b>downstream-nodes</b> <i>number</i> <b>next-hop-address</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> )
Tree	<a href="#">next-hop-address</a>
Default	0.0.0.0
Introduced	21.5.R1
Platforms	All

### **next-hop-interface-name** *string*

Synopsis	Interface name for replication segment next-hops
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>replication-segment</b> <i>string</i> <b>downstream-nodes</b> <i>number</i> <b>next-hop-interface-name</b> <i>string</i>
Tree	<a href="#">next-hop-interface-name</a>
String Length	1 to 32
Introduced	21.5.R1
Platforms	All



**protect-nexthop-id** *reference*

Synopsis	ID of the protection next hop used for FRR
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>replication-segment</b> <i>string</i> <b>downstream-nodes</b> <i>number</i> <b>protect-nexthop-id</b> <i>reference</i>
Tree	<b>protect-nexthop-id</b>
Reference	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>replication-segment</b> <i>string</i> <b>downstream-nodes</b> <i>number</i>
Introduced	21.5.R1
Platforms	All

**instance-id** *number*

Synopsis	Instance ID for replication segment entries
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>replication-segment</b> <i>string</i> <b>instance-id</b> <i>number</i>
Tree	<b>instance-id</b>
Max. Range	0 to 4294967295
Default	0
Introduced	21.5.R1
Platforms	All

**replication-sid** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Segment ID of the replication segment
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>replication-segment</b> <i>string</i> <b>replication-sid</b> <i>number</i>
Tree	<b>replication-sid</b>
Max. Range	0 to 4294967295
Default	0
Introduced	21.5.R1
Platforms	All

**root-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Root address for replication segment entries
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>replication-segment</b> <i>string</i> <b>root-address</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<b>root-address</b>
Introduced	21.5.R1
Platforms	All

**sid-action** *keyword*

Synopsis	SID action for replication segment entries
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>replication-segment</b> <i>string</i> <b>sid-action</b> <i>keyword</i>
Tree	<b>sid-action</b>
Options	none, push, pop, swap
Default	none
Introduced	21.5.R1
Platforms	All

**tree-id** *number*

Synopsis	Tree ID for the replication segment of the P2MP SR tree
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>replication-segment</b> <i>string</i> <b>tree-id</b> <i>number</i>
Tree	<b>tree-id</b>
Range	0   8193 to 16286
Default	0
Introduced	21.5.R1
Platforms	All

**reserved-label-block** *reference*

Synopsis	Reserved label block name for the P2MP SR tree
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>reserved-label-block</b> <i>reference</i>
Tree	<b>reserved-label-block</b>
Reference	<b>configure</b> <b>router</b> <i>string</i> <b>mpls-labels</b> <b>reserved-label-block</b> <i>string</i>
Introduced	21.5.R1

Platforms All

## pcep

Synopsis Enter the **pcep** context  
 Context **configure router string pcep**  
 Tree [pcep](#)  
 Introduced 16.0.R4  
 Platforms All

## pcc

Synopsis Enable the **pcc** context  
 Context **configure router string pcep pcc**  
 Tree [pcc](#)  
 Introduced 16.0.R4  
 Platforms All

## admin-state *keyword*

Synopsis Administrative state of the PCEP session element  
 Context **configure router string pcep pcc admin-state keyword**  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 16.0.R4  
 Platforms All

## dead-timer *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Configure dead timer  
 Context **configure router string pcep pcc dead-timer number**

Tree	<a href="#">dead-timer</a>
Range	1 to 255
Units	seconds
Default	120
Introduced	16.0.R4
Platforms	All

### **keepalive** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure keepalive
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pcep</a> <a href="#">pcc</a> <a href="#">keepalive</a> <i>number</i>
Tree	<a href="#">keepalive</a>
Range	1 to 255
Units	seconds
Default	30
Introduced	16.0.R4
Platforms	All

### **local-address** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IPv4 address of the PCEP speaker
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pcep</a> <a href="#">pcc</a> <a href="#">local-address</a> <i>string</i>
Tree	<a href="#">local-address</a>
Description	This command configures the local IPv4 address of the PCEP speaker. See "PCEP session establishment and maintenance" in the <i>7750 SR and 7950 XRS Segment Routing and PCE User Guide</i> for more information about configuring a PCEP local IPv4 address to establish a PCEP session.
Introduced	16.0.R4
Platforms	All

## local-address-ipv6 *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IPv6 address of the PCEP speaker
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pcep</a> <a href="#">pcc</a> <a href="#">local-address-ipv6</a> <i>string</i>
Tree	<a href="#">local-address-ipv6</a>
Description	This command configures the local IPv6 address of the PCEP speaker. See "PCEP session establishment and maintenance" in the <i>7750 SR and 7950 XRS Segment Routing and PCE User Guide</i> for more information about configuring a PCEP local IPv6 address to establish a PCEP session.
Introduced	20.2.R1
Platforms	All

## max-srte-pce-init-lsps *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure max sr te pce init LSP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pcep</a> <a href="#">pcc</a> <a href="#">max-srte-pce-init-lsps</a> <i>number</i>
Tree	<a href="#">max-srte-pce-init-lsps</a>
Range	0 to 8191
Default	8191
Introduced	16.0.R5
Platforms	All

## pce-associations

Synopsis	Enter the <b>pce-associations</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pcep</a> <a href="#">pcc</a> <a href="#">pce-associations</a>
Tree	<a href="#">pce-associations</a>
Description	Commands in this context configure PCE association groups.
Introduced	22.5.R1

Platforms All

### **diversity** [*assoc-name*] *string*

Synopsis Enter the **diversity** list instance

Context **configure** *router string pcep pcc pce-associations diversity string*

Tree *diversity*

Description Commands in this context create a named diversity association from which the parameters for the specified diversity association are configured.

Introduced 22.5.R1

Platforms All

### **[assoc-name]** *string*

Synopsis Name of the association group

Context **configure** *router string pcep pcc pce-associations diversity string*

Tree *diversity*

String Length 1 to 32

Notes This element is part of a list key.

Introduced 22.5.R1

Platforms All

### **association-id** *number*

Synopsis Association ID for the diversity association group

Context **configure** *router string pcep pcc pce-associations diversity string association-id number*

Tree *association-id*

Description This command configures the diversity association ID. The user must specify an association ID.

Range 0 to 65535

Default 0

Introduced 22.5.R1

Platforms All

**association-source** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source IP address for the association
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pcep</b> <b>pcc</b> <b>pce-associations</b> <b>diversity</b> <i>string</i> <b>association-source</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>association-source</b>
Description	This command configures the source IP address of the diversity association.
Introduced	22.5.R1
Platforms	All

**disjointness-reference** *boolean*

Synopsis	Configure P-flag in the disjointness configuration TLV
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pcep</b> <b>pcc</b> <b>pce-associations</b> <b>diversity</b> <i>string</i> <b>disjointness-reference</b> <i>boolean</i>
Tree	<b>disjointness-reference</b>
Description	When configured to <b>true</b> , the router sets the P-flag in the disjointness configuration TLV. When the P-flag is set, it indicates that this LSP path is the reference path for the disjoint set of paths. The PCE must first compute the path of this LSP and then apply the requested disjointness type to compute the path of all other paths in the same diversity association ID.  When configured to <b>false</b> , the router does not set the P-flag in the disjointness configuration TLV.
Default	false
Introduced	22.5.R1
Platforms	All

**disjointness-type** *keyword*

Synopsis	Disjointness type for the association group
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pcep</b> <b>pcc</b> <b>pce-associations</b> <b>diversity</b> <i>string</i> <b>disjointness-type</b> <i>keyword</i>
Tree	<b>disjointness-type</b>
Description	This command configures the disjointness type for the association group.
Options	strict, loose
Default	loose
Introduced	22.5.R1
Platforms	All

**diversity-type** *keyword*

Synopsis	Diversity type for the association group
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pcep</a> <a href="#">pcc</a> <a href="#">pce-associations</a> <a href="#">diversity</a> <i>string</i> <a href="#">diversity-type</a> <i>keyword</i>
Tree	<a href="#">diversity-type</a>
Description	This command configures the diversity type for the association group.
Options	none, link, node, srlg-link, srlg-node
Default	none
Introduced	22.5.R1
Platforms	All

**policy** [[assoc-name](#)] *string*

Synopsis	Enter the <b>policy</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pcep</a> <a href="#">pcc</a> <a href="#">pce-associations</a> <a href="#">policy</a> <i>string</i>
Tree	<a href="#">policy</a>
Description	Commands in this context create a named policy association from which the parameters for the specified policy association are configured.
Introduced	22.5.R1
Platforms	All

**[assoc-name]** *string*

Synopsis	Name of the association group
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pcep</a> <a href="#">pcc</a> <a href="#">pce-associations</a> <a href="#">policy</a> <i>string</i>
Tree	<a href="#">policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

**association-id** *number*

Synopsis	Association ID for the policy association group
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pcep</a> <a href="#">pcc</a> <a href="#">pce-associations</a> <a href="#">policy</a> <i>string</i> <a href="#">association-id</a> <i>number</i>



Tree	<a href="#">association-id</a>
Description	This command configures the policy association ID. The user must specify an association ID.
Range	0 to 65535
Default	0
Introduced	22.5.R1
Platforms	All

### **association-source** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source IP address for the association
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">pcep</a> <a href="#">pcc</a> <a href="#">pce-associations</a> <b>policy</b> <i>string</i> <a href="#">association-source</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">association-source</a>
Description	This command configures the source IP address of the policy association.
Introduced	22.5.R1
Platforms	All

### **peer** [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">pcep</a> <a href="#">pcc</a> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">peer</a>
Max. Instances	2
Introduced	16.0.R4
Platforms	All

### **[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Destination IP address of a PCE peer in a PCEP session
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">pcep</a> <a href="#">pcc</a> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">peer</a>
Notes	This element is part of a list key.
Introduced	16.0.R4

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the PCC peer

Context **configure** **router** *string* **pcep pcc peer** (*ipv4-address-no-zone | ipv6-address-no-zone*) **admin-state** *keyword*

Tree **admin-state**

Options enable, disable

Default disable

Introduced 16.0.R4

Platforms All

### **preference** *number*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Preference value of the peer

Context **configure** **router** *string* **pcep pcc peer** (*ipv4-address-no-zone | ipv6-address-no-zone*) **preference** *number*

Tree **preference**

Range 0 to 100

Default 0

Introduced 16.0.R4

Platforms All

### **route-preference** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Route preference to reach the PCE server

Context **configure** **router** *string* **pcep pcc peer** (*ipv4-address-no-zone | ipv6-address-no-zone*) **route-preference** *keyword*

Tree **route-preference**

Description	This command specifies the routing preference to reach the PCE server. If the configured option is to use both in-band and out-of-band routes, the out-of-band routes in the management routing instance are used to reach the PCE server before the in-band routes in the Base routing instance.
Options	inband, outband, both
Default	both
Introduced	21.10.R1
Platforms	All

### tls-client-profile *reference*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TLS client profile name assigned to this PCC peer
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pcep pcc peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>tls-client-profile</b> <i>reference</i>
Tree	<b>tls-client-profile</b>
Reference	<b>configure</b> <b>system</b> <b>security</b> <b>tls</b> <b>client-tls-profile</b> <i>string</i>
Introduced	21.10.R1
Platforms	All

### tls-wait-timer *number*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time the PCC waits until declaring handshake failure
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pcep pcc peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>tls-wait-timer</b> <i>number</i>
Tree	<b>tls-wait-timer</b>
Range	60 to 255
Units	seconds
Default	60
Introduced	21.10.R1
Platforms	All

**redelegation-timer** *number*

Synopsis	Configure redelegation-timer
Context	<b>configure</b> <i>router string pcep pcc redelegation-timer number</i>
Tree	<a href="#">redelegation-timer</a>
Range	1 to 3600
Units	seconds
Default	90
Introduced	16.0.R4
Platforms	All

**report-path-constraints** *boolean*

Synopsis	Include LSP path constraints in PCE report messages
Context	<b>configure</b> <i>router string pcep pcc report-path-constraints boolean</i>
Tree	<a href="#">report-path-constraints</a>
Default	true
Introduced	16.0.R4
Platforms	All

**state-timer**

Synopsis	Enter the <b>state-timer</b> context
Context	<b>configure</b> <i>router string pcep pcc state-timer</i>
Tree	<a href="#">state-timer</a>
Introduced	16.0.R4
Platforms	All

**timer** *number*

Synopsis	Configure state-timer
Context	<b>configure</b> <i>router string pcep pcc state-timer timer number</i>
Tree	<a href="#">timer</a>
Range	1 to 3600
Units	seconds

Default	180
Introduced	16.0.R4
Platforms	All

**timer-action** *keyword*

Synopsis	State timer action remove/none
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pcep</a> <a href="#">pcc</a> <a href="#">state-timer</a> <a href="#">timer-action</a> <i>keyword</i>
Tree	<a href="#">timer-action</a>
Options	none, remove
Default	remove
Introduced	16.0.R4
Platforms	All

**unknown-message-rate** *number*

Synopsis	Configure unknown message rate
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pcep</a> <a href="#">pcc</a> <a href="#">unknown-message-rate</a> <i>number</i>
Tree	<a href="#">unknown-message-rate</a>
Range	1 to 255
Default	10
Introduced	16.0.R4
Platforms	All

**pcp**

Synopsis	Enter the <b>pcp</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pcp</a>
Tree	<a href="#">pcp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**server** [*name*] *string*

Synopsis	Enter the <b>server</b> list instance
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Context	<b>configure</b> <i>router string pcp server string</i>
Tree	<i>server</i>
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	PCP server name
Context	<b>configure</b> <i>router string pcp server string</i>
Tree	<i>server</i>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the PCP server
Context	<b>configure</b> <i>router string pcp server string admin-state keyword</i>
Tree	<i>admin-state</i>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <i>router string pcp server string description string</i>
Tree	<i>description</i>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**dual-stack-lite-address** *string*

Synopsis	Inside Dual Stack Lite AFTR address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pcp</b> <b>server</b> <i>string</i> <b>dual-stack-lite-address</b> <i>string</i>
Tree	<b>dual-stack-lite-address</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**fwd-inside-router** *string*

Synopsis	PCP forwarding inside virtual router instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pcp</b> <b>server</b> <i>string</i> <b>fwd-inside-router</b> <i>string</i>
Tree	<b>fwd-inside-router</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**interface** [**name**] *reference*

Synopsis	Add a list entry for <b>interface</b>
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pcp</b> <b>server</b> <i>string</i> <b>interface</b> <i>reference</i>
Tree	<b>interface</b>
Max. Instances	32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[name]** *reference*

Synopsis	Interface name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pcp</b> <b>server</b> <i>string</i> <b>interface</b> <i>reference</i>
Tree	<b>interface</b>
Reference	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**policy reference**

Synopsis	PCP server policy
Context	<b>configure</b> <i>router string</i> <b>pcp server</b> <i>string</i> <b>policy reference</b>
Tree	<b>policy</b>
Reference	<b>configure service nat</b> <b>pcp-server-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**pim**

Synopsis	Enable the <b>pim</b> context
Context	<b>configure</b> <i>router string</i> <b>pim</b>
Tree	<b>pim</b>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of PIM
Context	<b>configure</b> <i>router string</i> <b>pim admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**apply-to** *keyword*

Synopsis	IES and non-IES interfaces to create in PIM
Context	<b>configure</b> <i>router string</i> <b>pim apply-to</b> <i>keyword</i>
Tree	<b>apply-to</b>
Options	ies, non-ies, all, none
Default	none
Introduced	16.0.R1



Platforms All

## import

Synopsis Enter the **import** context  
 Context **configure** [router](#) *string* [pim](#) **import**  
 Tree [import](#)  
 Introduced 16.0.R1  
 Platforms All

## join-policy *reference*

Synopsis Character limit for policy name  
 Context **configure** [router](#) *string* [pim](#) **import** [join-policy](#) *reference*  
 Tree [join-policy](#)  
 Reference **configure** [policy-options](#) [policy-statement](#) *string*  
 Max. Instances 5  
 Notes This element is ordered by the user.  
 Introduced 16.0.R1  
 Platforms All

## register-policy *reference*

Synopsis Character limit for policy name  
 Context **configure** [router](#) *string* [pim](#) **import** [register-policy](#) *reference*  
 Tree [register-policy](#)  
 Reference **configure** [policy-options](#) [policy-statement](#) *string*  
 Max. Instances 5  
 Notes This element is ordered by the user.  
 Introduced 16.0.R1  
 Platforms All

**interface** [[interface-name](#)] *string*

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i>
Tree	<a href="#">interface</a>
Introduced	16.0.R1
Platforms	All

**[interface-name]** *string*

Synopsis	Router interface name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i>
Tree	<a href="#">interface</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the PIM interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**assert-period** *number*

Synopsis	Time for periodic refreshes of PIM Assert messages on an interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">assert-period</a> <i>number</i>
Tree	<a href="#">assert-period</a>
Range	1 to 300
Default	60
Introduced	16.0.R1

Platforms All

### **bfd-liveness**

Synopsis Enter the **bfd-liveness** context  
 Context **configure** [router](#) *string* [pim](#) [interface](#) *string* [bfd-liveness](#)  
 Tree [bfd-liveness](#)  
 Introduced 16.0.R1  
 Platforms All

### **ipv4** *boolean*

Synopsis Use Bidirectional Forwarding Detection for IPv4 on PIM interface  
 Context **configure** [router](#) *string* [pim](#) [interface](#) *string* [bfd-liveness](#) [ipv4](#) *boolean*  
 Tree [ipv4](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **ipv6** *boolean*

Synopsis Use Bidirectional Forwarding Detection for IPv6 on PIM interface  
 Context **configure** [router](#) *string* [pim](#) [interface](#) *string* [bfd-liveness](#) [ipv6](#) *boolean*  
 Tree [ipv6](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **bier-signaling-type**

Synopsis Enter the **bier-signaling-type** context  
 Context **configure** [router](#) *string* [pim](#) [interface](#) *string* [bier-signaling-type](#)  
 Tree [bier-signaling-type](#)  
 Introduced 19.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ipv4** *boolean*

Synopsis	Enable PIM IPv4 signaling through a BIER domain
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>interface</b> <i>string</i> <b>bier-signaling-type</b> <b>ipv4</b> <i>boolean</i>
Tree	<b>ipv4</b>
Default	false
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ipv6** *boolean*

Synopsis	Enable PIM IPv6 signaling through a BIER domain
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>interface</b> <i>string</i> <b>bier-signaling-type</b> <b>ipv6</b> <i>boolean</i>
Tree	<b>ipv6</b>
Default	false
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **bsm-check-rtr-alert** *boolean*

Synopsis	Check router alert option in bootstrap messages received
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>interface</b> <i>string</i> <b>bsm-check-rtr-alert</b> <i>boolean</i>
Tree	<b>bsm-check-rtr-alert</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **hello-interval** *number*

Synopsis	Frequency at which PIM Hello messages are sent over this interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>interface</b> <i>string</i> <b>hello-interval</b> <i>number</i>
Tree	<b>hello-interval</b>
Range	0 to 255
Default	30
Introduced	16.0.R1

Platforms All

### **hello-multiplier** *number*

Synopsis Multiplier to determine the hold time for PIM neighbor

Context **configure** *router string pim interface string hello-multiplier number*

Tree [hello-multiplier](#)

Range 20 to 100

Default 35

Introduced 16.0.R1

Platforms All

### **improved-assert** *boolean*

Synopsis Allow improved assert processing on interface

Context **configure** *router string pim interface string improved-assert boolean*

Tree [improved-assert](#)

Default true

Introduced 16.0.R1

Platforms All

### **instant-prune-echo** *boolean*

Synopsis Allow PIM to send an instant prune echo when router starts the prune pending timer for PIM interface

Context **configure** *router string pim interface string instant-prune-echo boolean*

Tree [instant-prune-echo](#)

Default false

Introduced 16.0.R1

Platforms All

### **ipv4**

Synopsis Enter the **ipv4** context

Context **configure** *router string pim interface string ipv4*

Tree [ipv4](#)

Introduced 16.0.R1  
 Platforms All

### **monitor-oper-group**

Synopsis Enter the **monitor-oper-group** context  
 Context **configure** [router](#) *string* [pim](#) [interface](#) *string* [ipv4](#) [monitor-oper-group](#)  
 Tree [monitor-oper-group](#)  
 Introduced 16.0.R1  
 Platforms All

### **name** *reference*

Synopsis Operational group identifier  
 Context **configure** [router](#) *string* [pim](#) [interface](#) *string* [ipv4](#) [monitor-oper-group](#) [name](#) *reference*  
 Tree [name](#)  
 Reference **configure** [service](#) [oper-group](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### **operation** *keyword*

Synopsis Operation performed when operational group is active  
 Context **configure** [router](#) *string* [pim](#) [interface](#) *string* [ipv4](#) [monitor-oper-group](#) [operation](#) *keyword*  
 Tree [operation](#)  
 Options add, subtract, set  
 Introduced 16.0.R1  
 Platforms All

### **priority-delta** *number*

Synopsis Delta priority with operation when operational group is active  
 Context **configure** [router](#) *string* [pim](#) [interface](#) *string* [ipv4](#) [monitor-oper-group](#) [priority-delta](#) *number*  
 Tree [priority-delta](#)

Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **multicast** *boolean*

Synopsis	Enable PIM interface operation
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <b>multicast</b> <i>boolean</i>
Tree	<a href="#">multicast</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **ipv6**

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	16.0.R1
Platforms	All

### **monitor-oper-group**

Synopsis	Enter the <b>monitor-oper-group</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <b>monitor-oper-group</b>
Tree	<a href="#">monitor-oper-group</a>
Introduced	16.0.R1
Platforms	All

### **name** *reference*

Synopsis	Operational group identifier
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <b>monitor-oper-group</b> <i>name</i> <i>reference</i>
Tree	<a href="#">name</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <i>string</i>

Introduced 16.0.R1  
Platforms All

### **operation** *keyword*

Synopsis Operation performed when operational group is active  
Context **configure** *router string pim interface string ipv6 monitor-oper-group operation keyword*  
Tree [operation](#)  
Options add, subtract, set  
Introduced 16.0.R1  
Platforms All

### **priority-delta** *number*

Synopsis Delta priority with operation when operational group is active  
Context **configure** *router string pim interface string ipv6 monitor-oper-group priority-delta number*  
Tree [priority-delta](#)  
Range 1 to 4294967295  
Introduced 16.0.R1  
Platforms All

### **multicast** *boolean*

Synopsis Enable PIM interface operation  
Context **configure** *router string pim interface string ipv6 multicast boolean*  
Tree [multicast](#)  
Default true  
Introduced 16.0.R1  
Platforms All

### **max-groups** *number*

Synopsis Maximum number of groups for the interface  
Context **configure** *router string pim interface string max-groups number*  
Tree [max-groups](#)



Range	0   1 to 16000
Default	0
Introduced	16.0.R1
Platforms	All

## mcac

Synopsis	Enter the <b>mcac</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <b>mcac</b>
Tree	<a href="#">mcac</a>
Introduced	16.0.R1
Platforms	All

## bandwidth

Synopsis	Enter the <b>bandwidth</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">bandwidth</a>
Tree	<a href="#">bandwidth</a>
Introduced	16.0.R1
Platforms	All

## mandatory (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">bandwidth</a> <a href="#">mandatory</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mandatory</a>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

## total (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
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Context	<b>configure router</b> <i>string</i> <b>pim interface</b> <i>string</i> <b>mcac bandwidth total</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>total</b>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

### **interface-policy** *reference*

Synopsis	Name of multicast CAC interface policy
Context	<b>configure router</b> <i>string</i> <b>pim interface</b> <i>string</i> <b>mcac interface-policy</b> <i>reference</i>
Tree	<b>interface-policy</b>
Reference	<b>configure mcac interface-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **mc-constraints**

Synopsis	Enter the <b>mc-constraints</b> context
Context	<b>configure router</b> <i>string</i> <b>pim interface</b> <i>string</i> <b>mcac mc-constraints</b>
Tree	<b>mc-constraints</b>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the multicast CAC constraints
Context	<b>configure router</b> <i>string</i> <b>pim interface</b> <i>string</i> <b>mcac mc-constraints admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**level** [*level-id*] *number*

Synopsis	Enter the <b>level</b> list instance
Context	<b>configure</b> <i>router string pim interface string mcac mc-constraints level number</i>
Tree	<i>level</i>
Introduced	16.0.R1
Platforms	All

**[level-id]** *number*

Synopsis	Bandwidth level ID for an MCAC constraint
Context	<b>configure</b> <i>router string pim interface string mcac mc-constraints level number</i>
Tree	<i>level</i>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**bandwidth** *number*

Synopsis	Bandwidth available for this level
Context	<b>configure</b> <i>router string pim interface string mcac mc-constraints level number bandwidth number</i>
Tree	<i>bandwidth</i>
Range	0 to 2147483647
Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**number-down** [*number-lag-port-down*] *number*

Synopsis	Enter the <b>number-down</b> list instance
Context	<b>configure</b> <i>router string pim interface string mcac mc-constraints number-down number</i>
Tree	<i>number-down</i>

Introduced 16.0.R1  
 Platforms All

### **[number-lag-port-down]** *number*

Synopsis Number of ports that are down in this LAG link  
 Context **configure** *router string pim interface string mcac mc-constraints number-down number*  
 Tree [number-down](#)  
 Range 1 to 64  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **level** *number*

Synopsis Level ID to associate with number of down LAG ports  
 Context **configure** *router string pim interface string mcac mc-constraints number-down number level number*  
 Tree [level](#)  
 Description This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.  
 Range 1 to 8  
 Notes This element is mandatory.  
 Introduced 16.0.R1  
 Platforms All

### **use-lag-port-weight** *boolean*

Synopsis Use LAG port weight in calculating MCAC constraints  
 Context **configure** *router string pim interface string mcac mc-constraints use-lag-port-weight boolean*  
 Tree [use-lag-port-weight](#)  
 Description When configured to **true**, port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs.

Default	false
Introduced	16.0.R1
Platforms	All

### **policy reference**

Synopsis	Multicast CAC policy name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>interface</b> <i>string</i> <b>mcac</b> <b>policy</b> <i>reference</i>
Tree	<b>policy</b>
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> <li>• subscriber level and redirected interface when redirection is configured</li> <li>• subscriber level and group-interface level when redirection is unconfigured</li> </ul> <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p>
Reference	<b>configure</b> <b>mcac</b> <b>policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **multicast-senders** *keyword*

Synopsis	Subnet matching for the incoming data packets
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>interface</b> <i>string</i> <b>multicast-senders</b> <i>keyword</i>
Tree	<b>multicast-senders</b>
Options	auto, always, never
Default	auto
Introduced	16.0.R1
Platforms	All

## p2mp-ldp-tree-join

Synopsis	Enter the <b>p2mp-ldp-tree-join</b> context
Context	<b>configure</b> <i>router string pim interface string</i> <b>p2mp-ldp-tree-join</b>
Tree	<b>p2mp-ldp-tree-join</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ipv4 *boolean*

Synopsis	Allow dynamic mLDP in-band signaling for IPv4 PIM joins
Context	<b>configure</b> <i>router string pim interface string</i> <b>p2mp-ldp-tree-join ipv4 <i>boolean</i></b>
Tree	<b>ipv4</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ipv6 *boolean*

Synopsis	Allow dynamic mLDP in-band signaling for IPv6 PIM joins
Context	<b>configure</b> <i>router string pim interface string</i> <b>p2mp-ldp-tree-join ipv6 <i>boolean</i></b>
Tree	<b>ipv6</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## priority *number*

Synopsis	DR election priority for this interface
Context	<b>configure</b> <i>router string pim interface string</i> <b>priority <i>number</i></b>
Tree	<b>priority</b>
Range	1 to 4294967295
Default	1
Introduced	16.0.R1
Platforms	All

## **sticky-dr**

Synopsis	Enable the <b>sticky-dr</b> context
Context	<b>configure</b> <i>router string pim interface string sticky-dr</i>
Tree	<a href="#">sticky-dr</a>
Introduced	16.0.R1
Platforms	All

## **priority number**

Synopsis	DR election priority for this interface
Context	<b>configure</b> <i>router string pim interface string sticky-dr priority number</i>
Tree	<a href="#">priority</a>
Range	1 to 4294967295
Default	1024
Introduced	16.0.R1
Platforms	All

## **three-way-hello boolean**

Synopsis	Allow three-way hello compatibility mode
Context	<b>configure</b> <i>router string pim interface string three-way-hello boolean</i>
Tree	<a href="#">three-way-hello</a>
Default	false
Introduced	16.0.R1
Platforms	All

## **tracking-support boolean**

Synopsis	Allow upstream routers to explicitly track join membership
Context	<b>configure</b> <i>router string pim interface string tracking-support boolean</i>
Tree	<a href="#">tracking-support</a>
Default	false
Introduced	16.0.R1
Platforms	All

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim</a> <a href="#">ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of PIM operation for IPv4
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim</a> <a href="#">ipv4</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## gtm

Synopsis	Enter the <b>gtm</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim</a> <a href="#">ipv4</a> <a href="#">gtm</a>
Tree	<a href="#">gtm</a>
Introduced	16.0.R1
Platforms	All

## auto-discovery *keyword*

Synopsis	Method for multicast VPN membership auto-discovery
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim</a> <a href="#">ipv4</a> <a href="#">gtm</a> <a href="#">auto-discovery</a> <i>keyword</i>
Tree	<a href="#">auto-discovery</a>
Options	bgp
Introduced	16.0.R1
Platforms	All



**multicast-fast-failover** *boolean*

Synopsis	Use Multicast-Only Fast Reroute (MoFRR) functionality
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>ipv4</b> <b>multicast-fast-failover</b> <i>boolean</i>
Tree	<b>multicast-fast-failover</b>
Default	false
Introduced	16.0.R1
Platforms	All

**rpf-table** *keyword*

Synopsis	Route tables for RPF lookup
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>ipv4</b> <b>rpf-table</b> <i>keyword</i>
Tree	<b>rpf-table</b>
Options	rtable-m, rtable-u, both
Default	rtable-u
Introduced	16.0.R1
Platforms	All

**ssm-assert-compatible-mode** *boolean*

Synopsis	Enable SSM assert compatible mode
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>ipv4</b> <b>ssm-assert-compatible-mode</b> <i>boolean</i>
Tree	<b>ssm-assert-compatible-mode</b>
Default	false
Introduced	16.0.R1
Platforms	All

**ssm-default-range** *boolean*

Synopsis	SSM default range
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>ipv4</b> <b>ssm-default-range</b> <i>boolean</i>
Tree	<b>ssm-default-range</b>
Default	true
Introduced	16.0.R1

Platforms All

## ipv6

Synopsis Enter the **ipv6** context  
Context **configure router string pim ipv6**  
Tree **ipv6**  
Introduced 16.0.R1  
Platforms All

## admin-state *keyword*

Synopsis Administrative state of PIM operation for IPv6  
Context **configure router string pim ipv6 admin-state keyword**  
Tree **admin-state**  
Options enable, disable  
Default disable  
Introduced 16.0.R1  
Platforms All

## multicast-fast-failover *boolean*

Synopsis Use Multicast-Only Fast Reroute (MoFRR) functionality  
Context **configure router string pim ipv6 multicast-fast-failover boolean**  
Tree **multicast-fast-failover**  
Default false  
Introduced 16.0.R1  
Platforms All

## rpf-table *keyword*

Synopsis Route tables for RPF lookup  
Context **configure router string pim ipv6 rpf-table keyword**  
Tree **rpf-table**  
Options rtable-m, rtable-u, both

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Default	rtable-u
Introduced	16.0.R1
Platforms	All

### **ssm-default-range** *boolean*

Synopsis	SSM default range
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>ipv6</b> <b>ssm-default-range</b> <i>boolean</i>
Tree	<a href="#">ssm-default-range</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **lag-usage-optimization** *boolean*

Synopsis	Optimize LAG usage
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>lag-usage-optimization</b> <i>boolean</i>
Tree	<a href="#">lag-usage-optimization</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **mc-ecmp-balance** *boolean*

Synopsis	Enable multicast balancing of traffic over ECMP links
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>mc-ecmp-balance</b> <i>boolean</i>
Tree	<a href="#">mc-ecmp-balance</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **mc-ecmp-balance-hold** *number*

Synopsis	Hold time for multicast balancing over ECMP links
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>mc-ecmp-balance-hold</b> <i>number</i>

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Tree	<a href="#">mc-ecmp-balance-hold</a>
Range	2 to 600
Units	minutes
Introduced	16.0.R1
Platforms	All

### **mc-ecmp-hashing**

Synopsis	Enable the <b>mc-ecmp-hashing</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim mc-ecmp-hashing</a>
Tree	<a href="#">mc-ecmp-hashing</a>
Introduced	16.0.R1
Platforms	All

### **rebalance** *boolean*

Synopsis	Rebalance flows to newly added links immediately instead of waiting until they are pruned
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim mc-ecmp-hashing rebalance</a> <i>boolean</i>
Tree	<a href="#">rebalance</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **mdt-spt** *boolean*

Synopsis	Use SPT switchover for default MDT
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim mdt-spt</a> <i>boolean</i>
Tree	<a href="#">mdt-spt</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **non-dr-attract-traffic** *boolean*

Synopsis	Attract traffic when the router is not the designated one
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Context	<b>configure router</b> <i>string</i> <b>pim non-dr-attract-traffic</b> <i>boolean</i>
Tree	<b>non-dr-attract-traffic</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **pim-ssm-scaling** *boolean*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable PIM-SSM scaling
Context	<b>configure router</b> <i>string</i> <b>pim pim-ssm-scaling</b> <i>boolean</i>
Tree	<b>pim-ssm-scaling</b>
Description	<p>When configured to <b>true</b>, this command enables an increase of PIM SSM (S,G) scaling to a maximum of 256000 per system. The total maximum multicast capacity is, however, constrained by the lowest-performance FP.</p> <p>When the maximum link capacity from the fabric to the lowest-performance FP is reached, the link to that FP is overloaded, resulting in packet loss for all FPs. This capacity constraint is independent of whether the lowest-performance FP has a receiver on it or not. If the multicast management chassis per-plane total capacity is configured to an explicit value larger than that supported by the lowest-performance FP, then IMPM believes that there is more plane capacity available than there actually is and the result is (S,G) packet loss instead of blackholing. By setting the multicast management chassis per-plane total capacity to <b>dynamic</b>, the system automatically sets the switch fabric multicast plane capacity to the minimum value supported by the fabric and all line cards in the system.</p> <p>When PIM SSM scaling is enabled, the following multicast features are disabled:• DM• MoFRR• JP policy• SSM groups• InBand features (BIER and MLDP)• Extranet• ASM</p> <p>When configured to <b>false</b>, there is no increase of PIM SSM (S,G) scaling.</p>
Default	false
Introduced	19.7.R1
Platforms	All

### **rp**

Synopsis	Enter the <b>rp</b> context
Context	<b>configure router</b> <i>string</i> <b>pim rp</b>
Tree	<b>rp</b>

Introduced 16.0.R1  
 Platforms All

## bootstrap

Synopsis Enter the **bootstrap** context  
 Context **configure** [router](#) *string* [pim rp bootstrap](#)  
 Tree [bootstrap](#)  
 Introduced 16.0.R1  
 Platforms All

## export reference

Synopsis Character limit for policy name  
 Context **configure** [router](#) *string* [pim rp bootstrap export reference](#)  
 Tree [export](#)  
 Reference **configure** [policy-options](#) [policy-statement](#) *string*  
 Max. Instances 5  
 Notes This element is ordered by the user.  
 Introduced 16.0.R1  
 Platforms All

## import reference

Synopsis Character limit for policy name  
 Context **configure** [router](#) *string* [pim rp bootstrap import reference](#)  
 Tree [import](#)  
 Reference **configure** [policy-options](#) [policy-statement](#) *string*  
 Max. Instances 5  
 Notes This element is ordered by the user.  
 Introduced 16.0.R1  
 Platforms All

**ipv4**

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <i>router string pim rp ipv4</i>
Tree	<i>ipv4</i>
Introduced	16.0.R1
Platforms	All

**anycast** [*ipv4-address*] *string rp-set-peer string*

Synopsis	Add a list entry for <b>anycast</b>
Context	<b>configure</b> <i>router string pim rp ipv4 anycast string rp-set-peer string</i>
Tree	<i>anycast</i>
Introduced	16.0.R1
Platforms	All

**[ipv4-address]** *string*

Synopsis	Loopback IP address shared by routes in RP set
Context	<b>configure</b> <i>router string pim rp ipv4 anycast string rp-set-peer string</i>
Tree	<i>anycast</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**rp-set-peer** *string*

Synopsis	Configure a peer in the anycast rp-set.
Context	<b>configure</b> <i>router string pim rp ipv4 anycast string rp-set-peer string</i>
Tree	<i>anycast</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **auto-rp-discovery** *boolean*

Synopsis	Enable auto RP discovery
Context	<b>configure</b> <i>router</i> <i>string</i> <i>pim rp ipv4 auto-rp-discovery</i> <i>boolean</i>
Tree	<a href="#">auto-rp-discovery</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **bsr-candidate**

Synopsis	Enter the <b>bsr-candidate</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <i>pim rp ipv4 bsr-candidate</i>
Tree	<a href="#">bsr-candidate</a>
Introduced	16.0.R1
Platforms	All

### **address** *string*

Synopsis	Candidate BSR IP address for Bootstrap Router election
Context	<b>configure</b> <i>router</i> <i>string</i> <i>pim rp ipv4 bsr-candidate</i> <i>address</i> <i>string</i>
Tree	<a href="#">address</a>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the Candidate BSR
Context	<b>configure</b> <i>router</i> <i>string</i> <i>pim rp ipv4 bsr-candidate</i> <i>admin-state</i> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All



**hash-mask-len** *number*

Synopsis	Length for bootstrap hash mask
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim rp ipv4 bsr-candidate</b> <b>hash-mask-len</b> <i>number</i>
Tree	<b>hash-mask-len</b>
Range	0 to 32
Default	30
Introduced	16.0.R1
Platforms	All

**priority** *number*

Synopsis	Bootstrap priority of the router
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim rp ipv4 bsr-candidate</b> <b>priority</b> <i>number</i>
Tree	<b>priority</b>
Range	0 to 255
Default	0
Introduced	16.0.R1
Platforms	All

**candidate** *boolean*

Synopsis	Enable auto-RP to advertise candidate RP information
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim rp ipv4 candidate</b> <i>boolean</i>
Tree	<b>candidate</b>
Description	When configured to <b>true</b> , the auto-RP is enabled to advertise the candidate RP information. The auto-RP candidate RP announces the candidate RP messages on the 224.0.1.39 multicast address. This functionality is in addition to the listener functionality enabled by the auto RP discovery.  When configured to <b>false</b> , the candidate RP information is not specified.
Default	false
Introduced	20.10.R1
Platforms	All

**mapping-agent** *boolean*

Synopsis	Enable the mapping agent on the node
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Context	<b>configure router</b> <i>string</i> <b>pim rp ipv4 mapping-agent</b> <i>boolean</i>
Tree	<a href="#">mapping-agent</a>
Description	When configured to <b>true</b> , the mapping agent is enabled on the node. The auto-RP MA observes the <b>auto-rp-announcement</b> messages, selects the RP and generates the RP discovery 224.0.1.40 messages. This functionality is in addition to the auto-RP discovery functionality.
Default	false
Introduced	20.10.R1
Platforms	All

### rp-candidate

Synopsis	Enter the <b>rp-candidate</b> context
Context	<b>configure router</b> <i>string</i> <b>pim rp ipv4 rp-candidate</b>
Tree	<a href="#">rp-candidate</a>
Introduced	16.0.R1
Platforms	All

### address *string*

Synopsis	Local RP address
Context	<b>configure router</b> <i>string</i> <b>pim rp ipv4 rp-candidate</b> <b>address</b> <i>string</i>
Tree	<a href="#">address</a>
Description	This command specifies the local RP address that is sent in the RP candidate advertisements to the Bootstrap Router.
Introduced	16.0.R1
Platforms	All

### admin-state *keyword*

Synopsis	Administrative state of the Candidate RP
Context	<b>configure router</b> <i>string</i> <b>pim rp ipv4 rp-candidate</b> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1

Platforms All

### **group-range** [ipv4-prefix] *string*

Synopsis Add a list entry for **group-range**  
Context **configure** **router** *string* **pim** **rp** **ipv4** **rp-candidate** **group-range** *string*  
Tree [group-range](#)  
Introduced 16.0.R1  
Platforms All

### **[ipv4-prefix]** *string*

Synopsis IPv4 address and prefix length  
Context **configure** **router** *string* **pim** **rp** **ipv4** **rp-candidate** **group-range** *string*  
Tree [group-range](#)  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms All

### **holdtime** *number*

Synopsis Time during which the neighboring router considers this router to be up  
Context **configure** **router** *string* **pim** **rp** **ipv4** **rp-candidate** **holdtime** *number*  
Tree [holdtime](#)  
Range 5 to 255  
Units seconds  
Default 150  
Introduced 16.0.R1  
Platforms All

### **priority** *number*

Synopsis Candidate RP priority  
Context **configure** **router** *string* **pim** **rp** **ipv4** **rp-candidate** **priority** *number*  
Tree [priority](#)

Range	0 to 255
Default	192
Introduced	16.0.R1
Platforms	All

**static**

Synopsis	Enter the <b>static</b> context
Context	<b>configure</b> <i>router string pim rp ipv4 static</i>
Tree	<i>static</i>
Introduced	16.0.R1
Platforms	All

**address** [*ipv4-address*] *string*

Synopsis	Enter the <b>address</b> list instance
Context	<b>configure</b> <i>router string pim rp ipv4 static address string</i>
Tree	<i>address</i>
Introduced	16.0.R1
Platforms	All

**[ipv4-address]** *string*

Synopsis	IPv4 address for the static RP
Context	<b>configure</b> <i>router string pim rp ipv4 static address string</i>
Tree	<i>address</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**group-prefix** [*ipv4-prefix*] *string*

Synopsis	Add a list entry for <b>group-prefix</b>
Context	<b>configure</b> <i>router string pim rp ipv4 static address string group-prefix string</i>
Tree	<i>group-prefix</i>

Introduced 16.0.R1  
 Platforms All

### **[ipv4-prefix]** *string*

Synopsis IPv4 address and prefix length  
 Context **configure** *router string pim rp ipv4 static address string group-prefix string*  
 Tree *group-prefix*  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **override** *boolean*

Synopsis Change the precedence for static RP over dynamically learnt RP  
 Context **configure** *router string pim rp ipv4 static address string override boolean*  
 Tree *override*  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **ipv6**

Synopsis Enter the **ipv6** context  
 Context **configure** *router string pim rp ipv6*  
 Tree *ipv6*  
 Introduced 16.0.R1  
 Platforms All

### **anycast** [*ipv6-address*] *string rp-set-peer string*

Synopsis Add a list entry for **anycast**  
 Context **configure** *router string pim rp ipv6 anycast string rp-set-peer string*  
 Tree *anycast*  
 Introduced 16.0.R1

Platforms All

### **[ipv6-address] string**

Synopsis Loopback IP address shared by routes in RP set  
Context **configure** [router string](#) [pim rp ipv6 anycast string](#) [rp-set-peer string](#)  
Tree [anycast](#)  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms All

### **rp-set-peer string**

Synopsis Peer in the anycast RP set  
Context **configure** [router string](#) [pim rp ipv6 anycast string](#) [rp-set-peer string](#)  
Tree [anycast](#)  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms All

### **bsr-candidate**

Synopsis Enter the **bsr-candidate** context  
Context **configure** [router string](#) [pim rp ipv6 bsr-candidate](#)  
Tree [bsr-candidate](#)  
Introduced 16.0.R1  
Platforms All

### **address string**

Synopsis Candidate BSR IP address for Bootstrap Router election  
Context **configure** [router string](#) [pim rp ipv6 bsr-candidate address string](#)  
Tree [address](#)  
Introduced 16.0.R1  
Platforms All

### **admin-state** *keyword*

Synopsis	Administrative state of the Candidate BSR
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim rp ipv6 bsr-candidate</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **hash-mask-len** *number*

Synopsis	Length for bootstrap hash mask
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim rp ipv6 bsr-candidate</b> <b>hash-mask-len</b> <i>number</i>
Tree	<b>hash-mask-len</b>
Range	0 to 128
Default	126
Introduced	16.0.R1
Platforms	All

### **priority** *number*

Synopsis	Bootstrap priority of the router
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim rp ipv6 bsr-candidate</b> <b>priority</b> <i>number</i>
Tree	<b>priority</b>
Range	0 to 255
Default	0
Introduced	16.0.R1
Platforms	All

### **embedded-rp**

Synopsis	Enable the <b>embedded-rp</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim rp ipv6</b> <b>embedded-rp</b>
Tree	<b>embedded-rp</b>

Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of embedded RP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim rp ipv6 embedded-rp admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **group-range** [**ipv6-prefix**] *string*

Synopsis	Add a list entry for <b>group-range</b>
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim rp ipv6 embedded-rp group-range</b> <i>string</i>
Tree	<b>group-range</b>
Introduced	16.0.R1
Platforms	All

### **[ipv6-prefix]** *string*

Synopsis	IPv6 address and prefix length
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim rp ipv6 embedded-rp group-range</b> <i>string</i>
Tree	<b>group-range</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **rp-candidate**

Synopsis	Enter the <b>rp-candidate</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim rp ipv6 rp-candidate</b>
Tree	<b>rp-candidate</b>



Introduced	16.0.R1
Platforms	All

### **address** *string*

Synopsis	Local RP address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>rp</b> <b>ipv6</b> <b>rp-candidate</b> <b>address</b> <i>string</i>
Tree	<b>address</b>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the Candidate RP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>rp</b> <b>ipv6</b> <b>rp-candidate</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **group-range** [**ipv6-prefix**] *string*

Synopsis	Add a list entry for <b>group-range</b>
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>rp</b> <b>ipv6</b> <b>rp-candidate</b> <b>group-range</b> <i>string</i>
Tree	<b>group-range</b>
Introduced	16.0.R1
Platforms	All

### [**ipv6-prefix**] *string*

Synopsis	IPv6 address and prefix length
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>rp</b> <b>ipv6</b> <b>rp-candidate</b> <b>group-range</b> <i>string</i>
Tree	<b>group-range</b>
Notes	This element is part of a list key.

Introduced	16.0.R1
Platforms	All

**holdtime** *number*

Synopsis	Time during which the neighboring router considers this router to be up
Context	<b>configure</b> <i>router string pim rp ipv6 rp-candidate holdtime number</i>
Tree	<a href="#">holdtime</a>
Range	5 to 255
Units	seconds
Default	150
Introduced	16.0.R1
Platforms	All

**priority** *number*

Synopsis	Candidate RP priority
Context	<b>configure</b> <i>router string pim rp ipv6 rp-candidate priority number</i>
Tree	<a href="#">priority</a>
Range	0 to 255
Default	192
Introduced	16.0.R1
Platforms	All

**static**

Synopsis	Enter the <b>static</b> context
Context	<b>configure</b> <i>router string pim rp ipv6 static</i>
Tree	<a href="#">static</a>
Introduced	16.0.R1
Platforms	All

**address** [[ipv6-address](#)] *string*

Synopsis	Enter the <b>address</b> list instance
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Context	<b>configure</b> <i>router</i> <i>string</i> <i>pim rp ipv6 static address</i> <i>string</i>
Tree	<a href="#">address</a>
Introduced	16.0.R1
Platforms	All

**[ipv6-address]** *string*

Synopsis	Static IP address of the RP
Context	<b>configure</b> <i>router</i> <i>string</i> <i>pim rp ipv6 static address</i> <i>string</i>
Tree	<a href="#">address</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**group-prefix** [[ipv6-prefix](#)] *string*

Synopsis	Add a list entry for <b>group-prefix</b>
Context	<b>configure</b> <i>router</i> <i>string</i> <i>pim rp ipv6 static address</i> <i>string</i> <i>group-prefix</i> <i>string</i>
Tree	<a href="#">group-prefix</a>
Introduced	16.0.R1
Platforms	All

**[ipv6-prefix]** *string*

Synopsis	IPv6 address and prefix length
Context	<b>configure</b> <i>router</i> <i>string</i> <i>pim rp ipv6 static address</i> <i>string</i> <i>group-prefix</i> <i>string</i>
Tree	<a href="#">group-prefix</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**override** *boolean*

Synopsis	Change the precedence for static RP over dynamically learnt RP
Context	<b>configure</b> <i>router</i> <i>string</i> <i>pim rp ipv6 static address</i> <i>string</i> <i>override</i> <i>boolean</i>

Tree	<a href="#">override</a>
Default	false
Introduced	16.0.R1
Platforms	All

## **rpfv**

Synopsis	Enter the <b>rpfv</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim</a> <a href="#">rpfv</a>
Tree	<a href="#">rpfv</a>
Introduced	16.0.R1
Platforms	All

## **core** *boolean*

Synopsis	Include proxy RPF vector for core
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim</a> <a href="#">rpfv</a> <a href="#">core</a> <i>boolean</i>
Tree	<a href="#">core</a>
Default	false
Introduced	16.0.R1
Platforms	All

## **mvpn** *boolean*

Synopsis	Include proxy RPF vector for Inter-AS Rosen MVPN
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim</a> <a href="#">rpfv</a> <a href="#">mvpn</a> <i>boolean</i>
Tree	<a href="#">mvpn</a>
Default	false
Introduced	16.0.R1
Platforms	All

## **spt-switchover** [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the <b>spt-switchover</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim</a> <a href="#">spt-switchover</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )

Tree	<a href="#">spt-switchover</a>
Introduced	16.0.R1
Platforms	All

### **[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP address and mask length
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim</a> <a href="#">spt-switchover</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">spt-switchover</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **threshold** (*number* | *keyword*)

Synopsis	SPT switchover threshold
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim</a> <a href="#">spt-switchover</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">threshold</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">threshold</a>
Range	1 to 4294967294
Units	kilobps
Options	infinity
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **ssm-groups**

Synopsis	Enter the <b>ssm-groups</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim</a> <a href="#">ssm-groups</a>
Tree	<a href="#">ssm-groups</a>
Introduced	16.0.R1
Platforms	All

**group-range** [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Add a list entry for <b>group-range</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim</a> <a href="#">ssm-groups</a> <a href="#">group-range</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">group-range</a>
Introduced	16.0.R1
Platforms	All

**[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP address and mask length
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim</a> <a href="#">ssm-groups</a> <a href="#">group-range</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">group-range</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**radius**

Synopsis	Enter the <b>radius</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius</a>
Tree	<a href="#">radius</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**proxy** [[name](#)] *string*

Synopsis	Enter the <b>proxy</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius</a> <a href="#">proxy</a> <i>string</i>
Tree	<a href="#">proxy</a>
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	RADIUS proxy name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i>
Tree	<a href="#">proxy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of RADIUS proxy
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**attribute-matching**

Synopsis	Enter the <b>attribute-matching</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <b>attribute-matching</b>
Tree	<a href="#">attribute-matching</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**entry** [[index](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <b>attribute-matching</b> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[index] number**

Synopsis	Index of this entry
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">attribute-matching</a> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**accounting-server-policy string**

Synopsis	Accounting server policy
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">attribute-matching</a> <a href="#">entry</a> <i>number</i> <a href="#">accounting-server-policy</a> <i>string</i>
Tree	<a href="#">accounting-server-policy</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**authentication-server-policy string**

Synopsis	Authentication server policy
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">attribute-matching</a> <a href="#">entry</a> <i>number</i> <a href="#">authentication-server-policy</a> <i>string</i>
Tree	<a href="#">authentication-server-policy</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**prefix-string string**

Synopsis	Prefix string
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">attribute-matching</a> <a href="#">entry</a> <i>number</i> <a href="#">prefix-string</a> <i>string</i>
Tree	<a href="#">prefix-string</a>



String Length 1 to 128  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **suffix-string** *string*

Synopsis Prefix string  
 Context **configure** [router](#) *string* [radius proxy](#) *string* [attribute-matching](#) *entry* *number* **suffix-string** *string*  
 Tree [suffix-string](#)  
 String Length 1 to 128  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **type** *number*

Synopsis Matching attribute type to RADIUS server policy  
 Context **configure** [router](#) *string* [radius proxy](#) *string* [attribute-matching](#) *type* *number*  
 Tree [type](#)  
 Range 1 to 255  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **vendor** (*number* | *keyword*)

Synopsis Matching Vendor ID to RADIUS server policy  
 Context **configure** [router](#) *string* [radius proxy](#) *string* [attribute-matching](#) **vendor** (*number* | *keyword*)  
 Tree [vendor](#)  
 Range 1 to 16777215  
 Options nokia  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cache**

Synopsis Enter the **cache** context

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Context	<b>configure</b> <i>router string radius proxy string cache</i>
Tree	<i>cache</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the RADIUS proxy cache
Context	<b>configure</b> <i>router string radius proxy string cache admin-state keyword</i>
Tree	<i>admin-state</i>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **key**

Synopsis	Enable the <b>key</b> context
Context	<b>configure</b> <i>router string radius proxy string cache key</i>
Tree	<i>key</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **attribute-type** *number*

Synopsis	RADIUS attribute type to cache for this RADIUS proxy server
Context	<b>configure</b> <i>router string radius proxy string cache key attribute-type number</i>
Tree	<i>attribute-type</i>
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**packet-type** *keyword*

Synopsis	Packet type of the RADIUS messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>radius proxy</b> <i>string</i> <b>cache key</b> <b>packet-type</b> <i>keyword</i>
Tree	<b>packet-type</b>
Options	access-request, access-accept
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**vendor** (*number* | *keyword*)

Synopsis	RADIUS Vendor ID
Context	<b>configure</b> <b>router</b> <i>string</i> <b>radius proxy</b> <i>string</i> <b>cache key</b> <b>vendor</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>vendor</b>
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**timeout** *number*

Synopsis	Idle timeout value
Context	<b>configure</b> <b>router</b> <i>string</i> <b>radius proxy</b> <i>string</i> <b>cache</b> <b>timeout</b> <i>number</i>
Tree	<b>timeout</b>
Range	60 to 3600
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**track-accounting**

Synopsis	Enter the <b>track-accounting</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>radius proxy</b> <i>string</i> <b>cache</b> <b>track-accounting</b>
Tree	<b>track-accounting</b>

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **accounting-off** *boolean*

Synopsis Remove all ESM hosts associated with the RADIUS client  
Context **configure** [router](#) *string* [radius proxy](#) *string* [cache track-accounting](#) **accounting-off** *boolean*  
Tree [accounting-off](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **accounting-on** *boolean*

Synopsis Remove all ESM hosts associated with the RADIUS client  
Context **configure** [router](#) *string* [radius proxy](#) *string* [cache track-accounting](#) **accounting-on** *boolean*  
Tree [accounting-on](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **interim-update** *boolean*

Synopsis Update the ESM host with the RADIUS client that generated the interim update  
Context **configure** [router](#) *string* [radius proxy](#) *string* [cache track-accounting](#) **interim-update** *boolean*  
Tree [interim-update](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **start** *boolean*

Synopsis Update host with client that generated accounting-start

Context	<b>configure</b> <i>router string radius proxy string cache track-accounting start</i> <i>boolean</i>
Tree	<a href="#">start</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**stop** *boolean*

Synopsis	Remove ESM host and forward accounting-stop packet
Context	<b>configure</b> <i>router string radius proxy string cache track-accounting stop</i> <i>boolean</i>
Tree	<a href="#">stop</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**track-authentication**

Synopsis	Enter the <b>track-authentication</b> context
Context	<b>configure</b> <i>router string radius proxy string cache track-authentication</i>
Tree	<a href="#">track-authentication</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**accept** *boolean*

Synopsis	Track Access-Accept message for mobility
Context	<b>configure</b> <i>router string radius proxy string cache track-authentication accept</i> <i>boolean</i>
Tree	<a href="#">accept</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**track-delete-hold-time** *number*

Synopsis	Delete hold time
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Context	<b>configure</b> <i>router string radius proxy string cache track-delete-hold-time number</i>
Tree	<a href="#">track-delete-hold-time</a>
Range	0 to 6000
Units	seconds
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## defaults

Synopsis	Enter the <b>defaults</b> context
Context	<b>configure</b> <i>router string radius proxy string defaults</i>
Tree	<a href="#">defaults</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## accounting-server-policy *string*

Synopsis	Default accounting RADIUS server policy
Context	<b>configure</b> <i>router string radius proxy string defaults accounting-server-policy string</i>
Tree	<a href="#">accounting-server-policy</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## authentication-server-policy *string*

Synopsis	Default authentication RADIUS server policy
Context	<b>configure</b> <i>router string radius proxy string defaults authentication-server-policy string</i>
Tree	<a href="#">authentication-server-policy</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**interface** [[interface-name](#)] *string*

Synopsis	Add a list entry for <b>interface</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">interface</a> <i>string</i>
Tree	<a href="#">interface</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[interface-name]** *string*

Synopsis	IP interface name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">interface</a> <i>string</i>
Tree	<a href="#">interface</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**load-balance-key**

Synopsis	Enter the <b>load-balance-key</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">load-balance-key</a>
Tree	<a href="#">load-balance-key</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**attribute-1**

Synopsis	Enter the <b>attribute-1</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">load-balance-key</a> <a href="#">attribute-1</a>
Tree	<a href="#">attribute-1</a>
Notes	The following elements are part of a choice: ( <b>attribute-1</b> , <b>attribute-2</b> , <b>attribute-3</b> , <b>attribute-4</b> , and <b>attribute-5</b> ) or <b>source-ip-udp</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**type number**

Synopsis	Attribute type to cache for this RADIUS Proxy server
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">load-balance-key</a> <a href="#">attribute-1</a> <a href="#">type</a> <i>number</i>
Tree	<a href="#">type</a>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**vendor (number | keyword)**

Synopsis	Vendor-Id attribute
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">load-balance-key</a> <a href="#">attribute-1</a> <a href="#">vendor</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">vendor</a>
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**attribute-2**

Synopsis	Enter the <b>attribute-2</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">load-balance-key</a> <a href="#">attribute-2</a>
Tree	<a href="#">attribute-2</a>
Notes	The following elements are part of a choice: ( <b>attribute-1</b> , <b>attribute-2</b> , <b>attribute-3</b> , <b>attribute-4</b> , and <b>attribute-5</b> ) or <b>source-ip-udp</b> .



Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**type number**

Synopsis	Attribute type to cache for this RADIUS Proxy server
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">load-balance-key</a> <a href="#">attribute-2</a> <i>type</i> <i>number</i>
Tree	<a href="#">type</a>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**vendor (number | keyword)**

Synopsis	Vendor-Id attribute
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">load-balance-key</a> <a href="#">attribute-2</a> <i>vendor</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">vendor</a>
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**attribute-3**

Synopsis	Enter the <b>attribute-3</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">load-balance-key</a> <a href="#">attribute-3</a>
Tree	<a href="#">attribute-3</a>
Notes	The following elements are part of a choice: ( <b>attribute-1</b> , <b>attribute-2</b> , <b>attribute-3</b> , <b>attribute-4</b> , and <b>attribute-5</b> ) or <b>source-ip-udp</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**type number**

Synopsis	Attribute type to cache for this RADIUS Proxy server
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Context	<b>configure</b> <i>router string radius proxy string load-balance-key attribute-3 type number</i>
Tree	<i>type</i>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **vendor** (*number | keyword*)

Synopsis	Vendor-Id attribute
Context	<b>configure</b> <i>router string radius proxy string load-balance-key attribute-3 vendor (number   keyword)</i>
Tree	<i>vendor</i>
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **attribute-4**

Synopsis	Enter the <b>attribute-4</b> context
Context	<b>configure</b> <i>router string radius proxy string load-balance-key attribute-4</i>
Tree	<i>attribute-4</i>
Notes	The following elements are part of a choice: ( <b>attribute-1</b> , <b>attribute-2</b> , <b>attribute-3</b> , <b>attribute-4</b> , and <b>attribute-5</b> ) or <b>source-ip-udp</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **type** *number*

Synopsis	Attribute type to cache for this RADIUS Proxy server
Context	<b>configure</b> <i>router string radius proxy string load-balance-key attribute-4 type number</i>
Tree	<i>type</i>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**vendor** (*number* | *keyword*)

Synopsis	Vendor-Id attribute
Context	<b>configure</b> <b>router</b> <i>string</i> <b>radius proxy</b> <i>string</i> <b>load-balance-key</b> <b>attribute-4</b> <b>vendor</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>vendor</b>
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**attribute-5**

Synopsis	Enter the <b>attribute-5</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>radius proxy</b> <i>string</i> <b>load-balance-key</b> <b>attribute-5</b>
Tree	<b>attribute-5</b>
Notes	The following elements are part of a choice: ( <b>attribute-1</b> , <b>attribute-2</b> , <b>attribute-3</b> , <b>attribute-4</b> , and <b>attribute-5</b> ) or <b>source-ip-udp</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**type** *number*

Synopsis	Attribute type to cache for this RADIUS Proxy server
Context	<b>configure</b> <b>router</b> <i>string</i> <b>radius proxy</b> <i>string</i> <b>load-balance-key</b> <b>attribute-5</b> <b>type</b> <i>number</i>
Tree	<b>type</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**vendor** (*number* | *keyword*)

Synopsis	Vendor-Id attribute
Context	<b>configure</b> <b>router</b> <i>string</i> <b>radius proxy</b> <i>string</i> <b>load-balance-key</b> <b>attribute-5</b> <b>vendor</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>vendor</b>

Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### source-ip-udp

Synopsis	Key to consist of the source IP address and source UDP port of the RADIUS message
Context	<b>configure</b> <b>router</b> <i>string</i> <b>radius proxy</b> <i>string</i> <b>load-balance-key</b> <b>source-ip-udp</b>
Tree	<a href="#">source-ip-udp</a>
Notes	The following elements are part of a choice: ( <b>attribute-1</b> , <b>attribute-2</b> , <b>attribute-3</b> , <b>attribute-4</b> , and <b>attribute-5</b> ) or <b>source-ip-udp</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### purpose *keyword*



#### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Purpose of the RADIUS proxy
Context	<b>configure</b> <b>router</b> <i>string</i> <b>radius proxy</b> <i>string</i> <b>purpose</b> <i>keyword</i>
Tree	<a href="#">purpose</a>
Options	accounting, authentication, accounting-authentication
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### python-policy *reference*

Synopsis	Python policy
Context	<b>configure</b> <b>router</b> <i>string</i> <b>radius proxy</b> <i>string</i> <b>python-policy</b> <i>reference</i>
Tree	<a href="#">python-policy</a>
Reference	<b>configure</b> <b>python</b> <b>python-policy</b> <i>string</i>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **secret string**

Synopsis Format of the secret key to access the RADIUS proxy server

Context **configure** *router string radius proxy string secret string*

Tree [secret](#)

String Length 1 to 115

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **send-accounting-response boolean**

Synopsis Allow RADIUS proxy server to respond to Accounting-Response messages

Context **configure** *router string radius proxy string send-accounting-response boolean*

Tree [send-accounting-response](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **wlan-gw**

Synopsis Enter the **wlan-gw** context

Context **configure** *router string radius proxy string wlan-gw*

Tree [wlan-gw](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **address string**

Synopsis IPv4 address of the distributed RADIUS proxy server

Context **configure** *router string radius proxy string wlan-gw address string*

Tree [address](#)

Description This command configures the IPv4 address of the distributed RADIUS proxy server for use by the access points.

Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipv6-address** *string*

Synopsis IPv6 address of the distributed RADIUS proxy server  
 Context **configure** *router string radius proxy string wlan-gw ipv6-address string*  
 Tree [ipv6-address](#)  
 Description This command configures the IPv6 address of the distributed RADIUS proxy server for use by the access points.  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **wlan-gw-group** *reference*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis ISA WLAN gateway group  
 Context **configure** *router string radius proxy string wlan-gw-group reference*  
 Tree [wlan-gw-group](#)  
 Reference **configure** *isa wlan-gw-group number*  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **server** [*name*] *string*

Synopsis Enter the **server** list instance  
 Context **configure** *router string radius server string*  
 Tree [server](#)  
 Max. Instances 64  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	External RADIUS server name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>radius</b> <b>server</b> <i>string</i>
Tree	<b>server</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**accept-coa** *boolean*

Synopsis	Process Change of Authorization (CoA) messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>radius</b> <b>server</b> <i>string</i> <b>accept-coa</b> <i>boolean</i>
Tree	<b>accept-coa</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**acct-port** *number*

Synopsis	UDP port number of the RADIUS for accounting events
Context	<b>configure</b> <b>router</b> <i>string</i> <b>radius</b> <b>server</b> <i>string</i> <b>acct-port</b> <i>number</i>
Tree	<b>acct-port</b>
Range	1 to 65535
Default	1813
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the RADIUS server
Context	<b>configure</b> <b>router</b> <i>string</i> <b>radius</b> <b>server</b> <i>string</i> <b>address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>address</b>
Notes	This element is mandatory.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **auth-port** *number*

Synopsis	UDP port number of the RADIUS to be used as match criteria
Context	<b>configure</b> <b>router</b> <i>string</i> <b>radius</b> <b>server</b> <i>string</i> <b>auth-port</b> <i>number</i>
Tree	<b>auth-port</b>
Range	1 to 65535
Default	1812
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>router</b> <i>string</i> <b>radius</b> <b>server</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pending-requests-limit** *number*

Synopsis	Limit of the number for pending RADIUS requests
Context	<b>configure</b> <b>router</b> <i>string</i> <b>radius</b> <b>server</b> <i>string</i> <b>pending-requests-limit</b> <i>number</i>
Tree	<b>pending-requests-limit</b>
Range	1 to 4096
Default	4096
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **python-policy** *reference*

Synopsis	Python script policy to modify CoA messages
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Context	<b>configure</b> <i>router string radius server string python-policy reference</i>
Tree	<a href="#">python-policy</a>
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **secret** *string*

Synopsis	Secret key associated with this RADIUS server
Context	<b>configure</b> <i>router string radius server string secret string</i>
Tree	<a href="#">secret</a>
String Length	1 to 115
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **reassemble**

Synopsis	Enable the <b>reassemble</b> context
Context	<b>configure</b> <i>router string reassemble</i>
Tree	<a href="#">reassemble</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nat-group** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT group (including WLAN Gateway group) that executes the reassemble
Context	<b>configure</b> <i>router string reassemble nat-group number</i>
Tree	<a href="#">nat-group</a>
Max. Range	0 to 4294967295
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **to-base-network** *boolean*

Synopsis Allow reassembled traffic sent to network interface  
Context **configure** *router* *string* *reassemble* **to-base-network** *boolean*  
Tree [to-base-network](#)  
Default false  
Introduced 19.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rib-api**

Synopsis Enter the **rib-api** context  
Context **configure** *router* *string* *rib-api*  
Tree [rib-api](#)  
Introduced 16.0.R4  
Platforms All

### **mpls**

Synopsis Enter the **mpls** context  
Context **configure** *router* *string* *rib-api* *mpls*  
Tree [mpls](#)  
Introduced 16.0.R4  
Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of MPLS for RIB-API gRPC service  
Context **configure** *router* *string* *rib-api* *mpls* **admin-state** *keyword*  
Tree [admin-state](#)  
Options enable, disable  
Default disable  
Introduced 16.0.R4

Platforms All

### label-name *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Configure reserved label block.

Context **configure** [router](#) *string* [rib-api](#) [mpls](#) [label-name](#) *reference*

Tree [label-name](#)

Reference **configure** [router](#) *string* [mpls-labels](#) [reserved-label-block](#) *string*

Introduced 16.0.R4

Platforms All

### rip

Synopsis Enable the **rip** context

Context **configure** [router](#) *string* [rip](#)

Tree [rip](#)

Introduced 16.0.R4

Platforms All

### admin-state *keyword*

Synopsis Administrative state of the RIP instance

Context **configure** [router](#) *string* [rip](#) [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 16.0.R4

Platforms All

### authentication-key *string*

Synopsis Authentication password passed between RIP neighbors

Context	<b>configure</b> <i>router</i> <i>string</i> <i>rip</i> <i>authentication-key</i> <i>string</i>
Tree	<a href="#">authentication-key</a>
Description	<p>This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication password from the configuration and disables authentication.</p>
String Length	1 to 51
Introduced	16.0.R4
Platforms	All

### **authentication-type** *keyword*

Synopsis	Authentication type used between RIP neighbors
Context	<b>configure</b> <i>router</i> <i>string</i> <i>rip</i> <i>authentication-type</i> <i>keyword</i>
Tree	<a href="#">authentication-type</a>
Description	<p>This command sets the type of authentication to be used between RIP neighbors.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication.</p>
Options	none, password, md5, md20
Default	none
Introduced	16.0.R4
Platforms	All

### **bfd-liveness** *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	<b>configure</b> <i>router</i> <i>string</i> <i>rip</i> <i>bfd-liveness</i> <i>boolean</i>
Tree	<a href="#">bfd-liveness</a>
Description	<p>When configured to <b>true</b>, this command enables BFD to control the state of the associated protocol adjacency.</p> <p>When configured to <b>false</b>, this command removes BFD from the associated protocol adjacency.</p>

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Default	false
Introduced	16.0.R4
Platforms	All

### **check-zero** *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip</a> <b>check-zero</b> <i>boolean</i>
Tree	<a href="#">check-zero</a>
Description	When configured to <b>true</b> , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to <b>false</b> , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Default	false
Introduced	16.0.R4
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip</a> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

### **export-limit**

Synopsis	Enable the <b>export-limit</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip</a> <b>export-limit</b>
Tree	<a href="#">export-limit</a>
Introduced	16.0.R4
Platforms	All

**log-percent** *number*

Synopsis	Export limit before warning and SNMP notification sent
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rip</b> <b>export-limit</b> <b>log-percent</b> <i>number</i>
Tree	<b>log-percent</b>
Range	1 to 100
Introduced	16.0.R4
Platforms	All

**number** *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rip</b> <b>export-limit</b> <b>number</b> <i>number</i>
Tree	<b>number</b>
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**export-policy** *reference*

Synopsis	Policies to determine exported routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rip</b> <b>export-policy</b> <i>reference</i>
Tree	<b>export-policy</b>
Reference	<b>configure</b> <b>policy-options</b> <b>policy-statement</b> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

**group** [*group-name*] *string*

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rip</b> <b>group</b> <i>string</i>
Tree	<b>group</b>

Introduced 16.0.R4  
Platforms All

### **[group-name]** *string*

Synopsis RIP group name  
Context **configure** **router** *string* **rip** **group** *string*  
Tree **group**  
String Length 1 to 32  
Notes This element is part of a list key.  
Introduced 16.0.R4  
Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of RIP neighbor interface group  
Context **configure** **router** *string* **rip** **group** *string* **admin-state** *keyword*  
Tree **admin-state**  
Options enable, disable  
Default enable  
Introduced 16.0.R4  
Platforms All

### **authentication-key** *string*

Synopsis Authentication password passed between RIP neighbors  
Context **configure** **router** *string* **rip** **group** *string* **authentication-key** *string*  
Tree **authentication-key**  
Description This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.  
  
The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.  
  
When unconfigured, this command removes the authentication password from the configuration and disables authentication.  
  
String Length 1 to 51

Introduced	16.0.R4
Platforms	All

### **authentication-type** *keyword*

Synopsis	Authentication type
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rip</b> <b>group</b> <i>string</i> <b>authentication-type</b> <i>keyword</i>
Tree	<b>authentication-type</b>
Description	This command configures the type of authentication to be used.  The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.  When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication.
Options	none, password, md5, md20
Introduced	16.0.R4
Platforms	All

### **bfd-liveness** *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rip</b> <b>group</b> <i>string</i> <b>bfd-liveness</b> <i>boolean</i>
Tree	<b>bfd-liveness</b>
Description	When configured to <b>true</b> , this command enables BFD to control the state of the associated protocol adjacency.  When configured to <b>false</b> , this command removes BFD from the associated protocol adjacency.
Introduced	16.0.R4
Platforms	All

### **check-zero** *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rip</b> <b>group</b> <i>string</i> <b>check-zero</b> <i>boolean</i>
Tree	<b>check-zero</b>
Description	When configured to <b>true</b> , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages.



When configured to **false**, this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.

Introduced	16.0.R4
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

### **export-policy** *reference*

Synopsis	Policies used to rule which routes are exported to RIP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">export-policy</a> <i>reference</i>
Tree	<a href="#">export-policy</a>
Description	This command specifies the export route policies used to determine which routes are exported to RIP.  If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

### **import-policy** *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">import-policy</a> <i>reference</i>
Tree	<a href="#">import-policy</a>
Description	This command configures import route policies to determine which routes are accepted from RIP neighbors.

If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.

Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

### **message-size** *number*

Synopsis	Maximum number of routes per RIP update message
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <a href="#">message-size</a> <i>number</i>
Tree	<a href="#">message-size</a>
Range	25 to 255
Introduced	16.0.R4
Platforms	All

### **metric-in** *number*

Synopsis	Metric added to routes received from a RIP neighbor
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <a href="#">metric-in</a> <i>number</i>
Tree	<a href="#">metric-in</a>
Range	1 to 16
Introduced	16.0.R4
Platforms	All

### **metric-out** *number*

Synopsis	Metric added to routes exported into RIP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <a href="#">metric-out</a> <i>number</i>
Tree	<a href="#">metric-out</a>
Range	1 to 16
Introduced	16.0.R4
Platforms	All

**neighbor** [[interface-name](#)] *string*

Synopsis	Enter the <b>neighbor</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i>
Tree	<a href="#">neighbor</a>
Introduced	16.0.R4
Platforms	All

**[interface-name]** *string*

Synopsis	Neighbor added through the interface to the RIP group
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i>
Tree	<a href="#">neighbor</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the RIP neighbor interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

**authentication-key** *string*

Synopsis	Authentication password passed between RIP neighbors
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <a href="#">authentication-key</a> <i>string</i>
Tree	<a href="#">authentication-key</a>
Description	This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.

The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.

When unconfigured, this command removes the authentication password from the configuration and disables authentication.

String Length 1 to 51

Introduced 16.0.R4

Platforms All

### **authentication-type** *keyword*

Synopsis Authentication type

Context **configure** *router string rip group string neighbor string authentication-type keyword*

Tree [authentication-type](#)

Description This command configures the type of authentication to be used.

The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.

When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication.

Options none, password, md5, md20

Introduced 16.0.R4

Platforms All

### **bfd-liveness** *boolean*

Synopsis Enable BFD to control the state of protocol adjacency

Context **configure** *router string rip group string neighbor string bfd-liveness boolean*

Tree [bfd-liveness](#)

Description When configured to **true**, this command enables BFD to control the state of the associated protocol adjacency.

When configured to **false**, this command removes BFD from the associated protocol adjacency.

Introduced 16.0.R4

Platforms All

### **check-zero** *boolean*

Synopsis Enable checking of mandatory zero fields

Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <a href="#">check-zero</a> <i>boolean</i>
Tree	<a href="#">check-zero</a>
Description	When configured to <b>true</b> , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to <b>false</b> , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Introduced	16.0.R4
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

### **export-policy** *reference*

Synopsis	Policies used to rule which routes are exported to RIP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <a href="#">export-policy</a> <i>reference</i>
Tree	<a href="#">export-policy</a>
Description	This command specifies the export route policies used to determine which routes are exported to RIP. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

**import-policy** *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <a href="#">import-policy</a> <i>reference</i>
Tree	<a href="#">import-policy</a>
Description	This command configures import route policies to determine which routes are accepted from RIP neighbors.  If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

**message-size** *number*

Synopsis	Maximum number of routes per RIP update message
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <a href="#">message-size</a> <i>number</i>
Tree	<a href="#">message-size</a>
Range	25 to 255
Introduced	16.0.R4
Platforms	All

**metric-in** *number*

Synopsis	Metric added to routes received from a RIP neighbor
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <a href="#">metric-in</a> <i>number</i>
Tree	<a href="#">metric-in</a>
Range	1 to 16
Introduced	16.0.R4
Platforms	All

**metric-out** *number*

Synopsis	Metric added to routes exported into RIP
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Context	<b>configure</b> <i>router string rip group string neighbor string metric-out number</i>
Tree	<a href="#">metric-out</a>
Range	1 to 16
Introduced	16.0.R4
Platforms	All

### **preference** *number*

Synopsis	Route preference
Context	<b>configure</b> <i>router string rip group string neighbor string preference number</i>
Tree	<a href="#">preference</a>
Range	1 to 255
Introduced	16.0.R4
Platforms	All

### **receive** *keyword*

Synopsis	Accepted version on received packets
Context	<b>configure</b> <i>router string rip group string neighbor string receive keyword</i>
Tree	<a href="#">receive</a>
Options	version-1, version-2, both, none
Introduced	16.0.R4
Platforms	All

### **send** *keyword*

Synopsis	RIP version and method used to send RIP updates
Context	<b>configure</b> <i>router string rip group string neighbor string send keyword</i>
Tree	<a href="#">send</a>
Options	none, version-1, broadcast, multicast, unicast
Introduced	16.0.R4
Platforms	All

**split-horizon *boolean***

Synopsis	Enable split horizon and poison reverse
Context	<b>configure</b> <i>router string rip group string neighbor string split-horizon boolean</i>
Tree	<a href="#">split-horizon</a>
Description	<p>When configured to <b>true</b>, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to <b>false</b>, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Introduced	16.0.R4
Platforms	All

**timers**

Synopsis	Enable the <b>timers</b> context
Context	<b>configure</b> <i>router string rip group string neighbor string timers</i>
Tree	<a href="#">timers</a>
Introduced	16.0.R4
Platforms	All

**flush *number***

Synopsis	RIP flush timer
Context	<b>configure</b> <i>router string rip group string neighbor string timers flush number</i>
Tree	<a href="#">flush</a>
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All



**timeout** *number*

Synopsis	RIP timeout timer
Context	<b>configure</b> <i>router string rip group string neighbor string timers</i> <b>timeout</b> <i>number</i>
Tree	<b>timeout</b>
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**update** *number*

Synopsis	Timer that controls the frequency of updates
Context	<b>configure</b> <i>router string rip group string neighbor string timers</i> <b>update</b> <i>number</i>
Tree	<b>update</b>
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**unicast-address** [*address*] *string*

Synopsis	Add a list entry for <b>unicast-address</b>
Context	<b>configure</b> <i>router string rip group string neighbor string</i> <b>unicast-address</b> <i>string</i>
Tree	<b>unicast-address</b>
Introduced	16.0.R4
Platforms	All

**[address] string**

Synopsis	Unicast address for the neighbor
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rip</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>unicast-address</b> <i>string</i>
Tree	<b>unicast-address</b>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**preference number**

Synopsis	Route preference
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rip</b> <b>group</b> <i>string</i> <b>preference</b> <i>number</i>
Tree	<b>preference</b>
Range	1 to 255
Introduced	16.0.R4
Platforms	All

**receive keyword**

Synopsis	Accepted version on received packets
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rip</b> <b>group</b> <i>string</i> <b>receive</b> <i>keyword</i>
Tree	<b>receive</b>
Options	version-1, version-2, both, none
Introduced	16.0.R4
Platforms	All

**send keyword**

Synopsis	RIP version and method used to send RIP updates
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rip</b> <b>group</b> <i>string</i> <b>send</b> <i>keyword</i>
Tree	<b>send</b>
Options	none, version-1, broadcast, multicast
Introduced	16.0.R4
Platforms	All

**split-horizon** *boolean*

Synopsis	Enable split horizon and poison reverse
Context	<b>configure</b> <i>router string rip group string split-horizon boolean</i>
Tree	<a href="#">split-horizon</a>
Description	<p>When configured to <b>true</b>, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to <b>false</b>, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Introduced	16.0.R4
Platforms	All

**timers**

Synopsis	Enable the <b>timers</b> context
Context	<b>configure</b> <i>router string rip group string timers</i>
Tree	<a href="#">timers</a>
Introduced	16.0.R4
Platforms	All

**flush** *number*

Synopsis	RIP flush timer
Context	<b>configure</b> <i>router string rip group string timers flush number</i>
Tree	<a href="#">flush</a>
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**timeout** *number*

Synopsis	RIP timeout timer
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rip</b> <b>group</b> <i>string</i> <b>timers</b> <b>timeout</b> <i>number</i>
Tree	<b>timeout</b>
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**update** *number*

Synopsis	Timer that controls the frequency of updates
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rip</b> <b>group</b> <i>string</i> <b>timers</b> <b>update</b> <i>number</i>
Tree	<b>update</b>
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**import-policy** *reference*

Synopsis	Import policies to decide routes for routing table
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rip</b> <b>import-policy</b> <i>reference</i>
Tree	<b>import-policy</b>
Reference	<b>configure</b> <b>policy-options</b> <b>policy-statement</b> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4

Platforms All

### **message-size** *number*

Synopsis Maximum number of routes in the RIP message  
Context **configure** *router string rip message-size number*  
Tree [message-size](#)  
Range 25 to 255  
Default 25  
Introduced 16.0.R4  
Platforms All

### **metric-in** *number*

Synopsis Metric added to routes received from a RIP neighbor  
Context **configure** *router string rip metric-in number*  
Tree [metric-in](#)  
Range 1 to 16  
Default 1  
Introduced 16.0.R4  
Platforms All

### **metric-out** *number*

Synopsis Metric added to routes exported into RIP  
Context **configure** *router string rip metric-out number*  
Tree [metric-out](#)  
Range 1 to 16  
Default 1  
Introduced 16.0.R4  
Platforms All

### **preference** *number*

Synopsis Route preference

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Context	<b>configure router</b> <i>string rip preference number</i>
Tree	<a href="#">preference</a>
Range	1 to 255
Default	100
Introduced	16.0.R4
Platforms	All

### **receive** *keyword*

Synopsis	Accepted version on received packets
Context	<b>configure router</b> <i>string rip receive keyword</i>
Tree	<a href="#">receive</a>
Options	version-1, version-2, both, none
Default	both
Introduced	16.0.R4
Platforms	All

### **send** *keyword*

Synopsis	RIP version and method used to send RIP updates
Context	<b>configure router</b> <i>string rip send keyword</i>
Tree	<a href="#">send</a>
Options	none, version-1, broadcast, multicast
Default	broadcast
Introduced	16.0.R4
Platforms	All

### **split-horizon** *boolean*

Synopsis	Enable split horizon and poison reverse
Context	<b>configure router</b> <i>string rip split-horizon boolean</i>
Tree	<a href="#">split-horizon</a>
Description	When configured to <b>true</b> , this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).

When configured to **false**, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.

Default	true
Introduced	16.0.R4
Platforms	All

## timers

Synopsis	Enable the <b>timers</b> context
Context	<b>configure</b> <i>router string rip timers</i>
Tree	<a href="#">timers</a>
Introduced	16.0.R4
Platforms	All

## flush *number*

Synopsis	RIP flush timer
Context	<b>configure</b> <i>router string rip timers flush number</i>
Tree	<a href="#">flush</a>
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

## timeout *number*

Synopsis	RIP timeout timer
Context	<b>configure</b> <i>router string rip timers timeout number</i>
Tree	<a href="#">timeout</a>

Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **update** *number*

Synopsis	Timer that controls the frequency of updates
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip</a> <a href="#">timers</a> <a href="#">update</a> <i>number</i>
Tree	<a href="#">update</a>
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **ripng**

Synopsis	Enable the <b>ripng</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ripng</a>
Tree	<a href="#">ripng</a>
Introduced	16.0.R4
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the RIPng instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ripng</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable



Introduced	16.0.R4
Platforms	All

### **bfd-liveness** *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>bfd-liveness</b> <i>boolean</i>
Tree	<a href="#">bfd-liveness</a>
Description	When configured to <b>true</b> , this command enables BFD to control the state of the associated protocol adjacency. When configured to <b>false</b> , this command removes BFD from the associated protocol adjacency.
Default	false
Introduced	16.0.R4
Platforms	All

### **check-zero** *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>check-zero</b> <i>boolean</i>
Tree	<a href="#">check-zero</a>
Description	When configured to <b>true</b> , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to <b>false</b> , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Default	false
Introduced	16.0.R4
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4

Platforms All

### **export-limit**

Synopsis Enable the **export-limit** context  
Context **configure router string ripng export-limit**  
Tree [export-limit](#)  
Introduced 16.0.R4  
Platforms All

### **log-percent number**

Synopsis Export limit before warning and SNMP notification sent  
Context **configure router string ripng export-limit log-percent number**  
Tree [log-percent](#)  
Range 1 to 100  
Introduced 16.0.R4  
Platforms All

### **number number**

Synopsis Maximum routes or prefixes exported from route table  
Context **configure router string ripng export-limit number number**  
Tree [number](#)  
Range 1 to 4294967295  
Notes This element is mandatory.  
Introduced 16.0.R4  
Platforms All

### **export-policy reference**

Synopsis Policies to determine exported routes  
Context **configure router string ripng export-policy reference**  
Tree [export-policy](#)  
Reference **configure policy-options policy-statement string**

Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

### **group** [group-name] *string*

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure</b> <i>router string ripng group string</i>
Tree	<i>group</i>
Introduced	16.0.R4
Platforms	All

### [group-name] *string*

Synopsis	RIP group name
Context	<b>configure</b> <i>router string ripng group string</i>
Tree	<i>group</i>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of RIPng neighbor interface group
Context	<b>configure</b> <i>router string ripng group string admin-state keyword</i>
Tree	<i>admin-state</i>
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

**bfd-liveness** *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	<b>configure</b> <b>router</b> <i>string ripng group string bfd-liveness boolean</i>
Tree	<a href="#">bfd-liveness</a>
Description	When configured to <b>true</b> , this command enables BFD to control the state of the associated protocol adjacency. When configured to <b>false</b> , this command removes BFD from the associated protocol adjacency.
Introduced	16.0.R4
Platforms	All

**check-zero** *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	<b>configure</b> <b>router</b> <i>string ripng group string check-zero boolean</i>
Tree	<a href="#">check-zero</a>
Description	When configured to <b>true</b> , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to <b>false</b> , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Introduced	16.0.R4
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>router</b> <i>string ripng group string description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

**export-policy** *reference*

Synopsis	Policies used to rule which routes are exported to RIP
Context	<b>configure</b> <b>router</b> <i>string ripng group string export-policy reference</i>

Tree	<a href="#">export-policy</a>
Description	This command specifies the export route policies used to determine which routes are exported to RIP.  If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

### **import-policy** *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ripng</a> <a href="#">group</a> <i>string</i> <b>import-policy</b> <i>reference</i>
Tree	<a href="#">import-policy</a>
Description	This command configures import route policies to determine which routes are accepted from RIP neighbors.  If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

### **message-size** *number*

Synopsis	Maximum number of routes in the message
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ripng</a> <a href="#">group</a> <i>string</i> <b>message-size</b> <i>number</i>
Tree	<a href="#">message-size</a>
Range	25 to 255
Introduced	16.0.R4
Platforms	All

**metric-in** *number*

Synopsis	Metric added to routes received from the neighbor
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>group</b> <i>string</i> <b>metric-in</b> <i>number</i>
Tree	<b>metric-in</b>
Range	1 to 16
Introduced	16.0.R4
Platforms	All

**metric-out** *number*

Synopsis	Metric added to routes exported into RIPng
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>group</b> <i>string</i> <b>metric-out</b> <i>number</i>
Tree	<b>metric-out</b>
Range	1 to 16
Introduced	16.0.R4
Platforms	All

**neighbor** [*interface-name*] *string*

Synopsis	Enter the <b>neighbor</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i>
Tree	<b>neighbor</b>
Introduced	16.0.R4
Platforms	All

**[interface-name]** *string*

Synopsis	Neighbor added to the RIPng group through the interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i>
Tree	<b>neighbor</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the RIPng neighbor
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

**bfd-liveness** *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>bfd-liveness</b> <i>boolean</i>
Tree	<b>bfd-liveness</b>
Description	When configured to <b>true</b> , this command enables BFD to control the state of the associated protocol adjacency.  When configured to <b>false</b> , this command removes BFD from the associated protocol adjacency.
Introduced	16.0.R4
Platforms	All

**check-zero** *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>check-zero</b> <i>boolean</i>
Tree	<b>check-zero</b>
Description	When configured to <b>true</b> , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages.  When configured to <b>false</b> , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Introduced	16.0.R4
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

**export-policy** *reference*

Synopsis	Policies used to rule which routes are exported to RIP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>export-policy</b> <i>reference</i>
Tree	<b>export-policy</b>
Description	This command specifies the export route policies used to determine which routes are exported to RIP.  If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	<b>configure</b> <b>policy-options</b> <b>policy-statement</b> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

**import-policy** *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>import-policy</b> <i>reference</i>
Tree	<b>import-policy</b>
Description	This command configures import route policies to determine which routes are accepted from RIP neighbors.  If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	<b>configure</b> <b>policy-options</b> <b>policy-statement</b> <i>string</i>
Max. Instances	5



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Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

### **message-size** *number*

Synopsis	Maximum number of routes in the message
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>message-size</b> <i>number</i>
Tree	<b>message-size</b>
Range	25 to 255
Introduced	16.0.R4
Platforms	All

### **metric-in** *number*

Synopsis	Metric added to routes received from the neighbor
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>metric-in</b> <i>number</i>
Tree	<b>metric-in</b>
Range	1 to 16
Introduced	16.0.R4
Platforms	All

### **metric-out** *number*

Synopsis	Metric added to routes exported into RIPng
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>metric-out</b> <i>number</i>
Tree	<b>metric-out</b>
Range	1 to 16
Introduced	16.0.R4
Platforms	All

### **preference** *number*

Synopsis	Route preference
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>preference</b> <i>number</i>

Tree	<a href="#">preference</a>
Range	1 to 255
Introduced	16.0.R4
Platforms	All

### **receive** *keyword*

Synopsis	Accepted version on received packets
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ripng</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <a href="#">receive</a> <i>keyword</i>
Tree	<a href="#">receive</a>
Options	none, ripng
Introduced	16.0.R4
Platforms	All

### **send** *keyword*

Synopsis	RIPng version and method used to send RIPng updates
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ripng</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <a href="#">send</a> <i>keyword</i>
Tree	<a href="#">send</a>
Options	none, ripng, unicast
Introduced	16.0.R4
Platforms	All

### **split-horizon** *boolean*

Synopsis	Enable split horizon and poison reverse
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ripng</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <a href="#">split-horizon</a> <i>boolean</i>
Tree	<a href="#">split-horizon</a>
Description	<p>When configured to <b>true</b>, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to <b>false</b>, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Introduced	16.0.R4

Platforms All

## timers

Synopsis Enable the **timers** context

Context **configure** *router string ripng group string neighbor string timers*

Tree [timers](#)

Introduced 16.0.R4

Platforms All

## flush number

Synopsis RIP flush timer

Context **configure** *router string ripng group string neighbor string timers flush number*

Tree [flush](#)

Description This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.

Range 1 to 1200

Units seconds

Notes This element is mandatory.

Introduced 16.0.R4

Platforms All

## timeout number

Synopsis RIP timeout timer

Context **configure** *router string ripng group string neighbor string timers timeout number*

Tree [timeout](#)

Description This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.

Range 1 to 1200

Units seconds

Notes This element is mandatory.

Introduced 16.0.R4

Platforms All

### **update** *number*

Synopsis Timer that controls the frequency of updates

Context **configure** *router string ripng group string neighbor string timers update number*

Tree [update](#)

Range 1 to 600

Units seconds

Notes This element is mandatory.

Introduced 16.0.R4

Platforms All

### **unicast-address** [[address](#)] *string*

Synopsis Add a list entry for **unicast-address**

Context **configure** *router string ripng group string neighbor string unicast-address string*

Tree [unicast-address](#)

Introduced 16.0.R4

Platforms All

### **[address]** *string*

Synopsis Unicast address for the neighbor

Context **configure** *router string ripng group string neighbor string unicast-address string*

Tree [unicast-address](#)

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms All

### **preference** *number*

Synopsis Route preference

Context **configure** *router string ripng group string preference number*

Tree [preference](#)

Range	1 to 255
Introduced	16.0.R4
Platforms	All

**receive** *keyword*

Synopsis	Accepted version on received packets
Context	<b>configure</b> <i>router string ripng group string receive keyword</i>
Tree	<a href="#">receive</a>
Options	none, ripng
Introduced	16.0.R4
Platforms	All

**send** *keyword*

Synopsis	RIPng version and method used to send RIPng updates
Context	<b>configure</b> <i>router string ripng group string send keyword</i>
Tree	<a href="#">send</a>
Options	none, ripng
Introduced	16.0.R4
Platforms	All

**split-horizon** *boolean*

Synopsis	Enable split horizon and poison reverse
Context	<b>configure</b> <i>router string ripng group string split-horizon boolean</i>
Tree	<a href="#">split-horizon</a>
Description	<p>When configured to <b>true</b>, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to <b>false</b>, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Introduced	16.0.R4
Platforms	All

## timers

Synopsis	Enable the <b>timers</b> context
Context	<b>configure</b> <i>router string ripng group string timers</i>
Tree	<a href="#">timers</a>
Introduced	16.0.R4
Platforms	All

## flush number

Synopsis	RIP flush timer
Context	<b>configure</b> <i>router string ripng group string timers flush number</i>
Tree	<a href="#">flush</a>
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

## timeout number

Synopsis	RIP timeout timer
Context	<b>configure</b> <i>router string ripng group string timers timeout number</i>
Tree	<a href="#">timeout</a>
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **update** *number*

Synopsis	Timer that controls the frequency of updates
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ripng</a> <a href="#">group</a> <i>string</i> <a href="#">timers</a> <a href="#">update</a> <i>number</i>
Tree	<a href="#">update</a>
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **import-policy** *reference*

Synopsis	Import policies to decide routes for routing table
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ripng</a> <a href="#">import-policy</a> <i>reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

### **message-size** *number*

Synopsis	Maximum number of routes in the message
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ripng</a> <a href="#">message-size</a> <i>number</i>
Tree	<a href="#">message-size</a>
Range	25 to 255
Default	25
Introduced	16.0.R4
Platforms	All

**metric-in** *number*

Synopsis	Metric added to routes received from the neighbor
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>metric-in</b> <i>number</i>
Tree	<b>metric-in</b>
Range	1 to 16
Default	1
Introduced	16.0.R4
Platforms	All

**metric-out** *number*

Synopsis	Metric added to routes exported into RIPng
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>metric-out</b> <i>number</i>
Tree	<b>metric-out</b>
Range	1 to 16
Default	1
Introduced	16.0.R4
Platforms	All

**preference** *number*

Synopsis	Route preference
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>preference</b> <i>number</i>
Tree	<b>preference</b>
Range	1 to 255
Default	100
Introduced	16.0.R4
Platforms	All

**receive** *keyword*

Synopsis	Accepted version on received packets
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>receive</b> <i>keyword</i>
Tree	<b>receive</b>
Options	none, ripng



Default	ripng
Introduced	16.0.R4
Platforms	All

### **send** *keyword*

Synopsis	RIPng version and method used to send RIPng updates
Context	<b>configure</b> <i>router string ripng send keyword</i>
Tree	<a href="#">send</a>
Options	none, ripng
Default	ripng
Introduced	16.0.R4
Platforms	All

### **split-horizon** *boolean*

Synopsis	Enable split horizon and poison reverse
Context	<b>configure</b> <i>router string ripng split-horizon boolean</i>
Tree	<a href="#">split-horizon</a>
Description	<p>When configured to <b>true</b>, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to <b>false</b>, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Default	true
Introduced	16.0.R4
Platforms	All

### **timers**

Synopsis	Enable the <b>timers</b> context
Context	<b>configure</b> <i>router string ripng timers</i>
Tree	<a href="#">timers</a>
Introduced	16.0.R4

Platforms All

### **flush** *number*

Synopsis RIP flush timer

Context **configure** *router string ripng timers flush number*

Tree [flush](#)

Description This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.

Range 1 to 1200

Units seconds

Notes This element is mandatory.

Introduced 16.0.R4

Platforms All

### **timeout** *number*

Synopsis RIP timeout timer

Context **configure** *router string ripng timers timeout number*

Tree [timeout](#)

Description This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.

Range 1 to 1200

Units seconds

Notes This element is mandatory.

Introduced 16.0.R4

Platforms All

### **update** *number*

Synopsis Timer that controls the frequency of updates

Context **configure** *router string ripng timers update number*

Tree [update](#)

Range 1 to 600

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Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **router-id** *string*

Synopsis	Unique router ID for the router in the AS
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">router-id</a> <i>string</i>
Tree	<a href="#">router-id</a>
Introduced	16.0.R1
Platforms	All

### **rsvp**

Synopsis	Enable the <b>rsvp</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a>
Tree	<a href="#">rsvp</a>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of RSVP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **authentication-over-bypass** *boolean*

Synopsis	Enable MD5 authentication over bypass LSP of PLR and MP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">authentication-over-bypass</a> <i>boolean</i>

Tree	<a href="#">authentication-over-bypass</a>
Description	<p>When configured to <b>true</b>, this command configures the MD5 authentication over the bypass LSP of all Point of Local Repairs (PLRs) and Merge Points (MPs) on the router. Only enable this command when the TE interfaces in the RSVP-TE network use the same MD5 authentication parameters.</p> <p>When a Point of Local Repair (PLR) activates a bypass LSP towards a Merge Point (MP), by default, the INTEGRITY object corresponding to the bypass LSP interface is not added to a transmitted RSVP message except for packets of routed RSVP messages (Resv, Srefresh, and ACK), and only when the packet is intended for a bypass LSP endpoint (PLR or MP) that is a directly connected neighbor.</p> <p>When this command is enabled, the INTEGRITY object of the interface corresponding to the bypass LSP is added to a transmitted RSVP message regardless of whether the bypass LSP endpoint (PLR or MP) is a directly connected RSVP neighbor. The INTEGRITY object is included with the following RSVP messages: Path, PathTear, PathErr, Resv, ResvTear, ResvErr, Srefresh, and ACK.</p> <p>In all cases, an RSVP message received from a PLR or a MP (sender address in the SenderTemplate or FilterSpec is different from an Extended Tunnel Id in a Session Object), and which includes the INTEGRITY object is authenticated against the bypass LSP interface. An RSVP message received from a PLR or MP without the INTEGRITY object is also accepted.</p> <p>When configured to <b>false</b>, the router disables MD5 authentication over bypass LSP of the PLRs and MPs.</p>
Default	false
Introduced	22.10.R1
Platforms	All

## dbw-accounting

Synopsis	Enable the <b>dbw-accounting</b> context
Context	<b>configure router</b> <i>string</i> <b>rsvp dbw-accounting</b>
Tree	<a href="#">dbw-accounting</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

## dbw-multiplier *number*

Synopsis	Dark Bandwidth multiplier
Context	<b>configure router</b> <i>string</i> <b>rsvp dbw-accounting dbw-multiplier</b> <i>number</i>
Tree	<a href="#">dbw-multiplier</a>
Range	0 to 1000

Units	percent
Default	100
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

## down-threshold

Synopsis	Enter the <b>down-threshold</b> context
Context	<b>configure</b> <i>router string rsvp dbw-accounting down-threshold</i>
Tree	<i>down-threshold</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

## bw number

Synopsis	Minimum difference in MRLB or MRB to trigger an update
Context	<b>configure</b> <i>router string rsvp dbw-accounting down-threshold bw number</i>
Tree	<i>bw</i>
Range	0 to 1000000
Units	megabps
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

## percent number

Synopsis	Minimum difference in percent between dark bandwidth and sampled data rate, to trigger IGP-TE update
Context	<b>configure</b> <i>router string rsvp dbw-accounting down-threshold percent number</i>
Tree	<i>percent</i>
Range	0 to 100
Units	percent
Default	0
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

### **sample-interval** *number*

Synopsis	Dark Bandwidth sample interval
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>dbw-accounting</b> <b>sample-interval</b> <i>number</i>
Tree	<a href="#">sample-interval</a>
Range	10 to 600
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

### **sample-multiplier** *number*

Synopsis	Dark Bandwidth sample multiplier
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>dbw-accounting</b> <b>sample-multiplier</b> <i>number</i>
Tree	<a href="#">sample-multiplier</a>
Range	1 to 10
Default	3
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

### **up-threshold**

Synopsis	Enter the <b>up-threshold</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>dbw-accounting</b> <b>up-threshold</b>
Tree	<a href="#">up-threshold</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

### **bw** *number*

Synopsis	Minimum difference in MRLB or MRB to trigger an update
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>dbw-accounting</b> <b>up-threshold</b> <b>bw</b> <i>number</i>
Tree	<a href="#">bw</a>
Range	0 to 1000000
Units	megabps

Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

### **percent** *number*

Synopsis	Minimum difference in percent between dark bandwidth and sampled data rate, to trigger IGP-TE update
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>dbw-accounting</b> <b>up-threshold</b> <b>percent</b> <i>number</i>
Tree	<b>percent</b>
Range	0 to 100
Units	percent
Default	0
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

### **diffserv-te**

Synopsis	Enable the <b>diffserv-te</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>diffserv-te</b>
Tree	<b>diffserv-te</b>
Introduced	16.0.R1
Platforms	All

### **admission-control-model** *keyword*

Synopsis	Parameters for the DiffServ TE node
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>diffserv-te</b> <b>admission-control-model</b> <i>keyword</i>
Tree	<b>admission-control-model</b>
Options	mam, rdm
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## class-type-bw

Synopsis	Enter the <b>class-type-bw</b> context
Context	<b>configure</b> <i>router string rsvp diffserv-te class-type-bw</i>
Tree	<i>class-type-bw</i>
Introduced	16.0.R1
Platforms	All

## ct0 number

Synopsis	RSVP interface bandwidth percentage for class type 0
Context	<b>configure</b> <i>router string rsvp diffserv-te class-type-bw ct0 number</i>
Tree	<i>ct0</i>
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

## ct1 number

Synopsis	RSVP interface bandwidth percentage for class type 1
Context	<b>configure</b> <i>router string rsvp diffserv-te class-type-bw ct1 number</i>
Tree	<i>ct1</i>
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

## ct2 number

Synopsis	RSVP interface bandwidth percentage for class type 2
Context	<b>configure</b> <i>router string rsvp diffserv-te class-type-bw ct2 number</i>
Tree	<i>ct2</i>
Range	0 to 100
Default	0
Introduced	16.0.R1



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Platforms All

### **ct3 number**

Synopsis RSVP interface bandwidth percentage for class type 3

Context **configure router string rsvp diffserv-te class-type-bw ct3 number**

Tree [ct3](#)

Range 0 to 100

Default 0

Introduced 16.0.R1

Platforms All

### **ct4 number**

Synopsis RSVP interface bandwidth percentage for class type 4

Context **configure router string rsvp diffserv-te class-type-bw ct4 number**

Tree [ct4](#)

Range 0 to 100

Default 0

Introduced 16.0.R1

Platforms All

### **ct5 number**

Synopsis RSVP interface bandwidth percentage for class type 5

Context **configure router string rsvp diffserv-te class-type-bw ct5 number**

Tree [ct5](#)

Range 0 to 100

Default 0

Introduced 16.0.R1

Platforms All

### **ct6 number**

Synopsis RSVP interface bandwidth percentage for class type 6

Context	<b>configure</b> <i>router string rsvp diffserv-te class-type-bw ct6 number</i>
Tree	<a href="#">ct6</a>
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

**ct7 number**

Synopsis	RSVP interface bandwidth percentage for class type 7
Context	<b>configure</b> <i>router string rsvp diffserv-te class-type-bw ct7 number</i>
Tree	<a href="#">ct7</a>
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

**fc [fc-name] keyword**

Synopsis	Enter the <b>fc</b> list instance
Context	<b>configure</b> <i>router string rsvp diffserv-te fc keyword</i>
Tree	<a href="#">fc</a>
Introduced	16.0.R1
Platforms	All

**[fc-name] keyword**

Synopsis	Forwarding class for this mapping
Context	<b>configure</b> <i>router string rsvp diffserv-te fc keyword</i>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**class-type** *number*

Synopsis	Diff-Serv Class Type (CT) for an LSP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>diffserv-te</b> <b>fc</b> <i>keyword</i> <b>class-type</b> <i>number</i>
Tree	<b>class-type</b>
Range	0 to 7
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**te-class** [**te-class-number**] *number*

Synopsis	Enter the <b>te-class</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>diffserv-te</b> <b>te-class</b> <i>number</i>
Tree	<b>te-class</b>
Introduced	16.0.R1
Platforms	All

**[te-class-number]** *number*

Synopsis	TE class number
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>diffserv-te</b> <b>te-class</b> <i>number</i>
Tree	<b>te-class</b>
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

**class-type** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Class type (CT) associated with the TE class
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>diffserv-te</b> <b>te-class</b> <i>number</i> <b>class-type</b> <i>number</i>

Tree	<a href="#">class-type</a>
Range	0 to 7
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### priority *number*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	TE class priority
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>diffserv-te</b> <b>te-class</b> <i>number</i> <b>priority</b> <i>number</i>
Tree	<a href="#">priority</a>
Range	0 to 7
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### entropy-label-capability *boolean*

Synopsis	Allow receiving and processing of the entropy label and ELI on incoming packets of RSVP LSPs
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>entropy-label-capability</b> <i>boolean</i>
Tree	<a href="#">entropy-label-capability</a>
Default	false
Introduced	16.0.R1
Platforms	All

### graceful-restart

Synopsis	Enter the <b>graceful-restart</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>graceful-restart</b>
Tree	<a href="#">graceful-restart</a>
Introduced	16.0.R1

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Platforms All

### **max-recovery** *number*

Synopsis Maximum time to wait before a graceful helper recovers the session

Context **configure** **router** *string* **rsvp** **graceful-restart** **max-recovery** *number*

Tree [max-recovery](#)

Range 1 to 1800

Units seconds

Default 300

Introduced 16.0.R1

Platforms All

### **max-restart** *number*

Synopsis Maximum time that a graceful helper waits for session restart after the neighbor is considered down

Context **configure** **router** *string* **rsvp** **graceful-restart** **max-restart** *number*

Tree [max-restart](#)

Range 1 to 300

Units seconds

Default 120

Introduced 16.0.R1

Platforms All

### **graceful-shutdown** *boolean*

Synopsis Initiate a graceful shutdown of all RSVP interfaces on the node

Context **configure** **router** *string* **rsvp** **graceful-shutdown** *boolean*

Tree [graceful-shutdown](#)

Default false

Introduced 16.0.R1

Platforms All

**implicit-null-label** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Signal the implicit null option for all RSVP LSPs
Context	<b>configure</b> <i>router</i> <i>string</i> <i>rsvp</i> <b>implicit-null-label</b> <i>boolean</i>
Tree	<a href="#">implicit-null-label</a>
Default	false
Introduced	16.0.R1
Platforms	All

**include-node-id-in-rro** *boolean*

Synopsis	Include the node-id sub-object in the RRO (Record Route Object) on the RSVP instance
Context	<b>configure</b> <i>router</i> <i>string</i> <i>rsvp</i> <b>include-node-id-in-rro</b> <i>boolean</i>
Tree	<a href="#">include-node-id-in-rro</a>
Default	false
Introduced	16.0.R1
Platforms	All

**interface** [[interface-name](#)] *reference*

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure</b> <i>router</i> <i>string</i> <i>rsvp</i> <b>interface</b> <i>reference</i>
Tree	<a href="#">interface</a>
Description	<p>Commands in this context configure the attributes of the RSVP protocol support on an IP interface. RSVP commands are not executed on an IP interface if RSVP is not enabled.</p> <p>The RSVP interface must be administratively disabled before it can be deleted.</p> <p>A corresponding MPLS interface must also be configured. The RSVP interface cannot be deleted without also deleting the MPLS interface.</p>
Introduced	16.0.R1
Platforms	All

**[interface-name] reference**

Synopsis	Index for router RSVP interface
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">rsvp</a> <a href="#">interface</a> <a href="#">reference</a>
Tree	<a href="#">interface</a>
Reference	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of RSVP on the IP interface
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">rsvp</a> <a href="#">interface</a> <a href="#">reference</a> <a href="#">admin-state</a> <a href="#">keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**authentication-key string**

Synopsis	Authentication or hash key string
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">rsvp</a> <a href="#">interface</a> <a href="#">reference</a> <a href="#">authentication-key</a> <a href="#">string</a>
Tree	<a href="#">authentication-key</a>

**Description** This command configures the authentication key for use between RSVP neighbors to authenticate RSVP messages. Authentication uses the MD5 message-based digest.

When enabled on an RSVP interface, authentication of RSVP messages operates in both directions of the interface. A router maintains a security association using one authentication key for each interface to an RSVP neighbor.

An RSVP neighbor transmits an authenticating digest of the RSVP message that is computed using the shared authentication key and a keyed-hash algorithm. The message digest is included in an INTEGRITY object, which also contains a flags field, a key identifier field, and a sequence number field. An RSVP neighbor uses the key together with the authentication algorithm to process received RSVP messages. The RSVP MD5 authentication complies to the procedures for RSVP message generation in RFC 2747, *RSVP Cryptographic Authentication*.

The MD5 implementation does not support the authentication challenge procedures in RFC 2747.

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String Length 1 to 51  
Introduced 16.0.R1  
Platforms All

### **authentication-keychain** *reference*

Synopsis TCP authentication keychain for the session  
Context **configure** [router](#) *string* [rsvp](#) [interface](#) *reference* [authentication-keychain](#) *reference*  
Tree [authentication-keychain](#)  
Reference **configure** [system](#) [security](#) [keychains](#) [keychain](#) *string*  
Introduced 16.0.R3  
Platforms All

### **bfd-liveness** *boolean*

Synopsis Enable BFD  
Context **configure** [router](#) *string* [rsvp](#) [interface](#) *reference* [bfd-liveness](#) *boolean*  
Tree [bfd-liveness](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **class-type-bw**

Synopsis Enable the **class-type-bw** context  
Context **configure** [router](#) *string* [rsvp](#) [interface](#) *reference* [class-type-bw](#)  
Tree [class-type-bw](#)  
Introduced 16.0.R1  
Platforms All

### **ct0** *number*

Synopsis Percentage of link bandwidth for class type (CT) 0  
Context **configure** [router](#) *string* [rsvp](#) [interface](#) *reference* [class-type-bw](#) [ct0](#) *number*  
Tree [ct0](#)



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Range	0 to 100
Introduced	16.0.R1
Platforms	All

### **ct1 number**

Synopsis	Percentage of link bandwidth for class type (CT) 1
Context	<b>configure router</b> <i>string</i> <b>rsvp interface</b> <i>reference</i> <b>class-type-bw ct1 number</b>
Tree	<b>ct1</b>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

### **ct2 number**

Synopsis	Percentage of link bandwidth for class type (CT) 2
Context	<b>configure router</b> <i>string</i> <b>rsvp interface</b> <i>reference</i> <b>class-type-bw ct2 number</b>
Tree	<b>ct2</b>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

### **ct3 number**

Synopsis	Percentage of link bandwidth for class type (CT) 3
Context	<b>configure router</b> <i>string</i> <b>rsvp interface</b> <i>reference</i> <b>class-type-bw ct3 number</b>
Tree	<b>ct3</b>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

### **ct4 number**

Synopsis	Percentage of link bandwidth for class type (CT) 4
Context	<b>configure router</b> <i>string</i> <b>rsvp interface</b> <i>reference</i> <b>class-type-bw ct4 number</b>

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Tree	<a href="#">ct4</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

### **ct5 number**

Synopsis	Percentage of link bandwidth for class type (CT) 5
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">interface</a> <i>reference</i> <a href="#">class-type-bw</a> <a href="#">ct5</a> <i>number</i>
Tree	<a href="#">ct5</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

### **ct6 number**

Synopsis	Percentage of link bandwidth for class type (CT) 6
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">interface</a> <i>reference</i> <a href="#">class-type-bw</a> <a href="#">ct6</a> <i>number</i>
Tree	<a href="#">ct6</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

### **ct7 number**

Synopsis	Percentage of link bandwidth for class type (CT) 7
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">interface</a> <i>reference</i> <a href="#">class-type-bw</a> <a href="#">ct7</a> <i>number</i>
Tree	<a href="#">ct7</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

### **dbw-down-threshold**

Synopsis	Enable the <b>dbw-down-threshold</b> context
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">interface</a> <i>reference</i> <a href="#">dbw-down-threshold</a>
Tree	<a href="#">dbw-down-threshold</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

**bw number**

Synopsis	Minimum difference in MRLB or MRB to trigger an update
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">interface</a> <i>reference</i> <a href="#">dbw-down-threshold</a> <a href="#">bw</a> <i>number</i>
Tree	<a href="#">bw</a>
Range	0 to 1000000
Units	megabps
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

**percent number**

Synopsis	Minimum difference in percent between dark bandwidth and sampled data rate, to trigger IGP-TE update
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">interface</a> <i>reference</i> <a href="#">dbw-down-threshold</a> <a href="#">percent</a> <i>number</i>
Tree	<a href="#">percent</a>
Range	0 to 100
Units	percent
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

**dbw-multiplier number**

Synopsis	Configure the Dark Bandwidth multiplier.
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">interface</a> <i>reference</i> <a href="#">dbw-multiplier</a> <i>number</i>
Tree	<a href="#">dbw-multiplier</a>
Range	0 to 1000
Units	percent
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

## dbw-up-threshold

Synopsis	Enable the <b>dbw-up-threshold</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">interface</a> <i>reference</i> <a href="#">dbw-up-threshold</a>
Tree	<a href="#">dbw-up-threshold</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

## bw number

Synopsis	Minimum difference in MRLB or MRB to trigger an update
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">interface</a> <i>reference</i> <a href="#">dbw-up-threshold</a> <a href="#">bw</a> <i>number</i>
Tree	<a href="#">bw</a>
Range	0 to 1000000
Units	megabps
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

## percent number

Synopsis	Minimum difference in percent between dark bandwidth and sampled data rate, to trigger IGP-TE update
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">interface</a> <i>reference</i> <a href="#">dbw-up-threshold</a> <a href="#">percent</a> <i>number</i>
Tree	<a href="#">percent</a>
Range	0 to 100
Units	percent
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

## graceful-restart-helper-mode boolean

Synopsis	Enable graceful restart helper for the RSVP interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">interface</a> <i>reference</i> <a href="#">graceful-restart-helper-mode</a> <i>boolean</i>
Tree	<a href="#">graceful-restart-helper-mode</a>
Default	false

Introduced 16.0.R1  
 Platforms All

### **graceful-shutdown** *boolean*

Synopsis Initiate a graceful shutdown of RSVP interface  
 Context **configure** *router string rsvp interface reference graceful-shutdown boolean*  
 Tree [graceful-shutdown](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **hello-interval** *number*

Synopsis Time between RSVP Hello messages  
 Context **configure** *router string rsvp interface reference hello-interval number*  
 Tree [hello-interval](#)  
 Range 0 to 60  
 Units seconds  
 Default 3  
 Introduced 16.0.R1  
 Platforms All

### **implicit-null-label** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Signal the implicit null label value for all LSPs  
 Context **configure** *router string rsvp interface reference implicit-null-label boolean*  
 Tree [implicit-null-label](#)  
 Introduced 16.0.R1  
 Platforms All

## refresh-reduction

Synopsis	Enable the <b>refresh-reduction</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">interface</a> <i>reference</i> <a href="#">refresh-reduction</a>
Tree	<a href="#">refresh-reduction</a>
Introduced	16.0.R1
Platforms	All

## reliable-delivery *boolean*

Synopsis	Reliable delivery of RSVP messages over the RSVP interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">interface</a> <i>reference</i> <a href="#">refresh-reduction</a> <a href="#">reliable-delivery</a> <i>boolean</i>
Tree	<a href="#">reliable-delivery</a>
Default	false
Introduced	16.0.R1
Platforms	All

## subscription *number*

Synopsis	Percentage of the link bandwidth to use for reservation
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">interface</a> <i>reference</i> <a href="#">subscription</a> <i>number</i>
Tree	<a href="#">subscription</a>
Range	0 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

## te-down-threshold

Synopsis	Enable the <b>te-down-threshold</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">interface</a> <i>reference</i> <a href="#">te-down-threshold</a>
Tree	<a href="#">te-down-threshold</a>
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Threshold level per interface
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">rsvp</a> <a href="#">interface</a> <a href="#">reference</a> <a href="#">te-down-threshold</a> <a href="#">value</a> <a href="#">number</a>
Tree	<a href="#">value</a>
Range	0 to 100
Max. Instances	16
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R2
Platforms	All

**te-up-threshold**

Synopsis	Enable the <b>te-up-threshold</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">rsvp</a> <a href="#">interface</a> <a href="#">reference</a> <a href="#">te-up-threshold</a>
Tree	<a href="#">te-up-threshold</a>
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Threshold level per interface
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">rsvp</a> <a href="#">interface</a> <a href="#">reference</a> <a href="#">te-up-threshold</a> <a href="#">value</a> <a href="#">number</a>
Tree	<a href="#">value</a>
Range	0 to 100
Max. Instances	16
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R2
Platforms	All

### **keep-multiplier** *number*

Synopsis	Value for the keep-multiplier to declare a reservation or neighbor as down
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>keep-multiplier</b> <i>number</i>
Tree	<b>keep-multiplier</b>
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

### **msg-pacing**

Synopsis	Enable the <b>msg-pacing</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>msg-pacing</b>
Tree	<b>msg-pacing</b>
Introduced	16.0.R1
Platforms	All

### **max-burst** *number*

Synopsis	Maximum RSVP messages that are sent over a specified period when message pacing is enabled
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>msg-pacing</b> <b>max-burst</b> <i>number</i>
Tree	<b>max-burst</b>
Range	100 to 1000
Default	650
Introduced	16.0.R1
Platforms	All

### **period** *number*

Synopsis	Time for RSVP message pacing
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>msg-pacing</b> <b>period</b> <i>number</i>
Tree	<b>period</b>
Range	100 to 1000
Units	milliseconds



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Default	100
Introduced	16.0.R1
Platforms	All

### **p2mp-merge-point-abort-timer** *number*

Synopsis	Merge pointer timer for abort timer
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>p2mp-merge-point-abort-timer</b> <i>number</i>
Tree	<b>p2mp-merge-point-abort-timer</b>
Range	1 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

### **p2p-merge-point-abort-timer** *number*

Synopsis	Merge pointer timer for P2P paths
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>p2p-merge-point-abort-timer</b> <i>number</i>
Tree	<b>p2p-merge-point-abort-timer</b>
Range	1 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

### **preemption-timer** *number*

Synopsis	Preemption timer for the MPLS instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>preemption-timer</b> <i>number</i>
Tree	<b>preemption-timer</b>
Range	0 to 1800
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	All

**rapid-retransmit-time** *number*

Synopsis	Rapid retransmission interval to reliably deliver RSVP messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>rapid-retransmit-time</b> <i>number</i>
Tree	<b>rapid-retransmit-time</b>
Range	1 to 100
Units	deciseconds
Default	5
Introduced	16.0.R1
Platforms	All

**rapid-retry-limit** *number*

Synopsis	Rapid retry limit to reliably deliver RSVP messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>rapid-retry-limit</b> <i>number</i>
Tree	<b>rapid-retry-limit</b>
Range	1 to 6
Default	3
Introduced	16.0.R1
Platforms	All

**refresh-reduction-over-bypass** *boolean*

Synopsis	Enable refresh reduction capabilities over tunnels
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>refresh-reduction-over-bypass</b> <i>boolean</i>
Tree	<b>refresh-reduction-over-bypass</b>
Default	false
Introduced	16.0.R1
Platforms	All

**refresh-time** *number*

Synopsis	Interval between refresh messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>refresh-time</b> <i>number</i>
Tree	<b>refresh-time</b>

Range	1 to 65535
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	All

### **te-down-threshold** *number*

Synopsis	Value for the te-down-threshold
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">te-down-threshold</a> <i>number</i>
Tree	<a href="#">te-down-threshold</a>
Range	0 to 100
Max. Instances	16
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **te-threshold-update**

Synopsis	Enable the <b>te-threshold-update</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">te-threshold-update</a>
Tree	<a href="#">te-threshold-update</a>
Introduced	16.0.R1
Platforms	All

### **on-cac-failure** *boolean*

Synopsis	CAC (Call Admission Control) failure-triggered IGP update
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">te-threshold-update</a> <a href="#">on-cac-failure</a> <i>boolean</i>
Tree	<a href="#">on-cac-failure</a>
Default	false
Introduced	16.0.R1
Platforms	All

**update-timer** *number*

Synopsis	Timer-based IGP updates
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>te-threshold-update</b> <b>update-timer</b> <i>number</i>
Tree	<b>update-timer</b>
Range	1 to 300
Units	seconds
Introduced	16.0.R1
Platforms	All

**te-up-threshold** *number*

Synopsis	Value for the te-up-threshold
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>te-up-threshold</b> <i>number</i>
Tree	<b>te-up-threshold</b>
Range	0 to 100
Max.	16
Instances	
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

**segment-routing**

Synopsis	Enter the <b>segment-routing</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b>
Tree	<b>segment-routing</b>
Introduced	16.0.R1
Platforms	All

**maintenance-policy** [*policy-name*] *string*

Synopsis	Enter the <b>maintenance-policy</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>maintenance-policy</b> <i>string</i>
Tree	<b>maintenance-policy</b>

Description	Commands in this context configure a named maintenance policy that can be applied to SR policy candidate paths that are either statically configured or imported via BGP.
Introduced	20.10.R1
Platforms	All

**[policy-name]** *string*

Synopsis	Maintenance policy name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>maintenance-policy</b> <i>string</i>
Tree	<b>maintenance-policy</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the maintenance policy
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>maintenance-policy</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Description	This command sets the administrative state of the maintenance policy. A maintenance policy must be administratively disabled to change any of the parameters. When a maintenance template is administratively disabled, all applicable candidate paths are removed from the data path.
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	All

**bfd-liveness** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable seamless BFD for segment lists of candidate path
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Context	<b>configure</b> <i>router string segment-routing maintenance-policy string bfd-liveness boolean</i>
Tree	<a href="#">bfd-liveness</a>
Description	When configured to <b>true</b> , this command enables seamless BFD on every segment list of an SR policy candidate path to which the maintenance policy is applied. The BFD template configures the parameters for the BFD session. When configured to <b>false</b> , seamless BFD is disabled.
Default	false
Introduced	20.10.R1
Platforms	All

### **bfd-template** *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	BFD template to be used by seamless BFD
Context	<b>configure</b> <i>router string segment-routing maintenance-policy string bfd-template reference</i>
Tree	<a href="#">bfd-template</a>
Description	This command references a named BFD template to be used by seamless BFD. A BFD template must exist on the system before being referenced from a maintenance policy. The template specifies parameters that are used by the BFD session, such as the minimum transmit and receive control packet timer intervals.
Reference	<b>configure</b> <i>bfd bfd-template string</i>
Introduced	20.10.R1
Platforms	All

### **hold-down-timer** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Hold down timer for SR policy candidate paths
Context	<b>configure</b> <i>router string segment-routing maintenance-policy string hold-down-timer number</i>
Tree	<a href="#">hold-down-timer</a>

Description	<p>This command configures the hold down timer for the maintenance policy. The purpose of the timer is to prevent bouncing of the SR policy path state if S-BFD sessions associated with the segment lists flap, causing the threshold to be repeatedly crossed in a short period of time.</p> <p>The timer is started when the number of up S-BFD sessions drops below the threshold. The SR policy path is not considered to be up again until the hold down timer has expired and the number of up S-BFD sessions reaches or exceeds the threshold and the internal hold timer is not running.</p> <p>If the revert timer is also configured, the revert timer is not started until after the number of up S-BFD sessions equals or exceeds the threshold and the hold down timer for the primary candidate path has expired.</p>
Range	0 to 5000
Units	deciseconds
Default	0
Introduced	20.10.R1
Platforms	All

### **mode** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Protection mode for SR policy candidate paths
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>maintenance-policy</b> <i>string</i> <b>mode</b> <i>keyword</i>
Tree	<b>mode</b>
Description	This command specifies the data path programming and protection mechanism for SR policy candidate paths to which the maintenance policy is applied.
Options	none, ecmp-protected, linear
Default	none
Introduced	20.10.R1
Platforms	All

### **return-path-label** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	S-BFD return-path label
Context	<b>configure</b> <i>router</i> <i>string</i> <i>segment-routing</i> <i>maintenance-policy</i> <i>string</i> <i>return-path-label</i> <i>number</i>
Tree	<i>return-path-label</i>
Description	<p>This command configures the S-BFD session to echo mode and adds an additional MPLS label to the bottom of the label stack for the S-BFD packet.</p> <p>The command applies to the initiator of the S-BFD sessions. The return-path label may be a binding SID for an SR policy or other MPLS path configured on the reflector router. Instead of being routed through the IGP path, the S-BFD packet returns to the initiator through this MPLS return path.</p> <p>If the command is deleted, S-BFD returns to asynchronous mode and no return-path label is pushed by the initiator node. Any S-BFD packets for this LSP or path that the reflector receives are routed through the IGP path.</p>
Range	32 to 1048512
Introduced	22.10.R1
Platforms	All

### **revert-timer** *number*

Synopsis	Revert timer for SR policy candidate paths
Context	<b>configure</b> <i>router</i> <i>string</i> <i>segment-routing</i> <i>maintenance-policy</i> <i>string</i> <i>revert-timer</i> <i>number</i>
Tree	<i>revert-timer</i>
Description	<p>This command configures the revert timer for SR Policy candidate paths.</p> <p>The revert timer is started when the primary path recovers (the number of S-BFD sessions that are up equals or exceeds the threshold value and the hold down timer has expired). When the timer expires, the system reverts to the primary path.</p>
Range	0 to 4320
Units	minutes
Default	0
Introduced	20.10.R1
Platforms	All

### **threshold** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



Synopsis	Minimum number of up S-BFD sessions for up path status
Context	<b>configure</b> <i>router string</i> <a href="#">segment-routing maintenance-policy string</a> <a href="#">threshold number</a>
Tree	<a href="#">threshold</a>
Description	This command configures the minimum number of S-BFD sessions that must be up for the SR policy candidate path to be considered up. If the number of up sessions is below this threshold value, the policy candidate path is marked as BFD degraded by the system.  This command is only valid in the <b>ecmp-protected</b> mode.
Range	1 to 32
Default	1
Introduced	20.10.R1
Platforms	All

### segment-routing-v6

Synopsis	Enable the <b>segment-routing-v6</b> context
Context	<b>configure</b> <i>router string</i> <a href="#">segment-routing segment-routing-v6</a>
Tree	<a href="#">segment-routing-v6</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### base-routing-instance

Synopsis	Enter the <b>base-routing-instance</b> context
Context	<b>configure</b> <i>router string</i> <a href="#">segment-routing segment-routing-v6 base-routing-instance</a>
Tree	<a href="#">base-routing-instance</a>
Description	Commands in this context configure SRv6 SID functions for End, End.X, and service SIDs for IPv4 and IPv6 prefixes in the base routing instance.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### locator [[locator-name](#)] *reference*

Synopsis	Enter the <b>locator</b> list instance
Context	<b>configure</b> <i>router string</i> <a href="#">segment-routing segment-routing-v6 base-routing-instance locator reference</a>

Tree	<a href="#">locator</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **[locator-name]** *reference*

Synopsis	SRv6 locator name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">locator</a> <i>reference</i>
Tree	<a href="#">locator</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">locator</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **function**

Synopsis	Enter the <b>function</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">locator</a> <i>reference</i> <b>function</b>
Tree	<a href="#">function</a>
Description	Commands in this context configure the function value of SRv6 SIDs. The <b>end-dt46</b> command is mutually exclusive with the <b>end-dt4</b> and <b>end-dt6</b> commands.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **end** [[value](#)] *number*

Synopsis	Enter the <b>end</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">locator</a> <i>reference</i> <a href="#">function</a> <b>end</b> <i>number</i>
Tree	<a href="#">end</a>
Description	Commands in this context configure the attributes of SRv6 End SID function. The End SID functions for each SRH mode must be statically allocated. The value is not automatically allocated by default for a locator.
Max. Instances	8

Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**[value]** *number*

Synopsis	SRv6 SID function value
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">locator</a> <i>reference</i> <a href="#">function</a> <b>end</b> <i>number</i>
Tree	<a href="#">end</a>
Range	1 to 1048575
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**srh-mode** *keyword*

Synopsis	Segment Routing Header (SRH) mode
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">locator</a> <i>reference</i> <a href="#">function</a> <b>end</b> <i>number</i> <b>srh-mode</b> <i>keyword</i>
Tree	<a href="#">srh-mode</a>
Description	This command configures the popping mode for the SID.
Options	psp, usp
Default	psp
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**end-dt4**

Synopsis	Enable the <b>end-dt4</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">locator</a> <i>reference</i> <a href="#">function</a> <b>end-dt4</b>
Tree	<a href="#">end-dt4</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**value number**

Synopsis	SRv6 function value
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">locator</a> <a href="#">reference</a> <a href="#">function</a> <a href="#">end-dt4</a> <a href="#">value</a> <a href="#">number</a>
Tree	<a href="#">value</a>
Range	1 to 1048575
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**end-dt46**

Synopsis	Enable the <b>end-dt46</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">locator</a> <a href="#">reference</a> <a href="#">function</a> <a href="#">end-dt46</a>
Tree	<a href="#">end-dt46</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**value number**

Synopsis	SRv6 function value
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">locator</a> <a href="#">reference</a> <a href="#">function</a> <a href="#">end-dt46</a> <a href="#">value</a> <a href="#">number</a>
Tree	<a href="#">value</a>
Range	1 to 1048575
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**end-dt6**

Synopsis	Enable the <b>end-dt6</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">locator</a> <a href="#">reference</a> <a href="#">function</a> <a href="#">end-dt6</a>
Tree	<a href="#">end-dt6</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**value** *number*

Synopsis	SRv6 function value
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>segment-routing-v6</b> <b>base-routing-instance</b> <b>locator</b> <i>reference</i> <b>function</b> <b>end-dt6</b> <b>value</b> <i>number</i>
Tree	<b>value</b>
Range	1 to 1048575
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**end-x** [*value*] *number*

Synopsis	Enter the <b>end-x</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>segment-routing-v6</b> <b>base-routing-instance</b> <b>locator</b> <i>reference</i> <b>function</b> <b>end-x</b> <i>number</i>
Tree	<b>end-x</b>
Description	<p>Commands in this context configure the attributes of the End.X SID function associated with a P2P interface.</p> <p>A static function value can be configured for each combination of SRH mode and protection type. For a specific interface, the static function value associated with the same combination of protection type and SRH mode overrides any corresponding function value that is automatically allocated (<b>end.x-auto-allocate</b> list configuration).</p> <p>If more than one value is configured for an interface and combination of SRH mode and protection type, they are all advertised in IS-IS.</p> <p>When used in remote TI-LFA repair tunnel programming, IS-IS uses rules to select one End.X value from the multiple values received in IS-IS link advertisements.</p> <p>Values assigned to loopback and system interfaces are not advertised in IS-IS.</p> <p>End.X SID functions for adjacencies over broadcast interfaces are always automatically allocated based on the configuration of the <b>end.x-auto-allocate</b> list.</p>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**[value]** *number*

Synopsis	SRv6 SID function value
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>segment-routing-v6</b> <b>base-routing-instance</b> <b>locator</b> <i>reference</i> <b>function</b> <b>end-x</b> <i>number</i>
Tree	<b>end-x</b>

Range	1 to 1048575
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **interface-name** *reference*

Synopsis	Interface name
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">locator</a> <i>reference</i> <a href="#">function</a> <a href="#">end-x</a> <i>number</i> <b>interface-name</b> <i>reference</i>
Tree	<a href="#">interface-name</a>
Reference	<b>configure</b> <b>router</b> <i>string</i> <a href="#">interface</a> <i>string</i>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **protection** *keyword*

Synopsis	Adjacency protection for SID function
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">locator</a> <i>reference</i> <a href="#">function</a> <a href="#">end-x</a> <i>number</i> <b>protection</b> <i>keyword</i>
Tree	<a href="#">protection</a>
Description	This command configures the adjacency protection type for the SID function.
Options	unprotected, protected
Default	protected
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **srh-mode** *keyword*

Synopsis	Segment Routing Header (SRH) mode
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">locator</a> <i>reference</i> <a href="#">function</a> <a href="#">end-x</a> <i>number</i> <b>srh-mode</b> <i>keyword</i>
Tree	<a href="#">srh-mode</a>
Description	This command configures the popping mode for the SID.
Options	psp, usp

Default	psp
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **end-x-auto-allocate** [*srh-mode*] *keyword* *protection keyword*

Synopsis	Add a list entry for <b>end-x-auto-allocate</b>
Context	<b>configure</b> <i>router string</i> <i>segment-routing</i> <i>segment-routing-v6</i> <i>base-routing-instance</i> <i>locator reference</i> <i>function</i> <b>end-x-auto-allocate</b> <i>keyword</i> <i>protection keyword</i>
Tree	<a href="#">end-x-auto-allocate</a>
Description	This command adds a list entry for the automatic allocation of the End.X SID function for all adjacencies over all network interfaces on the router (P2P and broadcast interfaces). A list entry is a combination of the protection type and the SRH mode. Any combinations in addition to the maximum supported by this command must be allocated statically under each P2P interface ( <b>end.x</b> configuration). When no list entries are configured, no End.X function values are automatically allocated by default for a locator.
Max. Instances	2
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **[srh-mode]** *keyword*

Synopsis	Segment Routing Header (SRH) mode
Context	<b>configure</b> <i>router string</i> <i>segment-routing</i> <i>segment-routing-v6</i> <i>base-routing-instance</i> <i>locator reference</i> <i>function</i> <b>end-x-auto-allocate</b> <i>keyword</i> <i>protection keyword</i>
Tree	<a href="#">end-x-auto-allocate</a>
Description	This command specifies the popping mode for the automatically allocated SID.
Options	psp, usp
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **protection** *keyword*

Synopsis	Adjacency protection for automatic SID function
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Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">locator</a> <i>reference</i> <a href="#">function</a> <a href="#">end-x-auto-allocate</a> <i>keyword</i> <a href="#">protection</a> <i>keyword</i>
Tree	<a href="#">end-x-auto-allocate</a>
Description	This command specifies the adjacency protection for the automatically allocated SID function.
Options	unprotected, protected
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **micro-segment-locator** [[locator-name](#)] *reference*

Synopsis	Enter the <b>micro-segment-locator</b> list instance
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">micro-segment-locator</a> <i>reference</i>
Tree	<a href="#">micro-segment-locator</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **[locator-name]** *reference*

Synopsis	SRv6 micro-segment locator name
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">micro-segment-locator</a> <i>reference</i>
Tree	<a href="#">micro-segment-locator</a>
Description	This command references a micro-segment locator name defined in the <b>configure router segment-routing segment-routing-v6</b> context. This command assigns a micro-segment locator to BGP for use with Base router routes.
Reference	<b>configure</b> <i>router</i> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment-locator</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **function**

Synopsis	Enter the <b>function</b> context
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Context	<b>configure</b> <i>router string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">micro-segment-locator</a> <i>reference</i> <i>function</i>
Tree	<a href="#">function</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**ua** [*value*] *number*

Synopsis	Enter the <b>ua</b> list instance
Context	<b>configure</b> <i>router string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">micro-segment-locator</a> <i>reference</i> <i>function</i> <b>ua</b> <i>number</i>
Tree	<a href="#">ua</a>
Description	Commands in this context configure the attributes of the uA micro-SID function associated with a P2P interface. The uA micro-SID function encodes the behavior of an adjacency SID.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**[value]** *number*

Synopsis	SRv6 SID function value
Context	<b>configure</b> <i>router string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">micro-segment-locator</a> <i>reference</i> <i>function</i> <b>ua</b> <i>number</i>
Tree	<a href="#">ua</a>
Range	1 to 1048575
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**interface-name** *reference*

Synopsis	Interface name
Context	<b>configure</b> <i>router string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">micro-segment-locator</a> <i>reference</i> <i>function</i> <b>ua</b> <i>number</i> <b>interface-name</b> <i>reference</i>
Tree	<a href="#">interface-name</a>
Reference	<b>configure</b> <i>router string</i> <a href="#">interface</a> <i>string</i>
Introduced	22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **protection** *keyword*

Synopsis Adjacency protection for SID function

Context **configure** *router string segment-routing segment-routing-v6 base-routing-instance micro-segment-locator reference function ua number protection keyword*

Tree [protection](#)

Description This command configures the adjacency protection type for the SID function.

Options unprotected, protected

Default protected

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **srh-mode** *keyword*

Synopsis Segment Routing Header (SRH) mode

Context **configure** *router string segment-routing segment-routing-v6 base-routing-instance micro-segment-locator reference function ua number srh-mode keyword*

Tree [srh-mode](#)

Description This command configures the popping mode for the SID.

Options psp, usp

Default psp

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **ua-auto-allocate** [[srh-mode](#)] *keyword protection keyword*

Synopsis Add a list entry for **ua-auto-allocate**

Context **configure** *router string segment-routing segment-routing-v6 base-routing-instance micro-segment-locator reference function ua-auto-allocate keyword protection keyword*

Tree [ua-auto-allocate](#)

Description Commands in this context define a list entry for the automatic allocation of the uA micro-SID function for all adjacencies over all network interfaces on the router (P2P and broadcast interfaces).

Max. Instances 2

Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **[srh-mode]** *keyword*

Synopsis	Segment Routing Header (SRH) mode
Context	<b>configure</b> <i>router string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">micro-segment-locator</a> <i>reference</i> <a href="#">function</a> <a href="#">ua-auto-allocate</a> <i>keyword</i> <a href="#">protection</a> <i>keyword</i>
Tree	<a href="#">ua-auto-allocate</a>
Description	This command specifies the popping mode for the automatically allocated SID.
Options	psp, usp
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **protection** *keyword*

Synopsis	Adjacency protection for automatic SID function
Context	<b>configure</b> <i>router string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">micro-segment-locator</a> <i>reference</i> <a href="#">function</a> <a href="#">ua-auto-allocate</a> <i>keyword</i> <a href="#">protection</a> <i>keyword</i>
Tree	<a href="#">ua-auto-allocate</a>
Description	This command specifies the adjacency protection for the automatically allocated SID function.
Options	unprotected, protected
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **udt4**

Synopsis	Enable the <b>udt4</b> context
Context	<b>configure</b> <i>router string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">micro-segment-locator</a> <i>reference</i> <a href="#">function</a> <a href="#">udt4</a>
Tree	<a href="#">udt4</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**value number**

Synopsis	SRv6 function value
Context	<b>configure</b> <i>router string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">micro-segment-locator</a> <i>reference</i> <a href="#">function</a> <a href="#">udt4</a> <i>value number</i>
Tree	<a href="#">value</a>
Range	1 to 1048575
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**udt46**

Synopsis	Enable the <b>udt46</b> context
Context	<b>configure</b> <i>router string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">micro-segment-locator</a> <i>reference</i> <a href="#">function</a> <a href="#">udt46</a>
Tree	<a href="#">udt46</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**value number**

Synopsis	SRv6 function value
Context	<b>configure</b> <i>router string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">micro-segment-locator</a> <i>reference</i> <a href="#">function</a> <a href="#">udt46</a> <i>value number</i>
Tree	<a href="#">value</a>
Range	1 to 1048575
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**udt6**

Synopsis	Enable the <b>udt6</b> context
Context	<b>configure</b> <i>router string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">micro-segment-locator</a> <i>reference</i> <a href="#">function</a> <a href="#">udt6</a>
Tree	<a href="#">udt6</a>
Introduced	22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **value** *number*

Synopsis SRv6 function value

Context **configure** *router string* [segment-routing](#) [segment-routing-v6](#) [base-routing-instance](#) [micro-segment-locator](#) *reference* [function](#) [udt6](#) *value number*

Tree [value](#)

Range 1 to 1048575

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **locator** [[locator-name](#)] *string*

Synopsis Enter the **locator** list instance

Context **configure** *router string* [segment-routing](#) [segment-routing-v6](#) [locator](#) *string*

Tree [locator](#)

Max. Instances 16

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **[locator-name]** *string*

Synopsis SRv6 locator name

Context **configure** *router string* [segment-routing](#) [segment-routing-v6](#) [locator](#) *string*

Tree [locator](#)

String Length 1 to 64

Notes This element is part of a list key.

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the locator

Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <i>locator</i> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **algorithm** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IGP flexible algorithm ID
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <i>locator</i> <i>string</i> <a href="#">algorithm</a> <i>number</i>
Tree	<a href="#">algorithm</a>
Description	This command configures an IGP flexible algorithm for a locator. A locator can only be part of one algorithm but it can be used in multiple IGP instances.
Range	128 to 255
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **block-length** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SRv6 locator block address length
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <i>locator</i> <i>string</i> <a href="#">block-length</a> <i>number</i>
Tree	<a href="#">block-length</a>
Range	0 to 96
Default	0
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**function-length** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Function length
Context	<b>configure</b> <i>router</i> <i>string</i> <i>segment-routing</i> <i>segment-routing-v6</i> <i>locator</i> <i>string</i> <b>function-length</b> <i>number</i>
Tree	<b>function-length</b>
Description	This command configures the size of the function length. The sum of the function length and the locator prefix length must not exceed 128 bits. Operators can configure the locator level <b>label-block</b> command before they configure a function length of 16. If the function length is configured as 16, the locator level <b>label-block</b> must be configured rather than the static-function level <b>label-block</b> . The validation occurs when committed.
Range	16   20 to 96
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**label-block** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reserved label block name for service termination
Context	<b>configure</b> <i>router</i> <i>string</i> <i>segment-routing</i> <i>segment-routing-v6</i> <i>locator</i> <i>string</i> <b>label-block</b> <i>reference</i>
Tree	<b>label-block</b>
Reference	<b>configure</b> <i>router</i> <i>string</i> <i>mpls-labels</i> <i>reserved-label-block</i> <i>string</i>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**prefix**

Synopsis	Enter the <b>prefix</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <i>segment-routing</i> <i>segment-routing-v6</i> <i>locator</i> <i>string</i> <b>prefix</b>
Tree	<b>prefix</b>

Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## ip-prefix *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SRv6 locator prefix
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <b>locator</b> <i>string</i> <b>prefix</b> <a href="#">ip-prefix</a> <i>string</i>
Tree	<a href="#">ip-prefix</a>
Description	This command configures the IPv6 prefix for the locator.  For regular SRv6, the locator prefix length range is the sum of the length of the block field and the length of the node ID field. For micro-segment SRv6, the locator prefix length must be equal to the micro-SID block length.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## static-function

Synopsis	Enter the <b>static-function</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <b>locator</b> <i>string</i> <b>static-function</b>
Tree	<a href="#">static-function</a>
Description	Commands in this context configure the attributes of the function field range reserved for static End.d, End.X, and service SID assignment.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## label-block *reference*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Label block for the service SIDs of the SRv6 locator
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">locator</a> <i>string</i> <a href="#">static-function</a> <a href="#">label-block</a> <i>reference</i>
Tree	<a href="#">label-block</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls-labels</a> <a href="#">reserved-label-block</a> <i>string</i>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **max-entries** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of static SID functions
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">locator</a> <i>string</i> <a href="#">static-function</a> <a href="#">max-entries</a> <i>number</i>
Tree	<a href="#">max-entries</a>
Description	This command configures the maximum number of values that are reserved from the function field to assign to static SID functions.
Range	1 to 1048575
Default	1
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **termination-fpe** *reference*

Synopsis	List of the SRv6 termination FPE
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">locator</a> <i>string</i> <a href="#">termination-fpe</a> <i>reference</i>
Tree	<a href="#">termination-fpe</a>
Description	This command associates the Forwarding Path Extension (FPE) with the locator for terminating SRv6 in local services. Multiple locators can share the same FPE or each locator can use a different FPE. The FPE can be the same or different from the origination FPE.
Reference	<b>configure</b> <a href="#">fwd-path-ext</a> <a href="#">fpe</a> <i>number</i>
Max. Instances	1
Introduced	21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## micro-segment

Synopsis Enable the **micro-segment** context

Context **configure** *router* *string* [segment-routing](#) [segment-routing-v6](#) [micro-segment](#)

Tree [micro-segment](#)

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## block [[block-name](#)] *string*

Synopsis Enter the **block** list instance

Context **configure** *router* *string* [segment-routing](#) [segment-routing-v6](#) [micro-segment](#) [block](#) *string*

Tree [block](#)

Max. Instances 16

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## [\[block-name\]](#) *string*

Synopsis Micro-SID block name

Context **configure** *router* *string* [segment-routing](#) [segment-routing-v6](#) [micro-segment](#) [block](#) *string*

Tree [block](#)

String Length 1 to 64

Notes This element is part of a list key.

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## admin-state *keyword*

Synopsis Administrative state of micro-SID block

Context **configure** *router* *string* [segment-routing](#) [segment-routing-v6](#) [micro-segment](#) [block](#) *string* [admin-state](#) *keyword*

Tree [admin-state](#)

Options	enable, disable
Default	disable
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## label-block *reference*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reserved label block
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <b>micro-segment</b> <b>block</b> <i>string</i> <a href="#">label-block</a> <i>reference</i>
Tree	<a href="#">label-block</a>
Description	This command associates a pre-configured reserved label block with the micro-SID block.
Reference	<b>configure</b> <b>router</b> <i>string</i> <a href="#">mpls-labels</a> <a href="#">reserved-label-block</a> <i>string</i>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## prefix

Synopsis	Enter the <b>prefix</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <b>micro-segment</b> <b>block</b> <i>string</i> <a href="#">prefix</a>
Tree	<a href="#">prefix</a>
Description	Commands in this context configure the IPv6 prefix for an SRv6 micro-segment locator.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## ip-prefix *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SRv6 locator prefix
Context	<b>configure</b> <i>router string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment block</a> <i>string</i> <a href="#">prefix ip-prefix</a> <i>string</i>
Tree	<a href="#">ip-prefix</a>
Description	This command configures the IPv6 prefix for the locator.  For regular SRv6, the locator prefix length range is the sum of the length of the block field and the length of the node ID field. For micro-segment SRv6, the locator prefix length must be equal to the micro-SID block length.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### static-function

Synopsis	Enter the <b>static-function</b> context
Context	<b>configure</b> <i>router string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment block</a> <i>string</i> <a href="#">static-function</a>
Tree	<a href="#">static-function</a>
Description	Commands in this context configure the function field parameters of a static uA or service micro-SID assignment.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### max-entries *number*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of static SID functions
Context	<b>configure</b> <i>router string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment block</a> <i>string</i> <a href="#">static-function</a> <a href="#">max-entries</a> <i>number</i>
Tree	<a href="#">max-entries</a>
Description	This command configures the maximum number of values that are reserved from the function field to assign to static SID functions.
Range	1 to 1048575
Default	1
Introduced	22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **termination-fpe** *reference*

Synopsis FPE ID for SRv6 termination

Context **configure** **router** *string* [segment-routing](#) [segment-routing-v6](#) [micro-segment](#) **block** *string* [termination-fpe](#) *reference*

Tree [termination-fpe](#)

Description This command associates the FPE ID with the locator for SRv6 termination in local services.

Reference **configure** [fwd-path-ext](#) [fpe](#) *number*

Max. Instances 1

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **block-length** *number*

Synopsis Micro-SID block length

Context **configure** **router** *string* [segment-routing](#) [segment-routing-v6](#) [micro-segment](#) **block-length** *number*

Tree [block-length](#)

Description This command configures the length of the micro-SID blocks.

Range 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64

Default 32

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **global-sid-entries** *number*

Synopsis Maximum number of micro-segment locators network wide

Context **configure** **router** *string* [segment-routing](#) [segment-routing-v6](#) [micro-segment](#) **global-sid-entries** *number*

Tree [global-sid-entries](#)

Description This command defines the maximum number of unique micro-segment locators that can be configured network wide. The value is expressed in multiples of 1024 and must be the same on every platform network wide.

Range	4 to 60
Default	16
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **sid-length** *number*

Synopsis	Micro-SID length
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment</a> <b>sid-length</b> <i>number</i>
Tree	<a href="#">sid-length</a>
Description	This command configures the length of the micro-SIDs.
Range	16
Default	16
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **micro-segment-locator** [[locator-name](#)] *string*

Synopsis	Enter the <b>micro-segment-locator</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment-locator</a> <i>string</i>
Tree	<a href="#">micro-segment-locator</a>
Max. Instances	16
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **[locator-name]** *string*

Synopsis	SRv6 locator name
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment-locator</a> <i>string</i>
Tree	<a href="#">micro-segment-locator</a>
String Length	1 to 64
Notes	This element is part of a list key.

Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the locator
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment-locator</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **algorithm** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IGP flexible algorithm ID
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment-locator</a> <i>string</i> <b>algorithm</b> <i>number</i>
Tree	<a href="#">algorithm</a>
Description	This command configures an IGP flexible algorithm for a locator. A locator can only be part of one algorithm but it can be used in multiple IGP instances.
Range	128 to 255
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **block** *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Pre-defined micro-SID block
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment-locator</a> <i>string</i> <a href="#">block</a> <i>reference</i>
Tree	<a href="#">block</a>
Description	This command associates a pre-defined micro-SID block with the micro-segment SRv6 locator.
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment</a> <a href="#">block</a> <i>string</i>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**un**

Synopsis	Enter the <b>un</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment-locator</a> <i>string</i> <a href="#">un</a>
Tree	<a href="#">un</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**srh-mode** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Segment Routing Header (SRH) mode
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment-locator</a> <i>string</i> <a href="#">un</a> <a href="#">srh-mode</a> <i>keyword</i>
Tree	<a href="#">srh-mode</a>
Description	This command configures the popping mode for the SID.
Options	psp, usp
Default	psp
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR



## value number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SRv6 function value
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment-locator</a> <i>string</i> <b>un</b> <i>value number</i>
Tree	<a href="#">value</a>
Range	1 to 1048575
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## origination-fpe reference

Synopsis	List of the SRv6 origination FPEs
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">origination-fpe</a> <i>reference</i>
Tree	<a href="#">origination-fpe</a>
Description	This command configures the origination Forwarding Path Extension (FPE) for SRv6 tunnels on local services. The origination FPE must be different from any of the SRv6 termination FPEs.
Reference	<b>configure</b> <a href="#">fwd-path-ext</a> <a href="#">fpe</a> <i>number</i>
Max. Instances	1
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## source-address string

Synopsis	Source address used in the SRv6 packet
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">source-address</a> <i>string</i>
Tree	<a href="#">source-address</a>
Description	This command specifies the global default source IPv6 address used in the SA field of the outerIPv6 header of the SRv6 encapsulated packet.  The value is inherited in the BGP and services contexts (for example, <b>configure router "base" bgp segment-routing-v6 source-address</b> and <b>configure service vprn bgp-ipvprn segment-routing-v6 source-address</b> ), but is overwritten by the value configured in those contexts.

A source IPv6 address must be configured in the global context or in the BGP or services context.

The system does not check if the entered address is a valid local address.

Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## sr-mpls

Synopsis	Enter the <b>sr-mpls</b> context
Context	<b>configure router</b> <i>string</i> <a href="#">segment-routing sr-mpls</a>
Tree	<a href="#">sr-mpls</a>
Introduced	21.10.R1
Platforms	All

## prefix-sids [[interface-name](#)] *reference*

Synopsis	Enter the <b>prefix-sids</b> list instance
Context	<b>configure router</b> <i>string</i> <a href="#">segment-routing sr-mpls prefix-sids reference</a>
Tree	<a href="#">prefix-sids</a>
Description	Commands in this context configure the prefix SIDs for an interface.
Introduced	21.10.R1
Platforms	All

## [\[interface-name\]](#) *reference*

Synopsis	Loopback interface name that owns prefix to advertise
Context	<b>configure router</b> <i>string</i> <a href="#">segment-routing sr-mpls prefix-sids reference</a>
Tree	<a href="#">prefix-sids</a>
Reference	<b>configure router</b> <i>string</i> <a href="#">interface</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

## ipv4-sid

Synopsis	Enable the <b>ipv4-sid</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-mpls</a> <a href="#">prefix-sids</a> <i>reference</i> <a href="#">ipv4-sid</a>
Tree	<a href="#">ipv4-sid</a>
Introduced	21.10.R1
Platforms	All

## index number

Synopsis	Node SID index for the interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-mpls</a> <a href="#">prefix-sids</a> <i>reference</i> <a href="#">ipv4-sid</a> <a href="#">index</a> <i>number</i>
Tree	<a href="#">index</a>
Range	0 to 4294967295
Notes	The following elements are part of a choice: <b>index</b> or <b>label</b> .
Introduced	21.10.R1
Platforms	All

## label number

Synopsis	Label value for the node SID
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-mpls</a> <a href="#">prefix-sids</a> <i>reference</i> <a href="#">ipv4-sid</a> <a href="#">label</a> <i>number</i>
Tree	<a href="#">label</a>
Range	32 to 1048575
Notes	The following elements are part of a choice: <b>index</b> or <b>label</b> .
Introduced	21.10.R1
Platforms	All

## ipv6-sid

Synopsis	Enable the <b>ipv6-sid</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-mpls</a> <a href="#">prefix-sids</a> <i>reference</i> <a href="#">ipv6-sid</a>
Tree	<a href="#">ipv6-sid</a>
Introduced	21.10.R1

Platforms All

### **index number**

Synopsis Node SID index for the interface

Context **configure** [router](#) *string* [segment-routing sr-mpls prefix-sids](#) *reference* [ipv6-sid index number](#)

Tree [index](#)

Range 0 to 4294967295

Notes The following elements are part of a choice: **index** or **label**.

Introduced 21.10.R1

Platforms All

### **label number**

Synopsis Label value for the node SID

Context **configure** [router](#) *string* [segment-routing sr-mpls prefix-sids](#) *reference* [ipv6-sid label number](#)

Tree [label](#)

Range 32 to 1048575

Notes The following elements are part of a choice: **index** or **label**.

Introduced 21.10.R1

Platforms All

### **node-sid boolean**

Synopsis Assign a node SID to the prefix referencing the router

Context **configure** [router](#) *string* [segment-routing sr-mpls prefix-sids](#) *reference* [node-sid boolean](#)

Tree [node-sid](#)

Default true

Introduced 21.10.R1

Platforms All

### **sr-policies**

Synopsis Enter the **sr-policies** context

Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a>
Tree	<a href="#">sr-policies</a>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of segment routing policies
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **egress-statistics**

Synopsis	Enable the <b>egress-statistics</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">egress-statistics</a>
Tree	<a href="#">egress-statistics</a>
Introduced	19.10.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the traffic statistics
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">egress-statistics</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	19.10.R1
Platforms	All

## ingress-statistics

Synopsis	Enable the <b>ingress-statistics</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">ingress-statistics</a>
Tree	<a href="#">ingress-statistics</a>
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of the traffic statistics
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">ingress-statistics</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

## reserved-label-block *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reserved local block for segment routing policies
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">reserved-label-block</a> <i>reference</i>
Tree	<a href="#">reserved-label-block</a>
Reference	<b>configure</b> <b>router</b> <i>string</i> <a href="#">mpls-labels</a> <a href="#">reserved-label-block</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

## static-policy [*name*] *string*

Synopsis	Enter the <b>static-policy</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">static-policy</a> <i>string</i>
Tree	<a href="#">static-policy</a>

Max. Instances	8192
Introduced	16.0.R1
Platforms	All

**[name]** *string*

Synopsis	Name for the segment routing static policy
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>sr-policies</b> <b>static-policy</b> <i>string</i>
Tree	<b>static-policy</b>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of segment routing static policy
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>sr-policies</b> <b>static-policy</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**binding-sid** *number*

Synopsis	Segment ID that opaquely represents an SR policy to upstream routers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>sr-policies</b> <b>static-policy</b> <i>string</i> <b>binding-sid</b> <i>number</i>
Tree	<b>binding-sid</b>
Range	32 to 1048575
Introduced	16.0.R1
Platforms	All

## color number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Traffic flows to be steered by this policy
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>sr-policies</b> <b>static-policy</b> <i>string</i> <b>color</b> <i>number</i>
Tree	<b>color</b>
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

## distinguisher number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Unique value for a policy
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>sr-policies</b> <b>static-policy</b> <i>string</i> <b>distinguisher</b> <i>number</i>
Tree	<b>distinguisher</b>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

## endpoint (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination of the source-routed path
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>sr-policies</b> <b>static-policy</b> <i>string</i> <b>endpoint</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>endpoint</b>
Introduced	16.0.R1



Platforms All

### head-end (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *keyword*)



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Head end address for this static policy
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">static-policy</a> <i>string</i> <a href="#">head-end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>   <i>keyword</i> )
Tree	<a href="#">head-end</a>
Options	local
Introduced	16.0.R1
Platforms	All

### maintenance-policy *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Policy name
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">static-policy</a> <i>string</i> <a href="#">maintenance-policy</a> <i>reference</i>
Tree	<a href="#">maintenance-policy</a>
Reference	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">maintenance-policy</a> <i>string</i>
Introduced	20.10.R1
Platforms	All

### preference *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Preference value of this static policy
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Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">static-policy</a> <i>string</i> <a href="#">preference</a> <i>number</i>
Tree	<a href="#">preference</a>
Max. Range	0 to 4294967295
Default	100
Introduced	16.0.R1
Platforms	All

### **segment-list** [[seg-list-index](#)] *number*

Synopsis	Enter the <b>segment-list</b> list instance
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">static-policy</a> <i>string</i> <a href="#">segment-list</a> <i>number</i>
Tree	<a href="#">segment-list</a>
Max. Instances	32
Introduced	16.0.R1
Platforms	All

### **[seg-list-index]** *number*

Synopsis	Index for identifying a particular segment list
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">static-policy</a> <i>string</i> <a href="#">segment-list</a> <i>number</i>
Tree	<a href="#">segment-list</a>
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of segment list for static policy
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">static-policy</a> <i>string</i> <a href="#">segment-list</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>

Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **segment** [[segment-index](#)] *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>segment</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">static-policy</a> <i>string</i> <a href="#">segment-list</a> <i>number</i> <a href="#">segment</a> <i>number</i>
Tree	<a href="#">segment</a>
Max. Instances	11
Introduced	16.0.R1
Platforms	All

### **[segment-index]** *number*

Synopsis	Index for identifying a particular segment list
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">static-policy</a> <i>string</i> <a href="#">segment-list</a> <i>number</i> <a href="#">segment</a> <i>number</i>
Tree	<a href="#">segment</a>
Range	1 to 11
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **mpls-label** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Value for the MPLS label
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Context	<b>configure</b> <i>router</i> <i>string</i> <i>segment-routing</i> <i>sr-policies</i> <i>static-policy</i> <i>string</i> <i>segment-list</i> <i>number</i> <i>segment</i> <i>number</i> <i>mpls-label</i> <i>number</i>
Tree	<a href="#">mpls-label</a>
Range	0 to 1048575
Introduced	16.0.R1
Platforms	All

### **srv6-sid** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Segment ID for segment routing IPv6
Context	<b>configure</b> <i>router</i> <i>string</i> <i>segment-routing</i> <i>sr-policies</i> <i>static-policy</i> <i>string</i> <i>segment-list</i> <i>number</i> <i>segment</i> <i>number</i> <i>srv6-sid</i> <i>string</i>
Tree	<a href="#">srv6-sid</a>
Description	This command defines the 128-bit SRv6 SID for the segment.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **weight** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Weight of this segment list
Context	<b>configure</b> <i>router</i> <i>string</i> <i>segment-routing</i> <i>sr-policies</i> <i>static-policy</i> <i>string</i> <i>segment-list</i> <i>number</i> <i>weight</i> <i>number</i>
Tree	<a href="#">weight</a>
Max. Range	0 to 4294967295
Default	1
Introduced	16.0.R1
Platforms	All

## segment-routing-v6



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>segment-routing-v6</b> context
Context	<b>configure router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">static-policy</a> <i>string</i> <a href="#">segment-routing-v6</a>
Tree	<a href="#">segment-routing-v6</a>
Description	Commands in this context configure a static SRv6 policy.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## binding-sid [[index](#)] *number*

Synopsis	Enter the <b>binding-sid</b> list instance
Context	<b>configure router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">static-policy</a> <i>string</i> <a href="#">segment-routing-v6</a> <a href="#">binding-sid</a> <i>number</i>
Tree	<a href="#">binding-sid</a>
Max. Instances	1
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## [\[index\]](#) *number*

Synopsis	Binding SID index
Context	<b>configure router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">static-policy</a> <i>string</i> <a href="#">segment-routing-v6</a> <a href="#">binding-sid</a> <i>number</i>
Tree	<a href="#">binding-sid</a>
Range	1
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**ip-address string**

Synopsis	Remote SRv6 binding SID
Context	<b>configure router string segment-routing sr-policies static-policy string segment-routing-v6 binding-sid number ip-address string</b>
Tree	<a href="#">ip-address</a>
Description	This command configures an SRv6 binding SID for a remote SRv6 policy. The command cannot be used with a local head end location ( <b>configure router segment-routing sr-policies static-policy head-end local</b> ). This command and the <b>configure router segment-routing sr-policies static-policy segment-routing-v6 binding-sid locator</b> command for a local SRv6 policy are mutually exclusive.  The format of the binding SID is a 128-bit IPv6 address.
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>locator</b> .
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**locator**

Synopsis	Enable the <b>locator</b> context
Context	<b>configure router string segment-routing sr-policies static-policy string segment-routing-v6 binding-sid number locator</b>
Tree	<a href="#">locator</a>
Description	Commands in this context configure a binding SID locator for a local SRv6 policy. This command and the <b>configure router segment-routing sr-policies static-policy segment-routing-v6 binding-sid ip-address</b> command for a non-local SRv6 policy are mutually exclusive.
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>locator</b> .
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**function keyword**

Synopsis	Local SRv6 binding SID locator function
Context	<b>configure router string segment-routing sr-policies static-policy string segment-routing-v6 binding-sid number locator function keyword</b>
Tree	<a href="#">function</a>
Description	This command configures an SRv6 binding SID function for a static SRv6 policy with a local head end location ( <b>configure router segment-routing sr-policies static-policy head-end local</b> ).

Options	end-b6-encaps-red
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **function-value** *number*

Synopsis	Local SRv6 binding SID locator function value
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>sr-policies</b> <b>static-policy</b> <i>string</i> <b>segment-routing-v6</b> <b>binding-sid</b> <i>number</i> <b>locator</b> <b>function-value</b> <i>number</i>
Tree	<b>function-value</b>
Description	This command configures the function value for a static SRv6 policy with a local head end location ( <b>configure router segment-routing sr-policies static-policy head-end local</b> ). If a function value is configured, the router checks whether this function value is available for the named locator. If no function value is configured, the router dynamically allocates a value.
Range	1 to 1048575
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **locator-name** *reference*

Synopsis	Local SRv6 binding SID locator name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>sr-policies</b> <b>static-policy</b> <i>string</i> <b>segment-routing-v6</b> <b>binding-sid</b> <i>number</i> <b>locator</b> <b>locator-name</b> <i>reference</i>
Tree	<b>locator-name</b>
Description	This command configures an SRv6 binding SID locator for a static SRv6 policy with a local head end location ( <b>configure router segment-routing sr-policies static-policy head-end local</b> ). A corresponding locator must exist in the <b>configure router segment-routing segment-routing-v6</b> context.
Reference	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>segment-routing-v6</b> <b>locator</b> <i>string</i>
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**type** *keyword*

Synopsis	Static policy type
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>sr-policies</b> <b>static-policy</b> <i>string</i> <b>type</b> <i>keyword</i>
Tree	<b>type</b>
Description	This command configures the type of static policy. Only commands relevant to the type of the static policy can be executed. The type of the static policy can only be changed to a new type if there is no configuration present for the old type, or if all configuration for the old type is deleted.
Options	sr-mpls, srv6
Default	sr-mpls
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**selective-fib** *boolean*

Synopsis	Enable selective FIB
Context	<b>configure</b> <b>router</b> <i>string</i> <b>selective-fib</b> <i>boolean</i>
Tree	<b>selective-fib</b>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**sfm-overload**

Synopsis	Enable the <b>sfm-overload</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>sfm-overload</b>
Tree	<b>sfm-overload</b>
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS, VSR

**holdoff-time** *number*

Synopsis	Delay in detecting SFM failures and setting overload
Context	<b>configure</b> <b>router</b> <i>string</i> <b>sfm-overload</b> <b>holdoff-time</b> <i>number</i>
Tree	<b>holdoff-time</b>



Range	1 to 600
Units	seconds
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS, VSR

## sgt-qos

Synopsis	Enter the <b>sgt-qos</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">sgt-qos</a>
Tree	<a href="#">sgt-qos</a>
Introduced	16.0.R1
Platforms	All

## dot1p

Synopsis	Enter the <b>dot1p</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">sgt-qos</a> <a href="#">dot1p</a>
Tree	<a href="#">dot1p</a>
Introduced	16.0.R1
Platforms	All

## application [[dot1p-app-name](#)] *keyword*

Synopsis	Enter the <b>application</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">sgt-qos</a> <a href="#">dot1p</a> <a href="#">application</a> <i>keyword</i>
Tree	<a href="#">application</a>
Introduced	16.0.R1
Platforms	All

## [[dot1p-app-name](#)] *keyword*

Synopsis	Dot1p application ID that generates control traffic
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">sgt-qos</a> <a href="#">dot1p</a> <a href="#">application</a> <i>keyword</i>
Tree	<a href="#">application</a>
Options	arp, isis, pppoe

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **dot1p** (*keyword | number*)

Synopsis	Dot1p value to the traffic generated by this application
Context	<b>configure router</b> <i>string sgt-qos dot1p application keyword dot1p</i> ( <i>keyword   number</i> )
Tree	<a href="#">dot1p</a>
Range	0 to 7
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

### **dscp**

Synopsis	Enter the <b>dscp</b> context
Context	<b>configure router</b> <i>string sgt-qos dscp</i>
Tree	<a href="#">dscp</a>
Introduced	16.0.R1
Platforms	All

### **application** [[dscp-app-name](#)] *keyword*

Synopsis	Enter the <b>application</b> list instance
Context	<b>configure router</b> <i>string sgt-qos dscp application keyword</i>
Tree	<a href="#">application</a>
Introduced	16.0.R1
Platforms	All

### **[dscp-app-name]** *keyword*

Synopsis	DSCP application identifier on the NOKIA SR OS router that generates control traffic over IP
Context	<b>configure router</b> <i>string sgt-qos dscp application keyword</i>

Tree	<a href="#">application</a>
Options	bgp, cflowd, dhcp, dns, ftp, icmp, igmp, l2tp, ldp, mld, msdp, ndis, ntp, ospf, pim, radius, rip, rsvp, snmp, snmp-notification, srrp, ssh, syslog, tacplus, telnet, tftp, traceroute, vrrp, ptp, igmp-reporter, gtp, sflow, diameter, pcep, call-trace, bmp, grpc, mtrace2, http, mpls-udp-return, pfc, ibcp
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **dscp** (*keyword* | *number*)

Synopsis	DSCP value to the traffic generated by this application
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">sgt-qos</a> <a href="#">dscp</a> <a href="#">application</a> <i>keyword</i> <a href="#">dscp</a> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">dscp</a>
Range	0 to 63
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

### **dscp-map** [[dscp-name](#)] *keyword*

Synopsis	Enter the <b>dscp-map</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">sgt-qos</a> <a href="#">dscp</a> <a href="#">dscp-map</a> <i>keyword</i>
Tree	<a href="#">dscp-map</a>
Introduced	16.0.R2
Platforms	All

### **[dscp-name]** *keyword*

Synopsis	DSCP name mapped to forwarding class
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">sgt-qos</a> <a href="#">dscp</a> <a href="#">dscp-map</a> <i>keyword</i>
Tree	<a href="#">dscp-map</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31,

cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

### **fc keyword**

Synopsis	Value for the forwarding class for this mapping
Context	<b>configure router</b> <i>string</i> <a href="#">sgt-qos dscp dscp-map</a> <i>keyword</i> <b>fc</b> <i>keyword</i>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R2
Platforms	All

### **static-routes**

Synopsis	Enter the <b>static-routes</b> context
Context	<b>configure router</b> <i>string</i> <a href="#">static-routes</a>
Tree	<a href="#">static-routes</a>
Introduced	16.0.R1
Platforms	All

### **hold-down**

Synopsis	Enable the <b>hold-down</b> context
Context	<b>configure router</b> <i>string</i> <a href="#">static-routes hold-down</a>
Tree	<a href="#">hold-down</a>
Introduced	16.0.R1
Platforms	All

### **initial number**

Synopsis	Value for the initial hold down time
Context	<b>configure router</b> <i>string</i> <a href="#">static-routes hold-down</a> <i>initial number</i>

Tree	<a href="#">initial</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **max-value** *number*

Synopsis	Maximum value of the hold down time
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">static-routes</a> <a href="#">hold-down</a> <a href="#">max-value</a> <i>number</i>
Tree	<a href="#">max-value</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **multiplier** *number*

Synopsis	Value by which the previous hold-down time is multiplied to calculate the new one
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">static-routes</a> <a href="#">hold-down</a> <a href="#">multiplier</a> <i>number</i>
Tree	<a href="#">multiplier</a>
Range	1 to 10
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **route** [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*) [route-type](#) *keyword*

Synopsis	Enter the <b>route</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <i>keyword</i>
Tree	<a href="#">route</a>
Introduced	16.0.R1
Platforms	All

**[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix and prefix length for the static routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i>
Tree	<b>route</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**route-type** *keyword*

Synopsis	Static route type for unicast or multicast RPF
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i>
Tree	<b>route</b>
Options	unicast, multicast
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**backup-tag** *number*

Synopsis	Static route backup tag
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>backup-tag</b> <i>number</i>
Tree	<b>backup-tag</b>
Description	<p>This command associates a 4-byte backup route tag with the static route when the backup next-hop functionality is activated. The tag value is used in route policies to control distribution of the static route into other protocols when the backup next-hop function is activated for the associated static route.</p> <p>The tag specified at this level of the static route causes the tag values that are configured under the <b>next-hop</b>, <b>black-hole</b>, and <b>indirect</b> contexts of the static route to be ignored.</p>
Range	1 to 4294967295
Introduced	21.2.R1
Platforms	All

## blackhole

Synopsis	Enable the <b>blackhole</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>blackhole</b>
Tree	<b>blackhole</b>
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of the static route operation
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>blackhole</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Introduced	16.0.R1
Platforms	All

## community *string*

Synopsis	Community ID associated with the static route
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>blackhole</b> <b>community</b> <i>string</i>
Tree	<b>community</b>
String Length	1 to 72
Introduced	16.0.R1
Platforms	All

## description *string*

Synopsis	Text description
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>blackhole</b> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1

Platforms All

### **dynamic-bgp** *boolean*

Synopsis Derive static route next hop from BGP next hop value

Context **configure** **router** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **blackhole** **dynamic-bgp** *boolean*

Tree **dynamic-bgp**

Default false

Introduced 16.0.R1

Platforms All

### **generate-icmp** *boolean*

Synopsis Send ICMP unreachable messages when received packets match a static route with black-hole next-hop

Context **configure** **router** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **blackhole** **generate-icmp** *boolean*

Tree **generate-icmp**

Default false

Introduced 16.0.R1

Platforms All

### **metric** *number*

Synopsis Static route metric

Context **configure** **router** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **blackhole** **metric** *number*

Tree **metric**

Range 0 to 65535

Default 1

Introduced 16.0.R1

Platforms All

### **preference** *number*

Synopsis Priority of this static route over the routes from different sources



Context	<b>configure</b> <i>router string</i> <b>static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword</b> <b>blackhole preference number</b>
Tree	<b>preference</b>
Range	1 to 255
Default	5
Introduced	16.0.R1
Platforms	All

## prefix-list

Synopsis	Enter the <b>prefix-list</b> context
Context	<b>configure</b> <i>router string</i> <b>static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword</b> <b>blackhole prefix-list</b>
Tree	<b>prefix-list</b>
Introduced	16.0.R1
Platforms	All

## flag keyword

Synopsis	Static route match condition from prefix list
Context	<b>configure</b> <i>router string</i> <b>static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword</b> <b>blackhole prefix-list flag keyword</b>
Tree	<b>flag</b>
Options	any, all, none
Default	any
Introduced	16.0.R1
Platforms	All

## name reference

Synopsis	Prefix list name
Context	<b>configure</b> <i>router string</i> <b>static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword</b> <b>blackhole prefix-list name reference</b>
Tree	<b>name</b>
Reference	<b>configure</b> <b>policy-options prefix-list string</b>
Introduced	16.0.R1

Platforms All

### **tag number**

Synopsis Static route tag

Context **configure router string static-routes route** (*ipv4-prefix | ipv6-prefix*) **route-type keyword blackhole tag number**

Tree **tag**

Range 1 to 4294967295

Introduced 16.0.R1

Platforms All

### **community string**

Synopsis Community ID associated with the static route

Context **configure router string static-routes route** (*ipv4-prefix | ipv6-prefix*) **route-type keyword community string**

Tree **community**

String Length 1 to 72

Max. Instances 12

Notes This element is ordered by the user.

Introduced 16.0.R1

Platforms All

### **indirect [ip-address]** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis Enter the **indirect** list instance

Context **configure router string static-routes route** (*ipv4-prefix | ipv6-prefix*) **route-type keyword indirect** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Tree **indirect**

Introduced 16.0.R1

Platforms All

**[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Next-hop IP address used to reach the destination
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>indirect</b>
Description	This command specifies the next-hop IP address used to reach the destination. The specified IP address can be either on the network side or the access side and is typically at least one hop away from the node.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the static route operation
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Introduced	16.0.R1
Platforms	All

**community** *string*

Synopsis	Community ID associated with the static route
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>community</b> <i>string</i>
Tree	<b>community</b>
String Length	1 to 72
Introduced	16.0.R1
Platforms	All

**cpe-check** [**address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the <b>cpe-check</b> list instance
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Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>cpe-check</b>
Description	<p>When configured, this command enables the Customer Premises Equipment (CPE) check feature and specifies the IP address of the target CPE device.</p> <p>This option initiates a background ICMP ping test to the configured target IP address. The IP address can either be an IPv4 address for IPv4 static routes or an IPv6 address for IPv6 static routes. To avoid possible circular references, the target IP address cannot exist in the same subnet as the static route subnet. This command is mutually exclusive with BFD support on a specific static route.</p> <p><b>Note:</b> A node that is sourcing CPE-check packets waits an additional full interval before taking action, which gives the CPE time to respond. For example, with a drop-count of 3 and an interval of 1s, three CPE-check packets are sent out and the node waits for the duration of another interval before acting on the loss. Failure declaration may take extra time depending on the load, interval, and other factors. In line with multitasking, multi-priority operating principles of the node, and the relative priority of <b>cpe-ping</b>, the node paces these minor events.</p>
Max. Instances	1
Introduced	16.0.R1
Platforms	All

### [**address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the target CPE device
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>cpe-check</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **drop-count** *number*

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>drop-count</b> <i>number</i>
Tree	<b>drop-count</b>

Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

### **interval** *number*

Synopsis	Interval between ICMP pings to target CPE IP address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>interval</b> <i>number</i>
Tree	<b>interval</b>
Range	1 to 255
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

### **log** *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>log</b> <i>boolean</i>
Tree	<b>log</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **padding-size** *number*

Synopsis	Padding size for CPE connectivity checks
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>padding-size</b> <i>number</i>
Tree	<b>padding-size</b>
Range	0 to 16384

Units	bytes
Default	56
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **destination-class** *number*

Synopsis	Destination class for this static route
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>destination-class</b> <i>number</i>
Tree	<b>destination-class</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **metric** *number*

Synopsis	Static route metric
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>metric</b> <i>number</i>
Tree	<b>metric</b>
Range	0 to 65535
Default	1
Introduced	16.0.R1
Platforms	All

**preference number**

Synopsis	Priority of this static route over the routes from different sources
Context	<b>configure router string static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword indirect</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>preference number</b>
Tree	<b>preference</b>
Range	1 to 255
Default	5
Introduced	16.0.R1
Platforms	All

**prefix-list**

Synopsis	Enter the <b>prefix-list</b> context
Context	<b>configure router string static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword indirect</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>prefix-list</b>
Tree	<b>prefix-list</b>
Introduced	16.0.R1
Platforms	All

**flag keyword**

Synopsis	Static route match condition from prefix list
Context	<b>configure router string static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword indirect</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>prefix-list flag keyword</b>
Tree	<b>flag</b>
Options	any, all, none
Default	any
Introduced	16.0.R1
Platforms	All

**name reference**

Synopsis	Prefix list name
Context	<b>configure router string static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword indirect</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>prefix-list name reference</b>

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Tree	<a href="#">name</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">prefix-list</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

## qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <i>keyword</i> <a href="#">indirect</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">qos</a>
Tree	<a href="#">qos</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## forwarding-class *keyword*

Synopsis	Forwarding class associated with the static route
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <i>keyword</i> <a href="#">indirect</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">qos</a> <a href="#">forwarding-class</a> <i>keyword</i>
Tree	<a href="#">forwarding-class</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## priority *keyword*

Synopsis	Static route priority
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <i>keyword</i> <a href="#">indirect</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">qos</a> <a href="#">priority</a> <i>keyword</i>
Tree	<a href="#">priority</a>
Options	low, high
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS



**source-class** *number*

Synopsis	Source class for this static route
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-class</b> <b>number</b>
Tree	<b>source-class</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**tag** *number*

Synopsis	Static route tag
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>tag</b> <b>number</b>
Tree	<b>tag</b>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

**tunnel-next-hop**

Synopsis	Enter the <b>tunnel-next-hop</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>tunnel-next-hop</b>
Tree	<b>tunnel-next-hop</b>
Introduced	16.0.R1
Platforms	All

**disallow-igp** *boolean*

Synopsis	Do not resolve indirect static routes using IGP next-hops in RTM if no tunnel next-hops found in TTM
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>tunnel-next-hop</b> <b>disallow-igp</b> <b>boolean</b>
Tree	<b>disallow-igp</b>
Default	false

Introduced	16.0.R1
Platforms	All

### **flex-algo** *number*

Synopsis	Flexible Algorithm ID
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>tunnel-next-hop</b> <b>flex-algo</b> <i>number</i>
Tree	<b>flex-algo</b>
Range	128 to 255
Introduced	20.7.R1
Platforms	All

### **resolution** *keyword*

Synopsis	Tunnel next hop resolution to resolve indirect static route
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>tunnel-next-hop</b> <b>resolution</b> <i>keyword</i>
Tree	<b>resolution</b>
Options	none, filter, any
Default	none
Introduced	16.0.R1
Platforms	All

### **resolution-filter**

Synopsis	Enter the <b>resolution-filter</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>tunnel-next-hop</b> <b>resolution-filter</b>
Tree	<b>resolution-filter</b>
Introduced	16.0.R1
Platforms	All

### **ldp boolean**

Synopsis	Use LDP Route Forwarding Equivalence Class (FEC) tunneling for next-hop resolution
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>tunnel-next-hop</b> <b>resolution-filter</b> <b>ldp</b> <b>boolean</b>
Tree	<b>ldp</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **mpls-fwd-policy boolean**

Synopsis	Use MPLS forwarding policy for tunnel-next-hop
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>tunnel-next-hop</b> <b>resolution-filter</b> <b>mpls-fwd-policy</b> <b>boolean</b>
Tree	<b>mpls-fwd-policy</b>
Default	false
Introduced	16.0.R4
Platforms	All

### **rib-api boolean**

Synopsis	Set RIB API type for use with tunnel next-hop
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>tunnel-next-hop</b> <b>resolution-filter</b> <b>rib-api</b> <b>boolean</b>
Tree	<b>rib-api</b>
Default	false
Introduced	16.0.R4
Platforms	All

### **rsvp-te**

Synopsis	Enable the <b>rsvp-te</b> context
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Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>tunnel-next-hop</b> <b>resolution-filter</b> <b>rsvp-te</b>
Tree	<b>rsvp-te</b>
Introduced	16.0.R1
Platforms	All

### **lsp** [**lsp-name**] *string*

Synopsis	Add a list entry for <b>lsp</b>
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>tunnel-next-hop</b> <b>resolution-filter</b> <b>rsvp-te</b> <b>lsp</b> <i>string</i>
Tree	<b>lsp</b>
Introduced	16.0.R1
Platforms	All

### **[lsp-name]** *string*

Synopsis	Labeled Switch Path name
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>tunnel-next-hop</b> <b>resolution-filter</b> <b>rsvp-te</b> <b>lsp</b> <i>string</i>
Tree	<b>lsp</b>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **sr-isis** *boolean*

Synopsis	Use the SR ISIS tunneling mechanism to resolve next hop for the static route
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>tunnel-next-hop</b> <b>resolution-filter</b> <b>sr-isis</b> <i>boolean</i>
Tree	<b>sr-isis</b>
Default	false

Introduced	16.0.R1
Platforms	All

### **sr-ospf boolean**

Synopsis	Use SR OSPF tunneling for next-hop resolution
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type keyword indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>tunnel-next-hop resolution-filter sr-ospf boolean</b>
Tree	<b>sr-ospf</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **sr-ospf3 boolean**

Synopsis	Use SR OSPFv3 tunneling mechanism to resolve next-hop
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type keyword indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>tunnel-next-hop resolution-filter sr-ospf3 boolean</b>
Tree	<b>sr-ospf3</b>
Default	false
Introduced	16.0.R6
Platforms	All

### **sr-te**

Synopsis	Enable the <b>sr-te</b> context
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type keyword indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>tunnel-next-hop resolution-filter sr-te</b>
Tree	<b>sr-te</b>
Introduced	16.0.R1
Platforms	All

**lsp** [**lsp-name**] *string*

Synopsis	Add a list entry for <b>lsp</b>
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>tunnel-next-hop resolution-filter sr-te lsp</b> <i>string</i>
Tree	<b>lsp</b>
Introduced	16.0.R1
Platforms	All

**[lsp-name]** *string*

Synopsis	Labeled Switch Path name
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>tunnel-next-hop resolution-filter sr-te lsp</b> <i>string</i>
Tree	<b>lsp</b>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**interface** [**interface-name**] *string*

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i>
Tree	<b>interface</b>
Introduced	16.0.R1
Platforms	All

**[interface-name]** *string*

Synopsis	Router interface name
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i>
Tree	<b>interface</b>
String Length	1 to 32

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the static route operation
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Introduced	16.0.R1
Platforms	All

### **community** *string*

Synopsis	Community ID associated with the static route
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i> <b>community</b> <i>string</i>
Tree	<b>community</b>
String Length	1 to 72
Introduced	16.0.R1
Platforms	All

### **cpe-check** [*address*] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the <b>cpe-check</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i> <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>cpe-check</b>
Max. Instances	1
Introduced	16.0.R1
Platforms	All

**[address]** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the target CPE device
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i> <b>cpe-check</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<b>cpe-check</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**drop-count** *number*

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i> <b>cpe-check</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>drop-count</b> <i>number</i>
Tree	<b>drop-count</b>
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

**interval** *number*

Synopsis	Interval between ICMP pings to target CPE IP address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i> <b>cpe-check</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>interval</b> <i>number</i>
Tree	<b>interval</b>
Range	1 to 255
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All



## log *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i> <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>log</b> <b>boolean</b>
Tree	<b>log</b>
Default	false
Introduced	16.0.R1
Platforms	All

## padding-size *number*

Synopsis	Padding size for CPE connectivity checks
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i> <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>padding-size</b> <b>number</b>
Tree	<b>padding-size</b>
Range	0 to 16384
Units	bytes
Default	56
Introduced	16.0.R1
Platforms	All

## description *string*

Synopsis	Text description
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i> <b>description</b> <b>string</b>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

## destination-class *number*

Synopsis	Destination class for this static route
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Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i> <b>destination-class</b> <i>number</i>
Tree	<b>destination-class</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **load-balancing-weight** *number*

Synopsis	Load-balancing weight for all of the ECMP next hops
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i> <b>load-balancing-weight</b> <i>number</i>
Tree	<b>load-balancing-weight</b>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **metric** *number*

Synopsis	Static route metric
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i> <b>metric</b> <i>number</i>
Tree	<b>metric</b>
Range	0 to 65535
Default	1
Introduced	16.0.R1
Platforms	All

### **preference** *number*

Synopsis	Priority of this static route over the routes from different sources
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i> <b>preference</b> <i>number</i>
Tree	<b>preference</b>
Range	1 to 255
Default	5

Introduced	16.0.R1
Platforms	All

## prefix-list

Synopsis	Enter the <b>prefix-list</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <i>keyword</i> <a href="#">interface</a> <i>string</i> <a href="#">prefix-list</a>
Tree	<a href="#">prefix-list</a>
Introduced	16.0.R1
Platforms	All

## flag keyword

Synopsis	Static route match condition from prefix list
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <i>keyword</i> <a href="#">interface</a> <i>string</i> <a href="#">prefix-list</a> <a href="#">flag</a> <i>keyword</i>
Tree	<a href="#">flag</a>
Options	any, all, none
Default	any
Introduced	16.0.R1
Platforms	All

## name reference

Synopsis	Prefix list name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <i>keyword</i> <a href="#">interface</a> <i>string</i> <a href="#">prefix-list</a> <a href="#">name</a> <i>reference</i>
Tree	<a href="#">name</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">prefix-list</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

## qos

Synopsis	Enter the <b>qos</b> context
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Context	<b>configure</b> <i>router</i> <i>string</i> <b>static-routes</b> <i>route</i> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <i>route-type</i> <i>keyword</i> <i>interface</i> <i>string</i> <i>qos</i>
Tree	<b>qos</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **forwarding-class** *keyword*

Synopsis	Forwarding class associated with the static route
Context	<b>configure</b> <i>router</i> <i>string</i> <b>static-routes</b> <i>route</i> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <i>route-type</i> <i>keyword</i> <i>interface</i> <i>string</i> <b>qos</b> <b>forwarding-class</b> <i>keyword</i>
Tree	<b>forwarding-class</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **priority** *keyword*

Synopsis	Static route priority
Context	<b>configure</b> <i>router</i> <i>string</i> <b>static-routes</b> <i>route</i> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <i>route-type</i> <i>keyword</i> <i>interface</i> <i>string</i> <b>qos</b> <b>priority</b> <i>keyword</i>
Tree	<b>priority</b>
Options	low, high
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **source-class** *number*

Synopsis	Source class for this static route
Context	<b>configure</b> <i>router</i> <i>string</i> <b>static-routes</b> <i>route</i> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <i>route-type</i> <i>keyword</i> <i>interface</i> <i>string</i> <b>source-class</b> <i>number</i>
Tree	<b>source-class</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**tag number**

Synopsis	Static route tag
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i> <b>tag</b> <i>number</i>
Tree	<b>tag</b>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

**ipsec-tunnel [ipsec-tunnel-name] string**

Synopsis	Enter the <b>ipsec-tunnel</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>ipsec-tunnel</b> <i>string</i>
Tree	<b>ipsec-tunnel</b>
Introduced	22.7.R1
Platforms	VSR

**[ipsec-tunnel-name] string**

Synopsis	IPsec tunnel name.
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>ipsec-tunnel</b> <i>string</i>
Tree	<b>ipsec-tunnel</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

**admin-state keyword**

Synopsis	Administrative state of the static route operation
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>ipsec-tunnel</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable

Introduced 22.7.R1  
Platforms VSR

### **community** *string*

Synopsis Community ID associated with the static route  
Context **configure** **router** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword*  
**ipsec-tunnel** *string* **community** *string*  
Tree **community**  
String Length 1 to 72  
Introduced 22.7.R1  
Platforms VSR

### **description** *string*

Synopsis Text description  
Context **configure** **router** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword*  
**ipsec-tunnel** *string* **description** *string*  
Tree **description**  
String Length 1 to 80  
Introduced 22.7.R1  
Platforms VSR

### **metric** *number*

Synopsis Static route metric  
Context **configure** **router** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword*  
**ipsec-tunnel** *string* **metric** *number*  
Tree **metric**  
Range 0 to 65535  
Default 1  
Introduced 22.7.R1  
Platforms VSR

**preference number**

Synopsis	Priority of this static route over the routes from different sources
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>ipsec-tunnel</b> <i>string</i> <b>preference number</b>
Tree	<b>preference</b>
Range	1 to 255
Default	5
Introduced	22.7.R1
Platforms	VSR

**tag number**

Synopsis	Static route tag
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>ipsec-tunnel</b> <i>string</i> <b>tag number</b>
Tree	<b>tag</b>
Range	1 to 4294967295
Introduced	22.7.R1
Platforms	VSR

**next-hop** [**ip-address**] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	Enter the <b>next-hop</b> list instance
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> )
Tree	<b>next-hop</b>
Introduced	16.0.R1
Platforms	All

**[ip-address]** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	IP address of the directly-connected next hop
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> )
Tree	<b>next-hop</b>
Description	This command specifies the IP address of the directly-connected next hop. The IP address can either be on the network side or the access side on the node. The address

must be associated with a network directly connected to a network configured on the node.

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the static route operation
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Introduced	16.0.R1
Platforms	All

### **backup-next-hop**

Synopsis	Enter the <b>backup-next-hop</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>backup-next-hop</b>
Tree	<b>backup-next-hop</b>
Description	Commands in this context configure static route entry fast failover.
Introduced	21.2.R1
Platforms	All

### **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Backup next-hop IP address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>backup-next-hop</b> <b>address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>address</b>
Description	This command specifies the backup IP forwarding address that is used for static route Fast ReRoute (FRR). The configured address, if reachable, acts as pre-installed backup forwarding information that can be used when the primary IP next-hop suddenly fails.  The configured backup next-hop IP address can be directly or indirectly connected (using an IGP or tunnel) to the node. The backup next-hop forwarding information or the



Next-hop Label Forwarding Entry (NHLFE) tunnel forwarding information from the IP Routing Table Manager (RTM) is used to preconfigure an IP fast-reroute backup path.

One backup next-hop address can protect a single primary static route entry next-hop address without ECMP and it is only activated when the primary next-hop has no active ECMP.

The configured IP address can be either on the network or the access side.

Introduced	21.2.R1
Platforms	All

### **bfd-liveness** *boolean*

Synopsis	Use Bidirectional Forwarding Detection on this static route
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>bfd-liveness</b> <i>boolean</i>
Tree	<b>bfd-liveness</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **community** *string*

Synopsis	Community ID associated with the static route
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>community</b> <i>string</i>
Tree	<b>community</b>
String Length	1 to 72
Introduced	16.0.R1
Platforms	All

### **cpe-check** [*address*] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the <b>cpe-check</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>cpe-check</b>
Description	When configured, this command enables the Customer Premises Equipment (CPE) check feature and specifies the IP address of the target CPE device.

This option initiates a background ICMP ping test to the configured target IP address. The IP address can either be an IPv4 address for IPv4 static routes or an IPv6 address for IPv6 static routes. To avoid possible circular references, the target IP address cannot exist in the same subnet as the static route subnet. This command is mutually exclusive with BFD support on a specific static route.

**Note:** A node that is sourcing CPE-check packets waits an additional full interval before taking action, which gives the CPE time to respond. For example, with a drop-count of 3 and an interval of 1s, three CPE-check packets are sent out and the node waits for the duration of another interval before acting on the loss. Failure declaration may take extra time depending on the load, interval, and other factors. In line with multitasking, multi-priority operating principles of the node, and the relative priority of **cpe-ping**, the node paces these minor events.

Max. Instances	1
Introduced	16.0.R1
Platforms	All

### [**address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the target CPE device
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>cpe-check</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **drop-count** *number*

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>drop-count</b> <i>number</i>
Tree	<b>drop-count</b>
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

**interval** *number*

Synopsis	Interval between ICMP pings to target CPE IP address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>interval</b> <i>number</i>
Tree	<b>interval</b>
Range	1 to 255
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

**log** *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>log</b> <i>boolean</i>
Tree	<b>log</b>
Default	false
Introduced	16.0.R1
Platforms	All

**padding-size** *number*

Synopsis	Padding size for CPE connectivity checks
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>padding-size</b> <i>number</i>
Tree	<b>padding-size</b>
Range	0 to 16384
Units	bytes
Default	56
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**destination-class** *number*

Synopsis	Destination class for this static route
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>destination-class</b> <i>number</i>
Tree	<b>destination-class</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**ldp-sync** *boolean*

Synopsis	Use LDP synchronization feature for a static route
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>ldp-sync</b> <i>boolean</i>
Tree	<b>ldp-sync</b>
Default	false
Introduced	16.0.R1
Platforms	All

**load-balancing-weight** *number*

Synopsis	Load-balancing weight for all of the ECMP next hops
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>load-balancing-weight</b> <i>number</i>
Tree	<b>load-balancing-weight</b>

Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **metric number**

Synopsis	Static route metric
Context	<b>configure router string static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword next-hop</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>metric number</b>
Tree	<b>metric</b>
Range	0 to 65535
Default	1
Introduced	16.0.R1
Platforms	All

### **preference number**

Synopsis	Priority of this static route over the routes from different sources
Context	<b>configure router string static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword next-hop</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>preference number</b>
Tree	<b>preference</b>
Range	1 to 255
Default	5
Introduced	16.0.R1
Platforms	All

### **prefix-list**

Synopsis	Enter the <b>prefix-list</b> context
Context	<b>configure router string static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword next-hop</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>prefix-list</b>
Tree	<b>prefix-list</b>
Introduced	16.0.R1
Platforms	All

**flag keyword**

Synopsis	Static route match condition from prefix list
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>prefix-list flag</b> <i>keyword</i>
Tree	<b>flag</b>
Options	any, all, none
Default	any
Introduced	16.0.R1
Platforms	All

**name reference**

Synopsis	Prefix list name
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>prefix-list name</b> <i>reference</i>
Tree	<b>name</b>
Reference	<b>configure</b> <b>policy-options prefix-list</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

**qos**

Synopsis	Enter the <b>qos</b> context
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>qos</b>
Tree	<b>qos</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**forwarding-class keyword**

Synopsis	Forwarding class associated with the static route
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>qos forwarding-class</b> <i>keyword</i>
Tree	<b>forwarding-class</b>

Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **priority** *keyword*

Synopsis	Static route priority
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>qos</b> <b>priority</b> <i>keyword</i>
Tree	<b>priority</b>
Options	low, high
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **source-class** *number*

Synopsis	Source class for this static route
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>source-class</b> <i>number</i>
Tree	<b>source-class</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **tag** *number*

Synopsis	Static route tag
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>tag</b> <i>number</i>
Tree	<b>tag</b>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

**validate-next-hop** *boolean*

Synopsis	Track the state of the next hop in the IPv4 ARP Cache or the IPv6 Neighbor Cache
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>validate-next-hop</b> <i>boolean</i>
Tree	<a href="#">validate-next-hop</a>
Default	false
Introduced	16.0.R1
Platforms	All

**tag** *number*

Synopsis	Static route tag
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>tag</b> <i>number</i>
Tree	<a href="#">tag</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

**triggered-policy** *boolean*

Synopsis	Trigger route policy re-evaluation
Context	<b>configure</b> <b>router</b> <i>string</i> <b>triggered-policy</b> <i>boolean</i>
Tree	<a href="#">triggered-policy</a>
Default	false
Introduced	16.0.R1
Platforms	All

**ttl-propagate**

Synopsis	Enter the <b>ttl-propagate</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ttl-propagate</b>
Tree	<a href="#">ttl-propagate</a>
Introduced	16.0.R1
Platforms	All



**label-route-local** *keyword*

Synopsis	TTL propagation from IP header into label stack for local packets
Context	<b>configure router</b> <i>string</i> <a href="#">ttl-propagate label-route-local</a> <i>keyword</i>
Tree	<a href="#">label-route-local</a>
Options	none, all
Default	none
Introduced	16.0.R1
Platforms	All

**label-route-transit** *keyword*

Synopsis	TTL propagation from IP header into label stack for transit packets
Context	<b>configure router</b> <i>string</i> <a href="#">ttl-propagate label-route-transit</a> <i>keyword</i>
Tree	<a href="#">label-route-transit</a>
Options	none, all
Default	none
Introduced	16.0.R1
Platforms	All

**lsr-label-route** *keyword*

Synopsis	TTL propagation from IP header into label stack
Context	<b>configure router</b> <i>string</i> <a href="#">ttl-propagate lsr-label-route</a> <i>keyword</i>
Tree	<a href="#">lsr-label-route</a>
Options	none, all
Default	none
Introduced	16.0.R1
Platforms	All

**vprn-local** *keyword*

Synopsis	TTL propagation from IP header into label stack for VPRN local packets
Context	<b>configure router</b> <i>string</i> <a href="#">ttl-propagate vprn-local</a> <i>keyword</i>
Tree	<a href="#">vprn-local</a>

Options	none, all, vc-only
Default	vc-only
Introduced	16.0.R1
Platforms	All

### **vprn-transit** *keyword*

Synopsis	TTL propagation from IP header into label stack for VPRN transit packets
Context	<b>configure</b> <b>router</b> <i>string</i> <b>tli-propagate</b> <b>vprn-transit</b> <i>keyword</i>
Tree	<b>vprn-transit</b>
Options	none, all, vc-only
Default	vc-only
Introduced	16.0.R1
Platforms	All

### **tunnel-interface**

Synopsis	Enter the <b>tunnel-interface</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>tunnel-interface</b>
Tree	<b>tunnel-interface</b>
Introduced	16.0.R1
Platforms	All

### **ldp-p2mp-leaf** [**p2mp-id**] *number* **sender-address** *string*

Synopsis	Enter the <b>ldp-p2mp-leaf</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>tunnel-interface</b> <b>ldp-p2mp-leaf</b> <i>number</i> <b>sender-address</b> <i>string</i>
Tree	<b>ldp-p2mp-leaf</b>
Introduced	16.0.R1
Platforms	All

### **[p2mp-id]** *number*

Synopsis	Identifier used for signaling MLDP P2MP LSP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>tunnel-interface</b> <b>ldp-p2mp-leaf</b> <i>number</i> <b>sender-address</b> <i>string</i>

Tree	<a href="#">ldp-p2mp-leaf</a>
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **sender-address** *string*

Synopsis	Address of an LDP sender for the P2MP RSVP tunnel interface instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">tunnel-interface</a> <a href="#">ldp-p2mp-leaf</a> <i>number</i> <a href="#">sender-address</a> <i>string</i>
Tree	<a href="#">ldp-p2mp-leaf</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">tunnel-interface</a> <a href="#">ldp-p2mp-leaf</a> <i>number</i> <a href="#">sender-address</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **ldp-p2mp-root** [[p2mp-id](#)] *number* [sender-address](#) *string*

Synopsis	Enter the <b>ldp-p2mp-root</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">tunnel-interface</a> <a href="#">ldp-p2mp-root</a> <i>number</i> <a href="#">sender-address</a> <i>string</i>
Tree	<a href="#">ldp-p2mp-root</a>
Introduced	16.0.R1
Platforms	All

**[p2mp-id] number**

Synopsis	Identifier used for signaling MLDP P2MP LSP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>tunnel-interface</b> <b>ldp-p2mp-root</b> <i>number</i> <b>sender-address</b> <i>string</i>
Tree	<b>ldp-p2mp-root</b>
Range	1 to 8192
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**sender-address string**

Synopsis	Address of an LDP sender for the P2MP RSVP tunnel interface instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>tunnel-interface</b> <b>ldp-p2mp-root</b> <i>number</i> <b>sender-address</b> <i>string</i>
Tree	<b>ldp-p2mp-root</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <b>router</b> <i>string</i> <b>tunnel-interface</b> <b>ldp-p2mp-root</b> <i>number</i> <b>sender-address</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**rsvp-p2mp-leaf [lsp-name] string sender-address string**

Synopsis	Enter the <b>rsvp-p2mp-leaf</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>tunnel-interface</b> <b>rsvp-p2mp-leaf</b> <i>string</i> <b>sender-address</b> <i>string</i>
Tree	<b>rsvp-p2mp-leaf</b>
Introduced	16.0.R1
Platforms	All

**[lsp-name] string**

Synopsis	LSP name of the P2MP RSVP tunnel interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>tunnel-interface</b> <b>rsvp-p2mp-leaf</b> <i>string</i> <b>sender-address</b> <i>string</i>
Tree	<b>rsvp-p2mp-leaf</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**sender-address string**

Synopsis	Address of a sender for the P2MP RSVP tunnel interface instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>tunnel-interface</b> <b>rsvp-p2mp-leaf</b> <i>string</i> <b>sender-address</b> <i>string</i>
Tree	<b>rsvp-p2mp-leaf</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <b>router</b> <i>string</i> <b>tunnel-interface</b> <b>rsvp-p2mp-leaf</b> <i>string</i> <b>sender-address</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**rsvp-p2mp-root [lsp-name] string**

Synopsis	Enter the <b>rsvp-p2mp-root</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>tunnel-interface</b> <b>rsvp-p2mp-root</b> <i>string</i>
Tree	<b>rsvp-p2mp-root</b>
Introduced	16.0.R1

Platforms All

### [lsp-name] *string*

Synopsis LSP name of the P2MP RSVP tunnel interface  
Context **configure** [router](#) *string* [tunnel-interface](#) [rsvp-p2mp-root](#) *string*  
Tree [rsvp-p2mp-root](#)  
String Length 1 to 32  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms All

### description *string*

Synopsis Text description  
Context **configure** [router](#) *string* [tunnel-interface](#) [rsvp-p2mp-root](#) *string* [description](#) *string*  
Tree [description](#)  
String Length 1 to 80  
Introduced 16.0.R1  
Platforms All

### twamp-light

Synopsis Enter the **twamp-light** context  
Context **configure** [router](#) *string* [twamp-light](#)  
Tree [twamp-light](#)  
Introduced 16.0.R4  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### reflector

Synopsis Enable the **reflector** context  
Context **configure** [router](#) *string* [twamp-light](#) [reflector](#)  
Tree [reflector](#)  
Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **admin-state** *keyword*

Synopsis Administrative state of TWAMP Light functionality  
 Context **configure** *router string twamp-light reflector admin-state keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **allow-ipv6-udp-checksum-zero** *boolean*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Process IPv6 packets with a zero UDP checksum  
 Context **configure** *router string twamp-light reflector allow-ipv6-udp-checksum-zero boolean*  
 Tree [allow-ipv6-udp-checksum-zero](#)  
 Description When configured to **true**, this command allows the processing of IPv6 packets that arrive with a UDP checksum of zero. The destination UDP ports that are registered as TWAMP Test packets as part of this template allow this behavior.  
 When configured to **false**, IPv6 packets that arrive with a UDP checksum of zero are discarded.  
 Default false  
 Introduced 21.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **description** *string*

Synopsis Text description  
 Context **configure** *router string twamp-light reflector description string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **prefix** [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Enter the **prefix** list instance

Context **configure** [router](#) *string* [twamp-light](#) [reflector](#) [prefix](#) (*ipv4-prefix* | *ipv6-prefix*)

Tree [prefix](#)

Max. Instances 50

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Source prefix for the TWAMP-Light reflector

Context **configure** [router](#) *string* [twamp-light](#) [reflector](#) [prefix](#) (*ipv4-prefix* | *ipv6-prefix*)

Tree [prefix](#)

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **description** *string*

Synopsis Text description

Context **configure** [router](#) *string* [twamp-light](#) [reflector](#) [prefix](#) (*ipv4-prefix* | *ipv6-prefix*) [description](#) *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **type** *keyword*

Synopsis Processing behavior type for the reflector

Context **configure** [router](#) *string* [twamp-light](#) [reflector](#) [type](#) *keyword*

Tree [type](#)



Description	<p>This command configures the processing behavior of the TWAMP Light reflector. When the value is <b>twamp-light</b> the reflector does not check the received PDU as a traditional base TWAMP Light packet without TLV processing. When the value is <b>stamp</b>, the reflector attempts to find and process supported STAMP TLVs that follow the base STAMP packet.</p> <p>In mixed environments where different types of Session-Senders may be targeting a common TWAMP Light reflector, set the value to <b>stamp</b>. When the reflector is operating in <b>stamp</b> mode, the primary parsing is based on STAMP, checking and processing known TLVs, or determining if the arriving PDU is a TWAMP Light PDU. A Session-Sender launching a TWAMP Light-based packet must use all zeros padding pattern when the pad size is non zero.</p>
Options	stamp, twamp-light
Default	twamp-light
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### udp-port *number*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	UDP port on which the specified TWAMP-Light reflector listens for TWAMP PDUs
Context	<b>configure</b> router <i>string</i> twamp-light reflector udp-port <i>number</i>
Tree	udp-port
Range	862   64364 to 64373
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### vrgw

Synopsis	Enter the <b>vrgw</b> context
Context	<b>configure</b> router <i>string</i> vrgw
Tree	vrgw
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## lanext

Synopsis	Enable the <b>lanext</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>vrgw lanext</b>
Tree	<b>lanext</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of Home LAN Extension
Context	<b>configure</b> <b>router</b> <i>string</i> <b>vrgw lanext admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## vxlan-port *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	UDP port to be used by local or remote VXLAN VTEP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>vrgw lanext vxlan-port</b> <i>number</i>
Tree	<b>vxlan-port</b>
Range	4789   8472
Default	4789
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## vxlan-vtep-range

Synopsis	Enter the <b>vxlan-vtep-range</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>vrgw lanext vxlan-vtep-range</b>
Tree	<b>vxlan-vtep-range</b>

Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Upper bound of the VXLAN VTEP range  
 Context **configure** **router** *string* **vrgw** **lanext** **vxlan-vtep-range** **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)  
 Tree **end**  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Lower bound of the VXLAN VTEP range  
 Context **configure** **router** *string* **vrgw** **lanext** **vxlan-vtep-range** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)  
 Tree **start**  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **wlan-gw-group** *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

---

Synopsis	WLAN-GW group used for Home LAN Extension
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">vrgw lanext wlan-gw-group</a> <i>reference</i>
Tree	<a href="#">wlan-gw-group</a>
Reference	<b>configure</b> <a href="#">isa wlan-gw-group</a> <i>number</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **weighted-ecmp** *keyword*

Synopsis	Weighted load-balancing capability for ECMP routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">weighted-ecmp</a> <i>keyword</i>
Tree	<a href="#">weighted-ecmp</a>
Options	false, true, strict
Default	false
Introduced	16.0.R1
Platforms	All

### **wlan-gw**

Synopsis	Enable the <b>wlan-gw</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">wlan-gw</a>
Tree	<a href="#">wlan-gw</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **distributed-subscriber-mgmt**

Synopsis	Enter the <b>distributed-subscriber-mgmt</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">wlan-gw distributed-subscriber-mgmt</a>
Tree	<a href="#">distributed-subscriber-mgmt</a>
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ipv6-tcp-mss-adjust** *number*

Synopsis	TCP-MSS adjustment value in upstream direction for DSM
Context	<b>configure</b> <b>router</b> <i>string</i> <b>wlan-gw</b> <b>distributed-subscriber-mgmt</b> <b>ipv6-tcp-mss-adjust</b> <i>number</i>
Tree	<a href="#">ipv6-tcp-mss-adjust</a>
Range	160 to 10240
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mobility-triggered-accounting**

Synopsis	Enter the <b>mobility-triggered-accounting</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>wlan-gw</b> <b>mobility-triggered-accounting</b>
Tree	<a href="#">mobility-triggered-accounting</a>
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of mobility triggered accounting
Context	<b>configure</b> <b>router</b> <i>string</i> <b>wlan-gw</b> <b>mobility-triggered-accounting</b> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**hold-down** *number*

Synopsis	Hold additional mobility-triggered update until this timer expires
Context	<b>configure</b> <b>router</b> <i>string</i> <b>wlan-gw</b> <b>mobility-triggered-accounting</b> <b>hold-down</b> <i>number</i>
Tree	<a href="#">hold-down</a>
Range	60 to 86400
Units	seconds
Introduced	16.0.R4

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **include-counters** *boolean*

Synopsis Include counters in interim updates  
 Context **configure** *router string wlan-gw mobility-triggered-accounting include-counters boolean*  
 Tree [include-counters](#)  
 Default false  
 Introduced 16.0.R4  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **xconnect**

Synopsis Enter the **xconnect** context  
 Context **configure** *router string wlan-gw xconnect*  
 Tree [xconnect](#)  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the WLAN-GW cross-connect  
 Context **configure** *router string wlan-gw xconnect admin-state keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tunnel-source-ip** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis IPv6 address and prefix for the tunnel source

Context	<b>configure router</b> <i>string</i> <a href="#">wlan-gw xconnect tunnel-source-ip</a> <i>string</i>
Tree	<a href="#">tunnel-source-ip</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## wlan-gw-group *reference*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA WLAN-GW Group
Context	<b>configure router</b> <i>string</i> <a href="#">wlan-gw xconnect wlan-gw-group</a> <i>reference</i>
Tree	<a href="#">wlan-gw-group</a>
Reference	<b>configure isa</b> <a href="#">wlan-gw-group</a> <i>number</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## wpp

Synopsis	Enable the <b>wpp</b> context
Context	<b>configure router</b> <i>string</i> <a href="#">wpp</a>
Tree	<a href="#">wpp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of WPP
Context	<b>configure router</b> <i>string</i> <a href="#">wpp admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**portal** [*name*] *string*

Synopsis	Enter the <b>portal</b> list instance
Context	<b>configure router</b> <i>string</i> <b>wpp portal</b> <i>string</i>
Tree	<b>portal</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	Web portal name
Context	<b>configure router</b> <i>string</i> <b>wpp portal</b> <i>string</i>
Tree	<b>portal</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ack-auth-retry-count** *number*

Synopsis	Number of retransmissions of an ACK_OUT message
Context	<b>configure router</b> <i>string</i> <b>wpp portal</b> <i>string</i> <b>ack-auth-retry-count</b> <i>number</i>
Tree	<b>ack-auth-retry-count</b>
Range	0 to 5
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	WPP portal address
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Context	<b>configure router</b> <i>string</i> <b>wpp portal</b> <i>string</i> <b>address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>address</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the WPP portal server
Context	<b>configure router</b> <i>string</i> <b>wpp portal</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ntf-logout-retry-count** *number*

Synopsis	Number of retransmissions of an NTF_LOGOUT message
Context	<b>configure router</b> <i>string</i> <b>wpp portal</b> <i>string</i> <b>ntf-logout-retry-count</b> <i>number</i>
Tree	<b>ntf-logout-retry-count</b>
Range	0 to 5
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **port-format** *keyword*

Synopsis	Format of the port in the ACK_INO message
Context	<b>configure router</b> <i>string</i> <b>wpp portal</b> <i>string</i> <b>port-format</b> <i>keyword</i>
Tree	<b>port-format</b>
Options	standard, vendor-specific
Default	standard
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **retry-interval** *number*

Synopsis Time between two consecutive retransmissions

Context **configure** *router string wpp portal string retry-interval number*

Tree [retry-interval](#)

Range 10 to 2000

Units milliseconds

Default 2000

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **secret** *string*

Synopsis Message authentication between portal and BRAS by applying the secret used by WPPv2

Context **configure** *router string wpp portal string secret string*

Tree [secret](#)

String Length 1 to 115

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **version** *number*

Synopsis Protocol version to be expected by the WPP portal

Context **configure** *router string wpp portal string version number*

Tree [version](#)

Range 1 | 2

Default 1

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## 3.40 routing-options commands

```

configure
- routing-options
- admin-tags
  - admin-tag string
  - route-admin-tag-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - exclude reference
  - include reference
- apply-groups reference
- apply-groups-exclude reference
- flexible-algorithm-definitions
  - apply-groups reference
  - apply-groups-exclude reference
  - flex-algo string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - exclude
    - admin-group reference
  - flags-tlv boolean
  - include-all
    - admin-group reference
  - include-any
    - admin-group reference
  - metric-type keyword
  - priority number
- if-attribute
  - admin-group string
  - apply-groups reference
  - apply-groups-exclude reference
  - value number
  - apply-groups reference
  - apply-groups-exclude reference
  - srlg-group string
  - apply-groups reference
  - apply-groups-exclude reference
  - penalty-weight number
  - value number
- ip-fast-reroute boolean
- policy-accounting
  - apply-groups reference
  - apply-groups-exclude reference
  - policy-acct-template string
  - apply-groups reference
  - apply-groups-exclude reference
  - destination-class number
  - apply-groups reference
  - apply-groups-exclude reference
  - policer reference
  - policer number
  - apply-groups reference
  - apply-groups-exclude reference
  - max-burst-size (number | keyword)
  - peak-rate (number | keyword)
  - source-class number
- route-next-hop-policy
  - apply-groups reference

```

---

configure routing-options route-next-hop-policy apply-groups-exclude

- **apply-groups-exclude** *reference*
- **template** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **exclude-group** *reference*
  - **include-group** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **preference** *number*
- **nh-type** *keyword*
- **protection-type** *keyword*
- **srlg** *boolean*

### 3.40.1 routing-options command descriptions

#### routing-options

Synopsis	Enter the <b>routing-options</b> context
Context	<b>configure</b> <a href="#">routing-options</a>
Tree	<a href="#">routing-options</a>
Introduced	16.0.R1
Platforms	All

#### admin-tags

Synopsis	Enter the <b>admin-tags</b> context
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">admin-tags</a>
Tree	<a href="#">admin-tags</a>
Introduced	16.0.R1
Platforms	All

#### admin-tag [[tag](#)] *string*

Synopsis	Add a list entry for <b>admin-tag</b>
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">admin-tags</a> <a href="#">admin-tag</a> <i>string</i>
Tree	<a href="#">admin-tag</a>
Max. Instances	256
Introduced	16.0.R1
Platforms	All

#### [[tag](#)] *string*

Synopsis	Administrative tag value
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">admin-tags</a> <a href="#">admin-tag</a> <i>string</i>
Tree	<a href="#">admin-tag</a>
String Length	1 to 32
Notes	This element is part of a list key.

Introduced 16.0.R1  
 Platforms All

### **route-admin-tag-policy** [[policy-name](#)] *string*

Synopsis Enter the **route-admin-tag-policy** list instance  
 Context **configure** [routing-options](#) [admin-tags](#) [route-admin-tag-policy](#) *string*  
 Tree [route-admin-tag-policy](#)  
 Max. Instances 2048  
 Introduced 16.0.R1  
 Platforms All

### **[policy-name]** *string*

Synopsis Name of the route admin tag policy  
 Context **configure** [routing-options](#) [admin-tags](#) [route-admin-tag-policy](#) *string*  
 Tree [route-admin-tag-policy](#)  
 String Length 1 to 64  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **exclude** [[tag](#)] *reference*

Synopsis Add a list entry for **exclude**  
 Context **configure** [routing-options](#) [admin-tags](#) [route-admin-tag-policy](#) *string* [exclude](#) *reference*  
 Tree [exclude](#)  
 Max. Instances 8  
 Introduced 16.0.R1  
 Platforms All

### **[tag]** *reference*

Synopsis Administrative tag value

Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">admin-tags</a> <a href="#">route-admin-tag-policy</a> <i>string</i> <a href="#">exclude</a> <a href="#">reference</a>
Tree	<a href="#">exclude</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">admin-tags</a> <a href="#">admin-tag</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **include** [[tag](#)] [reference](#)

Synopsis	Add a list entry for <b>include</b>
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">admin-tags</a> <a href="#">route-admin-tag-policy</a> <i>string</i> <a href="#">include</a> <a href="#">reference</a>
Tree	<a href="#">include</a>
Max. Instances	8
Introduced	16.0.R1
Platforms	All

### **[tag]** [reference](#)

Synopsis	Administrative tag value
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">admin-tags</a> <a href="#">route-admin-tag-policy</a> <i>string</i> <a href="#">include</a> <a href="#">reference</a>
Tree	<a href="#">include</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">admin-tags</a> <a href="#">admin-tag</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **flexible-algorithm-definitions**

Synopsis	Enter the <b>flexible-algorithm-definitions</b> context
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">flexible-algorithm-definitions</a>
Tree	<a href="#">flexible-algorithm-definitions</a>
Description	Commands in this context enable locally-configured algorithm definitions and configure administrative groups.
Introduced	20.7.R1

Platforms All

### **flex-algo** [[flex-algo-name](#)] *string*

Synopsis Enter the **flex-algo** list instance

Context **configure** [routing-options](#) [flexible-algorithm-definitions](#) [flex-algo](#) *string*

Tree [flex-algo](#)

Description Commands in this context configure the definition context for a Flexible Algorithm Definition (FAD).

Max. Instances 256

Introduced 20.7.R1

Platforms All

### **[flex-algo-name]** *string*

Synopsis Flexible Algorithm Definition (FAD) name

Context **configure** [routing-options](#) [flexible-algorithm-definitions](#) [flex-algo](#) *string*

Tree [flex-algo](#)

Description This command specifies the name of the flexible algorithm definition that is used as a reference anchor for the configuration.

String Length 1 to 32

Notes This element is part of a list key.

Introduced 20.7.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the FAD

Context **configure** [routing-options](#) [flexible-algorithm-definitions](#) [flex-algo](#) *string* **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 20.7.R1

Platforms All



**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">flexible-algorithm-definitions</a> <a href="#">flex-algo</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	20.7.R1
Platforms	All

**exclude****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>exclude</b> context
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">flexible-algorithm-definitions</a> <a href="#">flex-algo</a> <i>string</i> <b>exclude</b>
Tree	<a href="#">exclude</a>
Description	<p>Commands in this context define administrative groups that are used to exclude links from the Flexible Algorithm topology graph.</p> <p>Administrative groups, also known as link colors, are attributes associated with a link. The exclude rule that is part of the FAD specifies that links with the named administrative groups set are to be excluded from the topology graph.</p>
Introduced	20.7.R1
Platforms	All

**admin-group** [[group-name](#)] *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Add a list entry for <b>admin-group</b>
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">flexible-algorithm-definitions</a> <a href="#">flex-algo</a> <i>string</i> <b>exclude</b> <a href="#">admin-group</a> <i>reference</i>
Tree	<a href="#">admin-group</a>
Introduced	20.7.R1
Platforms	All

**[group-name]** *reference*

Synopsis	Administrative group name
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">flexible-algorithm-definitions</a> <a href="#">flex-algo</a> <i>string</i> <a href="#">exclude</a> <a href="#">admin-group</a> <i>reference</i>
Tree	<a href="#">admin-group</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute</a> <a href="#">admin-group</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

**flags-tlv** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Advertise the FAD Flags TLV
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">flexible-algorithm-definitions</a> <a href="#">flex-algo</a> <i>string</i> <a href="#">flags-tlv</a> <i>boolean</i>
Tree	<a href="#">flags-tlv</a>
Description	<p>When configured to <b>true</b>, the router advertises the FAD Flags TLV within the FAD. The M-flag within the TLV is set to 1, specifying the use of a Flex-Algorithm specific prefix metric. A router receiving the TLV modifies the constrained SPF (cSPF) based on the M-flag status.</p> <p>When configured to <b>false</b>, the FAD Flags TLV is not included with the FAD advertisement.</p>
Default	true
Introduced	20.10.R1
Platforms	All

**include-all****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>include-all</b> context
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">flexible-algorithm-definitions</a> <a href="#">flex-algo</a> <i>string</i> <a href="#">include-all</a>

Tree	<a href="#">include-all</a>
Description	<p>Commands in this context define administrative groups that are used to include links from the Flexible Algorithm topology graph.</p> <p>Administrative groups, also known as link colors, are attributes associated with a link. The include-all rule that is part of the FAD specifies that all named administrative groups must be present in a link to be included in the topology graph.</p>
Introduced	20.7.R1
Platforms	All

### **admin-group** [[group-name](#)] *reference*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Add a list entry for <b>admin-group</b>
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">flexible-algorithm-definitions</a> <a href="#">flex-algo</a> <i>string</i> <a href="#">include-all</a> <a href="#">admin-group</a> <i>reference</i>
Tree	<a href="#">admin-group</a>
Introduced	20.7.R1
Platforms	All

### **[group-name]** *reference*

Synopsis	Administrative group name
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">flexible-algorithm-definitions</a> <a href="#">flex-algo</a> <i>string</i> <a href="#">include-all</a> <a href="#">admin-group</a> <i>reference</i>
Tree	<a href="#">admin-group</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute</a> <a href="#">admin-group</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

## include-any



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>include-any</b> context
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">flexible-algorithm-definitions</a> <a href="#">flex-algo</a> <i>string</i> <a href="#">include-any</a>
Tree	<a href="#">include-any</a>
Description	<p>Commands in this context define administrative groups that are used to include links from the Flexible Algorithm topology graph.</p> <p>Administrative groups, also known as link colors, are attributes associated with a link. The include-all rule that is part of the FAD specifies that any link with the named administrative groups is included in the topology graph</p>
Introduced	20.7.R1
Platforms	All

## admin-group [[group-name](#)] *reference*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Add a list entry for <b>admin-group</b>
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">flexible-algorithm-definitions</a> <a href="#">flex-algo</a> <i>string</i> <a href="#">include-any</a> <a href="#">admin-group</a> <i>reference</i>
Tree	<a href="#">admin-group</a>
Introduced	20.7.R1
Platforms	All

## [[group-name](#)] *reference*

Synopsis	Administrative group name
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">flexible-algorithm-definitions</a> <a href="#">flex-algo</a> <i>string</i> <a href="#">include-any</a> <a href="#">admin-group</a> <i>reference</i>
Tree	<a href="#">admin-group</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute</a> <a href="#">admin-group</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	20.7.R1

Platforms All

### **metric-type** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FAD metric type
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">flexible-algorithm-definitions</a> <a href="#">flex-algo</a> <i>string</i> <b>metric-type</b> <i>keyword</i>
Tree	<a href="#">metric-type</a>
Options	igp, delay, te-metric
Default	igp
Introduced	20.7.R1
Platforms	All

### **priority** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FAD priority
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">flexible-algorithm-definitions</a> <a href="#">flex-algo</a> <i>string</i> <b>priority</b> <i>number</i>
Tree	<a href="#">priority</a>
Description	This command configures the priority of the FAD. The priority is used as a tie-breaker when the router has received multiple FADs for the same flexible algorithm.
Range	0 to 255
Default	100
Introduced	20.7.R1
Platforms	All

### **if-attribute**

Synopsis	Enter the <b>if-attribute</b> context
Context	<b>configure</b> <a href="#">routing-options</a> <b>if-attribute</b>

Tree	<a href="#">if-attribute</a>
Introduced	16.0.R1
Platforms	All

### **admin-group** [[group-name](#)] *string*

Synopsis	Enter the <b>admin-group</b> list instance
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute</a> <a href="#">admin-group</a> <i>string</i>
Tree	<a href="#">admin-group</a>
Max. Instances	255
Introduced	16.0.R1
Platforms	All

### **[group-name]** *string*

Synopsis	Interface group name
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute</a> <a href="#">admin-group</a> <i>string</i>
Tree	<a href="#">admin-group</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **value** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Integer value associated with the group
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute</a> <a href="#">admin-group</a> <i>string</i> <a href="#">value</a> <i>number</i>
Tree	<a href="#">value</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

### **srlg-group** [*name*] *string*

Synopsis Enter the **srlg-group** list instance  
 Context **configure** [routing-options](#) [if-attribute srlg-group](#) *string*  
 Tree [srlg-group](#)  
 Max. Instances 1024  
 Introduced 16.0.R1  
 Platforms All

### **[name]** *string*

Synopsis SRLG name  
 Context **configure** [routing-options](#) [if-attribute srlg-group](#) *string*  
 Tree [srlg-group](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **penalty-weight** *number*

Synopsis Integer value of the penalty weight assigned to SRLG  
 Context **configure** [routing-options](#) [if-attribute srlg-group](#) *string* [penalty-weight](#) *number*  
 Tree [penalty-weight](#)  
 Description This command specifies the penalty weight associated with a SRLG. The higher the penalty weight, the less desirable it is to use the link with a given SRLG.  
 Range 0 to 65535  
 Default 0  
 Introduced 16.0.R1  
 Platforms All

**value** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Integer value associated with the SRLG
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute srlg-group</a> <i>string</i> <b>value</b> <i>number</i>
Tree	<a href="#">value</a>
Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**ip-fast-reroute** *boolean*

Synopsis	Enable IP fast reroute capability
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">ip-fast-reroute</a> <i>boolean</i>
Tree	<a href="#">ip-fast-reroute</a>
Default	false
Introduced	16.0.R1
Platforms	All

**policy-accounting**

Synopsis	Enter the <b>policy-accounting</b> context
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">policy-accounting</a>
Tree	<a href="#">policy-accounting</a>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**policy-acct-template** [[name](#)] *string*

Synopsis	Enter the <b>policy-acct-template</b> list instance
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">policy-accounting</a> <a href="#">policy-acct-template</a> <i>string</i>
Tree	<a href="#">policy-acct-template</a>



Max. Instances	1024
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**[name]** *string*

Synopsis	Policy accounting template name
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">policy-accounting</a> <a href="#">policy-acct-template</a> <i>string</i>
Tree	<a href="#">policy-acct-template</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**destination-class** [[index](#)] *number*

Synopsis	Enter the <b>destination-class</b> list instance
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">policy-accounting</a> <a href="#">policy-acct-template</a> <i>string</i> <b>destination-class</b> <i>number</i>
Tree	<a href="#">destination-class</a>
Max. Instances	255
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**[index]** *number*

Synopsis	Destination class index
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">policy-accounting</a> <a href="#">policy-acct-template</a> <i>string</i> <b>destination-class</b> <i>number</i>
Tree	<a href="#">destination-class</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**policer reference**

Synopsis	Policer ID
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">policy-accounting</a> <a href="#">policy-acct-template</a> <i>string</i> <a href="#">destination-class</a> <i>number</i> <a href="#">policer</a> <i>reference</i>
Tree	<a href="#">policer</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">policy-accounting</a> <a href="#">policy-acct-template</a> <i>string</i> <a href="#">policer</a> <i>number</i>
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**policer [policer-id] number**

Synopsis	Enter the <b>policer</b> list instance
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">policy-accounting</a> <a href="#">policy-acct-template</a> <i>string</i> <a href="#">policer</a> <i>number</i>
Tree	<a href="#">policer</a>
Description	Commands in this context configure the policer definition for the instance. Policing by action of a policy accounting template is only supported by cards and systems that are FP4 and later.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**[policer-id] number**

Synopsis	Policer ID
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">policy-accounting</a> <a href="#">policy-acct-template</a> <i>string</i> <a href="#">policer</a> <i>number</i>
Tree	<a href="#">policer</a>
Range	1 to 63
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**max-burst-size (number | keyword)**

Synopsis	Exceed threshold to drop packets from PIR leaky bucket
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">policy-accounting</a> <a href="#">policy-acct-template</a> <i>string</i> <a href="#">policer</a> <i>number</i> <a href="#">max-burst-size</a> ( <i>number</i>   <i>keyword</i> )

Tree	<a href="#">max-burst-size</a>
Description	This command specifies the maximum burst size for the policer. When this value is exceeded, packets are considered violating and are dropped.
Range	0 to 16777216
Units	bytes
Options	auto
Default	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **peak-rate** (*number* | *keyword*)

Synopsis	Peak rate of the policy accounting policer
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">policy-accounting</a> <a href="#">policy-acct-template</a> <i>string</i> <a href="#">policer</a> <i>number</i> <a href="#">peak-rate</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">peak-rate</a>
Description	This command configures the peak rate of the policy accounting policer, which is the fill or drain rate of the bucket.
Range	1 to 6400000000
Options	max
Default	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **source-class** [[index](#)] *number*

Synopsis	Add a list entry for <b>source-class</b>
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">policy-accounting</a> <a href="#">policy-acct-template</a> <i>string</i> <a href="#">source-class</a> <i>number</i>
Tree	<a href="#">source-class</a>
Max. Instances	255
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**[index] number**

Synopsis	Source-class index
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">policy-accounting</a> <a href="#">policy-acct-template</a> <i>string</i> <a href="#">source-class</a> <i>number</i>
Tree	<a href="#">source-class</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**route-next-hop-policy**

Synopsis	Enter the <b>route-next-hop-policy</b> context
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">route-next-hop-policy</a>
Tree	<a href="#">route-next-hop-policy</a>
Introduced	16.0.R1
Platforms	All

**template [template-name] string**

Synopsis	Enter the <b>template</b> list instance
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">route-next-hop-policy</a> <a href="#">template</a> <i>string</i>
Tree	<a href="#">template</a>
Introduced	16.0.R1
Platforms	All

**[template-name] string**

Synopsis	Template name
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">route-next-hop-policy</a> <a href="#">template</a> <i>string</i>
Tree	<a href="#">template</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">route-next-hop-policy</a> <a href="#">template</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**exclude-group** [[group-name](#)] *reference*

Synopsis	Add a list entry for <b>exclude-group</b>
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">route-next-hop-policy</a> <a href="#">template</a> <i>string</i> <a href="#">exclude-group</a> <i>reference</i>
Tree	<a href="#">exclude-group</a>
Max. Instances	32
Introduced	16.0.R1
Platforms	All

**[group-name]** *reference*

Synopsis	Administrative group name
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">route-next-hop-policy</a> <a href="#">template</a> <i>string</i> <a href="#">exclude-group</a> <i>reference</i>
Tree	<a href="#">exclude-group</a>
Description	This command specifies the name of the administrative group.  If the same group name is part of both include and exclude statements, the exclude statement will win. In other words, the exclude statement can be viewed as having an implicit preference value of 0.
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute</a> <a href="#">admin-group</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**include-group** [[group-name](#)] *reference*

Synopsis	Enter the <b>include-group</b> list instance
----------	--

Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">route-next-hop-policy</a> <a href="#">template</a> <i>string</i> <a href="#">include-group</a> <i>reference</i>
Tree	<a href="#">include-group</a>
Max. Instances	32
Introduced	16.0.R1
Platforms	All

### **[group-name]** *reference*

Synopsis	Administrative group name
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">route-next-hop-policy</a> <a href="#">template</a> <i>string</i> <a href="#">include-group</a> <i>reference</i>
Tree	<a href="#">include-group</a>
Description	This command specifies the name of the administrative group.  If the same group name is part of both include and exclude statements, the exclude statement will win. In other words, the exclude statement can be viewed as having an implicit preference value of 0.
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute</a> <a href="#">admin-group</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **preference** *number*

Synopsis	Preference number for configured admin-group.
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">route-next-hop-policy</a> <a href="#">template</a> <i>string</i> <a href="#">include-group</a> <i>reference</i> <a href="#">preference</a> <i>number</i>
Tree	<a href="#">preference</a>
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	All

### **nh-type** *keyword*

Synopsis	Preferred next hop
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">route-next-hop-policy</a> <a href="#">template</a> <i>string</i> <a href="#">nh-type</a> <i>keyword</i>

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Tree	<a href="#">nh-type</a>
Options	ip, tunnel
Default	ip
Introduced	16.0.R1
Platforms	All

### **protection-type** *keyword*

Synopsis	Protection type used
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">route-next-hop-policy</a> <a href="#">template</a> <i>string</i> <a href="#">protection-type</a> <i>keyword</i>
Tree	<a href="#">protection-type</a>
Options	link, node
Default	node
Introduced	16.0.R1
Platforms	All

### **srlg** *boolean*

Synopsis	Select next hops from the SRLG
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">route-next-hop-policy</a> <a href="#">template</a> <i>string</i> <a href="#">srlg</a> <i>boolean</i>
Tree	<a href="#">srlg</a>
Default	false
Introduced	16.0.R1
Platforms	All

### 3.41 saa commands

```

configure
- saa
- apply-groups reference
- apply-groups-exclude reference
- owner string test string
- accounting-policy reference
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- continuous boolean
- description string
- jitter-event keyword threshold-type keyword
- apply-groups reference
- apply-groups-exclude reference
- threshold number
- latency-event keyword threshold-type keyword
- apply-groups reference
- apply-groups-exclude reference
- threshold number
- loss-event keyword threshold-type keyword
- apply-groups reference
- apply-groups-exclude reference
- threshold number
- probe-history keyword
- type
- dns
- apply-groups reference
- apply-groups-exclude reference
- count number
- interval number
- name-server (ipv4-address-no-zone | ipv6-address-no-zone)
- record-type keyword
- router-instance string
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- target-address string
- timeout number
- trap-generation
- probe-fail boolean
- probe-fail-threshold number
- test-complete boolean
- test-fail boolean
- test-fail-threshold number
- icmp-ping
- apply-groups reference
- apply-groups-exclude reference
- bypass-routing boolean
- count number
- destination-address (ipv4-address-no-zone | ipv6-address-no-zone | string-
not-all-spaces)
- do-not-fragment boolean
- interface string
- interval (number | decimal-number)
- next-hop-address (ipv4-address-no-zone | ipv6-address-no-zone)
- pattern (keyword | number)
- qos
- fc keyword
- tos number
- router-instance string
- size number

```



configure saa owner type icmp-ping source-address

```

- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- timeout number
- trap-generation
  - probe-fail boolean
  - probe-fail-threshold number
  - test-complete boolean
  - test-fail boolean
  - test-fail-threshold number
- ttl number
- lsp-ping
  - apply-groups reference
  - apply-groups-exclude reference
  - interval number
  - qos
    - fc keyword
    - profile keyword
  - send-count number
  - size number
  - source-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - sub-type
    - bgp-label
      - path-destination
        - interface string
        - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
        - prefix (ipv4-prefix | ipv6-prefix)
    - ldp
      - path-destination
        - interface string
        - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
        - prefix (ipv4-prefix | ipv6-prefix)
    - rsvp-te
      - lsp-name string
      - path string
    - sr-isis
      - igp-instance number
      - path-destination
        - interface string
        - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
        - prefix (ipv4-prefix | ipv6-prefix)
    - sr-ospf
      - igp-instance number
      - path-destination
        - interface string
        - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
        - prefix (ipv4-prefix | ipv6-prefix)
    - sr-ospf3
      - igp-instance number
      - path-destination
        - interface string
        - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
        - prefix (ipv4-prefix | ipv6-prefix)
    - sr-policy
      - color number
      - endpoint (ipv4-address-no-zone | ipv6-address-no-zone)
      - path-destination
        - interface string
        - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
      - segment-list number

```

---

configure saa owner type lsp-ping sub-type sr-te

```
- sr-te
  - lsp-name string
  - path string
  - path-destination
    - interface string
    - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
- timeout number
- trap-generation
  - probe-fail boolean
  - probe-fail-threshold number
  - test-complete boolean
  - test-fail boolean
  - test-fail-threshold number
- ttl number
```

### 3.41.1 saa command descriptions

#### **saa**

Synopsis	Enter the <b>saa</b> context
Context	<b>configure saa</b>
Tree	<b>saa</b>
Description	Commands in this context configure the Service Assurance Agent (SAA) tests.
Introduced	16.0.R4
Platforms	All

#### **owner** [**owner-name**] *string test string*

Synopsis	Enter the <b>owner</b> list instance
Context	<b>configure saa owner string test string</b>
Tree	<b>owner</b>
Introduced	16.0.R4
Platforms	All

#### **[owner-name]** *string*

Synopsis	Optional owner name of the SAA operation
Context	<b>configure saa owner string test string</b>
Tree	<b>owner</b>
Description	This command configures the owner associated with the SAA operation. The owner is optional and "TIMOS CLI" is used if an owner is not specified.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

#### **test string**

Synopsis	SAA test name
Context	<b>configure saa owner string test string</b>

Tree	<a href="#">owner</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **accounting-policy** *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accounting policy associated with the SAA test
Context	<b>configure</b> <a href="#">saa owner string test string accounting-policy reference</a>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log accounting-policy number</a>
Introduced	16.0.R4
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the SAA test
Context	<b>configure</b> <a href="#">saa owner string test string admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

### **continuous** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Execute the SAA tests as continuous
----------	-------------------------------------

Context	<b>configure</b> <i>saa owner string test string continuous boolean</i>
Tree	<i>continuous</i>
Description	<p>When configured to <b>true</b>, the SAA test execution is continuous, that is, it cannot be started or stopped with the <b>oam saa test start</b> or <b>stop</b> commands.</p> <p>The SAA test types supported by this command include the following:</p> <ul style="list-style-type: none"> <li>• <b>cpe-ping</b></li> <li>• <b>dns</b></li> <li>• <b>eth-cfm-loopback</b></li> <li>• <b>eth-cfm-two-way-delay</b></li> <li>• <b>eth-cfm-two-way-slm</b></li> <li>• <b>icmp-ping</b> (not applicable to <b>rapid</b> type)</li> <li>• <b>lsp-ping</b></li> <li>• <b>mac-ping</b></li> <li>• <b>sdp-ping</b></li> <li>• <b>vccv-ping</b></li> <li>• <b>vprn-ping</b></li> </ul>
Default	false
Introduced	16.0.R4
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <i>saa owner string test string description string</i>
Tree	<i>description</i>
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

### **jitter-event** [*direction*] *keyword threshold-type keyword*

Synopsis	Enter the <b>jitter-event</b> list instance
Context	<b>configure</b> <i>saa owner string test string jitter-event keyword threshold-type keyword</i>
Tree	<i>jitter-event</i>

Description	Commands in this context configure the jitter event thresholds used to evaluate the jitter event value at the termination of an SAA test probe. The system generates SAA threshold events as required.
Introduced	16.0.R4
Platforms	All

### [**direction**] *keyword*

Synopsis	Direction for OAM ping responses for OAM ping test run
Context	<b>configure</b> <b>saa</b> <b>owner</b> <i>string</i> <b>test</b> <i>string</i> <b>jitter-event</b> <i>keyword</i> <b>threshold-type</b> <i>keyword</i>
Tree	<b>jitter-event</b>
Options	inbound, outbound, round-trip
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **threshold-type** *keyword*

Synopsis	Threshold type
Context	<b>configure</b> <b>saa</b> <b>owner</b> <i>string</i> <b>test</b> <i>string</i> <b>jitter-event</b> <i>keyword</i> <b>threshold-type</b> <i>keyword</i>
Tree	<b>jitter-event</b>
Options	rising, falling
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **threshold** *number*

Synopsis	Threshold jitter value
Context	<b>configure</b> <b>saa</b> <b>owner</b> <i>string</i> <b>test</b> <i>string</i> <b>jitter-event</b> <i>keyword</i> <b>threshold-type</b> <i>keyword</i> <b>threshold</b> <i>number</i>
Tree	<b>threshold</b>
Description	This command specifies the threshold jitter value. The system generates an SAA threshold event when the jitter value of the test run crosses the threshold value.
Range	0 to 2147483647
Units	microseconds

Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **latency-event** [*direction*] *keyword* *threshold-type* *keyword*

Synopsis	Enter the <b>latency-event</b> list instance
Context	<b>configure</b> <i>saa owner</i> <i>string</i> <i>test</i> <i>string</i> <b>latency-event</b> <i>keyword</i> <i>threshold-type</i> <i>keyword</i>
Tree	<b>latency-event</b>
Description	Commands in this context configure the latency event thresholds used to evaluate the latency event value at the termination of an SAA test probe. The system generates SAA threshold events as required.
Introduced	16.0.R4
Platforms	All

### **[direction]** *keyword*

Synopsis	Direction for OAM ping responses for OAM ping test run
Context	<b>configure</b> <i>saa owner</i> <i>string</i> <i>test</i> <i>string</i> <b>latency-event</b> <i>keyword</i> <i>threshold-type</i> <i>keyword</i>
Tree	<b>latency-event</b>
Options	inbound, outbound, round-trip
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **threshold-type** *keyword*

Synopsis	Threshold type
Context	<b>configure</b> <i>saa owner</i> <i>string</i> <i>test</i> <i>string</i> <b>latency-event</b> <i>keyword</i> <i>threshold-type</i> <i>keyword</i>
Tree	<b>latency-event</b>
Options	rising, falling
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**threshold** *number*

Synopsis	Threshold latency value
Context	<b>configure</b> <i>saa owner string test string latency-event keyword threshold-type keyword threshold number</i>
Tree	<b>threshold</b>
Description	This command specifies the threshold latency value. The system generates an SAA threshold event when the latency value of the test run crosses the threshold value.
Range	0 to 2147483647
Units	microseconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**loss-event** [*direction*] *keyword threshold-type keyword*

Synopsis	Enter the <b>loss-event</b> list instance
Context	<b>configure</b> <i>saa owner string test string loss-event keyword threshold-type keyword</i>
Tree	<b>loss-event</b>
Description	Commands in this context configure the loss event thresholds used to evaluate the loss event value at the termination of an SAA test probe. The system generates SAA threshold events as required.
Introduced	16.0.R4
Platforms	All

**[direction]** *keyword*

Synopsis	Direction for OAM ping responses for OAM ping test run
Context	<b>configure</b> <i>saa owner string test string loss-event keyword threshold-type keyword</i>
Tree	<b>loss-event</b>
Options	inbound, outbound, round-trip
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All



**threshold-type** *keyword*

Synopsis	Threshold type
Context	<b>configure</b> <i>saa owner string test string loss-event keyword threshold-type keyword</i>
Tree	<a href="#">loss-event</a>
Options	rising, falling
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**threshold** *number*

Synopsis	Threshold loss event value
Context	<b>configure</b> <i>saa owner string test string loss-event keyword threshold-type keyword threshold number</i>
Tree	<a href="#">threshold</a>
Description	This command specifies the threshold loss value. The system generates an SAA threshold event when the loss value of the test run crosses the threshold value.
Range	0 to 2147483647
Units	packets
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**probe-history** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	History probe behavior
Context	<b>configure</b> <i>saa owner string test string probe-history keyword</i>
Tree	<a href="#">probe-history</a>
Options	keep, drop, auto
Default	auto
Introduced	16.0.R4
Platforms	All

## type

Synopsis	Enter the <b>type</b> context
Context	<b>configure</b> <i>saa owner string test string type</i>
Tree	<i>type</i>
Introduced	16.0.R4
Platforms	All

## dns

Synopsis	Enable the <b>dns</b> context
Context	<b>configure</b> <i>saa owner string test string type dns</i>
Tree	<i>dns</i>
Notes	The following elements are part of a choice: <b>dns</b> , <b>icmp-ping</b> , or <b>lsp-ping</b> .
Introduced	22.10.R1
Platforms	All

## count *number*

Synopsis	Number of messages to send in a sample window
Context	<b>configure</b> <i>saa owner string test string type dns count number</i>
Tree	<i>count</i>
Description	This command specifies the number of messages to send. Each message request must either time out or receive a reply before the next message request is sent.
Range	1 to 100
Units	packets
Default	1
Introduced	22.10.R1
Platforms	All

## interval *number*

Synopsis	Minimum time before the next message request is sent
Context	<b>configure</b> <i>saa owner string test string type dns interval number</i>
Tree	<i>interval</i>

Range	1 to 10
Units	seconds
Default	1
Introduced	22.10.R1
Platforms	All

### **name-server** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the DNS name server used for the test
Context	<b>configure</b> <i>saa owner string test string type dns name-server</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">name-server</a>
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

### **record-type** *keyword*

Synopsis	Record type
Context	<b>configure</b> <i>saa owner string test string type dns record-type keyword</i>
Tree	<a href="#">record-type</a>
Options	ipv4-a-record, ipv6-aaaa-record
Default	ipv4-a-record
Introduced	22.10.R1
Platforms	All

### **router-instance** *string*

Synopsis	Router name or VPRN service name
Context	<b>configure</b> <i>saa owner string test string type dns router-instance string</i>
Tree	<a href="#">router-instance</a>
Default	_Base_and_management
Introduced	22.10.R1
Platforms	All

**source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address on the local system
Context	<b>configure</b> <i>saa owner string test string type dns source-address</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">source-address</a>
Description	This command configures the IP address on the local system. If unconfigured, the router uses a system selected local IP address.
Introduced	22.10.R1
Platforms	All

**target-address** *string*

Synopsis	DNS name to be resolved to an IP address
Context	<b>configure</b> <i>saa owner string test string type dns target-address string</i>
Tree	<a href="#">target-address</a>
String Length	1 to 255
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

**timeout** *number*

Synopsis	Maximum time to wait for a reply message
Context	<b>configure</b> <i>saa owner string test string type dns timeout number</i>
Tree	<a href="#">timeout</a>
Description	This command specifies the maximum time the router waits for a message response after sending the message request. When the timeout expires, the requesting router assumes the message response is not received. Any response received after the request times out is silently discarded.
Range	1 to 120
Units	seconds
Default	5
Introduced	22.10.R1
Platforms	All

## trap-generation

Synopsis	Enter the <b>trap-generation</b> context
Context	<b>configure</b> <a href="#">saa owner string test string type dns trap-generation</a>
Tree	<a href="#">trap-generation</a>
Introduced	22.10.R1
Platforms	All

## probe-fail *boolean*

Synopsis	Enable the generation of probe fail notifications
Context	<b>configure</b> <a href="#">saa owner string test string type dns trap-generation probe-fail boolean</a>
Tree	<a href="#">probe-fail</a>
Description	When configured to <b>true</b> , the system generates an SNMP trap if the consecutive probe failure threshold is reached during the execution of the SAA ping test.  This command is not applicable to SAA traceroute tests.
Default	false
Introduced	22.10.R1
Platforms	All

## probe-fail-threshold *number*

Synopsis	Consecutive probe failure count
Context	<b>configure</b> <a href="#">saa owner string test string type dns trap-generation probe-fail-threshold number</a>
Tree	<a href="#">probe-fail-threshold</a>
Description	This command configures the number of consecutive ping probe failures required to generate a trap.  This command has no effect if the <b>probe-fail</b> command is set to <b>false</b> .  This command is not applicable to SAA traceroute tests.
Range	0 to 15
Default	1
Introduced	22.10.R1
Platforms	All

**test-complete** *boolean*

Synopsis	Enable generation of test complete notifications
Context	<b>configure</b> <i>saa owner string test string type dns trap-generation test-complete boolean</i>
Tree	<a href="#">test-complete</a>
Default	false
Introduced	22.10.R1
Platforms	All

**test-fail** *boolean*

Synopsis	Enable the generation of test fail notifications
Context	<b>configure</b> <i>saa owner string test string type dns trap-generation test-fail boolean</i>
Tree	<a href="#">test-fail</a>
Description	When configured to <b>true</b> , the system generates a trap if a test fails. In the case of a ping test, the test is considered to have failed (for trap generation) if the number of failed probes is at least the value of the <b>test-fail-threshold</b> setting.
Default	false
Introduced	22.10.R1
Platforms	All

**test-fail-threshold** *number*

Synopsis	Total probe failures for trap generation
Context	<b>configure</b> <i>saa owner string test string type dns trap-generation test-fail-threshold number</i>
Tree	<a href="#">test-fail-threshold</a>
Description	This command configures the number of consecutive test failures required to generate a trap. This command has no effect when <b>test-fail</b> is set to <b>false</b> . This command is not applicable to SAA traceroute tests.
Range	0 to 15
Default	1
Introduced	22.10.R1
Platforms	All

**icmp-ping**

Synopsis	Enable the <b>icmp-ping</b> context
Context	<b>configure</b> <i>saa owner string test string type icmp-ping</i>
Tree	<a href="#">icmp-ping</a>
Description	Commands in this context configure an ICMP ping test.
Notes	The following elements are part of a choice: <b>dns</b> , <b>icmp-ping</b> , or <b>lsp-ping</b> .
Introduced	16.0.R4
Platforms	All

**bypass-routing** *boolean*

Synopsis	Bypass routing table for directly connected interfaces
Context	<b>configure</b> <i>saa owner string test string type icmp-ping bypass-routing boolean</i>
Tree	<a href="#">bypass-routing</a>
Default	false
Notes	The following elements are part of a choice: <b>bypass-routing</b> , <b>interface</b> , or <b>next-hop-address</b> .
Introduced	16.0.R4
Platforms	All

**count** *number*

Synopsis	ICMP Echo Request packets to send in a sample window
Context	<b>configure</b> <i>saa owner string test string type icmp-ping count number</i>
Tree	<a href="#">count</a>
Range	1 to 100000
Units	packets
Default	5
Introduced	16.0.R4
Platforms	All

**destination-address** (*ipv4-address-no-zone | ipv6-address-no-zone | string-not-all-spaces*)

Synopsis	Destination IP address or DNS name to send ping request
----------	---

Context	<b>configure</b> <i>saa owner string test string type icmp-ping destination-address</i> ( <i>ipv4-address-no-zone   ipv6-address-no-zone   string-not-all-spaces</i> )
Tree	<a href="#">destination-address</a>
String Length	1 to 128
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **do-not-fragment** *boolean*

Synopsis	Prevent fragmentation of the ICMP Echo Request packet
Context	<b>configure</b> <i>saa owner string test string type icmp-ping do-not-fragment boolean</i>
Tree	<a href="#">do-not-fragment</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **interface** *string*

Synopsis	Interface name
Context	<b>configure</b> <i>saa owner string test string type icmp-ping interface string</i>
Tree	<a href="#">interface</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>bypass-routing</b> , <b>interface</b> , or <b>next-hop-address</b> .
Introduced	16.0.R4
Platforms	All

### **interval** (*number | decimal-number*)

Synopsis	Minimum time to expire before message request is sent
Context	<b>configure</b> <i>saa owner string test string type icmp-ping interval</i> ( <i>number   decimal-number</i> )
Tree	<a href="#">interval</a>
Range	1 to 10000
Units	seconds



Default	1
Introduced	16.0.R4
Platforms	All

### **next-hop-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Next-hop IP address to reach destination
Context	<b>configure</b> <i>saa owner string test string type icmp-ping next-hop-address</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">next-hop-address</a>
Notes	The following elements are part of a choice: <b>bypass-routing</b> , <b>interface</b> , or <b>next-hop-address</b> .
Introduced	16.0.R4
Platforms	All

### **pattern** (*keyword* | *number*)

Synopsis	Pattern to fill the data portion in a ping packet
Context	<b>configure</b> <i>saa owner string test string type icmp-ping pattern</i> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">pattern</a>
Range	0 to 65535
Options	sequential
Default	sequential
Introduced	16.0.R4
Platforms	All

### **qos**

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <i>saa owner string test string type icmp-ping qos</i>
Tree	<a href="#">qos</a>
Introduced	16.0.R4
Platforms	All

**fc keyword**

Synopsis	Forwarding class
Context	<b>configure</b> <i>saa owner string test string type icmp-ping qos fc keyword</i>
Tree	<b>fc</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Default	nc
Introduced	16.0.R4
Platforms	All

**tos number**

Synopsis	Type of service
Context	<b>configure</b> <i>saa owner string test string type icmp-ping qos tos number</i>
Tree	<b>tos</b>
Range	0 to 255
Default	0
Introduced	16.0.R4
Platforms	All

**router-instance string**

Synopsis	Router name or VPRN service name
Context	<b>configure</b> <i>saa owner string test string type icmp-ping router-instance string</i>
Tree	<b>router-instance</b>
Default	Base
Introduced	16.0.R4
Platforms	All

**size number**

Synopsis	Packet padding size
Context	<b>configure</b> <i>saa owner string test string type icmp-ping size number</i>
Tree	<b>size</b>
Description	This command configures the number of bytes in the combined ICMP Header (8 bytes) and ICMP Payload (variable size) of the ICMP Echo Request packets.

Range	0 to 16384
Units	bytes
Default	56
Introduced	16.0.R4
Platforms	All

### **source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source IP address
Context	<b>configure</b> <i>saa owner string test string type icmp-ping source-address</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">source-address</a>
Description	This command configures the source IP address to be loaded into the IP header of the ICMP Echo Request packet. If unconfigured, the router uses a system-selected local address.
Introduced	16.0.R4
Platforms	All

### **timeout** *number*

Synopsis	Time router waits for a reply after sending last probe
Context	<b>configure</b> <i>saa owner string test string type icmp-ping timeout number</i>
Tree	<a href="#">timeout</a>
Range	1 to 10
Units	seconds
Default	5
Introduced	16.0.R4
Platforms	All

### **trap-generation**

Synopsis	Enter the <b>trap-generation</b> context
Context	<b>configure</b> <i>saa owner string test string type icmp-ping trap-generation</i>
Tree	<a href="#">trap-generation</a>
Introduced	22.10.R1

Platforms All

### **probe-fail** *boolean*

Synopsis Enable the generation of probe fail notifications

Context **configure** *saa owner string test string type icmp-ping trap-generation probe-fail boolean*

Tree [probe-fail](#)

Description When configured to **true**, the system generates an SNMP trap if the consecutive probe failure threshold is reached during the execution of the SAA ping test.  
This command is not applicable to SAA traceroute tests.

Default false

Introduced 22.10.R1

Platforms All

### **probe-fail-threshold** *number*

Synopsis Consecutive probe failure count

Context **configure** *saa owner string test string type icmp-ping trap-generation probe-fail-threshold number*

Tree [probe-fail-threshold](#)

Description This command configures the number of consecutive ping probe failures required to generate a trap.  
This command has no effect if the **probe-fail** command is set to **false**.  
This command is not applicable to SAA traceroute tests.

Range 0 to 15

Default 1

Introduced 22.10.R1

Platforms All

### **test-complete** *boolean*

Synopsis Enable generation of test complete notifications

Context **configure** *saa owner string test string type icmp-ping trap-generation test-complete boolean*

Tree [test-complete](#)

Default false

Introduced	22.10.R1
Platforms	All

**test-fail** *boolean*

Synopsis	Enable the generation of test fail notifications
Context	<b>configure</b> <i>saa owner string test string type icmp-ping trap-generation test-fail boolean</i>
Tree	<a href="#">test-fail</a>
Description	When configured to <b>true</b> , the system generates a trap if a test fails. In the case of a ping test, the test is considered to have failed (for trap generation) if the number of failed probes is at least the value of the <b>test-fail-threshold</b> setting.
Default	false
Introduced	22.10.R1
Platforms	All

**test-fail-threshold** *number*

Synopsis	Total probe failures for trap generation
Context	<b>configure</b> <i>saa owner string test string type icmp-ping trap-generation test-fail-threshold number</i>
Tree	<a href="#">test-fail-threshold</a>
Description	This command configures the number of consecutive test failures required to generate a trap.  This command has no effect when <b>test-fail</b> is set to <b>false</b> .  This command is not applicable to SAA traceroute tests.
Range	0 to 15
Default	1
Introduced	22.10.R1
Platforms	All

**tll** *number*

Synopsis	Time to live in the IP header
Context	<b>configure</b> <i>saa owner string test string type icmp-ping tll number</i>
Tree	<a href="#">tll</a>
Range	1 to 128

Default	64
Introduced	16.0.R4
Platforms	All

## **lsp-ping**

Synopsis	Enable the <b>lsp-ping</b> context
Context	<b>configure</b> <a href="#">saa owner string test string type lsp-ping</a>
Tree	<a href="#">lsp-ping</a>
Description	Commands in this context configure the command options to perform in-band LSP connectivity tests.  LSP ping uses the protocol and data structures defined in RFC 8029, <i>Detecting Multiprotocol Label Switched (MPLS) Data-Plane Failures</i> .
Notes	The following elements are part of a choice: <b>dns</b> , <b>icmp-ping</b> , or <b>lsp-ping</b> .
Introduced	22.10.R1
Platforms	All

## **interval number**

Synopsis	Minimum time before the next lsp-ping request is sent
Context	<b>configure</b> <a href="#">saa owner string test string type lsp-ping interval number</a>
Tree	<a href="#">interval</a>
Range	1 to 10
Units	seconds
Default	1
Introduced	22.10.R1
Platforms	All

## **qos**

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">saa owner string test string type lsp-ping qos</a>
Tree	<a href="#">qos</a>
Introduced	22.10.R1
Platforms	All

**fc keyword**

Synopsis	Forwarding class
Context	<b>configure</b> <a href="#">saa owner string test string type lsp-ping qos fc keyword</a>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Default	be
Introduced	22.10.R1
Platforms	All

**profile keyword**

Synopsis	Profile
Context	<b>configure</b> <a href="#">saa owner string test string type lsp-ping qos profile keyword</a>
Tree	<a href="#">profile</a>
Options	in, out
Default	out
Introduced	22.10.R1
Platforms	All

**send-count number**

Synopsis	Number of request packets to send in a sample window
Context	<b>configure</b> <a href="#">saa owner string test string type lsp-ping send-count number</a>
Tree	<a href="#">send-count</a>
Range	1 to 100
Units	packets
Default	1
Introduced	22.10.R1
Platforms	All

**size number**

Synopsis	Packet pad size
Context	<b>configure</b> <a href="#">saa owner string test string type lsp-ping size number</a>

Tree	<a href="#">size</a>
Range	1 to 9786
Units	bytes
Default	1
Introduced	22.10.R1
Platforms	All

### **source-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source IP address
Context	<b>configure</b> <a href="#">saa owner</a> <a href="#">string</a> <a href="#">test</a> <a href="#">string</a> <a href="#">type</a> <a href="#">lsp-ping</a> <a href="#">source-ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">source-ip-address</a>
Introduced	22.10.R1
Platforms	All

### **sub-type**

Synopsis	Enter the <b>sub-type</b> context
Context	<b>configure</b> <a href="#">saa owner</a> <a href="#">string</a> <a href="#">test</a> <a href="#">string</a> <a href="#">type</a> <a href="#">lsp-ping</a> <a href="#">sub-type</a>
Tree	<a href="#">sub-type</a>
Introduced	22.10.R1
Platforms	All

### **bgp-label**

Synopsis	Enable the <b>bgp-label</b> context
Context	<b>configure</b> <a href="#">saa owner</a> <a href="#">string</a> <a href="#">test</a> <a href="#">string</a> <a href="#">type</a> <a href="#">lsp-ping</a> <a href="#">sub-type</a> <a href="#">bgp-label</a>
Tree	<a href="#">bgp-label</a>
Notes	The following elements are part of a choice: <b>bgp-label</b> , <b>ldp</b> , <b>rsvp-te</b> , <b>sr-isis</b> , <b>sr-ospf</b> , <b>sr-ospf3</b> , <b>sr-policy</b> , or <b>sr-te</b> .
Introduced	22.10.R1
Platforms	All



## path-destination

Synopsis	Enter the <b>path-destination</b> context
Context	<b>configure</b> <b>saa owner</b> <i>string test string type</i> <b>lsp-ping sub-type bgp-label path-destination</b>
Tree	<b>path-destination</b>
Introduced	22.10.R1
Platforms	All

## interface *string*

Synopsis	Egress router interface used with the path destination
Context	<b>configure</b> <b>saa owner</b> <i>string test string type</i> <b>lsp-ping sub-type bgp-label path-destination interface string</b>
Tree	<b>interface</b>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	22.10.R1
Platforms	All

## ip-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the path destination
Context	<b>configure</b> <b>saa owner</b> <i>string test string type</i> <b>lsp-ping sub-type bgp-label path-destination ip-address (<i>ipv4-address-no-zone   ipv6-address-no-zone</i>)</b>
Tree	<b>ip-address</b>
Introduced	22.10.R1
Platforms	All

## next-hop (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Egress IP next hop address used with path destination
Context	<b>configure</b> <b>saa owner</b> <i>string test string type</i> <b>lsp-ping sub-type bgp-label path-destination next-hop (<i>ipv4-address-no-zone   ipv6-address-no-zone</i>)</b>
Tree	<b>next-hop</b>
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	22.10.R1

Platforms All

### **prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Destination IP prefix for the test

Context **configure** *saa owner string test string type lsp-ping sub-type bgp-label prefix* (*ipv4-prefix* | *ipv6-prefix*)

Tree [prefix](#)

Notes This element is mandatory.

Introduced 22.10.R1

Platforms All

### **ldp**

Synopsis Enable the **ldp** context

Context **configure** *saa owner string test string type lsp-ping sub-type ldp*

Tree [ldp](#)

Notes The following elements are part of a choice: **bgp-label**, **ldp**, **rsvp-te**, **sr-isis**, **sr-ospf**, **sr-ospf3**, **sr-policy**, or **sr-te**.

Introduced 22.10.R1

Platforms All

### **path-destination**

Synopsis Enter the **path-destination** context

Context **configure** *saa owner string test string type lsp-ping sub-type ldp path-destination*

Tree [path-destination](#)

Introduced 22.10.R1

Platforms All

### **interface** *string*

Synopsis Egress router interface used with the path destination

Context **configure** *saa owner string test string type lsp-ping sub-type ldp path-destination interface string*

Tree [interface](#)

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String Length	1 to 32
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	22.10.R1
Platforms	All

### **ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the path destination
Context	<b>configure</b> <b>saa</b> <b>owner</b> <i>string</i> <b>test</b> <i>string</i> <b>type</b> <b>lsp-ping</b> <b>sub-type</b> <b>ldp</b> <b>path-destination</b> <b>ip-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">ip-address</a>
Introduced	22.10.R1
Platforms	All

### **next-hop** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Egress IP next hop address used with path destination
Context	<b>configure</b> <b>saa</b> <b>owner</b> <i>string</i> <b>test</b> <i>string</i> <b>type</b> <b>lsp-ping</b> <b>sub-type</b> <b>ldp</b> <b>path-destination</b> <b>next-hop</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">next-hop</a>
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	22.10.R1
Platforms	All

### **prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Destination IP prefix for the test
Context	<b>configure</b> <b>saa</b> <b>owner</b> <i>string</i> <b>test</b> <i>string</i> <b>type</b> <b>lsp-ping</b> <b>sub-type</b> <b>ldp</b> <b>prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">prefix</a>
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

**rsvp-te**

Synopsis	Enable the <b>rsvp-te</b> context
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type rsvp-te</i>
Tree	<a href="#">rsvp-te</a>
Notes	The following elements are part of a choice: <b>bgp-label</b> , <b>ldp</b> , <b>rsvp-te</b> , <b>sr-isis</b> , <b>sr-ospf</b> , <b>sr-ospf3</b> , <b>sr-policy</b> , or <b>sr-te</b> .
Introduced	22.10.R1
Platforms	All

**lsp-name string**

Synopsis	Name of the LSP to be tested
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type rsvp-te lsp-name string</i>
Tree	<a href="#">lsp-name</a>
String Length	1 to 64
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

**path string**

Synopsis	Name of the MPLS path to be tested
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type rsvp-te path string</i>
Tree	<a href="#">path</a>
String Length	1 to 64
Introduced	22.10.R1
Platforms	All

**sr-isis**

Synopsis	Enable the <b>sr-isis</b> context
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-isis</i>
Tree	<a href="#">sr-isis</a>
Notes	The following elements are part of a choice: <b>bgp-label</b> , <b>ldp</b> , <b>rsvp-te</b> , <b>sr-isis</b> , <b>sr-ospf</b> , <b>sr-ospf3</b> , <b>sr-policy</b> , or <b>sr-te</b> .

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Introduced	22.10.R1
Platforms	All

### **igp-instance** *number*

Synopsis	IGP instance for the SR IS-IS test
Context	<b>configure</b> <b>saa owner</b> <i>string test string type lsp-ping sub-type sr-isis igp-instance number</i>
Tree	<a href="#">igp-instance</a>
Range	0 to 127
Default	0
Introduced	22.10.R1
Platforms	All

### **path-destination**

Synopsis	Enter the <b>path-destination</b> context
Context	<b>configure</b> <b>saa owner</b> <i>string test string type lsp-ping sub-type sr-isis path-destination</i>
Tree	<a href="#">path-destination</a>
Introduced	22.10.R1
Platforms	All

### **interface** *string*

Synopsis	Egress router interface used with the path destination
Context	<b>configure</b> <b>saa owner</b> <i>string test string type lsp-ping sub-type sr-isis path-destination interface string</i>
Tree	<a href="#">interface</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	22.10.R1
Platforms	All

### **ip-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the path destination
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Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-isis path-destination ip-address (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<a href="#">ip-address</a>
Introduced	22.10.R1
Platforms	All

### **next-hop** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Egress IP next hop address used with path destination
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-isis path-destination next-hop (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<a href="#">next-hop</a>
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	22.10.R1
Platforms	All

### **prefix** (*ipv4-prefix | ipv6-prefix*)

Synopsis	Destination IP prefix for the test
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-isis prefix (ipv4-prefix   ipv6-prefix)</i>
Tree	<a href="#">prefix</a>
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

### **sr-ospf**

Synopsis	Enable the <b>sr-ospf</b> context
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-ospf</i>
Tree	<a href="#">sr-ospf</a>
Notes	The following elements are part of a choice: <b>bgp-label</b> , <b>ldp</b> , <b>rsvp-te</b> , <b>sr-isis</b> , <b>sr-ospf</b> , <b>sr-ospf3</b> , <b>sr-policy</b> , or <b>sr-te</b> .
Introduced	22.10.R1
Platforms	All

**igp-instance** *number*

Synopsis	IGP instance for the SR OSPF test
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-ospf igp-instance number</i>
Tree	<a href="#">igp-instance</a>
Range	0 to 31
Default	0
Introduced	22.10.R1
Platforms	All

**path-destination**

Synopsis	Enter the <b>path-destination</b> context
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-ospf path-destination</i>
Tree	<a href="#">path-destination</a>
Introduced	22.10.R1
Platforms	All

**interface** *string*

Synopsis	Egress router interface used with the path destination
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-ospf path-destination interface string</i>
Tree	<a href="#">interface</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	22.10.R1
Platforms	All

**ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the path destination
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-ospf path-destination ip-address (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<a href="#">ip-address</a>

Introduced 22.10.R1  
 Platforms All

### **next-hop** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Egress IP next hop address used with path destination  
 Context **configure** *saa owner string test string type lsp-ping sub-type sr-ospf path-destination next-hop (ipv4-address-no-zone | ipv6-address-no-zone)*  
 Tree [next-hop](#)  
 Notes The following elements are part of a choice: **interface** or **next-hop**.  
 Introduced 22.10.R1  
 Platforms All

### **prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Destination IP prefix for the test  
 Context **configure** *saa owner string test string type lsp-ping sub-type sr-ospf prefix (ipv4-prefix | ipv6-prefix)*  
 Tree [prefix](#)  
 Notes This element is mandatory.  
 Introduced 22.10.R1  
 Platforms All

### **sr-ospf3**

Synopsis Enable the **sr-ospf3** context  
 Context **configure** *saa owner string test string type lsp-ping sub-type sr-ospf3*  
 Tree [sr-ospf3](#)  
 Notes The following elements are part of a choice: **bgp-label**, **ldp**, **rsvp-te**, **sr-isis**, **sr-ospf**, **sr-ospf3**, **sr-policy**, or **sr-te**.  
 Introduced 22.10.R1  
 Platforms All

### **igp-instance** *number*

Synopsis IGP instance for the SR OSPFv3 test



Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-ospf3 igp-instance number</i>
Tree	<a href="#">igp-instance</a>
Range	0 to 31   64 to 95
Default	0
Introduced	22.10.R1
Platforms	All

## path-destination

Synopsis	Enter the <b>path-destination</b> context
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-ospf3 path-destination</i>
Tree	<a href="#">path-destination</a>
Introduced	22.10.R1
Platforms	All

## interface *string*

Synopsis	Egress router interface used with the path destination
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-ospf3 path-destination interface string</i>
Tree	<a href="#">interface</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	22.10.R1
Platforms	All

## ip-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the path destination
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-ospf3 path-destination ip-address (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<a href="#">ip-address</a>
Introduced	22.10.R1
Platforms	All

**next-hop** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Egress IP next hop address used with path destination
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-ospf3 path-destination next-hop</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">next-hop</a>
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	22.10.R1
Platforms	All

**prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Destination IP prefix for the test
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-ospf3 prefix</i> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">prefix</a>
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

**sr-policy**

Synopsis	Enable the <b>sr-policy</b> context
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-policy</i>
Tree	<a href="#">sr-policy</a>
Notes	The following elements are part of a choice: <b>bgp-label</b> , <b>ldp</b> , <b>rsvp-te</b> , <b>sr-isis</b> , <b>sr-ospf</b> , <b>sr-ospf3</b> , <b>sr-policy</b> , or <b>sr-te</b> .
Introduced	22.10.R1
Platforms	All

**color number**

Synopsis	Segment Routing color for the test
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-policy color number</i>
Tree	<a href="#">color</a>
Range	0 to 4294967295

Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

### **endpoint** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Segment Routing endpoint for the test
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-policy endpoint</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">endpoint</a>
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

### **path-destination**

Synopsis	Enter the <b>path-destination</b> context
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-policy path-destination</i>
Tree	<a href="#">path-destination</a>
Introduced	22.10.R1
Platforms	All

### **interface** *string*

Synopsis	Egress router interface used with the path destination
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-policy path-destination interface string</i>
Tree	<a href="#">interface</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	22.10.R1
Platforms	All

### **ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the path destination
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Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-policy path-destination ip-address (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<a href="#">ip-address</a>
Introduced	22.10.R1
Platforms	All

### **next-hop** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Egress IP next hop address used with path destination
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-policy path-destination next-hop (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<a href="#">next-hop</a>
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	22.10.R1
Platforms	All

### **segment-list** *number*

Synopsis	Segment Routing segment list for the test
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-policy segment-list number</i>
Tree	<a href="#">segment-list</a>
Range	1 to 32
Introduced	22.10.R1
Platforms	All

### **sr-te**

Synopsis	Enable the <b>sr-te</b> context
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-te</i>
Tree	<a href="#">sr-te</a>
Notes	The following elements are part of a choice: <b>bgp-label</b> , <b>ldp</b> , <b>rsvp-te</b> , <b>sr-isis</b> , <b>sr-ospf</b> , <b>sr-ospf3</b> , <b>sr-policy</b> , or <b>sr-te</b> .
Introduced	22.10.R1
Platforms	All

**lsp-name** *string*

Synopsis	Name of the LSP to be tested
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-te lsp-name string</i>
Tree	<i>lsp-name</i>
String Length	1 to 64
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

**path** *string*

Synopsis	Name of the MPLS path to be tested
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-te path string</i>
Tree	<i>path</i>
String Length	1 to 64
Introduced	22.10.R1
Platforms	All

**path-destination**

Synopsis	Enter the <b>path-destination</b> context
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-te path-destination</i>
Tree	<i>path-destination</i>
Introduced	22.10.R1
Platforms	All

**interface** *string*

Synopsis	Egress router interface used with the path destination
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-te path-destination interface string</i>
Tree	<i>interface</i>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .

Introduced 22.10.R1  
 Platforms All

### **ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP address of the path destination  
 Context **configure** *saa owner string test string type lsp-ping sub-type sr-te path-destination ip-address* (*ipv4-address-no-zone* | *ipv6-address-no-zone*)  
 Tree [ip-address](#)  
 Introduced 22.10.R1  
 Platforms All

### **next-hop** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Egress IP next hop address used with path destination  
 Context **configure** *saa owner string test string type lsp-ping sub-type sr-te path-destination next-hop* (*ipv4-address-no-zone* | *ipv6-address-no-zone*)  
 Tree [next-hop](#)  
 Notes The following elements are part of a choice: **interface** or **next-hop**.  
 Introduced 22.10.R1  
 Platforms All

### **timeout** *number*

Synopsis Time router waits for a reply to an echo request  
 Context **configure** *saa owner string test string type lsp-ping timeout number*  
 Tree [timeout](#)  
 Range 1 to 10  
 Units seconds  
 Default 5  
 Introduced 22.10.R1  
 Platforms All

### **trap-generation**

Synopsis Enter the **trap-generation** context

Context	<b>configure</b> <i>saa owner string test string type lsp-ping trap-generation</i>
Tree	<i>trap-generation</i>
Introduced	22.10.R1
Platforms	All

### **probe-fail** *boolean*

Synopsis	Enable the generation of probe fail notifications
Context	<b>configure</b> <i>saa owner string test string type lsp-ping trap-generation probe-fail boolean</i>
Tree	<i>probe-fail</i>
Description	When configured to <b>true</b> , the system generates an SNMP trap if the consecutive probe failure threshold is reached during the execution of the SAA ping test. This command is not applicable to SAA traceroute tests.
Default	false
Introduced	22.10.R1
Platforms	All

### **probe-fail-threshold** *number*

Synopsis	Consecutive probe failure count
Context	<b>configure</b> <i>saa owner string test string type lsp-ping trap-generation probe-fail-threshold number</i>
Tree	<i>probe-fail-threshold</i>
Description	This command configures the number of consecutive ping probe failures required to generate a trap. This command has no effect if the <b>probe-fail</b> command is set to <b>false</b> . This command is not applicable to SAA traceroute tests.
Range	0 to 15
Default	1
Introduced	22.10.R1
Platforms	All

### **test-complete** *boolean*

Synopsis	Enable generation of test complete notifications
----------	--

Context	<b>configure</b> <i>saa owner string test string type lsp-ping trap-generation test-complete boolean</i>
Tree	<a href="#">test-complete</a>
Default	false
Introduced	22.10.R1
Platforms	All

### **test-fail** *boolean*

Synopsis	Enable the generation of test fail notifications
Context	<b>configure</b> <i>saa owner string test string type lsp-ping trap-generation test-fail boolean</i>
Tree	<a href="#">test-fail</a>
Description	When configured to <b>true</b> , the system generates a trap if a test fails. In the case of a ping test, the test is considered to have failed (for trap generation) if the number of failed probes is at least the value of the <b>test-fail-threshold</b> setting.
Default	false
Introduced	22.10.R1
Platforms	All

### **test-fail-threshold** *number*

Synopsis	Total probe failures for trap generation
Context	<b>configure</b> <i>saa owner string test string type lsp-ping trap-generation test-fail-threshold number</i>
Tree	<a href="#">test-fail-threshold</a>
Description	This command configures the number of consecutive test failures required to generate a trap.  This command has no effect when <b>test-fail</b> is set to <b>false</b> .  This command is not applicable to SAA traceroute tests.
Range	0 to 15
Default	1
Introduced	22.10.R1
Platforms	All



**ttl number**

Synopsis	TTL value for the echo request MPLS label
Context	<b>configure</b> <i>saa owner string test string type lsp-ping ttl number</i>
Tree	<i>tll</i>
Range	1 to 255
Default	255
Introduced	22.10.R1
Platforms	All

## 3.42 satellite commands

```

configure
- satellite
  - apply-groups reference
  - apply-groups-exclude reference
  - ethernet-satellite number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - client-down-delay number
    - console-access keyword
    - description string
    - dynamic-uplink boolean
    - feature keyword
    - mac-address string
    - port-map reference
      - apply-groups reference
      - apply-groups-exclude reference
      - primary reference
      - secondary reference
    - port-template string
    - ptp-tc boolean
    - sat-type keyword
    - software-repository reference
    - sync-e boolean
    - uplink-distribution keyword
  - file-transfer
    - apply-groups reference
    - apply-groups-exclude reference
    - ftp boolean
    - scp boolean
  - port-template string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - port string
      - apply-groups reference
      - apply-groups-exclude reference
      - role keyword
      - uplink reference
    - sat-type keyword
  - port-topology reference
    - apply-groups reference
    - apply-groups-exclude reference
    - far-end-port-id reference

```

### 3.42.1 satellite command descriptions

#### satellite

Synopsis	Enter the <b>satellite</b> context
Context	<b>configure satellite</b>
Tree	<a href="#">satellite</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

#### ethernet-satellite [[satellite-id](#)] *number*

Synopsis	Enter the <b>ethernet-satellite</b> list instance
Context	<b>configure satellite ethernet-satellite number</b>
Tree	<a href="#">ethernet-satellite</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

#### [\[satellite-id\]](#) *number*

Synopsis	The unique index identifying this satellite
Context	<b>configure satellite ethernet-satellite number</b>
Tree	<a href="#">ethernet-satellite</a>
Range	1 to 20
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

#### **admin-state** *keyword*

Synopsis	Administrative state of the satellite
Context	<b>configure satellite ethernet-satellite number admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable

Introduced 19.7.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **client-down-delay** *number*

Synopsis Delay between uplink as unavailable and disabling ports  
Context **configure** [satellite ethernet-satellite](#) *number* **client-down-delay** *number*  
Tree [client-down-delay](#)  
Range 0 to 1800  
Introduced 19.7.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **console-access** *keyword*

Synopsis Satellite console interface access  
Context **configure** [satellite ethernet-satellite](#) *number* **console-access** *keyword*  
Tree [console-access](#)  
Options enable, disable  
Default disable  
Introduced 20.2.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **description** *string*

Synopsis Text description  
Context **configure** [satellite ethernet-satellite](#) *number* **description** *string*  
Tree [description](#)  
String Length 1 to 80  
Introduced 19.7.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**dynamic-uplink** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable dynamic uplink resilience for Ethernet satellite
Context	<b>configure</b> <a href="#">satellite ethernet-satellite</a> <i>number</i> <b>dynamic-uplink</b> <i>boolean</i>
Tree	<a href="#">dynamic-uplink</a>
Default	false
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**feature** *keyword*

Synopsis	Functionality to enable
Context	<b>configure</b> <a href="#">satellite ethernet-satellite</a> <i>number</i> <b>feature</b> <i>keyword</i>
Tree	<a href="#">feature</a>
Options	local-forward, ptp-tc
Max. Instances	2
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**mac-address** *string*

Synopsis	MAC address for the satellite chassis
Context	<b>configure</b> <a href="#">satellite ethernet-satellite</a> <i>number</i> <b>mac-address</b> <i>string</i>
Tree	<a href="#">mac-address</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**port-map** [[client-port-id](#)] *reference*

Synopsis	Enter the <b>port-map</b> list instance
Context	<b>configure</b> <a href="#">satellite ethernet-satellite</a> <i>number</i> <b>port-map</b> <i>reference</i>
Tree	<a href="#">port-map</a>

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Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[client-port-id] reference**

Synopsis	Satellite client port associated with the port mapping
Context	<b>configure</b> <a href="#">satellite ethernet-satellite</a> <i>number</i> <a href="#">port-map</a> <i>reference</i>
Tree	<a href="#">port-map</a>
Reference	<b>configure</b> <a href="#">port</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**primary reference**

Synopsis	Primary satellite uplink for the associate client port
Context	<b>configure</b> <a href="#">satellite ethernet-satellite</a> <i>number</i> <a href="#">port-map</a> <i>reference</i> <a href="#">primary</a> <i>reference</i>
Tree	<a href="#">primary</a>
Reference	<b>configure</b> <a href="#">port</a> <i>string</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**secondary reference**

Synopsis	Secondary satellite uplink for associate client port
Context	<b>configure</b> <a href="#">satellite ethernet-satellite</a> <i>number</i> <a href="#">port-map</a> <i>reference</i> <a href="#">secondary</a> <i>reference</i>
Tree	<a href="#">secondary</a>
Reference	<b>configure</b> <a href="#">port</a> <i>string</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**port-template** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Port template name
Context	<b>configure</b> <a href="#">satellite ethernet-satellite</a> <i>number</i> <a href="#">port-template</a> <i>string</i>
Tree	<a href="#">port-template</a>
String Length	1 to 32
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ptp-tc** *boolean*

Synopsis	Enable the 1EEE 1588 transparent clock function
Context	<b>configure</b> <a href="#">satellite ethernet-satellite</a> <i>number</i> <a href="#">ptp-tc</a> <i>boolean</i>
Tree	<a href="#">ptp-tc</a>
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**sat-type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Type of satellite variant for the associated chassis
Context	<b>configure</b> <a href="#">satellite ethernet-satellite</a> <i>number</i> <a href="#">sat-type</a> <i>keyword</i>
Tree	<a href="#">sat-type</a>
Options	es48-1gb-sfp, es24-1gb-sfp, es48-1gb-tx, es24-1gb-tx, es64-10gb-sfpp+4-100gb-cfp4, es24-sass-1gb-sfp, es48-sass-1gb-sfp, es24-sasmxp-1gb-sfp, es64-10gb-sfpp+4-100gb-qsfp28, es24-sfpp+8-sfp28+2-qsfp28, es32-qsfp28+4-qsfpdd, es6-qsfpdd+48-sfp56
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**software-repository** *reference*

Synopsis	Software repository bound to the associated satellite
Context	<b>configure</b> <a href="#">satellite ethernet-satellite</a> <i>number</i> <a href="#">software-repository</a> <i>reference</i>
Tree	<a href="#">software-repository</a>
Reference	<b>configure</b> <a href="#">system software-repository</a> <i>string</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**sync-e** *boolean*

Synopsis	Enable the synchronous Ethernet operation
Context	<b>configure</b> <a href="#">satellite ethernet-satellite</a> <i>number</i> <a href="#">sync-e</a> <i>boolean</i>
Tree	<a href="#">sync-e</a>
Description	<p>When configured to <b>true</b>, this command enables the Ethernet satellite for synchronous Ethernet operation so that the transmit timing of the satellite access ports use the frequency of the central clock of the host router.</p> <p>To enable this functionality, both host ports on the router that connect to the U1 and U2 ports of the satellite must be synchronous Ethernet-capable ports.</p> <p>When configured to <b>false</b>, the command disables the Ethernet satellite for synchronous Ethernet operation.</p>
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**uplink-distribution** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Forwarding complex type for uplink distribution
Context	<b>configure</b> <a href="#">satellite ethernet-satellite</a> <i>number</i> <a href="#">uplink-distribution</a> <i>keyword</i>
Tree	<a href="#">uplink-distribution</a>
Description	<p>This command specifies the forwarding complex used for the satellite uplink association to the ports.</p> <p>With <b>single-complex</b>, all uplinks for the associated satellite must be connected to ports using a single forwarding complex.</p>



With **dual-complex**, all uplinks for the associated satellite must be connected to ports using a double forwarding complex. This option optimizes the resources across the two complexes.

Options	single-complex, dual-complex
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## file-transfer

Synopsis	Enter the <b>file-transfer</b> context
Context	<b>configure</b> <a href="#">satellite file-transfer</a>
Tree	<a href="#">file-transfer</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ftp boolean

Synopsis	Use FTP between host and satellite
Context	<b>configure</b> <a href="#">satellite file-transfer ftp boolean</a>
Tree	<a href="#">ftp</a>
Description	When configured to <b>true</b> , the file transfer FTP is used between 7750 SR or 7950 XRS host and the 7210 SAS Ethernet satellite.
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## scp boolean

Synopsis	Use FTP between host and satellite
Context	<b>configure</b> <a href="#">satellite file-transfer scp boolean</a>
Tree	<a href="#">scp</a>
Description	When configured to <b>true</b> , the file transfer SCP protocol is used between 7750 SR or 7950 XRS host and the 7210 SAS Ethernet satellite.  When configured to <b>false</b> , the file transfer FTP protocol is used between 7750 SR or 7950 XRS host and the 7210 SAS Ethernet satellite.
Default	false

Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **port-template** [[template-name](#)] *string*

Synopsis Enter the **port-template** list instance  
 Context **configure satellite port-template** *string*  
 Tree [port-template](#)  
 Introduced 19.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[template-name]** *string*

Synopsis Associated port template name  
 Context **configure satellite port-template** *string*  
 Tree [port-template](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 19.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **admin-state** *keyword*

Synopsis Administrative state of the port template  
 Context **configure satellite port-template** *string admin-state* *keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 19.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **description** *string*

Synopsis Text description  
 Context **configure satellite port-template** *string description* *string*

Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **port** [[sat-phys-port-id](#)] *string*

Synopsis	Enter the <b>port</b> list instance
Context	<b>configure</b> <a href="#">satellite</a> <a href="#">port-template</a> <i>string</i> <a href="#">port</a> <i>string</i>
Tree	<a href="#">port</a>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[sat-phys-port-id]** *string*

Synopsis	Satellite physical port ID
Context	<b>configure</b> <a href="#">satellite</a> <a href="#">port-template</a> <i>string</i> <a href="#">port</a> <i>string</i>
Tree	<a href="#">port</a>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **role** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Satellite port role
Context	<b>configure</b> <a href="#">satellite</a> <a href="#">port-template</a> <i>string</i> <a href="#">port</a> <i>string</i> <a href="#">role</a> <i>keyword</i>
Tree	<a href="#">role</a>
Options	none, uplink, client
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## uplink reference

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Uplink association used for associated satellite port
Context	<b>configure</b> <a href="#">satellite port-template</a> <i>string</i> <a href="#">port</a> <i>string</i> <a href="#">uplink</a> <i>reference</i>
Tree	<a href="#">uplink</a>
Reference	<b>configure</b> <a href="#">satellite port-template</a> <i>string</i> <a href="#">port</a> <i>string</i>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## sat-type keyword

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	The satellite type for the port template to use.
Context	<b>configure</b> <a href="#">satellite port-template</a> <i>string</i> <a href="#">sat-type</a> <i>keyword</i>
Tree	<a href="#">sat-type</a>
Options	es48-1gb-sfp, es24-1gb-sfp, es48-1gb-tx, es24-1gb-tx, es64-10gb-sfpp+4-100gb-cfp4, es24-sass-1gb-sfp, es48-sass-1gb-sfp, es24-sasmxp-1gb-sfp, es64-10gb-sfpp+4-100gb-qsfp28, es24-sfpp+8-sfp28+2-qsfp28, es32-qsfp28+4-qsfpdd, es6-qsfpdd+48-sfp56
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## port-topology [[local-port-id](#)] reference

Synopsis	Enter the <b>port-topology</b> list instance
Context	<b>configure</b> <a href="#">satellite port-topology</a> <i>reference</i>
Tree	<a href="#">port-topology</a>

Introduced 19.7.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[local-port-id] reference**

Synopsis Local port identifier  
Context **configure** [satellite port-topology reference](#)  
Tree [port-topology](#)  
Reference **configure** [port string](#)  
Notes This element is part of a list key.  
Introduced 19.7.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **far-end-port-id reference**



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Far end port identifier.  
Context **configure** [satellite port-topology reference](#) [far-end-port-id reference](#)  
Tree [far-end-port-id](#)  
Reference **configure** [port string](#)  
Notes This element is mandatory.  
Introduced 19.7.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### 3.43 service commands

```

configure
- service
  - apply-groups reference
  - apply-groups-exclude reference
  - cpipe string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - customer reference
    - description string
    - endpoint string
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - hold-time-active number
      - revert-time (number | keyword)
  - sap string
    - accounting-policy reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - cem
      - packet
        - jitter-buffer number
        - payload-size number
      - report-alarm
        - buffer-overflow boolean
        - buffer-underrun boolean
        - malformed-packets boolean
        - packet-loss boolean
        - remote-fault boolean
        - remote-packet-loss boolean
        - remote-rdi boolean
        - stray-packets boolean
      - rtp-header boolean
    - collect-stats boolean
    - description string
    - dist-cpu-protection reference
    - egress
      - agg-rate
        - adaptation-rule keyword
        - burst-limit (number | keyword)
        - limit-unused-bandwidth boolean
        - rate number
      - qos
        - policer-control-policy
          - overrides
            - apply-groups reference
            - apply-groups-exclude reference
          - root
            - max-rate (number | keyword)
            - priority-mbs-thresholds
              - min-thresh-separation (number | keyword)
              - priority number
            - apply-groups reference
            - apply-groups-exclude reference
            - mbs-contribution (number | keyword)
          - policy-name reference
        - sap-egress

```

configure service cpipe sap egress qos sap-egress overrides

```

- overrides
- policer reference
- apply-groups reference
- apply-groups-exclude reference
- cbs (number | keyword)
- mbs (number | keyword)
- packet-byte-offset number
- percent-rate
- cir decimal-number
- pir decimal-number
- rate
- cir (number | keyword)
- pir (number | keyword)
- stat-mode keyword
- queue reference
- adaptation-rule
- cir keyword
- pir keyword
- apply-groups reference
- apply-groups-exclude reference
- avg-frame-overhead decimal-number
- burst-limit (number | keyword)
- cbs (number | keyword)
- drop-tail
- low
- percent-reduction-from-mbs (number | keyword)
- hs-class-weight number
- hs-wred-queue
- policy reference
- hs-wrr-weight number
- mbs (number | keyword)
- monitor-queue-depth
- fast-polling boolean
- violation-threshold decimal-number
- parent
- cir-weight number
- weight number
- percent-rate
- cir decimal-number
- pir decimal-number
- rate
- cir (number | keyword)
- pir (number | keyword)
- policy-name reference
- scheduler-policy
- overrides
- scheduler string
- apply-groups reference
- apply-groups-exclude reference
- parent
- cir-weight number
- weight number
- rate
- cir (number | keyword)
- pir (number | keyword)
- policy-name reference
- endpoint reference
- ingress
- qos
- policer-control-policy
- overrides
- apply-groups reference
- apply-groups-exclude reference
- root

```

configure service cpipe sap ingress qos policer-control-policy overrides root max-rate

```

    - max-rate (number | keyword)
    - priority-mbs-thresholds
      - min-thresh-separation (number | keyword)
      - priority number
        - apply-groups reference
        - apply-groups-exclude reference
        - mbs-contribution (number | keyword)
  - policy-name reference
- sap-ingress
- overrides
  - ip-criteria
    - activate-entry-tag number
  - ipv6-criteria
    - activate-entry-tag number
  - policer reference
    - apply-groups reference
    - apply-groups-exclude reference
    - cbs (number | keyword)
    - mbs (number | keyword)
    - packet-byte-offset number
    - percent-rate
      - cir decimal-number
      - pir decimal-number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - stat-mode keyword
  - queue reference
    - adaptation-rule
      - cir keyword
      - pir keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - cbs (number | keyword)
    - drop-tail
      - low
      - percent-reduction-from-mbs (number | keyword)
    - mbs (number | keyword)
    - monitor-queue-depth
      - fast-polling boolean
  - parent
    - cir-weight number
    - weight number
  - percent-rate
    - cir decimal-number
    - pir decimal-number
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
  - policy-name reference
  - queuing-type keyword
- scheduler-policy
- overrides
  - scheduler string
    - apply-groups reference
    - apply-groups-exclude reference
  - parent
    - cir-weight number
    - weight number
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
  - policy-name reference
- lag

```



configure service cpipe sap multi-service-site

- **multi-service-site** *reference*
- **service-id** *number*
- **service-mtu** *number*
- **spoke-sdp** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **bandwidth** (*number* | *keyword*)
  - **bfd**
    - **bfd-liveness**
      - **encap** *keyword*
    - **bfd-template** *reference*
  - **control-word** *boolean*
  - **description** *string*
  - **egress**
    - **qos**
      - **network**
        - **policy-name** *reference*
        - **port-redirect-group**
          - **group-name** *reference*
          - **instance** *number*
    - **vc-label** *number*
- **endpoint**
  - **icb** *boolean*
  - **name** *reference*
  - **precedence** (*number* | *keyword*)
- **ingress**
  - **qos**
    - **network**
      - **fp-redirect-group**
        - **group-name** *reference*
        - **instance** *number*
        - **policy-name** *reference*
    - **vc-label** *number*
- **test** *boolean*
- **vc-switching** *boolean*
- **vc-type** *keyword*
- **vpn-id** *number*
- **customer** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **contact** *string*
  - **customer-id** *number*
  - **description** *string*
  - **multi-service-site** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **assignment**
    - **card** *number*
    - **fpe** *reference*
    - **port** *string*
  - **description** *string*
  - **egress**
    - **agg-rate**
      - **limit-unused-bandwidth** *boolean*
      - **queue-frame-based-accounting** *boolean*
      - **rate** *number*
    - **policer-control-policy** *reference*
    - **scheduler-policy**
      - **overrides**
        - **scheduler** *string*
          - **apply-groups** *reference*
          - **apply-groups-exclude** *reference*
          - **parent**

configure service customer multi-service-site egress scheduler-policy overrides scheduler parent cir-weight

```

    - cir-weight number
    - weight number
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
  - policy-name reference
- ingress
- policer-control-policy reference
- scheduler-policy
  - overrides
    - scheduler string
    - apply-groups reference
    - apply-groups-exclude reference
    - parent
      - cir-weight number
      - weight number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - policy-name reference
- phone string
- epipe string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- bgp number
  - adv-service-mtu number
  - apply-groups reference
  - apply-groups-exclude reference
  - pw-template-binding reference
    - apply-groups reference
    - apply-groups-exclude reference
  - bfd-liveness boolean
  - bfd-template reference
  - endpoint reference
  - import-rt string
- route-distinguisher (keyword | vpn-route-distinguisher)
- route-target
  - export string
  - import string
- vsi-export reference
- vsi-import reference
- bgp-evpn
  - apply-groups reference
  - apply-groups-exclude reference
  - evi number
  - local-attachment-circuit string
    - apply-groups reference
    - apply-groups-exclude reference
    - endpoint reference
    - eth-tag number
- mpls number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - auto-bind-tunnel
    - allow-flex-algo-fallback boolean
    - ecmp number
    - enforce-strict-tunnel-tagging boolean
    - resolution keyword
    - resolution-filter
      - bgp boolean
      - ldp boolean
      - mpls-fwd-policy boolean

```

configure service epipe bgp-evpn mpls auto-bind-tunnel resolution-filter rib-api

- **rib-api** *boolean*
- **rsvp** *boolean*
- **sr-isis** *boolean*
- **sr-ospf** *boolean*
- **sr-ospf3** *boolean*
- **sr-policy** *boolean*
- **sr-te** *boolean*
- **udp** *boolean*
- **weighted-ecmp** *boolean*
- **control-word** *boolean*
- **default-route-tag** *string*
- **dynamic-egress-label-limit** *boolean*
- **ecmp** *number*
- **entropy-label** *boolean*
- **evi-three-byte-auto-rt** *boolean*
- **force-vc-forwarding** *keyword*
- **oper-group** *reference*
- **route-next-hop**
  - **ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **system-ipv4**
  - **system-ipv6**
- **send-tunnel-encap**
  - **mpls** *boolean*
  - **mpls-over-udp** *boolean*
- **remote-attachment-circuit** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **endpoint** *reference*
  - **eth-tag** *number*
- **segment-routing-v6** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **default-route-tag** *string*
  - **ecmp** *number*
  - **evi-three-byte-auto-rt** *boolean*
  - **force-vc-forwarding** *keyword*
  - **oper-group** *reference*
  - **resolution** *keyword*
  - **route-next-hop**
    - **ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
    - **system-ipv4**
    - **system-ipv6**
  - **source-address** *string*
  - **srv6**
    - **default-locator** *string*
    - **instance** *reference*
- **vxlan** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **default-route-tag** *string*
  - **ecmp** *number*
  - **evi-three-byte-auto-rt** *boolean*
  - **send-tunnel-encap** *boolean*
  - **vxlan-instance** *reference*
- **bgp-mh-site** *string*
  - **activation-timer** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **boot-timer** *number*
  - **id** *number*
  - **min-down-timer** *number*

## configure service epipe bgp-mh-site preference

- **preference** *number*
- **sap** *string*
- **bgp-vpws**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **local-ve**
    - **id** *number*
    - **name** *string*
  - **remote-ve** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **id** *number*
- **customer** *reference*
- **description** *string*
- **endpoint** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **hold-time-active** *number*
  - **revert-time** (*number* | *keyword*)
  - **standby-signaling** *keyword*
- **eth-cfm**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **ignore-l2vpn-mtu-mismatch** *boolean*
- **load-balancing**
  - **lbl-eth-or-ip-l4-teid** *boolean*
  - **per-service-hashing** *boolean*
- **nat-outside** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **oper-group** *reference*
- **pbb**
  - **force-qtag-forwarding** *boolean*
  - **local-switch-service-state** *keyword*
  - **tunnel**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **backbone-dest-mac** *string*
    - **backbone-dest-mac-name** *reference*
    - **backbone-vpls-service-name** *reference*
    - **isid** *number*
- **sap** *string*
  - **aarp**
    - **id** *reference*
    - **type** *keyword*
  - **accounting-policy** *reference*
  - **admin-state** *keyword*
  - **app-profile** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **bandwidth** *number*
  - **cflowd** *boolean*
  - **collect-stats** *boolean*
  - **cpu-protection**
    - **eth-cfm-monitoring**
      - **aggregate**
      - **car**
    - **mac-monitoring**
    - **policy-id** *reference*
  - **description** *string*
  - **dist-cpu-protection** *reference*

configure service epipe sap egress

```

- egress
  - agg-rate
    - adaptation-rule keyword
    - burst-limit (number | keyword)
    - limit-unused-bandwidth boolean
    - queue-frame-based-accounting boolean
    - rate number
  - filter
    - ip reference
    - ipv6 reference
    - mac reference
  - qos
    - policer-control-policy
      - overrides
        - apply-groups reference
        - apply-groups-exclude reference
      - root
        - max-rate (number | keyword)
        - priority-mbs-thresholds
          - min-thresh-separation (number | keyword)
          - priority number
            - apply-groups reference
            - apply-groups-exclude reference
            - mbs-contribution (number | keyword)
        - policy-name reference
    - qinq-mark-top-only boolean
  - sap-egress
    - overrides
      - hs-secondary-shaper string
      - hs-wrr-group reference
        - apply-groups reference
        - apply-groups-exclude reference
        - hs-class-weight number
        - percent-rate decimal-number
        - rate (number | keyword)
      - policer reference
        - apply-groups reference
        - apply-groups-exclude reference
        - cbs (number | keyword)
        - mbs (number | keyword)
        - packet-byte-offset number
        - percent-rate
          - cir decimal-number
          - pir decimal-number
        - rate
          - cir (number | keyword)
          - pir (number | keyword)
        - stat-mode keyword
      - queue reference
        - adaptation-rule
          - cir keyword
          - pir keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - avg-frame-overhead decimal-number
        - burst-limit (number | keyword)
        - cbs (number | keyword)
        - drop-tail
          - low
            - percent-reduction-from-mbs (number | keyword)
        - hs-class-weight number
        - hs-wred-queue
          - policy reference
        - hs-wrr-weight number

```

configure service epipe sap egress qos sap-egress overrides queue mbs

```

    - mbs (number | keyword)
    - monitor-queue-depth
      - fast-polling boolean
      - violation-threshold decimal-number
    - parent
      - cir-weight number
      - weight number
    - percent-rate
      - cir decimal-number
      - pir decimal-number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
  - policy-name reference
  - port-redirect-group
    - group-name reference
    - instance number
  - scheduler-policy
    - overrides
      - scheduler string
      - apply-groups reference
      - apply-groups-exclude reference
      - parent
        - cir-weight number
        - weight number
      - rate
        - cir (number | keyword)
        - pir (number | keyword)
    - policy-name reference
  - endpoint reference
  - eth-cfm
    - ais boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - collect-lmm-fc-stats
      - fc keyword
      - fc-in-profile keyword
    - collect-lmm-stats boolean
  - mep md-admin-name reference ma-admin-name reference mep-id number
    - admin-state keyword
    - ais
      - client-mep-level number
      - interface-support boolean
      - interval number
      - low-priority-defect keyword
      - priority number
    - alarm-notification
      - fng-alarm-time number
      - fng-reset-time number
    - apply-groups reference
    - apply-groups-exclude reference
    - ccm boolean
    - ccm-ltm-priority number
    - ccm-padding-size number
    - cfm-vlan-tag string
    - csf
      - multiplier decimal-number
    - description string
    - direction keyword
  - eth-test
    - bit-error-threshold number
    - test-pattern
      - crc-tlv boolean
      - pattern keyword

```

configure service epipe sap eth-cfm mep fault-propagation

```

- fault-propagation keyword
- grace
  - eth-ed
    - max-rx-defect-window number
    - priority number
    - rx-eth-ed boolean
    - tx-eth-ed boolean
  - eth-vsm-grace
    - rx-eth-vsm-grace boolean
    - tx-eth-vsm-grace boolean
  - lbm-svc-act-responder boolean
  - low-priority-defect keyword
  - mac-address string
  - one-way-delay-threshold number
  - primary-vlan boolean
- mip primary-vlan (number | keyword)
  - apply-groups reference
  - apply-groups-exclude reference
  - cfm-vlan-tag string
  - mac-address string
  - snelch-ingress-ctag-levels number
  - snelch-ingress-levels number
- ethernet
  - llf
    - admin-state keyword
- ignore-oper-down boolean
- ingress
  - filter
    - ip reference
    - ipv6 reference
    - mac reference
  - qos
    - match-qinq-dot1p keyword
    - policer-control-policy
      - overrides
        - apply-groups reference
        - apply-groups-exclude reference
        - root
          - max-rate (number | keyword)
          - priority-mbs-thresholds
            - min-thresh-separation (number | keyword)
            - priority number
            - apply-groups reference
            - apply-groups-exclude reference
            - mbs-contribution (number | keyword)
          - policy-name reference
      - sap-ingress
        - fp-redirect-group
          - group-name reference
          - instance number
        - overrides
          - ip-criteria
            - activate-entry-tag number
          - ipv6-criteria
            - activate-entry-tag number
          - policer reference
          - apply-groups reference
          - apply-groups-exclude reference
          - cbs (number | keyword)
          - mbs (number | keyword)
          - packet-byte-offset number
          - percent-rate
            - cir decimal-number
            - pir decimal-number

```

configure service epipe sap ingress qos sap-ingress overrides policer rate

```

    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - stat-mode keyword
  - queue reference
  - adaptation-rule
    - cir keyword
    - pir keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - cbs (number | keyword)
  - drop-tail
    - low
      - percent-reduction-from-mbs (number | keyword)
  - mbs (number | keyword)
  - monitor-queue-depth
    - fast-polling boolean
  - parent
    - cir-weight number
    - weight number
  - percent-rate
    - cir decimal-number
    - pir decimal-number
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
  - policy-name reference
  - queuing-type keyword
- scheduler-policy
- overrides
  - scheduler string
  - apply-groups reference
  - apply-groups-exclude reference
  - parent
    - cir-weight number
    - weight number
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
  - policy-name reference
- qtag-manipulation
  - c-tag (number | keyword)
  - push-dot1q-vlan (number | keyword)
  - s-tag number
- l2tpv3-session
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - pseudo-wire
    - ethernet
      - ethernet-vlan-id number
  - router
    - group string
    - router-instance string
  - vc-id number
- lag
  - link-map-profile number
  - per-link-hash
    - class number
    - weight number
- mc-ring
  - apply-groups reference
  - apply-groups-exclude reference
  - ring-node string

```



## configure service epipe sap monitor-oper-group

- **monitor-oper-group** *reference*
- **multi-service-site** *reference*
- **oper-group** *reference*
- **transit-policy**
  - **ip** *reference*
  - **prefix** *reference*
- **segment-routing-v6** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **locator** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **function**
    - **end-dx2**
      - **value** *number*
- **micro-segment-locator** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **function**
    - **udx2**
      - **value** *number*
- **service-id** *number*
- **service-mtu** *number*
- **spoke-sdp** *string*
- **aarp**
  - **id** *reference*
  - **type** *keyword*
- **accounting-policy** *reference*
- **admin-state** *keyword*
- **adv-service-mtu** *number*
- **app-profile** *reference*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **bandwidth** (*number* | *keyword*)
- **bfd**
  - **bfd-liveness**
    - **encap** *keyword*
  - **bfd-template** *reference*
  - **failure-action** *keyword*
  - **wait-for-up-timer** *number*
- **collect-stats** *boolean*
- **control-word** *boolean*
- **cpu-protection**
  - **eth-cfm-monitoring**
    - **aggregate**
    - **car**
  - **mac-monitoring**
  - **policy-id** *reference*
- **description** *string*
- **egress**
  - **filter**
    - **ip** *reference*
    - **ipv6** *reference*
    - **mac** *reference*
  - **l2tpv3**
    - **cookie** *string*
  - **qos**
    - **network**
      - **policy-name** *reference*
      - **port-redirect-group**
        - **group-name** *reference*
        - **instance** *number*
    - **vc-label** *number*
  - **endpoint**

## configure service epipe spoke-sdp endpoint icb

```

- icb boolean
- name reference
- precedence (number | keyword)
- entropy-label
- eth-cfm
- apply-groups reference
- apply-groups-exclude reference
- collect-lmm-fc-stats
- fc keyword
- fc-in-profile keyword
- collect-lmm-stats boolean
- mep md-admin-name reference ma-admin-name reference mep-id number
- admin-state keyword
- ais
- client-meg-level number
- interface-support boolean
- interval number
- low-priority-defect keyword
- priority number
- alarm-notification
- fng-alarm-time number
- fng-reset-time number
- apply-groups reference
- apply-groups-exclude reference
- ccm boolean
- ccm-ltm-priority number
- ccm-padding-size number
- cfm-vlan-tag string
- csf
- multiplier decimal-number
- description string
- direction keyword
- eth-test
- bit-error-threshold number
- test-pattern
- crc-tlv boolean
- pattern keyword
- fault-propagation keyword
- grace
- eth-ed
- max-rx-defect-window number
- priority number
- rx-eth-ed boolean
- tx-eth-ed boolean
- eth-vsm-grace
- rx-eth-vsm-grace boolean
- tx-eth-vsm-grace boolean
- lbm-svc-act-responder boolean
- low-priority-defect keyword
- mac-address string
- one-way-delay-threshold number
- primary-vlan boolean
- mip primary-vlan (number | keyword)
- apply-groups reference
- apply-groups-exclude reference
- cfm-vlan-tag string
- mac-address string
- snelch-ingress-ctag-levels number
- snelch-ingress-levels number
- force-vc-forwarding keyword
- hash-label
- signal-capability
- ingress
- filter

```

configure service epipe spoke-sdp ingress filter ip

```

    - ip reference
    - ipv6 reference
    - mac reference
  - l2tpv3
    - cookie
      - cookie1 string
      - cookie2 string
    - qos
      - network
        - fp-redirect-group
          - group-name reference
          - instance number
          - policy-name reference
    - vc-label number
  - monitor-oper-group reference
  - oper-group reference
  - pw-status
    - block-on-peer-fault boolean
    - signaling boolean
    - standby-signaling-slave boolean
  - source-bmac
    - use-sdp-bmac-lsb boolean
  - transit-policy
    - ip reference
    - prefix reference
  - vc-type keyword
  - vlan-vc-tag number
  - test boolean
  - vc-switching boolean
  - vpn-id number
  - vxlan
    - instance number
    - apply-groups reference
    - apply-groups-exclude reference
    - egress-vtep
      - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - oper-group reference
      - vni number
    - source-vtep (ipv4-address-no-zone | ipv6-address-no-zone)
  - ies string
    - aa-interface string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - ip-mtu number
    - ipv4
      - primary
        - address string
        - apply-groups reference
        - apply-groups-exclude reference
        - prefix-length number
    - sap string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - egress
        - filter
          - ip reference
        - qos
          - sap-egress
            - policy-name reference
    - fwd-wholesale

```

configure service ies aa-interface sap fwd-wholesale pppoe-service

```

    - pppoe-service reference
  - ingress
    - qos
      - sap-ingress
        - overrides
        - policy-name reference
    - lag
  - aarp-interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - ip-mtu number
  - spoke-sdp string
    - aarp
      - id reference
      - type keyword
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - egress
        - filter
          - ip reference
          - vc-label number
      - ingress
        - filter
          - ip reference
          - vc-label number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - customer reference
  - description string
  - eth-cfm
    - apply-groups reference
    - apply-groups-exclude reference
  - igmp-host-tracking
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - expiry-time number
  - interface string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - cflowd-parameters
    - sampling keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - direction keyword
      - sample-profile (keyword | number)
      - type keyword
  - cpu-protection reference
  - description string
  - dynamic-tunnel-redundant-nexthop string
  - hold-time
    - ipv4
      - down
        - init-only boolean
        - seconds number
      - up
        - seconds number
    - ipv6

```

configure service ies interface hold-time ipv6 down

```

- down
  - init-only boolean
  - seconds number
- up
  - seconds number
- if-attribute
  - admin-group reference
  - srlg-group reference
- ingress
  - destination-class-lookup boolean
  - policy-accounting reference
- ingress-stats boolean
- ip-mtu number
- ipsec
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - ip-exception reference
  - ipsec-tunnel string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - bfd
    - bfd-designate boolean
    - bfd-liveness
      - dest-ip string
      - interface string
      - service-name string
  - clear-df-bit boolean
  - copy-traffic-class-upon-decapsulation boolean
  - description string
  - encapsulated-ip-mtu number
  - icmp-generation
    - frag-required
      - admin-state keyword
      - interval number
      - message-count number
  - icmp6-generation
    - packet-too-big
      - admin-state keyword
      - interval number
      - message-count number
  - ip-mtu number
  - key-exchange
    - dynamic
      - auto-establish boolean
      - cert
        - cert-profile reference
        - status-verify
          - default-result keyword
          - primary keyword
          - secondary keyword
          - trust-anchor-profile reference
      - id
        - fqdn string
        - ipv4 string
        - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
      - ike-policy reference
      - ipsec-transform reference
      - pre-shared-key string
    - manual
      - keys number direction keyword
      - apply-groups reference
      - apply-groups-exclude reference

```

configure service ies interface ipsec ipsec-tunnel key-exchange manual keys authentication-key

```

zone)
    - authentication-key string
    - encryption-key string
    - ipsec-transform reference
    - spi number
    - local-gateway-address-override (ipv4-address-no-zone | ipv6-address-no-
zone)
    - max-history-key-records
      - esp number
      - ike number
    - pmtu-discovery-aging number
    - private-sap number
    - private-service string
    - private-tcp-mss-adjust number
    - propagate-pmtu-v4 boolean
    - propagate-pmtu-v6 boolean
    - public-tcp-mss-adjust (number | keyword)
    - remote-gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - replay-window number
    - security-policy
      - id number
      - strict-match boolean
    - ipv6-exception reference
    - public-sap number
    - tunnel-group reference
  - ipv4
    - addresses
      - address string
      - apply-groups reference
      - apply-groups-exclude reference
      - prefix-length number
    - allow-directed-broadcasts boolean
    - bfd
      - admin-state keyword
      - echo-receive number
      - multiplier number
      - receive number
      - transmit-interval number
      - type keyword
    - dhcp
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - gi-address string
      - lease-populate
        - max-leases number
      - option-82
        - action keyword
        - circuit-id
          - ascii-tuple
          - ifindex
          - none
          - sap-id
          - vlan-ascii-tuple
        - remote-id
          - ascii-string string
          - mac
          - none
      - vendor-specific-option
        - client-mac-address boolean
        - pool-name boolean
        - sap-id boolean
        - service-id boolean
        - string string

```

configure service ies interface ipv4 dhcp option-82 vendor-specific-option system-id

```

    - system-id boolean
  - proxy-server
    - admin-state keyword
    - emulated-server string
    - lease-time
      - radius-override boolean
      - value number
  - python-policy reference
  - relay-plain-bootp boolean
  - relay-proxy
    - release-update-src-ip boolean
    - siaddr-override string
  - release-include-gi-address boolean
  - server string
  - src-ip-addr keyword
  - trusted boolean
  - use-arp boolean
- icmp
  - mask-reply boolean
  - param-problem
    - admin-state keyword
    - number number
    - seconds number
  - redirects
    - admin-state keyword
    - number number
    - seconds number
  - ttl-expired
    - admin-state keyword
    - number number
    - seconds number
  - unreachables
    - admin-state keyword
    - number number
    - seconds number
- ip-helper-address string
- local-dhcp-server reference
- neighbor-discovery
  - host-route
    - populate keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - route-tag number
  - learn-unsolicited boolean
  - limit
    - log-only boolean
    - max-entries number
    - threshold number
  - local-proxy-arp boolean
  - populate boolean
  - proactive-refresh boolean
  - proxy-arp-policy reference
  - remote-proxy-arp boolean
  - retry-timer number
  - static-neighbor string
    - apply-groups reference
    - apply-groups-exclude reference
    - mac-address string
  - static-neighbor-unnumbered
    - mac-address string
  - timeout number
- primary
  - address string
  - apply-groups reference

```

configure service ies interface ipv4 primary apply-groups-exclude

```

- apply-groups-exclude reference
- broadcast keyword
- prefix-length number
- track-srrp number
- qos-route-lookup keyword
- secondary string
- apply-groups reference
- apply-groups-exclude reference
- broadcast keyword
- igp-inhibit boolean
- prefix-length number
- track-srrp number
- tcp-mss number
- unnumbered
- ip-address string
- ip-int-name string
- system
- urpf-check
- ignore-default boolean
- mode keyword
- vrrp number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- authentication-key string
- backup string
- bfd-liveness
- apply-groups reference
- apply-groups-exclude reference
- dest-ip string
- interface-name string
- service-name string
- init-delay number
- mac string
- master-int-inherit boolean
- message-interval number
- monitor-oper-group reference
- ntp-reply boolean
- oper-group reference
- owner boolean
- passive boolean
- ping-reply boolean
- policy reference
- preempt boolean
- priority number
- ssh-reply boolean
- standby-forwarding boolean
- telnet-reply boolean
- traceroute-reply boolean
- ipv6
- address string
- apply-groups reference
- apply-groups-exclude reference
- duplicate-address-detection boolean
- eui-64 boolean
- prefix-length number
- primary-preference number
- track-srrp number
- bfd
- admin-state keyword
- echo-receive number
- multiplier number
- receive number
- transmit-interval number

```



## configure service ies interface ipv6 bfd type

- **type** *keyword*
- **dhcp6**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **relay**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **lease-populate**
    - **max-nbr-of-leases** *number*
  - **route-populate**
    - **na** *boolean*
    - **pd**
      - **exclude** *boolean*
      - **ta** *boolean*
  - **link-address** *string*
  - **neighbor-resolution** *boolean*
- **option**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **interface-id**
    - **ascii-tuple**
    - **if-index**
    - **sap-id**
    - **string** *string*
  - **remote-id** *boolean*
  - **python-policy** *reference*
  - **server** *string*
  - **source-address** *string*
  - **user-db** *reference*
- **server**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **max-nbr-of-leases** *number*
  - **prefix-delegation**
    - **admin-state** *keyword*
    - **prefix** *string*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **client-id**
        - **duid** *string*
        - **iaid** *number*
      - **preferred-lifetime** (*number* | *keyword*)
      - **valid-lifetime** (*number* | *keyword*)
- **duplicate-address-detection** *boolean*
- **forward-ipv4-packets** *boolean*
- **icmp6**
  - **packet-too-big**
    - **admin-state** *keyword*
    - **number** *number*
    - **seconds** *number*
  - **param-problem**
    - **admin-state** *keyword*
    - **number** *number*
    - **seconds** *number*
  - **redirects**
    - **admin-state** *keyword*
    - **number** *number*
    - **seconds** *number*
  - **time-exceeded**
    - **admin-state** *keyword*
    - **number** *number*
    - **seconds** *number*

configure service ies interface ipv6 icmp6 unreachablees

- **unreachables**
    - **admin-state** *keyword*
    - **number** *number*
    - **seconds** *number*
  - **link-local-address**
    - **address** *string*
    - **duplicate-address-detection** *boolean*
  - **local-dhcp-server** *reference*
  - **neighbor-discovery**
    - **host-route**
      - **populate** *keyword*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **route-tag** *number*
    - **learn-unsolicited** *keyword*
  - **limit**
    - **log-only** *boolean*
    - **max-entries** *number*
    - **threshold** *number*
  - **local-proxy-nd** *boolean*
  - **proactive-refresh** *keyword*
  - **proxy-nd-policy** *reference*
  - **reachable-time** *number*
  - **secure-nd**
    - **admin-state** *keyword*
    - **allow-unsecured-msgs** *boolean*
    - **public-key-min-bits** *number*
    - **security-parameter** *number*
  - **stale-time** *number*
  - **static-neighbor** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **mac-address** *string*
- **qos-route-lookup** *keyword*
- **tcp-mss** *number*
- **urpf-check**
  - **ignore-default** *boolean*
  - **mode** *keyword*
- **vrrp** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **backup** *string*
  - **bfd-liveness**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **dest-ip** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
    - **interface-name** *string*
    - **service-name** *string*
  - **init-delay** *number*
  - **mac** *string*
  - **master-int-inherit** *boolean*
  - **message-interval** *number*
  - **monitor-oper-group** *reference*
  - **ntp-reply** *boolean*
  - **oper-group** *reference*
  - **owner** *boolean*
  - **passive** *boolean*
  - **ping-reply** *boolean*
  - **policy** *reference*
  - **preempt** *boolean*
  - **priority** *number*
  - **standby-forwarding** *boolean*
  - **telnet-reply** *boolean*

configure service ies interface ipv6 vrrp traceroute-reply

- **traceroute-reply** *boolean*
- **load-balancing**
  - **flow-label-load-balancing** *boolean*
  - **ip-load-balancing** *keyword*
  - **spi-load-balancing** *boolean*
  - **teid-load-balancing** *boolean*
- **loopback** *boolean*
- **mac** *string*
- **mac-accounting** *boolean*
- **monitor-oper-group** *reference*
- **multi-chassis-shunting-profile** *reference*
- **multicast-network-domain** *reference*
- **ping-template**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **destination-address** *string*
  - **name** *reference*
- **ptp-hw-assist**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **radius-auth-policy** *reference*
- **sap** *string*
  - **aarp**
    - **id** *reference*
    - **type** *keyword*
  - **accounting-policy** *reference*
  - **admin-state** *keyword*
  - **anti-spoof** *keyword*
  - **app-profile** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **bandwidth** *number*
  - **calling-station-id** *string*
  - **collect-stats** *boolean*
  - **cpu-protection**
    - **eth-cfm-monitoring**
      - **aggregate**
      - **car**
    - **ip-src-monitoring**
    - **mac-monitoring**
    - **policy-id** *reference*
  - **description** *string*
  - **dist-cpu-protection** *reference*
  - **egress**
    - **agg-rate**
      - **adaptation-rule** *keyword*
      - **burst-limit** (*number* | *keyword*)
      - **limit-unused-bandwidth** *boolean*
      - **queue-frame-based-accounting** *boolean*
      - **rate** *number*
    - **filter**
      - **ip** *reference*
      - **ipv6** *reference*
    - **qos**
      - **policer-control-policy**
        - **overrides**
          - **apply-groups** *reference*
          - **apply-groups-exclude** *reference*
          - **root**
            - **max-rate** (*number* | *keyword*)
            - **priority-mbs-thresholds**
              - **min-thresh-separation** (*number* | *keyword*)

configure service ies interface sap egress qos policer-control-policy overrides root priority-mbs-thresholds priority

```

    - priority number
      - apply-groups reference
      - apply-groups-exclude reference
      - mbs-contribution (number | keyword)
  - policy-name reference
- qinq-mark-top-only boolean
- sap-egress
  - overrides
    - hs-secondary-shaper string
    - hs-wrr-group reference
      - apply-groups reference
      - apply-groups-exclude reference
      - hs-class-weight number
      - percent-rate decimal-number
      - rate (number | keyword)
    - policer reference
      - apply-groups reference
      - apply-groups-exclude reference
      - cbs (number | keyword)
      - mbs (number | keyword)
      - packet-byte-offset number
      - percent-rate
        - cir decimal-number
        - pir decimal-number
      - rate
        - cir (number | keyword)
        - pir (number | keyword)
      - stat-mode keyword
    - queue reference
      - adaptation-rule
        - cir keyword
        - pir keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - avg-frame-overhead decimal-number
      - burst-limit (number | keyword)
      - cbs (number | keyword)
      - drop-tail
        - low
          - percent-reduction-from-mbs (number | keyword)
      - hs-class-weight number
      - hs-wred-queue
        - policy reference
      - hs-wrr-weight number
      - mbs (number | keyword)
      - monitor-queue-depth
        - fast-polling boolean
        - violation-threshold decimal-number
      - parent
        - cir-weight number
        - weight number
      - percent-rate
        - cir decimal-number
        - pir decimal-number
      - rate
        - cir (number | keyword)
        - pir (number | keyword)
  - policy-name reference
  - port-redirect-group
    - group-name reference
    - instance number
- scheduler-policy
  - overrides
    - scheduler string

```

configure service ies interface sap egress qos scheduler-policy overrides scheduler apply-groups

```

    - apply-groups reference
    - apply-groups-exclude reference
    - parent
      - cir-weight number
      - weight number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - policy-name reference
  - queue-group-redirect-list reference
- eth-cfm
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-lmm-fc-stats
    - fc keyword
    - fc-in-profile keyword
  - collect-lmm-stats boolean
  - mep md-admin-name reference ma-admin-name reference mep-id number
  - admin-state keyword
  - ais boolean
  - alarm-notification
    - fng-alarm-time number
    - fng-reset-time number
  - apply-groups reference
  - apply-groups-exclude reference
  - ccm boolean
  - ccm-ltm-priority number
  - ccm-padding-size number
  - csf
    - multiplier decimal-number
  - description string
  - eth-test
    - bit-error-threshold number
    - test-pattern
      - crc-tlv boolean
      - pattern keyword
  - fault-propagation keyword
  - grace
    - eth-ed
      - max-rx-defect-window number
      - priority number
      - rx-eth-ed boolean
      - tx-eth-ed boolean
    - eth-vsm-grace
      - rx-eth-vsm-grace boolean
      - tx-eth-vsm-grace boolean
    - low-priority-defect keyword
    - one-way-delay-threshold number
  - snelch-ingress-levels number
- fwd-wholesale
  - pppoe-service reference
- host-admin-state keyword
- host-lockout-policy reference
- ingress
  - filter
    - ip reference
    - ipv6 reference
  - qos
    - match-qinq-dot1p keyword
    - policer-control-policy
      - overrides
        - apply-groups reference
        - apply-groups-exclude reference
        - root

```

configure service ies interface sap ingress qos policer-control-policy overrides root max-rate

- **max-rate** (number | keyword)
- **priority-mbs-thresholds**
  - **min-thresh-separation** (number | keyword)
  - **priority** number
    - **apply-groups** reference
    - **apply-groups-exclude** reference
    - **mbs-contribution** (number | keyword)
- **policy-name** reference
- **sap-ingress**
  - **fp-redirect-group**
    - **group-name** reference
    - **instance** number
  - **overrides**
    - **ip-criteria**
      - **activate-entry-tag** number
    - **ipv6-criteria**
      - **activate-entry-tag** number
    - **policer** reference
      - **apply-groups** reference
      - **apply-groups-exclude** reference
      - **cbs** (number | keyword)
      - **mbs** (number | keyword)
      - **packet-byte-offset** number
      - **percent-rate**
        - **cir** decimal-number
        - **pir** decimal-number
      - **rate**
        - **cir** (number | keyword)
        - **pir** (number | keyword)
      - **stat-mode** keyword
    - **queue** reference
      - **adaptation-rule**
        - **cir** keyword
        - **pir** keyword
      - **apply-groups** reference
      - **apply-groups-exclude** reference
      - **cbs** (number | keyword)
      - **drop-tail**
        - **low**
          - **percent-reduction-from-mbs** (number | keyword)
      - **mbs** (number | keyword)
      - **monitor-queue-depth**
        - **fast-polling** boolean
      - **parent**
        - **cir-weight** number
        - **weight** number
      - **percent-rate**
        - **cir** decimal-number
        - **pir** decimal-number
      - **rate**
        - **cir** (number | keyword)
        - **pir** (number | keyword)
    - **policy-name** reference
    - **queuing-type** keyword
  - **scheduler-policy**
    - **overrides**
      - **scheduler** string
        - **apply-groups** reference
        - **apply-groups-exclude** reference
        - **parent**
          - **cir-weight** number
          - **weight** number
        - **rate**
          - **cir** (number | keyword)

configure service ies interface sap ingress qos scheduler-policy overrides scheduler rate pir

```

    - pir (number | keyword)
      - policy-name reference
    - queue-group-redirect-list reference
  - ip-tunnel string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - backup-remote-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - clear-df-bit boolean
    - delivery-service string
    - description string
    - dest-ip (ipv4-address-no-zone | ipv6-address-no-zone)
    - dscp keyword
    - encapsulated-ip-mtu number
    - gre-header
      - admin-state keyword
      - key
        - admin-state keyword
        - receive number
        - send number
    - icmp-generation
      - frag-required
        - admin-state keyword
        - interval number
        - message-count number
    - icmp6-generation
      - packet-too-big
        - admin-state keyword
        - number number
        - seconds number
    - ip-mtu number
    - ipsec-transport-mode-profile reference
    - local-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - pmtu-discovery-aging number
    - private-tcp-mss-adjust number
    - propagate-pmtu-v4 boolean
    - propagate-pmtu-v6 boolean
    - public-tcp-mss-adjust (number | keyword)
    - reassembly (number | keyword)
    - remote-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - ipsec-gateway string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - cert
      - cert-profile reference
      - status-verify
        - default-result keyword
        - primary keyword
        - secondary keyword
      - trust-anchor-profile reference
    - client-db
      - fallback boolean
      - name reference
    - default-secure-service
      - interface string
      - service-name string
    - default-tunnel-template reference
    - dhcp-address-assignment
      - dhcpv4
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - gi-address string

```

configure service ies interface sap ipsec-gateway dhcp-address-assignment dhcpv4 send-release

```

    - send-release boolean
    - server
      - address string
      - router-instance string
  - dhcpv6
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - link-address string
    - send-release boolean
    - server
      - address string
      - router-instance string
  - ike-policy reference
  - local
    - address-assignment
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - ipv4
        - dhcp-server string
        - pool string
        - router-instance string
        - secondary-pool string
      - ipv6
        - dhcp-server string
        - pool string
        - router-instance string
    - gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - id
      - auto
      - fqdn string
      - ipv4 string
      - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
  - max-history-key-records
    - esp number
    - ike number
  - pre-shared-key string
  - radius
    - accounting-policy reference
    - authentication-policy reference
  - ts-list reference
  - lag
    - link-map-profile number
    - per-link-hash
      - class number
      - weight number
  - multi-service-site reference
  - static-host
    - ipv4 string mac string
    - admin-state keyword
    - ancp-string string
    - app-profile
      - profile reference
    - apply-groups reference
    - apply-groups-exclude reference
    - int-dest-id string
    - sla-profile reference
    - sub-profile reference
    - subscriber-id
      - string string
      - use-sap-id
  - transit-policy
    - ip reference

```



configure service ies interface sap transit-policy prefix

- **prefix** *reference*
- **shcv-policy-ipv4** *reference*
- **spoke-sdp** *string*
- **aarp**
  - **id** *reference*
  - **type** *keyword*
- **accounting-policy** *reference*
- **admin-state** *keyword*
- **app-profile** *reference*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **bfd**
  - **bfd-liveness**
    - **encap** *keyword*
  - **bfd-template** *reference*
  - **failure-action** *keyword*
  - **wait-for-up-timer** *number*
- **collect-stats** *boolean*
- **control-word** *boolean*
- **cpu-protection**
  - **eth-cfm-monitoring**
    - **aggregate**
    - **car**
  - **ip-src-monitoring**
  - **mac-monitoring**
  - **policy-id** *reference*
- **description** *string*
- **egress**
  - **filter**
    - **ip** *reference*
    - **ipv6** *reference*
  - **qos**
    - **network**
      - **policy-name** *reference*
      - **port-redirect-group**
        - **group-name** *reference*
        - **instance** *number*
    - **vc-label** *number*
- **entropy-label**
- **eth-cfm**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **collect-lmm-fc-stats**
    - **fc** *keyword*
    - **fc-in-profile** *keyword*
  - **collect-lmm-stats** *boolean*
  - **mep** **md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number*
    - **admin-state** *keyword*
    - **ais** *boolean*
    - **alarm-notification**
      - **fng-alarm-time** *number*
      - **fng-reset-time** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **ccm** *boolean*
    - **ccm-ltm-priority** *number*
    - **ccm-padding-size** *number*
    - **csf**
      - **multiplier** *decimal-number*
    - **description** *string*
    - **eth-test**
      - **bit-error-threshold** *number*
      - **test-pattern**
        - **crc-tlv** *boolean*

configure service ies interface spoke-sdp eth-cfm mep eth-test test-pattern pattern

```

    - pattern keyword
  - fault-propagation keyword
  - grace
    - eth-ed
      - max-rx-defect-window number
      - priority number
      - rx-eth-ed boolean
      - tx-eth-ed boolean
    - eth-vsm-grace
      - rx-eth-vsm-grace boolean
      - tx-eth-vsm-grace boolean
    - low-priority-defect keyword
    - one-way-delay-threshold number
  - snelch-ingress-levels number
- hash-label
  - signal-capability
- ingress
  - filter
    - ip reference
    - ipv6 reference
  - qos
    - network
      - fp-redirect-group
        - group-name reference
        - instance number
        - policy-name reference
      - vc-label number
    - transit-policy
      - ip reference
      - prefix reference
    - vc-type keyword
- static-tunnel-redundant-nexthop string
- tos-marking-state keyword
- tunnel boolean
- vas-if-type keyword
- vpls string
  - apply-groups reference
  - apply-groups-exclude reference
- egress
  - reclassify-using-qos reference
  - routed-override-filter
    - ip reference
    - ipv6 reference
- evpn
  - arp
    - advertise keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - route-tag number
    - flood-garp-and-unknown-req boolean
    - learn-dynamic boolean
  - nd
    - advertise keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - route-tag number
    - learn-dynamic boolean
  - ingress
    - routed-override-filter
      - ip reference
      - ipv6 reference
- redundant-interface string
  - admin-state keyword
  - apply-groups reference

```

configure service ies redundant-interface apply-groups-exclude

```

- apply-groups-exclude reference
- description string
- hold-time
  - ipv4
    - down
      - init-only boolean
      - seconds number
    - up
      - seconds number
- ip-mtu number
- ipv4
  - primary
    - address string
    - apply-groups reference
    - apply-groups-exclude reference
    - prefix-length number
    - remote-ip string
- spoke-sdp string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - control-word boolean
  - description string
  - egress
    - filter
      - ip reference
    - vc-label number
  - ingress
    - filter
      - ip reference
    - vc-label number
- service-id number
- subscriber-interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - fwd-service reference
  - fwd-subscriber-interface reference
- group-interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bonding-parameters
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - connection number
      - apply-groups reference
      - apply-groups-exclude reference
      - service string
    - fpe reference
    - multicast
      - connection (number | keyword)
  - brg
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - authenticated-brg-only boolean
    - default-brg-profile reference
  - cflowd-parameters
    - sampling keyword
      - apply-groups reference
      - apply-groups-exclude reference

```

configure service ies subscriber-interface group-interface cflowd-parameters sampling direction

```

    - direction keyword
    - sample-profile (keyword | number)
    - type keyword
- data-trigger
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- description string
- dynamic-routes-track-srrp
  - hold-time number
- gtp-parameters
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - fpe reference
- gx-policy reference
- ingress
  - policy-accounting reference
- ingress-stats boolean
- ip-mtu number
- ipoe-linking
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - gratuitous-router-advertisement boolean
  - shared-circuit-id boolean
- ipoe-session
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - force-auth
    - cid-change boolean
    - rid-change boolean
  - ipoe-session-policy reference
  - min-auth-interval (keyword | number)
  - radius-session-timeout keyword
  - sap-session-limit number
  - session-limit number
  - stateless-redundancy boolean
  - user-db reference
- ipv4
  - arp-host
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - host-limit number
    - min-auth-interval number
    - sap-host-limit number
  - dhcp
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - client-applications
      - dhcp boolean
      - ppp boolean
    - description string
    - filter reference
    - gi-address string
    - lease-populate
      - l2-header
        - mac string
      - max-leases number
    - match-circuit-id boolean

```

configure service ies subscriber-interface group-interface ipv4 dhcp offer-selection

```

- offer-selection
  - client-mac
    - discover-delay number
    - mac-address keyword
  - discover-delay number
  - server string
    - apply-groups reference
    - apply-groups-exclude reference
    - discover-delay number
- option-82
  - action keyword
  - circuit-id
    - ascii-tuple
    - ifindex
    - none
    - sap-id
    - vlan-ascii-tuple
  - remote-id
    - ascii-string string
    - mac
    - none
  - vendor-specific-option
    - client-mac-address boolean
    - pool-name boolean
    - sap-id boolean
    - service-id boolean
    - string string
    - system-id boolean
- proxy-server
  - admin-state keyword
  - emulated-server string
  - lease-time
    - radius-override boolean
    - value number
- python-policy reference
- relay-proxy
  - release-update-src-ip boolean
  - siaddr-override string
- release-include-gi-address boolean
- server string
- src-ip-addr keyword
- trusted boolean
- user-db reference
- icmp
  - mask-reply boolean
  - param-problem
    - admin-state keyword
    - number number
    - seconds number
  - redirects
    - admin-state keyword
    - number number
    - seconds number
  - ttl-expired
    - admin-state keyword
    - number number
    - seconds number
    - use-matching-address boolean
- unreachable
  - admin-state keyword
  - number number
  - seconds number
- ignore-df-bit boolean
- neighbor-discovery

```

configure service ies subscriber-interface group-interface ipv4 neighbor-discovery local-proxy-arp

- **local-proxy-arp** *boolean*
- **populate** *boolean*
- **proxy-arp-policy** *reference*
- **remote-proxy-arp** *boolean*
- **timeout** *number*
- **qos-route-lookup** *keyword*
- **urpf-check**
  - **mode** *keyword*
- **ipv6**
  - **allow-multiple-wan-addresses** *boolean*
  - **auto-reply**
    - **neighbor-solicitation** *boolean*
    - **router-solicitation** *boolean*
  - **dhcp6**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **filter** *reference*
    - **option**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **interface-id**
        - **ascii-tuple**
        - **if-index**
        - **sap-id**
        - **string** *string*
      - **remote-id** *boolean*
    - **override-slaac** *boolean*
    - **pd-managed-route**
      - **next-hop** *keyword*
    - **proxy-server**
      - **admin-state** *keyword*
      - **client-applications**
        - **dhcp** *boolean*
        - **ppp** *boolean*
      - **preferred-lifetime** *(number | keyword)*
      - **rebind-timer** *number*
      - **renew-timer** *number*
      - **server-id**
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **duid-en-ascii** *string*
        - **duid-en-hex** *string*
        - **duid-ll**
      - **valid-lifetime** *(number | keyword)*
    - **python-policy** *reference*
    - **relay**
      - **admin-state** *keyword*
      - **advertise-selection**
        - **client-mac**
          - **mac-address** *keyword*
          - **preference-option**
            - **value** *number*
          - **solicit-delay** *number*
        - **preference-option**
          - **value** *number*
        - **server** *string*
          - **apply-groups** *reference*
          - **apply-groups-exclude** *reference*
          - **preference-option**
            - **value** *number*
          - **solicit-delay** *number*
        - **solicit-delay** *number*
      - **client-applications**
        - **dhcp** *boolean*

configure service ies subscriber-interface group-interface ipv6 dhcp6 relay client-applications ppp

```

    - ppp boolean
    - description string
    - lease-split
      - admin-state keyword
      - valid-lifetime number
    - link-address string
    - server string
    - source-address string
  - snooping
    - admin-state keyword
  - user-db reference
  - user-ident keyword
- ipoe-bridged-mode boolean
- neighbor-discovery
  - apply-groups reference
  - apply-groups-exclude reference
  - dad-snooping boolean
  - neighbor-limit number
- qos-route-lookup keyword
- router-advertisements
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - force-mcast keyword
  - max-advertisement-interval number
  - min-advertisement-interval number
  - options
    - current-hop-limit number
    - dns
      - include-rdnss boolean
      - rdns-lifetime (number | keyword)
    - managed-configuration boolean
    - mtu (number | keyword)
    - other-stateful-configuration boolean
    - reachable-time number
    - retransmit-timer number
    - router-lifetime (number | keyword)
  - prefix-options
    - autonomous boolean
    - on-link boolean
    - preferred-lifetime (number | keyword)
    - valid-lifetime (number | keyword)
- router-solicit
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - inactivity-timer (number | keyword)
  - min-auth-interval number
  - user-db reference
- urpf-check
  - mode keyword
- local-address-assignment
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- ipv4
  - client-applications
    - ipoe boolean
    - ppp boolean
  - default-pool string
  - server reference
- ipv6
  - client-applications
    - ipoe-slaac boolean

```

configure service ies subscriber-interface group-interface local-address-assignment ipv6 client-applications ipoe-wan

```

    - ipoe-wan boolean
    - ppp-slaac boolean
  - server reference
- mac string
- nasreq-auth-policy reference
- oper-up-while-empty boolean
- pppoe
  - admin-state keyword
  - anti-spoof keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - dhcp-client
    - client-id keyword
  - policy reference
  - python-policy reference
  - sap-session-limit number
  - session-limit number
  - user-db reference
- radius-auth-policy reference
- redundant-interface reference
- sap string
  - accounting-policy reference
  - admin-state keyword
  - anti-spoof keyword
  - app-profile reference
  - apply-groups reference
  - apply-groups-exclude reference
  - calling-station-id string
  - collect-stats boolean
  - cpu-protection
    - eth-cfm-monitoring
      - aggregate
      - car
    - ip-src-monitoring
    - mac-monitoring
    - policy-id reference
  - default-host
    - ipv4 reference prefix-length number
      - apply-groups reference
      - apply-groups-exclude reference
      - next-hop string
    - ipv6 string prefix-length number
      - apply-groups reference
      - apply-groups-exclude reference
      - next-hop string
  - description string
  - dist-cpu-protection reference
- egress
  - agg-rate
    - adaptation-rule keyword
    - burst-limit (number | keyword)
    - limit-unused-bandwidth boolean
    - queue-frame-based-accounting boolean
    - rate number
  - filter
    - ip reference
    - ipv6 reference
  - qos
    - policer-control-policy
      - policy-name reference
    - qinq-mark-top-only boolean
    - sap-egress
      - policy-name reference

```



configure service ies subscriber-interface group-interface sap egress qos scheduler-policy

```

    - scheduler-policy
      - policy-name reference
- eth-cfm
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-lmm-fc-stats
    - fc keyword
    - fc-in-profile keyword
  - collect-lmm-stats boolean
  - mep md-admin-name reference ma-admin-name reference mep-id number
  - admin-state keyword
  - ais boolean
  - alarm-notification
    - fng-alarm-time number
    - fng-reset-time number
  - apply-groups reference
  - apply-groups-exclude reference
  - ccm boolean
  - ccm-ltm-priority number
  - ccm-padding-size number
  - csf
    - multiplier decimal-number
  - description string
  - eth-test
    - bit-error-threshold number
    - test-pattern
      - crc-tlv boolean
      - pattern keyword
  - fault-propagation keyword
  - grace
    - eth-ed
      - max-rx-defect-window number
      - priority number
      - rx-eth-ed boolean
      - tx-eth-ed boolean
    - eth-vsm-grace
      - rx-eth-vsm-grace boolean
      - tx-eth-vsm-grace boolean
  - low-priority-defect keyword
  - one-way-delay-threshold number
  - squelch-ingress-levels number
- fwd-wholesale
  - pppoe-service reference
- host-admin-state keyword
- host-lockout-policy reference
- igmp-host-tracking
  - apply-groups reference
  - apply-groups-exclude reference
  - expiry-time number
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
  - router-alert-check boolean
- ingress
  - filter
    - ip reference
    - ipv6 reference
  - qos
    - match-qinq-dot1p keyword
    - policer-control-policy
      - policy-name reference
    - sap-ingress
      - policy-name reference

```

configure service ies subscriber-interface group-interface sap ingress qos sap-ingress queuing-type

```

    - queuing-type keyword
    - scheduler-policy
    - policy-name reference
- lag
- link-map-profile number
- per-link-hash
  - class number
  - weight number
- monitor-oper-group reference
- multi-service-site reference
- oper-group reference
- static-host
  - ipv4 string mac string
    - admin-state keyword
    - ancp-string string
    - app-profile
      - profile reference
      - scope keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - int-dest-id string
    - managed-route string
      - apply-groups reference
      - apply-groups-exclude reference
    - cpe-check
      - apply-groups reference
      - apply-groups-exclude reference
      - destination-ip-address (ipv4-address-no-zone | ipv6-address-
no-zone)
      - drop-count number
      - failed-action
        - metric number
        - preference number
        - tag number
        - withdraw boolean
      - interval number
      - log boolean
      - padding-size number
      - source-ip-address (ipv4-address-no-zone | ipv6-address-no-
zone)
      - timeout number
    - metric number
    - preference number
    - tag number
  - rip-policy reference
  - shcv
  - sla-profile reference
  - sub-profile reference
  - subscriber-id
    - string string
    - use-sap-id
- ipv6 string mac string
  - admin-state keyword
  - ancp-string string
  - app-profile
    - profile reference
    - scope keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - int-dest-id string
  - mac-linking string
  - managed-route string
    - apply-groups reference
    - apply-groups-exclude reference

```

configure service ies subscriber-interface group-interface sap static-host ipv6 managed-route cpe-check

```

no-zone)
- cpe-check
  - apply-groups reference
  - apply-groups-exclude reference
  - destination-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - drop-count number
  - failed-action
    - metric number
    - preference number
    - tag number
    - withdraw boolean
  - interval number
  - log boolean
  - padding-size number
  - source-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
zone)
- timeout number
- metric number
- preference number
- tag number
- retail-svc-id number
- shcv
- sla-profile reference
- sub-profile reference
- subscriber-id
  - string string
  - use-sap-id
- mac-learning
  - data-triggered boolean
  - single-mac boolean
- sub-sla-mgmt
- admin-state keyword
- defaults
  - app-profile reference
  - int-dest-id
    - string string
    - top-q-tag
  - sla-profile reference
  - sub-profile reference
  - subscriber-id
    - auto-id
    - sap-id
    - string string
- single-sub-parameters
  - non-sub-traffic
    - app-profile reference
    - sla-profile reference
    - sub-profile reference
    - subscriber-id string
  - profiled-traffic-only boolean
  - sub-ident-policy reference
  - subscriber-limit (keyword | number)
- sap-parameters
  - anti-spoof keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - sub-sla-mgmt
  - defaults
    - app-profile reference
    - sla-profile reference
    - sub-profile reference
    - subscriber-id
    - auto-id

```

configure service ies subscriber-interface group-interface sap-parameters sub-sla-mgmt defaults subscriber-id string

```

    - string string
    - sub-ident-policy reference
- shcv-policy reference
- shcv-policy-ipv4 reference
- shcv-policy-ipv6 reference
- srrp number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- bfd-liveness
  - apply-groups reference
  - apply-groups-exclude reference
  - dest-ip string
  - interface-name string
  - service-name string
- description string
- gw-mac string
- keep-alive-interval number
- message-path reference
- monitor-oper-group
  - group-name reference
  - priority-step number
- one-garp-per-sap boolean
- policy reference
- preempt boolean
- priority number
- send-fib-population-packets keyword
- suppress-aa-sub boolean
- tos-marking-state keyword
- type keyword
- wlan-gw
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - purpose
      - xconnect boolean
  - gateway-router string
  - group-encryption
    - encryption-keygroup-inbound reference
    - encryption-keygroup-outbound reference
- L2-ap
  - access-point string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - encap-type keyword
    - epipe-sap-template reference
  - auto-sub-id-fmt keyword
  - default-encap-type keyword
- lanext
  - max-bd number
- learn-ap-mac
  - delay-auth boolean
- mobility
  - hold-time number
  - inter-tunnel-type boolean
  - inter-vlan boolean
  - trigger
    - control boolean
    - data boolean
    - iapp boolean

```

configure service ies subscriber-interface group-interface wlan-gw oper-down-on-group-degrade

```

- oper-down-on-group-degrade boolean
- tcp-mss-adjust number
- tunnel-egress-qos
  - admin-state keyword
  - agg-rate-limit (number | keyword)
  - granularity keyword
  - hold-time (number | keyword)
  - multi-client-only boolean
  - qos reference
  - scheduler-policy reference
- tunnel-encaps
  - learn-l2tp-cookie (keyword | hex-string)
- vlan-range string
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication
    - hold-time number
    - local
      - coa-policy reference
      - default-ue-state keyword
    - on-control-plane boolean
    - policy reference
    - vlan-mismatch-timeout number
  - data-triggered-ue-creation
    - admin-state keyword
    - arp boolean
    - create-proxy-cache-entry
      - mac-format string
      - proxy-server
        - name string
        - router-instance string
  - dhcp4
    - admin-state keyword
    - dns string
    - l2-aware-ip-address (ipv4-unicast-address | keyword)
    - lease-time
      - active number
      - initial number
    - nbns string
  - dhcp6
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - preferred-lifetime
      - active number
      - initial number
    - valid-lifetime
      - active number
      - initial number
  - dsm
    - accounting-policy reference
    - accounting-update
      - interval number
    - admin-state keyword
    - application-assurance
      - accounting-statistics boolean
      - profile reference
      - url-parameter string
    - apply-groups reference
    - apply-groups-exclude reference
    - egress
      - policer reference
    - ingress
      - ip-filter reference

```

configure service ies subscriber-interface group-interface wlan-gw vlan-range dsm ingress policer

```

    - policer reference
    - soft-quota-exhausted-filter reference
  - one-time-redirect
    - port number
    - url string
  - volume-quota-direction keyword
- extension string
- http-redirect-policy reference
- idle-timeout-action keyword
- l2-service
  - admin-state keyword
  - description string
  - service reference
- nat-policy reference
- retail-service string
- slaac
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - preferred-lifetime
    - active number
    - initial number
  - valid-lifetime
    - active number
    - initial number
- vrgw
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - brg
    - authenticated-brg-only boolean
    - default-brg-profile reference
  - lanext
    - access
      - max-mac number
      - multi-access boolean
      - policer reference
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - assistive-address-resolution boolean
      - bd-mac-prefix string
      - mac-translation boolean
      - network
        - admin-state keyword
        - max-mac number
        - policer reference
    - xconnect
      - accounting
        - mobility-updates boolean
        - policy reference
        - update-interval number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
- wlan-gw-group reference
- wpp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - initial
    - app-profile reference
    - sla-profile reference
    - sub-profile reference

```

configure service ies subscriber-interface group-interface wpp lease-time

```

- lease-time number
- portal
  - name string
  - portal-group reference
  - router-instance string
- restore-to-initial-on-disconnect boolean
- triggered-hosts boolean
- user-db reference
- hold-time
- ipv4
  - down
    - init-only boolean
    - seconds number
  - up
    - seconds number
- ipv6
  - down
    - init-only boolean
    - seconds number
  - up
    - seconds number
- ipoe-linking
- apply-groups reference
- apply-groups-exclude reference
- gratuitous-router-advertisement boolean
- ipoe-session
- apply-groups reference
- apply-groups-exclude reference
- session-limit number
- ipv4
- address string
- apply-groups reference
- apply-groups-exclude reference
- gateway string
- holdup-time number
- populate-host-routes boolean
- prefix-length number
- track-srrp number
- allow-unmatching-subnets boolean
- default-dns string
- dhcp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - client-applications
    - dhcp boolean
    - ppp boolean
  - description string
  - gi-address string
  - lease-populate
    - max-leases number
  - option-82
    - vendor-specific-option
      - client-mac-address boolean
      - sap-id boolean
      - service-id boolean
      - string string
      - system-id boolean
  - proxy-server
    - admin-state keyword
    - emulated-server string
  - lease-time
    - radius-override boolean
    - value number

```

configure service ies subscriber-interface ipv4 dhcp python-policy

```

- python-policy reference
- relay-proxy
  - release-update-src-ip boolean
  - siaddr-override string
- release-include-gi-address boolean
- server string
- src-ip-addr keyword
- virtual-subnet boolean
- export-host-routes boolean
- unnumbered
  - ip-address string
  - ip-int-name string
- ipv6
  - address string
  - apply-groups reference
  - apply-groups-exclude reference
  - host-type keyword
  - prefix-length number
- allow-multiple-wan-addresses boolean
- allow-unmatching-prefixes boolean
- default-dns string
- delegated-prefix-length (number | keyword)
- dhcp6
  - apply-groups reference
  - apply-groups-exclude reference
  - override-slaac boolean
  - pd-managed-route
    - next-hop keyword
  - proxy-server
    - admin-state keyword
    - client-applications
      - dhcp boolean
      - ppp boolean
    - preferred-lifetime (number | keyword)
    - rebind-timer number
    - renew-timer number
    - server-id
      - apply-groups reference
      - apply-groups-exclude reference
      - duid-en-ascii string
      - duid-en-hex string
      - duid-ll
    - valid-lifetime (number | keyword)
- python-policy reference
- relay
  - admin-state keyword
  - client-applications
    - dhcp boolean
    - ppp boolean
  - description string
  - lease-split
    - admin-state keyword
    - valid-lifetime number
  - link-address string
  - server string
  - source-address string
- ipoe-bridged-mode boolean
- link-local-address
  - address string
- prefix string
  - apply-groups reference
  - apply-groups-exclude reference
  - holdup-time number
  - host-type keyword

```



configure service ies subscriber-interface ipv6 prefix track-srrp

- **track-srrp** *number*
- **router-advertisements**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **force-mcast** *keyword*
  - **max-advertisement-interval** *number*
  - **min-advertisement-interval** *number*
  - **options**
    - **current-hop-limit** *number*
    - **dns**
      - **include-rdnss** *boolean*
      - **rdnss-lifetime** (*number* | *keyword*)
    - **managed-configuration** *boolean*
    - **mtu** (*number* | *keyword*)
    - **other-stateful-configuration** *boolean*
    - **reachable-time** *number*
    - **retransmit-timer** *number*
    - **router-lifetime** (*number* | *keyword*)
  - **prefix-options**
    - **autonomous** *boolean*
    - **on-link** *boolean*
    - **preferred-lifetime** (*number* | *keyword*)
    - **valid-lifetime** (*number* | *keyword*)
- **router-solicit**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **inactivity-timer** (*number* | *keyword*)
- **local-address-assignment**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **ipv4**
    - **client-applications**
      - **ppp** *boolean*
    - **default-pool** *string*
    - **server** *reference*
  - **ipv6**
    - **client-applications**
      - **ipoe-slaac** *boolean*
      - **ipoe-wan** *boolean*
      - **ppp-slaac** *boolean*
    - **server** *reference*
- **pppoe**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **session-limit** *number*
- **wan-mode** *keyword*
- **wlan-gw**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **pool-manager**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **dhcp6-client**
    - **dhcpv4-nat**
      - **admin-state** *keyword*
      - **link-address** *string*
      - **pool-name** *string*
    - **ia-na**
      - **admin-state** *keyword*
      - **link-address** *string*
      - **pool-name** *string*

configure service ies subscriber-interface wlan-gw pool-manager dhcp6-client lease-query

```

- lease-query
  - max-retries number
  - servers string
  - slaac
    - admin-state keyword
    - link-address string
    - pool-name string
    - source-ip (keyword | ipv6-address)
- watermarks
  - high number
  - low number
- wlan-gw-group reference
- redundancy
  - admin-state keyword
  - export string
  - monitor string
- subscriber-mgmt
  - apply-groups reference
  - apply-groups-exclude reference
  - multi-chassis-shunt-id number
  - up-resiliency
    - monitor-oper-group reference
    - apply-groups reference
    - apply-groups-exclude reference
    - health-drop number
- video-interface string
- accounting-policy reference
- address string
- adi
  - scte30
    - ad-server string
    - local-address
    - apply-groups reference
    - apply-groups-exclude reference
    - control string
    - data string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- channel string source string
  - apply-groups reference
  - apply-groups-exclude reference
  - channel-name string
  - description string
  - scte35-action keyword
  - zone-channel string zone-source string
    - adi-channel-name string
    - apply-groups reference
    - apply-groups-exclude reference
- cpu-protection reference
- description string
- multicast-service number
- output-format keyword
- rt-client
  - apply-groups reference
  - apply-groups-exclude reference
  - src-address string
- video-sap
  - apply-groups reference
  - apply-groups-exclude reference
  - egress
    - apply-groups reference
    - apply-groups-exclude reference
  - filter

```

configure service ies video-interface video-sap egress filter ip

```

    - ip reference
    - qos
      - policy-name reference
  - ingress
    - apply-groups reference
    - apply-groups-exclude reference
    - filter
      - ip reference
    - qos
      - policy-name reference
    - video-group-id reference
  - vpn-id number
- ipfix
  - apply-groups reference
  - apply-groups-exclude reference
  - export-policy string
    - apply-groups reference
    - apply-groups-exclude reference
    - collector router-instance string ip-address string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - mtu number
      - refresh-timeout number
      - source-ip-address string
  - description string
  - template-format keyword
- ipipe string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - ce-address-discovery
  - customer reference
  - description string
  - endpoint string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - hold-time-active number
    - revert-time (number | keyword)
    - standby-signaling keyword
- sap string
  - accounting-policy reference
  - admin-state keyword
  - app-profile reference
  - apply-groups reference
  - apply-groups-exclude reference
  - bandwidth number
  - ce-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - collect-stats boolean
  - cpu-protection
    - mac-monitoring
    - policy-id reference
  - description string
  - dist-cpu-protection reference
  - egress
    - agg-rate
      - adaptation-rule keyword
      - burst-limit (number | keyword)
      - limit-unused-bandwidth boolean
      - rate number
    - filter
      - ip reference
      - ipv6 reference

```

## configure service ipipe sap egress qos

```

- qos
- policer-control-policy
- overrides
  - apply-groups reference
  - apply-groups-exclude reference
  - root
    - max-rate (number | keyword)
    - priority-mbs-thresholds
      - min-thresh-separation (number | keyword)
      - priority number
        - apply-groups reference
        - apply-groups-exclude reference
        - mbs-contribution (number | keyword)
  - policy-name reference
- qinq-mark-top-only boolean
- sap-egress
- overrides
  - hs-secondary-shaper string
  - hs-wrr-group reference
    - apply-groups reference
    - apply-groups-exclude reference
    - hs-class-weight number
    - percent-rate decimal-number
    - rate (number | keyword)
  - policer reference
    - apply-groups reference
    - apply-groups-exclude reference
    - cbs (number | keyword)
    - mbs (number | keyword)
    - packet-byte-offset number
    - percent-rate
      - cir decimal-number
      - pir decimal-number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - stat-mode keyword
  - queue reference
  - adaptation-rule
    - cir keyword
    - pir keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - avg-frame-overhead decimal-number
    - burst-limit (number | keyword)
    - cbs (number | keyword)
  - drop-tail
    - low
      - percent-reduction-from-mbs (number | keyword)
  - hs-class-weight number
  - hs-wred-queue
    - policy reference
    - hs-wrr-weight number
  - mbs (number | keyword)
  - monitor-queue-depth
    - fast-polling boolean
    - violation-threshold decimal-number
  - parent
    - cir-weight number
    - weight number
  - percent-rate
    - cir decimal-number
    - pir decimal-number
  - rate

```

configure service ipipe sap egress qos sap-egress overrides queue rate cir

```

    - cir (number | keyword)
    - pir (number | keyword)
  - policy-name reference
  - port-redirect-group
    - group-name reference
    - instance number
  - scheduler-policy
  - overrides
    - scheduler string
    - apply-groups reference
    - apply-groups-exclude reference
    - parent
    - cir-weight number
    - weight number
    - rate
    - cir (number | keyword)
    - pir (number | keyword)
  - policy-name reference
- endpoint reference
- ingress
  - filter
    - ip reference
    - ipv6 reference
  - qos
    - match-qinq-dot1p keyword
    - policer-control-policy
    - overrides
      - apply-groups reference
      - apply-groups-exclude reference
      - root
      - max-rate (number | keyword)
      - priority-mbs-thresholds
      - min-thresh-separation (number | keyword)
      - priority number
      - apply-groups reference
      - apply-groups-exclude reference
      - mbs-contribution (number | keyword)
    - policy-name reference
  - sap-ingress
  - fp-redirect-group
    - group-name reference
    - instance number
  - overrides
    - policer reference
    - apply-groups reference
    - apply-groups-exclude reference
    - cbs (number | keyword)
    - mbs (number | keyword)
    - packet-byte-offset number
    - percent-rate
    - cir decimal-number
    - pir decimal-number
    - rate
    - cir (number | keyword)
    - pir (number | keyword)
    - stat-mode keyword
  - queue reference
    - adaptation-rule
    - cir keyword
    - pir keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - cbs (number | keyword)
    - drop-tail

```

configure service ipipe sap ingress qos sap-ingress overrides queue drop-tail low

```

    - low
      - percent-reduction-from-mbs (number | keyword)
    - mbs (number | keyword)
    - monitor-queue-depth
      - fast-polling boolean
    - parent
      - cir-weight number
      - weight number
    - percent-rate
      - cir decimal-number
      - pir decimal-number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
  - policy-name reference
  - queuing-type keyword
- scheduler-policy
- overrides
  - scheduler string
  - apply-groups reference
  - apply-groups-exclude reference
  - parent
    - cir-weight number
    - weight number
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
  - policy-name reference
- lag
  - link-map-profile number
  - per-link-hash
    - class number
    - weight number
- mac string
- mac-refresh number
- multi-service-site reference
- transit-policy
  - prefix reference
- use-broadcast-mac boolean
- service-id number
- service-mtu number
- spoke-sdp string
  - aarp
    - id reference
    - type keyword
  - admin-state keyword
  - app-profile reference
  - apply-groups reference
  - apply-groups-exclude reference
  - bandwidth (number | keyword)
  - bfd
    - bfd-liveness
      - encap keyword
    - bfd-template reference
  - ce-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - control-word boolean
  - description string
  - egress
    - filter
      - ip reference
      - ipv6 reference
    - qos
      - network
        - policy-name reference

```

configure service ipipe spoke-sdp egress qos network port-redirect-group

```

    - port-redirect-group
      - group-name reference
      - instance number
  - vc-label number
- endpoint
  - name reference
  - precedence (number | keyword)
- entropy-label
- hash-label
  - signal-capability
- ingress
  - filter
    - ip reference
    - ipv6 reference
  - qos
    - network
      - fp-redirect-group
        - group-name reference
        - instance number
        - policy-name reference
      - vc-label number
  - transit-policy
    - prefix reference
- vc-switching boolean
- vpn-id number
- mac-list string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - mac string
    - apply-groups reference
    - apply-groups-exclude reference
    - mask string
- md-auto-id
  - customer-id-range
    - apply-groups reference
    - apply-groups-exclude reference
    - end number
    - start number
  - pw-template-id-range
    - apply-groups reference
    - apply-groups-exclude reference
    - end number
    - start number
  - service-id-range
    - apply-groups reference
    - apply-groups-exclude reference
    - end number
    - start number
- mrp
  - policy string
    - apply-groups reference
    - apply-groups-exclude reference
    - default-action keyword
    - description string
    - entry number
      - action keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - match
        - isid number
        - apply-groups reference
        - apply-groups-exclude reference

```

configure service mrp policy entry match isid higher-value

```

    - higher-value number
  - scope keyword
- nat
- apply-groups reference
- apply-groups-exclude reference
- classifier string
- apply-groups reference
- apply-groups-exclude reference
- default
  - action
    - destination-nat
      - ip-address string
      - forward
    - dnat-ip-address string
- description string
- entry number
  - action
    - destination-nat
      - ip-address string
      - forward
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
  - match
    - dst-port-range
      - end number
      - start number
    - foreign-ip-address string
    - protocol keyword
- deterministic-script
- location string
- firewall-policy string
  - alg
    - ftp boolean
    - rtsp boolean
    - sip boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - domain
    - name string
    - router-instance string
  - filtering keyword
  - l2-outside
  - port-limits
    - forwarding number
- priority-sessions
  - fc
    - af boolean
    - be boolean
    - ef boolean
    - h1 boolean
    - h2 boolean
    - l1 boolean
    - l2 boolean
    - nc boolean
- session-limits
  - max number
  - reserved number
  - watermarks
    - high number
    - low number
- tcp
  - mss-adjust number

```



## configure service nat firewall-policy timeouts

```

- timeouts
  - icmp6-query number
  - sip number
  - tcp
    - established number
    - rst number
    - syn number
    - time-wait number
    - transitory number
  - udp
    - dns number
    - initial number
    - normal number
  - unknown-protocol number
- udp
  - inbound-refresh boolean
- unknown-protocols
  - all
  - protocol number
- map-t
  - domain string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - dmr-prefix string
  - ip-fragmentation
    - v6-frag-header boolean
  - mapping-rule string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - ea-length number
  - ipv4-prefix string
  - psid-offset number
  - rule-prefix string
  - mtu number
  - tcp-mss-adjust number
- nat-policy string
  - alg
    - ftp boolean
    - pptp boolean
    - rtsp boolean
    - sip boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - block-limit number
  - description string
  - dnat
    - classifier reference
  - dnat-only
    - nat-group reference
    - router-instance string
    - wlan-gw-group reference
  - filtering keyword
  - flow-log-policy
    - ipfix reference
    - syslog reference
  - l2-outside
  - pool
    - name string
    - router-instance string
  - port-forwarding-range-end number

```

## configure service nat nat-policy port-limits

- **port-limits**
  - **forwarding** *number*
  - **reserved** *number*
  - **watermarks**
    - **high** *number*
    - **low** *number*
- **priority-sessions**
  - **fc**
    - **af** *boolean*
    - **be** *boolean*
    - **ef** *boolean*
    - **h1** *boolean*
    - **h2** *boolean*
    - **l1** *boolean*
    - **l2** *boolean*
    - **nc** *boolean*
- **session-limits**
  - **max** *number*
  - **reserved** *number*
  - **watermarks**
    - **high** *number*
    - **low** *number*
- **tcp**
  - **mss-adjust** *number*
  - **reset-unknown** *boolean*
- **timeouts**
  - **icmp-query** *number*
  - **sip** *number*
  - **subscriber-retention** *number*
  - **tcp**
    - **established** *number*
    - **rst** *number*
    - **syn** *number*
    - **time-wait** *number*
    - **transitory** *number*
  - **udp**
    - **dns** *number*
    - **initial** *number*
    - **normal** *number*
- **udp**
  - **inbound-refresh** *boolean*
- **pcp-server-policy** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **lifetime**
    - **maximum** *number*
    - **minimum** *number*
  - **max-description-size** *number*
  - **opcode**
    - **announce** *boolean*
    - **get** *boolean*
    - **map** *boolean*
  - **option**
    - **description** *boolean*
    - **next** *boolean*
    - **port-reservation** *boolean*
    - **port-set** *boolean*
    - **prefer-failure** *boolean*
    - **third-party** *boolean*
  - **reuse-external-ip-address** *boolean*
  - **version**
    - **maximum** *number*
    - **minimum** *number*

## configure service nat prefix-list

- **prefix-list** *string*
  - **application** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **prefix** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **nat-policy** *reference*
- **syslog**
  - **export-policy** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **collector router-instance** *string ip-address string*
      - **admin-state** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **destination-port** *number*
      - **ipv4-source-address** *string*
  - **description** *string*
  - **facility** *keyword*
  - **include**
    - **destination-ip** *boolean*
    - **foreign-ip** *boolean*
    - **foreign-port** *boolean*
    - **nat-policy-name** *boolean*
    - **sub-id** *boolean*
  - **log-prefix** *string*
  - **max-tx-delay** *number*
  - **mtu** *number*
  - **rate-limit** *number*
  - **severity-level** *keyword*
- **up-nat-policy** *string*
  - **alg**
    - **ftp** *boolean*
    - **pptp** *boolean*
    - **rtsp** *boolean*
    - **sip** *boolean*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **default-host**
    - **inside-router-instance** *string*
    - **ip-address** *string*
    - **rate-limit** *number*
  - **description** *string*
  - **filtering** *keyword*
  - **flow-log-policy**
    - **ipfix** *reference*
  - **icmp-echo-reply** *boolean*
  - **port-limits**
    - **reserved** *number*
    - **watermarks**
      - **high** *number*
      - **low** *number*
  - **priority-sessions**
    - **fc**
      - **af** *boolean*
      - **be** *boolean*
      - **ef** *boolean*
      - **h1** *boolean*
      - **h2** *boolean*
      - **l1** *boolean*
      - **l2** *boolean*
      - **nc** *boolean*
  - **session-limits**

configure service nat up-nat-policy session-limits max

- **max** *number*
- **reserved** *number*
- **watermarks**
  - **high** *number*
  - **low** *number*
- **tcp**
  - **mss-adjust** *number*
  - **reset-unknown** *boolean*
- **timeouts**
  - **icmp-query** *number*
  - **sip** *number*
  - **subscriber-retention** *number*
  - **tcp**
    - **established** *number*
    - **rst** *number*
    - **syn** *number*
    - **time-wait** *number*
    - **transitory** *number*
  - **udp**
    - **dns** *number*
    - **initial** *number*
    - **normal** *number*
- **udp**
  - **inbound-refresh** *boolean*
- **oper-group** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **bfd-liveness**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **dest-ip** *string*
    - **interface-name** *string*
    - **router-instance** *string*
  - **hold-time**
    - **down** *number*
    - **up** *number*
- **pbb**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **mac** *string*
    - **address** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **mac-notification**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **count** *number*
    - **interval** *number*
  - **source-bmac**
    - **address** *string*
    - **evpn-etree-leaf-address** *string*
- **proxy-arp-nd**
  - **mac-list**
    - **list** *string*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
    - **mac** *string*
- **pw-template** *string*
  - **accounting-policy** *number*
  - **allow-fragmentation** *boolean*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **auto-gre-sdp** *boolean*
  - **block-on-peer-fault** *boolean*

## configure service pw-template collect-stats

```

- collect-stats boolean
- control-word boolean
- egress
  - filter
    - ip string
    - ipv6 string
    - mac string
  - mfib-allowed-mda-destinations
    - mda string
  - qos
    - network
      - policy-name string
      - port-redirect-group
        - group-name string
        - instance number
- encryption-keygroup
  - inbound number
  - outbound number
- entropy-label
- fdb
  - auto-learn-mac-protect boolean
  - auto-learn-mac-protect-exclude-list string
  - discard-unknown-source boolean
  - limit-mac-move keyword
  - mac-learning
    - aging boolean
    - learning boolean
  - mac-pinning boolean
  - maximum-mac-addresses number
  - protected-src-mac-violation-action keyword
- force-vc-forwarding keyword
- hash-label
  - signal-capability
- igmp-snooping
  - fast-leave boolean
  - import-policy string
  - maximum-number-groups number
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - robust-count number
  - send-queries boolean
  - version keyword
- ingress
  - filter
    - ip string
    - ipv6 string
    - mac string
  - qos
    - network
      - fp-redirect-group
        - group-name string
        - instance number
      - policy-name string
- l2pt
  - termination
    - protocols
      - cdp boolean
      - dtp boolean
      - pagp boolean
      - stp boolean
      - udld boolean
      - vtp boolean
- provisioned-sdp keyword

```

configure service pw-template pw-template-id

```

- pw-template-id number
- sdp-exclude reference
- sdp-include reference
- split-horizon-group
  - description string
  - fdb
    - saps
      - auto-learn-mac-protect boolean
      - discard-unprotected-dest-mac boolean
      - protected-src-mac-violation-action keyword
  - name string
- stp
  - admin-state keyword
  - auto-edge boolean
  - edge-port boolean
  - link-type keyword
  - path-cost number
  - priority number
  - root-guard boolean
- vc-type keyword
- vlan-vc-tag number
- sdp number
  - accounting-policy reference
  - admin-state keyword
  - adv-mtu-override boolean
  - allow-fragmentation boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - bgp-tunnel boolean
  - booking-factor number
  - class-forwarding
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - default-lsp reference
    - enforce-diffserv-lsp-fc boolean
    - fc keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - lsp reference
    - multicast-lsp reference
  - collect-stats boolean
  - delivery-type keyword
  - description string
  - far-end
    - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - keep-alive
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - hello-time number
    - hold-down-time number
    - maximum-drop-count number
    - message-length number
    - timeout number
  - ldp boolean
  - local-end (ipv4-address-no-zone | ipv6-address-no-zone)
  - lsp string
  - metric number
  - mixed-lsp-mode
    - revert-time (number | keyword)
  - network-domain reference
  - path-mtu number
  - pbb-etype string

```

## configure service sdp pw-port

- **pw-port**
  - **binding-port** *string*
  - **sdp-group** *reference*
  - **signaling** *keyword*
  - **source-bmac-lsb**
    - **control-pw-vc-id** *number*
    - **value** *string*
  - **sr-isis** *boolean*
  - **sr-ospf** *boolean*
  - **tunnel-far-end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **vlan-vc-etype** *string*
  - **weighted-ecmp** *boolean*
- **sdp-group**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **group-name** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **value** *number*
- **system**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **bgp**
    - **evpn**
      - **ad-per-es-route**
        - **extended-evi-range** *boolean*
        - **route-distinguisher-ip-address** *string*
        - **route-target-type** *keyword*
      - **ethernet-segment** *string*
        - **ac-df-capability** *keyword*
        - **admin-state** *keyword*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **association**
          - **lag** *reference*
            - **apply-groups** *reference*
            - **apply-groups-exclude** *reference*
          - **virtual-ranges**
            - **dot1q**
              - **q-tag** (*number* | *keyword*)
                - **apply-groups** *reference*
                - **apply-groups-exclude** *reference*
                - **end** (*number* | *keyword*)
              - **qinq**
                - **s-tag** (*number* | *keyword*)
                  - **apply-groups** *reference*
                  - **apply-groups-exclude** *reference*
                  - **end** (*number* | *keyword*)
                - **s-tag-c-tag** (*number* | *keyword*) **c-tag-start** (*number* | *keyword*)
                  - **apply-groups** *reference*
                  - **apply-groups-exclude** *reference*
                  - **c-tag-end** (*number* | *keyword*)
  - **network-interconnect-vxlan** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **virtual-ranges**
      - **service-id** *number*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
      - **end** *number*
  - **port** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **virtual-ranges**

configure service system bgp evpn ethernet-segment association port virtual-ranges dot1q

```

- dot1q
  - q-tag (number | keyword)
    - apply-groups reference
    - apply-groups-exclude reference
    - end (number | keyword)
  - qinq
    - s-tag (number | keyword)
      - apply-groups reference
      - apply-groups-exclude reference
      - end (number | keyword)
    - s-tag-c-tag (number | keyword) c-tag-start (number | keyword)
      - apply-groups reference
      - apply-groups-exclude reference
      - c-tag-end (number | keyword)
- pw-port reference
  - apply-groups reference
  - apply-groups-exclude reference
  - pw-port-headend boolean
- virtual-ranges
  - dot1q
    - q-tag (number | keyword)
      - apply-groups reference
      - apply-groups-exclude reference
      - end (number | keyword)
    - qinq
      - s-tag (number | keyword)
        - apply-groups reference
        - apply-groups-exclude reference
        - end (number | keyword)
      - s-tag-c-tag (number | keyword) c-tag-start (number | keyword)
        - apply-groups reference
        - apply-groups-exclude reference
        - c-tag-end (number | keyword)
- sdp reference
  - apply-groups reference
  - apply-groups-exclude reference
- virtual-ranges
  - vc-id number
    - apply-groups reference
    - apply-groups-exclude reference
    - end number
- vprn-next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
  - apply-groups reference
  - apply-groups-exclude reference
  - virtual-ranges
    - evi number
- auto-esi keyword
- df-election
  - es-activation-timer number
- manual
  - evi number
    - apply-groups reference
    - apply-groups-exclude reference
    - end number
  - isid number
    - apply-groups reference
    - apply-groups-exclude reference
    - end number
  - preference
    - apply-groups reference
    - apply-groups-exclude reference
    - mode keyword
    - value number
- service-carving-mode keyword

```



configure service system bgp evpn ethernet-segment esi

```

- esi string
- multi-homing-mode keyword
- oper-group reference
- orig-ip (ipv4-address-no-zone | ipv6-address-no-zone)
- pbb
  - es-bmac-table-size number
  - source-bmac-lsb string
- route-next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
- type keyword
- etree-leaf-label boolean
- etree-leaf-label-value (number | keyword)
- ip-prefix-routes
  - d-path-length-ignore boolean
  - iff-attribute-uniform-propagation boolean
  - iff-bgp-path-selection boolean
- multicast-leave-sync-propagation number
- route-distinguisher string
- bgp-auto-rd-range
  - apply-groups reference
  - apply-groups-exclude reference
  - community-value
    - end number
    - start number
  - ip-address string
- extended-default-qinq-sap-lookup boolean
- fdb
  - apply-groups reference
  - apply-groups-exclude reference
  - table-size number
- gre-eth-bridged
  - tunnel-termination (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - fpe-id reference
- pw-port-list
  - port string
- vpn-gre-source-ip string
- vxlan
  - assisted-replication
    - apply-groups reference
    - apply-groups-exclude reference
    - ip-address string
  - tunnel-termination (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - fpe-id reference
- template
  - epipe-sap-template string
  - apply-groups reference
  - apply-groups-exclude reference
  - egress
    - filter
      - ip reference
      - ipv6 reference
      - mac reference
    - qos
      - policy-name reference
  - ingress
    - filter
      - ip reference
      - ipv6 reference
      - mac reference
    - qos
      - policy-name reference

```

configure service template epipe-sap-template ingress qos queuing-type

```

- queuing-type keyword
- upnp
  - policy string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - mapping-limit number
    - port number
    - strict-mode boolean
- vpls string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bgp number
    - adv-service-mtu number
    - apply-groups reference
    - apply-groups-exclude reference
    - pw-template-binding reference
      - apply-groups reference
      - apply-groups-exclude reference
    - bfd-liveness boolean
    - bfd-template reference
    - import-rt string
    - monitor-oper-group reference
    - oper-group reference
    - split-horizon-group string
  - route-distinguisher (keyword | vpn-route-distinguisher)
  - route-target
    - export string
    - import string
  - vsi-export reference
  - vsi-import reference
- bgp-ad
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - vpls-id string
  - vsi-id-prefix string
- bgp-evpn
  - accept-ivpls-evpn-flush boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - evi number
  - incl-mcast-orig-ip string
  - isid-route-target
    - range number
      - apply-groups reference
      - apply-groups-exclude reference
      - end number
      - route-target string
      - type keyword
  - mac-duplication
    - blackhole boolean
    - detect
      - num-moves number
      - window number
    - retry (number | keyword)
- mpls number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - auto-bind-tunnel
    - allow-flex-algo-fallback boolean
  - ecmp number

```

configure service vpls bgp-evpn mpls auto-bind-tunnel enforce-strict-tunnel-tagging

```

- enforce-strict-tunnel-tagging boolean
- resolution keyword
- resolution-filter
  - bgp boolean
  - ldp boolean
  - mpls-fwd-policy boolean
  - rib-api boolean
  - rsvp boolean
  - sr-isis boolean
  - sr-ospf boolean
  - sr-ospf3 boolean
  - sr-policy boolean
  - sr-te boolean
  - udp boolean
- weighted-ecmp boolean
- control-word boolean
- default-route-tag string
- dynamic-egress-label-limit boolean
- ecmp number
- entropy-label boolean
- evi-three-byte-auto-rt boolean
- fdb
  - protected-src-mac-violation-action keyword
- force-vc-forwarding keyword
- ingress-replication-bum-label boolean
- mh-mode keyword
- oper-group reference
- route-next-hop
  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - system-ipv4
  - system-ipv6
- send-tunnel-encap
  - mpls boolean
  - mpls-over-udp boolean
- split-horizon-group reference
- routes
  - incl-mcast
    - advertise-ingress-replication boolean
  - ip-prefix
    - advertise boolean
    - domain-id string
    - include-direct-interface-host boolean
    - link-bandwidth
      - advertise
        - max-dynamic-weight number
        - weight (number | keyword)
      - weighted-ecmp boolean
  - mac-ip
    - advertise boolean
    - cfm-mac boolean
    - unknown-mac boolean
  - sel-mcast
    - advertise boolean
- segment-routing-v6 number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - default-route-tag string
  - ecmp number
  - evi-three-byte-auto-rt boolean
  - fdb
    - protected-src-mac-violation-action keyword
  - force-vc-forwarding keyword
  - mh-mode keyword

```

configure service vpls bgp-evpn segment-routing-v6 oper-group

- **oper-group** *reference*
- **resolution** *keyword*
- **route-next-hop**
  - **ip-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
  - **system-ipv4**
  - **system-ipv6**
- **source-address** *string*
- **split-horizon-group** *reference*
- **srv6**
  - **default-locator** *string*
  - **instance** *reference*
- **vxlan** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **default-route-tag** *string*
  - **ecmp** *number*
  - **evi-three-byte-auto-rt** *boolean*
  - **mh-mode** *keyword*
  - **oper-group** *reference*
  - **routes**
    - **auto-disc**
      - **advertise** *boolean*
  - **send-incl-mcast-ir-on-ndf** *boolean*
  - **send-tunnel-encap** *boolean*
  - **vxlan-instance** *reference*
- **bgp-mh-site** *string*
  - **activation-timer** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **boot-timer** *number*
  - **failed-threshold** (*number | keyword*)
  - **id** *number*
  - **mesh-sdp-binds**
  - **min-down-timer** *number*
  - **monitor-oper-group** *reference*
  - **sap** *string*
  - **shg-name** *string*
  - **spoke-sdp** *string*
- **bgp-vpls**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **maximum-ve-id** *number*
  - **ve**
    - **id** *number*
    - **name** *string*
- **capture-sap** *string*
  - **admin-state** *keyword*
  - **allow-dot1q-msaps** *boolean*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **bandwidth** *number*
  - **cpu-protection**
    - **mac-monitoring**
    - **policy-id** *reference*
  - **description** *string*
  - **dhcp**
    - **python-policy** *reference*
    - **user-db** *reference*
  - **dhcp6**
    - **python-policy** *reference*
    - **user-db** *reference*

configure service vpls capture-sap dist-cpu-protection

- **dist-cpu-protection** *reference*
- **host-lockout-policy** *reference*
- **ingress**
  - **filter**
    - **mac** *reference*
- **ipoe-session**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **ipoe-session-policy** *reference*
  - **user-db** *reference*
- **msap-defaults**
  - **group-interface** *string*
  - **policy** *reference*
  - **service-name** *string*
- **nasreq-auth-policy** *reference*
- **pfc**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **association** *reference*
  - **l2-access-id-alias** *string*
  - **up-resiliency**
    - **monitor-oper-group** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **health-drop** *number*
- **pppoe**
  - **policy** *reference*
  - **python-policy** *reference*
  - **user-db** *reference*
- **radius-auth-policy** *reference*
- **router-solicit**
  - **user-db** *reference*
- **track-srrp** *number*
- **trigger-packet**
  - **arp** *boolean*
  - **data** *boolean*
  - **dhcp** *boolean*
  - **dhcp6** *boolean*
  - **pppoe** *boolean*
  - **rtr-solicit** *boolean*
- **customer** *reference*
- **description** *string*
- **endpoint** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **block-on-mesh-failure** *boolean*
  - **description** *string*
- **fdb**
  - **auto-learn-mac-protect** *boolean*
  - **mac-pinning** *boolean*
  - **maximum-mac-addresses** *number*
  - **protected-src-mac-violation-action** *keyword*
- **ignore-standby-signaling** *boolean*
- **mc-endpoint** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **mc-ep-peer**
    - **name** *string*
    - **peer-address** *reference*
- **revert-time** (*number* | *keyword*)
- **suppress-standby-signaling** *boolean*
- **eth-cfm**

## configure service vpls eth-cfm apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **mep md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number*
  - **admin-state** *keyword*
  - **alarm-notification**
    - **fng-alarm-time** *number*
    - **fng-reset-time** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **ccm** *boolean*
  - **ccm-ltm-priority** *number*
  - **ccm-padding-size** *number*
  - **cfm-vlan-tag** *string*
  - **description** *string*
  - **eth-test**
    - **bit-error-threshold** *number*
    - **test-pattern**
      - **crc-tlv** *boolean*
      - **pattern** *keyword*
  - **grace**
    - **eth-ed**
      - **max-rx-defect-window** *number*
      - **priority** *number*
      - **rx-eth-ed** *boolean*
      - **tx-eth-ed** *boolean*
    - **eth-vsm-grace**
      - **rx-eth-vsm-grace** *boolean*
      - **tx-eth-vsm-grace** *boolean*
  - **low-priority-defect** *keyword*
  - **mac-address** *string*
  - **one-way-delay-threshold** *number*
- **etree** *boolean*
- **fdb**
  - **discard-unknown** *boolean*
  - **mac-learning**
    - **aging** *boolean*
    - **learning** *boolean*
    - **local-age-time** *number*
    - **remote-age-time** *number*
  - **mac-move**
    - **admin-state** *keyword*
    - **hold-down-time** *number*
    - **move-frequency** *number*
    - **primary-cumulative-factor** *number*
    - **retry-count** (*number* | *keyword*)
    - **sap** *reference*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **level** *keyword*
    - **secondary-cumulative-factor** *number*
    - **spoke-sdp** *reference*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **level** *keyword*
  - **mac-subnet-length** *number*
  - **selective-learning** *boolean*
  - **static-mac**
    - **mac** *string*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **blackhole**
      - **endpoint** *reference*
      - **mesh-sdp** *reference*
      - **monitor** *keyword*

configure service vpls fdb static-mac mac sap

- **sap** *reference*
- **spoke-sdp** *reference*
- **table**
  - **high-wmark** *number*
  - **low-wmark** *number*
  - **size** *number*
- **gsmp**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **group** *string*
    - **admin-state** *keyword*
    - **ancp**
      - **dynamic-topology-discovery** *boolean*
      - **oam** *boolean*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **hold-multiplier** *number*
    - **idle-filter** *boolean*
    - **keepalive** *number*
    - **neighbor** *string*
      - **admin-state** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **description** *string*
      - **local-address** *string*
      - **priority-marking**
        - **dscp** *keyword*
        - **prec** *number*
      - **persistency** *boolean*
- **igmp-host-tracking**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **expiry-time** *number*
- **igmp-snooping**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **evpn-proxy**
    - **admin-state** *keyword*
- **mvr**
  - **admin-state** *keyword*
  - **description** *string*
  - **group-policy** *string*
  - **query-interval** *number*
  - **query-source-address** (*keyword* | *ipv4-address*)
  - **report-source-address** *string*
  - **robust-count** *number*
- **ignore-l2vpn-mtu-mismatch** *boolean*
- **interface** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **hold-time**
    - **ipv4**
      - **down**
        - **init-only** *boolean*
        - **seconds** *number*
      - **up**
        - **seconds** *number*
- **ipv4**

configure service vpls interface ipv4 neighbor-discovery

- **neighbor-discovery**
  - **static-neighbor** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **mac-address** *string*
  - **timeout** *number*
- **primary**
  - **address** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **prefix-length** *number*
- **mac** *string*
- **isid-policy**
  - **entry** *number*
    - **advertise-local** *boolean*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **range**
      - **end** *number*
      - **start** *number*
    - **use-def-mcast** *boolean*
- **load-balancing**
  - **lbl-eth-or-ip-l4-teid** *boolean*
  - **per-service-hashing** *boolean*
  - **spl-load-balancing** *boolean*
  - **teid-load-balancing** *boolean*
- **m-vpls** *boolean*
- **mac-flush**
  - **tldp**
    - **propagate** *boolean*
    - **send-on-failure** *boolean*
- **mac-protect**
  - **mac** *string*
- **mcast-ipv6-snooping-scope** *keyword*
- **mcr-default-gtw**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **ip** *string*
  - **mac** *string*
- **mesh-sdp** *string*
  - **accounting-policy** *reference*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **bfd**
  - **bfd-liveness**
    - **encap** *keyword*
  - **bfd-template** *reference*
- **collect-stats** *boolean*
- **control-word** *boolean*
- **cpu-protection**
  - **eth-cfm-monitoring**
    - **aggregate**
    - **car**
  - **mac-monitoring**
  - **policy-id** *reference*
- **description** *string*
- **dhcp**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **snoop** *boolean*
- **egress**
  - **filter**



## configure service vpls mesh-sdp egress filter ip

```

- ip reference
- ipv6 reference
- mac reference
- mfib-allowed-mds-destinations
- mda string
- qos
- network
- policy-name reference
- port-redirect-group
- group-name reference
- instance number
- vc-label number
- entropy-label
- eth-cfm
- apply-groups reference
- apply-groups-exclude reference
- collect-lmm-fc-stats
- fc keyword
- fc-in-profile keyword
- collect-lmm-stats boolean
- mep md-admin-name reference ma-admin-name reference mep-id number
- admin-state keyword
- ais
- client-meg-level number
- interface-support boolean
- interval number
- low-priority-defect keyword
- priority number
- alarm-notification
- fng-alarm-time number
- fng-reset-time number
- apply-groups reference
- apply-groups-exclude reference
- ccm boolean
- ccm-ltm-priority number
- ccm-padding-size number
- cfm-vlan-tag string
- csf
- multiplier decimal-number
- description string
- direction keyword
- eth-test
- bit-error-threshold number
- test-pattern
- crc-tlv boolean
- pattern keyword
- fault-propagation keyword
- grace
- eth-ed
- max-rx-defect-window number
- priority number
- rx-eth-ed boolean
- tx-eth-ed boolean
- eth-vsm-grace
- rx-eth-vsm-grace boolean
- tx-eth-vsm-grace boolean
- lbm-svc-act-responder boolean
- low-priority-defect keyword
- mac-address string
- one-way-delay-threshold number
- primary-vlan boolean
- mip primary-vlan (number | keyword)
- apply-groups reference
- apply-groups-exclude reference

```

configure service vpls mesh-sdp eth-cfm mip cfm-vlan-tag

```

    - cfm-vlan-tag string
    - mac-address string
  - squelch-ingress-ctag-levels number
  - squelch-ingress-levels number
  - vmep-filter boolean
- etree-leaf boolean
- etree-root-leaf-tag boolean
- fdb
  - auto-learn-mac-protect boolean
  - auto-learn-mac-protect-exclude-list reference
  - mac-pinning boolean
  - protected-src-mac-violation-action keyword
- force-vc-forwarding keyword
- hash-label
  - signal-capability
- igmp-snooping
  - apply-groups reference
  - apply-groups-exclude reference
  - fast-leave boolean
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
  - mcac
    - bandwidth
      - mandatory (number | keyword)
      - total (number | keyword)
    - interface-policy reference
    - policy reference
  - mrouter-port boolean
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - robust-count number
  - router-alert-check boolean
  - send-queries boolean
  - static
    - group string
      - apply-groups reference
      - apply-groups-exclude reference
      - source string
      - starg
    - version keyword
- ingress
  - filter
    - ip reference
    - ipv6 reference
    - mac reference
  - qos
    - network
      - fp-redirect-group
        - group-name reference
        - instance number
      - policy-name reference
  - vc-label number
- mld-snooping
  - apply-groups reference
  - apply-groups-exclude reference
  - fast-leave boolean
  - import-policy reference
  - maximum-number-groups number
  - mrouter-port boolean
  - query-interval number
  - query-last-member-interval number

```

configure service vpls mesh-sdp mld-snooping query-response-interval

```

- query-response-interval number
- robust-count number
- router-alert-check boolean
- send-queries boolean
- static
  - group string
    - apply-groups reference
    - apply-groups-exclude reference
    - source string
    - starg
  - version keyword
- mrp
  - apply-groups reference
  - apply-groups-exclude reference
  - join-time number
  - leave-all-time number
  - leave-time number
  - periodic-time number
  - periodic-timer boolean
  - policy reference
- pbb
  - fault-propagation
    - backbone-mac-address string
    - backbone-mac-name reference
- vc-type keyword
- vlan-vc-tag number
- mfib
  - table
    - high-wmark number
    - low-wmark number
    - size number
- mld-snooping
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - evpn-proxy
    - admin-state keyword
- mvr
  - admin-state keyword
  - description string
  - group-policy string
  - query-interval number
  - query-source-address (keyword | ipv6-address)
  - report-source-address string
  - robust-count number
- mrp
  - admin-state keyword
- mmrp
  - admin-state keyword
  - attribute-table
    - high-wmark number
    - low-wmark number
    - size number
  - end-station-only boolean
  - flood-time number
- multicast-info-policy reference
- pbb
  - backbone-vpls reference
  - apply-groups reference
  - apply-groups-exclude reference
  - fdb
    - protected-src-mac-violation-action keyword
  - igmp-snooping
  - mrouter-destination reference

```

configure service vpls pbb backbone-vpls isid

- **isid** *number*
- **mesh-sdp** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **igmp-snooping**
    - **mrouter-port** *boolean*
  - **mld-snooping**
    - **mrouter-port** *boolean*
- **mld-snooping**
  - **mrouter-destination** *reference*
- **sap** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **igmp-snooping**
    - **mrouter-port** *boolean*
  - **mld-snooping**
    - **mrouter-port** *boolean*
- **spoke-sdp** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **igmp-snooping**
    - **mrouter-port** *boolean*
  - **mld-snooping**
    - **mrouter-port** *boolean*
- **force-qtag-forwarding** *boolean*
- **i-vpls-mac-flush**
  - **bgp-evpn**
    - **send-to-bvpls** *boolean*
  - **tldp**
    - **propagate-from-bvpls** *boolean*
    - **send-on-bvpls-failure** *boolean*
    - **send-to-bvpls**
      - **all-but-mine** *boolean*
      - **all-from-me** *boolean*
- **mac-notification**
  - **admin-state** *keyword*
  - **count** *number*
  - **interval** *number*
  - **renotify** (*number* | *keyword*)
- **source-bmac**
  - **address** *string*
  - **use-es-bmac-lsb** *boolean*
  - **use-mclag-bmac-lsb** *boolean*
- **pbb-type** *keyword*
- **pim-snooping**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **group-policy** *string*
  - **hold-time** *number*
  - **ipv4**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **ipv6**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
- **provider-tunnel**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **inclusive**
    - **admin-state** *keyword*
    - **data-delay-interval** *number*
  - **mldp**

configure service vpls provider-tunnel inclusive owner

```

- owner keyword
- root-and-leaf boolean
- rsvp
  - lsp-template reference
- proxy-arp
  - admin-state keyword
  - age-time (number | keyword)
  - apply-groups reference
  - apply-groups-exclude reference
  - duplicate-detect
    - anti-spoof-mac string
    - hold-down-time (number | keyword)
    - num-moves number
    - static-blackhole boolean
    - window number
  - dynamic-arp
    - ip-address string
    - apply-groups reference
    - apply-groups-exclude reference
    - mac-list reference
    - resolve-retry-time number
  - dynamic-populate boolean
- evpn
  - flood
    - gratuitous-arp boolean
    - unknown-arp-req boolean
  - route-tag number
  - process-arp-probes boolean
  - send-refresh (number | keyword)
  - static-arp
    - ip-address string
    - apply-groups reference
    - apply-groups-exclude reference
    - mac string
  - table-size number
- proxy-nd
  - admin-state keyword
  - age-time (number | keyword)
  - apply-groups reference
  - apply-groups-exclude reference
  - duplicate-detect
    - anti-spoof-mac string
    - hold-down-time (number | keyword)
    - num-moves number
    - static-blackhole boolean
    - window number
  - dynamic-neighbor
    - ip-address string
    - apply-groups reference
    - apply-groups-exclude reference
    - mac-list reference
    - resolve-retry-time number
  - dynamic-populate boolean
- evpn
  - advertise-neighbor-type keyword
  - flood
    - unknown-neighbor-advertise-host boolean
    - unknown-neighbor-advertise-router boolean
    - unknown-neighbor-solicitation boolean
  - route-tag number
  - process-dad-neighbor-solicitations boolean
  - send-refresh (number | keyword)
  - static-neighbor
    - ip-address string

```

configure service vpls proxy-nd static-neighbor ip-address apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **mac** *string*
- **type** *keyword*
- **table-size** *number*
- **routed-vpls**
  - **evpn-mpls-ecmp** *boolean*
  - **multicast**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **evpn-gateway**
      - **admin-state** *keyword*
      - **advertise** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **dr-activation-timer** *number*
      - **non-dr-attract-traffic** *keyword*
    - **ip-multicast-ecmp** *boolean*
    - **ipv4**
      - **forward-to-ip-interface** *boolean*
      - **igmp-snooping**
        - **mrouter-port** *boolean*
    - **ipv6**
      - **forward-to-ip-interface** *boolean*
      - **mld-snooping**
        - **mrouter-port** *boolean*
  - **vlan-ipv4-tep-ecmp** *boolean*
- **sap** *string*
  - **accounting-policy** *reference*
  - **admin-state** *keyword*
  - **anti-spoof** *keyword*
  - **app-profile** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **arp-host**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **host-limit** *number*
    - **min-auth-interval** *number*
  - **arp-reply-agent** *keyword*
  - **bandwidth** *number*
  - **bgp-vpls-mh-veid** *number*
  - **bpdu-translation** *keyword*
  - **calling-station-id** *string*
  - **cflowd** *boolean*
  - **collect-stats** *boolean*
  - **cpu-protection**
    - **eth-cfm-monitoring**
      - **aggregate**
      - **car**
    - **mac-monitoring**
    - **policy-id** *reference*
  - **description** *string*
  - **dhcp**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **lease-populate**
      - **max-leases** *number*
    - **option-82**
      - **action** *keyword*
      - **circuit-id**

configure service vpls sap dhcp option-82 circuit-id ascii-tuple

```

    - ascii-tuple
    - hex-string string
    - none
    - vlan-ascii-tuple
  - remote-id
    - ascii-string string
    - hex-string string
    - mac
    - none
  - vendor-specific-option
    - client-mac-address boolean
    - sap-id boolean
    - service-id boolean
    - string string
    - system-id boolean
  - proxy-server
    - admin-state keyword
    - emulated-server string
    - lease-time
      - radius-override boolean
      - value number
  - snoop boolean
  - dist-cpu-protection reference
  - egress
    - agg-rate
      - adaptation-rule keyword
      - burst-limit (number | keyword)
      - limit-unused-bandwidth boolean
      - queue-frame-based-accounting boolean
      - rate number
    - dest-mac-rewrite string
    - filter
      - ip reference
      - ipv6 reference
      - mac reference
    - qos
      - policer-control-policy
        - overrides
          - apply-groups reference
          - apply-groups-exclude reference
          - root
            - max-rate (number | keyword)
            - priority-mbs-thresholds
              - min-thresh-separation (number | keyword)
              - priority number
                - apply-groups reference
                - apply-groups-exclude reference
                - mbs-contribution (number | keyword)
            - policy-name reference
          - qinq-mark-top-only boolean
        - sap-egress
          - overrides
            - hs-secondary-shaper string
            - hs-wrr-group reference
              - apply-groups reference
              - apply-groups-exclude reference
              - hs-class-weight number
              - percent-rate decimal-number
              - rate (number | keyword)
            - policer reference
              - apply-groups reference
              - apply-groups-exclude reference
              - cbs (number | keyword)
              - mbs (number | keyword)

```

configure service vpls sap egress qos sap-egress overrides policer packet-byte-offset

```

- packet-byte-offset number
- percent-rate
  - cir decimal-number
  - pir decimal-number
- rate
  - cir (number | keyword)
  - pir (number | keyword)
  - stat-mode keyword
- queue reference
  - adaptation-rule
    - cir keyword
    - pir keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - avg-frame-overhead decimal-number
  - burst-limit (number | keyword)
  - cbs (number | keyword)
  - drop-tail
    - low
      - percent-reduction-from-mbs (number | keyword)
  - hs-class-weight number
  - hs-wred-queue
    - policy reference
  - hs-wrr-weight number
  - mbs (number | keyword)
  - monitor-queue-depth
    - fast-polling boolean
    - violation-threshold decimal-number
  - parent
    - cir-weight number
    - weight number
  - percent-rate
    - cir decimal-number
    - pir decimal-number
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
- policy-name reference
- port-redirect-group
  - group-name reference
  - instance number
- scheduler-policy
  - overrides
    - scheduler string
      - apply-groups reference
      - apply-groups-exclude reference
    - parent
      - cir-weight number
      - weight number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
  - policy-name reference
- eth-cfm
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-lmm-fc-stats
    - fc keyword
    - fc-in-profile keyword
  - collect-lmm-stats boolean
  - mep md-admin-name reference ma-admin-name reference mep-id number
  - admin-state keyword
  - ais
    - client-meg-level number

```



configure service vpls sap eth-cfm mep ais interface-support

```

- interface-support boolean
- interval number
- low-priority-defect keyword
- priority number
- alarm-notification
- fng-alarm-time number
- fng-reset-time number
- apply-groups reference
- apply-groups-exclude reference
- ccm boolean
- ccm-ltm-priority number
- ccm-padding-size number
- cfm-vlan-tag string
- csf
- multiplier decimal-number
- description string
- direction keyword
- eth-test
- bit-error-threshold number
- test-pattern
- crc-tlv boolean
- pattern keyword
- fault-propagation keyword
- grace
- eth-ed
- max-rx-defect-window number
- priority number
- rx-eth-ed boolean
- tx-eth-ed boolean
- eth-vsm-grace
- rx-eth-vsm-grace boolean
- tx-eth-vsm-grace boolean
- lbn-svc-act-responder boolean
- low-priority-defect keyword
- mac-address string
- one-way-delay-threshold number
- primary-vlan boolean
- mip primary-vlan (number | keyword)
- apply-groups reference
- apply-groups-exclude reference
- cfm-vlan-tag string
- mac-address string
- snelch-ingress-ctag-levels number
- snelch-ingress-levels number
- vmep-filter boolean
- eth-ring number
- etree-leaf boolean
- etree-root-leaf-tag
- leaf number
- fdb
- auto-learn-mac-protect boolean
- auto-learn-mac-protect-exclude-list reference
- discard-unknown-source boolean
- discard-unprotected-dest-mac boolean
- limit-mac-move keyword
- mac-learning
- aging boolean
- learning boolean
- mac-pinning boolean
- maximum-mac-addresses number
- protected-src-mac-violation-action keyword
- host-admin-state keyword
- host-lockout-policy reference
- i-vpls-mac-flush

```

configure service vpls sap i-vpls-mac-flush bgp-evpn

```

- bgp-evpn
  - send-to-bvpls boolean
- igmp-host-tracking
  - apply-groups reference
  - apply-groups-exclude reference
  - expiry-time number
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
  - router-alert-check boolean
- igmp-snooping
  - apply-groups reference
  - apply-groups-exclude reference
  - fast-leave boolean
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
- mcac
  - bandwidth
    - mandatory (number | keyword)
    - total (number | keyword)
  - interface-policy reference
  - mc-constraints
    - level number
      - apply-groups reference
      - apply-groups-exclude reference
      - bandwidth number
    - number-down number
      - apply-groups reference
      - apply-groups-exclude reference
      - level number
    - use-lag-port-weight boolean
  - policy reference
- mrouter-port boolean
- mvr
  - from-vpls reference
  - to-sap string
- query-interval number
- query-last-member-interval number
- query-response-interval number
- robust-count number
- router-alert-check boolean
- send-queries boolean
- static
  - group string
    - apply-groups reference
    - apply-groups-exclude reference
    - source string
    - starg
- version keyword
- ingress
  - filter
    - ip reference
    - ipv6 reference
    - mac reference
  - qos
    - match-qinq-dot1p keyword
    - policer-control-policy
      - overrides
        - apply-groups reference
        - apply-groups-exclude reference
      - root

```

configure service vpls sap ingress qos policer-control-policy overrides root max-rate

- **max-rate** (number | keyword)
- **priority-mbs-thresholds**
- **min-thresh-separation** (number | keyword)
- **priority** number
  - **apply-groups** reference
  - **apply-groups-exclude** reference
  - **mbs-contribution** (number | keyword)
- **policy-name** reference
- **sap-ingress**
- **fp-redirect-group**
  - **group-name** reference
  - **instance** number
- **overrides**
- **ip-criteria**
  - **activate-entry-tag** number
- **ipv6-criteria**
  - **activate-entry-tag** number
- **policer** reference
  - **apply-groups** reference
  - **apply-groups-exclude** reference
  - **cbs** (number | keyword)
  - **mbs** (number | keyword)
  - **packet-byte-offset** number
  - **percent-rate**
    - **cir** decimal-number
    - **pir** decimal-number
  - **rate**
    - **cir** (number | keyword)
    - **pir** (number | keyword)
  - **stat-mode** keyword
- **queue** reference
  - **adaptation-rule**
    - **cir** keyword
    - **pir** keyword
  - **apply-groups** reference
  - **apply-groups-exclude** reference
  - **cbs** (number | keyword)
  - **drop-tail**
    - **low**
      - **percent-reduction-from-mbs** (number | keyword)
  - **mbs** (number | keyword)
  - **monitor-queue-depth**
    - **fast-polling** boolean
  - **parent**
    - **cir-weight** number
    - **weight** number
  - **percent-rate**
    - **cir** decimal-number
    - **pir** decimal-number
  - **rate**
    - **cir** (number | keyword)
    - **pir** (number | keyword)
- **policy-name** reference
- **queuing-type** keyword
- **scheduler-policy**
- **overrides**
  - **scheduler** string
    - **apply-groups** reference
    - **apply-groups-exclude** reference
    - **parent**
      - **cir-weight** number
      - **weight** number
    - **rate**
      - **cir** (number | keyword)

configure service vpls sap ingress qos scheduler-policy overrides scheduler rate pir

```

    - pir (number | keyword)
      - policy-name reference
- qtag-manipulation
  - c-tag (number | keyword)
  - push-dot1q-vlan (number | keyword)
  - s-tag number
- l2pt
  - force-boundary
    - protocols
      - cdp boolean
      - dtp boolean
      - pagp boolean
      - stp boolean
      - udld boolean
      - vtp boolean
    - termination
      - protocols
        - cdp boolean
        - dtp boolean
        - pagp boolean
        - stp boolean
        - udld boolean
        - vtp boolean
- l2tpv3-session
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - pseudo-wire
    - ethernet
    - ethernet-vlan-id number
  - router
    - group string
    - router-instance string
  - vc-id number
- lag
  - link-map-profile number
  - per-link-hash
    - class number
    - weight number
- managed-vlan-list
  - range string
- mc-ring
  - apply-groups reference
  - apply-groups-exclude reference
  - ring-node string
- mld-snooping
  - apply-groups reference
  - apply-groups-exclude reference
  - fast-leave boolean
  - import-policy reference
  - maximum-number-groups number
  - mrouter-port boolean
  - mvr
    - from-vpls reference
    - to-sap string
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - robust-count number
  - router-alert-check boolean
  - send-queries boolean
  - static
    - group string
    - apply-groups reference

```

configure service vpls sap mld-snooping static group apply-groups-exclude

- **apply-groups-exclude** *reference*
- **source** *string*
- **starg**
- **version** *keyword*
- **monitor-oper-group** *reference*
- **mrp**
  - **join-time** *number*
  - **leave-all-time** *number*
  - **leave-time** *number*
  - **periodic-time** *number*
  - **periodic-timer** *boolean*
  - **policy** *reference*
- **multi-service-site** *reference*
- **oper-group** *reference*
- **pbb**
  - **fault-propagation**
    - **backbone-mac-address** *string*
    - **backbone-mac-name** *reference*
- **pim-snooping**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **maximum-number-groups** *number*
  - **process-cpm-traffic-on-sap-down** *boolean*
  - **radius-auth-policy** *reference*
  - **shcv-policy-ipv4** *reference*
- **spb**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **level** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **hello-interval** *number*
    - **hello-multiplier** *number*
    - **metric** *number*
  - **lsp-pacing-interval** *number*
  - **retransmit-interval** *number*
  - **split-horizon-group** *reference*
- **static-host**
  - **ipv4** *string* **mac** *string*
    - **admin-state** *keyword*
    - **ancp-string** *string*
    - **app-profile**
      - **profile** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **int-dest-id** *string*
    - **shcv**
    - **sla-profile** *reference*
    - **sub-profile** *reference*
    - **subscriber-id**
      - **string** *string*
      - **use-sap-id**
- **static-isid**
  - **range** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **end** *number*
    - **start** *number*
- **stp**
  - **admin-state** *keyword*
  - **auto-edge** *boolean*
  - **edge-port** *boolean*
  - **link-type** *keyword*

configure service vpls sap stp mst-instance

- **mst-instance** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **mst-path-cost** *number*
- **mst-port-priority** *number*
- **path-cost** *number*
- **port-num** *number*
- **priority** *number*
- **root-guard** *boolean*
- **sub-sla-mgmt**
- **admin-state** *keyword*
- **defaults**
- **app-profile** *reference*
- **int-dest-id**
- **string** *string*
- **top-q-tag**
- **sla-profile** *reference*
- **sub-profile** *reference*
- **subscriber-id**
- **auto-id**
- **sap-id**
- **string** *string*
- **mac-da-hashing** *boolean*
- **single-sub-parameters**
- **non-sub-traffic**
- **app-profile** *reference*
- **sla-profile** *reference*
- **sub-profile** *reference*
- **subscriber-id** *string*
- **profiled-traffic-only** *boolean*
- **sub-ident-policy** *reference*
- **subscriber-limit** (*keyword* | *number*)
- **transit-policy**
- **ip** *reference*
- **prefix** *reference*
- **segment-routing-v6** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **locator** *reference*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **function**
- **end-dt2m**
- **value** *number*
- **end-dt2u**
- **value** *number*
- **micro-segment-locator** *reference*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **function**
- **udt2m**
- **value** *number*
- **udt2u**
- **value** *number*
- **service-id** *number*
- **service-mtu** *number*
- **shcv-policy-ipv4** *reference*
- **spb**
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **fid** *number*
- **isis-instance** *number*
- **level** *number*

configure service vpls spb level apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- bridge-priority number
- ect-high-path-fid number
- forwarding-tree
  - topology keyword
- lsp-lifetime number
- lsp-refresh-interval
  - half-lifetime boolean
  - interval number
- overload
  - timeout number
- overload-on-boot
  - timeout number
- timers
  - lsp-wait
    - initial-wait number
    - max-wait number
    - second-wait number
  - spf-wait
    - initial-wait number
    - max-wait number
    - second-wait number
- spbm-control-vpls
  - fid number
  - service-name string
- split-horizon-group string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - fdb
    - saps
      - auto-learn-mac-protect boolean
      - auto-learn-mac-protect-exclude-list reference
      - discard-unprotected-dest-mac boolean
      - protected-src-mac-violation-action keyword
  - residential boolean
- spoke-sdp string
  - accounting-policy reference
  - admin-state keyword
  - app-profile reference
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd
    - bfd-liveness
      - encap keyword
    - bfd-template reference
    - failure-action keyword
    - wait-for-up-timer number
  - block-on-mesh-failure boolean
  - bpdu-translation keyword
  - collect-stats boolean
  - control-word boolean
  - cpu-protection
    - eth-cfm-monitoring
      - aggregate
      - car
    - mac-monitoring
  - policy-id reference
  - description string
  - dhcp
    - apply-groups reference
    - apply-groups-exclude reference
    - description string

```

## configure service vpls spoke-sdp dhcp snoop

- **snoop** *boolean*
- **egress**
- **filter**
  - **ip** *reference*
  - **ipv6** *reference*
  - **mac** *reference*
- **mfib-allowed-mda-destinations**
  - **mda** *string*
- **qos**
  - **network**
    - **policy-name** *reference*
    - **port-redirect-group**
      - **group-name** *reference*
      - **instance** *number*
- **vc-label** *number*
- **endpoint**
  - **name** *reference*
  - **precedence** (*number* | *keyword*)
- **entropy-label**
- **eth-cfm**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **collect-lmm-fc-stats**
    - **fc** *keyword*
    - **fc-in-profile** *keyword*
  - **collect-lmm-stats** *boolean*
  - **mep md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number*
    - **admin-state** *keyword*
  - **ais**
    - **client-meg-level** *number*
    - **interface-support** *boolean*
    - **interval** *number*
    - **low-priority-defect** *keyword*
    - **priority** *number*
  - **alarm-notification**
    - **fng-alarm-time** *number*
    - **fng-reset-time** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **ccm** *boolean*
  - **ccm-ltm-priority** *number*
  - **ccm-padding-size** *number*
  - **cfm-vlan-tag** *string*
  - **csf**
    - **multiplier** *decimal-number*
  - **description** *string*
  - **direction** *keyword*
  - **eth-test**
    - **bit-error-threshold** *number*
    - **test-pattern**
      - **crc-tlv** *boolean*
      - **pattern** *keyword*
  - **fault-propagation** *keyword*
  - **grace**
    - **eth-ed**
      - **max-rx-defect-window** *number*
      - **priority** *number*
      - **rx-eth-ed** *boolean*
      - **tx-eth-ed** *boolean*
    - **eth-vsm-grace**
      - **rx-eth-vsm-grace** *boolean*
      - **tx-eth-vsm-grace** *boolean*
  - **lbm-svc-act-responder** *boolean*
  - **low-priority-defect** *keyword*



configure service vpls spoke-sdp eth-cfm mep mac-address

```

- mac-address string
- one-way-delay-threshold number
- primary-vlan boolean
- mip primary-vlan (number | keyword)
- apply-groups reference
- apply-groups-exclude reference
- cfm-vlan-tag string
- mac-address string
- squelch-ingress-ctag-levels number
- squelch-ingress-levels number
- vmep-filter boolean
- etree-leaf boolean
- etree-root-leaf-tag boolean
- fdb
- auto-learn-mac-protect boolean
- auto-learn-mac-protect-exclude-list reference
- discard-unknown-source boolean
- limit-mac-move keyword
- mac-learning
- aging boolean
- learning boolean
- mac-pinning boolean
- maximum-mac-addresses number
- protected-src-mac-violation-action keyword
- force-vc-forwarding keyword
- hash-label
- signal-capability
- i-vpls-mac-flush
- bgp-evpn
- send-to-bvpls boolean
- igmp-snooping
- apply-groups reference
- apply-groups-exclude reference
- fast-leave boolean
- import-policy reference
- maximum-number-group-sources number
- maximum-number-groups number
- maximum-number-sources number
- mcac
- bandwidth
- mandatory (number | keyword)
- total (number | keyword)
- interface-policy reference
- policy reference
- mrouter-port boolean
- query-interval number
- query-last-member-interval number
- query-response-interval number
- robust-count number
- router-alert-check boolean
- send-queries boolean
- static
- group string
- apply-groups reference
- apply-groups-exclude reference
- source string
- starg
- version keyword
- ignore-standby-signaling boolean
- ingress
- filter
- ip reference
- ipv6 reference
- mac reference

```

configure service vpls spoke-sdp ingress qos

```

- qos
  - network
    - fp-redirect-group
      - group-name reference
      - instance number
      - policy-name reference
    - vc-label number
- l2pt
  - termination
    - protocols
      - cdp boolean
      - dtp boolean
      - pagp boolean
      - stp boolean
      - udld boolean
      - vtp boolean
- mld-snooping
  - apply-groups reference
  - apply-groups-exclude reference
  - fast-leave boolean
  - import-policy reference
  - maximum-number-groups number
  - mrouter-port boolean
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - robust-count number
  - router-alert-check boolean
  - send-queries boolean
  - static
    - group string
      - apply-groups reference
      - apply-groups-exclude reference
      - source string
      - starg
  - version keyword
- monitor-oper-group reference
- mrp
  - apply-groups reference
  - apply-groups-exclude reference
  - join-time number
  - leave-all-time number
  - leave-time number
  - periodic-time number
  - periodic-timer boolean
  - policy reference
- oper-group reference
- pbb
  - fault-propagation
    - backbone-mac-address string
    - backbone-mac-name reference
- pim-snooping
  - apply-groups reference
  - apply-groups-exclude reference
  - maximum-number-groups number
- pw-status
  - signaling boolean
- spb
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - level number
    - apply-groups reference
    - apply-groups-exclude reference

```

configure service vpls spoke-sdp spb level hello-interval

```

    - hello-interval number
    - hello-multiplier number
    - metric number
  - lsp-pacing-interval number
  - retransmit-interval number
- split-horizon-group reference
- static-isid
  - range number
    - apply-groups reference
    - apply-groups-exclude reference
    - end number
    - start number
- stp
  - admin-state keyword
  - auto-edge boolean
  - edge-port boolean
  - link-type keyword
  - path-cost number
  - port-num number
  - priority number
  - root-guard boolean
  - transit-policy
    - prefix reference
  - vc-type keyword
  - vlan-vc-tag number
- stp
  - admin-state keyword
  - forward-delay number
  - hello-time number
  - hold-count number
  - maximum-age number
  - mode keyword
  - mst-instance number
    - apply-groups reference
    - apply-groups-exclude reference
    - mst-priority number
    - vlan-range string
  - mst-maximum-hops number
  - mst-name string
  - mst-revision number
  - priority number
  - temp-flooding number
  - vpn-id number
- vxlan
  - instance number
    - apply-groups reference
    - apply-groups-exclude reference
    - assisted-replication
      - leaf
        - acttime number
      - replicator
    - egress-vtep (ipv4-address-no-zone | ipv6-address-no-zone)
    - fdb
      - discard-unknown-source boolean
      - mac-learning
        - aging boolean
        - learning boolean
        - maximum-mac-addresses number
        - protected-src-mac-violation-action keyword
      - igmp-snooping
        - mrouter-port boolean
      - mld-snooping
        - mrouter-port boolean
    - network

```

configure service vpls vxlan instance network ingress

```

    - ingress
      - qos
        - network
          - fp-redirect-group
            - group-name reference
            - instance number
            - policy-name reference
          - rx-discard-on-ndf keyword
          - source-vtep-security boolean
          - vni number
        - source-vtep (ipv4-address-no-zone | ipv6-address-no-zone)
  - wlan-gw
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
  - vprn string
    - aa-interface string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - ip-mtu number
    - ipv4
      - primary
        - address string
        - apply-groups reference
        - apply-groups-exclude reference
        - prefix-length number
    - sap string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - egress
      - filter
        - ip reference
      - qos
        - sap-egress
          - policy-name reference
    - fwd-wholesale
    - pppoe-service reference
    - ingress
      - qos
        - sap-ingress
          - overrides
          - policy-name reference
    - lag
  - aaa
    - remote-servers
      - radius
        - access-algorithm keyword
        - accounting boolean
        - accounting-port number
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - authorization boolean
        - interactive-authentication boolean
        - port number
        - server number
        - address (ipv4-address-no-zone | ipv6-address-no-zone)
        - apply-groups reference
        - apply-groups-exclude reference

```

configure service vprn aaa remote-servers radius server authenticator

```

    - authenticator keyword
    - secret string
    - tls-client-profile reference
  - server-retry number
  - server-timeout number
  - use-default-template boolean
- tacplus
  - accounting
    - record-type keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - authorization
    - request-format
      - access-operation-cmd keyword
    - use-priv-lvl boolean
  - interactive-authentication boolean
  - priv-lvl-map
    - priv-lvl number
      - apply-groups reference
      - apply-groups-exclude reference
      - user-profile-name reference
  - server number
    - address (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - port number
    - secret string
    - server-timeout number
    - use-default-template boolean
- aarp-interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - ip-mtu number
  - spoke-sdp string
    - aarp
      - id reference
      - type keyword
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
  - egress
    - filter
      - ip reference
      - vc-label number
  - ingress
    - filter
      - ip reference
      - vc-label number
  - admin-state keyword
- aggregates
  - aggregate (ipv4-prefix | ipv6-prefix)
    - aggregator
      - address string
      - as-number number
    - apply-groups reference
    - apply-groups-exclude reference
    - as-set boolean
    - blackhole
      - generate-icmp boolean
    - community string

```

configure service vpn aggregates aggregate description

- **description** *string*
- **discard-component-communities** *boolean*
- **indirect** (*ipv4-address-no-zone | ipv6-address-no-zone*)
- **local-preference** *number*
- **policy** *reference*
- **summary-only** *boolean*
- **tunnel-group** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **allow-export-bgp-vpn** *boolean*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **autonomous-system** *number*
- **bgp**
  - **admin-state** *keyword*
  - **advertise-inactive** *boolean*
  - **advertise-ipv6-next-hops**
    - **ipv4** *boolean*
  - **aggregator-id-zero** *boolean*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **asn-4-byte** *boolean*
  - **authentication-key** *string*
  - **authentication-keychain** *reference*
  - **backup-path**
    - **ipv4** *boolean*
    - **ipv6** *boolean*
    - **label-ipv4** *boolean*
    - **label-ipv6** *boolean*
  - **best-path-selection**
    - **always-compare-med**
      - **med-value** *keyword*
      - **strict-as** *boolean*
    - **as-path-ignore**
      - **ipv4** *boolean*
      - **ipv6** *boolean*
      - **label-ipv4** *boolean*
      - **label-ipv6** *boolean*
    - **compare-origin-validation-state** *boolean*
    - **d-path-length-ignore** *boolean*
    - **deterministic-med** *boolean*
    - **ebgp-ibgp-equal**
      - **ipv4** *boolean*
      - **ipv6** *boolean*
      - **label-ipv4** *boolean*
      - **label-ipv6** *boolean*
    - **ignore-nh-metric** *boolean*
    - **ignore-router-id**
    - **origin-invalid-unusable** *boolean*
  - **bfd-liveness** *boolean*
  - **client-reflect** *boolean*
  - **cluster**
    - **cluster-id** *string*
  - **connect-retry** *number*
  - **convergence**
    - **family** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **max-wait-to-advertise** *number*
    - **min-wait-to-advertise** *number*
  - **damp-peer-oscillations**
    - **error-interval** *number*
    - **idle-hold-time**
      - **initial-wait** *number*

configure service vprn bgp damp-peer-oscillations idle-hold-time max-wait

```

    - max-wait number
    - second-wait number
  - damping boolean
  - default-label-preference
    - ebgp number
    - ibgp number
  - default-preference
    - ebgp number
    - ibgp number
  - description string
  - domain-id string
  - dynamic-neighbor-limit number
  - ebgp-default-reject-policy
    - export boolean
    - import boolean
  - eibgp-loadbalance boolean
  - enforce-first-as boolean
  - error-handling
    - update-fault-tolerance boolean
  - export
    - apply-groups reference
    - apply-groups-exclude reference
    - policy (policy-expr-string | string)
  - extended-nh-encoding
    - ipv4 boolean
  - family
    - flow-ipv4 boolean
    - flow-ipv6 boolean
    - ipv4 boolean
    - ipv6 boolean
    - label-ipv4 boolean
    - mcast-ipv4 boolean
    - mcast-ipv6 boolean
  - fast-external-failover boolean
  - flowspec
    - validate-dest-prefix boolean
    - validate-redirect-ip boolean
  - graceful-restart
    - gr-notification boolean
    - long-lived
      - advertise-stale-to-all-neighbors boolean
      - advertised-stale-time number
      - family keyword
        - advertised-stale-time number
        - apply-groups reference
        - apply-groups-exclude reference
        - helper-override-stale-time number
      - forwarding-bits-set keyword
      - helper-override-restart-time number
      - helper-override-stale-time number
      - without-no-export boolean
    - restart-time number
    - stale-routes-time number
  - group string
    - admin-state keyword
    - advertise-inactive boolean
    - advertise-ipv6-next-hops
      - ipv4 boolean
    - aggregator-id-zero boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - as-override boolean
    - asn-4-byte boolean
    - authentication-key string

```

## configure service vpn bgp group authentication-keychain

- **authentication-keychain** *reference*
- **bfd-liveness** *boolean*
- **capability-negotiation** *boolean*
- **client-reflect** *boolean*
- **cluster**
  - **cluster-id** *string*
- **connect-retry** *number*
- **damp-peer-oscillations**
  - **error-interval** *number*
  - **idle-hold-time**
    - **initial-wait** *number*
    - **max-wait** *number*
    - **second-wait** *number*
- **damping** *boolean*
- **default-label-preference**
  - **ebgp** *number*
  - **ibgp** *number*
- **default-preference**
  - **ebgp** *number*
  - **ibgp** *number*
- **description** *string*
- **dynamic-neighbor**
  - **interface** *reference*
    - **allowed-peer-as** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **max-sessions** *number*
  - **match**
    - **prefix** (*ipv4-prefix* | *ipv6-prefix*)
      - **allowed-peer-as** *string*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
- **dynamic-neighbor-limit** *number*
- **ebgp-default-reject-policy**
  - **export** *boolean*
  - **import** *boolean*
- **enforce-first-as** *boolean*
- **error-handling**
  - **update-fault-tolerance** *boolean*
- **evpn-link-bandwidth**
  - **add-to-received-bgp** *number*
- **export**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **policy** (*policy-expr-string* | *string*)
- **extended-nh-encoding**
  - **ipv4** *boolean*
- **family**
  - **flow-ipv4** *boolean*
  - **flow-ipv6** *boolean*
  - **ipv4** *boolean*
  - **ipv6** *boolean*
  - **label-ipv4** *boolean*
  - **mcast-ipv4** *boolean*
  - **mcast-ipv6** *boolean*
- **fast-external-failover** *boolean*
- **graceful-restart**
  - **gr-notification** *boolean*
  - **long-lived**
    - **advertise-stale-to-all-neighbors** *boolean*
    - **advertised-stale-time** *number*
  - **family** *keyword*
    - **advertised-stale-time** *number*
  - **apply-groups** *reference*



configure service vpn bgp group graceful-restart long-lived family apply-groups-exclude

```

    - apply-groups-exclude reference
    - helper-override-stale-time number
    - forwarding-bits-set keyword
    - helper-override-restart-time number
    - helper-override-stale-time number
    - without-no-export boolean
  - restart-time number
  - stale-routes-time number
- hold-time
  - minimum-hold-time number
  - seconds number
- import
  - apply-groups reference
  - apply-groups-exclude reference
  - policy (policy-expr-string | string)
- initial-send-delay-zero boolean
- keepalive number
- label-preference number
- link-bandwidth
  - accept-from-ebgp
    - ipv4 boolean
    - ipv6 boolean
    - label-ipv4 boolean
  - add-to-received-ebgp
    - ipv4 boolean
    - ipv6 boolean
    - label-ipv4 boolean
  - aggregate-used-paths
    - ipv4 boolean
    - ipv6 boolean
    - label-ipv4 boolean
  - send-to-ebgp
    - ipv4 boolean
    - ipv6 boolean
    - label-ipv4 boolean
- local-address (ipv4-address-no-zone | ipv6-address-no-zone | interface-name)
- local-as
  - as-number number
  - prepend-global-as boolean
  - private boolean
- local-preference number
- loop-detect keyword
- loop-detect-threshold number
- med-out (number | keyword)
- min-route-advertisement number
- monitor
  - admin-state keyword
  - all-stations boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - route-monitoring
    - post-policy boolean
    - pre-policy boolean
  - station reference
- multihop number
- multipath-eligible boolean
- next-hop-self boolean
- origin-validation
  - ipv4 boolean
  - ipv6 boolean
  - label-ipv4 boolean
- passive boolean
- path-mtu-discovery boolean
- peer-as number

```

configure service vprn bgp group peer-ip-tracking

```

- peer-ip-tracking boolean
- preference number
- prefix-limit keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - idle-timeout number
  - log-only boolean
  - maximum number
  - post-import boolean
  - threshold number
- remove-private
  - limited boolean
  - replace boolean
  - skip-peer-as boolean
- send-communities
  - extended boolean
  - large boolean
  - standard boolean
- send-default
  - export-policy reference
  - ipv4 boolean
  - ipv6 boolean
- split-horizon boolean
- static-group boolean
- tcp-mss (number | keyword)
- third-party-nexthop boolean
- ttl-security number
- type keyword
- hold-time
  - minimum-hold-time number
  - seconds number
- ibgp-multipath boolean
- import
  - apply-groups reference
  - apply-groups-exclude reference
  - policy (policy-expr-string | string)
- initial-send-delay-zero boolean
- keepalive number
- label-preference number
- local-as
  - as-number number
  - prepend-global-as boolean
  - private boolean
- local-preference number
- loop-detect keyword
- loop-detect-threshold number
- med-out (number | keyword)
- min-route-advertisement number
- monitor
  - admin-state keyword
  - all-stations boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - route-monitoring
    - post-policy boolean
    - pre-policy boolean
  - station reference
- multihop number
- multipath
  - ebgp number
  - family keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - ebgp number

```

configure service vpn bgp multipath family ibgp

- **ibgp** *number*
- **max-paths** *number*
- **restrict** *keyword*
- **unequal-cost** *boolean*
- **ibgp** *number*
- **max-paths** *number*
- **restrict** *keyword*
- **unequal-cost** *boolean*
- **neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
  - **admin-state** *keyword*
  - **advertise-inactive** *boolean*
  - **advertise-ipv6-next-hops**
    - **ipv4** *boolean*
  - **aggregator-id-zero** *boolean*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **as-override** *boolean*
  - **asn-4-byte** *boolean*
  - **authentication-key** *string*
  - **authentication-keychain** *reference*
  - **bfd-liveness** *boolean*
  - **capability-negotiation** *boolean*
  - **client-reflect** *boolean*
  - **cluster**
    - **cluster-id** *string*
  - **connect-retry** *number*
  - **damp-peer-oscillations**
    - **error-interval** *number*
    - **idle-hold-time**
      - **initial-wait** *number*
      - **max-wait** *number*
      - **second-wait** *number*
  - **damping** *boolean*
  - **default-label-preference**
    - **ebgp** *number*
    - **ibgp** *number*
  - **default-preference**
    - **ebgp** *number*
    - **ibgp** *number*
  - **description** *string*
  - **ebgp-default-reject-policy**
    - **export** *boolean*
    - **import** *boolean*
  - **enforce-first-as** *boolean*
  - **error-handling**
    - **update-fault-tolerance** *boolean*
  - **evpn-link-bandwidth**
    - **add-to-received-bgp** *number*
  - **export**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **policy** (*policy-expr-string* | *string*)
  - **extended-nh-encoding**
    - **ipv4** *boolean*
  - **family**
    - **flow-ipv4** *boolean*
    - **flow-ipv6** *boolean*
    - **ipv4** *boolean*
    - **ipv6** *boolean*
    - **label-ipv4** *boolean*
    - **mcast-ipv4** *boolean*
    - **mcast-ipv6** *boolean*
  - **fast-external-failover** *boolean*
  - **graceful-restart**

configure service vprn bgp neighbor graceful-restart gr-notification

```

- gr-notification boolean
- long-lived
  - advertise-stale-to-all-neighbors boolean
  - advertised-stale-time number
  - family keyword
    - advertised-stale-time number
    - apply-groups reference
    - apply-groups-exclude reference
    - helper-override-stale-time number
  - forwarding-bits-set keyword
  - helper-override-restart-time number
  - helper-override-stale-time number
  - without-no-export boolean
- restart-time number
- stale-routes-time number
- group reference
- hold-time
  - minimum-hold-time number
  - seconds number
- import
  - apply-groups reference
  - apply-groups-exclude reference
  - policy (policy-expr-string | string)
- initial-send-delay-zero boolean
- keepalive number
- label-preference number
- link-bandwidth
  - accept-from-ebgp
    - ipv4 boolean
    - ipv6 boolean
    - label-ipv4 boolean
  - add-to-received-ebgp
    - ipv4 boolean
    - ipv6 boolean
    - label-ipv4 boolean
  - aggregate-used-paths
    - ipv4 boolean
    - ipv6 boolean
    - label-ipv4 boolean
  - send-to-ebgp
    - ipv4 boolean
    - ipv6 boolean
    - label-ipv4 boolean
- local-address (ipv4-address-no-zone | ipv6-address-no-zone | interface-name)
- local-as
  - as-number number
  - prepend-global-as boolean
  - private boolean
- local-preference number
- loop-detect keyword
- loop-detect-threshold number
- med-out (number | keyword)
- min-route-advertisement number
- monitor
  - admin-state keyword
  - all-stations boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - route-monitoring
    - post-policy boolean
    - pre-policy boolean
  - station reference
- multihop number
- multipath-eligible boolean

```

## configure service vprn bgp neighbor next-hop-self

- **next-hop-self** *boolean*
- **origin-validation**
  - **ipv4** *boolean*
  - **ipv6** *boolean*
  - **label-ipv4** *boolean*
- **passive** *boolean*
- **path-mtu-discovery** *boolean*
- **peer-as** *number*
- **peer-creation-type** *keyword*
- **peer-ip-tracking** *boolean*
- **preference** *number*
- **prefix-limit** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **idle-timeout** *number*
  - **log-only** *boolean*
  - **maximum** *number*
  - **post-import** *boolean*
  - **threshold** *number*
- **remove-private**
  - **limited** *boolean*
  - **replace** *boolean*
  - **skip-peer-as** *boolean*
- **send-communities**
  - **extended** *boolean*
  - **large** *boolean*
  - **standard** *boolean*
- **send-default**
  - **export-policy** *reference*
  - **ipv4** *boolean*
  - **ipv6** *boolean*
- **split-horizon** *boolean*
- **tcp-mss** (*number* | *keyword*)
- **third-party-nexthop** *boolean*
- **ttl-security** *number*
- **type** *keyword*
- **next-hop-resolution**
  - **policy** *reference*
  - **use-bgp-routes** *boolean*
- **path-mtu-discovery** *boolean*
- **peer-ip-tracking** *boolean*
- **peer-tracking-policy** *reference*
- **preference** *number*
- **rapid-withdrawal** *boolean*
- **remove-private**
  - **limited** *boolean*
  - **replace** *boolean*
  - **skip-peer-as** *boolean*
- **rib-management**
  - **ipv4**
    - **leak-import**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **policy** (*policy-expr-string* | *string*)
    - **route-table-import**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **policy-name** *reference*
  - **ipv6**
    - **leak-import**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **policy** (*policy-expr-string* | *string*)
    - **route-table-import**

configure service vpn bgp rib-management ipv6 route-table-import apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **policy-name** *reference*
- **label-ipv4**
  - **leak-import**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **policy** (*policy-expr-string* | *string*)
  - **route-table-import**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **policy-name** *reference*
- **label-ipv6**
  - **leak-import**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **policy** (*policy-expr-string* | *string*)
- **router-id** *string*
- **send-communities**
  - **extended** *boolean*
  - **large** *boolean*
  - **standard** *boolean*
- **send-default**
  - **export-policy** *reference*
  - **ipv4** *boolean*
  - **ipv6** *boolean*
- **split-horizon** *boolean*
- **tcp-mss** *number*
- **third-party-next-hop** *boolean*
- **bgp-evpn**
  - **mpls** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **auto-bind-tunnel**
      - **allow-flex-algo-fallback** *boolean*
      - **ecmp** *number*
      - **enforce-strict-tunnel-tagging** *boolean*
      - **resolution** *keyword*
      - **resolution-filter**
        - **bgp** *boolean*
        - **ldp** *boolean*
        - **mpls-fwd-policy** *boolean*
        - **rib-api** *boolean*
        - **rsvp** *boolean*
        - **sr-isis** *boolean*
        - **sr-ospf** *boolean*
        - **sr-ospf3** *boolean*
        - **sr-policy** *boolean*
        - **sr-te** *boolean*
        - **udp** *boolean*
  - **default-route-tag** *string*
  - **domain-id** *string*
  - **dynamic-egress-label-limit** *boolean*
  - **evi** *number*
  - **evpn-link-bandwidth**
    - **advertise**
      - **max-dynamic-weight** *number*
      - **weight** (*number* | *keyword*)
    - **weighted-ecmp** *boolean*
  - **route-distinguisher** (*string* | *keyword*)
  - **send-tunnel-encap**
    - **mpls** *boolean*
    - **mpls-over-udp** *boolean*

configure service vprn bgp-evpn mpls vrf-export

- **vrf-export**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **policy** (*policy-expr-string* | *string*)
- **vrf-import**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **policy** (*policy-expr-string* | *string*)
- **vrf-target**
  - **community** *string*
  - **export-community** *string*
  - **import-community** *string*
- **segment-routing-v6** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **default-route-tag** *string*
  - **domain-id** *string*
  - **evi** *number*
  - **resolution** *keyword*
  - **route-distinguisher** (*string* | *keyword*)
  - **source-address** *string*
- **srv6**
  - **default-locator** *string*
  - **instance** *reference*
- **vrf-export**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **policy** (*policy-expr-string* | *string*)
- **vrf-import**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **policy** (*policy-expr-string* | *string*)
- **vrf-target**
  - **community** *string*
  - **export-community** *string*
  - **import-community** *string*
- **bgp-ipvpn**
  - **mpls**
    - **admin-state** *keyword*
    - **auto-bind-tunnel**
      - **allow-flex-algo-fallback** *boolean*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **ecmp** *number*
      - **enforce-strict-tunnel-tagging** *boolean*
      - **resolution** *keyword*
      - **resolution-filter**
        - **bgp** *boolean*
        - **gre** *boolean*
        - **ldp** *boolean*
        - **mpls-fwd-policy** *boolean*
        - **rib-api** *boolean*
        - **rsvp** *boolean*
        - **sr-isis** *boolean*
        - **sr-ospf** *boolean*
        - **sr-ospf3** *boolean*
        - **sr-policy** *boolean*
        - **sr-te** *boolean*
        - **udp** *boolean*
      - **weighted-ecmp** *boolean*
    - **domain-id** *string*
    - **dynamic-egress-label-limit** *boolean*
    - **route-distinguisher** (*string* | *keyword*)

configure service vpn bgp-ipvpn mpls vrf-export

- **vrf-export**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **policy** (*policy-expr-string* | *string*)
- **vrf-import**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **policy** (*policy-expr-string* | *string*)
- **vrf-target**
  - **community** *string*
  - **export-community** *string*
  - **import-community** *string*
- **segment-routing-v6** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **default-route-tag** *string*
  - **domain-id** *string*
  - **resolution** *keyword*
  - **route-distinguisher** (*string* | *keyword*)
  - **source-address** *string*
- **srv6**
  - **default-locator** *string*
  - **instance** *reference*
- **vrf-export**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **policy** (*policy-expr-string* | *string*)
- **vrf-import**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **policy** (*policy-expr-string* | *string*)
- **vrf-target**
  - **community** *string*
  - **export-community** *string*
  - **import-community** *string*
- **bgp-shared-queue**
  - **cir** (*number* | *keyword*)
  - **pir** (*number* | *keyword*)
- **bgp-vpn-backup**
  - **ipv4** *boolean*
  - **ipv6** *boolean*
- **carrier-carrier-vpn** *boolean*
- **class-forwarding** *boolean*
- **confederation**
  - **confed-as-num** *number*
  - **members** *number*
- **customer** *reference*
- **d-path-length-ignore** *boolean*
- **description** *string*
- **dhcp-server**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **dhcpv4** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
- **failover**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **ignore-mclt-on-takeover** *boolean*
  - **maximum-client-lead-time** *number*



configure service vprn dhcp-server dhcpv4 failover partner-down-delay

```

- partner-down-delay number
- peer reference
  - apply-groups reference
  - apply-groups-exclude reference
  - sync-tag string
- startup-wait-time number
- force-renews boolean
- lease-hold
  - additional-scenarios
    - internal-lease-ipsec boolean
    - solicited-release boolean
  - time number
- pool string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - failover
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - ignore-mclt-on-takeover boolean
    - maximum-client-lead-time number
    - partner-down-delay number
    - peer reference
      - apply-groups reference
      - apply-groups-exclude reference
      - sync-tag string
    - startup-wait-time number
  - max-lease-time number
  - min-lease-time number
  - minimum-free
    - absolute number
    - event-when-depleted boolean
    - percent number
  - nak-non-matching-subnet boolean
  - offer-time number
  - options
    - option (number | keyword)
      - apply-groups reference
      - apply-groups-exclude reference
      - ascii-string string
      - duration number
      - empty
      - hex-string string
      - ipv4-address string
      - netbios-node-type keyword
  - subnet string
    - address-range string end string
    - apply-groups reference
    - apply-groups-exclude reference
    - failover-control-type keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - drain boolean
  - exclude-addresses string end string
  - maximum-declined number
  - minimum-free
    - absolute number
    - event-when-depleted boolean
    - percent number
  - options
    - option (number | keyword)
      - apply-groups reference
      - apply-groups-exclude reference

```

configure service vprn dhcp-server dhcpv4 pool subnet options option ascii-string

```

    - ascii-string string
    - duration number
    - empty
    - hex-string string
    - ipv4-address string
    - netbios-node-type keyword
- pool-selection
  - use-gi-address
  - scope keyword
  - use-pool-from-client
    - delimiter string
- user-db reference
- user-identification keyword
- dhcpv6 string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - auto-provisioned boolean
  - defaults
    - apply-groups reference
    - apply-groups-exclude reference
    - options
      - option (number | keyword)
        - apply-groups reference
        - apply-groups-exclude reference
        - ascii-string string
        - domain-string string
        - duration number
        - empty
        - hex-string string
        - ipv6-address string
      - preferred-lifetime number
      - rebind-time number
      - renew-time number
      - valid-lifetime number
    - description string
  - failover
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - ignore-mclt-on-takeover boolean
    - maximum-client-lead-time number
    - partner-down-delay number
    - peer reference
      - apply-groups reference
      - apply-groups-exclude reference
      - sync-tag string
    - startup-wait-time number
  - ignore-rapid-commit boolean
  - interface-id-mapping boolean
  - lease-hold
    - additional-scenarios
      - internal-lease-ipsec boolean
      - solicited-release boolean
    - time number
  - lease-query boolean
  - pool string
    - apply-groups reference
    - apply-groups-exclude reference
    - delegated-prefix
      - length number
      - maximum number
      - minimum number
    - description string

```

configure service vprn dhcp-server dhcpv6 pool exclude-prefix

```

- exclude-prefix string
- failover
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - ignore-mclt-on-takeover boolean
  - maximum-client-lead-time number
  - partner-down-delay number
  - peer reference
    - apply-groups reference
    - apply-groups-exclude reference
    - sync-tag string
  - startup-wait-time number
- options
  - option (number | keyword)
    - apply-groups reference
    - apply-groups-exclude reference
    - ascii-string string
    - domain-string string
    - duration number
    - empty
    - hex-string string
    - ipv6-address string
- prefix string
  - apply-groups reference
  - apply-groups-exclude reference
  - drain boolean
  - failover-control-type keyword
  - options
    - option (number | keyword)
      - apply-groups reference
      - apply-groups-exclude reference
      - ascii-string string
      - domain-string string
      - duration number
      - empty
      - hex-string string
      - ipv6-address string
  - preferred-lifetime number
  - prefix-length-threshold number
    - absolute number
    - apply-groups reference
    - apply-groups-exclude reference
    - event-when-depleted boolean
    - percent number
  - prefix-type
    - pd boolean
    - wan-host boolean
  - rebind-time number
  - renew-time number
  - valid-lifetime number
- prefix-length-threshold number
  - apply-groups reference
  - apply-groups-exclude reference
  - event-when-depleted boolean
  - minimum-free-percent number
- pool-selection
  - use-link-address
    - scope keyword
  - use-pool-from-client
    - delimiter string
- server-id
  - apply-groups reference
  - apply-groups-exclude reference

```

configure service vprn dhcp-server dhcpv6 server-id duid-enterprise

```

    - duid-enterprise
      - ascii-string string
      - hex-string string
    - duid-link-local
    - user-identification keyword
- dns
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - default-domain string
  - ipv4-source-address (keyword | ipv4-unicast-address)
  - ipv6-source-address (keyword | ipv6-unicast-address)
  - server (ipv4-address-no-zone | ipv6-address-no-zone)
- ecmp number
- ecmp-unequal-cost boolean
- entropy-label boolean
- eth-cfm
  - apply-groups reference
  - apply-groups-exclude reference
- export-inactive-bgp boolean
- fib-priority keyword
- firewall
  - apply-groups reference
  - apply-groups-exclude reference
  - domain string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - dhcpv6-server
      - name string
      - router-instance string
    - nat-group reference
    - prefix string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - wlan-gw-group reference
- flowspec
  - apply-groups reference
  - apply-groups-exclude reference
  - filter-cam-type keyword
  - ip-filter-max-size number
  - ipv6-filter-max-size number
- grt-leaking
  - allow-local-management boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - export-grt
    - policy-name (policy-expr-string | string)
  - export-limit number
  - export-v6-limit number
  - grt-lookup boolean
  - import-grt
    - policy-name (policy-expr-string | string)
- gsmp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - group string
    - admin-state keyword
    - ancp
      - dynamic-topology-discovery boolean
      - oam boolean
    - apply-groups reference

```

configure service vprn gsmg group apply-groups-exclude

```

- apply-groups-exclude reference
- description string
- hold-multiplier number
- idle-filter boolean
- keepalive number
- neighbor string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - local-address string
  - priority-marking
    - dscp keyword
    - prec number
- persistency boolean
- gtp
  - s11
    - interface reference
    - apn-policy reference
    - apply-groups reference
    - apply-groups-exclude reference
    - peer-profile-map
      - prefix (ipv4-prefix | ipv6-prefix)
        - apply-groups reference
        - apply-groups-exclude reference
        - peer-profile reference
    - upf-data-endpoint
      - apply-groups reference
      - apply-groups-exclude reference
      - fpe reference
      - interface reference
    - uplink
      - apn string
      - apply-groups reference
      - apply-groups-exclude reference
      - pdn-type keyword
      - peer-profile-map
        - prefix (ipv4-prefix | ipv6-prefix)
          - apply-groups reference
          - apply-groups-exclude reference
          - peer-profile reference
  - hash-label boolean
- igmp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - forwarding-group-interface forwarding-service string group-interface-
name reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
  - mcac
    - bandwidth
      - mandatory (number | keyword)
      - total (number | keyword)
    - interface-policy reference
    - policy reference
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number

```

configure service vprn igmp forwarding-group-interface query-source-address

```

- query-source-address string
- router-alert-check boolean
- sub-hosts-only boolean
- subnet-check boolean
- version keyword
- group-if-query-source-address string
- group-interface reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
  - mcac
    - bandwidth
      - mandatory (number | keyword)
      - total (number | keyword)
    - interface-policy reference
    - policy reference
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - query-source-address string
  - router-alert-check boolean
  - sub-hosts-only boolean
  - subnet-check boolean
  - version keyword
- interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
  - mcac
    - bandwidth
      - mandatory (number | keyword)
      - total (number | keyword)
    - interface-policy reference
    - mc-constraints
      - level number
        - apply-groups reference
        - apply-groups-exclude reference
        - bandwidth number
      - number-down number
        - apply-groups reference
        - apply-groups-exclude reference
        - level number
      - use-lag-port-weight boolean
    - policy reference
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - redundant-mcast boolean
  - router-alert-check boolean
  - ssm-translate
    - group-range start string end string
      - apply-groups reference
      - apply-groups-exclude reference
      - source string
  - static
    - group string

```

configure service vpn igmp interface static group apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **source** *string*
- **starg**
- **group-range start** *string end string step string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **source** *string*
- **starg**
- **subnet-check** *boolean*
- **version** *keyword*
- **query-interval** *number*
- **query-last-member-interval** *number*
- **query-response-interval** *number*
- **robust-count** *number*
- **ssm-translate**
  - **group-range start** *string end string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **source** *string*
- **igmp-host-tracking**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **expiry-time** *number*
- **ignore-nh-metric** *boolean*
- **interface** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **cflowd-parameters**
    - **sampling** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **direction** *keyword*
      - **sample-profile** (*keyword | number*)
      - **type** *keyword*
- **cpu-protection** *reference*
- **description** *string*
- **dynamic-tunnel-redundant-nexthop** *string*
- **hold-time**
  - **ipv4**
    - **down**
      - **init-only** *boolean*
      - **seconds** *number*
    - **up**
      - **seconds** *number*
  - **ipv6**
    - **down**
      - **init-only** *boolean*
      - **seconds** *number*
    - **up**
      - **seconds** *number*
- **if-attribute**
  - **admin-group** *reference*
  - **srlg-group** *reference*
- **ingress**
  - **destination-class-lookup** *boolean*
  - **policy-accounting** *reference*
- **ingress-stats** *boolean*
- **ip-mtu** *number*
- **ipsec**
  - **admin-state** *keyword*
  - **apply-groups** *reference*

configure service vpn interface ipsec apply-groups-exclude

```

- apply-groups-exclude reference
- ip-exception reference
- ipsec-tunnel string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- bfd
  - bfd-designate boolean
  - bfd-liveness
    - dest-ip string
    - interface string
    - service-name string
- clear-df-bit boolean
- copy-traffic-class-upon-decapsulation boolean
- description string
- encapsulated-ip-mtu number
- icmp-generation
  - frag-required
    - admin-state keyword
    - interval number
    - message-count number
- icmp6-generation
  - packet-too-big
    - admin-state keyword
    - interval number
    - message-count number
- ip-mtu number
- key-exchange
  - dynamic
    - auto-establish boolean
    - cert
      - cert-profile reference
      - status-verify
        - default-result keyword
        - primary keyword
        - secondary keyword
      - trust-anchor-profile reference
    - id
      - fqdn string
      - ipv4 string
      - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
    - ike-policy reference
    - ipsec-transform reference
    - pre-shared-key string
  - manual
    - keys number direction keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - authentication-key string
      - encryption-key string
      - ipsec-transform reference
      - spi number
- local-gateway-address-override (ipv4-address-no-zone | ipv6-address-no-
zone)
- max-history-key-records
  - esp number
  - ike number
- pmtu-discovery-aging number
- private-sap number
- private-service string
- private-tcp-mss-adjust number
- propagate-pmtu-v4 boolean
- propagate-pmtu-v6 boolean
- public-tcp-mss-adjust (number | keyword)

```



configure service vpn interface ipsec ipsec-tunnel remote-gateway-address

```

- remote-gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
- replay-window number
- security-policy
  - id number
  - strict-match boolean
- ipv6-exception reference
- public-sap number
- tunnel-group reference
- ipv4
  - addresses
    - address string
    - apply-groups reference
    - apply-groups-exclude reference
    - prefix-length number
  - allow-directed-broadcasts boolean
  - bfd
    - admin-state keyword
    - echo-receive number
    - multiplier number
    - receive number
    - transmit-interval number
    - type keyword
  - dhcp
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - gi-address string
    - lease-populate
      - max-leases number
    - option-82
      - action keyword
      - circuit-id
        - ascii-tuple
        - ifindex
        - none
        - sap-id
        - vlan-ascii-tuple
      - remote-id
        - ascii-string string
        - mac
        - none
      - vendor-specific-option
        - client-mac-address boolean
        - pool-name boolean
        - sap-id boolean
        - service-id boolean
        - string string
        - system-id boolean
    - proxy-server
      - admin-state keyword
      - emulated-server string
      - lease-time
        - radius-override boolean
        - value number
  - python-policy reference
  - relay-plain-bootp boolean
  - relay-proxy
    - release-update-src-ip boolean
    - siaddr-override string
  - release-include-gi-address boolean
  - server string
  - src-ip-addr keyword
  - trusted boolean

```

configure service vprn interface ipv4 dhcp use-arp

- **use-arp** *boolean*
- **icmp**
  - **mask-reply** *boolean*
  - **param-problem**
    - **admin-state** *keyword*
    - **number** *number*
    - **seconds** *number*
  - **redirects**
    - **admin-state** *keyword*
    - **number** *number*
    - **seconds** *number*
  - **ttl-expired**
    - **admin-state** *keyword*
    - **number** *number*
    - **seconds** *number*
  - **unreachables**
    - **admin-state** *keyword*
    - **number** *number*
    - **seconds** *number*
- **ip-helper-address** *string*
- **local-dhcp-server** *reference*
- **neighbor-discovery**
  - **host-route**
    - **populate** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **route-tag** *number*
  - **learn-unsolicited** *boolean*
  - **limit**
    - **log-only** *boolean*
    - **max-entries** *number*
    - **threshold** *number*
  - **local-proxy-arp** *boolean*
  - **populate** *boolean*
  - **proactive-refresh** *boolean*
  - **proxy-arp-policy** *reference*
  - **remote-proxy-arp** *boolean*
  - **retry-timer** *number*
  - **static-neighbor** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **mac-address** *string*
  - **static-neighbor-unnumbered**
    - **mac-address** *string*
  - **timeout** *number*
- **primary**
  - **address** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **broadcast** *keyword*
  - **prefix-length** *number*
  - **track-srrp** *number*
  - **qos-route-lookup** *keyword*
- **secondary** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **broadcast** *keyword*
  - **igp-inhibit** *boolean*
  - **prefix-length** *number*
  - **track-srrp** *number*
- **tcp-mss** *number*
- **unnumbered**
  - **ip-address** *string*
  - **ip-int-name** *string*

configure service vprn interface ipv4 urpf-check

- **urpf-check**
  - **ignore-default** *boolean*
  - **mode** *keyword*
- **vrrp** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **authentication-key** *string*
  - **backup** *string*
  - **bfd-liveness**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **dest-ip** *string*
    - **interface-name** *string*
    - **service-name** *string*
  - **init-delay** *number*
  - **mac** *string*
  - **master-int-inherit** *boolean*
  - **message-interval** *number*
  - **monitor-oper-group** *reference*
  - **ntp-reply** *boolean*
  - **oper-group** *reference*
  - **owner** *boolean*
  - **passive** *boolean*
  - **ping-reply** *boolean*
  - **policy** *reference*
  - **preempt** *boolean*
  - **priority** *number*
  - **ssh-reply** *boolean*
  - **standby-forwarding** *boolean*
  - **telnet-reply** *boolean*
  - **traceroute-reply** *boolean*
- **ipv6**
  - **address** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **duplicate-address-detection** *boolean*
    - **eui-64** *boolean*
    - **prefix-length** *number*
    - **primary-preference** *number*
    - **track-srrp** *number*
  - **bfd**
    - **admin-state** *keyword*
    - **echo-receive** *number*
    - **multiplier** *number*
    - **receive** *number*
    - **transmit-interval** *number*
    - **type** *keyword*
  - **dhcp6**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **relay**
      - **admin-state** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **description** *string*
      - **lease-populate**
        - **max-nbr-of-leases** *number*
        - **route-populate**
          - **na** *boolean*
          - **pd**
            - **exclude** *boolean*
            - **ta** *boolean*
    - **link-address** *string*

configure service vprn interface ipv6 dhcp6 relay neighbor-resolution

- **neighbor-resolution** *boolean*
- **option**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **interface-id**
    - **ascii-tuple**
    - **if-index**
    - **sap-id**
    - **string** *string*
  - **remote-id** *boolean*
- **python-policy** *reference*
- **server** *string*
- **source-address** *string*
- **user-db** *reference*
- **server**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **max-nbr-of-leases** *number*
  - **prefix-delegation**
    - **admin-state** *keyword*
    - **prefix** *string*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **client-id**
        - **duid** *string*
        - **iaid** *number*
      - **preferred-lifetime** (*number* | *keyword*)
      - **valid-lifetime** (*number* | *keyword*)
- **duplicate-address-detection** *boolean*
- **forward-ipv4-packets** *boolean*
- **icmp6**
  - **packet-too-big**
    - **admin-state** *keyword*
    - **number** *number*
    - **seconds** *number*
  - **param-problem**
    - **admin-state** *keyword*
    - **number** *number*
    - **seconds** *number*
  - **redirects**
    - **admin-state** *keyword*
    - **number** *number*
    - **seconds** *number*
  - **time-exceeded**
    - **admin-state** *keyword*
    - **number** *number*
    - **seconds** *number*
  - **unreachables**
    - **admin-state** *keyword*
    - **number** *number*
    - **seconds** *number*
- **link-local-address**
  - **address** *string*
  - **duplicate-address-detection** *boolean*
- **local-dhcp-server** *reference*
- **neighbor-discovery**
  - **host-route**
    - **populate** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **route-tag** *number*
  - **learn-unsolicited** *keyword*
  - **limit**
  - **log-only** *boolean*

configure service vprn interface ipv6 neighbor-discovery limit max-entries

- **max-entries** *number*
- **threshold** *number*
- **local-proxy-nd** *boolean*
- **proactive-refresh** *keyword*
- **proxy-nd-policy** *reference*
- **reachable-time** *number*
- **secure-nd**
  - **admin-state** *keyword*
  - **allow-unsecured-msgs** *boolean*
  - **public-key-min-bits** *number*
  - **security-parameter** *number*
- **stale-time** *number*
- **static-neighbor** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **mac-address** *string*
- **qos-route-lookup** *keyword*
- **tcp-mss** *number*
- **urpf-check**
  - **ignore-default** *boolean*
  - **mode** *keyword*
- **vrrp** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **backup** *string*
- **bfd-liveness**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **dest-ip** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **interface-name** *string*
  - **service-name** *string*
- **init-delay** *number*
- **mac** *string*
- **master-int-inherit** *boolean*
- **message-interval** *number*
- **monitor-oper-group** *reference*
- **ntp-reply** *boolean*
- **oper-group** *reference*
- **owner** *boolean*
- **passive** *boolean*
- **ping-reply** *boolean*
- **policy** *reference*
- **preempt** *boolean*
- **priority** *number*
- **standby-forwarding** *boolean*
- **telnet-reply** *boolean*
- **traceroute-reply** *boolean*
- **load-balancing**
  - **flow-label-load-balancing** *boolean*
  - **ip-load-balancing** *keyword*
  - **spi-load-balancing** *boolean*
  - **teid-load-balancing** *boolean*
- **loopback** *boolean*
- **mac** *string*
- **mac-accounting** *boolean*
- **monitor-oper-group** *reference*
- **multi-chassis-shunting-profile** *reference*
- **ping-template**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **destination-address** *string*
  - **name** *reference*

configure service vprn interface ptp-hw-assist

- **ptp-hw-assist**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **radius-auth-policy** *reference*
- **sap** *string*
  - **aarp**
    - **id** *reference*
    - **type** *keyword*
  - **accounting-policy** *reference*
  - **admin-state** *keyword*
  - **anti-spoof** *keyword*
  - **app-profile** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **bandwidth** *number*
  - **calling-station-id** *string*
  - **collect-stats** *boolean*
  - **cpu-protection**
    - **eth-cfm-monitoring**
      - **aggregate**
      - **car**
    - **ip-src-monitoring**
    - **mac-monitoring**
    - **policy-id** *reference*
  - **description** *string*
  - **dist-cpu-protection** *reference*
  - **egress**
    - **agg-rate**
      - **adaptation-rule** *keyword*
      - **burst-limit** (*number* | *keyword*)
      - **limit-unused-bandwidth** *boolean*
      - **queue-frame-based-accounting** *boolean*
      - **rate** *number*
    - **filter**
      - **ip** *reference*
      - **ipv6** *reference*
    - **qos**
      - **policer-control-policy**
        - **overrides**
          - **apply-groups** *reference*
          - **apply-groups-exclude** *reference*
          - **root**
            - **max-rate** (*number* | *keyword*)
            - **priority-mbs-thresholds**
              - **min-thresh-separation** (*number* | *keyword*)
              - **priority** *number*
              - **apply-groups** *reference*
              - **apply-groups-exclude** *reference*
              - **mbs-contribution** (*number* | *keyword*)
        - **policy-name** *reference*
    - **qinq-mark-top-only** *boolean*
    - **sap-egress**
      - **overrides**
        - **hs-secondary-shaper** *string*
        - **hs-wrr-group** *reference*
          - **apply-groups** *reference*
          - **apply-groups-exclude** *reference*
          - **hs-class-weight** *number*
          - **percent-rate** *decimal-number*
          - **rate** (*number* | *keyword*)
      - **policer** *reference*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*

configure service vprn interface sap egress qos sap-egress overrides policer cbs

```

- cbs (number | keyword)
- mbs (number | keyword)
- packet-byte-offset number
- percent-rate
  - cir decimal-number
  - pir decimal-number
- rate
  - cir (number | keyword)
  - pir (number | keyword)
- stat-mode keyword
- queue reference
- adaptation-rule
  - cir keyword
  - pir keyword
- apply-groups reference
- apply-groups-exclude reference
- avg-frame-overhead decimal-number
- burst-limit (number | keyword)
- cbs (number | keyword)
- drop-tail
  - low
    - percent-reduction-from-mbs (number | keyword)
- hs-class-weight number
- hs-wred-queue
  - policy reference
- hs-wrr-weight number
- mbs (number | keyword)
- monitor-queue-depth
  - fast-polling boolean
  - violation-threshold decimal-number
- parent
  - cir-weight number
  - weight number
- percent-rate
  - cir decimal-number
  - pir decimal-number
- rate
  - cir (number | keyword)
  - pir (number | keyword)
- policy-name reference
- port-redirect-group
  - group-name reference
  - instance number
- scheduler-policy
  - overrides
    - scheduler string
      - apply-groups reference
      - apply-groups-exclude reference
      - parent
        - cir-weight number
        - weight number
      - rate
        - cir (number | keyword)
        - pir (number | keyword)
    - policy-name reference
  - queue-group-redirect-list reference
- eth-cfm
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-lmm-fc-stats
    - fc keyword
    - fc-in-profile keyword
  - collect-lmm-stats boolean
  - mep md-admin-name reference ma-admin-name reference mep-id number

```

configure service vprn interface sap eth-cfm mep admin-state

- **admin-state** *keyword*
- **ais** *boolean*
- **alarm-notification**
  - **fng-alarm-time** *number*
  - **fng-reset-time** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **ccm** *boolean*
- **ccm-ltm-priority** *number*
- **ccm-padding-size** *number*
- **csf**
  - **multiplier** *decimal-number*
- **description** *string*
- **eth-test**
  - **bit-error-threshold** *number*
  - **test-pattern**
    - **crc-tlv** *boolean*
    - **pattern** *keyword*
- **fault-propagation** *keyword*
- **grace**
  - **eth-ed**
    - **max-rx-defect-window** *number*
    - **priority** *number*
    - **rx-eth-ed** *boolean*
    - **tx-eth-ed** *boolean*
  - **eth-vsm-grace**
    - **rx-eth-vsm-grace** *boolean*
    - **tx-eth-vsm-grace** *boolean*
- **low-priority-defect** *keyword*
- **one-way-delay-threshold** *number*
- **snelch-ingress-levels** *number*
- **fwd-wholesale**
  - **pppoe-service** *reference*
- **host-admin-state** *keyword*
- **host-lockout-policy** *reference*
- **ingress**
  - **filter**
    - **ip** *reference*
    - **ipv6** *reference*
- **qos**
  - **match-qinq-dot1p** *keyword*
  - **policer-control-policy**
    - **overrides**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **root**
        - **max-rate** (*number* | *keyword*)
        - **priority-mbs-thresholds**
          - **min-thresh-separation** (*number* | *keyword*)
          - **priority** *number*
            - **apply-groups** *reference*
            - **apply-groups-exclude** *reference*
            - **mbs-contribution** (*number* | *keyword*)
    - **policy-name** *reference*
  - **sap-ingress**
    - **fp-redirect-group**
      - **group-name** *reference*
      - **instance** *number*
    - **overrides**
      - **ip-criteria**
        - **activate-entry-tag** *number*
      - **ipv6-criteria**
        - **activate-entry-tag** *number*
    - **policer** *reference*



configure service vprn interface sap ingress qos sap-ingress overrides policer apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- cbs (number | keyword)
- mbs (number | keyword)
- packet-byte-offset number
- percent-rate
  - cir decimal-number
  - pir decimal-number
- rate
  - cir (number | keyword)
  - pir (number | keyword)
- stat-mode keyword
- queue reference
- adaptation-rule
  - cir keyword
  - pir keyword
- apply-groups reference
- apply-groups-exclude reference
- cbs (number | keyword)
- drop-tail
  - low
    - percent-reduction-from-mbs (number | keyword)
- mbs (number | keyword)
- monitor-queue-depth
  - fast-polling boolean
- parent
  - cir-weight number
  - weight number
- percent-rate
  - cir decimal-number
  - pir decimal-number
- rate
  - cir (number | keyword)
  - pir (number | keyword)
- policy-name reference
- queuing-type keyword
- scheduler-policy
- overrides
  - scheduler string
    - apply-groups reference
    - apply-groups-exclude reference
    - parent
      - cir-weight number
      - weight number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
  - policy-name reference
- queue-group-redirect-list reference
- ip-tunnel string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - backup-remote-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - clear-df-bit boolean
  - delivery-service string
  - description string
  - dest-ip (ipv4-address-no-zone | ipv6-address-no-zone)
  - dscp keyword
  - encapsulated-ip-mtu number
  - gre-header
    - admin-state keyword
    - key
      - admin-state keyword

```

configure service vpn interface sap ip-tunnel gre-header key receive

```

    - receive number
    - send number
- icmp-generation
  - frag-required
    - admin-state keyword
    - interval number
    - message-count number
- icmp6-generation
  - packet-too-big
    - admin-state keyword
    - number number
    - seconds number
- ip-mtu number
- ipsec-transport-mode-profile reference
- local-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
- pmtu-discovery-aging number
- private-tcp-mss-adjust number
- propagate-pmtu-v4 boolean
- propagate-pmtu-v6 boolean
- public-tcp-mss-adjust (number | keyword)
- reassembly (number | keyword)
- remote-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
- ipsec-gateway string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - cert
    - cert-profile reference
    - status-verify
      - default-result keyword
      - primary keyword
      - secondary keyword
    - trust-anchor-profile reference
- client-db
  - fallback boolean
  - name reference
- default-secure-service
  - interface string
  - service-name string
- default-tunnel-template reference
- dhcp-address-assignment
  - dhcpv4
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - gi-address string
    - send-release boolean
    - server
      - address string
      - router-instance string
  - dhcpv6
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - link-address string
    - send-release boolean
    - server
      - address string
      - router-instance string
- ike-policy reference
- local
  - address-assignment
    - admin-state keyword
    - apply-groups reference

```

configure service vpn interface sap ipsec-gateway local address-assignment apply-groups-exclude

```

- apply-groups-exclude reference
- ipv4
  - dhcp-server string
  - pool string
  - router-instance string
  - secondary-pool string
- ipv6
  - dhcp-server string
  - pool string
  - router-instance string
- gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
- id
  - auto
  - fqdn string
  - ipv4 string
  - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
- max-history-key-records
  - esp number
  - ike number
- pre-shared-key string
- radius
  - accounting-policy reference
  - authentication-policy reference
- ts-list reference
- ipsec-tunnel string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd
    - bfd-designate boolean
    - bfd-liveness
      - dest-ip string
      - interface string
      - service-name string
  - clear-df-bit boolean
  - copy-traffic-class-upon-decapsulation boolean
  - description string
  - dest-ip (ipv4-address-no-zone | ipv6-address-no-zone)
  - encapsulated-ip-mtu number
  - icmp-generation
    - frag-required
      - admin-state keyword
      - interval number
      - message-count number
  - icmp6-generation
    - packet-too-big
      - admin-state keyword
      - interval number
      - message-count number
  - ip-mtu number
  - key-exchange
    - dynamic
      - auto-establish boolean
      - cert
        - cert-profile reference
        - status-verify
          - default-result keyword
          - primary keyword
          - secondary keyword
        - trust-anchor-profile reference
    - id
      - fqdn string
      - ipv4 string
      - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)

```

configure service vpn interface sap ipsec-tunnel key-exchange dynamic ike-policy

```

    - ike-policy reference
    - ipsec-transform reference
    - pre-shared-key string
  - manual
    - keys number direction keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - authentication-key string
      - encryption-key string
      - ipsec-transform reference
      - spi number
  - max-history-key-records
    - esp number
    - ike number
  - pmtu-discovery-aging number
  - private-tcp-mss-adjust number
  - propagate-pmtu-v4 boolean
  - propagate-pmtu-v6 boolean
  - public-tcp-mss-adjust (number | keyword)
  - replay-window number
  - security-policy
    - id reference
    - strict-match boolean
  - tunnel-endpoint
    - delivery-service string
    - local-gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - remote-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - lag
    - link-map-profile number
    - per-link-hash
      - class number
      - weight number
  - multi-service-site reference
  - static-host
    - ipv4 string mac string
    - admin-state keyword
    - ancp-string string
    - app-profile
      - profile reference
    - apply-groups reference
    - apply-groups-exclude reference
    - int-dest-id string
    - sla-profile reference
    - sub-profile reference
    - subscriber-id
      - string string
      - use-sap-id
  - transit-policy
    - ip reference
    - prefix reference
  - shcv-policy-ipv4 reference
  - spoke-sdp string
    - aarp
      - id reference
      - type keyword
  - accounting-policy reference
  - admin-state keyword
  - app-profile reference
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd
    - bfd-liveness
      - encap keyword
    - bfd-template reference

```

configure service vprn interface spoke-sdp bfd failure-action

- **failure-action** *keyword*
- **wait-for-up-timer** *number*
- **collect-stats** *boolean*
- **control-word** *boolean*
- **cpu-protection**
  - **eth-cfm-monitoring**
    - **aggregate**
    - **car**
  - **ip-src-monitoring**
  - **mac-monitoring**
  - **policy-id** *reference*
- **description** *string*
- **egress**
  - **filter**
    - **ip** *reference*
    - **ipv6** *reference*
  - **qos**
    - **network**
      - **policy-name** *reference*
      - **port-redirect-group**
        - **group-name** *reference*
        - **instance** *number*
  - **vc-label** *number*
- **entropy-label**
- **eth-cfm**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **collect-lmm-fc-stats**
    - **fc** *keyword*
    - **fc-in-profile** *keyword*
  - **collect-lmm-stats** *boolean*
  - **mep** **md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number*
    - **admin-state** *keyword*
    - **ais** *boolean*
    - **alarm-notification**
      - **fng-alarm-time** *number*
      - **fng-reset-time** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **ccm** *boolean*
    - **ccm-ltm-priority** *number*
    - **ccm-padding-size** *number*
    - **csf**
      - **multiplier** *decimal-number*
    - **description** *string*
    - **eth-test**
      - **bit-error-threshold** *number*
      - **test-pattern**
        - **crc-tlv** *boolean*
        - **pattern** *keyword*
    - **fault-propagation** *keyword*
    - **grace**
      - **eth-ed**
        - **max-rx-defect-window** *number*
        - **priority** *number*
        - **rx-eth-ed** *boolean*
        - **tx-eth-ed** *boolean*
      - **eth-vsm-grace**
        - **rx-eth-vsm-grace** *boolean*
        - **tx-eth-vsm-grace** *boolean*
      - **low-priority-defect** *keyword*
      - **one-way-delay-threshold** *number*
      - **snelch-ingress-levels** *number*
  - **hash-label**

configure service vprn interface spoke-sdp hash-label signal-capability

```

- signal-capability
- ingress
- filter
  - ip reference
  - ipv6 reference
- qos
  - network
    - fp-redirect-group
      - group-name reference
      - instance number
      - policy-name reference
    - vc-label number
- transit-policy
  - ip reference
  - prefix reference
- vc-type keyword
- static-tunnel-redundant-nextthop string
- tos-marking-state keyword
- tunnel boolean
- vas-if-type keyword
- vpls string
- apply-groups reference
- apply-groups-exclude reference
- egress
  - reclassify-using-qos reference
  - routed-override-filter
    - ip reference
    - ipv6 reference
- evpn
  - arp
    - advertise keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - route-tag number
    - flood-garp-and-unknown-req boolean
    - learn-dynamic boolean
  - nd
    - advertise keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - route-tag number
    - learn-dynamic boolean
- evpn-tunnel
  - allow-bfd boolean
  - ipv6-gateway-address keyword
  - supplementary-broadcast-domain boolean
- ingress
  - routed-override-filter
    - ip reference
    - ipv6 reference
- ip-mirror-interface string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- description string
- spoke-sdp string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - ingress
    - filter
      - ip reference
    - vc-label number

```

configure service vpn ipsec

- **ipsec**
  - **allow-reverse-route-override-type** *keyword*
  - **multi-chassis-shunt-interface** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **next-hop**
      - **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **multi-chassis-shunting-profile** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **peer** *reference*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **multi-chassis-shunt-interface** *reference*
  - **security-policy** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **entry** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **local-ip**
        - **address** *string*
        - **any** *boolean*
      - **local-ipv6**
        - **address** *string*
        - **any** *boolean*
      - **remote-ip**
        - **address** *string*
        - **any** *boolean*
      - **remote-ipv6**
        - **address** *string*
        - **any** *boolean*
- **ipv6**
  - **neighbor-discovery**
    - **reachable-time** *number*
    - **stale-time** *number*
  - **router-advertisement**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **dns-options**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **rdnss-lifetime** (*keyword* | *number*)
      - **server** *string*
    - **interface** *reference*
      - **admin-state** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **current-hop-limit** *number*
      - **dns-options**
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **include-rdnss** *boolean*
        - **rdnss-lifetime** (*number* | *keyword*)
        - **server** *string*
      - **managed-configuration** *boolean*
      - **max-advertisement-interval** *number*
      - **min-advertisement-interval** *number*
      - **mtu** *number*
      - **other-stateful-configuration** *boolean*
      - **prefix** *string*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **autonomous** *boolean*

configure service vprn ipv6 router-advertisement interface prefix on-link

- **on-link** *boolean*
- **preferred-lifetime** (*keyword | number*)
- **valid-lifetime** (*keyword | number*)
- **reachable-time** *number*
- **retransmit-time** *number*
- **router-lifetime** *number*
- **use-virtual-mac** *boolean*
- **isis** *number*
  - **admin-state** *keyword*
  - **advertise-passive-only** *boolean*
  - **advertise-router-capability** *keyword*
  - **all-l1isis** *string*
  - **all-l2isis** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **area-address** *string*
  - **authentication-check** *boolean*
  - **authentication-key** *string*
  - **authentication-keychain** *reference*
  - **authentication-type** *keyword*
  - **csnp-authentication** *boolean*
  - **default-route-tag** *number*
  - **export-limit**
    - **log-percent** *number*
    - **number** *number*
  - **export-policy** *reference*
  - **graceful-restart**
    - **helper-mode** *boolean*
  - **hello-authentication** *boolean*
  - **hello-padding** *keyword*
  - **ignore-attached-bit** *boolean*
  - **ignore-lsp-errors** *boolean*
  - **ignore-narrow-metric** *boolean*
  - **iid-tlv** *boolean*
  - **import-policy** *reference*
  - **interface** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **bfd-liveness**
      - **ipv4**
        - **include-bfd-tlv** *boolean*
      - **ipv6**
        - **include-bfd-tlv** *boolean*
    - **csnp-interval** *number*
    - **default-instance** *boolean*
    - **hello-authentication** *boolean*
    - **hello-authentication-key** *string*
    - **hello-authentication-keychain** *reference*
    - **hello-authentication-type** *keyword*
    - **hello-padding** *keyword*
    - **interface-type** *keyword*
    - **ipv4-multicast** *boolean*
    - **ipv6-unicast** *boolean*
    - **level** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **hello-authentication-key** *string*
      - **hello-authentication-keychain** *reference*
      - **hello-authentication-type** *keyword*
      - **hello-interval** *number*
      - **hello-multiplier** *number*
      - **hello-padding** *keyword*
      - **ipv4-multicast-metric** *number*



configure service vprn isis interface level ipv6-unicast-metric

```

- ipv6-unicast-metric number
- metric number
- passive boolean
- priority number
- sd-offset number
- sf-offset number
- level-capability keyword
- load-balancing-weight number
- loopfree-alternate
  - exclude boolean
  - policy-map
    - route-nh-template reference
- lsp-pacing-interval number
- mesh-group
  - blocked
  - value number
- passive boolean
- retransmit-interval number
- tag number
- ipv4-multicast-routing keyword
- ipv4-routing boolean
- ipv6-routing keyword
- level keyword
  - advertise-router-capability boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication-key string
  - authentication-keychain reference
  - authentication-type keyword
  - csnp-authentication boolean
  - default-ipv4-multicast-metric number
  - default-ipv6-unicast-metric number
  - default-metric number
  - external-preference number
  - hello-authentication boolean
  - hello-padding keyword
  - loopfree-alternate-exclude boolean
  - lsp-mtu-size number
  - preference number
  - psnp-authentication boolean
  - wide-metrics-only boolean
- level-capability keyword
- link-group string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - level keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - ipv4-multicast-metric-offset number
    - ipv4-unicast-metric-offset number
    - ipv6-unicast-metric-offset number
    - member reference
    - oper-members number
    - revert-members number
- loopfree-alternate
  - exclude
    - prefix-policy reference
- lsp-lifetime number
- lsp-minimum-remaining-lifetime number
- lsp-mtu-size number
- lsp-refresh
  - half-lifetime boolean
  - interval number

```

## configure service vprn isis mru-mismatch-detection

- **mru-mismatch-detection** *boolean*
- **multi-topology**
  - **ipv4-multicast** *boolean*
  - **ipv6-unicast** *boolean*
- **multicast-import**
  - **ipv4** *boolean*
- **overload**
  - **max-metric** *boolean*
- **overload-export-external** *boolean*
- **overload-export-interlevel** *boolean*
- **overload-on-boot**
  - **max-metric** *boolean*
  - **timeout** *number*
- **poi-tlv** *boolean*
- **prefix-attributes-tlv** *boolean*
- **prefix-limit**
  - **limit** *number*
  - **log-only** *boolean*
  - **overload-timeout** (*number* | *keyword*)
  - **warning-threshold** *number*
- **psnp-authentication** *boolean*
- **reference-bandwidth** *number*
- **rib-priority**
  - **high**
    - **prefix-list** *reference*
    - **tag** *number*
- **router-id** *string*
- **standard-multi-instance** *boolean*
- **strict-adjacency-check** *boolean*
- **summary-address** (*ipv4-prefix* | *ipv6-prefix*)
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **level-capability** *keyword*
  - **route-tag** *number*
- **suppress-attached-bit** *boolean*
- **system-id** *string*
- **timers**
  - **lsp-wait**
    - **lsp-initial-wait** *number*
    - **lsp-max-wait** *number*
    - **lsp-second-wait** *number*
  - **spf-wait**
    - **spf-initial-wait** *number*
    - **spf-max-wait** *number*
    - **spf-second-wait** *number*
- **unicast-import**
  - **ipv4** *boolean*
  - **ipv6** *boolean*
- **l2tp**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **avp-hiding** *keyword*
  - **challenge** *boolean*
  - **destruct-timeout** *number*
  - **ethernet-tunnel**
    - **reconnect-timeout** (*number* | *keyword*)
  - **exclude-avps**
    - **calling-number** *boolean*
    - **initial-rx-lcp-conf-req** *boolean*
  - **failover**
    - **recovery-max-session-lifetime** *number*
    - **recovery-method** *keyword*
    - **recovery-time** *number*

## configure service vprn l2tp failover track-srrp

- **track-srrp** *reference*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **peer** *reference*
- **sync-tag** *string*
- **group** *string*
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **avp-hiding** *keyword*
- **challenge** *keyword*
- **description** *string*
- **destruct-timeout** *number*
- **ethernet-tunnel**
  - **reconnect-timeout** (*number* | *keyword*)
- **failover**
  - **recovery-method** *keyword*
  - **recovery-time** *number*
- **hello-interval** (*number* | *keyword*)
- **idle-timeout** (*number* | *keyword*)
- **l2tpv3**
  - **cookie-length** (*number* | *keyword*)
  - **digest-type** *keyword*
  - **nonce-length** *number*
  - **password** *string*
  - **private-tcp-mss-adjust** (*number* | *keyword*)
  - **public-tcp-mss-adjust** (*number* | *keyword*)
  - **pw-cap-list**
    - **ethernet** *boolean*
    - **ethernet-vlan** *boolean*
  - **rem-router-id** *string*
  - **track-password-change** *boolean*
- **lac**
  - **df-bit** *keyword*
- **lns**
  - **lns-group** *reference*
  - **load-balance-method** *keyword*
- **mlppp**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **endpoint**
    - **ip** (*ipv4-address* | *keyword*)
    - **mac** (*mac-address* | *keyword*)
  - **interleave** *boolean*
  - **max-fragment-delay** (*number* | *keyword*)
  - **max-links** *number*
  - **reassembly-timeout** *number*
  - **short-sequence-numbers** *boolean*
- **ppp**
  - **authentication** *keyword*
  - **authentication-policy** *string*
  - **chap-challenge-length**
    - **end** *number*
    - **start** *number*
  - **default-group-interface**
    - **interface** *string*
    - **service-name** *string*
  - **ipcp-subnet-negotiation** *boolean*
  - **keepalive**
    - **interval** *number*
    - **multiplier** *number*
  - **lcp-force-ack-accm** *boolean*
  - **lcp-ignore-magic-numbers** *boolean*

configure service vprn l2tp group lns ppp mtu

```

- mtu number
- proxy-authentication boolean
- proxy-lcp boolean
- reject-disabled-ncp boolean
- user-db string
- local-address string
- local-name string
- max-retries-estab number
- max-retries-not-estab number
- password string
- protocol keyword
- radius-accounting-policy reference
- receive-window-size number
- session-assign-method keyword
- session-limit (number | keyword)
- tunnel string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- auto-establish boolean
- avp-hiding keyword
- challenge keyword
- description string
- destruct-timeout number
- failover
- recovery-method keyword
- recovery-time number
- hello-interval (number | keyword)
- idle-timeout (number | keyword)
- l2tpv3
- private-tcp-mss-adjust (number | keyword)
- public-tcp-mss-adjust (number | keyword)
- lac
- df-bit keyword
- lns
- lns-group reference
- load-balance-method keyword
- mlppp
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- endpoint
- ip (ipv4-address | keyword)
- mac (mac-address | keyword)
- interleave keyword
- max-fragment-delay number
- max-links number
- reassembly-timeout number
- short-sequence-numbers keyword
- ppp
- authentication keyword
- authentication-policy string
- chap-challenge-length
- end number
- start number
- default-group-interface
- interface string
- service-name string
- ipcp-subnet-negotiation keyword
- keepalive
- interval number
- multiplier number
- lcp-force-ack-accm keyword
- lcp-ignore-magic-numbers keyword

```

configure service vprn l2tp group tunnel lns ppp mtu

```

    - mtu number
    - proxy-authentication keyword
    - proxy-lcp keyword
    - reject-disabled-ncp keyword
    - user-db string
  - local-address string
  - local-name string
  - max-retries-estab number
  - max-retries-not-estab number
  - password string
  - peer string
  - preference number
  - radius-accounting-policy reference
  - receive-window-size number
  - remote-name string
  - session-limit (number | keyword)
- group-session-limit number
- hello-interval (number | keyword)
- idle-timeout (number | keyword)
- ignore-avps
  - sequencing-required boolean
- l2tpv3
  - cookie-length number
  - digest-type keyword
  - nonce-length number
  - password string
  - private-tcp-mss-adjust number
  - public-tcp-mss-adjust number
  - transport-type
    - ip boolean
- lac
  - calling-number-format string
  - cisco-nas-port
    - ethernet string
  - df-bit boolean
  - local-address string
  - local-name string
  - max-retries-estab number
  - max-retries-not-estab number
  - next-attempt keyword
  - password string
  - peer-address-change-policy keyword
  - radius-accounting-policy reference
  - receive-window-size number
  - replace-result-code
    - cdn-invalid-dst boolean
    - cdn-permanent-no-facilities boolean
    - cdn-temporary-no-facilities boolean
  - rtm-debounce-time (number | keyword)
  - session-assign-method keyword
  - session-limit number
- tunnel-selection-blacklist
  - add-tunnel-on
    - address-change-timeout boolean
    - cdn-err-code boolean
    - cdn-invalid-dst boolean
    - cdn-permanent-no-facilities boolean
    - cdn-temporary-no-facilities boolean
    - stop-ccn-err-code boolean
    - stop-ccn-other boolean
    - tx-cdn-not-established-in-time boolean
  - max-list-length (number | keyword)
  - max-time number
  - timeout-action keyword

```

configure service vpn l2tp tunnel-session-limit

- **tunnel-session-limit** *number*
- **label-mode** *keyword*
- **local-routes-domain-id** *string*
- **log**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **filter** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **default-action** *keyword*
    - **description** *string*
    - **named-entry** *string*
      - **action** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **description** *string*
      - **match**
        - **application**
          - **eq** *keyword*
          - **neq** *keyword*
        - **event**
          - **eq** *number*
          - **gt** *number*
          - **gte** *number*
          - **lt** *number*
          - **lte** *number*
          - **neq** *number*
        - **message**
          - **eq** *string*
          - **neq** *string*
          - **regexp** *boolean*
        - **severity**
          - **eq** *keyword*
          - **gt** *keyword*
          - **gte** *keyword*
          - **lt** *keyword*
          - **lte** *keyword*
          - **neq** *keyword*
        - **subject**
          - **eq** *string*
          - **neq** *string*
          - **regexp** *boolean*
- **log-id** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **destination**
    - **netconf**
      - **max-entries** *number*
    - **snmp**
      - **max-entries** *number*
    - **syslog** *reference*
  - **filter** *reference*
  - **netconf-stream** *string*
  - **python-policy** *reference*
  - **source**
    - **change** *boolean*
    - **debug** *boolean*
    - **main** *boolean*
    - **security** *boolean*
  - **time-format** *keyword*
- **snmp-trap-group** *string*
  - **apply-groups** *reference*

configure service vprn log snmp-trap-group apply-groups-exclude

```

- apply-groups-exclude reference
- description string
- trap-target string
  - address (ipv4-address-no-zone | ipv6-address-no-zone)
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - notify-community string
  - port number
  - replay boolean
  - security-level keyword
  - version keyword
- syslog string
  - address (ipv4-address-no-zone | ipv6-address-no-zone)
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - facility keyword
  - log-prefix (keyword | string)
  - port number
  - severity keyword
  - tls-client-profile reference
- management
  - allow-ftp boolean
  - allow-grpc boolean
  - allow-netconf boolean
  - allow-ssh boolean
  - allow-telnet boolean
  - allow-telnet6 boolean
  - apply-groups reference
  - apply-groups-exclude reference
- maximum-ipv4-routes
  - log-only boolean
  - threshold number
  - value number
- maximum-ipv6-routes
  - log-only boolean
  - threshold number
  - value number
- mc-maximum-routes
  - log-only boolean
  - threshold number
  - value number
- mld
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - forwarding-group-interface forwarding-service string group-interface-
name reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
  - mcac
    - bandwidth
      - mandatory (number | keyword)
      - total (number | keyword)
    - interface-policy reference
    - policy reference
  - query-interval number
  - query-last-member-interval number

```

configure service vpn mld forwarding-group-interface query-response-interval

```

- query-response-interval number
- query-source-address string
- router-alert-check boolean
- sub-hosts-only boolean
- subnet-check boolean
- version keyword
- group-if-query-source-address string
- group-interface reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
  - mcac
    - bandwidth
      - mandatory (number | keyword)
      - total (number | keyword)
    - interface-policy reference
    - policy reference
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - query-source-address string
  - router-alert-check boolean
  - sub-hosts-only boolean
  - subnet-check boolean
  - version keyword
- interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
  - mcac
    - bandwidth
      - mandatory (number | keyword)
      - total (number | keyword)
    - interface-policy reference
    - mc-constraints
      - level number
        - apply-groups reference
        - apply-groups-exclude reference
        - bandwidth number
      - number-down number
        - apply-groups reference
        - apply-groups-exclude reference
        - level number
      - use-lag-port-weight boolean
    - policy reference
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - router-alert-check boolean
  - ssm-translate
    - group-range start string end string
      - apply-groups reference
      - apply-groups-exclude reference
      - source string
  - static
    - group string

```



configure service vpn mld interface static group apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **source** *string*
- **starg**
- **group-range start** *string end string step string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **source** *string*
- **starg**
- **version** *keyword*
- **query-interval** *number*
- **query-last-member-interval** *number*
- **query-response-interval** *number*
- **robust-count** *number*
- **ssm-translate**
  - **group-range start** *string end string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **source** *string*
- **msdp**
  - **active-source-limit** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **data-encapsulation** *boolean*
  - **export-policy** *reference*
  - **group** *string*
    - **active-source-limit** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **export-policy** *reference*
    - **import-policy** *reference*
    - **local-address** *string*
    - **mode** *keyword*
    - **peer** *string*
      - **active-source-limit** *number*
      - **admin-state** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **authentication-key** *string*
      - **default-peer** *boolean*
      - **export-policy** *reference*
      - **import-policy** *reference*
      - **local-address** *string*
      - **receive-message-rate**
        - **rate** *number*
        - **threshold** *number*
        - **time** *number*
      - **receive-message-rate**
        - **rate** *number*
        - **threshold** *number*
        - **time** *number*
  - **import-policy** *reference*
  - **local-address** *string*
  - **peer** *string*
    - **active-source-limit** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **authentication-key** *string*
    - **default-peer** *boolean*
    - **export-policy** *reference*
    - **import-policy** *reference*

configure service vprn msdp peer local-address

```

- local-address string
- receive-message-rate
  - rate number
  - threshold number
  - time number
- receive-message-rate
  - rate number
  - threshold number
  - time number
- rpf-table keyword
- source string
  - active-source-limit number
  - apply-groups reference
  - apply-groups-exclude reference
- source-active-cache-lifetime number
- mss-adjust
  - apply-groups reference
  - apply-groups-exclude reference
  - nat-group number
  - segment-size number
- mtrace2
  - admin-state keyword
  - udp-port number
- multicast-info-policy reference
- mvpn
  - apply-groups reference
  - apply-groups-exclude reference
  - auto-discovery
    - source-address string
    - type keyword
  - c-mcast-signaling keyword
  - intersite-shared
    - admin-state keyword
    - kat-type5-advertisement-withdraw boolean
    - persistent-type5-advertisement boolean
  - mdt-type keyword
  - provider-tunnel
    - inclusive
      - bier
        - admin-state keyword
        - sub-domain number
      - bsr keyword
      - mldp
        - admin-state keyword
      - p2mp-sr
        - admin-state keyword
        - bfd-leaf boolean
        - bfd-root
          - multiplier number
          - transmit-interval number
        - p2mp-policy boolean
        - static-policy reference
    - pim
      - admin-state keyword
      - group-address string
      - hello-interval number
      - hello-multiplier number
      - improved-assert boolean
      - mode keyword
      - three-way-hello boolean
      - tracking-support boolean
  - rsvp
    - admin-state keyword
    - bfd-leaf boolean

```

configure service vpn mvpn provider-tunnel inclusive rsvp bfd-root

```

- bfd-root
  - multiplier number
  - transmit-interval number
- lsp-template reference
- umh-rate-monitoring
  - revertive-timer number
  - traffic-rate-delta number
- wildcard-spmsi boolean
- selective
  - asm-mdt boolean
  - auto-discovery boolean
  - bier
    - admin-state keyword
    - sub-domain number
  - data-delay-interval number
  - data-threshold
    - group-prefix (ipv4-prefix | ipv6-prefix)
      - apply-groups reference
      - apply-groups-exclude reference
      - pe-threshold-add number
      - pe-threshold-delete number
      - threshold number
  - join-tlv-packing boolean
- mldp
  - admin-state keyword
  - maximum-p2mp-spmsi number
- multistream-spmsi number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - group-prefix (ipv4-prefix | ipv6-prefix) source-prefix (ipv4-prefix |
ipv6-prefix)
  - lsp-template reference
  - p2mp-sr
    - p2mp-policy boolean
    - static-policy reference
  - pim
    - group-address string
    - mode keyword
- p2mp-sr
  - admin-state keyword
  - p2mp-policy boolean
  - static-policy reference
- pim
  - group-prefix string
  - mode keyword
- rsvp
  - admin-state keyword
  - lsp-template reference
  - maximum-p2mp-spmsi number
- umh-rate-monitoring
  - group (ipv4-prefix | ipv6-prefix) source (ipv4-prefix | ipv6-prefix)
    - apply-groups reference
    - apply-groups-exclude reference
    - revertive-timer number
    - traffic-rate-delta number
- redundant-source-list
- source-prefix (ipv4-prefix | ipv6-prefix)
- rpf-select
  - core-mvpn reference
  - apply-groups reference
  - apply-groups-exclude reference
  - group-prefix string
  - apply-groups reference

```

configure service vprn mvpn rpf-select core-mvpn group-prefix apply-groups-exclude

```

    - apply-groups-exclude reference
    - starg boolean
- umh-pe-backup
  - umh-pe string
    - apply-groups reference
    - apply-groups-exclude reference
    - standby string
- umh-selection keyword
- vrf-export
  - policy (policy-expr-string | string)
  - unicast boolean
- vrf-import
  - policy (policy-expr-string | string)
  - unicast boolean
- vrf-target
  - community string
  - export
    - community string
    - unicast boolean
  - import
    - community string
    - unicast boolean
    - unicast boolean
- nat
  - apply-groups reference
  - apply-groups-exclude reference
  - inside
    - l2-aware
      - subscribers string
    - large-scale
      - dnat-only
        - source-prefix-list reference
      - dual-stack-lite
        - admin-state keyword
        - deterministic
          - policy-map string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - map string to string
              - apply-groups reference
              - apply-groups-exclude reference
              - first-outside-address string
            - nat-policy reference
          - prefix-map string nat-policy reference
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - map string to string
              - apply-groups reference
              - apply-groups-exclude reference
              - first-outside-address string
          - endpoint string
            - apply-groups reference
            - apply-groups-exclude reference
            - ip-fragmentation keyword
            - min-first-fragment-size-rx number
            - reassemble boolean
            - tunnel-mtu number
        - max-subscriber-limit number
        - subscriber-prefix-length number
    - filters
      - downstream
        - ipv4 reference

```

configure service vprn nat inside large-scale nat-policy

```

- nat-policy reference
- nat44
  - destination-prefix string
  - apply-groups reference
  - apply-groups-exclude reference
  - nat-policy reference
- deterministic
  - policy-map string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - map string to string
  - apply-groups reference
  - apply-groups-exclude reference
  - first-outside-address string
  - nat-policy reference
  - prefix-map string nat-policy reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - map string to string
  - apply-groups reference
  - apply-groups-exclude reference
  - first-outside-address string
- max-subscriber-limit number
- nat-import reference
- nat64
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - drop-zero-ipv4-checksum boolean
  - insert-ipv6-fragment-header boolean
  - ip-fragmentation keyword
  - ipv6-mtu number
  - prefix string
  - subscriber-prefix-length number
  - tos
    - downstream
      - use-ipv4 boolean
    - upstream
      - set-tos (keyword | number)
- redundancy
  - peer string
  - peer6 string
  - steering-route string
- subscriber-identification
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - attribute
    - type keyword
    - vendor keyword
  - description string
  - drop-unidentified-traffic boolean
  - radius-proxy-server
    - router-instance string
    - server string
- map
  - map-domain reference
- outside
  - dnat-only
    - route-limit number
  - filters
    - downstream

```

configure service vprn nat outside filters downstream ipv4

```

- ipv4 reference
- ipv6 reference
- upstream
- ipv4 reference
- ipv6 reference
- mtu number
- pool string
- address-range string end string
- apply-groups reference
- apply-groups-exclude reference
- description string
- drain boolean
- admin-state keyword
- applications
- agnostic boolean
- apply-groups reference
- apply-groups-exclude reference
- description string
- icmp-echo-reply boolean
- l2-aware
- default-host
- inside-router-instance string
- ip-address string
- rate-limit number
- external-assignment boolean
- port-block-extension
- ports number
- subscriber
- watermarks
- high number
- low number
- subscriber-limit number
- watermarks
- high number
- low number
- large-scale
- default-host
- inside-router-instance string
- ip-address string
- rate-limit number
- deterministic
- port-reservation number
- watermarks
- high number
- low number
- redundancy
- admin-state keyword
- export-route string
- follow
- name string
- router-instance string
- monitor-route string
- subscriber-limit number
- mode keyword
- nat-group reference
- port-forwarding
- dynamic-block-reservation boolean
- range-end number
- range-start number
- port-reservation
- port-blocks number
- ports number
- type keyword
- watermarks

```

configure service vprn nat outside pool watermarks high

```

    - high number
    - low number
    - wlan-gw-group reference
- network
  - apply-groups reference
  - apply-groups-exclude reference
  - ingress
    - filter
      - ip reference
      - ipv6 reference
    - qos
      - fp-redirect-group reference
      - instance number
      - network-policy reference
      - urpf-check boolean
  - network-interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - cflowd-parameters
    - sampling keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - direction keyword
      - sample-profile (keyword | number)
      - type keyword
  - cpu-protection reference
  - description string
  - dist-cpu-protection reference
  - egress
    - filter
      - ip reference
  - hold-time
    - ipv4
      - down
        - init-only boolean
        - seconds number
      - up
        - seconds number
  - ingress
    - filter
      - ip reference
  - ingress-stats boolean
  - ip-mtu number
  - ipv4
    - allow-directed-broadcasts boolean
    - bfd
      - admin-state keyword
      - echo-receive number
      - multiplier number
      - receive number
      - transmit-interval number
      - type keyword
    - icmp
      - mask-reply boolean
      - param-problem
        - admin-state keyword
        - number number
        - seconds number
      - redirects
        - admin-state keyword
        - number number
        - seconds number
    - ttl-expired

```

configure service vprn network-interface ipv4 icmp ttl-expired admin-state

- **admin-state** *keyword*
- **number** *number*
- **seconds** *number*
- **unreachables**
  - **admin-state** *keyword*
  - **number** *number*
  - **seconds** *number*
- **neighbor-discovery**
  - **retry-timer** *number*
  - **static-neighbor** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **mac-address** *string*
  - **timeout** *number*
- **primary**
  - **address** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **broadcast** *keyword*
  - **prefix-length** *number*
- **secondary** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **broadcast** *keyword*
  - **igp-inhibit** *boolean*
  - **prefix-length** *number*
- **tcp-mss** *number*
- **urpf-check**
  - **ignore-default** *boolean*
  - **mode** *keyword*
- **lag**
  - **link-map-profile** *number*
  - **per-link-hash**
    - **class** *number*
    - **weight** *number*
- **load-balancing**
  - **flow-label-load-balancing** *boolean*
  - **ip-load-balancing** *keyword*
  - **lsr-load-balancing** *keyword*
  - **spi-load-balancing** *boolean*
  - **teid-load-balancing** *boolean*
- **loopback**
- **mac** *string*
- **port** *string*
- **qos**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **egress-instance** *number*
  - **egress-port-redirect-group** *reference*
  - **ingress-fp-redirect-group** *reference*
  - **ingress-instance** *number*
  - **network-policy** *reference*
  - **tos-marking-state** *keyword*
- **ntp**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **authenticate** *boolean*
  - **authentication-check** *boolean*
  - **authentication-key** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **key** *string*
  - **type** *keyword*



configure service vprn ntp broadcast

- **broadcast** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **key-id** *reference*
  - **ttl** *number*
  - **version** *number*
- **ospf** *number*
  - **admin-state** *keyword*
  - **advertise-router-capability** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **area** *string*
    - **advertise-ne-profile** *reference*
    - **advertise-router-capability** *boolean*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **area-range** *string*
    - **advertise** *boolean*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **blackhole-aggregate** *boolean*
  - **export-policy** *reference*
  - **import-policy** *reference*
  - **interface** *string*
    - **admin-state** *keyword*
    - **advertise-router-capability** *boolean*
    - **advertise-subnet** *boolean*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **authentication-key** *string*
    - **authentication-keychain** *reference*
    - **authentication-type** *keyword*
    - **bfd-liveness**
      - **remain-down-on-failure** *boolean*
    - **dead-interval** *number*
    - **hello-interval** *number*
    - **interface-type** *keyword*
    - **load-balancing-weight** *number*
    - **loopfree-alternate**
      - **exclude** *boolean*
      - **policy-map**
        - **route-nh-template** *reference*
    - **lsa-filter-out** *keyword*
    - **message-digest-key** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
    - **md5** *string*
    - **metric** *number*
    - **mtu** *number*
    - **neighbor** *string*
    - **passive** *boolean*
    - **poll-interval** *number*
    - **priority** *number*
    - **retransmit-interval** *number*
    - **rib-priority** *keyword*
    - **transit-delay** *number*
  - **loopfree-alternate-exclude** *boolean*
  - **nssa**
    - **area-range** *string*
      - **advertise** *boolean*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
    - **originate-default-route**
      - **adjacency-check** *boolean*

configure service vprn ospf area nssa originate-default-route type-nssa

```

    - type-nssa boolean
    - redistribute-external boolean
    - summaries boolean
  - sham-link string ip-address string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication-key string
    - authentication-keychain reference
    - authentication-type keyword
    - dead-interval number
    - hello-interval number
    - message-digest-key number
      - apply-groups reference
      - apply-groups-exclude reference
      - md5 string
    - metric number
    - retransmit-interval number
    - transit-delay number
  - stub
    - default-metric number
    - summaries boolean
  - virtual-link string transit-area reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication-key string
    - authentication-keychain reference
    - authentication-type keyword
    - dead-interval number
    - hello-interval number
    - message-digest-key number
      - apply-groups reference
      - apply-groups-exclude reference
      - md5 string
    - retransmit-interval number
    - transit-delay number
  - compatible-rfc1583 boolean
  - export-limit
    - log-percent number
    - number number
  - export-policy reference
  - external-db-overflow
    - interval number
    - limit number
  - external-preference number
  - graceful-restart
    - helper-mode boolean
    - strict-lsa-checking boolean
  - ignore-dn-bit boolean
  - import-policy reference
  - loopfree-alternate
    - exclude
      - prefix-policy reference
  - multicast-import boolean
  - overload boolean
  - overload-include-ext-1 boolean
  - overload-include-ext-2 boolean
  - overload-include-stub boolean
  - overload-on-boot
    - timeout number
  - preference number
  - reference-bandwidth number
  - rib-priority

```

configure service vpn ospf rib-priority high

```

- high
  - prefix-list reference
- router-id string
- rtr-adv-lsa-limit
- log-only boolean
- max-lsa-count number
- overload-timeout (number | keyword)
- warning-threshold number
- super-backbone boolean
- suppress-dn-bit boolean
- timers
  - incremental-spf-wait number
  - lsa-accumulate number
  - lsa-arrival number
  - lsa-generate
    - lsa-initial-wait number
    - lsa-second-wait number
    - max-lsa-wait number
  - redistribute-delay number
  - spf-wait
    - spf-initial-wait number
    - spf-max-wait number
    - spf-second-wait number
- unicast-import boolean
- vpn-domain
  - id string
  - type keyword
- vpn-tag number
- ospf3 number
  - admin-state keyword
  - advertise-router-capability keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - area string
    - advertise-router-capability boolean
    - apply-groups reference
    - apply-groups-exclude reference
  - area-range (ipv4-prefix | ipv6-prefix)
    - advertise boolean
    - apply-groups reference
    - apply-groups-exclude reference
  - blackhole-aggregate boolean
  - export-policy reference
  - import-policy reference
  - interface string
    - admin-state keyword
    - advertise-router-capability boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication
      - inbound reference
      - outbound reference
    - bfd-liveness
      - remain-down-on-failure boolean
    - dead-interval number
    - hello-interval number
    - interface-type keyword
    - load-balancing-weight number
    - loopfree-alternate
      - exclude boolean
      - policy-map
        - route-nh-template reference
    - lsa-filter-out keyword
  - metric number

```

configure service vprn ospf3 area interface mtu

```

- mtu number
- neighbor (ipv4-address-no-zone | ipv6-address-no-zone)
- passive boolean
- poll-interval number
- priority number
- retransmit-interval number
- rib-priority keyword
- transit-delay number
- key-rollover-interval number
- loopfree-alternate-exclude boolean
- nssa
  - area-range (ipv4-prefix | ipv6-prefix)
    - advertise boolean
    - apply-groups reference
    - apply-groups-exclude reference
  - originate-default-route
    - adjacency-check boolean
    - type-nssa boolean
  - redistribute-external boolean
  - summaries boolean
- stub
  - default-metric number
  - summaries boolean
- virtual-link string transit-area reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication
    - inbound reference
    - outbound reference
  - dead-interval number
  - hello-interval number
  - retransmit-interval number
  - transit-delay number
- export-limit
  - log-percent number
  - number number
- export-policy reference
- external-db-overflow
  - interval number
  - limit number
- external-preference number
- graceful-restart
  - helper-mode boolean
  - strict-lsa-checking boolean
- ignore-dn-bit boolean
- import-policy reference
- loopfree-alternate
  - exclude
    - prefix-policy reference
- multicast-import boolean
- overload boolean
- overload-include-ext-1 boolean
- overload-include-ext-2 boolean
- overload-include-stub boolean
- overload-on-boot
  - timeout number
- preference number
- reference-bandwidth number
- rib-priority
  - high
    - prefix-list reference
- router-id string
- rtr-adv-lsa-limit

```

configure service vprn ospf3 rtr-adv-lsa-limit log-only

- **log-only** *boolean*
- **max-lsa-count** *number*
- **overload-timeout** (*number* | *keyword*)
- **warning-threshold** *number*
- **suppress-dn-bit** *boolean*
- **timers**
  - **incremental-spf-wait** *number*
  - **lsa-accumulate** *number*
  - **lsa-arrival** *number*
  - **lsa-generate**
    - **lsa-initial-wait** *number*
    - **lsa-second-wait** *number*
    - **max-lsa-wait** *number*
  - **redistribute-delay** *number*
  - **spf-wait**
    - **spf-initial-wait** *number*
    - **spf-max-wait** *number*
    - **spf-second-wait** *number*
- **unicast-import** *boolean*
- **pcp**
  - **server** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **dual-stack-lite-address** *string*
    - **fwd-inside-router** *string*
    - **interface** *reference*
    - **policy** *reference*
- **pim**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **apply-to** *keyword*
  - **bgp-nh-override** *boolean*
  - **import**
    - **join-policy** *reference*
    - **register-policy** *reference*
  - **interface** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **assert-period** *number*
    - **bfd-liveness**
      - **ipv4** *boolean*
      - **ipv6** *boolean*
    - **bsm-check-rtr-alert** *boolean*
    - **hello-interval** *number*
    - **hello-multiplier** *number*
    - **improved-assert** *boolean*
    - **instant-prune-echo** *boolean*
    - **ipv4**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **monitor-oper-group**
        - **name** *reference*
        - **operation** *keyword*
        - **priority-delta** *number*
      - **multicast** *boolean*
    - **ipv6**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **monitor-oper-group**
        - **name** *reference*

configure service vprn pim interface ipv6 monitor-oper-group operation

```

    - operation keyword
    - priority-delta number
  - multicast boolean
- max-groups number
- mcac
  - bandwidth
    - mandatory (number | keyword)
    - total (number | keyword)
  - interface-policy reference
- mc-constraints
  - admin-state keyword
  - level number
    - apply-groups reference
    - apply-groups-exclude reference
    - bandwidth number
  - number-down number
    - apply-groups reference
    - apply-groups-exclude reference
    - level number
  - use-lag-port-weight boolean
  - policy reference
- multicast-senders keyword
- p2mp-ldp-tree-join
  - ipv4 boolean
  - ipv6 boolean
- priority number
- sticky-dr
  - priority number
- three-way-hello boolean
- tracking-support boolean
- ipv4
  - admin-state keyword
  - grt-extranet
    - any
    - group-prefix (ipv4-prefix | ipv6-prefix)
      - apply-groups reference
      - apply-groups-exclude reference
      - starg boolean
  - rpf-table keyword
  - ssm-assert-compatible-mode boolean
  - ssm-default-range boolean
- ipv6
  - admin-state keyword
  - rpf-table keyword
  - ssm-default-range boolean
- mc-ecmp-balance boolean
- mc-ecmp-balance-hold number
- mc-ecmp-hashing
  - rebalance boolean
- mtu-over-head number
- non-dr-attract-traffic boolean
- rp
  - bootstrap
    - export reference
    - import reference
  - ipv4
    - anycast string rp-set-peer string
    - auto-rp-discovery boolean
    - bsr-candidate
      - address string
      - admin-state keyword
      - hash-mask-len number
      - priority number
    - candidate boolean

```

## configure service vprn pim rp ipv4 mapping-agent

- **mapping-agent** *boolean*
- **rp-candidate**
  - **address** *string*
  - **admin-state** *keyword*
  - **group-range** *string*
  - **holdtime** *number*
  - **priority** *number*
- **static**
  - **address** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **group-prefix** *string*
    - **override** *boolean*
- **ipv6**
  - **anycast** *string* **rp-set-peer** *string*
  - **bsr-candidate**
    - **address** *string*
    - **admin-state** *keyword*
    - **hash-mask-len** *number*
    - **priority** *number*
  - **embedded-rp**
    - **admin-state** *keyword*
    - **group-range** *string*
  - **rp-candidate**
    - **address** *string*
    - **admin-state** *keyword*
    - **group-range** *string*
    - **holdtime** *number*
    - **priority** *number*
  - **static**
    - **address** *string*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **group-prefix** *string*
      - **override** *boolean*
- **spt-switchover** (*ipv4-prefix | ipv6-prefix*)
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **threshold** (*number | keyword*)
- **ssm-groups**
  - **group-range** (*ipv4-prefix | ipv6-prefix*)
- **radius**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **proxy** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **attribute-matching**
      - **entry** *number*
        - **accounting-server-policy** *string*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **authentication-server-policy** *string*
        - **prefix-string** *string*
        - **suffix-string** *string*
      - **type** *number*
      - **vendor** (*number | keyword*)
  - **cache**
    - **admin-state** *keyword*
    - **key**
      - **attribute-type** *number*
      - **packet-type** *keyword*
      - **vendor** (*number | keyword*)

## configure service vprn radius proxy cache timeout

- **timeout** *number*
- **track-accounting**
  - **accounting-off** *boolean*
  - **accounting-on** *boolean*
  - **interim-update** *boolean*
  - **start** *boolean*
  - **stop** *boolean*
- **track-authentication**
  - **accept** *boolean*
- **track-delete-hold-time** *number*
- **defaults**
  - **accounting-server-policy** *string*
  - **authentication-server-policy** *string*
- **description** *string*
- **interface** *reference*
- **load-balance-key**
  - **attribute-1**
    - **type** *number*
    - **vendor** (*number* | *keyword*)
  - **attribute-2**
    - **type** *number*
    - **vendor** (*number* | *keyword*)
  - **attribute-3**
    - **type** *number*
    - **vendor** (*number* | *keyword*)
  - **attribute-4**
    - **type** *number*
    - **vendor** (*number* | *keyword*)
  - **attribute-5**
    - **type** *number*
    - **vendor** (*number* | *keyword*)
- **source-ip-udp**
- **purpose** *keyword*
- **python-policy** *reference*
- **secret** *string*
- **send-accounting-response** *boolean*
- **wlan-gw**
  - **address** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **ipv6-address** *string*
- **wlan-gw-group** *reference*
- **server** *string*
  - **accept-coa** *boolean*
  - **acct-port** *number*
  - **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **auth-port** *number*
  - **description** *string*
  - **pending-requests-limit** *number*
  - **python-policy** *reference*
  - **secret** *string*
- **reassembly**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **nat-group** *number*
  - **to-base-network** *boolean*
- **redundant-interface** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **hold-time**



configure service vprn redundant-interface hold-time ipv4

```

- ipv4
  - down
    - init-only boolean
    - seconds number
  - up
    - seconds number
- ip-mtu number
- ipv4
  - primary
    - address string
    - apply-groups reference
    - apply-groups-exclude reference
    - prefix-length number
    - remote-ip string
  - spoke-sdp string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - control-word boolean
    - description string
    - egress
      - filter
        - ip reference
        - vc-label number
    - ingress
      - filter
        - ip reference
        - vc-label number
- rip
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication-key string
  - authentication-type keyword
  - bfd-liveness boolean
  - check-zero boolean
  - description string
  - export-limit
    - log-percent number
    - number number
  - export-policy reference
  - group string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication-key string
    - authentication-type keyword
    - bfd-liveness boolean
    - check-zero boolean
    - description string
    - export-policy reference
    - import-policy reference
    - message-size number
    - metric-in number
    - metric-out number
    - neighbor string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - authentication-key string
      - authentication-type keyword
      - bfd-liveness boolean
      - check-zero boolean
      - description string

```

## configure service vprn rip group neighbor export-policy

- **export-policy** *reference*
- **import-policy** *reference*
- **message-size** *number*
- **metric-in** *number*
- **metric-out** *number*
- **preference** *number*
- **receive** *keyword*
- **send** *keyword*
- **split-horizon** *boolean*
- **timers**
  - **flush** *number*
  - **timeout** *number*
  - **update** *number*
- **unicast-address** *string*
- **preference** *number*
- **receive** *keyword*
- **send** *keyword*
- **split-horizon** *boolean*
- **timers**
  - **flush** *number*
  - **timeout** *number*
  - **update** *number*
- **import-policy** *reference*
- **message-size** *number*
- **metric-in** *number*
- **metric-out** *number*
- **preference** *number*
- **propagate-metric** *boolean*
- **receive** *keyword*
- **send** *keyword*
- **split-horizon** *boolean*
- **timers**
  - **flush** *number*
  - **timeout** *number*
  - **update** *number*
- **ripng**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **bfd-liveness** *boolean*
  - **check-zero** *boolean*
  - **description** *string*
  - **export-limit**
    - **log-percent** *number*
    - **number** *number*
  - **export-policy** *reference*
  - **group** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **bfd-liveness** *boolean*
    - **check-zero** *boolean*
    - **description** *string*
    - **export-policy** *reference*
    - **import-policy** *reference*
    - **message-size** *number*
    - **metric-in** *number*
    - **metric-out** *number*
    - **neighbor** *reference*
      - **admin-state** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **bfd-liveness** *boolean*
      - **check-zero** *boolean*

configure service vprn ripng group neighbor description

```

- description string
- export-policy reference
- import-policy reference
- message-size number
- metric-in number
- metric-out number
- preference number
- receive keyword
- send keyword
- split-horizon boolean
- timers
  - flush number
  - timeout number
  - update number
- unicast-address string
- preference number
- receive keyword
- send keyword
- split-horizon boolean
- timers
  - flush number
  - timeout number
  - update number
- import-policy reference
- message-size number
- metric-in number
- metric-out number
- preference number
- receive keyword
- send keyword
- split-horizon boolean
- timers
  - flush number
  - timeout number
  - update number
- router-id string
- segment-routing-v6 number
- apply-groups reference
- apply-groups-exclude reference
- locator reference
  - apply-groups reference
  - apply-groups-exclude reference
  - function
    - end-dt4
      - value number
    - end-dt46
      - value number
    - end-dt6
      - value number
- micro-segment-locator reference
  - apply-groups reference
  - apply-groups-exclude reference
  - function
    - udt4
      - value number
    - udt46
      - value number
    - udt6
      - value number
- selective-fib boolean
- service-id number
- sfm-overload
  - holdoff-time number
- sgt-qos

```

configure service vprn sgt-qos dot1p

- **dot1p**
  - **application** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **dot1p** (*keyword | number*)
- **dscp**
  - **application** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **dscp** (*keyword | number*)
  - **dscp-map** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **fc** *keyword*
- **snmp**
  - **access** *boolean*
  - **community** *string*
    - **access-permissions** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **source-access-list** *reference*
    - **version** *keyword*
- **source-address**
  - **ipv4** *keyword*
    - **address** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **interface-name** *string*
  - **ipv6** *keyword*
    - **address** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
- **spoke-sdp** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
- **static-routes**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **hold-down**
    - **initial** *number*
    - **max-value** *number*
    - **multiplier** *number*
  - **route** (*ipv4-prefix | ipv6-prefix*) **route-type** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **backup-tag** *number*
    - **blackhole**
      - **admin-state** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **community** *string*
      - **description** *string*
      - **generate-icmp** *boolean*
      - **metric** *number*
      - **preference** *number*
      - **prefix-list**
        - **flag** *keyword*
        - **name** *reference*
      - **tag** *number*
    - **community** *string*
    - **grt**
      - **admin-state** *keyword*
      - **apply-groups** *reference*

configure service vpn static-routes route grt apply-groups-exclude

- **apply-groups-exclude** *reference*
- **description** *string*
- **metric** *number*
- **preference** *number*
- **indirect** (*ipv4-address-no-zone | ipv6-address-no-zone*)
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **community** *string*
- **cpe-check** (*ipv4-address-no-zone | ipv6-address-no-zone*)
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **drop-count** *number*
  - **interval** *number*
  - **log** *boolean*
  - **padding-size** *number*
- **description** *string*
- **destination-class** *number*
- **metric** *number*
- **preference** *number*
- **prefix-list**
  - **flag** *keyword*
  - **name** *reference*
- **qos**
  - **forwarding-class** *keyword*
  - **priority** *keyword*
- **source-class** *number*
- **tag** *number*
- **interface** *string*
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **community** *string*
- **cpe-check** (*ipv4-address-no-zone | ipv6-address-no-zone*)
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **drop-count** *number*
  - **interval** *number*
  - **log** *boolean*
  - **padding-size** *number*
- **description** *string*
- **destination-class** *number*
- **load-balancing-weight** *number*
- **metric** *number*
- **preference** *number*
- **prefix-list**
  - **flag** *keyword*
  - **name** *reference*
- **qos**
  - **forwarding-class** *keyword*
  - **priority** *keyword*
- **source-class** *number*
- **tag** *number*
- **ipsec-tunnel** *string*
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **community** *string*
- **description** *string*
- **destination-class** *number*
- **metric** *number*
- **preference** *number*
- **qos**
  - **forwarding-class** *keyword*

configure service vprn static-routes route ipsec-tunnel qos priority

- **priority** *keyword*
- **source-class** *number*
- **tag** *number*
- **next-hop** (*ipv4-address-with-zone | ipv6-address-with-zone*)
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **backup-next-hop**
    - **address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
  - **bfd-liveness** *boolean*
  - **community** *string*
  - **cpe-check** (*ipv4-address-no-zone | ipv6-address-no-zone*)
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **drop-count** *number*
    - **interval** *number*
    - **log** *boolean*
    - **padding-size** *number*
  - **description** *string*
  - **destination-class** *number*
  - **load-balancing-weight** *number*
  - **metric** *number*
  - **preference** *number*
  - **prefix-list**
    - **flag** *keyword*
    - **name** *reference*
  - **qos**
    - **forwarding-class** *keyword*
    - **priority** *keyword*
    - **source-class** *number*
    - **tag** *number*
    - **validate-next-hop** *boolean*
  - **tag** *number*
- **subscriber-interface** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **fwd-service** *reference*
  - **fwd-subscriber-interface** *reference*
  - **group-interface** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **bonding-parameters**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **connection** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
    - **service** *string*
  - **fpe** *reference*
  - **multicast**
    - **connection** (*number | keyword*)
- **brg**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **authenticated-brg-only** *boolean*
  - **default-brg-profile** *reference*
- **cflowd-parameters**
  - **sampling** *keyword*
    - **apply-groups** *reference*

configure service vprn subscriber-interface group-interface cflowd-parameters sampling apply-groups-exclude

```

    - apply-groups-exclude reference
    - direction keyword
    - sample-profile (keyword | number)
    - type keyword
- data-trigger
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- description string
- dynamic-routes-track-srrp
  - hold-time number
- gtp-parameters
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - fpe reference
- gx-policy reference
- ingress
  - policy-accounting reference
- ingress-stats boolean
- ip-mtu number
- ipoe-linking
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - gratuitous-router-advertisement boolean
  - shared-circuit-id boolean
- ipoe-session
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - force-auth
    - cid-change boolean
    - rid-change boolean
  - ipoe-session-policy reference
  - min-auth-interval (keyword | number)
  - radius-session-timeout keyword
  - sap-session-limit number
  - session-limit number
  - stateless-redundancy boolean
  - user-db reference
- ipv4
  - arp-host
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - host-limit number
    - min-auth-interval number
    - sap-host-limit number
  - bfd
    - admin-state keyword
    - echo-receive number
    - multiplier number
    - receive number
    - transmit-interval number
    - type keyword
  - dhcp
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - client-applications
      - dhcp boolean
      - ppp boolean

```

configure service vprn subscriber-interface group-interface ipv4 dhcp description

```

- description string
- filter reference
- gi-address string
- lease-populate
  - l2-header
    - mac string
    - max-leases number
- match-circuit-id boolean
- offer-selection
  - client-mac
    - discover-delay number
    - mac-address keyword
  - discover-delay number
  - server string
    - apply-groups reference
    - apply-groups-exclude reference
    - discover-delay number
- option-82
  - action keyword
  - circuit-id
    - ascii-tuple
    - ifindex
    - none
    - sap-id
    - vlan-ascii-tuple
  - remote-id
    - ascii-string string
    - mac
    - none
  - vendor-specific-option
    - client-mac-address boolean
    - pool-name boolean
    - sap-id boolean
    - service-id boolean
    - string string
    - system-id boolean
- proxy-server
  - admin-state keyword
  - emulated-server string
  - lease-time
    - radius-override boolean
    - value number
- python-policy reference
- relay-proxy
  - release-update-src-ip boolean
  - siaddr-override string
- release-include-gi-address boolean
- server string
- src-ip-addr keyword
- trusted boolean
- user-db reference
- icmp
  - mask-reply boolean
  - param-problem
    - admin-state keyword
    - number number
    - seconds number
  - redirects
    - admin-state keyword
    - number number
    - seconds number
  - ttl-expired
    - admin-state keyword
    - number number

```



configure service vprn subscriber-interface group-interface ipv4 icmp ttl-expired seconds

```

    - seconds number
    - use-matching-address boolean
  - unreachable
    - admin-state keyword
    - number number
    - seconds number
  - ignore-df-bit boolean
  - neighbor-discovery
    - local-proxy-arp boolean
    - populate boolean
    - proxy-arp-policy reference
    - remote-proxy-arp boolean
    - timeout number
  - qos-route-lookup keyword
  - urpf-check
    - mode keyword
- ipv6
  - allow-multiple-wan-addresses boolean
  - auto-reply
    - neighbor-solicitation boolean
    - router-solicitation boolean
  - bfd
    - admin-state keyword
    - echo-receive number
    - multiplier number
    - receive number
    - transmit-interval number
    - type keyword
  - dhcp6
    - apply-groups reference
    - apply-groups-exclude reference
    - filter reference
    - option
      - apply-groups reference
      - apply-groups-exclude reference
      - interface-id
        - ascii-tuple
        - if-index
        - sap-id
        - string string
      - remote-id boolean
    - override-slaac boolean
  - pd-managed-route
    - next-hop keyword
  - proxy-server
    - admin-state keyword
    - client-applications
      - dhcp boolean
      - ppp boolean
    - preferred-lifetime (number | keyword)
    - rebind-timer number
    - renew-timer number
    - server-id
      - apply-groups reference
      - apply-groups-exclude reference
      - duid-en-ascii string
      - duid-en-hex string
      - duid-ll
    - valid-lifetime (number | keyword)
  - python-policy reference
  - relay
    - admin-state keyword
    - advertise-selection
      - client-mac

```

configure service vprn subscriber-interface group-interface ipv6 dhcp6 relay advertise-selection client-mac mac-address

```

    - mac-address keyword
    - preference-option
      - value number
    - solicit-delay number
  - preference-option
    - value number
  - server string
    - apply-groups reference
    - apply-groups-exclude reference
    - preference-option
      - value number
    - solicit-delay number
    - solicit-delay number
  - client-applications
    - dhcp boolean
    - ppp boolean
  - description string
  - lease-split
    - admin-state keyword
    - valid-lifetime number
  - link-address string
  - server string
  - source-address string
- snooping
  - admin-state keyword
- user-db reference
- user-ident keyword
- ipoe-bridged-mode boolean
- neighbor-discovery
  - apply-groups reference
  - apply-groups-exclude reference
  - dad-snooping boolean
  - neighbor-limit number
- qos-route-lookup keyword
- router-advertisements
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - force-mcast keyword
  - max-advertisement-interval number
  - min-advertisement-interval number
  - options
    - current-hop-limit number
    - dns
      - include-rdnss boolean
      - rdns-lifetime (number | keyword)
  - managed-configuration boolean
  - mtu (number | keyword)
  - other-stateful-configuration boolean
  - reachable-time number
  - retransmit-timer number
  - router-lifetime (number | keyword)
- prefix-options
  - autonomous boolean
  - on-link boolean
  - preferred-lifetime (number | keyword)
  - valid-lifetime (number | keyword)
- router-solicit
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - inactivity-timer (number | keyword)
  - min-auth-interval number
  - user-db reference

```

configure service vprn subscriber-interface group-interface ipv6 urpf-check

```

- urpf-check
  - mode keyword
- local-address-assignment
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - ipv4
    - client-applications
      - ipoe boolean
      - ppp boolean
    - default-pool string
    - server reference
  - ipv6
    - client-applications
      - ipoe-slaac boolean
      - ipoe-wan boolean
      - ppp-slaac boolean
    - server reference
- mac string
- nasreq-auth-policy reference
- oper-up-while-empty boolean
- pppoe
  - admin-state keyword
  - anti-spoof keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - dhcp-client
    - client-id keyword
  - policy reference
  - python-policy reference
  - sap-session-limit number
  - session-limit number
  - user-db reference
- radius-auth-policy reference
- redundant-interface reference
- sap string
  - accounting-policy reference
  - admin-state keyword
  - anti-spoof keyword
  - app-profile reference
  - apply-groups reference
  - apply-groups-exclude reference
  - calling-station-id string
  - collect-stats boolean
  - cpu-protection
    - eth-cfm-monitoring
      - aggregate
      - car
    - ip-src-monitoring
    - mac-monitoring
    - policy-id reference
  - default-host
    - ipv4 reference prefix-length number
      - apply-groups reference
      - apply-groups-exclude reference
      - next-hop string
    - ipv6 string prefix-length number
      - apply-groups reference
      - apply-groups-exclude reference
      - next-hop string
  - description string
  - dist-cpu-protection reference
- egress

```

configure service vprn subscriber-interface group-interface sap egress agg-rate

- **agg-rate**
  - **adaptation-rule** *keyword*
  - **burst-limit** (*number* | *keyword*)
  - **limit-unused-bandwidth** *boolean*
  - **queue-frame-based-accounting** *boolean*
  - **rate** *number*
- **filter**
  - **ip** *reference*
  - **ipv6** *reference*
- **qos**
  - **policer-control-policy**
    - **policy-name** *reference*
  - **qinq-mark-top-only** *boolean*
  - **sap-egress**
    - **policy-name** *reference*
  - **scheduler-policy**
    - **policy-name** *reference*
- **eth-cfm**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **collect-lmm-fc-stats**
    - **fc** *keyword*
    - **fc-in-profile** *keyword*
  - **collect-lmm-stats** *boolean*
  - **mep** *md-admin-name* *reference* *ma-admin-name* *reference* *mep-id* *number*
    - **admin-state** *keyword*
  - **ais** *boolean*
  - **alarm-notification**
    - **fng-alarm-time** *number*
    - **fng-reset-time** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **ccm** *boolean*
  - **ccm-ltm-priority** *number*
  - **ccm-padding-size** *number*
  - **csf**
    - **multiplier** *decimal-number*
  - **description** *string*
  - **eth-test**
    - **bit-error-threshold** *number*
    - **test-pattern**
      - **crc-tlv** *boolean*
      - **pattern** *keyword*
  - **fault-propagation** *keyword*
  - **grace**
    - **eth-ed**
      - **max-rx-defect-window** *number*
      - **priority** *number*
      - **rx-eth-ed** *boolean*
      - **tx-eth-ed** *boolean*
    - **eth-vsm-grace**
      - **rx-eth-vsm-grace** *boolean*
      - **tx-eth-vsm-grace** *boolean*
  - **low-priority-defect** *keyword*
  - **one-way-delay-threshold** *number*
  - **sqlch-ingress-levels** *number*
- **fwd-wholesale**
  - **pppoe-service** *reference*
- **host-admin-state** *keyword*
- **host-lockout-policy** *reference*
- **igmp-host-tracking**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **expiry-time** *number*

configure service vprn subscriber-interface group-interface sap igmp-host-tracking import-policy

```

- import-policy reference
- maximum-number-group-sources number
- maximum-number-groups number
- maximum-number-sources number
- router-alert-check boolean
- ingress
- filter
  - ip reference
  - ipv6 reference
- qos
  - match-qinq-dot1p keyword
  - policer-control-policy
    - policy-name reference
  - sap-ingress
    - policy-name reference
    - queuing-type keyword
  - scheduler-policy
    - policy-name reference
- lag
  - link-map-profile number
  - per-link-hash
    - class number
    - weight number
- monitor-oper-group reference
- multi-service-site reference
- oper-group reference
- static-host
  - ipv4 string mac string
    - admin-state keyword
    - ancp-string string
    - app-profile
      - profile reference
      - scope keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - int-dest-id string
    - managed-route string
      - apply-groups reference
      - apply-groups-exclude reference
    - cpe-check
      - apply-groups reference
      - apply-groups-exclude reference
      - destination-ip-address (ipv4-address-no-zone | ipv6-address-no-
no-zone)
        - drop-count number
        - failed-action
          - metric number
          - preference number
          - tag number
          - withdraw boolean
        - interval number
        - log boolean
        - padding-size number
        - source-ip-address (ipv4-address-no-zone | ipv6-address-no-
zone)
          - timeout number
    - metric number
    - preference number
    - tag number
  - rip-policy reference
  - shcv
  - sla-profile reference
  - sub-profile reference
  - subscriber-id

```

configure service vprn subscriber-interface group-interface sap static-host ipv4 subscriber-id string

```

    - string string
    - use-sap-id
  - ipv6 string mac string
    - admin-state keyword
    - ancp-string string
    - app-profile
      - profile reference
      - scope keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - int-dest-id string
    - mac-linking string
    - managed-route string
      - apply-groups reference
      - apply-groups-exclude reference
    - cpe-check
      - apply-groups reference
      - apply-groups-exclude reference
      - destination-ip-address (ipv4-address-no-zone | ipv6-address-
no-zone)
        - drop-count number
        - failed-action
          - metric number
          - preference number
          - tag number
          - withdraw boolean
        - interval number
        - log boolean
        - padding-size number
        - source-ip-address (ipv4-address-no-zone | ipv6-address-no-
zone)
          - timeout number
          - metric number
          - preference number
          - tag number
    - retail-svc-id number
    - shcv
    - sla-profile reference
    - sub-profile reference
    - subscriber-id
      - string string
      - use-sap-id
  - mac-learning
    - data-triggered boolean
    - single-mac boolean
  - sub-sla-mgmt
  - admin-state keyword
  - defaults
    - app-profile reference
    - int-dest-id
      - string string
      - top-q-tag
    - sla-profile reference
    - sub-profile reference
    - subscriber-id
      - auto-id
      - sap-id
      - string string
  - single-sub-parameters
    - non-sub-traffic
      - app-profile reference
      - sla-profile reference
      - sub-profile reference
      - subscriber-id string

```

configure service vprn subscriber-interface group-interface sap sub-sla-mgmt single-sub-parameters profiled-traffic-only

```

    - profiled-traffic-only boolean
    - sub-ident-policy reference
    - subscriber-limit (keyword | number)
- sap-parameters
  - anti-spoof keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - sub-sla-mgmt
    - defaults
      - app-profile reference
      - sla-profile reference
      - sub-profile reference
      - subscriber-id
        - auto-id
        - string string
      - sub-ident-policy reference
  - shcv-policy reference
  - shcv-policy-ipv4 reference
  - shcv-policy-ipv6 reference
  - srrp number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd-liveness
    - apply-groups reference
    - apply-groups-exclude reference
    - dest-ip string
    - interface-name string
    - service-name string
  - description string
  - gw-mac string
  - keep-alive-interval number
  - message-path reference
  - monitor-oper-group
    - group-name reference
    - priority-step number
  - one-garp-per-sap boolean
  - policy reference
  - preempt boolean
  - priority number
  - send-fib-population-packets keyword
  - suppress-aa-sub boolean
  - tos-marking-state keyword
  - type keyword
- wlan-gw
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - purpose
      - xconnect boolean
  - gateway-router string
  - group-encryption
    - encryption-keygroup-inbound reference
    - encryption-keygroup-outbound reference
  - l2-ap
    - access-point string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - encap-type keyword

```

configure service vprn subscriber-interface group-interface wlan-gw l2-ap access-point epipe-sap-template

```

    - epipe-sap-template reference
    - auto-sub-id-fmt keyword
    - default-encap-type keyword
  - lanext
    - max-bd number
  - learn-ap-mac
    - delay-auth boolean
  - mobility
    - hold-time number
    - inter-tunnel-type boolean
    - inter-vlan boolean
    - trigger
      - control boolean
      - data boolean
      - iapp boolean
  - oper-down-on-group-degrade boolean
  - tcp-mss-adjust number
  - tunnel-egress-qos
    - admin-state keyword
    - agg-rate-limit (number | keyword)
    - granularity keyword
    - hold-time (number | keyword)
    - multi-client-only boolean
    - qos reference
    - scheduler-policy reference
  - tunnel-encaps
    - learn-l2tp-cookie (keyword | hex-string)
  - vlan-range string
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication
      - hold-time number
      - local
        - coa-policy reference
        - default-ue-state keyword
      - on-control-plane boolean
      - policy reference
      - vlan-mismatch-timeout number
  - data-triggered-ue-creation
    - admin-state keyword
    - arp boolean
    - create-proxy-cache-entry
      - mac-format string
      - proxy-server
        - name string
        - router-instance string
  - dhcp4
    - admin-state keyword
    - dns string
    - l2-aware-ip-address (ipv4-unicast-address | keyword)
    - lease-time
      - active number
      - initial number
    - nbns string
  - dhcp6
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - preferred-lifetime
      - active number
      - initial number
    - valid-lifetime
      - active number
      - initial number

```



configure service vprn subscriber-interface group-interface wlan-gw vlan-range dsm

```

- dsm
- accounting-policy reference
- accounting-update
  - interval number
- admin-state keyword
- application-assurance
  - accounting-statistics boolean
  - profile reference
  - url-parameter string
- apply-groups reference
- apply-groups-exclude reference
- egress
  - policer reference
- ingress
  - ip-filter reference
  - policer reference
  - soft-quota-exhausted-filter reference
- one-time-redirect
  - port number
  - url string
- volume-quota-direction keyword
- extension string
- http-redirect-policy reference
- idle-timeout-action keyword
- l2-service
  - admin-state keyword
  - description string
  - service reference
- nat-policy reference
- retail-service string
- slaac
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - preferred-lifetime
    - active number
    - initial number
  - valid-lifetime
    - active number
    - initial number
- vrgw
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - brg
    - authenticated-brg-only boolean
    - default-brg-profile reference
  - lanext
    - access
      - max-mac number
      - multi-access boolean
      - policer reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - assistive-address-resolution boolean
    - bd-mac-prefix string
    - mac-translation boolean
    - network
      - admin-state keyword
      - max-mac number
      - policer reference
- xconnect
  - accounting

```

configure service vprn subscriber-interface group-interface wlan-gw vlan-range xconnect accounting mobility-updates

```

    - mobility-updates boolean
    - policy reference
    - update-interval number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- wlan-gw-group reference
- wpp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - initial
    - app-profile reference
    - sla-profile reference
    - sub-profile reference
  - lease-time number
  - portal
    - name string
    - portal-group reference
    - router-instance string
  - restore-to-initial-on-disconnect boolean
  - triggered-hosts boolean
  - user-db reference
- hold-time
- ipv4
  - down
    - init-only boolean
    - seconds number
  - up
    - seconds number
- ipv6
  - down
    - init-only boolean
    - seconds number
  - up
    - seconds number
- ipoe-linking
  - apply-groups reference
  - apply-groups-exclude reference
  - gratuitous-router-advertisement boolean
- ipoe-session
  - apply-groups reference
  - apply-groups-exclude reference
  - session-limit number
- ipv4
  - address string
  - apply-groups reference
  - apply-groups-exclude reference
  - gateway string
  - holdup-time number
  - populate-host-routes boolean
  - prefix-length number
  - track-srrp number
- allow-unmatching-subnets boolean
- arp-host
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - host-limit number
- bfd
  - admin-state keyword
  - echo-receive number
  - multiplier number
  - receive number

```

configure service vprn subscriber-interface ipv4 bfd transmit-interval

- **transmit-interval** *number*
- **type** *keyword*
- **default-dns** *string*
- **dhcp**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **client-applications**
    - **dhcp** *boolean*
    - **ppp** *boolean*
  - **description** *string*
  - **gi-address** *string*
  - **lease-populate**
    - **max-leases** *number*
  - **offer-selection**
    - **client-mac**
      - **discover-delay** *number*
      - **mac-address** *keyword*
    - **discover-delay** *number*
    - **server** *string*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **discover-delay** *number*
  - **option-82**
    - **vendor-specific-option**
      - **client-mac-address** *boolean*
      - **sap-id** *boolean*
      - **service-id** *boolean*
      - **string** *string*
      - **system-id** *boolean*
  - **proxy-server**
    - **admin-state** *keyword*
    - **emulated-server** *string*
    - **lease-time**
      - **radius-override** *boolean*
      - **value** *number*
  - **python-policy** *reference*
  - **relay-proxy**
    - **release-update-src-ip** *boolean*
    - **siaddr-override** *string*
  - **release-include-gi-address** *boolean*
  - **server** *string*
  - **src-ip-addr** *keyword*
  - **virtual-subnet** *boolean*
- **export-host-routes** *boolean*
- **unnumbered**
  - **ip-address** *string*
  - **ip-int-name** *string*
- **ipv6**
  - **address** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **host-type** *keyword*
    - **prefix-length** *number*
  - **allow-multiple-wan-addresses** *boolean*
  - **allow-unmatching-prefixes** *boolean*
  - **bfd**
    - **admin-state** *keyword*
    - **echo-receive** *number*
    - **multiplier** *number*
    - **receive** *number*
    - **transmit-interval** *number*
    - **type** *keyword*
  - **default-dns** *string*

configure service vprn subscriber-interface ipv6 delegated-prefix-length

- **delegated-prefix-length** (*number* | *keyword*)
- **dhcp6**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **override-slaac** *boolean*
  - **pd-managed-route**
    - **next-hop** *keyword*
  - **proxy-server**
    - **admin-state** *keyword*
    - **client-applications**
      - **dhcp** *boolean*
      - **ppp** *boolean*
    - **preferred-lifetime** (*number* | *keyword*)
    - **rebind-timer** *number*
    - **renew-timer** *number*
    - **server-id**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **duid-en-ascii** *string*
      - **duid-en-hex** *string*
      - **duid-ll**
    - **valid-lifetime** (*number* | *keyword*)
  - **python-policy** *reference*
  - **relay**
    - **admin-state** *keyword*
    - **advertise-selection**
      - **client-mac**
        - **mac-address** *keyword*
        - **preference-option**
          - **value** *number*
        - **solicit-delay** *number*
      - **preference-option**
        - **value** *number*
      - **server** *string*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **preference-option**
          - **value** *number*
        - **solicit-delay** *number*
      - **solicit-delay** *number*
    - **client-applications**
      - **dhcp** *boolean*
      - **ppp** *boolean*
    - **description** *string*
    - **lease-split**
      - **admin-state** *keyword*
      - **valid-lifetime** *number*
    - **link-address** *string*
    - **server** *string*
    - **source-address** *string*
  - **ipoe-bridged-mode** *boolean*
  - **link-local-address**
    - **address** *string*
  - **prefix** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **holdup-time** *number*
    - **host-type** *keyword*
    - **track-srrp** *number*
  - **router-advertisements**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **force-mcast** *keyword*

configure service vprn subscriber-interface ipv6 router-advertisements max-advertisement-interval

- **max-advertisement-interval** *number*
- **min-advertisement-interval** *number*
- **options**
  - **current-hop-limit** *number*
  - **dns**
    - **include-rdnss** *boolean*
    - **rdnss-lifetime** (*number* | *keyword*)
  - **managed-configuration** *boolean*
  - **mtu** (*number* | *keyword*)
  - **other-stateful-configuration** *boolean*
  - **reachable-time** *number*
  - **retransmit-timer** *number*
  - **router-lifetime** (*number* | *keyword*)
- **prefix-options**
  - **autonomous** *boolean*
  - **on-link** *boolean*
  - **preferred-lifetime** (*number* | *keyword*)
  - **valid-lifetime** (*number* | *keyword*)
- **router-solicit**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **inactivity-timer** (*number* | *keyword*)
- **local-address-assignment**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **ipv4**
  - **client-applications**
    - **ppp** *boolean*
  - **default-pool** *string*
  - **server** *reference*
- **ipv6**
  - **client-applications**
    - **ipoe-slaac** *boolean*
    - **ipoe-wan** *boolean*
    - **ppp-slaac** *boolean*
  - **server** *reference*
- **pppoe**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **session-limit** *number*
- **private-retail-subnets** *boolean*
- **wan-mode** *keyword*
- **wlan-gw**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **pool-manager**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **dhcp6-client**
  - **dhcpv4-nat**
    - **admin-state** *keyword*
    - **link-address** *string*
    - **pool-name** *string*
  - **ia-na**
    - **admin-state** *keyword*
    - **link-address** *string*
    - **pool-name** *string*
  - **lease-query**
    - **max-retries** *number*
  - **servers** *string*
  - **slaac**
    - **admin-state** *keyword*

configure service vprn subscriber-interface wlan-gw pool-manager dhcp6-client slaac link-address

```

    - link-address string
    - pool-name string
    - source-ip (keyword | ipv6-address)
  - watermarks
    - high number
    - low number
  - wlan-gw-group reference
  - redundancy
    - admin-state keyword
    - export string
    - monitor string
- subscriber-mgmt
  - apply-groups reference
  - apply-groups-exclude reference
  - multi-chassis-shunt-id number
  - up-resiliency
    - monitor-oper-group reference
    - apply-groups reference
    - apply-groups-exclude reference
    - health-drop number
- ttl-propagate
  - local keyword
  - transit keyword
- twamp-light
  - apply-groups reference
  - apply-groups-exclude reference
  - reflector
    - admin-state keyword
    - allow-ipv6-udp-checksum-zero boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - prefix (ipv4-prefix | ipv6-prefix)
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
    - type keyword
    - udp-port number
- video-interface string
  - accounting-policy reference
  - address string
  - adi
    - scte30
      - ad-server string
      - local-address
        - apply-groups reference
        - apply-groups-exclude reference
        - control string
        - data string
    - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - channel string source string
    - apply-groups reference
    - apply-groups-exclude reference
    - channel-name string
    - description string
    - scte35-action keyword
  - zone-channel string zone-source string
    - adi-channel-name string
    - apply-groups reference
    - apply-groups-exclude reference
- cpu-protection reference
- description string

```

configure service vprn video-interface multicast-service

```

- multicast-service number
- output-format keyword
- rt-client
  - apply-groups reference
  - apply-groups-exclude reference
  - src-address string
- video-sap
  - apply-groups reference
  - apply-groups-exclude reference
  - egress
    - apply-groups reference
    - apply-groups-exclude reference
    - filter
      - ip reference
    - qos
      - policy-name reference
  - ingress
    - apply-groups reference
    - apply-groups-exclude reference
    - filter
      - ip reference
    - qos
      - policy-name reference
  - video-group-id reference
- vprn-type keyword
- vxlan
  - tunnel-termination (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - fpe-id reference
- weighted-ecmp keyword
- wlan-gw
  - apply-groups reference
  - apply-groups-exclude reference
  - distributed-subscriber-mgmt
    - apply-groups reference
    - apply-groups-exclude reference
    - ipv6-tcp-mss-adjust number
  - mobility-triggered-accounting
    - admin-state keyword
    - hold-down number
    - include-counters boolean
  - xconnect
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - tunnel-source-ip string
    - wlan-gw-group reference
- wpp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - portal string
    - ack-auth-retry-count number
    - address (ipv4-address-no-zone | ipv6-address-no-zone)
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - ntf-logout-retry-count number
    - port-format keyword
    - retry-interval number
    - secret string
    - version number

```

### 3.43.1 service command descriptions

#### **service**

|            |                                  |
|------------|----------------------------------|
| Synopsis   | Enter the <b>service</b> context |
| Context    | <b>configure service</b>         |
| Tree       | <a href="#">service</a>          |
| Introduced | 16.0.R1                          |
| Platforms  | All                              |

#### **cpipe** [[service-name](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>cpipe</b> list instance                         |
| Context    | <b>configure service cpipe string</b>                        |
| Tree       | <a href="#">cpipe</a>  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

#### **[service-name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Administrative service name                                  |
| Context       | <b>configure service cpipe string</b>                        |
| Tree          | <a href="#">cpipe</a>  |
| String Length | 1 to 64  |
| Notes         | This element is part of a list key.                          |
| Introduced    | 20.10.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

#### **admin-state** *keyword*

|          |   |
|----------|---|
| Synopsis | Administrative state of the service                       |
| Context  | <b>configure service cpipe string admin-state keyword</b> |
| Tree     | <a href="#">admin-state</a>                               |
| Options  | enable, disable   |
| Default  | disable   |



Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **customer** *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Service customer ID  
 Context **configure** *service cpipe string customer reference*  
 Tree *customer*  
 Reference **configure** *service customer string*  
 Notes This element is mandatory.  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **description** *string*

Synopsis Text description  
 Context **configure** *service cpipe string description string*  
 Tree *description*  
 String Length 1 to 80  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **endpoint** [*name*] *string*

Synopsis Enter the **endpoint** list instance  
 Context **configure** *service cpipe string endpoint string*  
 Tree *endpoint*  
 Max. Instances 2  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Service endpoint name  |
| Context       | <b>configure</b> <i>service cpipe string endpoint string</i> |
| Tree          | <i>endpoint</i>  |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.                          |
| Introduced    | 20.10.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

**description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <i>service cpipe string endpoint string description string</i> |
| Tree          | <i>description</i>  |
| String Length | 1 to 80   |
| Introduced    | 20.10.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                    |

**hold-time-active** *number*

|            |  |
|------------|--|
| Synopsis   | Time before entering standby when MC-LAG SAP goes down                               |
| Context    | <b>configure</b> <i>service cpipe string endpoint string hold-time-active number</i> |
| Tree       | <i>hold-time-active</i>  |
| Range      | 1 to 60  |
| Units      | deciseconds  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                         |

**revert-time** (*number* | *keyword*)

|          |   |
|----------|---|
| Synopsis | Time to wait before reverting to primary spoke SDP  |
| Context  | <b>configure</b> <i>service cpipe string endpoint string revert-time (number   keyword)</i> |
| Tree     | <i>revert-time</i>  |
| Range    | 1 to 600  |

|            |  |
|------------|--|
| Units      | seconds  |
| Options    | never, immediate   |
| Default    | immediate  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **sap** [**sap-id**] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>sap</b> list instance                               |
| Context    | <b>configure</b> <a href="#">service cpipe string sap string</a> |
| Tree       | <a href="#">sap</a>  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS     |

### **[sap-id]** *string*

|               |  |
|---------------|--|
| Synopsis      | SAP ID   |
| Context       | <b>configure</b> <a href="#">service cpipe string sap string</a> |
| Tree          | <a href="#">sap</a>  |
| String Length | 1 to 45  |
| Notes         | This element is part of a list key.                              |
| Introduced    | 20.10.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS     |

### **accounting-policy** *reference*

|            |  |
|------------|--|
| Synopsis   | Accounting policy  |
| Context    | <b>configure</b> <a href="#">service cpipe string sap string accounting-policy reference</a> |
| Tree       | <a href="#">accounting-policy</a>  |
| Reference  | <b>configure</b> <a href="#">log accounting-policy number</a>                                |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                                 |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the SAP  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**cem**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>cem</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <b>cem</b> |
| Tree       | <a href="#">cem</a>   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**packet**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>packet</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <b>cem</b> <b>packet</b> |
| Tree       | <a href="#">packet</a>  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**jitter-buffer** *number*

|            |  |
|------------|--|
| Synopsis   | Jitter buffer size   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <b>cem</b> <b>packet</b> <b>jitter-buffer</b> <i>number</i> |
| Tree       | <a href="#">jitter-buffer</a>  |
| Range      | 1 to 250   |
| Units      | milliseconds   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**payload-size** *number*

|            |  |
|------------|--|
| Synopsis   | Size of payload packets transmitted to PSN by CEM SAP  |
| Context    | <b>configure</b> <a href="#">service cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cem packet</a> <a href="#">payload-size</a> <i>number</i> |
| Tree       | <a href="#">payload-size</a>   |
| Range      | 16 to 2048   |
| Units      | bytes  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**report-alarm**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>report-alarm</b> context   |
| Context    | <b>configure</b> <a href="#">service cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cem</a> <a href="#">report-alarm</a> |
| Tree       | <a href="#">report-alarm</a>  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**buffer-overflow** *boolean*

|            |  |
|------------|--|
| Synopsis   | Report alarm for buffer overrun  |
| Context    | <b>configure</b> <a href="#">service cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cem</a> <a href="#">report-alarm</a> <a href="#">buffer-overflow</a> <i>boolean</i> |
| Tree       | <a href="#">buffer-overflow</a>  |
| Default    | true   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**buffer-underrun** *boolean*

|            |  |
|------------|--|
| Synopsis   | Report alarm for buffer underrun   |
| Context    | <b>configure</b> <a href="#">service cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cem</a> <a href="#">report-alarm</a> <a href="#">buffer-underrun</a> <i>boolean</i> |
| Tree       | <a href="#">buffer-underrun</a>  |
| Default    | true   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**malformed-packets** *boolean*

|            |  |
|------------|--|
| Synopsis   | Report alarm for malformed packets   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">cem</a> <a href="#">report-alarm</a> <a href="#">malformed-packets</a> <i>boolean</i> |
| Tree       | <a href="#">malformed-packets</a>  |
| Default    | true   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**packet-loss** *boolean*

|            |  |
|------------|--|
| Synopsis   | Report remote peer is currently in packet loss status  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">cem</a> <a href="#">report-alarm</a> <a href="#">packet-loss</a> <i>boolean</i> |
| Tree       | <a href="#">packet-loss</a>  |
| Default    | true   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**remote-fault** *boolean*

|            |   |
|------------|---|
| Synopsis   | Report remote TDM interface is currently not in service   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">cem</a> <a href="#">report-alarm</a> <a href="#">remote-fault</a> <i>boolean</i> |
| Tree       | <a href="#">remote-fault</a>  |
| Default    | false   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**remote-packet-loss** *boolean*

|            |   |
|------------|---|
| Synopsis   | Report remote peer is currently in packet loss status   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">cem</a> <a href="#">report-alarm</a> <a href="#">remote-packet-loss</a> <i>boolean</i> |
| Tree       | <a href="#">remote-packet-loss</a>  |
| Default    | false   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**remote-rdi** *boolean*

|            |   |
|------------|---|
| Synopsis   | Report remote TDM interface is currently in RDI status  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">cem</a> <a href="#">report-alarm</a> <a href="#">remote-rdi</a> <i>boolean</i> |
| Tree       | <a href="#">remote-rdi</a>  |
| Default    | false   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**stray-packets** *boolean*

|            |  |
|------------|--|
| Synopsis   | Report alarm for stray packets   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">cem</a> <a href="#">report-alarm</a> <a href="#">stray-packets</a> <i>boolean</i> |
| Tree       | <a href="#">stray-packets</a>  |
| Default    | true   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**rtp-header** *boolean*

|            |  |
|------------|--|
| Synopsis   | Use RTP header for transmitted packets to the PSN  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">cem</a> <a href="#">rtp-header</a> <i>boolean</i> |
| Tree       | <a href="#">rtp-header</a>   |
| Default    | false  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e   |

**collect-stats** *boolean*

|            |   |
|------------|---|
| Synopsis   | Collect accounting statistics   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">collect-stats</a> <i>boolean</i> |
| Tree       | <a href="#">collect-stats</a>   |
| Default    | false   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 160   |
| Introduced    | 20.10.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **dist-cpu-protection** *reference*

|            |   |
|------------|---|
| Synopsis   | Distributed CPU protection policy for SAP   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">dist-cpu-protection</a> <i>reference</i> |
| Tree       | <a href="#">dist-cpu-protection</a>   |
| Reference  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dist-cpu-protection</a> <i>policy</i> <i>string</i>                                    |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **egress**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>egress</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> |
| Tree       | <a href="#">egress</a>  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **agg-rate**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>agg-rate</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a> |
| Tree       | <a href="#">agg-rate</a>   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |



**adaptation-rule** *keyword*

|            |   |
|------------|---|
| Synopsis   | Adaptation rule to compute the operational PIR value when an aggregate shaper is used   |
| Context    | <b>configure</b> <b>service</b> <b>cpipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress</b> <b>agg-rate</b> <b>adaptation-rule</b> <i>keyword</i> |
| Tree       | <a href="#">adaptation-rule</a>   |
| Options    | max, min, closest   |
| Default    | closest   |
| Introduced | 22.10.R1  |
| Platforms  | 7750 SR-1, 7750 SR-s  |

**burst-limit** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Shaping burst size when an aggregate shaper is used   |
| Context    | <b>configure</b> <b>service</b> <b>cpipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress</b> <b>agg-rate</b> <b>burst-limit</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">burst-limit</a>   |
| Range      | 1 to 14000000   |
| Units      | bytes   |
| Options    | auto  |
| Default    | auto  |
| Introduced | 22.10.R1  |
| Platforms  | 7750 SR-1, 7750 SR-s  |

**limit-unused-bandwidth** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable aggregate rate overrun protection   |
| Context    | <b>configure</b> <b>service</b> <b>cpipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress</b> <b>agg-rate</b> <b>limit-unused-bandwidth</b> <i>boolean</i> |
| Tree       | <a href="#">limit-unused-bandwidth</a>   |
| Default    | false  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**rate** *number*

|          |   |
|----------|---|
| Synopsis | Enforced aggregate rate for all queues  |
| Context  | <b>configure</b> <b>service</b> <b>cpipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress</b> <b>agg-rate</b> <b>rate</b> <i>number</i> |

|            |  |
|------------|--|
| Tree       | <a href="#">rate</a>   |
| Range      | 1 to 6400000000  |
| Units      | kilobps  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

## qos

|            |   |
|------------|---|
| Synopsis   | Enter the <b>qos</b> context  |
| Context    | <b>configure</b> <a href="#">service cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos</a> |
| Tree       | <a href="#">qos</a>   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## policer-control-policy

|            |  |
|------------|--|
| Synopsis   | Enter the <b>policer-control-policy</b> context  |
| Context    | <b>configure</b> <a href="#">service cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos</a> <a href="#">policer-control-policy</a> |
| Tree       | <a href="#">policer-control-policy</a>   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## overrides

|            |  |
|------------|--|
| Synopsis   | Enable the <b>overrides</b> context  |
| Context    | <b>configure</b> <a href="#">service cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> |
| Tree       | <a href="#">overrides</a>  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## root

|          |   |
|----------|---|
| Synopsis | Enter the <b>root</b> context   |
| Context  | <b>configure</b> <a href="#">service cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> |
| Tree     | <a href="#">root</a>  |

Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

### **max-rate** (*number* | *keyword*)

Synopsis Maximum frame-based bandwidth limit  
 Context **configure** [service](#) [cpipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [policer-control-policy](#) [overrides](#) [root](#)  
[max-rate](#) (*number* | *keyword*)  
 Tree [max-rate](#)  
 Range 1 to 6400000000  
 Options max  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

### **priority-mbs-thresholds**

Synopsis Enter the **priority-mbs-thresholds** context  
 Context **configure** [service](#) [cpipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [policer-control-policy](#) [overrides](#) [root](#)  
[priority-mbs-thresholds](#)  
 Tree [priority-mbs-thresholds](#)  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

### **min-thresh-separation** (*number* | *keyword*)

Synopsis Minimum amount of separation buffer space  
 Context **configure** [service](#) [cpipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [policer-control-policy](#) [overrides](#) [root](#)  
[priority-mbs-thresholds](#) [min-thresh-separation](#) (*number* | *keyword*)  
 Tree [min-thresh-separation](#)  
 Range 0 to 16777216  
 Units bytes  
 Options auto  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

**priority** [*priority-level*] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>priority</b> list instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <b>priority</b> <i>number</i> |
| Tree       | <a href="#">priority</a>  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**[priority-level]** *number*

|            |   |
|------------|---|
| Synopsis   | Priority level  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <b>priority</b> <i>number</i> |
| Tree       | <a href="#">priority</a>  |
| Range      | 1 to 8  |
| Notes      | This element is part of a list key.   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**mbs-contribution** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Minimum amount of cumulative buffer space allowed  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <b>priority</b> <i>number</i> <b>mbs-contribution</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">mbs-contribution</a>   |
| Range      | 0 to 16777216  |
| Units      | bytes  |
| Options    | auto   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**policy-name** *reference*

|          |  |
|----------|--|
| Synopsis | Policer control policy name  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <b>policy-name</b> <i>reference</i> |

|            |   |
|------------|---|
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">policer-control-policy</a> <i>string</i> |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## sap-egress

|            |  |
|------------|--|
| Synopsis   | Enter the <b>sap-egress</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> |
| Tree       | <a href="#">sap-egress</a>   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## overrides

|            |  |
|------------|--|
| Synopsis   | Enter the <b>overrides</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> |
| Tree       | <a href="#">overrides</a>  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## policer [[policer-id](#)] *reference*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>policer</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> |
| Tree       | <a href="#">policer</a>   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## [[policer-id](#)] *reference*

|          |   |
|----------|---|
| Synopsis | Policer unique ID   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> |
| Tree     | <a href="#">policer</a>   |

|            |  |
|------------|--|
| Reference  | <b>configure qos sap-egress</b> <i>string</i> <b>policer</b> <i>number</i> |
| Notes      | This element is part of a list key.  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS                          |

**cbs** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | CBS  |
| Context    | <b>configure service cpipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides policer</b><br><i>reference</i> <b>cbs</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <b>cbs</b>   |
| Range      | 0 to 268435456   |
| Units      | bytes  |
| Options    | auto   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**mbs** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | MBS  |
| Context    | <b>configure service cpipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides policer</b><br><i>reference</i> <b>mbs</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <b>mbs</b>   |
| Range      | 0 to 268435456   |
| Units      | bytes  |
| Options    | auto   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**packet-byte-offset** *number*

|          |  |
|----------|--|
| Synopsis | Packet size modification for policing information  |
| Context  | <b>configure service cpipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides policer</b><br><i>reference</i> <b>packet-byte-offset</b> <i>number</i> |
| Tree     | <b>packet-byte-offset</b>  |
| Range    | -64 to 31  |

|            |   |
|------------|---|
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

## percent-rate

|            |   |
|------------|---|
| Synopsis   | Enter the <b>percent-rate</b> context   |
| Context    | <b>configure</b> <a href="#">service cpipe string sap string egress qos sap-egress overrides policer reference percent-rate</a> |
| Tree       | <a href="#">percent-rate</a>  |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## cir decimal-number

|            |  |
|------------|--|
| Synopsis   | CIR percent rate   |
| Context    | <b>configure</b> <a href="#">service cpipe string sap string egress qos sap-egress overrides policer reference percent-rate cir decimal-number</a> |
| Tree       | <a href="#">cir</a>  |
| Range      | 0.00 to 100.00   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## pir decimal-number

|            |  |
|------------|--|
| Synopsis   | PIR percent rate   |
| Context    | <b>configure</b> <a href="#">service cpipe string sap string egress qos sap-egress overrides policer reference percent-rate pir decimal-number</a> |
| Tree       | <a href="#">pir</a>  |
| Range      | 0.01 to 100.00   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## rate

|          |                               |
|----------|-------------------------------|
| Synopsis | Enter the <b>rate</b> context |
|----------|-------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service cpipe string sap string egress qos sap-egress overrides policer reference rate</b> |
| Tree       | <a href="#">rate</a>  |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .                       |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**cir** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | CIR rate   |
| Context    | <b>configure service cpipe string sap string egress qos sap-egress overrides policer reference rate cir (number   keyword)</b> |
| Tree       | <a href="#">cir</a>  |
| Range      | 0 to 6400000000  |
| Units      | kilobps  |
| Options    | max  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**pir** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | PIR rate   |
| Context    | <b>configure service cpipe string sap string egress qos sap-egress overrides policer reference rate pir (number   keyword)</b> |
| Tree       | <a href="#">pir</a>  |
| Range      | 1 to 6400000000  |
| Units      | kilobps  |
| Options    | max  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**stat-mode** *keyword*

|          |  |
|----------|--|
| Synopsis | Mode of statistics collected by the policer  |
| Context  | <b>configure service cpipe string sap string egress qos sap-egress overrides policer reference stat-mode keyword</b> |



|            |  |
|------------|--|
| Tree       | <a href="#">stat-mode</a>  |
| Options    | no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **queue** [[queue-id](#)] *reference*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>queue</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> |
| Tree       | <a href="#">queue</a>   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **[queue-id]** *reference*

|            |   |
|------------|---|
| Synopsis   | Policer unique ID   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> |
| Tree       | <a href="#">queue</a>   |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">sap-egress</a> <i>string</i> <a href="#">queue</a> <i>number</i>   |
| Notes      | This element is part of a list key.   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **adaptation-rule**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>adaptation-rule</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">adaptation-rule</a> |
| Tree       | <a href="#">adaptation-rule</a>   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**cir keyword**

|            |   |
|------------|---|
| Synopsis   | Constraint used when deriving the operational CIR value   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a><br><a href="#">reference</a> <a href="#">adaptation-rule</a> <a href="#">cir</a> <a href="#">keyword</a> |
| Tree       | <a href="#">cir</a>   |
| Options    | max, min, closest   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**pir keyword**

|            |   |
|------------|---|
| Synopsis   | Constraint used when deriving the operational PIR value   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a><br><a href="#">reference</a> <a href="#">adaptation-rule</a> <a href="#">pir</a> <a href="#">keyword</a> |
| Tree       | <a href="#">pir</a>   |
| Options    | max, min, closest   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**avg-frame-overhead decimal-number**

|            |   |
|------------|---|
| Synopsis   | Average packet-to-frame encapsulation overhead  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a><br><a href="#">reference</a> <a href="#">avg-frame-overhead</a> <a href="#">decimal-number</a> |
| Tree       | <a href="#">avg-frame-overhead</a>  |
| Range      | 0.00 to 100.00  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**burst-limit (number | keyword)**

|          |  |
|----------|--|
| Synopsis | Explicit shaping burst size for the queue  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a><br><a href="#">reference</a> <a href="#">burst-limit</a> <a href="#">(number   keyword)</a> |
| Tree     | <a href="#">burst-limit</a>  |
| Range    | 1 to 14000000  |

|            |  |
|------------|--|
| Units      | bytes  |
| Options    | auto   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **cbs** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | CBS   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a><br><i>reference</i> <a href="#">cbs</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cbs</a>   |
| Range      | 0 to 1048576  |
| Units      | kilobytes   |
| Options    | auto  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **drop-tail**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>drop-tail</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a><br><i>reference</i> <a href="#">drop-tail</a> |
| Tree       | <a href="#">drop-tail</a>  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **low**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>low</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a><br><i>reference</i> <a href="#">drop-tail</a> <a href="#">low</a> |
| Tree       | <a href="#">low</a>  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**percent-reduction-from-mbs** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Percentage reduction from the MBS for a queue drop tail  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">drop-tail</a> <a href="#">low</a> <a href="#">percent-reduction-from-mbs</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">percent-reduction-from-mbs</a>   |
| Range      | 0 to 100   |
| Options    | auto   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**hs-class-weight** *number*

|            |  |
|------------|--|
| Synopsis   | Class weight override for the queue  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">hs-class-weight</a> <i>number</i> |
| Tree       | <a href="#">hs-class-weight</a>  |
| Range      | 1   2   4   8  |
| Introduced | 20.10.R1   |
| Platforms  | 7750 SR-7/12/12e   |

**hs-wred-queue**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>hs-wred-queue</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">hs-wred-queue</a> |
| Tree       | <a href="#">hs-wred-queue</a>  |
| Introduced | 20.10.R1   |
| Platforms  | 7750 SR-7/12/12e   |

**policy** *reference*

|           |  |
|-----------|--|
| Synopsis  | Slope policy applied to the HSQ queue group queue  |
| Context   | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">hs-wred-queue</a> <a href="#">policy</a> <i>reference</i> |
| Tree      | <a href="#">policy</a>   |
| Reference | <b>configure</b> <a href="#">qos</a> <a href="#">slope-policy</a> <i>string</i>  |

Introduced 20.10.R1  
 Platforms 7750 SR-7/12/12e

### **hs-wrr-weight** *number*

Synopsis WRR weight to parent with the queue into the scheduler  
 Context **configure** [service](#) [cpipe](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)  
*reference* [hs-wrr-weight](#) *number*  
 Tree [hs-wrr-weight](#)  
 Range 1 to 127  
 Default 1  
 Introduced 20.10.R1  
 Platforms 7750 SR-7/12/12e

### **mbs** (*number* | *keyword*)

Synopsis MBS  
 Context **configure** [service](#) [cpipe](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)  
*reference* [mbs](#) (*number* | *keyword*)  
 Tree [mbs](#)  
 Range 0 to 1073741824  
 Units bytes  
 Options auto  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **monitor-queue-depth**

Synopsis Enable the **monitor-queue-depth** context  
 Context **configure** [service](#) [cpipe](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)  
*reference* [monitor-queue-depth](#)  
 Tree [monitor-queue-depth](#)  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**fast-polling** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Enable fast polling of the queue depth  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">monitor-queue-depth</a> <b>fast-polling</b> <i>boolean</i> |
| Tree        | <a href="#">fast-polling</a>  |
| Description | When configured to <b>true</b> , this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth.<br>When configured to <b>false</b> , fast queue polling is not enabled.  |
| Default     | false   |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**violation-threshold** *decimal-number*

|             |   |
|-------------|---|
| Synopsis    | Threshold for queue depth before violation is raised  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">monitor-queue-depth</a> <b>violation-threshold</b> <i>decimal-number</i> |
| Tree        | <a href="#">violation-threshold</a>   |
| Description | This command specifies the threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.  |
| Range       | 0.01 to 99.99   |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**parent**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>parent</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>parent</b> |
| Tree       | <a href="#">parent</a>   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**cir-weight** *number*

|          |   |
|----------|---|
| Synopsis | CIR parameter that overrides parent for queue group |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure service cpipe string sap string egress qos sap-egress overrides queue reference parent cir-weight number</b> |
| Tree       | <b>cir-weight</b>   |
| Range      | 0 to 100  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **weight number**

|            |   |
|------------|---|
| Synopsis   | PIR parameter that overrides parent for queue group   |
| Context    | <b>configure service cpipe string sap string egress qos sap-egress overrides queue reference parent weight number</b> |
| Tree       | <b>weight</b>   |
| Range      | 0 to 100  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **percent-rate**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>percent-rate</b> context   |
| Context    | <b>configure service cpipe string sap string egress qos sap-egress overrides queue reference percent-rate</b> |
| Tree       | <b>percent-rate</b>   |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .                             |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **cir decimal-number**

|            |  |
|------------|--|
| Synopsis   | CIR percent rate   |
| Context    | <b>configure service cpipe string sap string egress qos sap-egress overrides queue reference percent-rate cir decimal-number</b> |
| Tree       | <b>cir</b>   |
| Range      | 0.00 to 100.00   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**pir** *decimal-number*

|            |  |
|------------|--|
| Synopsis   | PIR percent rate   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">percent-rate</a> <b>pir</b> <i>decimal-number</i> |
| Tree       | <a href="#">pir</a>  |
| Range      | 0.01 to 100.00   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**rate**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>rate</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>rate</b> |
| Tree       | <a href="#">rate</a>   |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**cir** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | CIR rate  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">rate</a> <b>cir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cir</a>   |
| Range      | 0 to 6400000000   |
| Units      | kilobps   |
| Options    | max   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**pir** (*number* | *keyword*)

|          |          |
|----------|----------|
| Synopsis | PIR rate |
|----------|----------|



|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">rate</a> <a href="#">pir</a> ( <i>number   keyword</i> ) |
| Tree       | <a href="#">pir</a>   |
| Range      | 1 to 6400000000   |
| Units      | kilobps   |
| Options    | max   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **policy-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Policy ID to associate with SAP for mirrored service  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">string</a>  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **scheduler-policy**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>scheduler-policy</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> |
| Tree       | <a href="#">scheduler-policy</a>   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **overrides**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>overrides</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> |
| Tree       | <a href="#">overrides</a>  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**scheduler** [[scheduler-name](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>scheduler</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a><br><a href="#">scheduler</a> <i>string</i> |
| Tree       | <a href="#">scheduler</a>   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**[scheduler-name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Scheduler name   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a><br><a href="#">scheduler</a> <i>string</i>  |
| Tree          | <a href="#">scheduler</a>  |
| Description   | <p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.</p> |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 20.10.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**parent**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>parent</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a><br><a href="#">scheduler</a> <i>string</i> <a href="#">parent</a> |
| Tree       | <a href="#">parent</a>   |
| Introduced | 20.10.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **cir-weight** *number*

Synopsis Weight used at the within-CIR port priority level

Context **configure** [service](#) [cpipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string* [parent](#) **cir-weight** *number*

Tree [cir-weight](#)

Range 0 to 100

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **weight** *number*

Synopsis Relative weight of the scheduler to feed the queue

Context **configure** [service](#) [cpipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string* [parent](#) **weight** *number*

Tree [weight](#)

Range 0 to 100

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **rate**

Synopsis Enter the **rate** context

Context **configure** [service](#) [cpipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string* **rate**

Tree [rate](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **cir** (*number* | *keyword*)

Synopsis CIR at which the queue it to operate

Context **configure** [service](#) [cpipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string* **rate** **cir** (*number* | *keyword*)

Tree [cir](#)

|            |  |
|------------|--|
| Range      | 0 to 6400000000  |
| Units      | kilobps  |
| Options    | sum, max   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **pir** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | PIR at which the queue is to operate   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <b>rate</b> <b>pir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">pir</a>  |
| Range      | 1 to 6400000000  |
| Units      | kilobps  |
| Options    | max  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **policy-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Scheduler policy name   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">scheduler-policy</a> <i>string</i>   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **endpoint** *reference*

|            |  |
|------------|--|
| Synopsis   | Endpoint name  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">endpoint</a> <i>reference</i> |
| Tree       | <a href="#">endpoint</a>   |
| Reference  | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">endpoint</a> <i>string</i>                                      |
| Introduced | 20.10.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ingress

Synopsis Enter the **ingress** context

Context **configure** [service cpipe](#) [string sap](#) [string ingress](#)

Tree [ingress](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## qos

Synopsis Enter the **qos** context

Context **configure** [service cpipe](#) [string sap](#) [string ingress](#) [qos](#)

Tree [qos](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## policer-control-policy

Synopsis Enter the **policer-control-policy** context

Context **configure** [service cpipe](#) [string sap](#) [string ingress](#) [qos](#) [policer-control-policy](#)

Tree [policer-control-policy](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

## overrides

Synopsis Enable the **overrides** context

Context **configure** [service cpipe](#) [string sap](#) [string ingress](#) [qos](#) [policer-control-policy](#) [overrides](#)

Tree [overrides](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

**root**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>root</b> context  |
| Context    | <b>configure service cpipe string sap string ingress qos policer-control-policy overrides root</b> |
| Tree       | <b>root</b>  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**max-rate** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Maximum frame-based bandwidth limit  |
| Context    | <b>configure service cpipe string sap string ingress qos policer-control-policy overrides root max-rate</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <b>max-rate</b>  |
| Range      | 1 to 6400000000  |
| Options    | max  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**priority-mbs-thresholds**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>priority-mbs-thresholds</b> context   |
| Context    | <b>configure service cpipe string sap string ingress qos policer-control-policy overrides root priority-mbs-thresholds</b> |
| Tree       | <b>priority-mbs-thresholds</b>   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**min-thresh-separation** (*number* | *keyword*)

|          |   |
|----------|---|
| Synopsis | Minimum amount of separation buffer space   |
| Context  | <b>configure service cpipe string sap string ingress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <b>min-thresh-separation</b>  |
| Range    | 0 to 16777216   |
| Units    | bytes   |

|            |   |
|------------|---|
| Options    | auto  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **priority** [[priority-level](#)] *number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>priority</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a><br><a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i> |
| Tree       | <a href="#">priority</a>   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **[priority-level]** *number*

|            |  |
|------------|--|
| Synopsis   | Priority level   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a><br><a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i> |
| Tree       | <a href="#">priority</a>   |
| Range      | 1 to 8   |
| Notes      | This element is part of a list key.  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **mbs-contribution** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Minimum amount of cumulative buffer space allowed  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a><br><a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i> <a href="#">mbs-contribution</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">mbs-contribution</a>   |
| Range      | 0 to 16777216  |
| Units      | bytes  |
| Options    | auto   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## policy-name *reference*

|            |  |
|------------|--|
| Synopsis   | Policer control policy name  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">policer-control-policy</a> <i>string</i>  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## sap-ingress

|            |  |
|------------|--|
| Synopsis   | Enter the <b>sap-ingress</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> |
| Tree       | <a href="#">sap-ingress</a>  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## overrides

|            |  |
|------------|--|
| Synopsis   | Enter the <b>overrides</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> |
| Tree       | <a href="#">overrides</a>  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## ip-criteria

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ip-criteria</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">ip-criteria</a> |
| Tree       | <a href="#">ip-criteria</a>  |
| Introduced | 20.10.R2   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |



**activate-entry-tag** *number*

|            |   |
|------------|---|
| Synopsis   | Tag ID activated for IPv4 criteria  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">ip-criteria</a> <a href="#">activate-entry-tag</a> <i>number</i> |
| Tree       | <a href="#">activate-entry-tag</a>  |
| Range      | 1 to 255  |
| Introduced | 20.10.R2  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**ipv6-criteria**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv6-criteria</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">ipv6-criteria</a> |
| Tree       | <a href="#">ipv6-criteria</a>  |
| Introduced | 20.10.R2   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**activate-entry-tag** *number*

|            |   |
|------------|---|
| Synopsis   | Tag ID activated for IPv6 criteria  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">ipv6-criteria</a> <a href="#">activate-entry-tag</a> <i>number</i> |
| Tree       | <a href="#">activate-entry-tag</a>  |
| Range      | 1 to 255  |
| Introduced | 20.10.R2  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**policer** [[policer-id](#)] *reference*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>policer</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> |
| Tree       | <a href="#">policer</a>   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**[policer-id] reference**

|            |  |
|------------|--|
| Synopsis   | Policer unique ID  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> |
| Tree       | <a href="#">policer</a>  |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">string</a> <a href="#">policer</a> <a href="#">number</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**cbs (number | keyword)**

|            |   |
|------------|---|
| Synopsis   | CBS   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">cbs</a> ( <a href="#">number</a>   <a href="#">keyword</a> ) |
| Tree       | <a href="#">cbs</a>   |
| Range      | 0 to 268435456  |
| Units      | bytes   |
| Options    | auto  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**mbs (number | keyword)**

|            |   |
|------------|---|
| Synopsis   | MBS   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">mbs</a> ( <a href="#">number</a>   <a href="#">keyword</a> ) |
| Tree       | <a href="#">mbs</a>   |
| Range      | 0 to 268435456  |
| Units      | bytes   |
| Options    | auto  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**packet-byte-offset** *number*

|            |   |
|------------|---|
| Synopsis   | Packet size modification for policing information   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">packet-byte-offset</a> <i>number</i> |
| Tree       | <a href="#">packet-byte-offset</a>  |
| Range      | -32 to 31   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**percent-rate**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>percent-rate</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">percent-rate</a> |
| Tree       | <a href="#">percent-rate</a>  |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**cir** *decimal-number*

|            |   |
|------------|---|
| Synopsis   | CIR percent rate  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">percent-rate</a> <a href="#">cir</a> <i>decimal-number</i> |
| Tree       | <a href="#">cir</a>   |
| Range      | 0.00 to 100.00  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**pir** *decimal-number*

|          |   |
|----------|---|
| Synopsis | PIR percent rate  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">percent-rate</a> <a href="#">pir</a> <i>decimal-number</i> |
| Tree     | <a href="#">pir</a>   |
| Range    | 0.01 to 100.00  |

|            |   |
|------------|---|
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

**rate**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>rate</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>rate</b> |
| Tree       | <a href="#">rate</a>   |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**cir** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | CIR rate  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>rate</b> <a href="#">cir</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cir</a>   |
| Range      | 0 to 6400000000   |
| Units      | kilobps   |
| Options    | max   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**pir** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | PIR rate  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>rate</b> <a href="#">pir</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">pir</a>   |
| Range      | 1 to 6400000000   |
| Units      | kilobps   |
| Options    | max   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**stat-mode** *keyword*

|            |  |
|------------|--|
| Synopsis   | Mode of statistics collected by the policer  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>stat-mode</b> <i>keyword</i> |
| Tree       | <a href="#">stat-mode</a>  |
| Options    | no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**queue** [[queue-id](#)] *reference*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>queue</b> list instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> |
| Tree       | <a href="#">queue</a>  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**[queue-id]** *reference*

|            |  |
|------------|--|
| Synopsis   | Policer unique ID  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> |
| Tree       | <a href="#">queue</a>  |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">sap-ingress</a> <i>string</i> <a href="#">queue</a> <i>number</i>   |
| Notes      | This element is part of a list key.  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**adaptation-rule**

|          |   |
|----------|---|
| Synopsis | Enter the <b>adaptation-rule</b> context  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>adaptation-rule</b> |

|            |  |
|------------|--|
| Tree       | <a href="#">adaptation-rule</a>                              |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

**cir keyword**

|            |  |
|------------|--|
| Synopsis   | Constraint used when deriving the operational CIR value  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a><br><i>reference</i> <a href="#">adaptation-rule</a> <a href="#">cir</a> <a href="#">keyword</a> |
| Tree       | <a href="#">cir</a>  |
| Options    | max, min, closest  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**pir keyword**

|            |  |
|------------|--|
| Synopsis   | Constraint used when deriving the operational PIR value  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a><br><i>reference</i> <a href="#">adaptation-rule</a> <a href="#">pir</a> <a href="#">keyword</a> |
| Tree       | <a href="#">pir</a>  |
| Options    | max, min, closest  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**cbs (number | keyword)**

|            |   |
|------------|---|
| Synopsis   | CBS   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a><br><i>reference</i> <a href="#">cbs</a> <a href="#">(number   keyword)</a> |
| Tree       | <a href="#">cbs</a>   |
| Range      | 0 to 1048576  |
| Units      | kilobytes   |
| Options    | auto  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## drop-tail

|            |  |
|------------|--|
| Synopsis   | Enter the <b>drop-tail</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a><br><i>reference</i> <a href="#">drop-tail</a> |
| Tree       | <a href="#">drop-tail</a>  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## low

|            |  |
|------------|--|
| Synopsis   | Enter the <b>low</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a><br><i>reference</i> <a href="#">drop-tail</a> <a href="#">low</a> |
| Tree       | <a href="#">low</a>  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## percent-reduction-from-mbs (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Percentage reduction from the MBS for a queue drop tail  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a><br><i>reference</i> <a href="#">drop-tail</a> <a href="#">low</a> <a href="#">percent-reduction-from-mbs</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">percent-reduction-from-mbs</a>   |
| Range      | 0 to 100   |
| Options    | auto   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## mbs (*number* | *keyword*)

|          |   |
|----------|---|
| Synopsis | MBS   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a><br><i>reference</i> <a href="#">mbs</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <a href="#">mbs</a>   |
| Range    | 0 to 1073741824   |

|            |  |
|------------|--|
| Units      | bytes  |
| Options    | auto   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### monitor-queue-depth

|            |   |
|------------|---|
| Synopsis   | Enable the <b>monitor-queue-depth</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>monitor-queue-depth</b> |
| Tree       | <a href="#">monitor-queue-depth</a>   |
| Introduced | 21.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### fast-polling *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable fast polling of the queue depth  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">monitor-queue-depth</a> <b>fast-polling</b> <i>boolean</i> |
| Tree       | <a href="#">fast-polling</a>  |
| Default    | false   |
| Introduced | 21.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### parent

|            |  |
|------------|--|
| Synopsis   | Enter the <b>parent</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>parent</b> |
| Tree       | <a href="#">parent</a>   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### cir-weight *number*

|          |   |
|----------|---|
| Synopsis | CIR parameter that overrides parent for queue group |
|----------|---|



|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">parent</a> <a href="#">cir-weight</a> <a href="#">number</a> |
| Tree       | <a href="#">cir-weight</a>  |
| Range      | 0 to 100  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **weight** *number*

|            |   |
|------------|---|
| Synopsis   | PIR parameter that overrides parent for queue group   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">parent</a> <a href="#">weight</a> <a href="#">number</a> |
| Tree       | <a href="#">weight</a>  |
| Range      | 0 to 100  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **percent-rate**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>percent-rate</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">percent-rate</a> |
| Tree       | <a href="#">percent-rate</a>  |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **cir** *decimal-number*

|            |  |
|------------|--|
| Synopsis   | CIR percent rate   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">percent-rate</a> <a href="#">cir</a> <a href="#">decimal-number</a> |
| Tree       | <a href="#">cir</a>  |
| Range      | 0.00 to 100.00   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**pir** *decimal-number*

|            |  |
|------------|--|
| Synopsis   | PIR percent rate   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">percent-rate</a> <b>pir</b> <i>decimal-number</i> |
| Tree       | <a href="#">pir</a>  |
| Range      | 0.01 to 100.00   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**rate**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>rate</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>rate</b> |
| Tree       | <a href="#">rate</a>   |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**cir** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | CIR rate  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">rate</a> <b>cir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cir</a>   |
| Range      | 0 to 6400000000   |
| Units      | kilobps   |
| Options    | max   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**pir** (*number* | *keyword*)

|          |          |
|----------|----------|
| Synopsis | PIR rate |
|----------|----------|

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">rate</a> <a href="#">pir</a> ( <i>number   keyword</i> ) |
| Tree       | <a href="#">pir</a>   |
| Range      | 1 to 6400000000   |
| Units      | kilobps   |
| Options    | max   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **policy-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Policy ID   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">string</a>   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **queuing-type** *keyword*

|            |  |
|------------|--|
| Synopsis   | Queuing type   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">queuing-type</a> <i>keyword</i> |
| Tree       | <a href="#">queuing-type</a>   |
| Options    | shared, multipoint-shared  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e   |

### **scheduler-policy**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>scheduler-policy</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> |
| Tree       | <a href="#">scheduler-policy</a>  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**overrides**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>overrides</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> |
| Tree       | <a href="#">overrides</a>   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**scheduler** [[scheduler-name](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>scheduler</b> list instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a><br><a href="#">scheduler</a> <i>string</i> |
| Tree       | <a href="#">scheduler</a>  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**[scheduler-name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Scheduler name   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a><br><a href="#">scheduler</a> <i>string</i>   |
| Tree          | <a href="#">scheduler</a>  |
| Description   | <p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.</p> |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 20.10.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## parent

Synopsis Enter the **parent** context

Context **configure** [service](#) [cpipe](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) [string](#) **parent**

Tree [parent](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## cir-weight *number*

Synopsis Weight used at the within-CIR port priority level

Context **configure** [service](#) [cpipe](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) [string](#) **parent** [cir-weight](#) *number*

Tree [cir-weight](#)

Range 0 to 100

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## weight *number*

Synopsis Relative weight of the scheduler to feed the queue

Context **configure** [service](#) [cpipe](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) [string](#) **parent** [weight](#) *number*

Tree [weight](#)

Range 0 to 100

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## rate

Synopsis Enter the **rate** context

Context **configure** [service](#) [cpipe](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) [string](#) **rate**

Tree [rate](#)

|            |  |
|------------|--|
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

**cir** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | CIR at which the queue it to operate  |
| Context    | <b>configure</b> <a href="#">service cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos scheduler-policy overrides scheduler</a> <i>string rate cir</i> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cir</a>   |
| Range      | 0 to 6400000000   |
| Units      | kilobps   |
| Options    | sum, max  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**pir** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | PIR at which the queue is to operate  |
| Context    | <b>configure</b> <a href="#">service cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos scheduler-policy overrides scheduler</a> <i>string rate pir</i> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">pir</a>   |
| Range      | 1 to 6400000000   |
| Units      | kilobps   |
| Options    | max   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**policy-name** *reference*

|            |  |
|------------|--|
| Synopsis   | Scheduler policy name  |
| Context    | <b>configure</b> <a href="#">service cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos scheduler-policy</a> <i>policy-name reference</i> |
| Tree       | <a href="#">policy-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos scheduler-policy</a> <i>string</i>  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## lag

|            |  |
|------------|--|
| Synopsis   | Enter the <b>lag</b> context   |
| Context    | <b>configure</b> <a href="#">service cpipe string sap string lag</a> |
| Tree       | <a href="#">lag</a>  |
| Introduced | 21.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS         |

## multi-service-site *reference*

|            |   |
|------------|---|
| Synopsis   | Multi service site name   |
| Context    | <b>configure</b> <a href="#">service cpipe string sap string multi-service-site reference</a> |
| Tree       | <a href="#">multi-service-site</a>  |
| Reference  | <b>configure</b> <a href="#">service customer string multi-service-site string</a>            |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                                  |

## service-id *number*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Service ID  |
| Context    | <b>configure</b> <a href="#">service cpipe string service-id number</a> |
| Tree       | <a href="#">service-id</a>  |
| Range      | 1 to 2147483647   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS            |

## service-mtu *number*

|          |  |
|----------|--|
| Synopsis | MTU size   |
| Context  | <b>configure</b> <a href="#">service cpipe string service-mtu number</a> |
| Tree     | <a href="#">service-mtu</a>  |
| Range    | 1 to 9194  |

Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **spoke-sdp** [**sdp-bind-id**] *string*

Synopsis Enter the **spoke-sdp** list instance  
 Context **configure** *service cpipe string spoke-sdp string*  
 Tree *spoke-sdp*  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[sdp-bind-id]** *string*

Synopsis SDP binding ID  
 Context **configure** *service cpipe string spoke-sdp string*  
 Tree *spoke-sdp*  
 String Length 3 to 16  
 Notes This element is part of a list key.  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **admin-state** *keyword*

Synopsis Administrative state of the SDP binding to the service  
 Context **configure** *service cpipe string spoke-sdp string admin-state keyword*  
 Tree *admin-state*  
 Options enable, disable  
 Default enable  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **bandwidth** (*number* | *keyword*)

Synopsis Bandwidth that is reserved for this SDP binding  
 Context **configure** *service cpipe string spoke-sdp string bandwidth (number | keyword)*



---

|            |  |
|------------|--|
| Tree       | <a href="#">bandwidth</a>                                    |
| Range      | 0 to 100000000   |
| Units      | kilobps  |
| Options    | max  |
| Default    | 0  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

## bfd

|            |  |
|------------|--|
| Synopsis   | Enter the <b>bfd</b> context   |
| Context    | <b>configure</b> <a href="#">service cpipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">bfd</a> |
| Tree       | <a href="#">bfd</a>  |
| Introduced | 21.2.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## bfd-liveness

|            |   |
|------------|---|
| Synopsis   | Enable the <b>bfd-liveness</b> context  |
| Context    | <b>configure</b> <a href="#">service cpipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">bfd</a> <a href="#">bfd-liveness</a> |
| Tree       | <a href="#">bfd-liveness</a>  |
| Introduced | 21.2.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## encap *keyword*

|            |  |
|------------|--|
| Synopsis   | BFD encapsulation used on the SDP binding  |
| Context    | <b>configure</b> <a href="#">service cpipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">bfd</a> <a href="#">bfd-liveness</a> <a href="#">encap</a> <i>keyword</i> |
| Tree       | <a href="#">encap</a>  |
| Options    | ipv4   |
| Default    | ipv4   |
| Introduced | 21.2.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**bfd-template** *reference*

|             |   |
|-------------|---|
| Synopsis    | BFD template associated with the SDP binding  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">bfd</a> <a href="#">bfd-template</a> <i>reference</i>  |
| Tree        | <a href="#">bfd-template</a>  |
| Description | This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the <b>configure router bfd</b> context. |
| Reference   | <b>configure</b> <a href="#">bfd</a> <a href="#">bfd-template</a> <i>string</i>   |
| Introduced  | 21.2.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**control-word** *boolean*

|            |  |
|------------|--|
| Synopsis   | Use control word as part of packet encapsulation   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">control-word</a> <i>boolean</i> |
| Tree       | <a href="#">control-word</a>   |
| Default    | true   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 20.10.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**egress**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>egress</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> |
| Tree       | <a href="#">egress</a>  |
| Introduced | 20.10.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## qos

Synopsis Enter the **qos** context

Context **configure** [service](#) [cpipe](#) *string* [spoke-sdp](#) *string* [egress](#) [qos](#)

Tree [qos](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## network

Synopsis Enter the **network** context

Context **configure** [service](#) [cpipe](#) *string* [spoke-sdp](#) *string* [egress](#) [qos](#) [network](#)

Tree [network](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## policy-name *reference*

Synopsis Network policy ID

Context **configure** [service](#) [cpipe](#) *string* [spoke-sdp](#) *string* [egress](#) [qos](#) [network](#) [policy-name](#) *reference*

Tree [policy-name](#)

Reference **configure** [qos](#) [network](#) *string*

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## port-redirect-group

Synopsis Enter the **port-redirect-group** context

Context **configure** [service](#) [cpipe](#) *string* [spoke-sdp](#) *string* [egress](#) [qos](#) [network](#) [port-redirect-group](#)

Tree [port-redirect-group](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**group-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Name of the egress port queue group   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">network</a> <a href="#">port-redirect-group</a> <a href="#">group-name</a> <i>reference</i> |
| Tree       | <a href="#">group-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>string</i>   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**instance** *number*

|            |  |
|------------|--|
| Synopsis   | Queue-group instance ID  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">network</a> <a href="#">port-redirect-group</a> <a href="#">instance</a> <i>number</i> |
| Tree       | <a href="#">instance</a>   |
| Range      | 1 to 65535   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**vc-label** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Egress MPLS VC label to send packets to the far end  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">vc-label</a> <i>number</i> |
| Tree       | <a href="#">vc-label</a>   |
| Range      | 16 to 1048575  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**endpoint**

|          |                                   |
|----------|-----------------------------------|
| Synopsis | Enter the <b>endpoint</b> context |
|----------|-----------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service cpipe string spoke-sdp string endpoint</b> |
| Tree       | <b>endpoint</b>   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS    |

### **icb boolean**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Bind the SDP as the Inter-Chassis Backup (ICB) type                         |
| Context    | <b>configure service cpipe string spoke-sdp string endpoint icb boolean</b> |
| Tree       | <b>icb</b>  |
| Default    | false   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                |

### **name reference**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Endpoint name to which SDP bind is attached                                    |
| Context    | <b>configure service cpipe string spoke-sdp string endpoint name reference</b> |
| Tree       | <b>name</b>  |
| Reference  | <b>configure service cpipe string endpoint string</b>                          |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                   |

### **precedence (number | keyword)**

|          |   |
|----------|---|
| Synopsis | Precedence when multiple SDP binds are on one endpoint  |
| Context  | <b>configure service cpipe string spoke-sdp string endpoint precedence (number   keyword)</b> |
| Tree     | <b>precedence</b>   |

---

|            |  |
|------------|--|
| Range      | 1 to 4   |
| Options    | primary  |
| Default    | 4  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

## ingress

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ingress</b> context   |
| Context    | <b>configure</b> <a href="#">service cpipe</a> <a href="#">string spoke-sdp</a> <a href="#">string ingress</a> |
| Tree       | <a href="#">ingress</a>  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## qos

|            |  |
|------------|--|
| Synopsis   | Enter the <b>qos</b> context   |
| Context    | <b>configure</b> <a href="#">service cpipe</a> <a href="#">string spoke-sdp</a> <a href="#">string ingress qos</a> |
| Tree       | <a href="#">qos</a>  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## network

|            |  |
|------------|--|
| Synopsis   | Enter the <b>network</b> context   |
| Context    | <b>configure</b> <a href="#">service cpipe</a> <a href="#">string spoke-sdp</a> <a href="#">string ingress qos network</a> |
| Tree       | <a href="#">network</a>  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## fp-redirect-group

|          |  |
|----------|--|
| Synopsis | Enter the <b>fp-redirect-group</b> context   |
| Context  | <b>configure</b> <a href="#">service cpipe</a> <a href="#">string spoke-sdp</a> <a href="#">string ingress qos network fp-redirect-group</a> |
| Tree     | <a href="#">fp-redirect-group</a>  |

---

|            |  |
|------------|--|
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **group-name** *reference*

|            |  |
|------------|--|
| Synopsis   | Name of the forwarding plane queue group template  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress qos network</a> <a href="#">fp-redirect-group</a> <a href="#">group-name</a> <i>reference</i> |
| Tree       | <a href="#">group-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos queue-group-templates</a> <a href="#">ingress queue-group</a> <i>string</i>   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **instance** *number*

|            |   |
|------------|---|
| Synopsis   | Instance of FP ingress queue group for the SDP binding  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress qos network</a> <a href="#">fp-redirect-group</a> <a href="#">instance</a> <i>number</i> |
| Tree       | <a href="#">instance</a>  |
| Range      | 1 to 65535  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **policy-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Network policy ID   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress qos network</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos network</a> <i>string</i>  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**vc-label** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Ingress MPLS VC label to send packets to the far end                                  |
| Context    | <b>configure</b> <i>service cpipe string spoke-sdp string ingress vc-label number</i> |
| Tree       | <i>vc-label</i>   |
| Range      | 1 to 1048575  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                          |

**test** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Designate as a test service                                  |
| Context    | <b>configure</b> <i>service cpipe string test boolean</i>    |
| Tree       | <i>test</i>  |
| Default    | false  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

**vc-switching** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Use PW switching signaling for spoke SDPs in service              |
| Context    | <b>configure</b> <i>service cpipe string vc-switching boolean</i> |
| Tree       | <i>vc-switching</i>   |
| Default    | false   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS      |



**vc-type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Circuit emulation service type   |
| Context    | <b>configure</b> <i>service cpipe string</i> <b>vc-type</b> <i>keyword</i> |
| Tree       | <b>vc-type</b>   |
| Options    | satop-e1, satop-t1, cesopsn, cesopsn-cas                                   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS               |

**vpn-id** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | VPN identifier for the service   |
| Context    | <b>configure</b> <i>service cpipe string</i> <b>vpn-id</b> <i>number</i> |
| Tree       | <b>vpn-id</b>  |
| Range      | 1 to 2147483647  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS             |

**customer** [*customer-name*] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>customer</b> list instance         |
| Context    | <b>configure</b> <i>service customer string</i> |
| Tree       | <b>customer</b>                                 |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[customer-name]** *string*

|          |                             |
|----------|-----------------------------|
| Synopsis | Customer name for a service |
|----------|-----------------------------|

---

|               |  |
|---------------|--|
| Context       | <b>configure service customer string</b> |
| Tree          | <b>customer</b>                          |
| String Length | 1 to 64                                  |
| Notes         | This element is part of a list key.      |
| Introduced    | 16.0.R1                                  |
| Platforms     | All                                      |

### **contact string**

|               |   |
|---------------|---|
| Synopsis      | Service customer contact information                    |
| Context       | <b>configure service customer string contact string</b> |
| Tree          | <b>contact</b>  |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

### **customer-id number**

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Customer ID   |
| Context    | <b>configure service customer string customer-id number</b> |
| Tree       | <b>customer-id</b>  |
| Range      | 1 to 2147483647   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **description string**

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure service customer string description string</b> |
| Tree          | <b>description</b>  |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |

Platforms All

### **multi-service-site** [[multi-service-site-name](#)] *string*

Synopsis Enter the **multi-service-site** list instance  
 Context **configure service customer** *string* [multi-service-site](#) *string*  
 Tree [multi-service-site](#)  
 Introduced 16.0.R1  
 Platforms All

### **[multi-service-site-name]** *string*

Synopsis Customer site name  
 Context **configure service customer** *string* [multi-service-site](#) *string*  
 Tree [multi-service-site](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **assignment**

Synopsis Enter the **assignment** context  
 Context **configure service customer** *string* [multi-service-site](#) *string* **assignment**  
 Tree [assignment](#)  
 Introduced 16.0.R1  
 Platforms All

### **card** *number*

Synopsis Multi-service-site assignment to the card slot  
 Context **configure service customer** *string* [multi-service-site](#) *string* **assignment** **card** *number*  
 Tree [card](#)  
 Range 1 to 20  
 Notes The following elements are part of a choice: **card**, **fpe**, or **port**.

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **fpe reference**

|             |  |
|-------------|--|
| Synopsis    | Multi-service-site assignment to the FPE object  |
| Context     | <b>configure service customer string multi-service-site string assignment fpe reference</b>  |
| Tree        | <b>fpe</b>   |
| Description | <p>When configured to <b>true</b>, this command identifies the MSS assignment to an FPE object to allow the creation of a scheduling hierarchy used to control bandwidth over a set of PW SAPs belonging to multiple PW ports. These PW ports must be associated with the same FPE to which MSS is assigned.</p> <p>When configured to <b>false</b>, this command has no effect and returns no warnings or messages.</p> |
| Reference   | <b>configure fwd-path-ext fpe number</b>   |
| Notes       | The following elements are part of a choice: <b>card</b> , <b>fpe</b> , or <b>port</b> .   |
| Introduced  | 20.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **port string**

|            |   |
|------------|---|
| Synopsis   | Multi-service-site assignment to the port   |
| Context    | <b>configure service customer string multi-service-site string assignment port string</b> |
| Tree       | <b>port</b>   |
| Notes      | The following elements are part of a choice: <b>card</b> , <b>fpe</b> , or <b>port</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **description string**

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure service customer string multi-service-site string description string</b> |
| Tree          | <b>description</b>  |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

## egress

|            |   |
|------------|---|
| Synopsis   | Enter the <b>egress</b> context   |
| Context    | <b>configure service customer string multi-service-site string egress</b> |
| Tree       | <b>egress</b>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## agg-rate

|            |  |
|------------|--|
| Synopsis   | Enter the <b>agg-rate</b> context  |
| Context    | <b>configure service customer string multi-service-site string egress agg-rate</b> |
| Tree       | <b>agg-rate</b>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## limit-unused-bandwidth *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable aggregate rate overrun protection  |
| Context    | <b>configure service customer string multi-service-site string egress agg-rate limit-unused-bandwidth boolean</b> |
| Tree       | <b>limit-unused-bandwidth</b>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## queue-frame-based-accounting *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable frame based accounting for policers and queues   |
| Context    | <b>configure service customer string multi-service-site string egress agg-rate queue-frame-based-accounting boolean</b> |
| Tree       | <b>queue-frame-based-accounting</b>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**rate number**

|            |   |
|------------|---|
| Synopsis   | Rate limit  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a> <a href="#">rate</a> <i>number</i> |
| Tree       | <a href="#">rate</a>  |
| Range      | 1 to 6400000000   |
| Units      | kilobps   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**policer-control-policy reference**

|            |   |
|------------|---|
| Synopsis   | Policer control policy  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i> <a href="#">egress</a> <a href="#">policer-control-policy</a> <i>reference</i> |
| Tree       | <a href="#">policer-control-policy</a>  |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">policer-control-policy</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**scheduler-policy**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>scheduler-policy</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i> <a href="#">egress</a> <a href="#">scheduler-policy</a> |
| Tree       | <a href="#">scheduler-policy</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**overrides**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>overrides</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i> <a href="#">egress</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> |
| Tree       | <a href="#">overrides</a>  |
| Introduced | 16.0.R1  |

Platforms All

### **scheduler** [[scheduler-name](#)] *string*

Synopsis Enter the **scheduler** list instance

Context **configure service customer** *string* **multi-service-site** *string* **egress scheduler-policy overrides scheduler** *string*

Tree [scheduler](#)

Introduced 16.0.R1

Platforms All

### **[scheduler-name]** *string*

Synopsis Scheduler name

Context **configure service customer** *string* **multi-service-site** *string* **egress scheduler-policy overrides scheduler** *string*

Tree [scheduler](#)

Description This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (**#**, **\$**, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.

If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.

If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context does not change.

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **parent**

Synopsis Enter the **parent** context

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i> <a href="#">egress</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">parent</a> |
| Tree       | <a href="#">parent</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **cir-weight** *number*

|            |  |
|------------|--|
| Synopsis   | Weight used at the within-CIR port priority level  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i> <a href="#">egress</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">parent</a> <a href="#">cir-weight</a> <i>number</i> |
| Tree       | <a href="#">cir-weight</a>   |
| Range      | 0 to 100   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **weight** *number*

|            |  |
|------------|--|
| Synopsis   | Relative weight of the scheduler to feed the queue   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i> <a href="#">egress</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">parent</a> <a href="#">weight</a> <i>number</i> |
| Tree       | <a href="#">weight</a>   |
| Range      | 0 to 100   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **rate**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>rate</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i> <a href="#">egress</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">rate</a> |
| Tree       | <a href="#">rate</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |



**cir** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | CIR for the scheduler  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i> <a href="#">egress</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <b>rate</b> <b>cir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cir</a>  |
| Range      | 0 to 6400000000  |
| Units      | kilobps  |
| Options    | sum, max   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**pir** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | PIR for the scheduler  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i> <a href="#">egress</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <b>rate</b> <b>pir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">pir</a>  |
| Range      | 1 to 6400000000  |
| Units      | kilobps  |
| Options    | max  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**policy-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Scheduler policy name   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i> <a href="#">egress</a> <a href="#">scheduler-policy</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">scheduler-policy</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**ingress**

|          |                                  |
|----------|----------------------------------|
| Synopsis | Enter the <b>ingress</b> context |
|----------|----------------------------------|

|            |  |
|------------|--|
| Context    | <b>configure service customer</b> <i>string</i> <b>multi-service-site</b> <i>string</i> <b>ingress</b> |
| Tree       | <a href="#">ingress</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **policer-control-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | Policer control policy  |
| Context    | <b>configure service customer</b> <i>string</i> <b>multi-service-site</b> <i>string</i> <b>ingress</b> <b>policer-control-policy</b> <i>reference</i> |
| Tree       | <a href="#">policer-control-policy</a>  |
| Reference  | <b>configure qos</b> <b>policer-control-policy</b> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

### **scheduler-policy**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>scheduler-policy</b> context  |
| Context    | <b>configure service customer</b> <i>string</i> <b>multi-service-site</b> <i>string</i> <b>ingress</b> <b>scheduler-policy</b> |
| Tree       | <a href="#">scheduler-policy</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **overrides**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>overrides</b> context  |
| Context    | <b>configure service customer</b> <i>string</i> <b>multi-service-site</b> <i>string</i> <b>ingress</b> <b>scheduler-policy</b> <b>overrides</b> |
| Tree       | <a href="#">overrides</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **scheduler** [[scheduler-name](#)] *string*

|          |  |
|----------|--|
| Synopsis | Enter the <b>scheduler</b> list instance |
|----------|--|

|            |   |
|------------|---|
| Context    | <b>configure service customer</b> <i>string</i> <b>multi-service-site</b> <i>string</i> <b>ingress scheduler-policy overrides scheduler</b> <i>string</i> |
| Tree       | <b>scheduler</b>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **[scheduler-name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Scheduler name  |
| Context       | <b>configure service customer</b> <i>string</i> <b>multi-service-site</b> <i>string</i> <b>ingress scheduler-policy overrides scheduler</b> <i>string</i> |
| Tree          | <b>scheduler</b>  |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

### **parent**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>parent</b> context   |
| Context    | <b>configure service customer</b> <i>string</i> <b>multi-service-site</b> <i>string</i> <b>ingress scheduler-policy overrides scheduler</b> <i>string</i> <b>parent</b> |
| Tree       | <b>parent</b>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **cir-weight** *number*

|            |  |
|------------|--|
| Synopsis   | Weight used at the within-CIR port priority level  |
| Context    | <b>configure service customer</b> <i>string</i> <b>multi-service-site</b> <i>string</i> <b>ingress scheduler-policy overrides scheduler</b> <i>string</i> <b>parent cir-weight</b> <i>number</i> |
| Tree       | <b>cir-weight</b>  |
| Range      | 0 to 100   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**weight number**

|            |   |
|------------|---|
| Synopsis   | Relative weight of the scheduler to feed the queue  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i> <a href="#">ingress</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">parent</a> <a href="#">weight</a> <i>number</i> |
| Tree       | <a href="#">weight</a>  |
| Range      | 0 to 100  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**rate**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>rate</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i> <a href="#">ingress</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">rate</a> |
| Tree       | <a href="#">rate</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**cir (number | keyword)**

|            |   |
|------------|---|
| Synopsis   | CIR for the scheduler   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i> <a href="#">ingress</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">rate</a> <a href="#">cir</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cir</a>   |
| Range      | 0 to 6400000000   |
| Units      | kilobps   |
| Options    | sum, max  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**pir (number | keyword)**

|          |   |
|----------|---|
| Synopsis | PIR for the scheduler   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i> <a href="#">ingress</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">rate</a> <a href="#">pir</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <a href="#">pir</a>   |

|            |                 |
|------------|-----------------|
| Range      | 1 to 6400000000 |
| Units      | kilobps         |
| Options    | max             |
| Introduced | 16.0.R1         |
| Platforms  | All             |

### **policy-name** *reference*

|            |  |
|------------|--|
| Synopsis   | Scheduler policy name  |
| Context    | <b>configure</b> <a href="#">service customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i> <a href="#">ingress scheduler-policy</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos scheduler-policy</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **phone** *string*

|               |   |
|---------------|---|
| Synopsis      | Service customer telephone number information   |
| Context       | <b>configure</b> <a href="#">service customer</a> <i>string</i> <a href="#">phone</a> <i>string</i> |
| Tree          | <a href="#">phone</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

### **epipe** [[service-name](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>epipe</b> list instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> |
| Tree       | <a href="#">epipe</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[service-name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Administrative service name  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> |
| Tree          | <a href="#">epipe</a>  |
| String Length | 1 to 64  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the service  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**bgp** [[bgp-instance](#)] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>bgp</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <b>bgp</b> <i>number</i> |
| Tree       | <a href="#">bgp</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[bgp-instance]** *number*

|            |   |
|------------|---|
| Synopsis   | BGP instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <b>bgp</b> <i>number</i> |
| Tree       | <a href="#">bgp</a>   |
| Range      | 1   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |

Platforms All

### **adv-service-mtu** *number*

Synopsis Advertised service MTU value

Context **configure service epipe** *string* **bgp** *number* **adv-service-mtu** *number*

Tree [adv-service-mtu](#)

Description This command configures the MTU signaled value used in the BGP for the service. When configured, the router uses the value for signaling and for validation with the received MTU instead of the service MTU. However, the value does not affect the locally enforced value, which is still based on the service MTU.

Range 0 to 9782

Introduced 22.2.R1

Platforms All

### **pw-template-binding** [[pw-template-name](#)] *reference*

Synopsis Enter the **pw-template-binding** list instance

Context **configure service epipe** *string* **bgp** *number* **pw-template-binding** *reference*

Tree [pw-template-binding](#)

Max. Instances 100

Introduced 16.0.R1

Platforms All

### **[pw-template-name]** *reference*

Synopsis Policy name

Context **configure service epipe** *string* **bgp** *number* **pw-template-binding** *reference*

Tree [pw-template-binding](#)

Reference **configure service pw-template** *string*

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

**bfd-liveness** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable BFD  |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">bgp</a> <i>number</i> <a href="#">pw-template-binding</a> <i>reference</i> <a href="#">bfd-liveness</a> <i>boolean</i> |
| Tree       | <a href="#">bfd-liveness</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**bfd-template** *reference*

|            |   |
|------------|---|
| Synopsis   | BFD template name for PW-Template binding   |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">bgp</a> <i>number</i> <a href="#">pw-template-binding</a> <i>reference</i> <a href="#">bfd-template</a> <i>reference</i> |
| Tree       | <a href="#">bfd-template</a>  |
| Reference  | <b>configure</b> <a href="#">bfd</a> <a href="#">bfd-template</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**endpoint** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Endpoint name associated with the BGP PW template  |
| Context     | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">bgp</a> <i>number</i> <a href="#">pw-template-binding</a> <i>reference</i> <a href="#">endpoint</a> <i>reference</i>  |
| Tree        | <a href="#">endpoint</a>   |
| Description | This command specifies the endpoint name associated with the BGP PW template. When an endpoint is associated to the PW template binding of a BGP VPWS service, EVPN MPLS can also be configured and associated to the same endpoint in the same Epipe service. |
| Reference   | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">endpoint</a> <i>string</i>  |
| Introduced  | 20.5.R1  |
| Platforms   | All  |



**import-rt string**

|                |  |
|----------------|--|
| Synopsis       | Import route-target communities  |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">bgp</a> <a href="#">number</a> <a href="#">pw-template-binding</a> <a href="#">reference</a> <b>import-rt</b> <a href="#">string</a> |
| Tree           | <a href="#">import-rt</a>  |
| String Length  | 10 to 28   |
| Max. Instances | 5  |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

**route-distinguisher** (*keyword* | *vpn-route-distinguisher*)

|            |   |
|------------|---|
| Synopsis   | RD component for NLRI for L2VPN and EVPN families   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">bgp</a> <a href="#">number</a> <b>route-distinguisher</b> ( <i>keyword</i>   <i>vpn-route-distinguisher</i> ) |
| Tree       | <a href="#">route-distinguisher</a>   |
| Options    | auto-rd   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**route-target**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>route-target</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">bgp</a> <a href="#">number</a> <b>route-target</b> |
| Tree       | <a href="#">route-target</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**export string**

|               |  |
|---------------|--|
| Synopsis      | Extended community name for default import policy  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">bgp</a> <a href="#">number</a> <a href="#">route-target</a> <b>export</b> <a href="#">string</a> |
| Tree          | <a href="#">export</a>   |
| String Length | 10 to 28   |

Introduced 16.0.R1  
 Platforms All

### **import** *string*

Synopsis Extended community name for default import policy  
 Context **configure** [service](#) [epipe](#) *string* [bgp](#) *number* [route-target](#) [import](#) *string*  
 Tree [import](#)  
 String Length 10 to 28  
 Introduced 16.0.R1  
 Platforms All

### **vsi-export** *reference*

Synopsis VSI export policies  
 Context **configure** [service](#) [epipe](#) *string* [bgp](#) *number* [vsi-export](#) *reference*  
 Tree [vsi-export](#)  
 Reference **configure** [policy-options](#) [policy-statement](#) *string*  
 Max. Instances 5  
 Notes This element is ordered by the user.  
 Introduced 19.10.R1  
 Platforms All

### **vsi-import** *reference*

Synopsis VSI import policies  
 Context **configure** [service](#) [epipe](#) *string* [bgp](#) *number* [vsi-import](#) *reference*  
 Tree [vsi-import](#)  
 Reference **configure** [policy-options](#) [policy-statement](#) *string*  
 Max. Instances 5  
 Notes This element is ordered by the user.  
 Introduced 19.10.R1  
 Platforms All

**bgp-evpn**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>bgp-evpn</b> context             |
| Context    | <b>configure service epipe string bgp-evpn</b> |
| Tree       | <a href="#">bgp-evpn</a>                       |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**evi number**

|             |  |
|-------------|--|
| Synopsis    | EVPN ID  |
| Context     | <b>configure service epipe string bgp-evpn evi number</b>  |
| Tree        | <a href="#">evi</a>  |
| Description | <p>This command configures an EVPN instance (EVI) unique in the system. It is used for the service-carving algorithm for multi-homing and auto-deriving route target and route distinguishers.</p> <p>The following options are supported:</p> <p>If this EVPN identifier is not specified, the value is zero and no route distinguisher or route target is automatically derived from it. If the specified EVPN identifier is lower than 65535 and no other route distinguisher or route target is configured in the service, the following applies:</p> <ul style="list-style-type: none"> <li>the route distinguisher is derived from &lt;system_ip&gt;:evi</li> <li>the route target is derived from &lt;autonomous-system&gt;:evi</li> </ul> <p>If the specified EVPN identifier is higher than 65535 and no other route distinguisher or route target is configured in the service, the following applies.</p> <ul style="list-style-type: none"> <li>The route distinguisher cannot be automatically derived. An error is generated if enabling EVPN is attempted without a route distinguisher. A manual or an <b>auto-rd</b> route distinguisher must be configured.</li> <li>The route target can only be automatically derived if the <b>evi-three-byte-auto-rt</b> command is configured. If configured, the route target is automatically derived in accordance with the rules described in RFC8365.</li> </ul> |
| Range       | 1 to 16777215  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**local-attachment-circuit [name] string**

|          |   |
|----------|---|
| Synopsis | Enter the <b>local-attachment-circuit</b> list instance |
|----------|---|

|                |  |
|----------------|--|
| Context        | <b>configure service epipe string bgp-evpn local-attachment-circuit string</b> |
| Tree           | <a href="#">local-attachment-circuit</a>                                       |
| Max. Instances | 2  |
| Introduced     | 20.10.R1   |
| Platforms      | All  |

**[name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Attachment circuit name  |
| Context       | <b>configure service epipe string bgp-evpn local-attachment-circuit string</b> |
| Tree          | <a href="#">local-attachment-circuit</a>                                       |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 20.10.R1   |
| Platforms     | All  |

**endpoint** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Endpoint name   |
| Context    | <b>configure service epipe string bgp-evpn local-attachment-circuit string endpoint reference</b> |
| Tree       | <a href="#">endpoint</a>  |
| Reference  | <b>configure service epipe string endpoint string</b>   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**eth-tag** *number*

|          |   |
|----------|---|
| Synopsis | Ethernet tag of the attachment circuit  |
| Context  | <b>configure service epipe string bgp-evpn local-attachment-circuit string eth-tag number</b> |
| Tree     | <a href="#">eth-tag</a>   |

|             |  |
|-------------|--|
| Description | <p>This command configures the Ethernet tag value of the attachment circuit.</p> <p>When configured in the local attachment circuit context, the tag value is used in the advertised AD per-EVI route sent for the attachment circuit.</p> <p>When configured in the remote attachment circuit context, the value is compared with the Ethernet tag value of the imported D per-EVI routes for the service. When there is a match, the system creates an EVPN destination for the Epipe.</p> |
| Range       | 1 to 16777215  |
| Introduced  | 20.10.R1   |
| Platforms   | All  |

### **mpls** [**bgp-instance**] *number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mpls</b> list instance  |
| Context    | <b>configure</b> <b>service</b> <b>epipe</b> <i>string</i> <b>bgp-evpn</b> <b>mpls</b> <i>number</i> |
| Tree       | <b>mpls</b>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **[bgp-instance]** *number*

|            |  |
|------------|--|
| Synopsis   | BGP instance   |
| Context    | <b>configure</b> <b>service</b> <b>epipe</b> <i>string</i> <b>bgp-evpn</b> <b>mpls</b> <i>number</i> |
| Tree       | <b>mpls</b>  |
| Range      | 1  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of BGP EVPN MPLS  |
| Context    | <b>configure</b> <b>service</b> <b>epipe</b> <i>string</i> <b>bgp-evpn</b> <b>mpls</b> <i>number</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>   |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |

Platforms All

## auto-bind-tunnel

Synopsis Enter the **auto-bind-tunnel** context

Context **configure service epipe** *string* *bgp-evpn mpls* *number* **auto-bind-tunnel**

Tree [auto-bind-tunnel](#)

Introduced 16.0.R1

Platforms All

## allow-flex-algo-fallback *boolean*

Synopsis Enable flexible algorithm fallback

Context **configure service epipe** *string* *bgp-evpn mpls* *number* **auto-bind-tunnel allow-flex-algo-fallback** *boolean*

Tree [allow-flex-algo-fallback](#)

Description When configured to **true**, a BGP router with a Flex-Algorithm action configured (via the **configure policy-options policy-statement entry action flex-algo** command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available.

When configured to **false**, the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available.

Default false

Introduced 20.10.R1

Platforms All

## ecmp *number*

Synopsis Maximum ECMP routes information

Context **configure service epipe** *string* *bgp-evpn mpls* *number* **auto-bind-tunnel ecmp** *number*

Tree [ecmp](#)

Range 1 to 32

Default 1

Introduced 19.10.R1

Platforms All

**enforce-strict-tunnel-tagging** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable/disable enforcement of strict tunnel tagging  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <i>number</i> <a href="#">auto-bind-tunnel</a> <a href="#">enforce-strict-tunnel-tagging</a> <i>boolean</i> |
| Tree       | <a href="#">enforce-strict-tunnel-tagging</a>  |
| Default    | false  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**resolution** *keyword*

|            |   |
|------------|---|
| Synopsis   | Resolution method for tunnel selection  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <i>number</i> <a href="#">auto-bind-tunnel</a> <a href="#">resolution</a> <i>keyword</i> |
| Tree       | <a href="#">resolution</a>  |
| Options    | none, filter, any   |
| Default    | none  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**resolution-filter**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>resolution-filter</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <i>number</i> <a href="#">auto-bind-tunnel</a> <a href="#">resolution-filter</a> |
| Tree       | <a href="#">resolution-filter</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**bgp** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Use BGP tunneling for next-hop resolution  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <i>number</i> <a href="#">auto-bind-tunnel</a> <a href="#">resolution-filter</a> <a href="#">bgp</a> <i>boolean</i> |
| Tree        | <a href="#">bgp</a>  |
| Description | When configured to <b>true</b> , BGP searches the BGP LSP for the address of the BGP next hop.   |

When configured to **false**, BGP tunneling is not used and inter-area or inter-as prefixes are not resolved.

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **ldp boolean**

|             |  |
|-------------|--|
| Synopsis    | Use LDP tunneling for next-hop resolution  |
| Context     | <b>configure service epipe string bgp-evpn mpls number auto-bind-tunnel resolution-filter ldp boolean</b>  |
| Tree        | <b>ldp</b>   |
| Description | When configured to <b>true</b> , BGP searches for an LDP LSP with a FEC prefix corresponding to the address of the BGP next hop.<br>When configured to <b>false</b> , LDP tunneling is not used for next-hop resolution. |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **mpls-fwd-policy boolean**

|             |   |
|-------------|---|
| Synopsis    | Use MPLS forwarding policy for next-hop resolution  |
| Context     | <b>configure service epipe string bgp-evpn mpls number auto-bind-tunnel resolution-filter mpls-fwd-policy boolean</b>   |
| Tree        | <b>mpls-fwd-policy</b>  |
| Description | When configured to <b>true</b> , BGP uses the MPLS forwarding policy to determine the address of the BGP next hop.<br>When configured to <b>false</b> , the MPLS forwarding policy is not used for next-hop resolution. |
| Default     | false   |
| Introduced  | 19.5.R1   |
| Platforms   | All   |

### **rib-api boolean**

|          |  |
|----------|--|
| Synopsis | Use RIB API gRPC service for next-hop resolution |
|----------|--|



|             |   |
|-------------|---|
| Context     | <b>configure service epipe</b> <i>string</i> <b>bgp-evpn mpls</b> <i>number</i> <b>auto-bind-tunnel resolution-filter rib-api</b> <i>boolean</i>  |
| Tree        | <b>rib-api</b>  |
| Description | When configured to <b>true</b> , BGP uses tunnels programmed using the RIB API gRPC service to resolve the next hops of routes imported into the EVPN service.<br>When configured to <b>false</b> , the RIB API service tunnels are not used for next-hop resolution. |
| Default     | false   |
| Introduced  | 19.5.R1   |
| Platforms   | All   |

### **rsvp** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Use RSVP tunneling for next-hop resolution  |
| Context     | <b>configure service epipe</b> <i>string</i> <b>bgp-evpn mpls</b> <i>number</i> <b>auto-bind-tunnel resolution-filter rsvp</b> <i>boolean</i>   |
| Tree        | <b>rsvp</b>   |
| Description | When configured to <b>true</b> , BGP searches the best metric RSVP LSP to determine the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface used by the BGP instance on the remote node. The LSP metric is provided by MPLS in the tunnel table. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID.<br>When configured to <b>false</b> , the RSVP LSP is not used for next-hop resolution. |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **sr-isis** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Use IS-IS SR tunneling for next-hop resolution  |
| Context     | <b>configure service epipe</b> <i>string</i> <b>bgp-evpn mpls</b> <i>number</i> <b>auto-bind-tunnel resolution-filter sr-isis</b> <i>boolean</i>  |
| Tree        | <b>sr-isis</b>  |
| Description | When configured to <b>true</b> , BGP uses an IS-IS tunnel type to determine the address of the BGP next hop.<br>The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered IS-IS instance.<br>When configured to <b>false</b> , IS-IS tunneling is not used for next-hop resolution. |

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **sr-ospf** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Use OSPF SR tunneling for next-hop resolution  |
| Context     | <b>configure</b> <b>service</b> <b>epipe</b> <i>string</i> <b>bgp-evpn</b> <b>mpls</b> <i>number</i> <b>auto-bind-tunnel</b> <b>resolution-filter</b> <b>sr-ospf</b> <i>boolean</i>  |
| Tree        | <b>sr-ospf</b>   |
| Description | When configured to <b>true</b> , BGP uses an OSPF tunnel type to determine the address of the BGP next hop.<br><br>The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OPSF instance.<br><br>When configured to <b>false</b> , OSPF tunneling is not used for next-hop resolution. |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **sr-ospf3** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Use OSPFv3 SR tunneling for next-hop resolution   |
| Context     | <b>configure</b> <b>service</b> <b>epipe</b> <i>string</i> <b>bgp-evpn</b> <b>mpls</b> <i>number</i> <b>auto-bind-tunnel</b> <b>resolution-filter</b> <b>sr-ospf3</b> <i>boolean</i>  |
| Tree        | <b>sr-ospf3</b>   |
| Description | When configured to <b>true</b> , BGP uses an OSPF3 tunnel type to determine the address of the BGP next hop.<br><br>The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OPSF3 instance.<br><br>When configured to <b>false</b> , OSPF3 tunneling is not used for next-hop resolution. |
| Default     | false   |
| Introduced  | 19.10.R1  |
| Platforms   | All   |

### **sr-policy** *boolean*

|          |   |
|----------|---|
| Synopsis | Use SR policies for next-hop resolution |
|----------|---|

|             |  |
|-------------|--|
| Context     | <b>configure service epipe</b> <i>string</i> <b>bgp-evpn mpls</b> <i>number</i> <b>auto-bind-tunnel resolution-filter sr-policy</b> <i>boolean</i>   |
| Tree        | <b>sr-policy</b>   |
| Description | When configured to <b>true</b> , this command instructs BGP to use an SR policy to determine the address of the BGP next hop. The SR policy search criteria includes a non-null endpoint and color value that matches the BGP next hop and color extended community value, respectively, of the EVPN route.<br><br>When configured to <b>false</b> , SR policies are not used for next-hop resolution. |
| Default     | false  |
| Introduced  | 19.5.R1  |
| Platforms   | All  |

**sr-te** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Use SR-TE tunneling for next-hop resolution  |
| Context     | <b>configure service epipe</b> <i>string</i> <b>bgp-evpn mpls</b> <i>number</i> <b>auto-bind-tunnel resolution-filter sr-te</b> <i>boolean</i>   |
| Tree        | <b>sr-te</b>   |
| Description | When configured to <b>true</b> , BGP uses an SR-TE tunnel type to determine the address of the BGP next hop.<br><br>The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered tunnel ID.<br><br>When configured to <b>false</b> , SR-TE tunneling is not used for next-hop resolution. |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**udp** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Use MPLS over UDP tunneling for next-hop resolution  |
| Context     | <b>configure service epipe</b> <i>string</i> <b>bgp-evpn mpls</b> <i>number</i> <b>auto-bind-tunnel resolution-filter udp</b> <i>boolean</i>   |
| Tree        | <b>udp</b>   |
| Description | When configured to <b>true</b> , BGP uses an MPLS over UDP tunnel type to determine the address of the BGP next hop.<br><br>When configured to <b>false</b> , MPLS over UDP tunneling is not used for next-hop resolution. |
| Default     | false  |
| Introduced  | 16.0.R1  |

Platforms All

### **weighted-ecmp** *boolean*

Synopsis Allow weighted load balancing

Context **configure** *service* *epipe string* *bgp-evpn mpls number* *auto-bind-tunnel* *weighted-ecmp boolean*

Tree [weighted-ecmp](#)

Description When configured to **true**, this router enables weighted ECMP for packets using tunnels that a VPLS or Epipe automatically binds to. Packets are sprayed across LSPs in the ECMP according to the outcome of the hash algorithm and the configured load balancing weight of each LSP.

When configured to **false**, this command disables weighted ECMP for next-hop tunnel selection.

Default false

Introduced 22.7.R1

Platforms All

### **control-word** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable the CW bit in the label message

Context **configure** *service* *epipe string* *bgp-evpn mpls number* *control-word boolean*

Tree [control-word](#)

Default false

Introduced 16.0.R1

Platforms All

### **default-route-tag** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Default route tag

|             |  |
|-------------|--|
| Context     | <b>configure service epipe</b> <i>string</i> <b>bgp-evpn mpls</b> <i>number</i> <b>default-route-tag</b> <i>string</i>   |
| Tree        | <b>default-route-tag</b>   |
| Description | <p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p> <p>The following are examples of the conflict priority handling:</p> <ul style="list-style-type: none"> <li>• If a service is configured with both <b>default-route-tag</b> <i>X</i> and <b>proxy-arp evpn-route-tag</b> <i>Y</i>, the EVPN uses route tag <i>Y</i> when sending EVPN proxy-arp routes to the BGP RIB for advertisement.</li> <li>• If a given IP-prefix route is tagged in the route-table with tag <i>A</i> and the R-VPLS, in which the route is advertised, uses <i>B</i> as the <b>default-route-tag</b>, then EVPN keeps tag <i>A</i> when sending the route to the BGP RIB.</li> </ul> <p>The <b>default-route-tag</b> configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.</p> |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

### **dynamic-egress-label-limit** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Enables dynamic egress label limit  |
| Context     | <b>configure service epipe</b> <i>string</i> <b>bgp-evpn mpls</b> <i>number</i> <b>dynamic-egress-label-limit</b> <i>boolean</i>  |
| Tree        | <b>dynamic-egress-label-limit</b>   |
| Description | <p>When configured to <b>true</b>, this command relaxes the egress MPLS label limit check when resolving BGP next hops in the tunnel table.</p> <p>For VPRN services, the OAM label is never computed and, therefore, one more egress label is allowed.</p> <p>For EVPN (Epipe and VPLS) services, the system only computes the control word and ESI label if they are used. For the control word, the system reduces the egress label limit by one label if the control word is configured in the service. When configured, the ESI label is not counted for Epipes or VPLS services without an ES.</p> <p>When configured to <b>false</b> this command, for EVPN, Epipe, and VPLS services, always accounts for the ESI label and control word.</p> |
| Default     | false   |
| Introduced  | 22.2.R1   |
| Platforms   | All   |

**ecmp number**

|            |  |
|------------|--|
| Synopsis   | Maximum ECMP routes information  |
| Context    | <b>configure service epipe string bgp-evpn mpls number ecmp number</b> |
| Tree       | <b>ecmp</b>  |
| Range      | 1 to 32  |
| Default    | 1  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**entropy-label boolean**

|            |  |
|------------|--|
| Synopsis   | Enable use of entropy-labels   |
| Context    | <b>configure service epipe string bgp-evpn mpls number entropy-label boolean</b> |
| Tree       | <b>entropy-label</b>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**evi-three-byte-auto-rt boolean****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Auto-derive the BGP EVPN route target   |
| Context     | <b>configure service epipe string bgp-evpn mpls number evi-three-byte-auto-rt boolean</b>   |
| Tree        | <b>evi-three-byte-auto-rt</b>   |
| Description | <p>When configured to <b>true</b>, the BGP-EVPN instance import and export route target is auto-derived as described in RFC 8365 (Global-Administrator:A/Type/D-ID/Service-ID).</p> <p>Where:</p> <ul style="list-style-type: none"> <li>• Global Administrator – is the configured 2-octet AS number; if the configured ASN exceeds the 2 byte limit, the low order 16-bit value is taken</li> <li>• A=0 (for auto-derivation)</li> <li>• Type=4 (EVI-based route-target)</li> </ul> |

- D-ID= [1..2] – encodes the BGP instance, which allows the auto-derivation of different route-targets in multi-instance services; the value is inherited from the corresponding BGP instance
- Service ID=3-octet EVI

When configured to **false**, route target derivation is not allowed.

|            |          |
|------------|----------|
| Default    | false    |
| Introduced | 21.10.R1 |
| Platforms  | All      |

### **force-vc-forwarding** *keyword*

|            |  |
|------------|--|
| Synopsis   | VC forwarding action   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <i>number</i> <b>force-vc-forwarding</b> <i>keyword</i> |
| Tree       | <a href="#">force-vc-forwarding</a>  |
| Options    | vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **oper-group** *reference*

|            |   |
|------------|---|
| Synopsis   | Operational group identifier  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <i>number</i> <b>oper-group</b> <i>reference</i> |
| Tree       | <a href="#">oper-group</a>  |
| Reference  | <b>configure</b> <a href="#">service</a> <b>oper-group</b> <i>string</i>  |
| Introduced | 19.5.R1   |
| Platforms  | All   |

### **route-next-hop**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>route-next-hop</b> context  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <i>number</i> <b>route-next-hop</b> |
| Tree        | <a href="#">route-next-hop</a>   |
| Description | Commands in this context configure the next hop of the EVPN routes.  |
| Introduced  | 19.10.R1   |
| Platforms   | All  |

**ip-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | IP address of the next-hop for the service EVPN route  |
| Context    | <b>configure</b> <i>service epipe string bgp-evpn mpls number route-next-hop ip-address</i> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) |
| Tree       | <a href="#">ip-address</a>   |
| Notes      | The following elements are part of a choice: <b>ip-address</b> , <b>system-ipv4</b> , or <b>system-ipv6</b> .                                      |
| Introduced | 19.10.R1   |
| Platforms  | All  |

**system-ipv4****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | System IPv4 address for service EVPN route next hop   |
| Context    | <b>configure</b> <i>service epipe string bgp-evpn mpls number route-next-hop system-ipv4</i>                  |
| Tree       | <a href="#">system-ipv4</a>   |
| Notes      | The following elements are part of a choice: <b>ip-address</b> , <b>system-ipv4</b> , or <b>system-ipv6</b> . |
| Introduced | 19.10.R1  |
| Platforms  | All   |

**system-ipv6****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | System IPv6 address for service EVPN route next hop   |
| Context  | <b>configure</b> <i>service epipe string bgp-evpn mpls number route-next-hop system-ipv6</i>                  |
| Tree     | <a href="#">system-ipv6</a>   |
| Notes    | The following elements are part of a choice: <b>ip-address</b> , <b>system-ipv4</b> , or <b>system-ipv6</b> . |



|            |          |
|------------|----------|
| Introduced | 19.10.R1 |
| Platforms  | All      |

## send-tunnel-encap

|            |  |
|------------|--|
| Synopsis   | Enter the <b>send-tunnel-encap</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <a href="#">number</a> <a href="#">send-tunnel-encap</a> |
| Tree       | <a href="#">send-tunnel-encap</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## mpls *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enable MPLS encapsulation  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <a href="#">number</a> <a href="#">send-tunnel-encap</a> <a href="#">mpls</a> <i>boolean</i> |
| Tree       | <a href="#">mpls</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## mpls-over-udp *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enable MPLS over UDP encapsulation  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <a href="#">number</a> <a href="#">send-tunnel-encap</a> <a href="#">mpls-over-udp</a> <i>boolean</i> |
| Tree       | <a href="#">mpls-over-udp</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**remote-attachment-circuit** [*name*] *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>remote-attachment-circuit</b> list instance                               |
| Context        | <b>configure service epipe string</b> <i>bgp-evpn remote-attachment-circuit string</i> |
| Tree           | <i>remote-attachment-circuit</i>   |
| Max. Instances | 2  |
| Introduced     | 20.10.R1   |
| Platforms      | All  |

**[name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Attachment circuit name  |
| Context       | <b>configure service epipe string</b> <i>bgp-evpn remote-attachment-circuit string</i> |
| Tree          | <i>remote-attachment-circuit</i>   |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 20.10.R1   |
| Platforms     | All  |

**endpoint** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Endpoint name   |
| Context    | <b>configure service epipe string</b> <i>bgp-evpn remote-attachment-circuit string endpoint reference</i> |
| Tree       | <i>endpoint</i>   |
| Reference  | <b>configure service epipe string</b> <i>endpoint string</i>  |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**eth-tag** *number*

|             |   |
|-------------|---|
| Synopsis    | Ethernet tag of the attachment circuit  |
| Context     | <b>configure</b> <b>service</b> <b>epipe</b> <i>string</i> <b>bgp-evpn</b> <b>remote-attachment-circuit</b> <i>string</i> <b>eth-tag</b> <i>number</i>  |
| Tree        | <b>eth-tag</b>  |
| Description | This command configures the Ethernet tag value of the attachment circuit.<br><br>When configured in the local attachment circuit context, the tag value is used in the advertised AD per-EVI route sent for the attachment circuit.<br><br>When configured in the remote attachment circuit context, the value is compared with the Ethernet tag value of the imported D per-EVI routes for the service. When there is a match, the system creates an EVPN destination for the Epipe. |
| Range       | 1 to 16777215   |
| Introduced  | 20.10.R1  |
| Platforms   | All   |

**segment-routing-v6** [**bgp-instance**] *number*

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>segment-routing-v6</b> list instance  |
| Context     | <b>configure</b> <b>service</b> <b>epipe</b> <i>string</i> <b>bgp-evpn</b> <b>segment-routing-v6</b> <i>number</i> |
| Tree        | <b>segment-routing-v6</b>  |
| Description | Commands in this context configure the SRv6 instance that is used in the service.                                  |
| Introduced  | 21.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

**[bgp-instance]** *number*

|            |  |
|------------|--|
| Synopsis   | BGP instance   |
| Context    | <b>configure</b> <b>service</b> <b>epipe</b> <i>string</i> <b>bgp-evpn</b> <b>segment-routing-v6</b> <i>number</i> |
| Tree       | <b>segment-routing-v6</b>  |
| Range      | 1  |
| Notes      | This element is part of a list key.  |
| Introduced | 21.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of segment routing over IPv6  |
| Context    | <b>configure</b> <b>service</b> <b>epipe</b> <i>string</i> <b>bgp-evpn</b> <b>segment-routing-v6</b> <i>number</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>   |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 21.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

**default-route-tag** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Default route tag  |
| Context     | <b>configure</b> <b>service</b> <b>epipe</b> <i>string</i> <b>bgp-evpn</b> <b>segment-routing-v6</b> <i>number</i> <b>default-route-tag</b> <i>string</i>  |
| Tree        | <b>default-route-tag</b>   |
| Description | <p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p> <p>The following are examples of the conflict priority handling:</p> <ul style="list-style-type: none"> <li>• If a service is configured with both <b>default-route-tag</b> <i>X</i> and <b>proxy-arp evpn-route-tag</b> <i>Y</i>, the EVPN uses route tag <i>Y</i> when sending EVPN proxy-arp routes to the BGP RIB for advertisement.</li> <li>• If a given IP-prefix route is tagged in the route-table with tag <i>A</i> and the R-VPLS, in which the route is advertised, uses <i>B</i> as the <b>default-route-tag</b>, then EVPN keeps tag <i>A</i> when sending the route to the BGP RIB.</li> </ul> <p>The <b>default-route-tag</b> configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.</p> |
| Introduced  | 21.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

**ecmp number**

|            |  |
|------------|--|
| Synopsis   | Maximum ECMP value configured on the service   |
| Context    | <b>configure</b> <b>service</b> <b>epipe</b> <i>string</i> <b>bgp-evpn</b> <b>segment-routing-v6</b> <i>number</i> <b>ecmp</b> <i>number</i> |
| Tree       | <b>ecmp</b>  |
| Range      | 1 to 32  |
| Default    | 1  |
| Introduced | 21.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

**evi-three-byte-auto-rt boolean****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Auto-derive the BGP EVPN route target   |
| Context     | <b>configure</b> <b>service</b> <b>epipe</b> <i>string</i> <b>bgp-evpn</b> <b>segment-routing-v6</b> <i>number</i> <b>evi-three-byte-auto-rt</b> <i>boolean</i>   |
| Tree        | <b>evi-three-byte-auto-rt</b>   |
| Description | <p>When configured to <b>true</b>, the BGP-EVPN instance import and export route target is auto-derived as described in RFC 8365 (Global-Administrator:A/Type/D-ID/Service-ID).<br/>Where:</p> <ul style="list-style-type: none"> <li>• Global Administrator – is the configured 2-octet AS number; if the configured ASN exceeds the 2 byte limit, the low order 16-bit value is taken</li> <li>• A=0 (for auto-derivation)</li> <li>• Type=4 (EVI-based route-target)</li> <li>• D-ID= [1..2] – encodes the BGP instance, which allows the auto-derivation of different route-targets in multi-instance services; the value is inherited from the corresponding BGP instance</li> <li>• Service ID=3-octet EVI</li> </ul> <p>When configured to <b>false</b>, route target derivation is not allowed.</p> |
| Default     | false   |
| Introduced  | 21.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

**force-vc-forwarding** *keyword*

|             |  |
|-------------|--|
| Synopsis    | Datapath forwarding to force vlan-vc-type  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">segment-routing-v6</a> <i>number</i> <b>force-vc-forwarding</b> <i>keyword</i>   |
| Tree        | <a href="#">force-vc-forwarding</a>  |
| Description | <p>This command allows the system to preserve the VLAN ID and 802.1p bits of the service-delimiting qtag in a new tag added in the customer frame before sending it to the EVPN destinations.</p> <p>This command may be used in conjunction with the <b>sap ingress vlan-translation</b> command. If so used, the configured translated VLAN ID is the VLAN ID sent to the EVPN destinations as opposed to the service-delimiting tag VLAN ID. If the ingress SAP/SDP binding is 'null'-encapsulated, the output VLAN ID and pbits is zero.</p> |
| Options     | vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag   |
| Introduced  | 21.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

**oper-group** *reference*

|             |  |
|-------------|--|
| Synopsis    | Operational group  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">segment-routing-v6</a> <i>number</i> <b>oper-group</b> <i>reference</i>  |
| Tree        | <a href="#">oper-group</a>   |
| Description | <p>This command adds the BGP EVPN SRv6 instance or an Ethernet Segment (ES) as a member of the operational group.</p> <p>When configured on a BGP EVPN instance, the operational group is up when it is either empty (meaning that the operational group has no members) or at least an EVPN destination is created under the EVPN instance added as member. When configured, no other SAP, SDP binding, or BGP EVPN instance can be added to the same operational group within the same or different service.</p> |
| Reference   | <b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <i>string</i>  |
| Introduced  | 21.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

**resolution** *keyword*

|          |   |
|----------|---|
| Synopsis | Resolution options for routes   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">segment-routing-v6</a> <i>number</i> <b>resolution</b> <i>keyword</i> |
| Tree     | <a href="#">resolution</a>  |

|            |   |
|------------|---|
| Options    | route-table, tunnel-table, fallback-tunnel-to-route-table |
| Default    | route-table   |
| Introduced | 22.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR               |

## route-next-hop

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>route-next-hop</b> context  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">bgp-evpn</a> <a href="#">segment-routing-v6</a> <a href="#">number</a> <b>route-next-hop</b> |
| Tree        | <a href="#">route-next-hop</a>   |
| Description | Commands in this context configure the next hop of the EVPN routes.  |
| Introduced  | 21.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

## ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | IP address of the next-hop for the service EVPN route   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">bgp-evpn</a> <a href="#">segment-routing-v6</a> <a href="#">number</a> <a href="#">route-next-hop</a> <b>ip-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <a href="#">ip-address</a>  |
| Notes      | The following elements are part of a choice: <b>ip-address</b> , <b>system-ipv4</b> , or <b>system-ipv6</b> .   |
| Introduced | 21.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

## system-ipv4



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | System IPv4 address for service EVPN route next hop  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">bgp-evpn</a> <a href="#">segment-routing-v6</a> <a href="#">number</a> <a href="#">route-next-hop</a> <b>system-ipv4</b> |

|            |   |
|------------|---|
| Tree       | <a href="#">system-ipv4</a>   |
| Notes      | The following elements are part of a choice: <b>ip-address</b> , <b>system-ipv4</b> , or <b>system-ipv6</b> . |
| Introduced | 21.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

## system-ipv6



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | System IPv6 address for service EVPN route next hop   |
| Context    | <b>configure service epipe string</b> <a href="#">bgp-evpn segment-routing-v6 number route-next-hop system-ipv6</a> |
| Tree       | <a href="#">system-ipv6</a>   |
| Notes      | The following elements are part of a choice: <b>ip-address</b> , <b>system-ipv4</b> , or <b>system-ipv6</b> .       |
| Introduced | 21.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

## source-address *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Source IPv6 address  |
| Context     | <b>configure service epipe string</b> <a href="#">bgp-evpn segment-routing-v6 number source-address string</a>   |
| Tree        | <a href="#">source-address</a>   |
| Description | <p>When configured, this command specifies the source IPv6 address used in the SA field of the outer IPv6 header of the SRv6 encapsulated packet.</p> <p>When not configured, the source IPv6 address is inherited from the configuration of the global default address in the <b>router "base" segment-routing segment-routing-v6 source-address</b> context.</p> <p>A source IPv6 address must be configured in this context or in the base router context. The system does not check if the address entered is a valid local address.</p> |
| Introduced  | 21.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |



**srv6**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>srv6</b> context   |
| Context    | <b>configure service epipe string</b> <i>bgp-evpn segment-routing-v6 number</i> <b>srv6</b> |
| Tree       | <b>srv6</b>   |
| Introduced | 21.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

**default-locator** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Default route locator   |
| Context     | <b>configure service epipe string</b> <i>bgp-evpn segment-routing-v6 number</i> <b>srv6 default-locator</b> <i>string</i>       |
| Tree        | <b>default-locator</b>  |
| Description | This command specifies the locator that exists in the SRv6 service instance and is used as the default locator for the service. |
| Introduced  | 21.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

**instance** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Segment Routing SRv6 instance   |
| Context    | <b>configure service epipe string</b> <i>bgp-evpn segment-routing-v6 number</i> <b>srv6 instance</b> <i>reference</i> |
| Tree       | <b>instance</b>   |
| Reference  | <b>configure service epipe string</b> <i>segment-routing-v6 number</i>  |
| Introduced | 21.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

**vxlan** [**bgp-instance**] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>vxlan</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">vxlan</a> <i>number</i> |
| Tree       | <a href="#">vxlan</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[bgp-instance]** *number*

|            |   |
|------------|---|
| Synopsis   | BGP instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">vxlan</a> <i>number</i> |
| Tree       | <a href="#">vxlan</a>   |
| Range      | 1   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of BGP EVPN VXLAN   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">vxlan</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**default-route-tag** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Default route tag   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">vxlan</a> <i>number</i> <a href="#">default-route-tag</a> <i>string</i> |
| Tree     | <a href="#">default-route-tag</a>   |

|             |  |
|-------------|--|
| Description | <p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p> <p>The following are examples of the conflict priority handling:</p> <ul style="list-style-type: none"> <li>• If a service is configured with both <b>default-route-tag X</b> and <b>proxy-arp evpn-route-tag Y</b>, the EVPN uses route tag Y when sending EVPN proxy-arp routes to the BGP RIB for advertisement.</li> <li>• If a given IP-prefix route is tagged in the route-table with tag A and the R-VPLS, in which the route is advertised, uses B as the <b>default-route-tag</b>, then EVPN keeps tag A when sending the route to the BGP RIB.</li> </ul> <p>The <b>default-route-tag</b> configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.</p> |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

### **ecmp number**

|            |   |
|------------|---|
| Synopsis   | Maximum ECMP routes information   |
| Context    | <b>configure</b> <i>service epipe string bgp-evpn vxlan number</i> <b>ecmp number</b> |
| Tree       | <b>ecmp</b>   |
| Range      | 1 to 32   |
| Default    | 1   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **evi-three-byte-auto-rt boolean**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Auto-derive the BGP EVPN route target   |
| Context     | <b>configure</b> <i>service epipe string bgp-evpn vxlan number</i> <b>evi-three-byte-auto-rt boolean</b>  |
| Tree        | <b>evi-three-byte-auto-rt</b>   |
| Description | When configured to <b>true</b> , the BGP-EVPN instance import and export route target is auto-derived as described in RFC 8365 (Global-Administrator:A/Type/D-ID/Service-ID). |

Where:

- Global Administrator – is the configured 2-octet AS number; if the configured ASN exceeds the 2 byte limit, the low order 16-bit value is taken
- A=0 (for auto-derivation)
- Type=4 (EVI-based route-target)
- D-ID= [1..2] – encodes the BGP instance, which allows the auto-derivation of different route-targets in multi-instance services; the value is inherited from the corresponding BGP instance
- Service ID=3-octet EVI

When configured to **false**, route target derivation is not allowed.

|            |          |
|------------|----------|
| Default    | false    |
| Introduced | 21.10.R1 |
| Platforms  | All      |

### send-tunnel-encap *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Send VXLAN value in encapsulation extended community   |
| Context     | <b>configure</b> <i>service</i> <i>epipe</i> <i>string</i> <i>bgp-evpn</i> <i>vxlan</i> <i>number</i> <i>send-tunnel-encap</i> <i>boolean</i>  |
| Tree        | <i>send-tunnel-encap</i>   |
| Description | When configured to <b>true</b> , this command sends the VXLAN value in the encapsulation that is advertised with the EVPN routes for the service. The encapsulation is encoded in RFC5512-based tunnel encapsulation extended communities.<br><br>When configured to <b>false</b> , no encapsulation extended community is sent. |
| Default     | true   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### vxlan-instance *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |                |
|----------|----------------|
| Synopsis | VXLAN instance |
|----------|----------------|

|            |   |
|------------|---|
| Context    | <b>configure service epipe string</b> <i>bgp-evpn vxlan number vxlan-instance reference</i> |
| Tree       | <i>vxlan-instance</i>   |
| Reference  | <b>configure service epipe string</b> <i>vxlan instance number</i>                          |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **bgp-mh-site** [*site-name*] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>bgp-mh-site</b> list instance                      |
| Context        | <b>configure service epipe string</b> <i>bgp-mh-site string</i> |
| Tree           | <i>bgp-mh-site</i>  |
| Max. Instances | 1   |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

### [*site-name*] *string*

|               |   |
|---------------|---|
| Synopsis      | Name for the specific site                                      |
| Context       | <b>configure service epipe string</b> <i>bgp-mh-site string</i> |
| Tree          | <i>bgp-mh-site</i>  |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.                             |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

### **activation-timer** *number*

|            |   |
|------------|---|
| Synopsis   | Time to wait for BGP updates from remote PEs  |
| Context    | <b>configure service epipe string</b> <i>bgp-mh-site string activation-timer number</i> |
| Tree       | <i>activation-timer</i>   |
| Range      | 0 to 100  |
| Units      | seconds   |
| Introduced | 16.0.R1   |

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the site

Context **configure** [service](#) [epipe](#) *string* [bgp-mh-site](#) *string* **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms All

### **boot-timer** *number*

Synopsis Wait time after reboot to run the DF election algorithm

Context **configure** [service](#) [epipe](#) *string* [bgp-mh-site](#) *string* **boot-timer** *number*

Tree [boot-timer](#)

Range 0 to 600

Units seconds

Introduced 16.0.R1

Platforms All

### **id** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Site ID for the service

Context **configure** [service](#) [epipe](#) *string* [bgp-mh-site](#) *string* **id** *number*

Tree [id](#)

Description This command configures the ID for the site. The ID must match between services but is local to the service.

Range 1 to 65535

Introduced 16.0.R1

Platforms All

**min-down-timer** *number*

|            |  |
|------------|--|
| Synopsis   | Minimum down time when site goes operationally down  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-mh-site</a> <i>string</i> <b>min-down-timer</b> <i>number</i> |
| Tree       | <a href="#">min-down-timer</a>   |
| Range      | 0 to 100   |
| Units      | seconds  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**preference** *number*

|            |  |
|------------|--|
| Synopsis   | Preference to advertise in NLRI L2 extended community  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-mh-site</a> <i>string</i> <b>preference</b> <i>number</i> |
| Tree       | <a href="#">preference</a>   |
| Range      | 1 to 65535   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**sap** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | SAP to be associated with this site   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-mh-site</a> <i>string</i> <b>sap</b> <i>string</i> |
| Tree          | <a href="#">sap</a>   |
| String Length | 1 to 45   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**bgp-vpws**

|          |  |
|----------|--|
| Synopsis | Enable the <b>bgp-vpws</b> context   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <b>bgp-vpws</b> |

|            |                          |
|------------|--------------------------|
| Tree       | <a href="#">bgp-vpws</a> |
| Introduced | 16.0.R1                  |
| Platforms  | All                      |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the VPWS edge instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-vpws</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **local-ve**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>local-ve</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-vpws</a> <b>local-ve</b> |
| Tree       | <a href="#">local-ve</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **id** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Local VPWS edge ID  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-vpws</a> <b>local-ve</b> <b>id</b> <i>number</i> |
| Tree       | <a href="#">id</a>  |
| Range      | 1 to 65535  |
| Introduced | 16.0.R1   |
| Platforms  | All   |



**name** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Local VPWS instance name   |
| Context       | <b>configure service epipe</b> <i>string</i> <b>bgp-vpws local-ve</b> <i>name string</i> |
| Tree          | <i>name</i>  |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**remote-ve** [*name*] *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>remote-ve</b> list instance   |
| Context        | <b>configure service epipe</b> <i>string</i> <b>bgp-vpws remote-ve</b> <i>string</i> |
| Tree           | <i>remote-ve</i>   |
| Max. Instances | 2  |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

**[name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Remote PE name to which a PW is to be signaled                                       |
| Context       | <b>configure service epipe</b> <i>string</i> <b>bgp-vpws remote-ve</b> <i>string</i> |
| Tree          | <i>remote-ve</i>   |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**id** *number*

|          |  |
|----------|--|
| Synopsis | Remote VPWS edge ID  |
| Context  | <b>configure service epipe</b> <i>string</i> <b>bgp-vpws remote-ve</b> <i>string id number</i> |

|            |                    |
|------------|--------------------|
| Tree       | <a href="#">id</a> |
| Range      | 1 to 65535         |
| Introduced | 16.0.R1            |
| Platforms  | All                |

### **customer** *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Service customer ID  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">customer</a> <i>reference</i> |
| Tree       | <a href="#">customer</a>   |
| Reference  | <b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i>  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

### **endpoint** [[name](#)] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>endpoint</b> list instance   |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">endpoint</a> <i>string</i> |
| Tree           | <a href="#">endpoint</a>  |
| Max. Instances | 2   |
| Introduced     | 16.0.R1   |

Platforms All

### **[name]** *string*

Synopsis Service endpoint name  
 Context **configure** **service** **epipe** *string* **endpoint** *string*  
 Tree **endpoint**  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** **service** **epipe** *string* **endpoint** *string* **description** *string*  
 Tree **description**  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **hold-time-active** *number*

Synopsis Time before entering standby when MC-LAG SAP goes down  
 Context **configure** **service** **epipe** *string* **endpoint** *string* **hold-time-active** *number*  
 Tree **hold-time-active**  
 Range 1 to 60  
 Units deciseconds  
 Introduced 16.0.R1  
 Platforms All

### **revert-time** (*number* | *keyword*)

Synopsis Time to wait before reverting to primary spoke SDP  
 Context **configure** **service** **epipe** *string* **endpoint** *string* **revert-time** (*number* | *keyword*)

|            |                             |
|------------|-----------------------------|
| Tree       | <a href="#">revert-time</a> |
| Range      | 1 to 600                    |
| Units      | seconds                     |
| Options    | never, immediate            |
| Default    | immediate                   |
| Introduced | 16.0.R1                     |
| Platforms  | All                         |

### **standby-signaling** *keyword*

|            |   |
|------------|---|
| Synopsis   | Endpoint behavior to handle the PW standby bit  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">endpoint</a> <i>string</i> <b>standby-signaling</b> <i>keyword</i> |
| Tree       | <a href="#">standby-signaling</a>   |
| Options    | master, slave   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **eth-cfm**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>eth-cfm</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <b>eth-cfm</b> |
| Tree       | <a href="#">eth-cfm</a>   |
| Introduced | 19.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                                |

### **ignore-l2vpn-mtu-mismatch** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Ignore the L2 VPN MTU mismatch with local service MTU   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <b>ignore-l2vpn-mtu-mismatch</b> <i>boolean</i>  |
| Tree        | <a href="#">ignore-l2vpn-mtu-mismatch</a>   |
| Description | <p>When configured to <b>true</b>, the router does not check the value of the Layer 2 MTU in the Layer2 Info Extended Community received in a BGP update message against the local service MTU or locally signaled MTU. It may, therefore, bring up the BGP VPWS service regardless of any MTU mismatch.</p> <p>When configured to <b>false</b>, an MTU mismatch prevents the system from bringing up a BGP-VPWS service.</p> |

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 22.2.R1 |
| Platforms  | All     |

## load-balancing

|            |   |
|------------|---|
| Synopsis   | Enter the <b>load-balancing</b> context   |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">load-balancing</a> |
| Tree       | <a href="#">load-balancing</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## lbl-eth-or-ip-l4-teid *boolean*

|             |  |
|-------------|--|
| Synopsis    | Enable hashing of MPLS ethernet and IP packets on SAPs   |
| Context     | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">load-balancing</a> <a href="#">lbl-eth-or-ip-l4-teid</a> <i>boolean</i>   |
| Tree        | <a href="#">lbl-eth-or-ip-l4-teid</a>  |
| Description | When configured to <b>true</b> , this command enables hashing of MPLS Ethernet and MPLS IP packets received on the Epipe and VPLS service SAP using the MPLS labels, the inner IP addresses, the port numbers, and the GTP TEID field, if read by the system. This capability is supported on line cards that are FP4-based and later. |
| Default     | false  |
| Introduced  | 22.2.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## per-service-hashing *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable per-service hashing for Ethernet services   |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">load-balancing</a> <a href="#">per-service-hashing</a> <i>boolean</i> |
| Tree       | <a href="#">per-service-hashing</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**nat-outside** [[nat-group](#)] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>nat-outside</b> list instance                                      |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string nat-outside number</i> |
| Tree       | <a href="#">nat-outside</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                    |

**[nat-group]** *number*

|            |   |
|------------|---|
| Synopsis   | NAT group   |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string nat-outside number</i> |
| Tree       | <a href="#">nat-outside</a>   |
| Max. Range | 0 to 4294967295   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                    |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of Epipe as a NAT outside service  |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string nat-outside number admin-state keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**oper-group** *reference*

|            |   |
|------------|---|
| Synopsis   | Oper-group name   |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string oper-group reference</i> |
| Tree       | <a href="#">oper-group</a>  |
| Reference  | <b>configure</b> <a href="#">service oper-group</a> <i>string</i>                 |
| Introduced | 16.0.R1   |

Platforms All

## **pbb**

Synopsis Enter the **pbb** context  
 Context **configure service epipe string pbb**  
 Tree [pbb](#)  
 Introduced 16.0.R1  
 Platforms All

## **force-qtag-forwarding boolean**

Synopsis Add an IEEE 802.1q tag after CMAC addresses PBB header  
 Context **configure service epipe string pbb force-qtag-forwarding boolean**  
 Tree [force-qtag-forwarding](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

## **local-switch-service-state keyword**

Synopsis Endpoint state used to determine PBB-Epipe state  
 Context **configure service epipe string pbb local-switch-service-state keyword**  
 Tree [local-switch-service-state](#)  
 Description In a PBB Epipe with two SAPs and a PBB tunnel, this command controls whether the operational state of the PBB-Epipe service depends on the state of the PBB tunnel only, or on the state of two of the three endpoints (PBB tunnel and two SAPs). The second case implies that at least one of the SAPs must be up for the PBB-Epipe service to be operationally up.  
 Options sap, pbb-tunnel  
 Default sap  
 Introduced 21.7.R1  
 Platforms All

## tunnel

|            |   |
|------------|---|
| Synopsis   | Enable the <b>tunnel</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">pbb</a> <a href="#">tunnel</a> |
| Tree       | <a href="#">tunnel</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## backbone-dest-mac *string*

|            |   |
|------------|---|
| Synopsis   | Backbone Destination MAC address  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">pbb</a> <a href="#">tunnel</a> <a href="#">backbone-dest-mac</a> <i>string</i> |
| Tree       | <a href="#">backbone-dest-mac</a>   |
| Notes      | The following elements are part of a mandatory choice: <b>backbone-dest-mac</b> or <b>backbone-dest-mac-name</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## backbone-dest-mac-name *reference*

|            |   |
|------------|---|
| Synopsis   | Backbone destination MAC name for PBB packets   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">pbb</a> <a href="#">tunnel</a> <a href="#">backbone-dest-mac-name</a> <i>reference</i> |
| Tree       | <a href="#">backbone-dest-mac-name</a>  |
| Reference  | <b>configure</b> <a href="#">service</a> <a href="#">pbb</a> <a href="#">mac</a> <i>string</i>  |
| Notes      | The following elements are part of a mandatory choice: <b>backbone-dest-mac</b> or <b>backbone-dest-mac-name</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## backbone-vpls-service-name *reference*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Backbone VPLS service   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">pbb</a> <a href="#">tunnel</a> <a href="#">backbone-vpls-service-name</a> <i>reference</i> |



|            |   |
|------------|---|
| Tree       | <a href="#">backbone-vpls-service-name</a>  |
| Reference  | <b>configure service vpls</b> <i>string</i> |
| Notes      | This element is mandatory.                  |
| Introduced | 16.0.R1                                     |
| Platforms  | All   |

**isid number****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Service instance ID   |
| Context    | <b>configure service epipe</b> <i>string pbb tunnel isid number</i> |
| Tree       | <a href="#">isid</a>  |
| Range      | 0 to 16777215   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**sap [sap-id] string**

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>sap</b> list instance                      |
| Context        | <b>configure service epipe</b> <i>string sap string</i> |
| Tree           | <a href="#">sap</a>                                     |
| Max. Instances | 2   |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

**[sap-id] string**

|               |   |
|---------------|---|
| Synopsis      | SAP ID  |
| Context       | <b>configure service epipe</b> <i>string sap string</i> |
| Tree          | <a href="#">sap</a>                                     |
| String Length | 1 to 45   |

|            |                                     |
|------------|-------------------------------------|
| Notes      | This element is part of a list key. |
| Introduced | 16.0.R1                             |
| Platforms  | All                                 |

## **aarp**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>aarp</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">aarp</a> |
| Tree       | <a href="#">aarp</a>  |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## **id reference**

|            |  |
|------------|--|
| Synopsis   | AARP instance ID   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">aarp</a> <i>id</i> <i>reference</i> |
| Tree       | <a href="#">id</a>   |
| Reference  | <b>configure</b> <a href="#">application-assurance</a> <a href="#">aarp</a> <i>number</i>  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## **type keyword**

|            |  |
|------------|--|
| Synopsis   | Role referenced by the AARP  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">aarp</a> <i>type</i> <i>keyword</i> |
| Tree       | <a href="#">type</a>   |
| Options    | dual-homed, dual-homed-secondary   |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## **accounting-policy reference**

|          |   |
|----------|---|
| Synopsis | Accounting policy   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">accounting-policy</a> <i>reference</i> |
| Tree     | <a href="#">accounting-policy</a>   |

|            |  |
|------------|--|
| Reference  | <b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the SAP  |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**app-profile** *reference*

|            |  |
|------------|--|
| Synopsis   | Application profile name   |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>app-profile</b> <i>reference</i>   |
| Tree       | <a href="#">app-profile</a>  |
| Reference  | <b>configure</b> <a href="#">application-assurance</a> <i>group</i> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i> |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**bandwidth** *number*

|            |   |
|------------|---|
| Synopsis   | SAP bandwidth   |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>bandwidth</b> <i>number</i> |
| Tree       | <a href="#">bandwidth</a>   |
| Range      | 1 to 6400000000   |
| Units      | kilobps   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **cflowd** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable Cflowd collection and analysis on this SAP   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>cflowd</b> <i>boolean</i> |
| Tree       | <a href="#">cflowd</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **collect-stats** *boolean*

|            |  |
|------------|--|
| Synopsis   | Collect accounting statistics  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>collect-stats</b> <i>boolean</i> |
| Tree       | <a href="#">collect-stats</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **cpu-protection**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>cpu-protection</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>cpu-protection</b> |
| Tree       | <a href="#">cpu-protection</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS  |

### **eth-cfm-monitoring**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>eth-cfm-monitoring</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>cpu-protection</b> <b>eth-cfm-monitoring</b> |
| Tree       | <a href="#">eth-cfm-monitoring</a>   |
| Notes      | The following elements are part of a choice: <b>eth-cfm-monitoring</b> or <b>mac-monitoring</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS  |

## aggregate

|            |  |
|------------|--|
| Synopsis   | Apply rate limit to the sum of the per peer packet rates   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">eth-cfm-monitoring</a> <a href="#">aggregate</a> |
| Tree       | <a href="#">aggregate</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS  |

## car

|            |  |
|------------|--|
| Synopsis   | Ignore Ethernet CFM packets when enforcing overall rate  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">eth-cfm-monitoring</a> <a href="#">car</a> |
| Tree       | <a href="#">car</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS  |

## mac-monitoring

|            |  |
|------------|--|
| Synopsis   | Monitor MAC for CPU protection   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">mac-monitoring</a> |
| Tree       | <a href="#">mac-monitoring</a>   |
| Notes      | The following elements are part of a choice: <b>eth-cfm-monitoring</b> or <b>mac-monitoring</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS  |

## policy-id *reference*

|            |  |
|------------|--|
| Synopsis   | CPM protection policy  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">policy-id</a> <i>reference</i> |
| Tree       | <a href="#">policy-id</a>  |
| Reference  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpu-protection</a> <a href="#">policy</a> <i>number</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS  |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 160   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**dist-cpu-protection** *reference*

|            |   |
|------------|---|
| Synopsis   | Distributed CPU protection policy for SAP   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">dist-cpu-protection</a> <i>reference</i> |
| Tree       | <a href="#">dist-cpu-protection</a>   |
| Reference  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dist-cpu-protection</a> <i>policy</i> <i>string</i>                                    |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**egress**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>egress</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> |
| Tree       | <a href="#">egress</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**agg-rate**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>agg-rate</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a> |
| Tree       | <a href="#">agg-rate</a>   |
| Notes      | The following elements are part of a choice: <b>agg-rate</b> or <b>percent-agg-rate</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**adaptation-rule** *keyword*

|            |   |
|------------|---|
| Synopsis   | Adaptation rule to compute the operational PIR value when an aggregate shaper is used   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a> <a href="#">adaptation-rule</a> <i>keyword</i> |
| Tree       | <a href="#">adaptation-rule</a>   |
| Options    | max, min, closest   |
| Default    | closest   |
| Introduced | 22.10.R1  |
| Platforms  | 7750 SR-1, 7750 SR-s  |

**burst-limit** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Shaping burst size when an aggregate shaper is used   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a> <a href="#">burst-limit</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">burst-limit</a>   |
| Range      | 1 to 14000000   |
| Units      | bytes   |
| Options    | auto  |
| Default    | auto  |
| Introduced | 22.10.R1  |
| Platforms  | 7750 SR-1, 7750 SR-s  |

**limit-unused-bandwidth** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable aggregate rate overrun protection   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a> <a href="#">limit-unused-bandwidth</a> <i>boolean</i> |
| Tree       | <a href="#">limit-unused-bandwidth</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**queue-frame-based-accounting** *boolean*

|          |  |
|----------|--|
| Synopsis | Enable frame based accounting on policers and queues |
|----------|--|

|            |  |
|------------|--|
| Context    | <b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress</b> <b>agg-rate</b> <b>queue-frame-based-accounting</b> <i>boolean</i> |
| Tree       | <a href="#">queue-frame-based-accounting</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **rate number**

|            |   |
|------------|---|
| Synopsis   | Enforced aggregate rate for all queues  |
| Context    | <b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress</b> <b>agg-rate</b> <b>rate</b> <i>number</i> |
| Tree       | <a href="#">rate</a>  |
| Range      | 1 to 6400000000   |
| Units      | kilobps   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **filter**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>filter</b> context  |
| Context    | <b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress</b> <a href="#">filter</a> |
| Tree       | <a href="#">filter</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **ip reference**

|            |   |
|------------|---|
| Synopsis   | IPv4 filter policy name   |
| Context    | <b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress</b> <a href="#">filter</a> <b>ip</b> <i>reference</i> |
| Tree       | <a href="#">ip</a>  |
| Reference  | <b>configure filter</b> <a href="#">ip-filter</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |



## ipv6 reference

|            |   |
|------------|---|
| Synopsis   | IPv6 filter policy name   |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress filter ipv6 reference</a> |
| Tree       | <a href="#">ipv6</a>  |
| Reference  | <b>configure</b> <a href="#">filter ipv6-filter</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## mac reference

|            |  |
|------------|--|
| Synopsis   | MAC filter policy name   |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress filter mac reference</a> |
| Tree       | <a href="#">mac</a>  |
| Reference  | <b>configure</b> <a href="#">filter mac-filter</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## qos

|            |   |
|------------|---|
| Synopsis   | Enter the <b>qos</b> context  |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos</a> |
| Tree       | <a href="#">qos</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## policer-control-policy

|            |  |
|------------|--|
| Synopsis   | Enter the <b>policer-control-policy</b> context  |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos policer-control-policy</a> |
| Tree       | <a href="#">policer-control-policy</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**overrides**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>overrides</b> context  |
| Context    | <b>configure service epipe string sap string egress qos policer-control-policy overrides</b> |
| Tree       | <a href="#">overrides</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR                                       |

**root**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>root</b> context   |
| Context    | <b>configure service epipe string sap string egress qos policer-control-policy overrides root</b> |
| Tree       | <a href="#">root</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**max-rate** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Maximum frame-based bandwidth limit  |
| Context    | <b>configure service epipe string sap string egress qos policer-control-policy overrides root</b><br><a href="#">max-rate</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">max-rate</a>   |
| Range      | 1 to 6400000000  |
| Options    | max  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**priority-mbs-thresholds**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>priority-mbs-thresholds</b> context   |
| Context    | <b>configure service epipe string sap string egress qos policer-control-policy overrides root</b><br><a href="#">priority-mbs-thresholds</a> |
| Tree       | <a href="#">priority-mbs-thresholds</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**min-thresh-separation** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Minimum amount of separation buffer space  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">min-thresh-separation</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">min-thresh-separation</a>  |
| Range      | 0 to 16777216  |
| Units      | bytes  |
| Options    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**priority** [[priority-level](#)] *number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>priority</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i> |
| Tree       | <a href="#">priority</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**[priority-level]** *number*

|            |  |
|------------|--|
| Synopsis   | Priority level   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i> |
| Tree       | <a href="#">priority</a>   |
| Range      | 1 to 8   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**mbs-contribution** (*number* | *keyword*)

|          |  |
|----------|--|
| Synopsis | Minimum amount of cumulative buffer space allowed  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i> <a href="#">mbs-contribution</a> ( <i>number</i>   <i>keyword</i> ) |

|            |  |
|------------|--|
| Tree       | <a href="#">mbs-contribution</a>                       |
| Range      | 0 to 16777216  |
| Units      | bytes  |
| Options    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

### **policy-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Policer control policy name   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">policer-control-policy</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

### **qinq-mark-top-only** *boolean*

|            |   |
|------------|---|
| Synopsis   | Mark top Q-tags   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">qinq-mark-top-only</a> <i>boolean</i> |
| Tree       | <a href="#">qinq-mark-top-only</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **sap-egress**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>sap-egress</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> |
| Tree       | <a href="#">sap-egress</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**overrides**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>overrides</b> context   |
| Context    | <b>configure service epipe string sap string egress qos sap-egress overrides</b> |
| Tree       | <a href="#">overrides</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**hs-secondary-shaper string**

|               |   |
|---------------|---|
| Synopsis      | HS Secondary Shaper   |
| Context       | <b>configure service epipe string sap string egress qos sap-egress overrides hs-secondary-shaper string</b> |
| Tree          | <a href="#">hs-secondary-shaper</a>   |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | 7750 SR-7/12/12e  |

**hs-wrr-group [group-id] reference**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>hs-wrr-group</b> list instance   |
| Context    | <b>configure service epipe string sap string egress qos sap-egress overrides hs-wrr-group reference</b> |
| Tree       | <a href="#">hs-wrr-group</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR-7/12/12e  |

**[group-id] reference**

|            |   |
|------------|---|
| Synopsis   | HS WRR group identifier   |
| Context    | <b>configure service epipe string sap string egress qos sap-egress overrides hs-wrr-group reference</b> |
| Tree       | <a href="#">hs-wrr-group</a>  |
| Reference  | <b>configure qos sap-egress string hs-wrr-group number</b>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |

Platforms 7750 SR-7/12/12e

### **hs-class-weight** *number*

Synopsis Class weight override of the WRR group

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [hs-wrr-group](#)  
*reference* [hs-class-weight](#) *number*

Tree [hs-class-weight](#)

Range 1 | 2 | 4 | 8

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

### **percent-rate** *decimal-number*

Synopsis Percent rate override applied to the HS WRR group

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [hs-wrr-group](#)  
*reference* [percent-rate](#) *decimal-number*

Tree [percent-rate](#)

Range 0.01 to 100.00

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

### **rate** (*number* | *keyword*)

Synopsis Scheduling rate override applied to the HS WRR group

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [hs-wrr-group](#)  
*reference* [rate](#) (*number* | *keyword*)

Tree [rate](#)

Range 1 to 2000000000

Units kilobps

Options max

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

**policer** [*policer-id*] *reference*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>policer</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> |
| Tree       | <a href="#">policer</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**[policer-id]** *reference*

|            |   |
|------------|---|
| Synopsis   | Policer unique ID   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> |
| Tree       | <a href="#">policer</a>   |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">sap-egress</a> <i>string</i> <a href="#">policer</a> <i>number</i>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**cbs** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | CBS  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> <a href="#">cbs</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cbs</a>  |
| Range      | 0 to 268435456   |
| Units      | bytes  |
| Options    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**mbs** (*number* | *keyword*)

|          |     |
|----------|-----|
| Synopsis | MBS |
|----------|-----|

|            |   |
|------------|---|
| Context    | <b>configure service epipe string sap string egress qos sap-egress overrides policer</b><br><i>reference mbs (number   keyword)</i> |
| Tree       | <a href="#">mbs</a>   |
| Range      | 0 to 268435456  |
| Units      | bytes   |
| Options    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

### **packet-byte-offset** *number*

|            |  |
|------------|--|
| Synopsis   | Packet size modification for policing information  |
| Context    | <b>configure service epipe string sap string egress qos sap-egress overrides policer</b><br><i>reference packet-byte-offset number</i> |
| Tree       | <a href="#">packet-byte-offset</a>   |
| Range      | -64 to 31  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

### **percent-rate**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>percent-rate</b> context   |
| Context    | <b>configure service epipe string sap string egress qos sap-egress overrides policer</b><br><i>reference percent-rate</i> |
| Tree       | <a href="#">percent-rate</a>  |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

### **cir** *decimal-number*

|          |  |
|----------|--|
| Synopsis | CIR percent rate   |
| Context  | <b>configure service epipe string sap string egress qos sap-egress overrides policer</b><br><i>reference percent-rate cir decimal-number</i> |
| Tree     | <a href="#">cir</a>  |
| Range    | 0.00 to 100.00   |



|            |  |
|------------|--|
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

### **pir** *decimal-number*

|            |  |
|------------|--|
| Synopsis   | PIR percent rate   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a><br><i>reference</i> <a href="#">percent-rate</a> <b>pir</b> <i>decimal-number</i> |
| Tree       | <a href="#">pir</a>  |
| Range      | 0.01 to 100.00   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

### **rate**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>rate</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a><br><i>reference</i> <b>rate</b> |
| Tree       | <a href="#">rate</a>   |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

### **cir** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | CIR rate  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a><br><i>reference</i> <a href="#">rate</a> <b>cir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cir</a>   |
| Range      | 0 to 6400000000   |
| Units      | kilobps   |
| Options    | max   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**pir** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | PIR rate   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>rate</b> <b>pir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">pir</a>  |
| Range      | 1 to 6400000000  |
| Units      | kilobps  |
| Options    | max  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**stat-mode** *keyword*

|            |  |
|------------|--|
| Synopsis   | Mode of statistics collected by the policer  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>stat-mode</b> <i>keyword</i> |
| Tree       | <a href="#">stat-mode</a>  |
| Options    | no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**queue** [[queue-id](#)] *reference*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>queue</b> list instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> |
| Tree       | <a href="#">queue</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[queue-id]** *reference*

|          |  |
|----------|--|
| Synopsis | Policer unique ID  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> |

|            |   |
|------------|---|
| Tree       | <a href="#">queue</a>   |
| Reference  | <b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">queue</a> <i>number</i> |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## adaptation-rule

|            |  |
|------------|--|
| Synopsis   | Enter the <b>adaptation-rule</b> context   |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos sap-egress overrides</a> <a href="#">queue reference</a> <a href="#">adaptation-rule</a> |
| Tree       | <a href="#">adaptation-rule</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## cir keyword

|            |   |
|------------|---|
| Synopsis   | Constraint used when deriving the operational CIR value   |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos sap-egress overrides</a> <a href="#">queue reference</a> <a href="#">adaptation-rule</a> <a href="#">cir</a> <i>keyword</i> |
| Tree       | <a href="#">cir</a>   |
| Options    | max, min, closest   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## pir keyword

|            |   |
|------------|---|
| Synopsis   | Constraint used when deriving the operational PIR value   |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos sap-egress overrides</a> <a href="#">queue reference</a> <a href="#">adaptation-rule</a> <a href="#">pir</a> <i>keyword</i> |
| Tree       | <a href="#">pir</a>   |
| Options    | max, min, closest   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**avg-frame-overhead** *decimal-number*

|            |  |
|------------|--|
| Synopsis   | Average packet-to-frame encapsulation overhead   |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos</a> <a href="#">sap-egress overrides</a> <a href="#">queue reference</a> <b>avg-frame-overhead</b> <i>decimal-number</i> |
| Tree       | <a href="#">avg-frame-overhead</a>   |
| Range      | 0.00 to 100.00   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**burst-limit** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Explicit shaping burst size for the queue  |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos</a> <a href="#">sap-egress overrides</a> <a href="#">queue reference</a> <b>burst-limit</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">burst-limit</a>  |
| Range      | 1 to 14000000  |
| Units      | bytes  |
| Options    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**cbs** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | CBS  |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos</a> <a href="#">sap-egress overrides</a> <a href="#">queue reference</a> <b>cbs</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cbs</a>  |
| Range      | 0 to 1048576   |
| Units      | kilobytes  |
| Options    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**drop-tail**

|          |                                    |
|----------|------------------------------------|
| Synopsis | Enter the <b>drop-tail</b> context |
|----------|------------------------------------|

|            |  |
|------------|--|
| Context    | <b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides queue reference drop-tail</b> |
| Tree       | <b>drop-tail</b>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## low

|            |  |
|------------|--|
| Synopsis   | Enter the <b>low</b> context   |
| Context    | <b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides queue reference drop-tail low</b> |
| Tree       | <b>low</b>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## percent-reduction-from-mbs (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Percentage reduction from the MBS for a queue drop tail  |
| Context    | <b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides queue reference drop-tail low percent-reduction-from-mbs</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <b>percent-reduction-from-mbs</b>  |
| Range      | 0 to 100   |
| Options    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## hs-class-weight *number*

|            |  |
|------------|--|
| Synopsis   | Class weight override for the queue  |
| Context    | <b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides queue reference hs-class-weight</b> <i>number</i> |
| Tree       | <b>hs-class-weight</b>   |
| Range      | 1   2   4   8  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR-7/12/12e   |

**hs-wred-queue**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>hs-wred-queue</b> context   |
| Context    | <b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides queue</b><br><i>reference</i> <a href="#">hs-wred-queue</a> |
| Tree       | <a href="#">hs-wred-queue</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR-7/12/12e   |

**policy reference**

|            |   |
|------------|---|
| Synopsis   | Slope policy applied to the HSQ queue group queue   |
| Context    | <b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides queue</b><br><i>reference</i> <a href="#">hs-wred-queue</a> <a href="#">policy reference</a> |
| Tree       | <a href="#">policy</a>  |
| Reference  | <b>configure qos slope-policy</b> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR-7/12/12e  |

**hs-wrr-weight** *number*

|            |  |
|------------|--|
| Synopsis   | WRR weight to parent with the queue into the scheduler   |
| Context    | <b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides queue</b><br><i>reference</i> <a href="#">hs-wrr-weight</a> <i>number</i> |
| Tree       | <a href="#">hs-wrr-weight</a>  |
| Range      | 1 to 127   |
| Default    | 1  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR-7/12/12e   |

**mbs** (*number* | *keyword*)

|          |   |
|----------|---|
| Synopsis | MBS   |
| Context  | <b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides queue</b><br><i>reference</i> <a href="#">mbs</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <a href="#">mbs</a>   |
| Range    | 0 to 1073741824   |

|            |         |
|------------|---------|
| Units      | bytes   |
| Options    | auto    |
| Introduced | 16.0.R1 |
| Platforms  | All     |

## monitor-queue-depth

|            |   |
|------------|---|
| Synopsis   | Enable the <b>monitor-queue-depth</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>monitor-queue-depth</b> |
| Tree       | <a href="#">monitor-queue-depth</a>   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

## fast-polling *boolean*

|             |   |
|-------------|---|
| Synopsis    | Enable fast polling of the queue depth  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">monitor-queue-depth</a> <b>fast-polling</b> <i>boolean</i> |
| Tree        | <a href="#">fast-polling</a>  |
| Description | When configured to <b>true</b> , this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth.<br>When configured to <b>false</b> , fast queue polling is not enabled.  |
| Default     | false   |
| Introduced  | 20.10.R1  |
| Platforms   | All   |

## violation-threshold *decimal-number*

|             |   |
|-------------|---|
| Synopsis    | Threshold for queue depth before violation is raised  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">monitor-queue-depth</a> <b>violation-threshold</b> <i>decimal-number</i> |
| Tree        | <a href="#">violation-threshold</a>   |
| Description | This command specifies the threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.  |
| Range       | 0.01 to 99.99   |

Introduced 20.10.R1  
 Platforms All

## parent

Synopsis Enter the **parent** context  
 Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#) [reference](#) **parent**  
 Tree [parent](#)  
 Introduced 16.0.R1  
 Platforms All

## cir-weight *number*

Synopsis CIR parameter that overrides parent for queue group  
 Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#) [reference](#) **parent** **cir-weight** *number*  
 Tree [cir-weight](#)  
 Range 0 to 100  
 Introduced 16.0.R1  
 Platforms All

## weight *number*

Synopsis PIR parameter that overrides parent for queue group  
 Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#) [reference](#) **parent** **weight** *number*  
 Tree [weight](#)  
 Range 0 to 100  
 Introduced 16.0.R1  
 Platforms All

## percent-rate

Synopsis Enter the **percent-rate** context  
 Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#) [reference](#) **percent-rate**



|            |   |
|------------|---|
| Tree       | <a href="#">percent-rate</a>  |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> . |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **cir** *decimal-number*

|            |   |
|------------|---|
| Synopsis   | CIR percent rate  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">percent-rate</a> <a href="#">cir</a> <i>decimal-number</i> |
| Tree       | <a href="#">cir</a>   |
| Range      | 0.00 to 100.00  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **pir** *decimal-number*

|            |   |
|------------|---|
| Synopsis   | PIR percent rate  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">percent-rate</a> <a href="#">pir</a> <i>decimal-number</i> |
| Tree       | <a href="#">pir</a>   |
| Range      | 0.01 to 100.00  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **rate**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>rate</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">rate</a> |
| Tree       | <a href="#">rate</a>  |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**cir** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | CIR rate  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">rate</a> <b>cir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cir</a>   |
| Range      | 0 to 6400000000   |
| Units      | kilobps   |
| Options    | max   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**pir** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | PIR rate  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">rate</a> <b>pir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">pir</a>   |
| Range      | 1 to 6400000000   |
| Units      | kilobps   |
| Options    | max   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**policy-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Policy ID to associate with SAP for mirrored service  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">sap-egress</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**port-redirect-group**

|          |  |
|----------|--|
| Synopsis | Enter the <b>port-redirect-group</b> context |
|----------|--|

|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">port-redirect-group</a> |
| Tree       | <a href="#">port-redirect-group</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **group-name** *reference*

|            |  |
|------------|--|
| Synopsis   | Name of the queue group redirect list policy   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">port-redirect-group</a> <a href="#">group-name</a> <i>reference</i> |
| Tree       | <a href="#">group-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">egress</a> <a href="#">queue-group</a> <a href="#">string</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **instance** *number*

|            |   |
|------------|---|
| Synopsis   | Instance of port queue group  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">port-redirect-group</a> <a href="#">instance</a> <i>number</i> |
| Tree       | <a href="#">instance</a>  |
| Range      | 1 to 65535  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **scheduler-policy**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>scheduler-policy</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> |
| Tree       | <a href="#">scheduler-policy</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **overrides**

|          |                                    |
|----------|------------------------------------|
| Synopsis | Enter the <b>overrides</b> context |
|----------|------------------------------------|

|            |  |
|------------|--|
| Context    | <b>configure service epipe string sap string egress qos scheduler-policy overrides</b> |
| Tree       | <b>overrides</b>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **scheduler** [**scheduler-name**] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>scheduler</b> list instance  |
| Context    | <b>configure service epipe string sap string egress qos scheduler-policy overrides scheduler string</b> |
| Tree       | <b>scheduler</b>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **[scheduler-name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Scheduler name   |
| Context       | <b>configure service epipe string sap string egress qos scheduler-policy overrides scheduler string</b>  |
| Tree          | <b>scheduler</b>   |
| Description   | <p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.</p> |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**parent**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>parent</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <b>parent</b> |
| Tree       | <a href="#">parent</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**cir-weight** *number*

|            |   |
|------------|---|
| Synopsis   | Weight used at the within-CIR port priority level   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">parent</a> <b>cir-weight</b> <i>number</i> |
| Tree       | <a href="#">cir-weight</a>  |
| Range      | 0 to 100  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**weight** *number*

|            |   |
|------------|---|
| Synopsis   | Relative weight of the scheduler to feed the queue  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">parent</a> <b>weight</b> <i>number</i> |
| Tree       | <a href="#">weight</a>  |
| Range      | 0 to 100  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**rate**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>rate</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <b>rate</b> |
| Tree       | <a href="#">rate</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**cir** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | CIR at which the queue it to operate  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">rate</a> <b>cir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cir</a>   |
| Range      | 0 to 6400000000   |
| Units      | kilobps   |
| Options    | sum, max  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**pir** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | PIR at which the queue is to operate  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">rate</a> <b>pir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">pir</a>   |
| Range      | 1 to 6400000000   |
| Units      | kilobps   |
| Options    | max   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**policy-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Scheduler policy name   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">scheduler-policy</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## endpoint *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Name of the endpoint  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">endpoint</a> <a href="#">reference</a> |
| Tree       | <a href="#">endpoint</a>  |
| Reference  | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">endpoint</a> <a href="#">string</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## eth-cfm

|            |  |
|------------|--|
| Synopsis   | Enter the <b>eth-cfm</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> |
| Tree       | <a href="#">eth-cfm</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## ais *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable the generation and the reception of AIS messages  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">ais</a> <a href="#">boolean</a> |
| Tree       | <a href="#">ais</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## collect-lmm-fc-stats

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>collect-lmm-fc-stats</b> context   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">collect-lmm-fc-stats</a> |
| Tree        | <a href="#">collect-lmm-fc-stats</a>  |
| Description | Commands in this context configure per forwarding class (FC) LMM information collection.  |

The commands **fc-in-profile** and **fc** in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.

This command and the **collect-imm-stats** command are mutually exclusive when there is entity resource contention.

|            |  |
|------------|--|
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **fc** keyword

|                |   |
|----------------|---|
| Synopsis       | Forwarding class name for profile-unaware counter   |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">collect-imm-fc-stats</a> <a href="#">fc</a> <a href="#">keyword</a>  |
| Tree           | <a href="#">fc</a>  |
| Description    | <p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the <b>fc-in-profile</b> command under the <b>collect-imm-fc-stats</b> context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p> |
| Options        | be, l2, af, l1, h2, ef, h1, nc  |
| Max. Instances | 8   |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **fc-in-profile** keyword

|             |   |
|-------------|---|
| Synopsis    | Forwarding class name for profile-aware counter   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">collect-imm-fc-stats</a> <a href="#">fc-in-profile</a> <a href="#">keyword</a>   |
| Tree        | <a href="#">fc-in-profile</a>   |
| Description | <p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the <b>fc</b> command under the <b>collect-imm-fc-stats</b> context.</p> |



When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.

|                |  |
|----------------|--|
| Options        | be, l2, af, l1, h2, ef, h1, nc                               |
| Max. Instances | 8  |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **collect-lmm-stats** *boolean*

|            |  |
|------------|--|
| Synopsis   | Collect statistics for loss measurement message tests  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <b>collect-lmm-stats</b> <i>boolean</i> |
| Tree       | <a href="#">collect-lmm-stats</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **mep** [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mep</b> list instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <b>mep</b> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> |
| Tree       | <a href="#">mep</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **md-admin-name** *reference*

|            |  |
|------------|--|
| Synopsis   | Maintenance Domain (MD) name   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <b>mep</b> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> |
| Tree       | <a href="#">mep</a>  |
| Reference  | <b>configure</b> <a href="#">eth-cfm</a> <a href="#">domain</a> <i>string</i>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**ma-admin-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Maintenance Association (MA) name   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> |
| Tree       | <a href="#">mep</a>   |
| Reference  | <b>configure</b> <a href="#">eth-cfm</a> <a href="#">domain</a> <i>string</i> <a href="#">association</a> <i>string</i>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**mep-id** *number*

|            |   |
|------------|---|
| Synopsis   | Maintenance Endpoint (MEP) ID   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> |
| Tree       | <a href="#">mep</a>   |
| Range      | 1 to 8191   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the MEP  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**ais**

|          |                               |
|----------|-------------------------------|
| Synopsis | Enable the <b>ais</b> context |
|----------|-------------------------------|

|            |  |
|------------|--|
| Context    | <b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>ais</b> |
| Tree       | <a href="#">ais</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **client-meg-level** *number*

|                |   |
|----------------|---|
| Synopsis       | Client MEG level for AIS message generation   |
| Context        | <b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>ais client-meg-level</b> <i>number</i> |
| Tree           | <a href="#">client-meg-level</a>  |
| Range          | 1 to 7  |
| Max. Instances | 7   |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **interface-support** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable generation of AIS PDUs based on endpoint state   |
| Context    | <b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>ais interface-support</b> <i>boolean</i> |
| Tree       | <a href="#">interface-support</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **interval** *number*

|          |   |
|----------|---|
| Synopsis | Transmission interval for AIS messages  |
| Context  | <b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>ais interval</b> <i>number</i> |
| Tree     | <a href="#">interval</a>  |
| Range    | 1   60  |
| Units    | seconds   |
| Default  | 1   |

|            |  |
|------------|--|
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **low-priority-defect** *keyword*

|            |   |
|------------|---|
| Synopsis   | Lowest priority defect allowed to generate fault alarm  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ais</a> <b>low-priority-defect</b> <i>keyword</i> |
| Tree       | <a href="#">low-priority-defect</a>   |
| Options    | all-def, mac-rem-err-xcon   |
| Default    | all-def   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **priority** *number*

|            |   |
|------------|---|
| Synopsis   | Priority of the AIS messages generated by the node  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ais</a> <b>priority</b> <i>number</i> |
| Tree       | <a href="#">priority</a>  |
| Range      | 0 to 7  |
| Default    | 7   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **alarm-notification**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>alarm-notification</b> context  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>alarm-notification</b>  |
| Tree        | <a href="#">alarm-notification</a>   |
| Description | <p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p> |
| Introduced  | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fng-alarm-time** *number*

Synopsis Time that must expire before an FNG alarm is raised

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [alarm-notification](#) [fng-alarm-time](#) *number*

Tree [fng-alarm-time](#)

Range 250 | 500 | 1000

Units centiseconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fng-reset-time** *number*

Synopsis Time that must expire before an FNG alarm is reset

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [alarm-notification](#) [fng-reset-time](#) *number*

Tree [fng-reset-time](#)

Range 250 | 500 | 1000

Units centiseconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm** *boolean*

Synopsis Generate CCM messages

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [ccm](#) *boolean*

Tree [ccm](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ccm-ltm-priority** *number*

|            |   |
|------------|---|
| Synopsis   | Priority of CCM and LTM messages transmitted by the MEP   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>ccm-ltm-priority</b> <i>number</i> |
| Tree       | <a href="#">ccm-ltm-priority</a>  |
| Range      | 0 to 7  |
| Default    | 7   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**ccm-padding-size** *number*

|             |   |
|-------------|---|
| Synopsis    | Number of octets of padding to insert in CCM packets  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>ccm-padding-size</b> <i>number</i>   |
| Tree        | <a href="#">ccm-padding-size</a>  |
| Description | This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.<br><br>This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through <b>configure eth-cfm domain association ccm-interval</b> ) is less than 1 second. |
| Range       | 3 to 1500   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**cfm-vlan-tag** *string*

|               |   |
|---------------|---|
| Synopsis      | VLAN tags to apply to CFM PDUs for egress processing  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>cfm-vlan-tag</b> <i>string</i> |
| Tree          | <a href="#">cfm-vlan-tag</a>  |
| String Length | 1 to 9  |
| Introduced    | 21.10.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**csf**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>csf</b> context   |
| Context    | <b>configure service epipe</b> <i>string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number csf</i> |
| Tree       | <a href="#">csf</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**multiplier** *decimal-number*

|            |   |
|------------|---|
| Synopsis   | Multiplication factor used to clear the CSF condition   |
| Context    | <b>configure service epipe</b> <i>string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number csf multiplier decimal-number</i> |
| Tree       | <a href="#">multiplier</a>  |
| Range      | 0.0   2.0 to 30.0   |
| Default    | 3.5   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure service epipe</b> <i>string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number description string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**direction** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |                         |
|----------|-------------------------|
| Synopsis | Direction the MEP faces |
|----------|-------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service epipe</b> <i>string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number direction keyword</i> |
| Tree       | <a href="#">direction</a>   |
| Options    | down, up  |
| Default    | down  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## eth-test

|             |   |
|-------------|---|
| Synopsis    | Enable the <b>eth-test</b> context  |
| Context     | <b>configure service epipe</b> <i>string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test</i>  |
| Tree        | <a href="#">eth-test</a>  |
| Description | Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the <b>oam eth-cfm eth-test</b> command. |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## bit-error-threshold *number*

|            |   |
|------------|---|
| Synopsis   | Lowest priority defect allowed to generate fault alarm  |
| Context    | <b>configure service epipe</b> <i>string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test bit-error-threshold number</i> |
| Tree       | <a href="#">bit-error-threshold</a>   |
| Range      | 0 to 11840  |
| Units      | bit errors  |
| Default    | 1   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## test-pattern

|          |   |
|----------|---|
| Synopsis | Enter the <b>test-pattern</b> context   |
| Context  | <b>configure service epipe</b> <i>string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern</i> |



|             |  |
|-------------|--|
| Tree        | <a href="#">test-pattern</a>   |
| Description | Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver. |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **crc-tlv** *boolean*

|            |   |
|------------|---|
| Synopsis   | Generate a CRC checksum   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test</a> <a href="#">test-pattern</a> <b>crc-tlv</b> <i>boolean</i> |
| Tree       | <a href="#">crc-tlv</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **pattern** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Test pattern for Ethernet Test frames   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test</a> <a href="#">test-pattern</a> <b>pattern</b> <i>keyword</i> |
| Tree        | <a href="#">pattern</a>   |
| Description | This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.   |
| Options     | all-zeros, all-ones   |
| Default     | all-zeros   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **fault-propagation** *keyword*

|          |  |
|----------|--|
| Synopsis | Fault propagation for the MEP  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">fault-propagation</a> <i>keyword</i> |
| Tree     | <a href="#">fault-propagation</a>  |
| Options  | use-if-status-tlv, suspend-ccm   |

|            |  |
|------------|--|
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

## grace

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>grace</b> context  |
| Context     | <b>configure service epipe string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace</b>      |
| Tree        | <a href="#">grace</a>   |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function. |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## eth-ed

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>eth-ed</b> context   |
| Context     | <b>configure service epipe string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed</b> |
| Tree        | <a href="#">eth-ed</a>  |
| Description | Commands in this context configure the ITU-T Y.1731 ETH-ED function.  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## max-rx-defect-window *number*

|            |   |
|------------|---|
| Synopsis   | Maximum received ETH-ED expected defect window duration   |
| Context    | <b>configure service epipe string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed max-rx-defect-window number</b> |
| Tree       | <a href="#">max-rx-defect-window</a>  |
| Range      | 1 to 86400  |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**priority number**

|            |   |
|------------|---|
| Synopsis   | Transmission priority for ETH-ED PDUs   |
| Context    | <b>configure service epipe string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed priority number</b> |
| Tree       | <a href="#">priority</a>  |
| Range      | 0 to 7  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**rx-eth-ed boolean**

|             |   |
|-------------|---|
| Synopsis    | Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP   |
| Context     | <b>configure service epipe string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed rx-eth-ed boolean</b> |
| Tree        | <a href="#">rx-eth-ed</a>   |
| Description | This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.  |
| Default     | true  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**tx-eth-ed boolean**

|            |   |
|------------|---|
| Synopsis   | Transmit ETH-ED PDUs from the MEP   |
| Context    | <b>configure service epipe string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed tx-eth-ed boolean</b> |
| Tree       | <a href="#">tx-eth-ed</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**eth-vsm-grace**

|          |  |
|----------|--|
| Synopsis | Enter the <b>eth-vsm-grace</b> context   |
| Context  | <b>configure service epipe string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace</b> |

|             |  |
|-------------|--|
| Tree        | <a href="#">eth-vsm-grace</a>  |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function. |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS         |

### **rx-eth-vsm-grace** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Receive and process Nokia ETH-CFM Grace PDU on the MEP  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-vsm-grace</a> <a href="#">rx-eth-vsm-grace</a> <i>boolean</i> |
| Tree        | <a href="#">rx-eth-vsm-grace</a>  |
| Description | When configured to <b>true</b> , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.<br><br>When configured to <b>false</b> , the router disables the Nokia Grace function.   |
| Default     | true  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **tx-eth-vsm-grace** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Transmit ETH-ED PDUs from the MEP  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-vsm-grace</a> <a href="#">tx-eth-vsm-grace</a> <i>boolean</i>  |
| Tree        | <a href="#">tx-eth-vsm-grace</a>   |
| Description | When configured to <b>true</b> , the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.<br><br>The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.<br><br>The operator must configure the <b>configure system eth-cfm grace</b> command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).<br><br>When configured to <b>false</b> , the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP. |
| Default     | true   |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**lbm-svc-act-responder** *boolean*

|            |   |
|------------|---|
| Synopsis   | Process service activation streams in ETH-CFM LBM   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>lbm-svc-act-responder</b> <i>boolean</i> |
| Tree       | <a href="#">lbm-svc-act-responder</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**low-priority-defect** *keyword*

|            |   |
|------------|---|
| Synopsis   | Lowest priority defect allowed to generate fault alarm  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>low-priority-defect</b> <i>keyword</i> |
| Tree       | <a href="#">low-priority-defect</a>   |
| Options    | all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon  |
| Default    | mac-rem-err-xcon  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**mac-address** *string*

|             |  |
|-------------|--|
| Synopsis    | MAC address of the MEP   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>mac-address</b> <i>string</i> |
| Tree        | <a href="#">mac-address</a>  |
| Description | This command specifies the MAC address of the MEP.<br>When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.   |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**one-way-delay-threshold** *number*

|          |  |
|----------|--|
| Synopsis | Threshold time limit for the one-way delay test  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>one-way-delay-threshold</b> <i>number</i> |

|            |  |
|------------|--|
| Tree       | <a href="#">one-way-delay-threshold</a>                      |
| Range      | 0 to 600   |
| Units      | seconds  |
| Default    | 3  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### primary-vlan *boolean*



#### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | MEP provisioned using MA primary VLAN ID  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">primary-vlan</a> <i>boolean</i> |
| Tree       | <a href="#">primary-vlan</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### mip [primary-vlan](#) (*number* | *keyword*)

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>mip</b> list instance   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mip</a> <a href="#">primary-vlan</a> ( <i>number</i>   <i>keyword</i> )   |
| Tree        | <a href="#">mip</a>  |
| Description | This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the <b>vc-type</b> <b>vlan</b> or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM PDUs arriving at the same egress. When this command is included under the MEP or MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration. |
| Introduced  | 21.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**primary-vlan** (*number* | *keyword*)

|             |   |
|-------------|---|
| Synopsis    | VLAN ID to which the MIP is attached  |
| Context     | <b>configure</b> <b>service</b> <b>epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm</b> <b>mip</b> <b>primary-vlan</b> ( <i>number</i>   <i>keyword</i> )      |
| Tree        | <b>mip</b>  |
| Description | This command provides an option for linking a MIP with a Primary VLAN number or none. When the <b>none</b> option is provided, the MIP does not include the primary vlan. |
| Range       | 1 to 4094   |
| Options     | none  |
| Notes       | This element is part of a list key.   |
| Introduced  | 21.5.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**cfm-vlan-tag** *string*

|               |  |
|---------------|--|
| Synopsis      | VLAN tags to apply to CFM PDUs for egress processing   |
| Context       | <b>configure</b> <b>service</b> <b>epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm</b> <b>mip</b> <b>primary-vlan</b> ( <i>number</i>   <i>keyword</i> )<br><b>cfm-vlan-tag</b> <i>string</i>  |
| Tree          | <b>cfm-vlan-tag</b>  |
| Description   | This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the vc-type vlan or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM PDUs arriving at the same egress. When this command is included under the MEP or MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration. |
| String Length | 1 to 9   |
| Introduced    | 21.10.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**mac-address** *string*

|            |  |
|------------|--|
| Synopsis   | MAC address of the MIP   |
| Context    | <b>configure</b> <b>service</b> <b>epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm</b> <b>mip</b> <b>primary-vlan</b> ( <i>number</i>   <i>keyword</i> )<br><b>mac-address</b> <i>string</i> |
| Tree       | <b>mac-address</b>   |
| Introduced | 21.5.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **squelch-ingress-ctag-levels** *number*

**Synopsis** Squelch levels using additional VLAN C-Tag space

**Context** **configure** **service** **epipe** *string* **sap** *string* **eth-cfm** **squelch-ingress-ctag-levels** *number*

**Tree** [squelch-ingress-ctag-levels](#)

**Description** This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding plus an additional VLAN, up to a maximum tag length of two tags. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.

The list of levels must be a complete contiguous list from 0 up to the highest level to be dropped.

**Range** 0 to 7

**Max.** 8

**Instances**

**Introduced** 21.2.R1

**Platforms** 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **squelch-ingress-levels** *number*

**Synopsis** Levels for which ETH-CFM packets are silently discarded

**Context** **configure** **service** **epipe** *string* **sap** *string* **eth-cfm** **squelch-ingress-levels** *number*

**Tree** [squelch-ingress-levels](#)

**Description** This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.

The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.

**Range** 0 to 7

**Max.** 8

**Instances**

**Introduced** 16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ethernet

Synopsis Enter the **ethernet** context

Context **configure service epipe string sap string ethernet**

Tree [ethernet](#)

Introduced 20.5.R1

Platforms All

## llf

Synopsis Enter the **llf** context

Context **configure service epipe string sap string ethernet llf**

Tree [llf](#)

Description Commands in this context enable Link Loss Forwarding (LLF) on an Ethernet port. This feature provides an end-to-end OAM fault notification for Ethernet VLL service. It brings down the Ethernet port (Ethernet LLF) or sends a SONET/SDH Path AIS (ATM LLF) toward the attached CE when there is a local fault on the pseudowire or service, or a remote fault on the SAP or pseudowire, signaled with label withdrawal or T-LDP status bits. It ceases when the fault disappears.

The Ethernet port must be configured for null encapsulation.

This feature is also supported in Epipes with BGP-EVPN enabled. In this case, upon removal of the EVPN destination, the port transitions to an operationally down state, however the AD per-EVI route for the SAP is still advertised (the SAP remains operationally up). The port transitions to the operationally up state when the EVPN destination is created.

Introduced 20.5.R1

Platforms All

## admin-state *keyword*

Synopsis Administrative state of Link Loss Forwarding

Context **configure service epipe string sap string ethernet llf admin-state keyword**

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 20.5.R1

Platforms All

### **ignore-oper-down** *boolean*

Synopsis Ignore operational down state of the SAP on SAP failure

Context **configure service epipe** *string sap string ignore-oper-down boolean*

Tree [ignore-oper-down](#)

Description When configured to **true**, the Epipe service does not transition to the operational down state when the SAP fails. This command can only be set to **true** for a single SAP in an Epipe. The command can be used in Epipes with or without EVPN enabled.

When configured to **false**, the Epipe service transitions to the operational down state when SAP fails.

Default false

Introduced 16.0.R1

Platforms All

### **ingress**

Synopsis Enter the **ingress** context

Context **configure service epipe** *string sap string ingress*

Tree [ingress](#)

Introduced 16.0.R1

Platforms All

### **filter**

Synopsis Enter the **filter** context

Context **configure service epipe** *string sap string ingress filter*

Tree [filter](#)

Introduced 16.0.R1

Platforms All

### **ip reference**

Synopsis IPv4 filter policy name

Context **configure service epipe** *string sap string ingress filter ip reference*

|            |   |
|------------|---|
| Tree       | <a href="#">ip</a>                              |
| Reference  | <b>configure filter ip-filter</b> <i>string</i> |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **ipv6 reference**

|            |  |
|------------|--|
| Synopsis   | IPv6 filter policy name  |
| Context    | <b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress filter ipv6 reference</b> |
| Tree       | <a href="#">ipv6</a>   |
| Reference  | <b>configure filter ipv6-filter</b> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **mac reference**

|            |   |
|------------|---|
| Synopsis   | MAC filter policy name  |
| Context    | <b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress filter mac reference</b> |
| Tree       | <a href="#">mac</a>   |
| Reference  | <b>configure filter mac-filter</b> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **qos**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>qos</b> context   |
| Context    | <b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos</b> |
| Tree       | <a href="#">qos</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **match-qinq-dot1p keyword**

|          |   |
|----------|---|
| Synopsis | Ingress match QinQ Dot1p  |
| Context  | <b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos match-qinq-dot1p keyword</b> |

|            |                                  |
|------------|----------------------------------|
| Tree       | <a href="#">match-qinq-dot1p</a> |
| Options    | top, bottom                      |
| Introduced | 16.0.R1                          |
| Platforms  | All                              |

## **policer-control-policy**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>policer-control-policy</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <b>policer-control-policy</b> |
| Tree       | <a href="#">policer-control-policy</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

## **overrides**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>overrides</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <b>policer-control-policy overrides</b> |
| Tree       | <a href="#">overrides</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

## **root**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>root</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <b>policer-control-policy overrides</b><br><a href="#">root</a> |
| Tree       | <a href="#">root</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

## **max-rate** (*number* | *keyword*)

|          |   |
|----------|---|
| Synopsis | Maximum frame-based bandwidth limit   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <b>policer-control-policy overrides</b><br><a href="#">root</a> <b>max-rate</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <a href="#">max-rate</a>  |

|            |  |
|------------|--|
| Range      | 1 to 6400000000  |
| Options    | max  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

## priority-mbs-thresholds

|            |  |
|------------|--|
| Synopsis   | Enter the <b>priority-mbs-thresholds</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> |
| Tree       | <a href="#">priority-mbs-thresholds</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

## min-thresh-separation (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Minimum amount of separation buffer space   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">min-thresh-separation</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">min-thresh-separation</a>   |
| Range      | 0 to 16777216   |
| Units      | bytes   |
| Options    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

## priority [[priority-level](#)] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>priority</b> list instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i> |
| Tree       | <a href="#">priority</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**[priority-level]** *number*

|            |   |
|------------|---|
| Synopsis   | Priority level  |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos policer-control-policy overrides</a> <a href="#">root priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i> |
| Tree       | <a href="#">priority</a>  |
| Range      | 1 to 8  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**mbs-contribution** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Minimum amount of cumulative buffer space allowed   |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos policer-control-policy overrides</a> <a href="#">root priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i> <a href="#">mbs-contribution</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">mbs-contribution</a>  |
| Range      | 0 to 16777216   |
| Units      | bytes   |
| Options    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**policy-name** *reference*

|            |  |
|------------|--|
| Synopsis   | Policer control policy name  |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos policer-control-policy</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos policer-control-policy</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**sap-ingress**

|          |  |
|----------|--|
| Synopsis | Enter the <b>sap-ingress</b> context   |
| Context  | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos</a> <a href="#">sap-ingress</a> |

|            |                             |
|------------|-----------------------------|
| Tree       | <a href="#">sap-ingress</a> |
| Introduced | 16.0.R1                     |
| Platforms  | All                         |

## fp-redirect-group

|            |  |
|------------|--|
| Synopsis   | Enter the <b>fp-redirect-group</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">fp-redirect-group</a> |
| Tree       | <a href="#">fp-redirect-group</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## group-name *reference*

|            |  |
|------------|--|
| Synopsis   | Queue group template name created on forwarding plane  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">fp-redirect-group</a> <a href="#">group-name</a> <i>reference</i> |
| Tree       | <a href="#">group-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">ingress</a> <a href="#">queue-group</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## instance *number*

|            |   |
|------------|---|
| Synopsis   | Queue group instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">fp-redirect-group</a> <a href="#">instance</a> <i>number</i> |
| Tree       | <a href="#">instance</a>  |
| Range      | 1 to 65535  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## overrides

|          |  |
|----------|--|
| Synopsis | Enter the <b>overrides</b> context   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> |

|            |                           |
|------------|---------------------------|
| Tree       | <a href="#">overrides</a> |
| Introduced | 16.0.R1                   |
| Platforms  | All                       |

## ip-criteria

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ip-criteria</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <b>ip-criteria</b> |
| Tree       | <a href="#">ip-criteria</a>   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## activate-entry-tag *number*

|            |   |
|------------|---|
| Synopsis   | Tag ID activated for IPv4 criteria  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <b>ip-criteria</b><br><a href="#">activate-entry-tag</a> <i>number</i> |
| Tree       | <a href="#">activate-entry-tag</a>  |
| Range      | 1 to 255  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## ipv6-criteria

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ipv6-criteria</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <b>ipv6-criteria</b> |
| Tree       | <a href="#">ipv6-criteria</a>   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## activate-entry-tag *number*

|          |   |
|----------|---|
| Synopsis | Tag ID activated for IPv6 criteria  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <b>ipv6-criteria</b><br><a href="#">activate-entry-tag</a> <i>number</i> |
| Tree     | <a href="#">activate-entry-tag</a>  |



|            |  |
|------------|--|
| Range      | 1 to 255   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **policer** [[policer-id](#)] *reference*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>policer</b> list instance  |
| Context    | <b>configure service epipe</b> <i>string sap string ingress qos sap-ingress overrides policer reference</i> |
| Tree       | <a href="#">policer</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

### **[policer-id]** *reference*

|            |   |
|------------|---|
| Synopsis   | Policer unique ID   |
| Context    | <b>configure service epipe</b> <i>string sap string ingress qos sap-ingress overrides policer reference</i> |
| Tree       | <a href="#">policer</a>   |
| Reference  | <b>configure qos sap-ingress</b> <i>string policer number</i>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

### **cbs** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | CBS  |
| Context    | <b>configure service epipe</b> <i>string sap string ingress qos sap-ingress overrides policer reference cbs</i> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cbs</a>  |
| Range      | 0 to 268435456   |
| Units      | bytes  |
| Options    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**mbs** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | MBS  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>mbs</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">mbs</a>  |
| Range      | 0 to 268435456   |
| Units      | bytes  |
| Options    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**packet-byte-offset** *number*

|            |  |
|------------|--|
| Synopsis   | Packet size modification for policing information  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>packet-byte-offset</b> <i>number</i> |
| Tree       | <a href="#">packet-byte-offset</a>   |
| Range      | -32 to 31  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**percent-rate**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>percent-rate</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>percent-rate</b> |
| Tree       | <a href="#">percent-rate</a>   |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**cir** *decimal-number*

|          |                  |
|----------|------------------|
| Synopsis | CIR percent rate |
|----------|------------------|

|            |  |
|------------|--|
| Context    | <b>configure service epipe string sap string ingress qos sap-ingress overrides policer reference percent-rate cir decimal-number</b> |
| Tree       | <b>cir</b>   |
| Range      | 0.00 to 100.00   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

### **pir decimal-number**

|            |  |
|------------|--|
| Synopsis   | PIR percent rate   |
| Context    | <b>configure service epipe string sap string ingress qos sap-ingress overrides policer reference percent-rate pir decimal-number</b> |
| Tree       | <b>pir</b>   |
| Range      | 0.01 to 100.00   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

### **rate**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>rate</b> context   |
| Context    | <b>configure service epipe string sap string ingress qos sap-ingress overrides policer reference rate</b> |
| Tree       | <b>rate</b>   |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .                         |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

### **cir (number | keyword)**

|          |  |
|----------|--|
| Synopsis | CIR rate   |
| Context  | <b>configure service epipe string sap string ingress qos sap-ingress overrides policer reference rate cir (number   keyword)</b> |
| Tree     | <b>cir</b>   |
| Range    | 0 to 6400000000  |
| Units    | kilobps  |
| Options  | max  |

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **pir** (*number* | *keyword*)

Synopsis PIR rate  
 Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [policer](#)  
*reference* [rate](#) **pir** (*number* | *keyword*)  
 Tree [pir](#)  
 Range 1 to 6400000000  
 Units kilobps  
 Options max  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **stat-mode** *keyword*

Synopsis Mode of statistics collected by the policer  
 Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [policer](#)  
*reference* [stat-mode](#) *keyword*  
 Tree [stat-mode](#)  
 Options no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **queue** [[queue-id](#)] *reference*

Synopsis Enter the **queue** list instance  
 Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#)  
*reference*  
 Tree [queue](#)  
 Introduced 16.0.R1  
 Platforms All

**[queue-id] reference**

|            |  |
|------------|--|
| Synopsis   | Policer unique ID  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> |
| Tree       | <a href="#">queue</a>  |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">sap-ingress</a> <i>string</i> <a href="#">queue</a> <i>number</i>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**adaptation-rule**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>adaptation-rule</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">adaptation-rule</a> |
| Tree       | <a href="#">adaptation-rule</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**cir keyword**

|            |   |
|------------|---|
| Synopsis   | Constraint used when deriving the operational CIR value   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">adaptation-rule</a> <a href="#">cir</a> <i>keyword</i> |
| Tree       | <a href="#">cir</a>   |
| Options    | max, min, closest   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**pir keyword**

|          |   |
|----------|---|
| Synopsis | Constraint used when deriving the operational PIR value   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">adaptation-rule</a> <a href="#">pir</a> <i>keyword</i> |
| Tree     | <a href="#">pir</a>   |
| Options  | max, min, closest   |

Introduced 16.0.R1  
 Platforms All

### **cbs** (*number* | *keyword*)

Synopsis CBS  
 Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#)  
*reference* [cbs](#) (*number* | *keyword*)  
 Tree [cbs](#)  
 Range 0 to 1048576  
 Units kilobytes  
 Options auto  
 Introduced 16.0.R1  
 Platforms All

### **drop-tail**

Synopsis Enter the **drop-tail** context  
 Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#)  
*reference* [drop-tail](#)  
 Tree [drop-tail](#)  
 Introduced 16.0.R1  
 Platforms All

### **low**

Synopsis Enter the **low** context  
 Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#)  
*reference* [drop-tail](#) [low](#)  
 Tree [low](#)  
 Introduced 16.0.R1  
 Platforms All

### **percent-reduction-from-mbs** (*number* | *keyword*)

Synopsis Percentage reduction from the MBS for a queue drop tail

|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">drop-tail</a> <a href="#">low</a> <a href="#">percent-reduction-from-mbs</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">percent-reduction-from-mbs</a>   |
| Range      | 0 to 100   |
| Options    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **mbs** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | MBS   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">mbs</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">mbs</a>   |
| Range      | 0 to 1073741824   |
| Units      | bytes   |
| Options    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **monitor-queue-depth**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>monitor-queue-depth</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">monitor-queue-depth</a> |
| Tree       | <a href="#">monitor-queue-depth</a>  |
| Introduced | 21.7.R1  |
| Platforms  | All  |

### **fast-polling** *boolean*

|          |  |
|----------|--|
| Synopsis | Enable fast polling of the queue depth   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">monitor-queue-depth</a> <a href="#">fast-polling</a> <i>boolean</i> |
| Tree     | <a href="#">fast-polling</a>   |
| Default  | false  |

Introduced 21.7.R1  
 Platforms All

## parent

Synopsis Enter the **parent** context  
 Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#) [reference](#) **parent**  
 Tree [parent](#)  
 Introduced 16.0.R1  
 Platforms All

## cir-weight *number*

Synopsis CIR parameter that overrides parent for queue group  
 Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#) [reference](#) **parent** **cir-weight** *number*  
 Tree [cir-weight](#)  
 Range 0 to 100  
 Introduced 16.0.R1  
 Platforms All

## weight *number*

Synopsis PIR parameter that overrides parent for queue group  
 Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#) [reference](#) **parent** **weight** *number*  
 Tree [weight](#)  
 Range 0 to 100  
 Introduced 16.0.R1  
 Platforms All

## percent-rate

Synopsis Enter the **percent-rate** context  
 Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#) [reference](#) **percent-rate**



---

|            |   |
|------------|---|
| Tree       | <a href="#">percent-rate</a>  |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> . |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **cir** *decimal-number*

|            |   |
|------------|---|
| Synopsis   | CIR percent rate  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">percent-rate</a> <a href="#">cir</a> <i>decimal-number</i> |
| Tree       | <a href="#">cir</a>   |
| Range      | 0.00 to 100.00  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **pir** *decimal-number*

|            |   |
|------------|---|
| Synopsis   | PIR percent rate  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">percent-rate</a> <a href="#">pir</a> <i>decimal-number</i> |
| Tree       | <a href="#">pir</a>   |
| Range      | 0.01 to 100.00  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **rate**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>rate</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">rate</a> |
| Tree       | <a href="#">rate</a>  |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**cir** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | CIR rate  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">rate</a> <b>cir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cir</a>   |
| Range      | 0 to 6400000000   |
| Units      | kilobps   |
| Options    | max   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**pir** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | PIR rate  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">rate</a> <b>pir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">pir</a>   |
| Range      | 1 to 6400000000   |
| Units      | kilobps   |
| Options    | max   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**policy-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Policy ID   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">sap-ingress</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**queuing-type** *keyword*

|          |              |
|----------|--------------|
| Synopsis | Queuing type |
|----------|--------------|

|            |  |
|------------|--|
| Context    | <b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress queuing-type</b> <i>keyword</i> |
| Tree       | <a href="#">queuing-type</a>   |
| Options    | shared, multipoint-shared  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR  |

## scheduler-policy

|            |   |
|------------|---|
| Synopsis   | Enter the <b>scheduler-policy</b> context   |
| Context    | <b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos scheduler-policy</b> |
| Tree       | <a href="#">scheduler-policy</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## overrides

|            |   |
|------------|---|
| Synopsis   | Enter the <b>overrides</b> context  |
| Context    | <b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos scheduler-policy overrides</b> |
| Tree       | <a href="#">overrides</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## scheduler [[scheduler-name](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>scheduler</b> list instance   |
| Context    | <b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos scheduler-policy overrides</b><br><a href="#">scheduler</a> <i>string</i> |
| Tree       | <a href="#">scheduler</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## [[scheduler-name](#)] *string*

|          |  |
|----------|--|
| Synopsis | Scheduler name   |
| Context  | <b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos scheduler-policy overrides</b><br><a href="#">scheduler</a> <i>string</i> |

|               |  |
|---------------|--|
| Tree          | <a href="#">scheduler</a>  |
| Description   | <p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.</p> |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

## parent

|            |  |
|------------|--|
| Synopsis   | Enter the <b>parent</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">parent</a> |
| Tree       | <a href="#">parent</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## cir-weight *number*

|            |   |
|------------|---|
| Synopsis   | Weight used at the within-CIR port priority level   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">parent</a> <a href="#">cir-weight</a> <i>number</i> |
| Tree       | <a href="#">cir-weight</a>  |
| Range      | 0 to 100  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**weight number**

|            |   |
|------------|---|
| Synopsis   | Relative weight of the scheduler to feed the queue  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">parent</a> <a href="#">weight</a> <i>number</i> |
| Tree       | <a href="#">weight</a>  |
| Range      | 0 to 100  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**rate**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>rate</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">rate</a> |
| Tree       | <a href="#">rate</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**cir** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | CIR at which the queue it to operate  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">rate</a> <a href="#">cir</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cir</a>   |
| Range      | 0 to 6400000000   |
| Units      | kilobps   |
| Options    | sum, max  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**pir** (*number* | *keyword*)

|          |   |
|----------|---|
| Synopsis | PIR at which the queue is to operate  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">rate</a> <a href="#">pir</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <a href="#">pir</a>   |

|            |                 |
|------------|-----------------|
| Range      | 1 to 6400000000 |
| Units      | kilobps         |
| Options    | max             |
| Introduced | 16.0.R1         |
| Platforms  | All             |

### **policy-name** *reference*

|            |  |
|------------|--|
| Synopsis   | Scheduler policy name  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">scheduler-policy</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **qtag-manipulation**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>qtag-manipulation</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qtag-manipulation</a> |
| Tree       | <a href="#">qtag-manipulation</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **c-tag** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Inner ingress VLAN translation for two service delimiting VLAN values   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qtag-manipulation</a> <a href="#">c-tag</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">c-tag</a>   |
| Range      | 0 to 4094   |
| Options    | tag-*   |
| Notes      | The following elements are part of a choice: <b>push-dot1q-vlan</b> or ( <b>c-tag</b> and <b>s-tag</b> ).   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**push-dot1q-vlan** (*number | keyword*)

|            |  |
|------------|--|
| Synopsis   | VLAN translation information   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qtag-manipulation</a> <a href="#">push-dot1q-vlan</a> ( <i>number   keyword</i> ) |
| Tree       | <a href="#">push-dot1q-vlan</a>  |
| Range      | 0 to 4094  |
| Options    | use-sap-svlan  |
| Notes      | The following elements are part of a choice: <b>push-dot1q-vlan</b> or ( <b>c-tag</b> and <b>s-tag</b> ).  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**s-tag** *number*

|            |  |
|------------|--|
| Synopsis   | Outer ingress VLN translation for two service delimiting VLAN values   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qtag-manipulation</a> <a href="#">s-tag</a> <i>number</i> |
| Tree       | <a href="#">s-tag</a>  |
| Range      | 0 to 4094  |
| Notes      | The following elements are part of a choice: <b>push-dot1q-vlan</b> or ( <b>c-tag</b> and <b>s-tag</b> ).  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**I2tpv3-session**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>I2tpv3-session</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">I2tpv3-session</a> |
| Tree       | <a href="#">I2tpv3-session</a>  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**admin-state** *keyword*

|          |  |
|----------|--|
| Synopsis | Administrative state of the session for the service  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">I2tpv3-session</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree     | <a href="#">admin-state</a>  |

|            |                 |
|------------|-----------------|
| Options    | enable, disable |
| Default    | disable         |
| Introduced | 16.0.R4         |
| Platforms  | All             |

## pseudo-wire



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enter the <b>pseudo-wire</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">l2tpv3-session</a> <a href="#">pseudo-wire</a> |
| Tree       | <a href="#">pseudo-wire</a>   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

## ethernet



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enable the Ethernet PW-type for the L2TPv3 session   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">l2tpv3-session</a> <a href="#">pseudo-wire</a> <a href="#">ethernet</a> |
| Tree       | <a href="#">ethernet</a>   |
| Notes      | The following elements are part of a choice: <b>ethernet</b> or <b>ethernet-vlan-id</b> .  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

## ethernet-vlan-id *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Ethernet-VLAN PW-type ID for the L2TPv3 session |
|----------|---|



|            |  |
|------------|--|
| Context    | <b>configure service epipe</b> <i>string sap string l2tpv3-session pseudo-wire ethernet-vlan-id number</i> |
| Tree       | <a href="#">ethernet-vlan-id</a>   |
| Range      | 0 to 4095  |
| Notes      | The following elements are part of a choice: <b>ethernet</b> or <b>ethernet-vlan-id</b> .                  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

## router



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enter the <b>router</b> context   |
| Context    | <b>configure service epipe</b> <i>string sap string l2tpv3-session router</i> |
| Tree       | <a href="#">router</a>  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

## group *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Tunnel group name  |
| Context       | <b>configure service epipe</b> <i>string sap string l2tpv3-session router group string</i> |
| Tree          | <a href="#">group</a>  |
| String Length | 1 to 32  |
| Introduced    | 16.0.R4  |
| Platforms     | All  |

**router-instance** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Router name used to identify the router instance   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">l2tpv3-session</a> <a href="#">router</a> <a href="#">router-instance</a> <i>string</i> |
| Tree          | <a href="#">router-instance</a>  |
| String Length | 1 to 64  |
| Introduced    | 16.0.R4  |
| Platforms     | All  |

**vc-id** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | VC ID for the L2TPv3 session  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">l2tpv3-session</a> <a href="#">vc-id</a> <i>number</i> |
| Tree       | <a href="#">vc-id</a>   |
| Range      | 1 to 4294967295   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**lag**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>lag</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">lag</a> |
| Tree       | <a href="#">lag</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**link-map-profile** *number*

|          |   |
|----------|---|
| Synopsis | LAG link map profile  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">lag</a> <a href="#">link-map-profile</a> <i>number</i> |

---

|            |                                  |
|------------|----------------------------------|
| Tree       | <a href="#">link-map-profile</a> |
| Range      | 1 to 64                          |
| Introduced | 16.0.R1                          |
| Platforms  | All                              |

### **per-link-hash**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>per-link-hash</b> context   |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">lag</a> <a href="#">per-link-hash</a> |
| Tree       | <a href="#">per-link-hash</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **class *number***

|            |  |
|------------|--|
| Synopsis   | Class used on LAG egress using weighted per-link-hash  |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">lag</a> <a href="#">per-link-hash</a> <a href="#">class</a> <i>number</i> |
| Tree       | <a href="#">class</a>  |
| Range      | 1 to 3   |
| Default    | 1  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **weight *number***

|            |   |
|------------|---|
| Synopsis   | Weight used on LAG egress using weighted per-link-hash  |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">lag</a> <a href="#">per-link-hash</a> <a href="#">weight</a> <i>number</i> |
| Tree       | <a href="#">weight</a>  |
| Range      | 1 to 1024   |
| Default    | 1   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**mc-ring**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>mc-ring</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>mc-ring</b> |
| Tree       | <a href="#">mc-ring</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**ring-node** *string*

|               |   |
|---------------|---|
| Synopsis      | Name for the ring node associated with this SAP   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>mc-ring</b> <a href="#">ring-node</a> <i>string</i> |
| Tree          | <a href="#">ring-node</a>   |
| String Length | 1 to 32   |
| Notes         | This element is mandatory.  |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**monitor-oper-group** *reference*

|            |   |
|------------|---|
| Synopsis   | Monitor operational group   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>monitor-oper-group</b> <i>reference</i> |
| Tree       | <a href="#">monitor-oper-group</a>  |
| Reference  | <b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <i>string</i>   |
| Notes      | The following elements are part of a choice: <b>monitor-oper-group</b> or <b>oper-group</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**multi-service-site** *reference*

|            |   |
|------------|---|
| Synopsis   | Multi service site name   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>multi-service-site</b> <i>reference</i> |
| Tree       | <a href="#">multi-service-site</a>  |
| Reference  | <b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <b>multi-service-site</b> <i>string</i>                                   |
| Introduced | 16.0.R1   |

Platforms All

### **oper-group** *reference*

Synopsis Operational group

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [oper-group](#) *reference*

Tree [oper-group](#)

Reference **configure** [service](#) [oper-group](#) *string*

Notes The following elements are part of a choice: **monitor-oper-group** or **oper-group**.

Introduced 16.0.R1

Platforms All

### **transit-policy**

Synopsis Enable the **transit-policy** context

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [transit-policy](#)

Tree [transit-policy](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip** *reference*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis IP transit policy ID

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [transit-policy](#) [ip](#) *reference*

Tree [ip](#)

Reference **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [transit-ip-policy](#) *number*

Notes The following elements are part of a mandatory choice: **ip** or **prefix**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**prefix** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | IP prefix policy ID  |
| Context    | <b>configure</b> <i>service</i> <i>epipe</i> <i>string</i> <i>sap</i> <i>string</i> <i>transit-policy</i> <i>prefix</i> <i>reference</i>           |
| Tree       | <i>prefix</i>  |
| Reference  | <b>configure</b> <i>application-assurance</i> <i>group</i> <i>number</i> <i>partition</i> <i>number</i> <i>transit-prefix-policy</i> <i>number</i> |
| Notes      | The following elements are part of a mandatory choice: <b>ip</b> or <b>prefix</b> .  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**segment-routing-v6** [*instance*] *number*

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>segment-routing-v6</b> list instance  |
| Context     | <b>configure</b> <i>service</i> <i>epipe</i> <i>string</i> <i>segment-routing-v6</i> <i>number</i> |
| Tree        | <i>segment-routing-v6</i>  |
| Description | Commands in this context configure the SRv6 instance that is used in the service.                  |
| Introduced  | 21.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

**[instance]** *number*

|            |  |
|------------|--|
| Synopsis   | Segment routing v6 instance  |
| Context    | <b>configure</b> <i>service</i> <i>epipe</i> <i>string</i> <i>segment-routing-v6</i> <i>number</i> |
| Tree       | <i>segment-routing-v6</i>  |
| Range      | 1  |
| Notes      | This element is part of a list key.  |
| Introduced | 21.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

**locator** [*locator-name*] *reference*

|          |  |
|----------|--|
| Synopsis | Enter the <b>locator</b> list instance |
|----------|--|

|                |  |
|----------------|--|
| Context        | <b>configure service epipe</b> <i>string</i> <a href="#">segment-routing-v6</a> <i>number</i> <a href="#">locator</a> <i>reference</i> |
| Tree           | <a href="#">locator</a>  |
| Max. Instances | 1  |
| Introduced     | 21.7.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

### **[locator-name]** *reference*

|            |  |
|------------|--|
| Synopsis   | SRv6 locator name  |
| Context    | <b>configure service epipe</b> <i>string</i> <a href="#">segment-routing-v6</a> <i>number</i> <a href="#">locator</a> <i>reference</i>         |
| Tree       | <a href="#">locator</a>  |
| Reference  | <b>configure router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">locator</a> <i>string</i> |
| Notes      | This element is part of a list key.  |
| Introduced | 21.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

### **function**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>function</b> context   |
| Context     | <b>configure service epipe</b> <i>string</i> <a href="#">segment-routing-v6</a> <i>number</i> <a href="#">locator</a> <i>reference</i> <a href="#">function</a> |
| Tree        | <a href="#">function</a>  |
| Description | Commands in this context configure SRv6 SID function values and parameters for the locator.   |
| Introduced  | 21.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

### **end-dx2**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>end-dx2</b> context   |
| Context    | <b>configure service epipe</b> <i>string</i> <a href="#">segment-routing-v6</a> <i>number</i> <a href="#">locator</a> <i>reference</i> <a href="#">function</a> <a href="#">end-dx2</a> |
| Tree       | <a href="#">end-dx2</a>   |
| Introduced | 21.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

**value number**

|             |  |
|-------------|--|
| Synopsis    | SRv6 function value  |
| Context     | <b>configure service epipe</b> <i>string segment-routing-v6 number locator reference function end-dx2 value number</i>   |
| Tree        | <a href="#">value</a>  |
| Description | This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance.<br><br>When unconfigured, the system allocates a value dynamically. |
| Range       | 1 to 1048575   |
| Introduced  | 21.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

**micro-segment-locator** [[locator-name](#)] *reference*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>micro-segment-locator</b> list instance   |
| Context        | <b>configure service epipe</b> <i>string segment-routing-v6 number micro-segment-locator reference</i> |
| Tree           | <a href="#">micro-segment-locator</a>  |
| Max. Instances | 1  |
| Introduced     | 22.10.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

**[locator-name]** *reference*

|             |   |
|-------------|---|
| Synopsis    | Micro-segment SRv6 locator name   |
| Context     | <b>configure service epipe</b> <i>string segment-routing-v6 number micro-segment-locator reference</i>  |
| Tree        | <a href="#">micro-segment-locator</a>   |
| Description | This command associates a pre-defined micro-segment SRv6 locator (defined in the <b>configure router segment-routing segment-routing-v6</b> context) with the SRv6 instance in the service. The same micro-segment locator can be referenced in multiple BGP instances used by IPVPN or EVPN. |
| Reference   | <b>configure router</b> <i>string segment-routing segment-routing-v6 micro-segment-locator string</i>   |
| Notes       | This element is part of a list key.   |



|            |   |
|------------|---|
| Introduced | 22.10.R1                                    |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

## function

|            |  |
|------------|--|
| Synopsis   | Enter the <b>function</b> context  |
| Context    | <b>configure service epipe string segment-routing-v6 number micro-segment-locator reference function</b> |
| Tree       | <b>function</b>  |
| Introduced | 22.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

## udx2

|             |  |
|-------------|--|
| Synopsis    | Enable the <b>udx2</b> context   |
| Context     | <b>configure service epipe string segment-routing-v6 number micro-segment-locator reference function udx2</b>  |
| Tree        | <b>udx2</b>  |
| Description | Commands in this context configure the SRv6 micro-segment uDX2 behavior and the function value that is associated with the SRv6 instance in the service. When configured, decapsulation and cross-connect to the egress SAP occurs in the Epipe service. |
| Introduced  | 22.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

## value number

|             |  |
|-------------|--|
| Synopsis    | SRv6 function value  |
| Context     | <b>configure service epipe string segment-routing-v6 number micro-segment-locator reference function udx2 value number</b>   |
| Tree        | <b>value</b>   |
| Description | This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance.<br>When unconfigured, the system allocates a value dynamically. |
| Range       | 1 to 1048575   |
| Introduced  | 22.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

**service-id** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Service ID  |
| Context    | <b>configure</b> <i>service epipe</i> <i>string</i> <i>service-id</i> <i>number</i> |
| Tree       | <i>service-id</i>   |
| Range      | 1 to 2147483647   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**service-mtu** *number*

|             |   |
|-------------|---|
| Synopsis    | MTU size  |
| Context     | <b>configure</b> <i>service epipe</i> <i>string</i> <i>service-mtu</i> <i>number</i>  |
| Tree        | <i>service-mtu</i>  |
| Description | This command configures the Maximum Transmission Unit (MTU) value (payload) for the service. The system uses the value to validate the operational state of the SAP and SDP binding within the service. The value overrides the default MTU for the service type. |

The service MTU and a SAP's service delineation encapsulation overhead (4 bytes for a dot1q tag) are used to derive the required MTU of the physical port or channel on which the SAP was created. If the required payload is larger than the port or channel MTU, the SAP is placed in an inoperative state. If the required MTU is equal to or less than the port or channel MTU, the SAP transitions to the operative state.

When binding an SDP to a service, the service MTU is compared to the path MTU associated with the SDP. The path MTU can be administratively defined in the context of the SDP. The default or administrative path MTU can be dynamically reduced due to the MTU capabilities discovered by the tunneling mechanism of the SDP or the egress interface MTU capabilities based on the next hop in the tunnel path. If the service MTU is larger than the path MTU, the SDP binding for the service is placed in an inoperative state. If the service MTU is equal to or less than the path MTU, the SDP binding is placed in an operational state.

If a service MTU, port or channel MTU, or path MTU is dynamically or administratively modified, all associated SAP and SDP binding operational states are automatically reevaluated.

Binding operational states are automatically reevaluated.

For I-VPLS and Epipes bound to a B-VPLS, the service MTU must be at least 18 bytes smaller than the B-VPLS service MTU to accommodate the PBB header.

Because this connects a Layer 2 to a Layer 3 service, adjust the service MTU under the Epipe service. The MTU that is advertised from the Epipe side is service MTU minus EtherHeaderSize.

In the **configure service epipe spoke-sdp** context, the **adv-service-mtu** command can be used to override the configured MTU value used in T-LDP signaling to the far-end of an Epipe spoke-sdp. The **adv-service-mtu** command is also used to validate the value signaled by the far-end PE.

|            |           |
|------------|-----------|
| Range      | 1 to 9782 |
| Introduced | 16.0.R1   |
| Platforms  | All       |

### **spoke-sdp** [[sdp-bind-id](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>spoke-sdp</b> list instance                                    |
| Context    | <b>configure service epipe</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> |
| Tree       | <a href="#">spoke-sdp</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **[sdp-bind-id]** *string*

|               |   |
|---------------|---|
| Synopsis      | SDP binding ID  |
| Context       | <b>configure service epipe</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> |
| Tree          | <a href="#">spoke-sdp</a>   |
| String Length | 3 to 16   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

### **aarp**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>aarp</b> context  |
| Context    | <b>configure service epipe</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>aarp</b> |
| Tree       | <a href="#">aarp</a>  |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **id reference**

|            |   |
|------------|---|
| Synopsis   | AARP instance ID  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">aarp</a> <i>id reference</i> |
| Tree       | <a href="#">id</a>  |
| Reference  | <b>configure</b> <a href="#">application-assurance</a> <a href="#">aarp</a> <i>number</i>   |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **type keyword**

|            |   |
|------------|---|
| Synopsis   | Role referenced by the AARP   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">aarp</a> <i>type keyword</i> |
| Tree       | <a href="#">type</a>  |
| Options    | dual-homed, dual-homed-secondary  |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **accounting-policy reference**

|            |   |
|------------|---|
| Synopsis   | Policy to collect accounting statistics   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">accounting-policy</a> <i>reference</i> |
| Tree       | <a href="#">accounting-policy</a>   |
| Reference  | <b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **admin-state keyword**

|            |   |
|------------|---|
| Synopsis   | Administrative state of the SDP binding to the service  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |

Platforms All

### **adv-service-mtu** *number*

Synopsis Service MTU used in signaling

Context **configure service epipe** *string* **spoke-sdp** *string* **adv-service-mtu** *number*

Tree [adv-service-mtu](#)

Description This command configures the MTU value that is signaled in the targeted LDP for the spoke-SDP, instead of the service MTU. However, the configuration does not affect the locally enforced value, which is still based on the service MTU.

This MTU value cannot be configured on a spoke-SDP that is bound to an SDP with the **adv-mtu-override** command (**configure service sdp** context).

When unconfigured, an adjusted service MTU is used (**service-mtu** command).

Range 0 to 9782

Introduced 21.5.R1

Platforms All

### **app-profile** *reference*

Synopsis Application profile name for this SDP

Context **configure service epipe** *string* **spoke-sdp** *string* **app-profile** *reference*

Tree [app-profile](#)

Reference **configure application-assurance** *group* *number* *partition* *number* *policy* **app-profile** *string*

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **bandwidth** (*number* | *keyword*)

Synopsis Bandwidth that is reserved for this SDP binding

Context **configure service epipe** *string* **spoke-sdp** *string* **bandwidth** (*number* | *keyword*)

Tree [bandwidth](#)

Range 0 to 1000000000

Units kilobps

Options max

Default 0

Introduced 16.0.R1

Platforms All

## **bfd**

Synopsis Enter the **bfd** context  
 Context **configure service epipe string spoke-sdp string bfd**  
 Tree [bfd](#)  
 Introduced 21.2.R1  
 Platforms All

## **bfd-liveness**

Synopsis Enable the **bfd-liveness** context  
 Context **configure service epipe string spoke-sdp string bfd bfd-liveness**  
 Tree [bfd-liveness](#)  
 Introduced 21.2.R1  
 Platforms All

## **encap keyword**

Synopsis BFD encapsulation used on the SDP binding  
 Context **configure service epipe string spoke-sdp string bfd bfd-liveness encap keyword**  
 Tree [encap](#)  
 Options ipv4  
 Default ipv4  
 Introduced 21.2.R1  
 Platforms All

## **bfd-template reference**

Synopsis BFD template associated with the SDP binding  
 Context **configure service epipe string spoke-sdp string bfd bfd-template reference**  
 Tree [bfd-template](#)  
 Description This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum

transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the **configure router bfd** context.

|            |   |
|------------|---|
| Reference  | <b>configure bfd bfd-template</b> <i>string</i> |
| Introduced | 21.2.R1   |
| Platforms  | All   |

### **failure-action** *keyword*

|             |   |
|-------------|---|
| Synopsis    | VCCV BFD action taken on the SDP binding  |
| Context     | <b>configure service epipe</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>bfd failure-action</b> <i>keyword</i>  |
| Tree        | <a href="#">failure-action</a>  |
| Description | This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the <b>configure router bfd</b> context. |
| Options     | none, down  |
| Default     | none  |
| Introduced  | 21.2.R1   |
| Platforms   | All   |

### **wait-for-up-timer** *number*

|             |  |
|-------------|--|
| Synopsis    | Time waited for BFD up status  |
| Context     | <b>configure service epipe</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>bfd wait-for-up-timer</b> <i>number</i>   |
| Tree        | <a href="#">wait-for-up-timer</a>  |
| Description | This command configures the time interval that is used to wait for a BFD session to come up.<br><br>This command is triggered when a spoke-SDP is first administratively enabled and a VCCV BFD session transitions from up to down. The command is required to allow time for BFD sessions to come up, and for BFD to settle before selecting the active spoke-SDP for use in a redundant set. In the case where a VCCV BFD session is bouncing, the timer prevents excessive flapping of the operational state of a spoke-SDP. |
| Range       | 1 to 60  |
| Units       | seconds  |
| Introduced  | 21.2.R1  |
| Platforms   | All  |

**collect-stats** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow agent to collect accounting statistics   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>collect-stats</b> <i>boolean</i> |
| Tree       | <a href="#">collect-stats</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**control-word** *boolean*

|            |   |
|------------|---|
| Synopsis   | Use the control word as preferred   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>control-word</b> <i>boolean</i> |
| Tree       | <a href="#">control-word</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**cpu-protection**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>cpu-protection</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>cpu-protection</b> |
| Tree       | <a href="#">cpu-protection</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS  |

**eth-cfm-monitoring**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>eth-cfm-monitoring</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">cpu-protection</a> <b>eth-cfm-monitoring</b> |
| Tree       | <a href="#">eth-cfm-monitoring</a>  |
| Notes      | The following elements are part of a choice: <b>eth-cfm-monitoring</b> or <b>mac-monitoring</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS   |



## aggregate

|            |  |
|------------|--|
| Synopsis   | Apply rate limit to the sum of the per peer packet rates   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">eth-cfm-monitoring</a> <a href="#">aggregate</a> |
| Tree       | <a href="#">aggregate</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS  |

## car

|            |  |
|------------|--|
| Synopsis   | Ignore Ethernet CFM packets when enforcing overall rate  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">eth-cfm-monitoring</a> <a href="#">car</a> |
| Tree       | <a href="#">car</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS  |

## mac-monitoring

|            |  |
|------------|--|
| Synopsis   | Monitor MAC for CPU protection   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">mac-monitoring</a> |
| Tree       | <a href="#">mac-monitoring</a>   |
| Notes      | The following elements are part of a choice: <b>eth-cfm-monitoring</b> or <b>mac-monitoring</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS  |

## policy-id *reference*

|            |  |
|------------|--|
| Synopsis   | CPM protection policy  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">policy-id</a> <i>reference</i> |
| Tree       | <a href="#">policy-id</a>  |
| Reference  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpu-protection</a> <a href="#">policy</a> <i>number</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS  |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**egress**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>egress</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> |
| Tree       | <a href="#">egress</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**filter**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>filter</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">filter</a> |
| Tree       | <a href="#">filter</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**ip** *reference*

|            |  |
|------------|--|
| Synopsis   | IPv4 filter policy name  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">filter</a> <a href="#">ip</a> <i>reference</i> |
| Tree       | <a href="#">ip</a>   |
| Reference  | <b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**ipv6 reference**

|            |  |
|------------|--|
| Synopsis   | IPv6 filter policy name  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">filter</a> <a href="#">ipv6</a> <i>reference</i> |
| Tree       | <a href="#">ipv6</a>   |
| Reference  | <b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**mac reference**

|            |   |
|------------|---|
| Synopsis   | MAC filter policy name  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">filter</a> <a href="#">mac</a> <i>reference</i> |
| Tree       | <a href="#">mac</a>   |
| Reference  | <b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**l2tpv3**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>l2tpv3</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">l2tpv3</a> |
| Tree       | <a href="#">l2tpv3</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**cookie string**

|               |   |
|---------------|---|
| Synopsis      | Cookie parameters   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">l2tpv3</a> <a href="#">cookie</a> <i>string</i> |
| Tree          | <a href="#">cookie</a>  |
| String Length | 18 to 23  |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

## qos

|            |   |
|------------|---|
| Synopsis   | Enter the <b>qos</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> |
| Tree       | <a href="#">qos</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## network

|            |   |
|------------|---|
| Synopsis   | Enter the <b>network</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">network</a> |
| Tree       | <a href="#">network</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## policy-name *reference*

|            |  |
|------------|--|
| Synopsis   | Network policy ID  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">network</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">network</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## port-redirect-group

|            |   |
|------------|---|
| Synopsis   | Enter the <b>port-redirect-group</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">network</a> <a href="#">port-redirect-group</a> |
| Tree       | <a href="#">port-redirect-group</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**group-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Name of the egress port queue group   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">network</a> <a href="#">port-redirect-group</a> <a href="#">group-name</a> <i>reference</i> |
| Tree       | <a href="#">group-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**instance** *number*

|            |  |
|------------|--|
| Synopsis   | Queue-group instance ID  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">network</a> <a href="#">port-redirect-group</a> <a href="#">instance</a> <i>number</i> |
| Tree       | <a href="#">instance</a>   |
| Range      | 1 to 65535   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**vc-label** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Egress MPLS VC label to send packets to the far end  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">vc-label</a> <i>number</i> |
| Tree       | <a href="#">vc-label</a>   |
| Range      | 16 to 1048575  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**endpoint**

|          |   |
|----------|---|
| Synopsis | Enter the <b>endpoint</b> context   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">endpoint</a> |

|            |                          |
|------------|--------------------------|
| Tree       | <a href="#">endpoint</a> |
| Introduced | 16.0.R1                  |
| Platforms  | All                      |

**icb** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Bind SDP as type Inter-Chassis Backup (ICB)  |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">endpoint icb</a> <i>boolean</i> |
| Tree       | <a href="#">icb</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**name** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Service endpoint name   |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">endpoint name</a> <i>reference</i> |
| Tree       | <a href="#">name</a>  |
| Reference  | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">endpoint</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**precedence** (*number* | *keyword*)

|          |   |
|----------|---|
| Synopsis | Precedence when multiple SDP binds are on one endpoint  |
| Context  | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">endpoint precedence</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <a href="#">precedence</a>  |
| Range    | 1 to 4  |

|            |         |
|------------|---------|
| Options    | primary |
| Default    | 4       |
| Introduced | 16.0.R1 |
| Platforms  | All     |

## entropy-label

|            |  |
|------------|--|
| Synopsis   | Enable the use of entropy labels for spoke SDPs  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">entropy-label</a> |
| Tree       | <a href="#">entropy-label</a>  |
| Notes      | The following elements are part of a choice: <b>entropy-label</b> or <b>hash-label</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## eth-cfm

|            |  |
|------------|--|
| Synopsis   | Enter the <b>eth-cfm</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> |
| Tree       | <a href="#">eth-cfm</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## collect-lmm-fc-stats

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>collect-lmm-fc-stats</b> context  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">collect-lmm-fc-stats</a>  |
| Tree        | <a href="#">collect-lmm-fc-stats</a>   |
| Description | <p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands <b>fc-in-profile</b> and <b>fc</b> in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the <b>collect-lmm-stats</b> command are mutually exclusive when there is entity resource contention.</p> |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**fc keyword**

|                |   |
|----------------|---|
| Synopsis       | Forwarding class name for profile-unaware counter   |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">collect-lmm-fc-stats</a> <a href="#">fc</a> <i>keyword</i>   |
| Tree           | <a href="#">fc</a>  |
| Description    | <p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the <b>fc-in-profile</b> command under the <b>collect-lmm-fc-stats</b> context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p> |
| Options        | be, l2, af, l1, h2, ef, h1, nc  |
| Max. Instances | 8   |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**fc-in-profile keyword**

|                |   |
|----------------|---|
| Synopsis       | Forwarding class name for profile-aware counter   |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">collect-lmm-fc-stats</a> <a href="#">fc-in-profile</a> <i>keyword</i>  |
| Tree           | <a href="#">fc-in-profile</a>   |
| Description    | <p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the <b>fc</b> command under the <b>collect-lmm-fc-stats</b> context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p> |
| Options        | be, l2, af, l1, h2, ef, h1, nc  |
| Max. Instances | 8   |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |



**collect-lmm-stats** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Collect statistics for loss measurement message tests  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <b>collect-lmm-stats</b> <i>boolean</i>   |
| Tree        | <a href="#">collect-lmm-stats</a>  |
| Description | <p>When configured to <b>true</b>, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.</p> <p>The <b>show eth-cfm collect-lmm-stats</b> command displays entities that have been enabled to collect transit and receive counters.</p> <p>When configured to <b>false</b>, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.</p> |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**mep** [md-admin-name](#) *reference* [ma-admin-name](#) *reference* **mep-id** *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mep</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <b>mep</b> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <b>mep-id</b> <i>number</i> |
| Tree       | <a href="#">mep</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**md-admin-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Maintenance Domain (MD) name  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <b>mep</b> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <b>mep-id</b> <i>number</i> |
| Tree       | <a href="#">mep</a>   |
| Reference  | <b>configure</b> <a href="#">eth-cfm</a> <a href="#">domain</a> <i>string</i>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**ma-admin-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Maintenance Association (MA) name   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> |
| Tree       | <a href="#">mep</a>   |
| Reference  | <b>configure</b> <a href="#">eth-cfm</a> <a href="#">domain</a> <i>string</i> <a href="#">association</a> <i>string</i>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**mep-id** *number*

|            |   |
|------------|---|
| Synopsis   | Maintenance Endpoint (MEP) ID   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> |
| Tree       | <a href="#">mep</a>   |
| Range      | 1 to 8191   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the MEP  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**ais**

|          |                               |
|----------|-------------------------------|
| Synopsis | Enable the <b>ais</b> context |
|----------|-------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service epipe</b> <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais</i> |
| Tree       | <a href="#">ais</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **client-meg-level** *number*

|                   |   |
|-------------------|---|
| Synopsis          | Client MEG level for AIS message generation   |
| Context           | <b>configure service epipe</b> <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais client-meg-level number</i> |
| Tree              | <a href="#">client-meg-level</a>  |
| Range             | 1 to 7  |
| Max.<br>Instances | 7   |
| Introduced        | 16.0.R1   |
| Platforms         | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **interface-support** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable generation of AIS PDUs based on endpoint state   |
| Context    | <b>configure service epipe</b> <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais interface-support boolean</i> |
| Tree       | <a href="#">interface-support</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **interval** *number*

|          |   |
|----------|---|
| Synopsis | Transmission interval for AIS messages  |
| Context  | <b>configure service epipe</b> <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais interval number</i> |
| Tree     | <a href="#">interval</a>  |
| Range    | 1   60  |
| Units    | seconds   |
| Default  | 1   |

|            |  |
|------------|--|
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **low-priority-defect** *keyword*

|            |  |
|------------|--|
| Synopsis   | Lowest priority defect allowed to generate fault alarm   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>ais</b> <b>low-priority-defect</b> <i>keyword</i> |
| Tree       | <a href="#">low-priority-defect</a>  |
| Options    | all-def, mac-rem-err-xcon  |
| Default    | all-def  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **priority** *number*

|            |  |
|------------|--|
| Synopsis   | Priority of the AIS messages generated by the node   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>ais</b> <b>priority</b> <i>number</i> |
| Tree       | <a href="#">priority</a>   |
| Range      | 0 to 7   |
| Default    | 7  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **alarm-notification**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>alarm-notification</b> context  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>alarm-notification</b>  |
| Tree        | <a href="#">alarm-notification</a>   |
| Description | <p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p> |
| Introduced  | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fng-alarm-time** *number*

Synopsis Time that must expire before an FNG alarm is raised

Context **configure** [service](#) [epipe](#) *string* [spoke-sdp](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [alarm-notification](#) [fng-alarm-time](#) *number*

Tree [fng-alarm-time](#)

Range 250 | 500 | 1000

Units centiseconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fng-reset-time** *number*

Synopsis Time that must expire before an FNG alarm is reset

Context **configure** [service](#) [epipe](#) *string* [spoke-sdp](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [alarm-notification](#) [fng-reset-time](#) *number*

Tree [fng-reset-time](#)

Range 250 | 500 | 1000

Units centiseconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm** *boolean*

Synopsis Generate CCM messages

Context **configure** [service](#) [epipe](#) *string* [spoke-sdp](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [ccm](#) *boolean*

Tree [ccm](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ccm-ltm-priority** *number*

|            |   |
|------------|---|
| Synopsis   | Priority of CCM and LTM messages transmitted by the MEP   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>ccm-ltm-priority</b> <i>number</i> |
| Tree       | <a href="#">ccm-ltm-priority</a>  |
| Range      | 0 to 7  |
| Default    | 7   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**ccm-padding-size** *number*

|             |   |
|-------------|---|
| Synopsis    | Number of octets of padding to insert in CCM packets  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>ccm-padding-size</b> <i>number</i>   |
| Tree        | <a href="#">ccm-padding-size</a>  |
| Description | This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.<br><br>This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through <b>configure eth-cfm domain association ccm-interval</b> ) is less than 1 second. |
| Range       | 3 to 1500   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**cfm-vlan-tag** *string*

|               |   |
|---------------|---|
| Synopsis      | VLAN tags to apply to CFM PDUs for egress processing  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>cfm-vlan-tag</b> <i>string</i> |
| Tree          | <a href="#">cfm-vlan-tag</a>  |
| String Length | 1 to 9  |
| Introduced    | 21.10.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**csf**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>csf</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>csf</b> |
| Tree       | <a href="#">csf</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**multiplier** *decimal-number*

|            |  |
|------------|--|
| Synopsis   | Multiplication factor used to clear the CSF condition  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>csf</b> <b>multiplier</b> <i>decimal-number</i> |
| Tree       | <a href="#">multiplier</a>   |
| Range      | 0.0   2.0 to 30.0  |
| Default    | 3.5  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**direction** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |                         |
|----------|-------------------------|
| Synopsis | Direction the MEP faces |
|----------|-------------------------|

|            |  |
|------------|--|
| Context    | <b>configure service epipe string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number direction keyword</b> |
| Tree       | <a href="#">direction</a>  |
| Options    | down, up   |
| Default    | down   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## eth-test

|             |   |
|-------------|---|
| Synopsis    | Enable the <b>eth-test</b> context  |
| Context     | <b>configure service epipe string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test</b>   |
| Tree        | <a href="#">eth-test</a>  |
| Description | Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the <b>oam eth-cfm eth-test</b> command. |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## bit-error-threshold *number*

|            |  |
|------------|--|
| Synopsis   | Lowest priority defect allowed to generate fault alarm   |
| Context    | <b>configure service epipe string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test bit-error-threshold number</b> |
| Tree       | <a href="#">bit-error-threshold</a>  |
| Range      | 0 to 11840   |
| Units      | bit errors   |
| Default    | 1  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## test-pattern

|          |  |
|----------|--|
| Synopsis | Enter the <b>test-pattern</b> context  |
| Context  | <b>configure service epipe string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern</b> |



|             |  |
|-------------|--|
| Tree        | <a href="#">test-pattern</a>   |
| Description | Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver. |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **crc-tlv** *boolean*

|            |   |
|------------|---|
| Synopsis   | Generate a CRC checksum   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test</a> <a href="#">test-pattern</a> <b>crc-tlv</b> <i>boolean</i> |
| Tree       | <a href="#">crc-tlv</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **pattern** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Test pattern for Ethernet Test frames   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test</a> <a href="#">test-pattern</a> <b>pattern</b> <i>keyword</i> |
| Tree        | <a href="#">pattern</a>   |
| Description | This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.   |
| Options     | all-zeros, all-ones   |
| Default     | all-zeros   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **fault-propagation** *keyword*

|          |   |
|----------|---|
| Synopsis | Fault propagation for the MEP   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>fault-propagation</b> <i>keyword</i> |
| Tree     | <a href="#">fault-propagation</a>   |
| Options  | use-if-status-tlv, suspend-ccm  |

|            |  |
|------------|--|
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

## grace

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>grace</b> context  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> |
| Tree        | <a href="#">grace</a>   |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## eth-ed

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>eth-ed</b> context  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-ed</a> |
| Tree        | <a href="#">eth-ed</a>   |
| Description | Commands in this context configure the ITU-T Y.1731 ETH-ED function.   |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## max-rx-defect-window *number*

|            |   |
|------------|---|
| Synopsis   | Maximum received ETH-ED expected defect window duration   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-ed</a> <a href="#">max-rx-defect-window</a> <i>number</i> |
| Tree       | <a href="#">max-rx-defect-window</a>  |
| Range      | 1 to 86400  |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**priority number**

|            |  |
|------------|--|
| Synopsis   | Transmission priority for ETH-ED PDUs  |
| Context    | <b>configure service epipe</b> <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed priority number</i> |
| Tree       | <a href="#">priority</a>   |
| Range      | 0 to 7   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**rx-eth-ed boolean**

|             |  |
|-------------|--|
| Synopsis    | Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP  |
| Context     | <b>configure service epipe</b> <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed rx-eth-ed boolean</i> |
| Tree        | <a href="#">rx-eth-ed</a>  |
| Description | This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.   |
| Default     | true   |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**tx-eth-ed boolean**

|            |  |
|------------|--|
| Synopsis   | Transmit ETH-ED PDUs from the MEP  |
| Context    | <b>configure service epipe</b> <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed tx-eth-ed boolean</i> |
| Tree       | <a href="#">tx-eth-ed</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**eth-vsm-grace**

|          |   |
|----------|---|
| Synopsis | Enter the <b>eth-vsm-grace</b> context  |
| Context  | <b>configure service epipe</b> <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace</i> |

|             |  |
|-------------|--|
| Tree        | <a href="#">eth-vsm-grace</a>  |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function. |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS         |

### **rx-eth-vsm-grace** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Receive and process Nokia ETH-CFM Grace PDU on the MEP  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-vsm-grace</a> <a href="#">rx-eth-vsm-grace</a> <i>boolean</i> |
| Tree        | <a href="#">rx-eth-vsm-grace</a>  |
| Description | When configured to <b>true</b> , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.<br><br>When configured to <b>false</b> , the router disables the Nokia Grace function.   |
| Default     | true  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **tx-eth-vsm-grace** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Transmit ETH-ED PDUs from the MEP  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-vsm-grace</a> <a href="#">tx-eth-vsm-grace</a> <i>boolean</i>  |
| Tree        | <a href="#">tx-eth-vsm-grace</a>   |
| Description | When configured to <b>true</b> , the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.<br><br>The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.<br><br>The operator must configure the <b>configure system eth-cfm grace</b> command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).<br><br>When configured to <b>false</b> , the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP. |
| Default     | true   |
| Introduced  | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **lbm-svc-act-responder** *boolean*

Synopsis Process service activation streams in ETH-CFM LBM

Context **configure** **service** **epipe** *string* **spoke-sdp** *string* **eth-cfm** **mep** **md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number* **lbm-svc-act-responder** *boolean*

Tree [lbm-svc-act-responder](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **low-priority-defect** *keyword*

Synopsis Lowest priority defect allowed to generate fault alarm

Context **configure** **service** **epipe** *string* **spoke-sdp** *string* **eth-cfm** **mep** **md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number* **low-priority-defect** *keyword*

Tree [low-priority-defect](#)

Options all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon

Default mac-rem-err-xcon

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mac-address** *string*

Synopsis MAC address of the MEP

Context **configure** **service** **epipe** *string* **spoke-sdp** *string* **eth-cfm** **mep** **md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number* **mac-address** *string*

Tree [mac-address](#)

Description This command specifies the MAC address of the MEP.

When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**one-way-delay-threshold** *number*

|            |  |
|------------|--|
| Synopsis   | Threshold time limit for the one-way delay test  |
| Context    | <b>configure</b> <b>service</b> <b>epipe</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm</b> <b>mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>one-way-delay-threshold</b> <i>number</i> |
| Tree       | <b>one-way-delay-threshold</b>   |
| Range      | 0 to 600   |
| Units      | seconds  |
| Default    | 3  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**primary-vlan** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | MEP provisioned using MA primary VLAN ID   |
| Context    | <b>configure</b> <b>service</b> <b>epipe</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm</b> <b>mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>primary-vlan</b> <i>boolean</i> |
| Tree       | <b>primary-vlan</b>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**mip primary-vlan** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mip</b> list instance   |
| Context    | <b>configure</b> <b>service</b> <b>epipe</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm</b> <b>mip</b> <b>primary-vlan</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <b>mip</b>   |
| Introduced | 21.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**primary-vlan** (*number* | *keyword*)

|          |                                      |
|----------|--------------------------------------|
| Synopsis | VLAN ID to which the MIP is attached |
|----------|--------------------------------------|

|             |   |
|-------------|---|
| Context     | <b>configure service epipe</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm mip primary-vlan</b> ( <i>number</i>   <i>keyword</i> )                            |
| Tree        | <a href="#">mip</a>   |
| Description | This command provides an option for linking a MIP with a Primary VLAN number or none. When the <b>none</b> option is provided, the MIP does not include the primary vlan. |
| Range       | 1 to 4094   |
| Options     | none  |
| Notes       | This element is part of a list key.   |
| Introduced  | 21.5.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **cfm-vlan-tag** *string*

|               |  |
|---------------|--|
| Synopsis      | VLAN tags to apply to CFM PDUs for egress processing   |
| Context       | <b>configure service epipe</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm mip primary-vlan</b> ( <i>number</i>   <i>keyword</i> ) <b>cfm-vlan-tag</b> <i>string</i>   |
| Tree          | <a href="#">cfm-vlan-tag</a>   |
| Description   | This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the vc-type vlan or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM PDUs arriving at the same egress. When this command is included under the MEP or MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration. |
| String Length | 1 to 9   |
| Introduced    | 21.10.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **mac-address** *string*

|            |   |
|------------|---|
| Synopsis   | MAC address of the MIP  |
| Context    | <b>configure service epipe</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm mip primary-vlan</b> ( <i>number</i>   <i>keyword</i> ) <b>mac-address</b> <i>string</i> |
| Tree       | <a href="#">mac-address</a>   |
| Introduced | 21.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**snelch- ingress-ctag-levels *number***

|                |   |
|----------------|---|
| Synopsis       | Snelch levels using additional VLAN C-Tag space   |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">snelch- ingress-ctag-levels</a> <a href="#">number</a>   |
| Tree           | <a href="#">snelch- ingress-ctag-levels</a>   |
| Description    | <p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding plus an additional VLAN, up to a maximum tag length of two tags. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level to be dropped.</p> |
| Range          | 0 to 7  |
| Max. Instances | 8   |
| Introduced     | 21.2.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**snelch- ingress-levels *number***

|                |  |
|----------------|--|
| Synopsis       | Levels for which ETH-CFM packets are silently discarded  |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">snelch- ingress-levels</a> <a href="#">number</a>   |
| Tree           | <a href="#">snelch- ingress-levels</a>   |
| Description    | <p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.</p> |
| Range          | 0 to 7   |
| Max. Instances | 8  |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |



### **force-vc-forwarding** *keyword*

|            |  |
|------------|--|
| Synopsis   | VC forwarding action   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>force-vc-forwarding</b> <i>keyword</i> |
| Tree       | <a href="#">force-vc-forwarding</a>  |
| Options    | vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **hash-label**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>hash-label</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>hash-label</b> |
| Tree       | <a href="#">hash-label</a>   |
| Notes      | The following elements are part of a choice: <b>entropy-label</b> or <b>hash-label</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **signal-capability**

|            |  |
|------------|--|
| Synopsis   | Enable the signaling of the hash label between PE nodes  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">hash-label</a> <b>signal-capability</b> |
| Tree       | <a href="#">signal-capability</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **ingress**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ingress</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>ingress</b> |
| Tree       | <a href="#">ingress</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## filter

|            |   |
|------------|---|
| Synopsis   | Enter the <b>filter</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress</a> <a href="#">filter</a> |
| Tree       | <a href="#">filter</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## ip reference

|            |   |
|------------|---|
| Synopsis   | IPv4 filter policy name   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress</a> <a href="#">filter</a> <a href="#">ip</a> <i>reference</i> |
| Tree       | <a href="#">ip</a>  |
| Reference  | <b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## ipv6 reference

|            |   |
|------------|---|
| Synopsis   | IPv6 filter policy name   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress</a> <a href="#">filter</a> <a href="#">ipv6</a> <i>reference</i> |
| Tree       | <a href="#">ipv6</a>  |
| Reference  | <b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## mac reference

|            |  |
|------------|--|
| Synopsis   | MAC filter policy name   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress</a> <a href="#">filter</a> <a href="#">mac</a> <i>reference</i> |
| Tree       | <a href="#">mac</a>  |
| Reference  | <b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## **l2tpv3**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>l2tpv3</b> context                                       |
| Context    | <b>configure service epipe string spoke-sdp string ingress l2tpv3</b> |
| Tree       | <b>l2tpv3</b>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## **cookie**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>cookie</b> context  |
| Context    | <b>configure service epipe string spoke-sdp string ingress l2tpv3 cookie</b> |
| Tree       | <b>cookie</b>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## **cookie1 string**

|               |   |
|---------------|---|
| Synopsis      | Value of cookie-1 for the tunnel  |
| Context       | <b>configure service epipe string spoke-sdp string ingress l2tpv3 cookie cookie1 string</b> |
| Tree          | <b>cookie1</b>  |
| String Length | 18 to 23  |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

## **cookie2 string**

|               |   |
|---------------|---|
| Synopsis      | Value of cookie-1 for the tunnel  |
| Context       | <b>configure service epipe string spoke-sdp string ingress l2tpv3 cookie cookie2 string</b> |
| Tree          | <b>cookie2</b>  |
| String Length | 18 to 23  |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

## qos

|            |  |
|------------|--|
| Synopsis   | Enter the <b>qos</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> |
| Tree       | <a href="#">qos</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## network

|            |  |
|------------|--|
| Synopsis   | Enter the <b>network</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">network</a> |
| Tree       | <a href="#">network</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## fp-redirect-group

|            |  |
|------------|--|
| Synopsis   | Enter the <b>fp-redirect-group</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">network</a> <a href="#">fp-redirect-group</a> |
| Tree       | <a href="#">fp-redirect-group</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## group-name *reference*

|            |  |
|------------|--|
| Synopsis   | Name of the forwarding plane queue group template  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">network</a> <a href="#">fp-redirect-group</a> <a href="#">group-name</a> <i>reference</i> |
| Tree       | <a href="#">group-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">ingress</a> <a href="#">queue-group</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**instance number**

|            |   |
|------------|---|
| Synopsis   | Instance of FP ingress queue group for the SDP binding  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">network</a> <a href="#">fp-redirect-group</a> <i>instance number</i> |
| Tree       | <a href="#">instance</a>  |
| Range      | 1 to 65535  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**policy-name reference**

|            |   |
|------------|---|
| Synopsis   | Network policy ID   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">network</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">network</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**vc-label number****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Ingress MPLS VC label to send packets to the far end  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress</a> <a href="#">vc-label</a> <i>number</i> |
| Tree       | <a href="#">vc-label</a>  |
| Range      | 1 to 1048575  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**monitor-oper-group reference**

|          |  |
|----------|--|
| Synopsis | Operational group that affects state of the SDP bind   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">monitor-oper-group</a> <i>reference</i> |

|            |   |
|------------|---|
| Tree       | <a href="#">monitor-oper-group</a>  |
| Reference  | <b>configure</b> <a href="#">service oper-group</a> <i>string</i>                             |
| Notes      | The following elements are part of a choice: <b>monitor-oper-group</b> or <b>oper-group</b> . |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **oper-group** *reference*

|            |  |
|------------|--|
| Synopsis   | Operational group identifier   |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">oper-group</a> <i>reference</i> |
| Tree       | <a href="#">oper-group</a>   |
| Reference  | <b>configure</b> <a href="#">service oper-group</a> <i>string</i>  |
| Notes      | The following elements are part of a choice: <b>monitor-oper-group</b> or <b>oper-group</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **pw-status**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>pw-status</b> context   |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">pw-status</a> |
| Tree       | <a href="#">pw-status</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **block-on-peer-fault** *boolean*

|            |   |
|------------|---|
| Synopsis   | Block transmit direction of PW based on status code   |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">pw-status</a> <a href="#">block-on-peer-fault</a> <i>boolean</i> |
| Tree       | <a href="#">block-on-peer-fault</a>   |
| Default    | false   |
| Notes      | The following elements are part of a choice: <b>block-on-peer-fault</b> or <b>standby-signaling-slave</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **signaling** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow SDP binding to support pseudowire status signaling  |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">pw-status</a> <a href="#">signaling</a> <i>boolean</i> |
| Tree       | <a href="#">signaling</a>   |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **standby-signaling-slave** *boolean*

|            |   |
|------------|---|
| Synopsis   | Block spoke transmission based on PW standby status   |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">pw-status</a> <a href="#">standby-signaling-slave</a> <i>boolean</i> |
| Tree       | <a href="#">standby-signaling-slave</a>   |
| Default    | false   |
| Notes      | The following elements are part of a choice: <b>block-on-peer-fault</b> or <b>standby-signaling-slave</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **source-bmac**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>source-bmac</b> context   |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">source-bmac</a> |
| Tree       | <a href="#">source-bmac</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **use-sdp-bmac-lsb** *boolean*

|          |  |
|----------|--|
| Synopsis | Allow the spoke SDP to be part of a redundant pseudo-wire within PBB Epipe service   |
| Context  | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">source-bmac</a> <a href="#">use-sdp-bmac-lsb</a> <i>boolean</i> |
| Tree     | <a href="#">use-sdp-bmac-lsb</a>   |
| Default  | false  |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

## transit-policy

|            |   |
|------------|---|
| Synopsis   | Enable the <b>transit-policy</b> context  |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">transit-policy</a> |
| Tree       | <a href="#">transit-policy</a>  |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## ip reference



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | IP transit policy ID   |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">transit-policy</a> <a href="#">ip reference</a>   |
| Tree       | <a href="#">ip</a>   |
| Reference  | <b>configure</b> <a href="#">application-assurance</a> <i>group number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-ip-policy</a> <i>number</i> |
| Notes      | The following elements are part of a mandatory choice: <b>ip</b> or <b>prefix</b> .  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## prefix reference



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

|           |  |
|-----------|--|
| Synopsis  | IP prefix policy ID  |
| Context   | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">transit-policy</a> <a href="#">prefix</a> <a href="#">reference</a> |
| Tree      | <a href="#">prefix</a>   |
| Reference | <b>configure</b> <a href="#">application-assurance</a> <i>group number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-prefix-policy</a> <i>number</i>               |



|            |   |
|------------|---|
| Notes      | The following elements are part of a mandatory choice: <b>ip</b> or <b>prefix</b> . |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **vc-type** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Virtual circuit type associated with the SDP binding   |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>vc-type</b> <i>keyword</i> |
| Tree       | <a href="#">vc-type</a>  |
| Options    | ether, vlan  |
| Default    | ether  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **vlan-vc-tag** *number*

|            |   |
|------------|---|
| Synopsis   | SDP bind VC tag   |
| Context    | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>vlan-vc-tag</b> <i>number</i> |
| Tree       | <a href="#">vlan-vc-tag</a>   |
| Range      | 0 to 4094   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **test** *boolean*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Designate as a test service   |
| Context  | <b>configure</b> <a href="#">service epipe</a> <i>string</i> <b>test</b> <i>boolean</i> |
| Tree     | <a href="#">test</a>  |
| Default  | false   |

Introduced 16.0.R1  
 Platforms All

### **vc-switching** *boolean*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Use PW switching signaling for spoke SDPs in service  
 Context **configure** *service epipe string* **vc-switching** *boolean*  
 Tree **vc-switching**  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **vpn-id** *number*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis VPN identifier for the service  
 Context **configure** *service epipe string* **vpn-id** *number*  
 Tree **vpn-id**  
 Range 1 to 2147483647  
 Introduced 16.0.R1  
 Platforms All

### **vxlan**

Synopsis Enter the **vxlan** context  
 Context **configure** *service epipe string* **vxlan**  
 Tree **vxlan**  
 Introduced 16.0.R1  
 Platforms All

**instance** [*vxlan-instance*] *number*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>instance</b> list instance                     |
| Context        | <b>configure service epipe string vxlan instance number</b> |
| Tree           | <b>instance</b>   |
| Max. Instances | 1   |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

**[vxlan-instance]** *number*

|            |   |
|------------|---|
| Synopsis   | VXLAN instance  |
| Context    | <b>configure service epipe string vxlan instance number</b> |
| Tree       | <b>instance</b>   |
| Range      | 1   |
| Notes      | This element is part of a list key.                         |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**egress-vtep**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>egress-vtep</b> context                                    |
| Context    | <b>configure service epipe string vxlan instance number egress-vtep</b> |
| Tree       | <b>egress-vtep</b>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

|            |  |
|------------|--|
| Synopsis   | VTEP IP address used when originating VXLAN packets  |
| Context    | <b>configure service epipe string vxlan instance number egress-vtep ip-address (ipv4-address-no-zone   ipv6-address-no-zone)</b> |
| Tree       | <b>ip-address</b>  |
| Introduced | 16.0.R1  |

Platforms All

### **oper-group** *reference*

Synopsis Operational group associated with egress VTEP address  
 Context **configure** [service](#) [epipe](#) *string* [vxlan](#) [instance](#) *number* [egress-vtep](#) [oper-group](#) *reference*  
 Tree [oper-group](#)  
 Reference **configure** [service](#) [oper-group](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### **vni** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis VNI of the VXLAN  
 Context **configure** [service](#) [epipe](#) *string* [vxlan](#) [instance](#) *number* [vni](#) *number*  
 Tree [vni](#)  
 Range 1 to 16777215  
 Notes This element is mandatory.  
 Introduced 16.0.R1  
 Platforms All

### **source-vtep** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Vxlan source virtual tunnel endpoint information  
 Context **configure** [service](#) [epipe](#) *string* [vxlan](#) [source-vtep](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)  
 Tree [source-vtep](#)  
 Introduced 16.0.R1  
 Platforms All

**ies** [*service-name*] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ies</b> list instance         |
| Context    | <b>configure</b> <i>service ies string</i> |
| Tree       | <i>ies</i>                                 |
| Introduced | 16.0.R1                                    |
| Platforms  | All  |

**[service-name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Administrative service name                |
| Context       | <b>configure</b> <i>service ies string</i> |
| Tree          | <i>ies</i>                                 |
| String Length | 1 to 64                                    |
| Notes         | This element is part of a list key.        |
| Introduced    | 16.0.R1                                    |
| Platforms     | All  |

**aa-interface** [*interface-name*] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>aa-interface</b> list instance                    |
| Context    | <b>configure</b> <i>service ies string aa-interface string</i> |
| Tree       | <i>aa-interface</i>  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                   |

**[interface-name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Interface name   |
| Context       | <b>configure</b> <i>service ies string aa-interface string</i> |
| Tree          | <i>aa-interface</i>  |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.                            |
| Introduced    | 21.10.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the interface   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">aa-interface</a> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">aa-interface</a> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 255   |
| Introduced    | 21.10.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**ip-mtu** *number*

|            |   |
|------------|---|
| Synopsis   | IP MTU applied to outgoing packets  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">aa-interface</a> <i>string</i> <b>ip-mtu</b> <i>number</i> |
| Tree       | <a href="#">ip-mtu</a>  |
| Range      | 512 to 9786   |
| Units      | bytes   |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**ipv4**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ipv4</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">aa-interface</a> <i>string</i> <b>ipv4</b> |
| Tree       | <a href="#">ipv4</a>  |
| Introduced | 21.10.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## primary

Synopsis Enable the **primary** context  
 Context **configure service ies string aa-interface string ipv4 primary**  
 Tree [primary](#)  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## address *string*

Synopsis Primary IPv4 address assigned to the interface  
 Context **configure service ies string aa-interface string ipv4 primary address string**  
 Tree [address](#)  
 Notes This element is mandatory.  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## prefix-length *number*

Synopsis IPv4 address prefix length  
 Context **configure service ies string aa-interface string ipv4 primary prefix-length number**  
 Tree [prefix-length](#)  
 Range 0 to 32  
 Notes This element is mandatory.  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## sap [[sap-id](#)] *string*

Synopsis Enter the **sap** list instance  
 Context **configure service ies string aa-interface string sap string**  
 Tree [sap](#)

|                |  |
|----------------|--|
| Max. Instances | 1  |
| Introduced     | 21.10.R1                                     |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

**[sap-id] string**

|               |  |
|---------------|--|
| Synopsis      | SAP ID   |
| Context       | <b>configure</b> <a href="#">service ies string</a> <a href="#">aa-interface string</a> <a href="#">sap string</a> |
| Tree          | <a href="#">sap</a>  |
| String Length | 1 to 45  |
| Notes         | This element is part of a list key.  |
| Introduced    | 21.10.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**admin-state keyword**

|            |  |
|------------|--|
| Synopsis   | Administrative state of the SAP  |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">aa-interface string</a> <a href="#">sap string</a> <a href="#">admin-state keyword</a> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**description string**

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">service ies string</a> <a href="#">aa-interface string</a> <a href="#">sap string</a> <a href="#">description string</a> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 160  |
| Introduced    | 21.10.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |



## egress

|            |  |
|------------|--|
| Synopsis   | Enter the <b>egress</b> context  |
| Context    | <b>configure service ies</b> <i>string aa-interface string sap string egress</i> |
| Tree       | <a href="#">egress</a>   |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                     |

## filter

|            |   |
|------------|---|
| Synopsis   | Enter the <b>filter</b> context   |
| Context    | <b>configure service ies</b> <i>string aa-interface string sap string egress filter</i> |
| Tree       | <a href="#">filter</a>  |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## ip reference

|            |  |
|------------|--|
| Synopsis   | IPv4 filter policy name  |
| Context    | <b>configure service ies</b> <i>string aa-interface string sap string egress filter ip reference</i> |
| Tree       | <a href="#">ip</a>   |
| Reference  | <b>configure filter ip-filter</b> <i>string</i>  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## qos

|            |  |
|------------|--|
| Synopsis   | Enter the <b>qos</b> context   |
| Context    | <b>configure service ies</b> <i>string aa-interface string sap string egress qos</i> |
| Tree       | <a href="#">qos</a>  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## sap-egress

|          |                                     |
|----------|-------------------------------------|
| Synopsis | Enter the <b>sap-egress</b> context |
|----------|-------------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service ies</b> <i>string aa-interface string sap string egress qos sap-egress</i> |
| Tree       | <a href="#">sap-egress</a>  |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **policy-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Policy ID to associate with SAP for mirrored service  |
| Context    | <b>configure service ies</b> <i>string aa-interface string sap string egress qos sap-egress policy-name reference</i> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure qos sap-egress</b> <i>string</i>   |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **fwd-wholesale**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>fwd-wholesale</b> context  |
| Context    | <b>configure service ies</b> <i>string aa-interface string sap string fwd-wholesale</i> |
| Tree       | <a href="#">fwd-wholesale</a>   |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **pppoe-service** *reference*

|            |   |
|------------|---|
| Synopsis   | PPPoE service name  |
| Context    | <b>configure service ies</b> <i>string aa-interface string sap string fwd-wholesale pppoe-service reference</i> |
| Tree       | <a href="#">pppoe-service</a>   |
| Reference  | <b>configure service epipe</b> <i>string</i>  |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **ingress**

|          |                                  |
|----------|----------------------------------|
| Synopsis | Enter the <b>ingress</b> context |
|----------|----------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service ies</b> <i>string aa-interface string sap string ingress</i> |
| Tree       | <a href="#">ingress</a>   |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                      |

## qos

|            |   |
|------------|---|
| Synopsis   | Enter the <b>qos</b> context  |
| Context    | <b>configure service ies</b> <i>string aa-interface string sap string ingress qos</i> |
| Tree       | <a href="#">qos</a>   |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## sap-ingress

|            |   |
|------------|---|
| Synopsis   | Enter the <b>sap-ingress</b> context  |
| Context    | <b>configure service ies</b> <i>string aa-interface string sap string ingress qos sap-ingress</i> |
| Tree       | <a href="#">sap-ingress</a>   |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## overrides

|            |   |
|------------|---|
| Synopsis   | Enter the <b>overrides</b> context  |
| Context    | <b>configure service ies</b> <i>string aa-interface string sap string ingress qos sap-ingress overrides</i> |
| Tree       | <a href="#">overrides</a>   |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## policy-name *reference*

|          |   |
|----------|---|
| Synopsis | Policy ID   |
| Context  | <b>configure service ies</b> <i>string aa-interface string sap string ingress qos sap-ingress policy-name reference</i> |
| Tree     | <a href="#">policy-name</a>   |

|            |  |
|------------|--|
| Reference  | <b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                   |

## lag

|            |  |
|------------|--|
| Synopsis   | Enter the <b>lag</b> context   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">aa-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>lag</b> |
| Tree       | <a href="#">lag</a>  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## aarp-interface [[interface-name](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>aarp-interface</b> list instance   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> |
| Tree       | <a href="#">aarp-interface</a>  |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## [[interface-name](#)] *string*

|               |   |
|---------------|---|
| Synopsis      | Interface name  |
| Context       | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> |
| Tree          | <a href="#">aarp-interface</a>  |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 21.10.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## admin-state *keyword*

|          |  |
|----------|--|
| Synopsis | Administrative state of the interface  |
| Context  | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree     | <a href="#">admin-state</a>  |

|            |  |
|------------|--|
| Options    | enable, disable                              |
| Default    | enable                                       |
| Introduced | 21.10.R1                                     |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 255   |
| Introduced    | 21.10.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **ip-mtu** *number*

|            |   |
|------------|---|
| Synopsis   | IP MTU applied to outgoing packets  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <b>ip-mtu</b> <i>number</i> |
| Tree       | <a href="#">ip-mtu</a>  |
| Range      | 512 to 9786   |
| Units      | bytes   |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **spoke-sdp** [[sdp-bind-id](#)] *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>spoke-sdp</b> list instance   |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <b>spoke-sdp</b> <i>string</i> |
| Tree           | <a href="#">spoke-sdp</a>  |
| Max. Instances | 1  |
| Introduced     | 21.10.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**[sdp-bind-id]** *string*

|               |   |
|---------------|---|
| Synopsis      | SDP binding ID  |
| Context       | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> |
| Tree          | <a href="#">spoke-sdp</a>   |
| String Length | 3 to 16   |
| Notes         | This element is part of a list key.   |
| Introduced    | 21.10.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**aarp**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>aarp</b> context  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>aarp</b> |
| Tree       | <a href="#">aarp</a>  |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**id reference****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | AARP instance ID  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>aarp</b> <i>id reference</i> |
| Tree       | <a href="#">id</a>  |
| Reference  | <b>configure</b> <a href="#">application-assurance aarp</a> <i>number</i>   |
| Notes      | This element is mandatory.  |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Role of the spoke SDP referenced by the AARP  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">aarp</a> <i>type</i> <i>keyword</i> |
| Tree       | <a href="#">type</a>  |
| Options    | subscriber-side-shunt, network-side-shunt   |
| Notes      | This element is mandatory.  |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of this service SDP binding   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 21.10.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**egress**

|          |  |
|----------|--|
| Synopsis | Enter the <b>egress</b> context  |
| Context  | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> |

|            |  |
|------------|--|
| Tree       | <a href="#">egress</a>                       |
| Introduced | 21.10.R1                                     |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

## filter

|            |   |
|------------|---|
| Synopsis   | Enter the <b>filter</b> context   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">filter</a> |
| Tree       | <a href="#">filter</a>  |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## ip reference

|            |  |
|------------|--|
| Synopsis   | IP filter ID   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">filter</a> <a href="#">ip</a> <a href="#">reference</a> |
| Tree       | <a href="#">ip</a>   |
| Reference  | <b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i>  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## vc-label *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | VC egress value that indicates a specific connection  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">vc-label</a> <i>number</i> |
| Tree       | <a href="#">vc-label</a>  |
| Range      | 16 to 1048575   |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |



## ingress

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ingress</b> context  |
| Context    | <b>configure service ies</b> <i>string aarp-interface string spoke-sdp string ingress</i> |
| Tree       | <a href="#">ingress</a>   |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## filter

|            |  |
|------------|--|
| Synopsis   | Enter the <b>filter</b> context  |
| Context    | <b>configure service ies</b> <i>string aarp-interface string spoke-sdp string ingress filter</i> |
| Tree       | <a href="#">filter</a>   |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## ip reference

|            |   |
|------------|---|
| Synopsis   | IP filter name  |
| Context    | <b>configure service ies</b> <i>string aarp-interface string spoke-sdp string ingress filter ip reference</i> |
| Tree       | <a href="#">ip</a>  |
| Reference  | <b>configure filter ip-filter</b> <i>string</i>   |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## vc-label *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | VC ingress value that indicates a specific connection   |
| Context  | <b>configure service ies</b> <i>string aarp-interface string spoke-sdp string ingress vc-label number</i> |
| Tree     | <a href="#">vc-label</a>  |
| Range    | 1 to 1048575  |

|            |  |
|------------|--|
| Introduced | 21.10.R1                                     |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the service  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **customer** *reference*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Service customer ID   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <b>customer</b> <i>reference</i> |
| Tree       | <a href="#">customer</a>  |
| Reference  | <b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i>                             |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

## eth-cfm

|            |  |
|------------|--|
| Synopsis   | Enter the <b>eth-cfm</b> context                             |
| Context    | <b>configure service ies string eth-cfm</b>                  |
| Tree       | <a href="#">eth-cfm</a>                                      |
| Introduced | 19.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

## igmp-host-tracking

|            |   |
|------------|---|
| Synopsis   | Enter the <b>igmp-host-tracking</b> context             |
| Context    | <b>configure service ies string igmp-host-tracking</b>  |
| Tree       | <a href="#">igmp-host-tracking</a>                      |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of IGMP host tracking                                 |
| Context    | <b>configure service ies string igmp-host-tracking admin-state keyword</b> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                    |

## expiry-time *number*

|            |   |
|------------|---|
| Synopsis   | Time that the system continues to track inactive hosts                    |
| Context    | <b>configure service ies string igmp-host-tracking expiry-time number</b> |
| Tree       | <a href="#">expiry-time</a>   |
| Range      | 1 to 65535  |
| Units      | seconds   |
| Default    | 260   |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **interface** [*interface-name*] *string*

Synopsis Enter the **interface** list instance

Context **configure service ies string interface string**

Tree [interface](#)

Description Commands in this context create a logical IP routing interface. When created, attributes such as an IP address and SAP ID can be associated with the IP interface.

Introduced 16.0.R1

Platforms All

### **[interface-name]** *string*

Synopsis Interface name

Context **configure service ies string interface string**

Tree [interface](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the interface

Context **configure service ies string interface string admin-state keyword**

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 16.0.R1

Platforms All

### **cflowd-parameters**

Synopsis Enter the **cflowd-parameters** context

|            |  |
|------------|--|
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>cflowd-parameters</b> |
| Tree       | <b>cflowd-parameters</b>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **sampling** [**sampling-type**] *keyword*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>sampling</b> list instance   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>cflowd-parameters</b> <b>sampling</b> <i>keyword</i> |
| Tree       | <b>sampling</b>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **[sampling-type]** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Traffic sampling type   |
| Context     | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>cflowd-parameters</b> <b>sampling</b> <i>keyword</i> |
| Tree        | <b>sampling</b>   |
| Description | This command configures the type of traffic to be sampled on the associated IP interface.   |
| Options     | unicast, multicast, both  |
| Notes       | This element is part of a list key.   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **direction** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Direction of traffic for cflowd sampling  |
| Context     | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>cflowd-parameters</b> <b>sampling</b> <i>keyword</i> <b>direction</b> <i>keyword</i> |
| Tree        | <b>direction</b>  |
| Description | This command configures the direction in which sampling occurs on the associated IP interfaces.   |
| Options     | ingress-only, egress-only, both   |
| Default     | ingress-only  |
| Introduced  | 16.0.R1   |

Platforms All

### **sample-profile** (*keyword | number*)

Synopsis Sample profile ID

Context **configure** [service ies](#) *string* [interface](#) *string* [cflowd-parameters](#) [sampling](#) *keyword* [sample-profile](#) (*keyword | number*)

Tree [sample-profile](#)

Description This command defines the sampling rate profile associated with this interface.

Max. Range 0 to 4294967295

Options 1

Introduced 19.5.R1

Platforms All

### **type** *keyword*

Synopsis Type of cflowd analysis

Context **configure** [service ies](#) *string* [interface](#) *string* [cflowd-parameters](#) [sampling](#) *keyword* [type](#) *keyword*

Tree [type](#)

Description This command configures the cflowd sampling type on the associated IP interface.

Options [acl](#), [interface](#)

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

### **cpu-protection** *reference*

Synopsis CPU protection policy

Context **configure** [service ies](#) *string* [interface](#) *string* [cpu-protection](#) *reference*

Tree [cpu-protection](#)

Reference **configure** [system security](#) [cpu-protection](#) *policy* *number*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 255   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**dynamic-tunnel-redundant-nexthop** *string*

|             |   |
|-------------|---|
| Synopsis    | Redundant next-hop address for the dynamic IPsec tunnel   |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">dynamic-tunnel-redundant-nexthop</a> <i>string</i>   |
| Tree        | <a href="#">dynamic-tunnel-redundant-nexthop</a>  |
| Description | This command specifies the redundant next-hop address on a public or private IPsec interface (with public or private tunnel SAP) for a dynamic IPsec tunnel. The next-hop address is used by a standby node to shunt traffic to a master if it receives the address.<br><br>The next-hop address is resolved in the routing table of a corresponding service. |
| Notes       | The following elements are part of a choice: <b>multi-chassis-shunting-profile</b> or ( <b>dynamic-tunnel-redundant-nexthop</b> and <b>static-tunnel-redundant-nexthop</b> ).   |
| Introduced  | 19.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**hold-time**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>hold-time</b> context   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time</a> |
| Tree       | <a href="#">hold-time</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**ipv4**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ipv4</b> context   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> |
| Tree       | <a href="#">ipv4</a>  |
| Introduced | 16.0.R1   |

Platforms All

## down

Synopsis Enter the **down** context

Context **configure service ies string interface string hold-time ipv4 down**

Tree **down**

Description Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the **init-only** command.

Introduced 16.0.R1

Platforms All

## init-only *boolean*

Synopsis Apply delay only at interface configuration or reboot

Context **configure service ies string interface string hold-time ipv4 down init-only boolean**

Tree **init-only**

Description This command applies a delay only when the IP interface is first configured or after a system reboot.

Default false

Introduced 16.0.R1

Platforms All

## seconds *number*

Synopsis Down hold time for the IP interface

Context **configure service ies string interface string hold-time ipv4 down seconds number**

Tree **seconds**

Range 1 to 1200

Units seconds

Introduced 16.0.R1

Platforms All



## up

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>up</b> context   |
| Context     | <b>configure service ies string interface string hold-time ipv4 up</b>  |
| Tree        | <b>up</b>   |
| Description | Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down. |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

## seconds *number*

|            |   |
|------------|---|
| Synopsis   | Up hold time for the IP interface   |
| Context    | <b>configure service ies string interface string hold-time ipv4 up seconds number</b> |
| Tree       | <b>seconds</b>  |
| Range      | 1 to 1200   |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## ipv6

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ipv6</b> context                                       |
| Context    | <b>configure service ies string interface string hold-time ipv6</b> |
| Tree       | <b>ipv6</b>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## down

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>down</b> context   |
| Context     | <b>configure service ies string interface string hold-time ipv6 down</b>  |
| Tree        | <b>down</b>   |
| Description | Commands in this context configure the down hold timer, which specifies the delay before activation of the associated interface. The delay is invoked whenever the system |

attempts to bring the associated IP interface up, unless an operator configures the **init-only** command.

Introduced 16.0.R1  
Platforms All

### **init-only** *boolean*

Synopsis Apply delay only at interface configuration or reboot  
Context **configure** *service ies string interface string hold-time ipv6 down init-only boolean*  
Tree [init-only](#)  
Description This command applies the delay only when when the IP interface is first configured or after a system reboot.  
Default false  
Introduced 16.0.R1  
Platforms All

### **seconds** *number*

Synopsis Down hold time for the IP interface  
Context **configure** *service ies string interface string hold-time ipv6 down seconds number*  
Tree [seconds](#)  
Range 1 to 1200  
Units seconds  
Introduced 16.0.R1  
Platforms All

### **up**

Synopsis Enter the **up** context  
Context **configure** *service ies string interface string hold-time ipv6 up*  
Tree [up](#)  
Description Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.  
Introduced 16.0.R1  
Platforms All

**seconds** *number*

|            |   |
|------------|---|
| Synopsis   | Up hold time for the IP interface   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv6</a> <a href="#">up</a> <b>seconds</b> <i>number</i> |
| Tree       | <a href="#">seconds</a>   |
| Range      | 1 to 1200   |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**if-attribute**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>if-attribute</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>if-attribute</b> |
| Tree       | <a href="#">if-attribute</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**admin-group** *reference*

|                |  |
|----------------|--|
| Synopsis       | Administrative group name for the interface  |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">if-attribute</a> <a href="#">admin-group</a> <i>reference</i> |
| Tree           | <a href="#">admin-group</a>  |
| Reference      | <b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute</a> <a href="#">admin-group</a> <i>string</i>  |
| Max. Instances | 32   |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

**srlg-group** [[name](#)] *reference*

|            |   |
|------------|---|
| Synopsis   | Add a list entry for <b>srlg-group</b>  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">if-attribute</a> <a href="#">srlg-group</a> <i>reference</i> |
| Tree       | <a href="#">srlg-group</a>  |
| Introduced | 16.0.R1   |

Platforms All

### [name] *reference*

Synopsis SRLG name

Context **configure** [service ies](#) *string* [interface](#) *string* [if-attribute srlg-group](#) *reference*

Tree [srlg-group](#)

Reference **configure** [routing-options](#) [if-attribute srlg-group](#) *string*

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### ingress

Synopsis Enter the **ingress** context

Context **configure** [service ies](#) *string* [interface](#) *string* **ingress**

Tree [ingress](#)

Introduced 19.7.R1

Platforms All

### destination-class-lookup *boolean*

Synopsis Enable BGP destination class lookup

Context **configure** [service ies](#) *string* [interface](#) *string* [ingress](#) **destination-class-lookup** *boolean*

Tree [destination-class-lookup](#)

Description When configured to **true**, the router performs a destination class lookup. This command is supported on FP3-based cards and later and is used in combination with the **destination-class** match criterion for an IP filter policy to filter egress traffic based on BGP destination classes.

When configured to **false**, destination class lookup is not enabled.

Default false

Introduced 20.7.R1

Platforms All

### **policy-accounting** *reference*

|            |   |
|------------|---|
| Synopsis   | Ingress policy accounting template name   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ingress</a> <a href="#">policy-accounting</a> <i>reference</i> |
| Tree       | <a href="#">policy-accounting</a>   |
| Reference  | <b>configure</b> <a href="#">routing-options</a> <a href="#">policy-accounting</a> <a href="#">policy-acct-template</a> <i>string</i>   |
| Introduced | 19.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS  |

### **ingress-stats** *boolean*

|            |   |
|------------|---|
| Synopsis   | Collect ingress statistics  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ingress-stats</a> <i>boolean</i> |
| Tree       | <a href="#">ingress-stats</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **ip-mtu** *number*

|            |   |
|------------|---|
| Synopsis   | IP MTU applied to outgoing packets  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ip-mtu</a> <i>number</i> |
| Tree       | <a href="#">ip-mtu</a>  |
| Range      | 512 to 9786   |
| Units      | bytes   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **ipsec**

|             |  |
|-------------|--|
| Synopsis    | Enable the <b>ipsec</b> context  |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec</a> |
| Tree        | <a href="#">ipsec</a>  |
| Description | Commands in this context configure an IPsec secured interface.   |
| Introduced  | 22.7.R1  |

Platforms VSR

### **admin-state** *keyword*

Synopsis Administrative state of IPsec secured interface  
 Context **configure service ies** *string* **interface** *string* **ipsec admin-state** *keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 22.7.R1  
 Platforms VSR

### **ip-exception** *reference*

Synopsis IP exception filter  
 Context **configure service ies** *string* **interface** *string* **ipsec ip-exception** *reference*  
 Tree [ip-exception](#)  
 Description This command configures the IP exception filter for the secured interface. All ingress traffic matching the specified filter bypasses IPsec processing.  
 Reference **configure filter ip-exception** *string*  
 Introduced 22.7.R1  
 Platforms VSR

### **ipsec-tunnel** [[name](#)] *string*

Synopsis Enter the **ipsec-tunnel** list instance  
 Context **configure service ies** *string* **interface** *string* **ipsec ipsec-tunnel** *string*  
 Tree [ipsec-tunnel](#)  
 Description Commands in this context configure IPsec tunnels used to secure traffic forwarded over the interface.  
 Introduced 22.7.R1  
 Platforms VSR

### **[name]** *string*

Synopsis IPsec tunnel name

|               |   |
|---------------|---|
| Context       | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> |
| Tree          | <b>ipsec-tunnel</b>   |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 22.7.R1   |
| Platforms     | VSR   |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the IPsec tunnel  |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 22.7.R1   |
| Platforms  | VSR   |

### **bfd**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enter the <b>bfd</b> context   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>bfd</b> |
| Tree       | <b>bfd</b>   |
| Introduced | 22.7.R1  |
| Platforms  | VSR  |

### **bfd-designate** *boolean*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Designate IPsec tunnel to carry BFD traffic |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>bfd bfd-designate</b> <i>boolean</i> |
| Tree       | <a href="#">bfd-designate</a>   |
| Default    | false   |
| Introduced | 22.7.R1   |
| Platforms  | VSR   |

## bfd-liveness



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Enable the <b>bfd-liveness</b> context  |
| Context     | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>bfd bfd-liveness</b>   |
| Tree        | <a href="#">bfd-liveness</a>  |
| Description | <p>Commands in this context configure a BFD session to provide a heart-beat mechanism for a specified IPsec tunnel. There can be only one BFD session assigned to any given IPsec tunnel, but there can be multiple IPsec tunnels using the same BFD session.</p> <p>BFD controls the state of the association tunnel. If the BFD session goes down, the system brings down the associated non-designated IPsec tunnel.</p> |
| Introduced  | 22.7.R1   |
| Platforms   | VSR   |

## dest-ip *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Destination address used for the BFD session   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>bfd bfd-liveness</b> <b>dest-ip</b> <i>string</i> |
| Tree       | <a href="#">dest-ip</a>  |
| Notes      | This element is mandatory.   |
| Introduced | 22.7.R1  |
| Platforms  | VSR  |



## interface *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Name of the interface used by the BFD session  |
| Context       | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">ipsec ipsec-tunnel string</a> <a href="#">bfd bfd-liveness interface string</a> |
| Tree          | <a href="#">interface</a>  |
| String Length | 1 to 32  |
| Notes         | This element is mandatory.   |
| Introduced    | 22.7.R1  |
| Platforms     | VSR  |

## service-name *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Administrative service name   |
| Context       | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">ipsec ipsec-tunnel string</a> <a href="#">bfd bfd-liveness service-name string</a> |
| Tree          | <a href="#">service-name</a>  |
| Description   | This command configures the name of the service where BFD traffic is forwarded to.  |
| String Length | 1 to 64   |
| Notes         | This element is mandatory.  |
| Introduced    | 22.7.R1   |
| Platforms     | VSR   |

## clear-df-bit *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Reset the DF bit to 0 in all payload IP packets |
|----------|---|

|             |  |
|-------------|--|
| Context     | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>clear-df-bit</b> <i>boolean</i>           |
| Tree        | <b>clear-df-bit</b>  |
| Description | When configured to <b>true</b> , the DF bit is set to 0 in all payload IP packets associated with the IPsec tunnel, before any potential fragmentation occurs. |
| Default     | false  |
| Introduced  | 22.7.R1  |
| Platforms   | VSR  |

### **copy-traffic-class-upon-decapsulation** *boolean*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Enable traffic class copy upon decapsulation  |
| Context     | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>copy-traffic-class-upon-decapsulation</b> <i>boolean</i>                   |
| Tree        | <b>copy-traffic-class-upon-decapsulation</b>  |
| Description | When configured to <b>true</b> , the system copies the traffic class from the outer tunnel IP packet header to the payload IP packet header in the decapsulating direction (public to private). |
| Default     | false   |
| Introduced  | 22.7.R1   |
| Platforms   | VSR   |

### **description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <b>description</b>   |
| String Length | 1 to 80  |
| Introduced    | 22.7.R1  |
| Platforms     | VSR  |

**encapsulated-ip-mtu** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Maximum size of the encapsulated tunnel packet  |
| Context     | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">ipsec ipsec-tunnel string</a> <a href="#">encapsulated-ip-mtu number</a>   |
| Tree        | <a href="#">encapsulated-ip-mtu</a>   |
| Description | This command specifies the maximum size of the encapsulated tunnel packet to the IPsec tunnel, the IP tunnel, or the dynamic tunnels terminated on the IPsec Gateway. If the encapsulated IPv4 or IPv6 tunnel packet exceeds this value, the system fragments the packet. |
| Range       | 512 to 9000   |
| Units       | bytes   |
| Introduced  | 22.7.R1   |
| Platforms   | VSR   |

**icmp-generation****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>icmp-generation</b> context   |
| Context     | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">ipsec ipsec-tunnel string</a> <a href="#">icmp-generation</a> |
| Tree        | <a href="#">icmp-generation</a>  |
| Description | Commands in this context configure settings for ICMPv4 message generation.   |
| Introduced  | 22.7.R1  |
| Platforms   | VSR  |

**frag-required****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | Enter the <b>frag-required</b> context |
|----------|--|

|             |  |
|-------------|--|
| Context     | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>icmp-generation frag-required</b>   |
| Tree        | <b>frag-required</b>   |
| Description | Commands in this context configure the attributes for sending generated ICMP Destination Unreachable "fragmentation needed and DF set" messages (type 3, code 4) back to the source, if the received size of the IPv4 packet on the private side exceeds the private MTU size. |
| Introduced  | 22.7.R1  |
| Platforms   | VSR  |

### **admin-state** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Administrative state of sending ICMP messages  |
| Context     | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>icmp-generation frag-required admin-state</b> <i>keyword</i>  |
| Tree        | <b>admin-state</b>   |
| Description | This command configures the administrative state of sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) messages to the source if the received size of the IPv4 packet on the private side exceeds the private MTU size. |
| Options     | enable, disable  |
| Default     | enable   |
| Introduced  | 22.7.R1  |
| Platforms   | VSR  |

### **interval** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Interval for sending ICMP messages  |
| Context  | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>icmp-generation frag-required interval</b> <i>number</i> |
| Tree     | <b>interval</b>   |

|             |   |
|-------------|---|
| Description | This command configures the interval for sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4). |
| Range       | 1 to 60   |
| Units       | seconds   |
| Default     | 10  |
| Introduced  | 22.7.R1   |
| Platforms   | VSR   |

### message-count *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Maximum number of ICMP messages that can be sent  |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">icmp-generation frag-required</a> <a href="#">message-count</a> <i>number</i> |
| Tree        | <a href="#">message-count</a>   |
| Description | This command configures the maximum number of ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) that can be sent during the configured interval.  |
| Range       | 10 to 1000  |
| Default     | 100   |
| Introduced  | 22.7.R1   |
| Platforms   | VSR   |

### icmp6-generation



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>icmp6-generation</b> context  |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">icmp6-generation</a> |
| Tree        | <a href="#">icmp6-generation</a>   |
| Description | Commands in this context configure settings for ICMPv6 message generation.   |
| Introduced  | 22.7.R1  |

Platforms VSR

## packet-too-big



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>packet-too-big</b> context   |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">icmp6-generation</a> <a href="#">packet-too-big</a>   |
| Tree        | <a href="#">packet-too-big</a>  |
| Description | <p>Commands in this context configure the parameters to send ICMPv6 PTB (Packet Too Big) messages on the private side.</p> <p>The system sends PTB messages if a received IPv6 packet on the private side is greater than 1280 bytes and it exceeds the private MTU of the tunnel.</p> <p>The private MTU for the tunnel is configured via the <b>configure router interface ipsec ipsec-tunnel ip-mtu</b> command for the interface.</p> |
| Introduced  | 22.7.R1   |
| Platforms   | VSR   |

## admin-state *keyword*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Administrative state of Packet Too Big message sends   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">icmp6-generation</a> <a href="#">packet-too-big</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 22.7.R1  |
| Platforms  | VSR  |

## interval *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Interval for sending Packet Too Big messages   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>icmp6-generation</b> <b>packet-too-big</b> <b>interval</b> <i>number</i> |
| Tree       | <b>interval</b>  |
| Range      | 1 to 60  |
| Units      | seconds  |
| Default    | 10   |
| Introduced | 22.7.R1  |
| Platforms  | VSR  |

## message-count *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Maximum number of ICMPv6 PTB messages that can be sent  |
| Context     | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>icmp6-generation</b> <b>packet-too-big</b> <b>message-count</b> <i>number</i> |
| Tree        | <b>message-count</b>  |
| Description | This command configures the maximum number of PTB messages that can be sent during the configured interval.   |
| Range       | 10 to 1000  |
| Default     | 100   |
| Introduced  | 22.7.R1   |
| Platforms   | VSR   |

## ip-mtu *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Private MTU of the IPsec tunnel   |
| Context     | <b>configure</b> <i>service ies string interface string ipsec ipsec-tunnel string ip-mtu number</i>   |
| Tree        | <i>ip-mtu</i>   |
| Description | This command specifies the private MTU of the IPsec tunnel. The private MTU is used to determine the need for fragmentation before encapsulation of the payload packet. |
| Range       | 512 to 9000   |
| Units       | bytes   |
| Introduced  | 22.7.R1   |
| Platforms   | VSR   |

## key-exchange



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enter the <b>key-exchange</b> context  |
| Context    | <b>configure</b> <i>service ies string interface string ipsec ipsec-tunnel string key-exchange</i> |
| Tree       | <i>key-exchange</i>  |
| Introduced | 22.7.R1  |
| Platforms  | VSR  |

## dynamic



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enable the <b>dynamic</b> context  |
| Context    | <b>configure</b> <i>service ies string interface string ipsec ipsec-tunnel string key-exchange dynamic</i> |
| Tree       | <i>dynamic</i>   |
| Notes      | The following elements are part of a choice: <b>dynamic</b> or <b>manual</b> .                             |
| Introduced | 22.7.R1  |
| Platforms  | VSR  |



**auto-establish** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Attempt to establish a phase 1 exchange automatically  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange dynamic auto-establish</a> <i>boolean</i> |
| Tree       | <a href="#">auto-establish</a>   |
| Default    | false  |
| Introduced | 22.7.R1  |
| Platforms  | VSR  |

**cert****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>cert</b> context   |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange dynamic cert</a> |
| Tree        | <a href="#">cert</a>  |
| Description | Commands in this context configure the attributes of the dynamic keying certificate.  |
| Introduced  | 22.7.R1   |
| Platforms   | VSR   |

**cert-profile** *reference*

|            |   |
|------------|---|
| Synopsis   | Certificate profile name  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange dynamic cert cert-profile</a> <i>reference</i> |
| Tree       | <a href="#">cert-profile</a>  |
| Reference  | <b>configure</b> <a href="#">ipsec cert-profile</a> <i>string</i>   |
| Introduced | 22.7.R1   |
| Platforms  | VSR   |

## status-verify

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>status-verify</b> context   |
| Context     | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>key-exchange dynamic cert status-verify</b> |
| Tree        | <b>status-verify</b>   |
| Description | Commands in this context configure attributes of Certificate Status Verification (CSV).  |
| Introduced  | 22.7.R1  |
| Platforms   | VSR  |

## default-result *keyword*

|             |  |
|-------------|--|
| Synopsis    | Default result for Certificate Status Verification   |
| Context     | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>key-exchange dynamic cert status-verify default-result</b> <i>keyword</i> |
| Tree        | <b>default-result</b>  |
| Description | This command specifies the default certificate revocation status result to use when all configured CSV methods fail to return a result.  |
| Options     | revoked, good  |
| Default     | revoked  |
| Introduced  | 22.7.R1  |
| Platforms   | VSR  |

## primary *keyword*

|             |   |
|-------------|---|
| Synopsis    | Primary method of CSV to verify the revocation status   |
| Context     | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>key-exchange dynamic cert status-verify primary</b> <i>keyword</i> |
| Tree        | <b>primary</b>  |
| Description | This command configures the primary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the certificate of the peer.                        |
| Options     | crl, ocsp   |
| Default     | crl   |

Introduced 22.7.R1  
 Platforms VSR

### **secondary** *keyword*

Synopsis Secondary method used to verify certificate revocation  
 Context **configure** [service ies string](#) [interface string ipsec ipsec-tunnel string](#) [key-exchange dynamic cert status-verify secondary keyword](#)  
 Tree [secondary](#)  
 Description This command specifies the secondary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the peer certificate.  
 Options none, crl, ocsp  
 Default none  
 Introduced 22.7.R1  
 Platforms VSR

### **trust-anchor-profile** *reference*

Synopsis Trust anchor profile name  
 Context **configure** [service ies string](#) [interface string ipsec ipsec-tunnel string](#) [key-exchange dynamic cert trust-anchor-profile reference](#)  
 Tree [trust-anchor-profile](#)  
 Reference **configure** [ipsec trust-anchor-profile string](#)  
 Introduced 22.7.R1  
 Platforms VSR

### **id**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **id** context  
 Context **configure** [service ies string](#) [interface string ipsec ipsec-tunnel string](#) [key-exchange dynamic id](#)  
 Tree [id](#)  
 Description Commands in this context specify the local ID used for IDi or IDr for IKEv2 negotiation.

The default behavior depends on the local authentication method as follows:

- Psk: local tunnel IP address
- Cert-auth: subject of the local certificate

Introduced 22.7.R1

Platforms VSR

### **fqdn string**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis FQDN used as the local ID IKE type

Context **configure service ies string interface string ipsec ipsec-tunnel string key-exchange dynamic id fqdn string**

Tree **fqdn**

String Length 1 to 255

Notes The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.

Introduced 22.7.R1

Platforms VSR

### **ipv4 string**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis IPv4 as the local ID type

Context **configure service ies string interface string ipsec ipsec-tunnel string key-exchange dynamic id ipv4 string**

Tree **ipv4**

Notes The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.

Introduced 22.7.R1

Platforms VSR

**ipv6** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | IPv6 used as the local IKE ID type   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange dynamic id ipv6</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <a href="#">ipv6</a>   |
| Notes      | The following elements are part of a choice: <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .  |
| Introduced | 22.7.R1  |
| Platforms  | VSR  |

**ike-policy** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | IKE policy ID  |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange dynamic ike-policy</a> <i>reference</i> |
| Tree        | <a href="#">ike-policy</a>   |
| Description | This command specifies the ID of the IKE policy used for IKE negotiation.<br>The <b>ipsec-transport-mode-profile</b> configuration only supports IKEv2.  |
| Reference   | <b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i>  |
| Introduced  | 22.7.R1  |
| Platforms   | VSR  |

**ipsec-transform** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | IPsec transform IDs used by the dynamic key   |
| Context  | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange dynamic ipsec-transform</a> <i>reference</i> |

|                |   |
|----------------|---|
| Tree           | <a href="#">ipsec-transform</a>   |
| Description    | This command specifies IPsec transform IDs used for CHILD_SA negotiation. |
| Reference      | <b>configure</b> <a href="#">ipsec ipsec-transform</a> <i>number</i>      |
| Max. Instances | 4   |
| Introduced     | 22.7.R1   |
| Platforms      | VSR   |

### pre-shared-key *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Pre-shared key for authentication   |
| Context       | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange dynamic pre-shared-key</a> <i>string</i> |
| Tree          | <a href="#">pre-shared-key</a>  |
| String Length | 1 to 115  |
| Introduced    | 22.7.R1   |
| Platforms     | VSR   |

### manual



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Enable the <b>manual</b> context  |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange manual</a> |
| Tree        | <a href="#">manual</a>  |
| Description | Commands in this context configure settings for manually configured security associations for the IPsec tunnel.   |
| Notes       | The following elements are part of a choice: <b>dynamic</b> or <b>manual</b> .  |
| Introduced  | 22.7.R1   |
| Platforms   | VSR   |

**keys** [[security-association](#)] *number* [direction](#) *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>keys</b> list instance   |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange manual keys</a> <i>number</i> <a href="#">direction</a> <i>keyword</i> |
| Tree        | <a href="#">keys</a>  |
| Description | Commands in this context configure the security association list for the tunnel.  |
| Introduced  | 22.7.R1   |
| Platforms   | VSR   |

**[security-association]** *number*

|            |   |
|------------|---|
| Synopsis   | SA entry ID   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange manual keys</a> <i>number</i> <a href="#">direction</a> <i>keyword</i> |
| Tree       | <a href="#">keys</a>  |
| Range      | 1 to 16   |
| Notes      | This element is part of a list key.   |
| Introduced | 22.7.R1   |
| Platforms  | VSR   |

**direction** *keyword*

|            |   |
|------------|---|
| Synopsis   | Direction of the IPsec tunnel   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange manual keys</a> <i>number</i> <a href="#">direction</a> <i>keyword</i> |
| Tree       | <a href="#">keys</a>  |
| Options    | inbound, outbound   |
| Notes      | This element is part of a list key.   |
| Introduced | 22.7.R1   |
| Platforms  | VSR   |

**authentication-key *string*****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Key used for the authentication algorithm  |
| Context       | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string ipsec ipsec-tunnel string</a> <a href="#">key-exchange manual keys number direction keyword authentication-key string</a> |
| Tree          | <a href="#">authentication-key</a>   |
| String Length | 1 to 130   |
| Introduced    | 22.7.R1  |
| Platforms     | VSR  |

**encryption-key *string*****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Key used for the encryption algorithm  |
| Context       | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string ipsec ipsec-tunnel string</a> <a href="#">key-exchange manual keys number direction keyword encryption-key string</a> |
| Tree          | <a href="#">encryption-key</a>   |
| String Length | 1 to 66  |
| Introduced    | 22.7.R1  |
| Platforms     | VSR  |



**ipsec-transform** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Transform entry used by manual SAs   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">manual keys</a> <i>number</i> <a href="#">direction</a> <i>keyword</i> <a href="#">ipsec-transform</a> <i>reference</i> |
| Tree       | <a href="#">ipsec-transform</a>  |
| Reference  | <b>configure</b> <a href="#">ipsec ipsec-transform</a> <i>number</i>   |
| Notes      | This element is mandatory.   |
| Introduced | 22.7.R1  |
| Platforms  | VSR  |

**spi** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | SPI of inbound and outbound packets  |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">manual keys</a> <i>number</i> <a href="#">direction</a> <i>keyword</i> <a href="#">spi</a> <i>number</i>  |
| Tree        | <a href="#">spi</a>  |
| Description | This command specifies the Security Parameter Index (SPI) used to look up the instruction to verify and decrypt the incoming IPsec packets when the direction is inbound. When the direction is outbound, the SPI is used in the encoding of the outgoing packets.<br><br>The remote node can use the SPI to look up the instruction to verify and decrypt the packet. |
| Range       | 256 to 16383   |

|            |                            |
|------------|----------------------------|
| Notes      | This element is mandatory. |
| Introduced | 22.7.R1                    |
| Platforms  | VSR                        |

### local-gateway-address-override (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Local IPsec tunnel endpoint address  |
| Context     | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>local-gateway-address-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree        | <a href="#">local-gateway-address-override</a>   |
| Description | This command configures the local IPsec tunnel endpoint address. This overrides the default endpoint address, which is the interface address.  |
| Introduced  | 22.7.R1  |
| Platforms   | VSR  |

### max-history-key-records



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>max-history-key-records</b> context  |
| Context     | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>max-history-key-records</b> |
| Tree        | <a href="#">max-history-key-records</a>   |
| Description | Commands in this context configure the settings for recording historical IPsec keys.  |
| Introduced  | 22.7.R1   |
| Platforms   | VSR   |

## esp number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Maximum number of recent records  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">max-history-key-records</a> <a href="#">esp</a> <i>number</i> |
| Tree       | <a href="#">esp</a>   |
| Range      | 1 to 48   |
| Introduced | 22.7.R1   |
| Platforms  | VSR   |

## ike number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Maximum number of historical IKE key records  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">max-history-key-records</a> <a href="#">ike</a> <i>number</i> |
| Tree       | <a href="#">ike</a>   |
| Range      | 1 to 3  |
| Introduced | 22.7.R1   |
| Platforms  | VSR   |

## pmtu-discovery-aging number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | Aging out time of the learned path MTU   |
| Context  | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">pmtu-discovery-aging</a> <i>number</i> |
| Tree     | <a href="#">pmtu-discovery-aging</a>   |

|             |  |
|-------------|--|
| Description | This command configures the temporary public and private MTU expiration time. The temporary MTU is used for MTU propagation. |
| Range       | 900 to 3600  |
| Units       | seconds  |
| Default     | 900  |
| Introduced  | 22.7.R1  |
| Platforms   | VSR  |

### **private-sap** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Private SAP ID   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <b>private-sap</b> <i>number</i> |
| Tree       | <a href="#">private-sap</a>  |
| Range      | 0 to 4094  |
| Notes      | This element is mandatory.   |
| Introduced | 22.7.R1  |
| Platforms  | VSR  |

### **private-service** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | Private service name   |
| Context  | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <b>private-service</b> <i>string</i> |

|               |   |
|---------------|---|
| Tree          | <a href="#">private-service</a>   |
| Description   | This command configures the private service name.<br>If unconfigured, the private service is the service where the secured interface resides. |
| String Length | 1 to 64   |
| Introduced    | 22.7.R1   |
| Platforms     | VSR   |

### **private-tcp-mss-adjust** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | TCP maximum segment size (MSS) adjustment  |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">private-tcp-mss-adjust</a> <i>number</i>       |
| Tree        | <a href="#">private-tcp-mss-adjust</a>   |
| Description | This command specifies the TCP MSS to adjust for the tunnel on the private side.<br>When configured, the system may use the value to update the MSS option in the received TCP SYN packet on the private side. |
| Range       | 512 to 9000  |
| Units       | bytes  |
| Introduced  | 22.7.R1  |
| Platforms   | VSR  |

### **propagate-pmtu-v4** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Enable propagation of the path MTU to IPv4 hosts   |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">propagate-pmtu-v4</a> <i>boolean</i> |
| Tree        | <a href="#">propagate-pmtu-v4</a>  |
| Description | When configured to <b>true</b> , the system propagates the path MTU learned from the public side to the private side (IPv4 hosts).   |
| Default     | true   |

Introduced 22.7.R1  
 Platforms VSR

### **propagate-pmtu-v6** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable propagation of the path MTU to IPv6 hosts

Context **configure** [service ies](#) *string* [interface](#) *string* [ipsec ipsec-tunnel](#) *string* **propagate-pmtu-v6** *boolean*

Tree [propagate-pmtu-v6](#)

Description When configured to **true**, the system propagates the path MTU learned from the public side to the private side (IPv6 hosts).

Default true

Introduced 22.7.R1

Platforms VSR

### **public-tcp-mss-adjust** (*number | keyword*)



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis TCP maximum segment size (MSS) on the public network

Context **configure** [service ies](#) *string* [interface](#) *string* [ipsec ipsec-tunnel](#) *string* **public-tcp-mss-adjust** (*number | keyword*)

Tree [public-tcp-mss-adjust](#)

Description This command configures the MSS for the TCP traffic in an IPsec tunnel that is sent from the public network to the private network. The system may use this value to adjust or insert the MSS option in the TCP SYN packet.

Range 512 to 9000

Units bytes

Options auto

Introduced 22.7.R1

Platforms VSR

**remote-gateway-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Remote IPsec tunnel endpoint address   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">remote-gateway-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <a href="#">remote-gateway-address</a>   |
| Introduced | 22.7.R1  |
| Platforms  | VSR  |

**replay-window number****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Anti-replay window size  |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">replay-window number</a> |
| Tree        | <a href="#">replay-window</a>  |
| Description | This command specifies the size of an IPsec anti-replay window. If unconfigured, IPsec anti-replay is disabled.  |
| Range       | 32   64   128   256   512  |
| Units       | packets  |
| Introduced  | 22.7.R1  |
| Platforms   | VSR  |

**security-policy****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Enter the <b>security-policy</b> context  |
| Context  | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">security-policy</a> |

|             |  |
|-------------|--|
| Tree        | <a href="#">security-policy</a>  |
| Description | Commands in this context specify a security policy used by the tunnel. |
| Introduced  | 22.7.R1  |
| Platforms   | VSR  |

### **id number**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Security policy ID for use by the tunnel  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">security-policy id number</a> |
| Tree       | <a href="#">id</a>  |
| Max. Range | 0 to 4294967295   |
| Introduced | 22.7.R1   |
| Platforms  | VSR   |

### **strict-match boolean**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Enable strict match of the security policy entry  |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">security-policy strict-match boolean</a>  |
| Tree        | <a href="#">strict-match</a>  |
| Description | <p>When configured to <b>true</b>, this command enables strict match of the security policy entry.</p> <p>When a CREATE_CHILD exchange request is received for a static IPsec tunnel, and this request is not a rekey request, ISA matches the received TSi and TSr with the configured security policy. This can be a match only when a received TS (in TSi or TSr) address range matches exactly with the subnet in a security policy entry.</p> <p>If there is no match, the setup fails, and TS_UNACCEPTABLE is sent.</p> <p>If there is a match, but there is an existing CHILD_SA for the matched security policy, the setup fails, and NO_PROPOSAL_CHOSEN is sent.</p> <p>If there is a match, and there is not a CHILD_SA for the matched entry, the subnet is sent in the matched security policy entry as TSi and TSr, and the CHILD_SA is created.</p> |



|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 22.7.R1 |
| Platforms  | VSR     |

### **ipv6-exception** *reference*

|             |   |
|-------------|---|
| Synopsis    | IPv6 filter exception used to bypass encryption   |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec</a> <a href="#">ipv6-exception</a> <i>reference</i>  |
| Tree        | <a href="#">ipv6-exception</a>  |
| Description | This command specifies the IPv6 filter exception for an IPsec-secured IPv6 interface. When an IPv6 filter exception is added, clear text packets that match the exception criteria in the IPv6 filter exception can ingress the interface, even when IPsec is enabled on the interface. |
| Reference   | <b>configure</b> <a href="#">filter</a> <a href="#">ipv6-exception</a> <i>string</i>  |
| Introduced  | 22.7.R1   |
| Platforms   | VSR   |

### **public-sap** *number*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Public SAP ID   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec</a> <a href="#">public-sap</a> <i>number</i> |
| Tree       | <a href="#">public-sap</a>  |
| Range      | 0 to 4094   |
| Notes      | This element is mandatory.  |
| Introduced | 22.7.R1   |
| Platforms  | VSR   |

### **tunnel-group** *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Tunnel group ID  |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec tunnel-group</b> <i>reference</i> |
| Tree       | <b>tunnel-group</b>  |
| Reference  | <b>configure isa tunnel-group</b> <i>number</i>  |
| Notes      | This element is mandatory.   |
| Introduced | 22.7.R1  |
| Platforms  | VSR  |

## ipv4

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ipv4</b> context   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> |
| Tree       | <b>ipv4</b>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## addresses

|            |   |
|------------|---|
| Synopsis   | Enter the <b>addresses</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 addresses</b> |
| Tree       | <b>addresses</b>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## address [ipv4-address] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>address</b> list instance   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 addresses</b> <b>address</b> <i>string</i> |
| Tree       | <b>address</b>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## [ipv4-address] *string*

|          |                                |
|----------|--------------------------------|
| Synopsis | IPv4 address for the interface |
|----------|--------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 addresses address</b> <i>string</i> |
| Tree       | <a href="#">address</a>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **prefix-length** *number*

|            |  |
|------------|--|
| Synopsis   | IPv4 address prefix length   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 addresses address</b> <i>string</i> <b>prefix-length</b> <i>number</i> |
| Tree       | <a href="#">prefix-length</a>  |
| Range      | 0 to 32  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **allow-directed-broadcasts** *boolean*

|            |  |
|------------|--|
| Synopsis   | Forward directed broadcasts  |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 allow-directed-broadcasts</b> <i>boolean</i> |
| Tree       | <a href="#">allow-directed-broadcasts</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **bfd**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>bfd</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 bfd</b> |
| Tree       | <a href="#">bfd</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of BFD sessions   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 bfd admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>   |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**echo-receive** *number*

|            |  |
|------------|--|
| Synopsis   | Minimum echo interval over this interface  |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 bfd echo-receive</b> <i>number</i> |
| Tree       | <b>echo-receive</b>  |
| Range      | 100 to 100000  |
| Units      | milliseconds   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**multiplier** *number*

|             |   |
|-------------|---|
| Synopsis    | Number of consecutive BFD messages missed from the peer   |
| Context     | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 bfd multiplier</b> <i>number</i>  |
| Tree        | <b>multiplier</b>   |
| Description | This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments. |
| Range       | 1 to 20   |
| Default     | 3   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**receive** *number*

|          |  |
|----------|--|
| Synopsis | BFD receive interval over this interface |
|----------|--|

|             |  |
|-------------|--|
| Context     | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 bfd receive</b> <i>number</i>  |
| Tree        | <b>receive</b>   |
| Description | This command specifies the receive interval for the BFD session.<br>On the 7750 SR, this command can only be configured to a value less than 100 when the <b>type</b> command is configured to <b>cpm-np</b> . |
| Range       | 10 to 100000   |
| Units       | milliseconds   |
| Default     | 100  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **transmit-interval** *number*

|             |   |
|-------------|---|
| Synopsis    | BFD transmit interval over this interface   |
| Context     | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 bfd transmit-interval</b> <i>number</i>   |
| Tree        | <b>transmit-interval</b>  |
| Description | This command configures the transmit intervals.<br>On the 7750 SR, this command can only be configured to a value less than 100 when the <b>type</b> command is configured to <b>cpm-np</b> . |
| Range       | 10 to 100000  |
| Units       | milliseconds  |
| Default     | 100   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **type** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Local termination point for the BFD session   |
| Context     | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 bfd type</b> <i>keyword</i>   |
| Tree        | <b>type</b>   |
| Description | This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity.<br>The options to specify where the BFD session runs are: <ul style="list-style-type: none"> <li>• <b>auto</b> (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the <b>cpm-np</b>.</li> </ul> |

- **cpm-np** – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems.
- **fp** – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.

|            |  |
|------------|--|
| Options    | cpm-np, auto, fp   |
| Default    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

## dhcp

|            |  |
|------------|--|
| Synopsis   | Enter the <b>dhcp</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> |
| Tree       | <a href="#">dhcp</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## admin-state *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of DHCP  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## description *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**gi-address** *string*

|             |   |
|-------------|---|
| Synopsis    | GI address for the DHCP relay   |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">gi-address</a> <i>string</i>   |
| Tree        | <a href="#">gi-address</a>  |
| Description | <p>This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay.</p> <p>By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.</p> |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**lease-populate**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>lease-populate</b> context   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">lease-populate</a> |
| Tree       | <a href="#">lease-populate</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**max-leases** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of DHCPv4 leases allowed  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">lease-populate</a> <a href="#">max-leases</a> <i>number</i> |
| Tree       | <a href="#">max-leases</a>   |
| Range      | 0 to 511999  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**option-82**

|          |  |
|----------|--|
| Synopsis | Enter the <b>option-82</b> context   |
| Context  | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">option-82</a> |

|             |   |
|-------------|---|
| Tree        | <a href="#">option-82</a>   |
| Description | Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet. |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **action** *keyword*

|            |  |
|------------|--|
| Synopsis   | Action to take with received DHCP Option 82  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">action</a> <i>keyword</i> |
| Tree       | <a href="#">action</a>   |
| Options    | replace, drop, keep  |
| Default    | keep   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **circuit-id**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>circuit-id</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">circuit-id</a> |
| Tree       | <a href="#">circuit-id</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **ascii-tuple**

|            |   |
|------------|---|
| Synopsis   | Use the ASCII-encoded tuple for the circuit ID  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">circuit-id</a> <a href="#">ascii-tuple</a> |
| Tree       | <a href="#">ascii-tuple</a>   |
| Notes      | The following elements are part of a choice: <b>ascii-tuple</b> , <b>ifindex</b> , <b>none</b> , <b>sap-id</b> , or <b>vlan-ascii-tuple</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | All   |



## ifindex

|            |   |
|------------|---|
| Synopsis   | Use the interface index for the circuit ID  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">circuit-id</a> <a href="#">ifindex</a> |
| Tree       | <a href="#">ifindex</a>   |
| Notes      | The following elements are part of a choice: <b>ascii-tuple</b> , <b>ifindex</b> , <b>none</b> , <b>sap-id</b> , or <b>vlan-ascii-tuple</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## none

|            |  |
|------------|--|
| Synopsis   | Do not include the circuit ID  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">circuit-id</a> <a href="#">none</a> |
| Tree       | <a href="#">none</a>   |
| Notes      | The following elements are part of a choice: <b>ascii-tuple</b> , <b>ifindex</b> , <b>none</b> , <b>sap-id</b> , or <b>vlan-ascii-tuple</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## sap-id

|            |  |
|------------|--|
| Synopsis   | Use the SAP ID   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">circuit-id</a> <a href="#">sap-id</a> |
| Tree       | <a href="#">sap-id</a>   |
| Notes      | The following elements are part of a choice: <b>ascii-tuple</b> , <b>ifindex</b> , <b>none</b> , <b>sap-id</b> , or <b>vlan-ascii-tuple</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## vlan-ascii-tuple

|          |  |
|----------|--|
| Synopsis | Include the VLAN ID and dot1p bits in the ASCII tuple  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">circuit-id</a> <a href="#">vlan-ascii-tuple</a> |
| Tree     | <a href="#">vlan-ascii-tuple</a>   |

|             |   |
|-------------|---|
| Description | When configured, the router includes the VLAN ID and dot1p bits with the ASCII-tuple information. This only occurs on dot1q and QinQ-encapsulated ports. When the Option 82 bits are stripped, dot1p bits are copied to the Ethernet header of the outgoing packet.<br>When unconfigured, the router leaves the circuit ID sub-option of the DHCP packet empty. |
| Notes       | The following elements are part of a choice: <b>ascii-tuple</b> , <b>ifindex</b> , <b>none</b> , <b>sap-id</b> , or <b>vlan-ascii-tuple</b> .   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### remote-id

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>remote-id</b> context   |
| Context     | <b>configure service ies string interface string ipv4 dhcp option-82 remote-id</b>   |
| Tree        | <a href="#">remote-id</a>  |
| Description | Commands in this context configure the remote IP sub-option of the DHCP packet with the identity of the remote host end (typically the DHCP client). |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### ascii-string *string*

|               |  |
|---------------|--|
| Synopsis      | User-defined ASCII string for the remote ID  |
| Context       | <b>configure service ies string interface string ipv4 dhcp option-82 remote-id ascii-string string</b> |
| Tree          | <a href="#">ascii-string</a>   |
| String Length | 1 to 32  |
| Notes         | The following elements are part of a choice: <b>ascii-string</b> , <b>mac</b> , or <b>none</b> .       |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

### mac

|          |  |
|----------|--|
| Synopsis | Use the MAC address for the remote ID  |
| Context  | <b>configure service ies string interface string ipv4 dhcp option-82 remote-id mac</b> |
| Tree     | <a href="#">mac</a>  |

|            |  |
|------------|--|
| Notes      | The following elements are part of a choice: <b>ascii-string</b> , <b>mac</b> , or <b>none</b> . |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**none**

|            |  |
|------------|--|
| Synopsis   | Do not include the remote ID   |
| Context    | <b>configure service ies string interface string ipv4 dhcp option-82 remote-id none</b>          |
| Tree       | <a href="#">none</a>   |
| Notes      | The following elements are part of a choice: <b>ascii-string</b> , <b>mac</b> , or <b>none</b> . |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**vendor-specific-option**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>vendor-specific-option</b> context   |
| Context     | <b>configure service ies string interface string ipv4 dhcp option-82 vendor-specific-option</b> |
| Tree        | <a href="#">vendor-specific-option</a>  |
| Description | Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**client-mac-address *boolean***

|            |   |
|------------|---|
| Synopsis   | Send the MAC address in the VSO   |
| Context    | <b>configure service ies string interface string ipv4 dhcp option-82 vendor-specific-option client-mac-address <i>boolean</i></b> |
| Tree       | <a href="#">client-mac-address</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**pool-name *boolean***

|          |                               |
|----------|-------------------------------|
| Synopsis | Send the pool name in the VSO |
|----------|-------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 dhcp option-82 vendor-specific-option</b> <b>pool-name</b> <i>boolean</i> |
| Tree       | <b>pool-name</b>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**sap-id** *boolean*

|            |  |
|------------|--|
| Synopsis   | Send SAP ID in the sub-option of the DHCP relay packet   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 dhcp option-82 vendor-specific-option</b> <b>sap-id</b> <i>boolean</i> |
| Tree       | <b>sap-id</b>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**service-id** *boolean*

|            |  |
|------------|--|
| Synopsis   | Send the service ID in the Vendor Specific Option  |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 dhcp option-82 vendor-specific-option</b> <b>service-id</b> <i>boolean</i> |
| Tree       | <b>service-id</b>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**string** *string*

|               |   |
|---------------|---|
| Synopsis      | User-defined ASCII string for the VSO   |
| Context       | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 dhcp option-82 vendor-specific-option</b> <b>string</b> <i>string</i> |
| Tree          | <b>string</b>   |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**system-id** *boolean*

|            |  |
|------------|--|
| Synopsis   | Send the system ID in the VSO  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82 vendor-specific-option</a> <a href="#">system-id</a> <i>boolean</i> |
| Tree       | <a href="#">system-id</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**proxy-server**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>proxy-server</b> context   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp proxy-server</a> |
| Tree       | <a href="#">proxy-server</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the DHCP proxy server  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp proxy-server</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**emulated-server** *string*

|          |   |
|----------|---|
| Synopsis | IP address used as the DHCP server address for the SAP  |
| Context  | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp proxy-server</a> <a href="#">emulated-server</a> <i>string</i> |
| Tree     | <a href="#">emulated-server</a>   |

|             |  |
|-------------|--|
| Description | This command configures the IP address which will be used as the DHCP server address in the context of the SAP. Typically, the configured address should be in the context of the subnet represented by the service. |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### lease-time

|            |  |
|------------|--|
| Synopsis   | Enter the <b>lease-time</b> context  |
| Context    | <b>configure service ies string interface string ipv4 dhcp proxy-server lease-time</b> |
| Tree       | <a href="#">lease-time</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### radius-override *boolean*

|            |  |
|------------|--|
| Synopsis   | Use lease time information provided by RADIUS server   |
| Context    | <b>configure service ies string interface string ipv4 dhcp proxy-server lease-time radius-override boolean</b> |
| Tree       | <a href="#">radius-override</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### value *number*

|            |   |
|------------|---|
| Synopsis   | DHCP lease time   |
| Context    | <b>configure service ies string interface string ipv4 dhcp proxy-server lease-time value number</b> |
| Tree       | <a href="#">value</a>   |
| Range      | 300 to 315446399  |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **python-policy** *reference*

|            |  |
|------------|--|
| Synopsis   | Python policy  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">python-policy</a> <a href="#">reference</a> |
| Tree       | <a href="#">python-policy</a>  |
| Reference  | <b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <a href="#">string</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **relay-plain-bootp** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable relaying of plain BOOTP packets   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">relay-plain-bootp</a> <a href="#">boolean</a> |
| Tree       | <a href="#">relay-plain-bootp</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **relay-proxy**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>relay-proxy</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">relay-proxy</a> |
| Tree       | <a href="#">relay-proxy</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **release-update-src-ip** *boolean*

|            |  |
|------------|--|
| Synopsis   | Update the source IP address of a DHCP RELEASE message   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">relay-proxy</a> <a href="#">release-update-src-ip</a> <a href="#">boolean</a> |
| Tree       | <a href="#">release-update-src-ip</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**siaddr-override** *string*

|            |   |
|------------|---|
| Synopsis   | DHCP server IP address for address hiding function  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp relay-proxy</a> <b>siaddr-override</b> <i>string</i> |
| Tree       | <a href="#">siaddr-override</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**release-include-gi-address** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include gateway IP address in DHCP Release messages   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <b>release-include-gi-address</b> <i>boolean</i> |
| Tree       | <a href="#">release-include-gi-address</a>  |
| Default    | false   |
| Introduced | 21.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**server** *string*

|                |  |
|----------------|--|
| Synopsis       | IP addresses for DHCP server requests  |
| Context        | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <b>server</b> <i>string</i>   |
| Tree           | <a href="#">server</a>   |
| Description    | This command configures a list of servers that this interface forwards requests to.<br>The operator can enter the list of servers as either IP addresses or fully qualified domain names. The operator must specify at least one server specified for DHCP relay to work. If there are multiple servers, the system forwards the request to all the servers in the list. |
| Max. Instances | 8  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

**src-ip-addr** *keyword*

|          |  |
|----------|--|
| Synopsis | Type of source address to use for DHCP relay |
|----------|--|



|            |   |
|------------|---|
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 dhcp src-ip-addr</b> <i>keyword</i> |
| Tree       | <b>src-ip-addr</b>  |
| Options    | auto, gi-address  |
| Default    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **trusted** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Relay untrusted packets   |
| Context     | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 dhcp trusted</b> <i>boolean</i>   |
| Tree        | <b>trusted</b>  |
| Description | <p>When configured to <b>true</b>, the router enables the trusted mode on the interface. When enabled, the relay agent changes the existing GI address (of the request) to the ingress interface, and forwards the request.</p> <p>A DHCP request that contains a GI address of 0.0.0.0 and an Option 82 field in the packet is discarded unless it arrives on a trusted circuit.</p> <p>This behavior only applies if the Relay Agent Information Option action is to keep the existing information. When the Option 82 field is replaced by the relay agent, the original Option 82 information is lost, and there is no reason to enable the trusted option.</p> |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **use-arp** *boolean*

|            |   |
|------------|---|
| Synopsis   | Use ARP to determine the destination hardware address   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 dhcp use-arp</b> <i>boolean</i> |
| Tree       | <b>use-arp</b>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **icmp**

|          |  |
|----------|--|
| Synopsis | Enter the <b>icmp</b> context  |
| Context  | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 icmp</b> |

|            |                      |
|------------|----------------------|
| Tree       | <a href="#">icmp</a> |
| Introduced | 16.0.R1              |
| Platforms  | All                  |

### **mask-reply** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow responses to ICMP mask requests on the interface   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 icmp mask-reply</a> <i>boolean</i> |
| Tree       | <a href="#">mask-reply</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **param-problem**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>param-problem</b> context   |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 icmp param-problem</a> |
| Tree        | <a href="#">param-problem</a>  |
| Description | Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface.                              |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of sent Parameter Problem messages   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 icmp param-problem admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**number** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of Parameter Problem messages to send   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">param-problem</a> <b>number</b> <i>number</i> |
| Tree       | <a href="#">number</a>   |
| Range      | 10 to 1000   |
| Default    | 100  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**seconds** *number*

|            |   |
|------------|---|
| Synopsis   | Time used to limit number of Parameter Problem messages   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">param-problem</a> <b>seconds</b> <i>number</i> |
| Tree       | <a href="#">seconds</a>   |
| Range      | 1 to 60   |
| Units      | seconds   |
| Default    | 10  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**redirects**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>redirects</b> context  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">icmp</a> <b>redirects</b>   |
| Tree        | <a href="#">redirects</a>   |
| Description | <p>Commands in this context configure the settings for ICMP redirect messages generated by the interface.</p> <p>The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.</p> |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**admin-state** *keyword*

|          |  |
|----------|--|
| Synopsis | Administrative state of sending ICMP redirect messages |
|----------|--|

|            |   |
|------------|---|
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 icmp redirects admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **number** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum number of ICMP redirect messages to send  |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 icmp redirects number</b> <i>number</i> |
| Tree       | <b>number</b>   |
| Range      | 10 to 1000  |
| Default    | 100   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **seconds** *number*

|            |  |
|------------|--|
| Synopsis   | Time used to limit the number of ICMP redirect messages  |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 icmp redirects seconds</b> <i>number</i> |
| Tree       | <b>seconds</b>   |
| Range      | 1 to 60  |
| Units      | seconds  |
| Default    | 10   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **ttl-expired**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>ttl-expired</b> context  |
| Context     | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 icmp ttl-expired</b>    |
| Tree        | <b>ttl-expired</b>  |
| Description | Commands in this context configure the settings for ICMP TTL expired messages generated by the interface. |

---

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of sending TTL expired messages   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">ttl-expired</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**number** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of TTL expired messages to send   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">ttl-expired</a> <b>number</b> <i>number</i> |
| Tree       | <a href="#">number</a>   |
| Range      | 10 to 2000   |
| Default    | 100  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**seconds** *number*

|            |   |
|------------|---|
| Synopsis   | Time used to limit the number of TTL expired messages   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">ttl-expired</a> <b>seconds</b> <i>number</i> |
| Tree       | <a href="#">seconds</a>   |
| Range      | 1 to 60   |
| Units      | seconds   |
| Default    | 10  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## unreachables

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>unreachables</b> context   |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 icmp unreachables</a> |
| Tree        | <a href="#">unreachables</a>  |
| Description | Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface.      |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of sending unreachable messages   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 icmp unreachables admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## number *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of unreachable messages to send   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 icmp unreachables number</a> <i>number</i> |
| Tree       | <a href="#">number</a>   |
| Range      | 10 to 2000   |
| Default    | 100  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## seconds *number*

|          |   |
|----------|---|
| Synopsis | Time to limit the number of ICMP unreachable messages   |
| Context  | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 icmp unreachables seconds</a> <i>number</i> |
| Tree     | <a href="#">seconds</a>   |

|            |         |
|------------|---------|
| Range      | 1 to 60 |
| Units      | seconds |
| Default    | 10      |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **ip-helper-address** *string*

|            |   |
|------------|---|
| Synopsis   | Gateway address   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 ip-helper-address</a> <i>string</i> |
| Tree       | <a href="#">ip-helper-address</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **local-dhcp-server** *reference*

|            |  |
|------------|--|
| Synopsis   | DHCP server for the interface  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 local-dhcp-server</a> <i>reference</i> |
| Tree       | <a href="#">local-dhcp-server</a>  |
| Reference  | <b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **neighbor-discovery**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>neighbor-discovery</b> context  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery</a> |
| Tree       | <a href="#">neighbor-discovery</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **host-route**

|          |   |
|----------|---|
| Synopsis | Enter the <b>host-route</b> context   |
| Context  | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery</a> <a href="#">host-route</a> |

|            |                            |
|------------|----------------------------|
| Tree       | <a href="#">host-route</a> |
| Introduced | 19.10.R1                   |
| Platforms  | All                        |

### **populate** [[route-type](#)] *keyword*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>populate</b> list instance   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">host-route</a> <a href="#">populate</a> <i>keyword</i> |
| Tree       | <a href="#">populate</a>  |
| Introduced | 19.10.R1  |
| Platforms  | All   |

### **[route-type]** *keyword*

|            |   |
|------------|---|
| Synopsis   | Type of ARP or ND entries that generate host routes   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">host-route</a> <a href="#">populate</a> <i>keyword</i> |
| Tree       | <a href="#">populate</a>  |
| Options    | static, dynamic, evpn   |
| Notes      | This element is part of a list key.   |
| Introduced | 19.10.R1  |
| Platforms  | All   |

### **route-tag** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Tag value used with the host route from an ARP/ND entry   |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">host-route</a> <a href="#">populate</a> <i>keyword</i> <a href="#">route-tag</a> <i>number</i> |
| Tree        | <a href="#">route-tag</a>   |
| Description | This command specifies the route tag that is added in the route table for ARP or ND host routes. This tag can be matched on BGP VRF export and BGP peer export policies.  |
| Range       | 1 to 255  |



|            |          |
|------------|----------|
| Introduced | 19.10.R1 |
| Platforms  | All      |

### **learn-unsolicited** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Learn new entries from any received NA message   |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery</a> <a href="#">learn-unsolicited</a> <i>boolean</i>  |
| Tree        | <a href="#">learn-unsolicited</a>  |
| Description | <p>When configured to <b>true</b>, the router can learn neighbor entries from received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited (S) flag set. The command can be enabled for global addresses, link-local addresses, or for both.</p> <p>When configured to <b>false</b>, the router follows standard behavior for learning neighbor entries.</p> <ul style="list-style-type: none"> <li>• If an unsolicited NA (regardless of the S flag) is received from a neighbor that is not yet in the Neighbor Discovery (ND) cache, the NA is ignored.</li> <li>• If an NS, RS, RA, or Redirect message with a Link Layer Address (MAC) is received from a neighbor that is not yet in the ND cache, a new neighbor entry is created in the cache to store the received Link Layer MAC. The neighbor is put in the STALE state.</li> </ul> |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **limit**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>limit</b> context   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery</a> <a href="#">limit</a> |
| Tree       | <a href="#">limit</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **log-only** *boolean*

|          |  |
|----------|--|
| Synopsis | Generate log entries only if limit is reached  |
| Context  | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery</a> <a href="#">limit</a> <a href="#">log-only</a> <i>boolean</i> |
| Tree     | <a href="#">log-only</a>   |

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

**max-entries** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum number of entries learned on an IP interface  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>neighbor-discovery</b> <b>limit</b> <b>max-entries</b> <i>number</i> |
| Tree       | <a href="#">max-entries</a>   |
| Range      | 0 to 524288   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**threshold** *number*

|            |   |
|------------|---|
| Synopsis   | Threshold value that triggers a warning message   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>neighbor-discovery</b> <b>limit</b> <b>threshold</b> <i>number</i> |
| Tree       | <a href="#">threshold</a>   |
| Range      | 1 to 100  |
| Units      | percent   |
| Default    | 90  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**local-proxy-arp** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Enable local proxy ARP on interface  |
| Context     | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>neighbor-discovery</b> <b>local-proxy-arp</b> <i>boolean</i>                                      |
| Tree        | <a href="#">local-proxy-arp</a>  |
| Description | When configured to <b>true</b> , the router enables local proxy ARP on the interface.<br>When configured to <b>false</b> , the router does not respond to ARP requests for addresses on the same subnet. |
| Introduced  | 16.0.R1  |

Platforms All

### populate *boolean*

Synopsis Allow static and dynamic hosts to be populated in system ARP cache

Context **configure** [service ies](#) *string* [interface](#) *string* [ipv4 neighbor-discovery populate](#) *boolean*

Tree [populate](#)

Default false

Introduced 16.0.R1

Platforms All

### proactive-refresh *boolean*

Synopsis Send a single refresh message before entry timeout

Context **configure** [service ies](#) *string* [interface](#) *string* [ipv4 neighbor-discovery proactive-refresh](#) *boolean*

Tree [proactive-refresh](#)

Description When configured to **true**, the router always sends a refresh message 30 seconds before the timeout of the entry (a single refresh message with no retries).

When configured to **false**, the router marks an entry as stale 30 seconds before age-out, and the router only sends an ARP request to refresh the entry if the IOM receives traffic that uses it. Then, the IOM asks the ARP application to send a refresh message. With ARP proactive refresh enabled, the ARP module sends a refresh message regardless of the IOM receiving traffic.

Default false

Introduced 16.0.R1

Platforms All

### proxy-arp-policy *reference*

Synopsis Proxy ARP policy name

Context **configure** [service ies](#) *string* [interface](#) *string* [ipv4 neighbor-discovery proxy-arp-policy](#) *reference*

Tree [proxy-arp-policy](#)

Reference **configure** [policy-options policy-statement](#) *string*

Max. Instances 5

|            |                                      |
|------------|--------------------------------------|
| Notes      | This element is ordered by the user. |
| Introduced | 16.0.R1                              |
| Platforms  | All                                  |

### **remote-proxy-arp** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable remote proxy ARP on the interface   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">remote-proxy-arp</a> <i>boolean</i> |
| Tree       | <a href="#">remote-proxy-arp</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **retry-timer** *number*

|            |  |
|------------|--|
| Synopsis   | ARP retry interval   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">retry-timer</a> <i>number</i> |
| Tree       | <a href="#">retry-timer</a>  |
| Range      | 1 to 300   |
| Units      | deciseconds  |
| Default    | 50   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **static-neighbor** [[ipv4-address](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>static-neighbor</b> list instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">static-neighbor</a> <i>string</i> |
| Tree       | <a href="#">static-neighbor</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[ipv4-address] string**

|            |   |
|------------|---|
| Synopsis   | IPv4 address that corresponds to the physical address   |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">ipv4 neighbor-discovery static-neighbor string</a> |
| Tree       | <a href="#">static-neighbor</a>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**mac-address string**

|            |  |
|------------|--|
| Synopsis   | MAC address for the static neighbor  |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">ipv4 neighbor-discovery static-neighbor string mac-address string</a> |
| Tree       | <a href="#">mac-address</a>  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**static-neighbor-unnumbered**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>static-neighbor-unnumbered</b> context  |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">ipv4 neighbor-discovery static-neighbor-unnumbered</a> |
| Tree       | <a href="#">static-neighbor-unnumbered</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**mac-address string**

|            |  |
|------------|--|
| Synopsis   | MAC address for the static neighbor  |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">ipv4 neighbor-discovery static-neighbor-unnumbered mac-address string</a> |
| Tree       | <a href="#">mac-address</a>  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |

Platforms All

### **timeout** *number*

Synopsis Timeout for an ARP entry learned on the interface

Context **configure** [service ies](#) *string* [interface](#) *string* [ipv4 neighbor-discovery](#) [timeout](#) *number*

Tree [timeout](#)

Description This command configures the minimum time an ARP entry learned on the IP interface is stored in the ARP table. ARP entries are automatically refreshed when an ARP request or gratuitous ARP is seen by an IP host. Otherwise, the ARP entry is aged from the ARP table.

Range 0 to 65535

Units seconds

Default 14400

Introduced 16.0.R1

Platforms All

### **primary**

Synopsis Enable the **primary** context

Context **configure** [service ies](#) *string* [interface](#) *string* [ipv4 primary](#)

Tree [primary](#)

Introduced 16.0.R1

Platforms All

### **address** *string*

Synopsis Primary IPv4 address assigned to the interface

Context **configure** [service ies](#) *string* [interface](#) *string* [ipv4 primary](#) [address](#) *string*

Tree [address](#)

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

**broadcast** *keyword*

|            |  |
|------------|--|
| Synopsis   | Broadcast address format   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">primary</a> <a href="#">broadcast</a> <i>keyword</i> |
| Tree       | <a href="#">broadcast</a>  |
| Options    | all-ones, host-ones  |
| Default    | host-ones  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**prefix-length** *number*

|            |   |
|------------|---|
| Synopsis   | IPv4 address prefix length  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">primary</a> <a href="#">prefix-length</a> <i>number</i> |
| Tree       | <a href="#">prefix-length</a>   |
| Range      | 0 to 32   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**track-srrp** *number*

|            |  |
|------------|--|
| Synopsis   | SRRP instance whose state is tracked on this IP address  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">primary</a> <a href="#">track-srrp</a> <i>number</i> |
| Tree       | <a href="#">track-srrp</a>   |
| Range      | 1 to 4294967295  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**qos-route-lookup** *keyword*

|            |   |
|------------|---|
| Synopsis   | QoS Route lookup  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">qos-route-lookup</a> <i>keyword</i> |
| Tree       | <a href="#">qos-route-lookup</a>  |
| Options    | destination, source   |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **secondary** [address] *string*

Synopsis Enter the **secondary** list instance  
 Context **configure service ies** *string* **interface** *string* **ipv4 secondary** *string*  
 Tree **secondary**  
 Introduced 16.0.R1  
 Platforms All

### [address] *string*

Synopsis Secondary IPv4 address assigned to the interface  
 Context **configure service ies** *string* **interface** *string* **ipv4 secondary** *string*  
 Tree **secondary**  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **broadcast** *keyword*

Synopsis Broadcast address format  
 Context **configure service ies** *string* **interface** *string* **ipv4 secondary** *string* **broadcast** *keyword*  
 Tree **broadcast**  
 Options all-ones, host-ones  
 Default host-ones  
 Introduced 16.0.R1  
 Platforms All

### **igp-inhibit** *boolean*

Synopsis Disable the running IGP from recognizing secondary IP  
 Context **configure service ies** *string* **interface** *string* **ipv4 secondary** *string* **igp-inhibit** *boolean*  
 Tree **igp-inhibit**



|             |  |
|-------------|--|
| Description | When configured to <b>true</b> , the running IGP does not recognize the secondary IP address as a local interface. |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **prefix-length** *number*

|            |   |
|------------|---|
| Synopsis   | IPv4 address prefix length  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">secondary</a> <a href="#">string</a> <b>prefix-length</b> <i>number</i> |
| Tree       | <a href="#">prefix-length</a>   |
| Range      | 0 to 32   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **track-srrp** *number*

|            |  |
|------------|--|
| Synopsis   | SRRP instance whose state is tracked on this IP address  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">secondary</a> <a href="#">string</a> <b>track-srrp</b> <i>number</i> |
| Tree       | <a href="#">track-srrp</a>   |
| Range      | 1 to 4294967295  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **tcp-mss** *number*

|            |  |
|------------|--|
| Synopsis   | TCP maximum segment size for the interface   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <b>tcp-mss</b> <i>number</i> |
| Tree       | <a href="#">tcp-mss</a>  |
| Range      | 384 to 9746  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## unnumbered

|            |  |
|------------|--|
| Synopsis   | Enter the <b>unnumbered</b> context                                  |
| Context    | <b>configure service ies string interface string ipv4 unnumbered</b> |
| Tree       | <a href="#">unnumbered</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## ip-address *string*

|            |  |
|------------|--|
| Synopsis   | IP address of the unnumbered interface   |
| Context    | <b>configure service ies string interface string ipv4 unnumbered ip-address string</b>                   |
| Tree       | <a href="#">ip-address</a>   |
| Notes      | The following elements are part of a choice: <b>ip-address</b> , <b>ip-int-name</b> , or <b>system</b> . |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## ip-int-name *string*

|               |  |
|---------------|--|
| Synopsis      | IP interface name  |
| Context       | <b>configure service ies string interface string ipv4 unnumbered ip-int-name string</b>                  |
| Tree          | <a href="#">ip-int-name</a>  |
| String Length | 1 to 32  |
| Notes         | The following elements are part of a choice: <b>ip-address</b> , <b>ip-int-name</b> , or <b>system</b> . |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

## system

|            |  |
|------------|--|
| Synopsis   | IP interface as an unnumbered interface  |
| Context    | <b>configure service ies string interface string ipv4 unnumbered system</b>                              |
| Tree       | <a href="#">system</a>   |
| Notes      | The following elements are part of a choice: <b>ip-address</b> , <b>ip-int-name</b> , or <b>system</b> . |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## urpf-check

|            |   |
|------------|---|
| Synopsis   | Enable the <b>urpf-check</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <b>urpf-check</b> |
| Tree       | <a href="#">urpf-check</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## ignore-default *boolean*

|            |  |
|------------|--|
| Synopsis   | Ignore default route when performing a uRPF check  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <b>urpf-check</b> <b>ignore-default</b> <i>boolean</i> |
| Tree       | <a href="#">ignore-default</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## mode *keyword*

|            |  |
|------------|--|
| Synopsis   | Unicast RPF check mode   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <b>urpf-check</b> <b>mode</b> <i>keyword</i> |
| Tree       | <a href="#">mode</a>   |
| Options    | strict, loose, strict-no-ecmp  |
| Default    | strict   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## vrrp [[virtual-router-id](#)] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>vrrp</b> list instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <b>vrrp</b> <i>number</i> |
| Tree       | <a href="#">vrrp</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[virtual-router-id] number**

|            |   |
|------------|---|
| Synopsis   | Virtual Router Identifier (VRID) for the IP interface   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">vrrp</a> <a href="#">number</a> |
| Tree       | <a href="#">vrrp</a>  |
| Range      | 1 to 255  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**admin-state keyword**

|             |  |
|-------------|--|
| Synopsis    | Administrative state of VRRP   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">vrrp</a> <a href="#">number</a> <a href="#">admin-state</a> <a href="#">keyword</a>  |
| Tree        | <a href="#">admin-state</a>  |
| Description | <p>The command determines the administrative state of non-owner virtual router instances.</p> <p>Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes.</p> <p>When <b>disabled</b>, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing.</p> <p>Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated.</p> <p>An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the <b>admin-state</b> command within the parent IP interface node which administratively disables the IP interface.</p> |
| Options     | enable, disable  |
| Default     | enable   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**authentication-key string**

|          |   |
|----------|---|
| Synopsis | Password for simple text authentication   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">vrrp</a> <a href="#">number</a> <a href="#">authentication-key</a> <a href="#">string</a> |

|               |   |
|---------------|---|
| Tree          | <a href="#">authentication-key</a>  |
| Description   | <p>This command optionally assigns a simple text password authentication key to generate master VRRP advertisement messages and validate received VRRP advertisement messages.</p> <p>If this command is re-executed with a different password key defined, the new key immediately replaces the old key. This command may be executed at any time.</p> |
| String Length | 1 to 38   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

### **backup string**

|                |  |
|----------------|--|
| Synopsis       | Virtual router IP addresses for the interface  |
| Context        | <b>configure service ies</b> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4 vrrp</a> <a href="#">number</a> <a href="#">backup</a> <a href="#">string</a>  |
| Tree           | <a href="#">backup</a>   |
| Description    | <p>This command associates virtual router IP addresses with those of the parental IP interface.</p> <p>This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance.</p> <p>Non-owner virtual router instances create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup). This command, when executed on an owner virtual router instance, does not create a routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance.</p> <p>For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is advertising to backup virtual routers receiving the messages. The specified <i>unicast-ipv4-address</i> must be equal to one of the existing IP addresses in the parental IP interface (primary or secondary) or this command fails.</p> <p>See "Owner and non-owner VRRP" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide</i> for more information about owner and non-owner virtual router instances.</p> |
| Max. Instances | 16   |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

### **bfd-liveness**

|          |  |
|----------|--|
| Synopsis | Enable the <b>bfd-liveness</b> context |
|----------|--|

|            |  |
|------------|--|
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 vrrp</b> <i>number</i> <b>bfd-liveness</b> |
| Tree       | <b>bfd-liveness</b>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**dest-ip** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Destination IP address to use for BFD session   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 vrrp</b> <i>number</i> <b>bfd-liveness</b> <b>dest-ip</b> <i>string</i> |
| Tree       | <b>dest-ip</b>  |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**interface-name** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Name of the interface running BFD  |
| Context       | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 vrrp</b> <i>number</i> <b>bfd-liveness</b> <b>interface-name</b> <i>string</i> |
| Tree          | <b>interface-name</b>  |
| String Length | 1 to 32  |
| Notes         | This element is mandatory.   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**service-name** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Administrative service name   |
| Context       | <b>configure</b> <i>service ies string interface string ipv4 vrrp number bfd-liveness service-name string</i> |
| Tree          | <i>service-name</i>   |
| String Length | 1 to 64   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**init-delay** *number*

|            |  |
|------------|--|
| Synopsis   | VRRP initialization delay timer  |
| Context    | <b>configure</b> <i>service ies string interface string ipv4 vrrp number init-delay number</i> |
| Tree       | <i>init-delay</i>  |
| Range      | 1 to 65535   |
| Units      | seconds  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**mac** *string*

|             |  |
|-------------|--|
| Synopsis    | Virtual MAC address to use in ARP responses  |
| Context     | <b>configure</b> <i>service ies string interface string ipv4 vrrp number mac string</i>  |
| Tree        | <i>mac</i>   |
| Description | <p>This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID.</p> <p>Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address.</p> <p>Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with <i>unicast-mac-address</i> as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts</p> |

results. All VRRP advertisement messages are transmitted with *unicast-mac-address* as the source MAC.

An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **master-int-inherit** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Allow master instance to dictate the master down timer  |
| Context     | <b>configure</b> <i>service ies string interface string ipv4 vrrp number master-int-inherit boolean</i>   |
| Tree        | <a href="#">master-int-inherit</a>  |
| Description | <p>When configured to <b>true</b>, the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer.</p> <p>When configured to <b>false</b>, the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded.</p> |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **message-interval** *number*

|             |  |
|-------------|--|
| Synopsis    | Interval for sending VRRP advertisement messages   |
| Context     | <b>configure</b> <i>service ies string interface string ipv4 vrrp number message-interval number</i>   |
| Tree        | <a href="#">message-interval</a>   |
| Description | <p>This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command.</p> <p>The usage of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the <b>master-int-inherit</b> command:</p> <ul style="list-style-type: none"> <li>• When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar to an owner virtual router instance. The <b>master-int-inherit</b> command has no effect when operating as master.</li> <li>• When a non-owner is in the backup state with <b>master-int-inherit</b> disabled, the system uses the configured value of this command to match the incoming</li> </ul> |



advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement.

- When a non-owner is in the backup state with **master-int-inherit** enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message.

|            |             |
|------------|-------------|
| Range      | 1 to 2559   |
| Units      | deciseconds |
| Default    | 10          |
| Introduced | 16.0.R1     |
| Platforms  | All         |

### **monitor-oper-group** *reference*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | VRRP instance to follow a specified operational group   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">vrrp</a> <a href="#">number</a> <b>monitor-oper-group</b> <a href="#">reference</a>   |
| Tree        | <a href="#">monitor-oper-group</a>  |
| Description | This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states. |
| Reference   | <b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <a href="#">string</a>  |
| Introduced  | 22.2.R1   |
| Platforms   | All   |

### **ntp-reply** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Allow processing of NTP requests   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">vrrp</a> <a href="#">number</a> <b>ntp-reply</b> <a href="#">boolean</a> |
| Tree        | <a href="#">ntp-reply</a>  |
| Description | When configured to <b>true</b> , the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router.  |

When configured to **false**, the router does not process NTP requests.

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 20.2.R1 |
| Platforms  | All     |

### **oper-group** *reference*

|             |   |
|-------------|---|
| Synopsis    | Operational group name associated with the VRRP   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">vrrp</a> <a href="#">number</a> <a href="#">oper-group</a> <a href="#">reference</a>  |
| Tree        | <a href="#">oper-group</a>  |
| Description | This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router (MR), the operational group is up. The operational group is down for all other VRRP states. |
| Reference   | <b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <a href="#">string</a>  |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **owner** *boolean*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Designate the virtual router instance as owner  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">vrrp</a> <a href="#">number</a> <a href="#">owner</a> <a href="#">boolean</a>   |
| Tree        | <a href="#">owner</a>   |
| Description | When configured to <b>true</b> , the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router.<br><br>When configured to <b>false</b> , this virtual router instance is designated as a non-owner. |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**passive** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Suppress the processing of VRRP advertisement messages  |
| Context     | <b>configure</b> <i>service ies string interface string ipv4 vrrp number</i> <b>passive</b> <i>boolean</i>  |
| Tree        | <b>passive</b>  |
| Description | <p>When configured to <b>true</b>, the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down).</p> <p>When configured to <b>false</b>, this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages.</p> |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**ping-reply** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Allow non-owner master to reply to ICMP echo requests   |
| Context     | <b>configure</b> <i>service ies string interface string ipv4 vrrp number</i> <b>ping-reply</b> <i>boolean</i>   |
| Tree        | <b>ping-reply</b>   |
| Description | <p>When configured to <b>true</b>, the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address).</p> <p>When configured to <b>false</b>, ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded.</p> <p>Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.</p> |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**policy** *reference*

|          |                              |
|----------|------------------------------|
| Synopsis | VRRP priority control policy |
|----------|------------------------------|

|             |  |
|-------------|--|
| Context     | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 vrrp</b> <i>number</i> <b>policy</b> <i>reference</i>  |
| Tree        | <b>policy</b>  |
| Description | <p>This command configures a VRRP priority control policy to associate with the virtual router instance.</p> <p>VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis.</p> <p>An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with the <b>priority</b> command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value.</p> <p>For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.</p> |
| Reference   | <b>configure vrrp policy</b> <i>number</i>   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **preempt** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Allow the VRRP to override an existing non-owner master  |
| Context     | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 vrrp</b> <i>number</i> <b>preempt</b> <i>boolean</i>   |
| Tree        | <b>preempt</b>   |
| Description | <p>When configured to <b>true</b>, this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router.</p> <p>When configured to <b>false</b>, this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router.</p> |
| Default     | true   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **priority** *number*

|             |   |
|-------------|---|
| Synopsis    | Base priority for the VRRP  |
| Context     | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 vrrp</b> <i>number</i> <b>priority</b> <i>number</i>                                    |
| Tree        | <b>priority</b>   |
| Description | This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process. |

The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis.

|            |          |
|------------|----------|
| Range      | 1 to 255 |
| Introduced | 16.0.R1  |
| Platforms  | All      |

### **ssh-reply** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Allow the non-owner master to reply to SSH requests   |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 vrrp</a> <i>number</i> <b>ssh-reply</b> <i>boolean</i>  |
| Tree        | <a href="#">ssh-reply</a>   |
| Description | <p>When configured to <b>true</b>, the router allows the non-owner master to reply to SSH requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the SSH request. SSH cannot be disabled at the management security level (either on the parental IP interface or on the SSH source host address).</p> <p>When configure to <b>false</b>, SSH requests to non-owner master virtual IP addresses are silently discarded.</p> |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **standby-forwarding** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Allow standby router to forward traffic  |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 vrrp</a> <i>number</i> <b>standby-forwarding</b> <i>boolean</i>  |
| Tree        | <a href="#">standby-forwarding</a>   |
| Description | <p>When configured to <b>true</b>, the standby router forwards all traffic.</p> <p>When configured to <b>false</b>, the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address.</p> |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**telnet-reply** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Allow non-owner master to reply to Telnet requests  |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 vrrp</a> <i>number</i> <b>telnet-reply</b> <i>boolean</i>   |
| Tree        | <a href="#">telnet-reply</a>  |
| Description | <p>When configured to <b>true</b>, the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address).</p> <p>When configured to <b>false</b>, the router silently discards Telnet requests sent to non-owner master virtual IP addresses.</p> |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**traceroute-reply** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Allow non-owner master to reply to traceroute requests  |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 vrrp</a> <i>number</i> <b>traceroute-reply</b> <i>boolean</i>   |
| Tree        | <a href="#">traceroute-reply</a>  |
| Description | <p>When configured to <b>true</b>, the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance.</p> <p>When configured to <b>false</b>, the router silently discards traceroute requests sent to non-owner master virtual IP addresses.</p> <p>Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address).</p> |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**ipv6**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>ipv6</b> context   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>ipv6</b> |
| Tree       | <a href="#">ipv6</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**address** [ipv6-address] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>address</b> list instance  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">address</a> <i>string</i> |
| Tree       | <a href="#">address</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[ipv6-address]** *string*

|            |   |
|------------|---|
| Synopsis   | IPv6 address assigned to the interface  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">address</a> <i>string</i> |
| Tree       | <a href="#">address</a>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**duplicate-address-detection** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Enable Duplicate Address Detection  |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">address</a> <i>string</i> <a href="#">duplicate-address-detection</a> <i>boolean</i>      |
| Tree        | <a href="#">duplicate-address-detection</a>   |
| Description | When configured to <b>true</b> , the router enables Duplicate Address Detection (DAD).<br>When configured to <b>false</b> , the router disables DAD and sets the address to preferred, even if there is a duplicated address. |
| Default     | true  |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**eui-64** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Form IPv6 address from prefix and 64-bit interface ID  |
| Context     | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>address</b> <i>string</i> <b>eui-64</b> <i>boolean</i>  |
| Tree        | <b>eui-64</b>  |
| Description | When configured to <b>true</b> , the router forms a complete IPv6 address from the supplied prefix and 64-bit interface identifier. The 64-bit interface identifier is derived from the MAC address on Ethernet interfaces. For interfaces without a MAC address, for example POS interfaces, use the base MAC address of the chassis. |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**prefix-length** *number*

|            |   |
|------------|---|
| Synopsis   | IPv6 address prefix length  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>address</b> <i>string</i> <b>prefix-length</b> <i>number</i> |
| Tree       | <b>prefix-length</b>  |
| Range      | 4 to 128  |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**primary-preference** *number*

|             |   |
|-------------|---|
| Synopsis    | Index assigned to the IPv6 address of the interface   |
| Context     | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>address</b> <i>string</i> <b>primary-preference</b> <i>number</i>  |
| Tree        | <b>primary-preference</b>   |
| Description | This command assigns a primary preference index to an IPv6 address of the interface to enforce the order in which the address is used by control plane protocols and applications that require a fixed address of the interface, such as LDP and Segment Routing. In cases where a fixed address is required when originating packets from the interface, the IPv6 address with the lowest primary preference index is selected. If the selected address is removed, the next IPv6 address with the next lowest primary preference index is selected. |



If this index is not specified for the IPv6 address, the system assigns the next available index value to the address. The address index space is unique across all addresses of a given interface.

|            |                 |
|------------|-----------------|
| Range      | 1 to 4294967295 |
| Introduced | 16.0.R1         |
| Platforms  | All             |

### **track-srrp** *number*

|            |   |
|------------|---|
| Synopsis   | SRRP ID whose state is tracked on this IP address   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">address</a> <i>string</i> <b>track-srrp</b> <i>number</i> |
| Tree       | <a href="#">track-srrp</a>  |
| Range      | 1 to 4294967295   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **bfd**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>bfd</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <b>bfd</b> |
| Tree       | <a href="#">bfd</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of BFD sessions   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <b>bfd</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**echo-receive** *number*

|            |  |
|------------|--|
| Synopsis   | Minimum echo interval over this interface  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">bfd</a> <a href="#">echo-receive</a> <i>number</i> |
| Tree       | <a href="#">echo-receive</a>   |
| Range      | 100 to 100000  |
| Units      | milliseconds   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**multiplier** *number*

|             |   |
|-------------|---|
| Synopsis    | Number of consecutive BFD messages missed from the peer   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">bfd</a> <a href="#">multiplier</a> <i>number</i>                                    |
| Tree        | <a href="#">multiplier</a>  |
| Description | This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments. |
| Range       | 1 to 20   |
| Default     | 3   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**receive** *number*

|             |  |
|-------------|--|
| Synopsis    | BFD receive interval over this interface   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">bfd</a> <a href="#">receive</a> <i>number</i>              |
| Tree        | <a href="#">receive</a>  |
| Description | This command specifies the receive interval for the BFD session.<br>On the 7750 SR, this command can only be configured to a value less than 100 when the <b>type</b> command is configured to <b>cpm-np</b> . |
| Range       | 10 to 100000   |
| Units       | milliseconds   |
| Default     | 100  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**transmit-interval** *number*

|             |   |
|-------------|---|
| Synopsis    | BFD transmit interval over this interface   |
| Context     | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>bfd</b> <b>transmit-interval</b> <i>number</i>   |
| Tree        | <b>transmit-interval</b>  |
| Description | This command configures the transmit intervals.<br>On the 7750 SR, this command can only be configured to a value less than 100 when the <b>type</b> command is configured to <b>cpm-np</b> . |
| Range       | 10 to 100000  |
| Units       | milliseconds  |
| Default     | 100   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**type** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Local termination point for the BFD session   |
| Context     | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>bfd</b> <b>type</b> <i>keyword</i>   |
| Tree        | <b>type</b>   |
| Description | This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity.<br>The options to specify where the BFD session runs are: <ul style="list-style-type: none"> <li>• <b>auto</b> (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the <b>cpm-np</b>.</li> <li>• <b>cpm-np</b> – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems.</li> <li>• <b>fp</b> – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.</li> </ul> |
| Options     | cpm-np, auto, fp  |
| Default     | auto  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**dhcp6**

|          |                                |
|----------|--------------------------------|
| Synopsis | Enter the <b>dhcp6</b> context |
|----------|--------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6</b> |
| Tree       | <b>dhcp6</b>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## relay

|            |   |
|------------|---|
| Synopsis   | Enter the <b>relay</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 relay</b> |
| Tree       | <b>relay</b>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of DHCPv6 Relay   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 relay admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>   |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## description *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 relay description</b> <i>string</i> |
| Tree          | <b>description</b>  |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

## lease-populate

|          |   |
|----------|---|
| Synopsis | Enter the <b>lease-populate</b> context |
|----------|---|

|            |  |
|------------|--|
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 relay lease-populate</b> |
| Tree       | <a href="#">lease-populate</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **max-nbr-of-leases** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum lease state entries allowed for the interface  |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 relay lease-populate max-nbr-of-leases</b> <i>number</i> |
| Tree       | <a href="#">max-nbr-of-leases</a>  |
| Range      | 0 to 32767   |
| Default    | 0  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **route-populate**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>route-populate</b> context   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 relay lease-populate route-populate</b> |
| Tree       | <a href="#">route-populate</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **na** *boolean*

|            |   |
|------------|---|
| Synopsis   | Create route based on IA_NA prefix option in relay-reply message  |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 relay lease-populate route-populate na</b> <i>boolean</i> |
| Tree       | <a href="#">na</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**pd**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>pd</b> context   |
| Context    | <b>configure service ies string interface string ipv6 dhcp6 relay lease-populate route-populate pd</b> |
| Tree       | <b>pd</b>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**exclude boolean**

|            |  |
|------------|--|
| Synopsis   | Create back hole route based on prefix exclude option in relay-reply message   |
| Context    | <b>configure service ies string interface string ipv6 dhcp6 relay lease-populate route-populate pd exclude boolean</b> |
| Tree       | <b>exclude</b>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**ta boolean**

|            |  |
|------------|--|
| Synopsis   | Create route based on IA_TA prefix option in relay-reply message   |
| Context    | <b>configure service ies string interface string ipv6 dhcp6 relay lease-populate route-populate ta boolean</b> |
| Tree       | <b>ta</b>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**link-address string**

|            |   |
|------------|---|
| Synopsis   | Link address of the DHCPv6 relay messages   |
| Context    | <b>configure service ies string interface string ipv6 dhcp6 relay link-address string</b> |
| Tree       | <b>link-address</b>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## neighbor-resolution *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable neighbor resolution via DHCPv6 relay  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay neighbor-resolution</a> <i>boolean</i> |
| Tree       | <a href="#">neighbor-resolution</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## option

|            |  |
|------------|--|
| Synopsis   | Enter the <b>option</b> context  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay option</a> |
| Tree       | <a href="#">option</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## interface-id

|            |   |
|------------|---|
| Synopsis   | Enter the <b>interface-id</b> context   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay option interface-id</a> |
| Tree       | <a href="#">interface-id</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## ascii-tuple

|            |   |
|------------|---|
| Synopsis   | Use ASCII-encoded concatenated tuple  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay option interface-id ascii-tuple</a> |
| Tree       | <a href="#">ascii-tuple</a>   |
| Notes      | The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-index</b> , <b>sap-id</b> , or <b>string</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## if-index

|            |  |
|------------|--|
| Synopsis   | Use interface index in the DHCPv6 relay packet   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <a href="#">option</a> <a href="#">interface-id</a> <a href="#">if-index</a> |
| Tree       | <a href="#">if-index</a>   |
| Notes      | The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-index</b> , <b>sap-id</b> , or <b>string</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## sap-id

|            |  |
|------------|--|
| Synopsis   | Use SAP ID in interface ID option in relay packet  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <a href="#">option</a> <a href="#">interface-id</a> <a href="#">sap-id</a> |
| Tree       | <a href="#">sap-id</a>   |
| Notes      | The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-index</b> , <b>sap-id</b> , or <b>string</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## string *string*

|               |   |
|---------------|---|
| Synopsis      | String for interface ID option in DHCPv6 relay packet   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <a href="#">option</a> <a href="#">interface-id</a> <a href="#">string</a> <a href="#">string</a> |
| Tree          | <a href="#">string</a>  |
| String Length | 1 to 80   |
| Notes         | The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-index</b> , <b>sap-id</b> , or <b>string</b> .  |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

## remote-id *boolean*

|          |  |
|----------|--|
| Synopsis | Send remote ID option in the DHCPv6 relay packet   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <a href="#">option</a> <a href="#">remote-id</a> <a href="#">boolean</a> |
| Tree     | <a href="#">remote-id</a>  |
| Default  | false  |



Introduced 16.0.R1  
 Platforms All

### **python-policy** *reference*

Synopsis Python policy name  
 Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv6](#) [dhcp6](#) [relay](#) [python-policy](#) [reference](#)  
 Tree [python-policy](#)  
 Reference **configure** [python](#) [python-policy](#) [string](#)  
 Introduced 16.0.R1  
 Platforms All

### **server** *string*

Synopsis DHCPv6 server to which the DHCPv6 requests are forwarded  
 Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv6](#) [dhcp6](#) [relay](#) [server](#) [string](#)  
 Tree [server](#)  
 Max. Instances 8  
 Notes This element is ordered by the user.  
 Introduced 16.0.R1  
 Platforms All

### **source-address** *string*

Synopsis Source IPv6 address of the DHCPv6 relay messages  
 Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv6](#) [dhcp6](#) [relay](#) [source-address](#) [string](#)  
 Tree [source-address](#)  
 Introduced 16.0.R1  
 Platforms All

### **user-db** *reference*

Synopsis Local user database for authentication  
 Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv6](#) [dhcp6](#) [relay](#) [user-db](#) [reference](#)

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|            |  |
|------------|--|
| Tree       | <a href="#">user-db</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                      |

## server

|            |  |
|------------|--|
| Synopsis   | Enter the <b>server</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">server</a> |
| Tree       | <a href="#">server</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## max-nbr-of-leases *number*

|            |  |
|------------|--|
| Synopsis   | DHCPv6 leases allowed  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">server</a> <a href="#">max-nbr-of-leases</a> <i>number</i> |
| Tree       | <a href="#">max-nbr-of-leases</a>  |
| Range      | 0 to 8000  |
| Default    | 8000   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## prefix-delegation

|            |  |
|------------|--|
| Synopsis   | Enter the <b>prefix-delegation</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">server</a> <a href="#">prefix-delegation</a> |
| Tree       | <a href="#">prefix-delegation</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## admin-state *keyword*

|          |   |
|----------|---|
| Synopsis | Administrative state of the prefix delegation |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 server prefix-delegation admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **prefix** [**ipv6-prefix**] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>prefix</b> list instance   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 server prefix-delegation prefix</b> <i>string</i> |
| Tree       | <b>prefix</b>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **[ipv6-prefix]** *string*

|            |   |
|------------|---|
| Synopsis   | IPv6 address and prefix   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 server prefix-delegation prefix</b> <i>string</i> |
| Tree       | <b>prefix</b>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **client-id**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>client-id</b> context   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 server prefix-delegation prefix</b> <i>string</i> <b>client-id</b> |
| Tree       | <b>client-id</b>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**duid string**

|               |  |
|---------------|--|
| Synopsis      | Requesting router ID   |
| Context       | <b>configure service ies string interface string ipv6 dhcp6 server prefix-delegation prefix string client-id duid string</b> |
| Tree          | <a href="#">duid</a>   |
| String Length | 1 to 130   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**iaid number**

|             |  |
|-------------|--|
| Synopsis    | IAID from the requesting router to match   |
| Context     | <b>configure service ies string interface string ipv6 dhcp6 server prefix-delegation prefix string client-id iaid number</b>   |
| Tree        | <a href="#">iaid</a>   |
| Description | This command configures the Identity Association ID (IAID) associated with a prefix delegation entry and must match the IAID sent by the requesting router for the prefix delegation to succeed. |
| Range       | 1 to 4294967295  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**preferred-lifetime (number | keyword)**

|             |  |
|-------------|--|
| Synopsis    | Preferred lifetime of the prefix   |
| Context     | <b>configure service ies string interface string ipv6 dhcp6 server prefix-delegation prefix string preferred-lifetime (number   keyword)</b> |
| Tree        | <a href="#">preferred-lifetime</a>   |
| Description | This command configures the preferred lifetime of the prefix. The value cannot be greater than the valid lifetime value.                     |
| Range       | 1 to 4294967294  |
| Units       | seconds  |
| Options     | infinite   |
| Default     | 604800   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**valid-lifetime** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Valid lifetime of the prefix  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">server</a> <a href="#">prefix-delegation</a> <a href="#">prefix</a> <a href="#">string</a> <b>valid-lifetime</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">valid-lifetime</a>  |
| Range      | 1 to 4294967294   |
| Units      | seconds   |
| Options    | infinite  |
| Default    | 2592000   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**duplicate-address-detection** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable Duplicate Address Detection per interface   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">duplicate-address-detection</a> <i>boolean</i> |
| Tree       | <a href="#">duplicate-address-detection</a>  |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**forward-ipv4-packets** *boolean*

|            |   |
|------------|---|
| Synopsis   | Forward unencapsulated IPv4 packets   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">forward-ipv4-packets</a> <i>boolean</i> |
| Tree       | <a href="#">forward-ipv4-packets</a>  |
| Default    | false   |
| Introduced | 19.5.R1   |
| Platforms  | All   |

**icmp6**

|          |  |
|----------|--|
| Synopsis | Enter the <b>icmp6</b> context   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <b>icmp6</b> |

|            |                       |
|------------|-----------------------|
| Tree       | <a href="#">icmp6</a> |
| Introduced | 16.0.R1               |
| Platforms  | All                   |

## packet-too-big

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>packet-too-big</b> context  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">icmp6</a> <a href="#">packet-too-big</a> |
| Tree        | <a href="#">packet-too-big</a>   |
| Description | Commands in this context configure limiting the number of ICMPv6 Packet Too Big messages.  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

## admin-state *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of Packet Too Big message sends  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">icmp6</a> <a href="#">packet-too-big</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## number *number*

|            |   |
|------------|---|
| Synopsis   | Number of Packet Too big Messages issued per time frame   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">icmp6</a> <a href="#">packet-too-big</a> <a href="#">number</a> <i>number</i> |
| Tree       | <a href="#">number</a>  |
| Range      | 10 to 1000  |
| Default    | 100   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**seconds** *number*

|            |  |
|------------|--|
| Synopsis   | Time used to limit Packet Too Big messages   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">icmp6</a> <a href="#">packet-too-big</a> <a href="#">seconds</a> <i>number</i> |
| Tree       | <a href="#">seconds</a>  |
| Range      | 1 to 60  |
| Default    | 10   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**param-problem**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>param-problem</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">icmp6</a> <a href="#">param-problem</a> |
| Tree       | <a href="#">param-problem</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of Parameter Problem message sends  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">icmp6</a> <a href="#">param-problem</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**number** *number*

|          |  |
|----------|--|
| Synopsis | Number used to limit ICMPv6 Parameter Problem messages   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">icmp6</a> <a href="#">param-problem</a> <a href="#">number</a> <i>number</i> |
| Tree     | <a href="#">number</a>   |
| Range    | 10 to 1000   |
| Default  | 100  |

---

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **seconds** *number*

|            |   |
|------------|---|
| Synopsis   | Time used to limit ICMPv6 Parameter Problem messages  |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 icmp6 param-problem seconds</b> <i>number</i> |
| Tree       | <b>seconds</b>  |
| Range      | 1 to 60   |
| Default    | 10  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **redirects**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>redirects</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 icmp6 redirects</b> |
| Tree       | <b>redirects</b>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of Redirect message sends   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 icmp6 redirects admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>   |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **number** *number*

|          |  |
|----------|--|
| Synopsis | Number to limit ICMPv6 Redirect messages per time frame  |
| Context  | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 icmp6 redirects number</b> <i>number</i> |



|            |                        |
|------------|------------------------|
| Tree       | <a href="#">number</a> |
| Range      | 10 to 1000             |
| Default    | 100                    |
| Introduced | 16.0.R1                |
| Platforms  | All                    |

### **seconds** *number*

|            |   |
|------------|---|
| Synopsis   | Time used to limit ICMPv6 Redirect messages   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 icmp6 redirects</a> <a href="#">seconds</a> <i>number</i> |
| Tree       | <a href="#">seconds</a>   |
| Range      | 1 to 60   |
| Default    | 10  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **time-exceeded**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>time-exceeded</b> context  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 icmp6 time-exceeded</a> |
| Tree       | <a href="#">time-exceeded</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of Time Exceeded message sends  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 icmp6 time-exceeded admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**number** *number*

|            |  |
|------------|--|
| Synopsis   | Number to limit Time Exceeded messages per time frame  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">icmp6</a> <a href="#">time-exceeded</a> <a href="#">number</a> <i>number</i> |
| Tree       | <a href="#">number</a>   |
| Range      | 10 to 2000   |
| Default    | 100  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**seconds** *number*

|            |   |
|------------|---|
| Synopsis   | Time used to limit ICMPv6 Time Exceeded messages  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">icmp6</a> <a href="#">time-exceeded</a> <a href="#">seconds</a> <i>number</i> |
| Tree       | <a href="#">seconds</a>   |
| Range      | 1 to 60   |
| Default    | 10  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**unreachables**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>unreachables</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">icmp6</a> <a href="#">unreachables</a> |
| Tree       | <a href="#">unreachables</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**admin-state** *keyword*

|          |   |
|----------|---|
| Synopsis | Administrative state of Unreachable message sends   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">icmp6</a> <a href="#">unreachables</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree     | <a href="#">admin-state</a>   |
| Options  | enable, disable   |
| Default  | enable  |

Introduced 16.0.R1  
 Platforms All

### **number** *number*

Synopsis Number to limit Unreachable messages per time frame  
 Context **configure** [service ies](#) *string* [interface](#) *string* [ipv6 icmp6 unreachable](#) *number* *number*  
 Tree [number](#)  
 Range 10 to 2000  
 Default 100  
 Introduced 16.0.R1  
 Platforms All

### **seconds** *number*

Synopsis Time used to limit ICMPv6 Unreachable messages  
 Context **configure** [service ies](#) *string* [interface](#) *string* [ipv6 icmp6 unreachable](#) *seconds* *number*  
 Tree [seconds](#)  
 Range 1 to 60  
 Default 10  
 Introduced 16.0.R1  
 Platforms All

### **link-local-address**

Synopsis Enter the **link-local-address** context  
 Context **configure** [service ies](#) *string* [interface](#) *string* [ipv6 link-local-address](#)  
 Tree [link-local-address](#)  
 Introduced 16.0.R1  
 Platforms All

### **address** *string*

Synopsis IPv6 link-local address  
 Context **configure** [service ies](#) *string* [interface](#) *string* [ipv6 link-local-address](#) *address* *string*

|            |                         |
|------------|-------------------------|
| Tree       | <a href="#">address</a> |
| Introduced | 16.0.R1                 |
| Platforms  | All                     |

### **duplicate-address-detection** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Enable Duplicate Address Detection   |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 link-local-address duplicate-address-detection</a> <i>boolean</i>  |
| Tree        | <a href="#">duplicate-address-detection</a>  |
| Description | When configured to <b>true</b> , the router enables Duplicate Address Detection (DAD) on the interface.<br>When configured to <b>false</b> , the router disables DAD and sets the address to preferred, even if there is a duplicated address. |
| Default     | true   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **local-dhcp-server** *reference*

|            |  |
|------------|--|
| Synopsis   | DHCP server for the interface  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 local-dhcp-server</a> <i>reference</i> |
| Tree       | <a href="#">local-dhcp-server</a>  |
| Reference  | <b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **neighbor-discovery**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>neighbor-discovery</b> context  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 neighbor-discovery</a> |
| Tree       | <a href="#">neighbor-discovery</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**host-route**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>host-route</b> context   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 neighbor-discovery host-route</b> |
| Tree       | <b>host-route</b>   |
| Introduced | 20.2.R1   |
| Platforms  | All   |

**populate** [*route-type*] *keyword*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>populate</b> list instance   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 neighbor-discovery host-route populate</b> <i>keyword</i> |
| Tree       | <b>populate</b>   |
| Introduced | 20.2.R1   |
| Platforms  | All   |

**[route-type]** *keyword*

|            |   |
|------------|---|
| Synopsis   | Type of ARP or ND entries that generate host routes   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 neighbor-discovery host-route populate</b> <i>keyword</i> |
| Tree       | <b>populate</b>   |
| Options    | static, dynamic, evpn   |
| Notes      | This element is part of a list key.   |
| Introduced | 20.2.R1   |
| Platforms  | All   |

**route-tag** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | Tag value used with the host route from an ARP/ND entry  |
| Context  | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 neighbor-discovery host-route populate</b> <i>keyword</i> <b>route-tag</b> <i>number</i> |
| Tree     | <b>route-tag</b>   |

|             |  |
|-------------|--|
| Description | This command specifies the route tag that is added in the route table for ARP or ND host routes. This tag can be matched on BGP VRF export and BGP peer export policies. |
| Range       | 1 to 255   |
| Introduced  | 20.2.R1  |
| Platforms   | All  |

### **learn-unsolicited** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Type of entries learned from unsolicited NA messages  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">learn-unsolicited</a> <a href="#">keyword</a>  |
| Tree        | <a href="#">learn-unsolicited</a>   |
| Description | This command enables the ability to learn neighbor entries out of received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited flag set.<br><br>When unconfigured, the router follows standard RFC 4861 behavior for learning of neighbor entries. The neighbor is put in the stale state. This is the standard RFC behavior. |
| Options     | global, link-local, both  |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **limit**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>limit</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">limit</a> |
| Tree       | <a href="#">limit</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **log-only** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Generate log entries when limit is reached  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">limit</a> <a href="#">log-only</a> <a href="#">boolean</a> |
| Tree        | <a href="#">log-only</a>  |
| Description | When configured to <b>true</b> , the router sends the warning message at the specified threshold percentage or upon exceeding the specified limit. Entries that exceed the limit are learned.   |

When configured to **false**, the router does not send the warning message.

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **max-entries** *number*

|             |   |
|-------------|---|
| Synopsis    | Maximum number of entries learned on an IP interface  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">limit</a> <a href="#">max-entries</a> <a href="#">number</a> |
| Tree        | <a href="#">max-entries</a>   |
| Description | This command configures the maximum number of entries that can be learned on an IP interface.<br>When unconfigured, no maximum limit is imposed.  |
| Range       | 0 to 102400   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **threshold** *number*

|            |   |
|------------|---|
| Synopsis   | Threshold percentage that triggers a warning message  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">limit</a> <a href="#">threshold</a> <a href="#">number</a> |
| Tree       | <a href="#">threshold</a>   |
| Range      | 1 to 100  |
| Units      | percent   |
| Default    | 90  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **local-proxy-nd** *boolean*

|          |   |
|----------|---|
| Synopsis | Enable local proxy neighbor discovery on the interface  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">local-proxy-nd</a> <a href="#">boolean</a> |
| Tree     | <a href="#">local-proxy-nd</a>  |

|             |   |
|-------------|---|
| Description | <p>When configured to <b>true</b>, the router enables local proxy neighbor discovery on the interface and replies to neighbor solicitation requests when both the hosts are on the same subnet. In this case, ICMP redirects are disabled.</p> <p>When configured to <b>false</b>, the router disables local proxy neighbor discovery on the interface and does not reply to neighbor solicitation requests if both the hosts are on the same subnet.</p> |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **proactive-refresh** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Proactive refresh of neighbor entries   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <b>proactive-refresh</b> <i>keyword</i>  |
| Tree        | <a href="#">proactive-refresh</a>   |
| Description | This command enables a proactive refresh of the neighbor entries. After the stale timer expires, the router sends an NUD message to the host (regardless of the existence of traffic to the IP address on the IOM), so the entry can be refreshed or removed. |
| Options     | global, link-local, both  |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **proxy-nd-policy** *reference*

|                |  |
|----------------|--|
| Synopsis       | Proxy Neighbor Discovery policy name for the interface   |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <b>proxy-nd-policy</b> <i>reference</i> |
| Tree           | <a href="#">proxy-nd-policy</a>  |
| Reference      | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>   |
| Max. Instances | 5  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R1  |
| Platforms      | All  |



**reachable-time** *number*

|            |  |
|------------|--|
| Synopsis   | Neighbor reachability detection timer  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">reachable-time</a> <a href="#">number</a> |
| Tree       | <a href="#">reachable-time</a>   |
| Range      | 30 to 3600   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**secure-nd**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>secure-nd</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">secure-nd</a> |
| Tree       | <a href="#">secure-nd</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of Secure Neighbor Discovery  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">secure-nd</a> <a href="#">admin-state</a> <a href="#">keyword</a> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**allow-unsecured-msgs** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Accept unsecured messages   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">secure-nd</a> <a href="#">allow-unsecured-msgs</a> <a href="#">boolean</a> |
| Tree        | <a href="#">allow-unsecured-msgs</a>  |
| Description | When configured to <b>true</b> , the router accepts unsecured messages. When Secure Neighbor Discovery (SeND) is enabled, only secure messages are accepted.  |

When configured to **false**, the router disables the acceptance of unsecured messages.

|            |         |
|------------|---------|
| Default    | true    |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **public-key-min-bits** *number*

|            |   |
|------------|---|
| Synopsis   | Minimum acceptable key length for public keys in CGA  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>neighbor-discovery</b> <b>secure-nd</b> <b>public-key-min-bits</b> <i>number</i> |
| Tree       | <a href="#">public-key-min-bits</a>   |
| Range      | 512 to 1024   |
| Default    | 1024  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **security-parameter** *number*

|            |  |
|------------|--|
| Synopsis   | Security parameter used in the generation of a CGA   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>neighbor-discovery</b> <b>secure-nd</b> <b>security-parameter</b> <i>number</i> |
| Tree       | <a href="#">security-parameter</a>   |
| Range      | 0 to 1   |
| Default    | 1  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **stale-time** *number*

|            |   |
|------------|---|
| Synopsis   | Time a Neighbor Discovery cache entry remains stale   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>neighbor-discovery</b> <b>stale-time</b> <i>number</i> |
| Tree       | <a href="#">stale-time</a>  |
| Range      | 60 to 65535   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**static-neighbor** [ipv6-address] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>static-neighbor</b> list instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">static-neighbor</a> <i>string</i> |
| Tree       | <a href="#">static-neighbor</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[ipv6-address]** *string*

|            |  |
|------------|--|
| Synopsis   | IPv6 address corresponding to the physical address   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">static-neighbor</a> <i>string</i> |
| Tree       | <a href="#">static-neighbor</a>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**mac-address** *string*

|            |  |
|------------|--|
| Synopsis   | MAC address for the static neighbor  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">static-neighbor</a> <i>string</i> <a href="#">mac-address</a> <i>string</i> |
| Tree       | <a href="#">mac-address</a>  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**qos-route-lookup** *keyword*

|            |   |
|------------|---|
| Synopsis   | QoS Route lookup  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">qos-route-lookup</a> <i>keyword</i> |
| Tree       | <a href="#">qos-route-lookup</a>  |
| Options    | destination, source   |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **tcp-mss** *number*

Synopsis TCP maximum segment size for the interface  
Context **configure service ies** *string* **interface** *string* **ipv6 tcp-mss** *number*  
Tree [tcp-mss](#)  
Range 1220 to 9726  
Introduced 16.0.R1  
Platforms All

### **urpf-check**

Synopsis Enable the **urpf-check** context  
Context **configure service ies** *string* **interface** *string* **ipv6 urpf-check**  
Tree [urpf-check](#)  
Introduced 16.0.R1  
Platforms All

### **ignore-default** *boolean*

Synopsis Ignore default route when performing a uRPF check  
Context **configure service ies** *string* **interface** *string* **ipv6 urpf-check ignore-default** *boolean*  
Tree [ignore-default](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **mode** *keyword*

Synopsis Unicast RPF check mode  
Context **configure service ies** *string* **interface** *string* **ipv6 urpf-check mode** *keyword*  
Tree [mode](#)  
Options strict, loose, strict-no-ecmp  
Default strict

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **vrrp** [*virtual-router-id*] *number*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>vrrp</b> list instance  |
| Context        | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 vrrp</b> <i>number</i> |
| Tree           | <b>vrrp</b>  |
| Max. Instances | 4  |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

### [*virtual-router-id*] *number*

|            |  |
|------------|--|
| Synopsis   | Virtual Router Identifier (VRID) for the IP interface  |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 vrrp</b> <i>number</i> |
| Tree       | <b>vrrp</b>  |
| Range      | 1 to 255   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **admin-state** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Administrative state of VRRP  |
| Context     | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 vrrp</b> <i>number</i> <b>admin-state</b> <i>keyword</i>  |
| Tree        | <b>admin-state</b>  |
| Description | <p>The command determines the administrative state of non-owner virtual router instances.</p> <p>Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes.</p> <p>When <b>disabled</b>, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing.</p> |

Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated.

An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the **admin-state** command within the parent IP interface node which administratively disables the IP interface.

|            |                 |
|------------|-----------------|
| Options    | enable, disable |
| Default    | enable          |
| Introduced | 16.0.R1         |
| Platforms  | All             |

### **backup string**

|                |  |
|----------------|--|
| Synopsis       | Virtual router IP addresses for the interface  |
| Context        | <b>configure service ies string interface string ipv6 vrrp number backup string</b>  |
| Tree           | <b>backup</b>  |
| Description    | <p>This command associates router IPv6 virtual router IP addresses with those of the parental IP interface.</p> <p>This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance.</p> <p>Non-owner virtual router instance create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup). This command, when executed on an owner virtual router instance, does not create a routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance.</p> <p>For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is representing to backup virtual routers receiving the messages. The specified IPv6 address must be equal to one of the existing parental IP addresses in the parental IP interface (primary or secondary) or this command fails.</p> <p>See "Owner and non-owner VRRP" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide</i> for more information about owner and non-owner virtual router instances.</p> |
| Max. Instances | 4  |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

### **bfd-liveness**

|          |  |
|----------|--|
| Synopsis | Enable the <b>bfd-liveness</b> context |
|----------|--|

|            |  |
|------------|--|
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 vrrp</b> <i>number</i> <b>bfd-liveness</b> |
| Tree       | <b>bfd-liveness</b>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **dest-ip** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Destination address for the BFD session   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 vrrp</b> <i>number</i> <b>bfd-liveness</b> <b>dest-ip</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <b>dest-ip</b>  |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **interface-name** *string*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Name of the interface running BFD  |
| Context       | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 vrrp</b> <i>number</i> <b>bfd-liveness</b> <b>interface-name</b> <i>string</i> |
| Tree          | <b>interface-name</b>  |
| String Length | 1 to 32  |
| Notes         | This element is mandatory.   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**service-name** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Administrative service name   |
| Context       | <b>configure</b> <i>service ies string interface string ipv6 vrrp number bfd-liveness service-name string</i> |
| Tree          | <i>service-name</i>   |
| String Length | 1 to 64   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**init-delay** *number*

|            |  |
|------------|--|
| Synopsis   | VRRP initialization delay timer  |
| Context    | <b>configure</b> <i>service ies string interface string ipv6 vrrp number init-delay number</i> |
| Tree       | <i>init-delay</i>  |
| Range      | 1 to 65535   |
| Units      | seconds  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**mac** *string*

|             |  |
|-------------|--|
| Synopsis    | Virtual MAC address to use in ARP responses  |
| Context     | <b>configure</b> <i>service ies string interface string ipv6 vrrp number mac string</i>  |
| Tree        | <i>mac</i>   |
| Description | <p>This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID.</p> <p>Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address.</p> <p>Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with <i>unicast-mac-address</i> as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts</p> |



results. All VRRP advertisement messages are transmitted with *unicast-mac-address* as the source MAC.

An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **master-int-inherit** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Allow master instance to dictate the master down timer   |
| Context     | <b>configure</b> <i>service ies string interface string ipv6 vrrp number master-int-inherit boolean</i>  |
| Tree        | <a href="#">master-int-inherit</a>   |
| Description | When configured to <b>true</b> , the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer.<br><br>When configured to <b>false</b> , the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded. |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **message-interval** *number*

|             |   |
|-------------|---|
| Synopsis    | Interval for sending VRRP advertisement messages  |
| Context     | <b>configure</b> <i>service ies string interface string ipv6 vrrp number message-interval number</i>  |
| Tree        | <a href="#">message-interval</a>  |
| Description | This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command.<br><br>The use of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the <b>master-int-inherit</b> command: <ul style="list-style-type: none"> <li>• When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar to an owner virtual router instance. The <b>master-int-inherit</b> command has no effect when operating as the master.</li> <li>• When a non-owner is in the backup state with <b>master-int-inherit</b> disabled, the system uses the configured value of this command to match the incoming</li> </ul> |

advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement.

- When a non-owner is in the backup state with **master-int-inherit** enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message.

|            |              |
|------------|--------------|
| Range      | 10 to 4095   |
| Units      | centiseconds |
| Default    | 100          |
| Introduced | 16.0.R1      |
| Platforms  | All          |

### **monitor-oper-group** *reference*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | VRRP instance to follow a specified operational group   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">vrrp</a> <a href="#">number</a> <b>monitor-oper-group</b> <a href="#">reference</a>   |
| Tree        | <a href="#">monitor-oper-group</a>  |
| Description | This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states. |
| Reference   | <b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <a href="#">string</a>  |
| Introduced  | 22.2.R1   |
| Platforms   | All   |

### **ntp-reply** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Allow processing of NTP requests   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">vrrp</a> <a href="#">number</a> <b>ntp-reply</b> <a href="#">boolean</a> |
| Tree        | <a href="#">ntp-reply</a>  |
| Description | When configured to <b>true</b> , the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router.  |

When configured to **false**, the router does not process NTP requests.

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 20.2.R1 |
| Platforms  | All     |

### **oper-group** *reference*

|             |   |
|-------------|---|
| Synopsis    | Operational group name associated with the VRRP   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">vrrp</a> <a href="#">number</a> <a href="#">oper-group</a> <a href="#">reference</a>  |
| Tree        | <a href="#">oper-group</a>  |
| Description | This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router (MR), the operational group is up. The operational group is down for all other VRRP states. |
| Reference   | <b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <a href="#">string</a>  |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **owner** *boolean*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Designate the virtual router instance as owner  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">vrrp</a> <a href="#">number</a> <a href="#">owner</a> <a href="#">boolean</a>   |
| Tree        | <a href="#">owner</a>   |
| Description | When configured to <b>true</b> , the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router.<br><br>When configured to <b>false</b> , this virtual router instance is designated as a non-owner. |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**passive** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Suppress the processing of VRRP advertisement messages  |
| Context     | <b>configure</b> <i>service ies string interface string ipv6 vrrp number</i> <b>passive</b> <i>boolean</i>  |
| Tree        | <b>passive</b>  |
| Description | <p>When configured to <b>true</b>, the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down).</p> <p>When configured to <b>false</b>, this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages.</p> |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**ping-reply** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Allow non-owner master to reply to ICMP echo requests   |
| Context     | <b>configure</b> <i>service ies string interface string ipv6 vrrp number</i> <b>ping-reply</b> <i>boolean</i>   |
| Tree        | <b>ping-reply</b>   |
| Description | <p>When configured to <b>true</b>, the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address).</p> <p>When configured to <b>false</b>, ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded.</p> <p>Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.</p> |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**policy** *reference*

|          |                              |
|----------|------------------------------|
| Synopsis | VRRP priority control policy |
|----------|------------------------------|

|             |  |
|-------------|--|
| Context     | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 vrrp</b> <i>number</i> <b>policy</b> <i>reference</i>  |
| Tree        | <b>policy</b>  |
| Description | <p>This command configures a VRRP priority control policy to associate with the virtual router instance.</p> <p>VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis.</p> <p>An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with the <b>priority</b> command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value.</p> <p>For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.</p> |
| Reference   | <b>configure vrrp policy</b> <i>number</i>   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **preempt** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Allow the VRRP to override an existing non-owner master  |
| Context     | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 vrrp</b> <i>number</i> <b>preempt</b> <i>boolean</i>   |
| Tree        | <b>preempt</b>   |
| Description | <p>When configured to <b>true</b>, this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router.</p> <p>When configured to <b>false</b>, this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router.</p> |
| Default     | true   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **priority** *number*

|             |   |
|-------------|---|
| Synopsis    | Base priority for the VRRP  |
| Context     | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 vrrp</b> <i>number</i> <b>priority</b> <i>number</i>                                    |
| Tree        | <b>priority</b>   |
| Description | This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process. |

The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis.

|            |          |
|------------|----------|
| Range      | 1 to 255 |
| Introduced | 16.0.R1  |
| Platforms  | All      |

### **standby-forwarding** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Allow standby router to forward traffic   |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrrp number</a> <a href="#">standby-forwarding</a> <i>boolean</i>   |
| Tree        | <a href="#">standby-forwarding</a>  |
| Description | When configured to <b>true</b> , the standby router forwards all traffic.<br>When configured to <b>false</b> , the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address. |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **telnet-reply** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Allow non-owner master to reply to Telnet requests   |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrrp number</a> <a href="#">telnet-reply</a> <i>boolean</i>  |
| Tree        | <a href="#">telnet-reply</a>   |
| Description | When configured to <b>true</b> , the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address).<br>When configured to <b>false</b> , the router silently discards Telnet requests sent to non-owner master virtual IP addresses. |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**traceroute-reply** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Allow non-owner master to reply to traceroute requests  |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrrp</a> <i>number</i> <a href="#">traceroute-reply</a> <i>boolean</i>  |
| Tree        | <a href="#">traceroute-reply</a>  |
| Description | <p>When configured to <b>true</b>, the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance.</p> <p>When configured to <b>false</b>, the router silently discards traceroute requests sent to non-owner master virtual IP addresses.</p> <p>Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address).</p> |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**load-balancing**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>load-balancing</b> context   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">load-balancing</a> |
| Tree       | <a href="#">load-balancing</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**flow-label-load-balancing** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Enable flow label load balancing  |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">load-balancing</a> <a href="#">flow-label-load-balancing</a> <i>boolean</i>  |
| Tree        | <a href="#">flow-label-load-balancing</a>   |
| Description | <p>When configured to <b>true</b>, the router enables load balancing in ECMP and LAG based on the output of a hash performed on the triplet (SA, DA, flow label) in the header of an IPv6 packet received on an IES, VPRN, R-VPLS, CSC, or network interface.</p> <p>When configured to <b>false</b>, the router disables load balancing in ECMP and LAG.</p> |
| Default     | false   |
| Introduced  | 21.5.R1   |
| Platforms   | All   |

**ip-load-balancing** *keyword*

|             |  |
|-------------|--|
| Synopsis    | IP load-balancing algorithm  |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">load-balancing</a> <a href="#">ip-load-balancing</a> <i>keyword</i>   |
| Tree        | <a href="#">ip-load-balancing</a>  |
| Description | This command specifies whether to include the source address, destination address, or both in LAG or ECMP hash on IP interfaces. Additionally, when the <b>l4-load-balancing</b> command is enabled, this command also includes the source or destination port in the hash inputs. |
| Options     | both, destination, source, inner-ip  |
| Default     | both   |
| Introduced  | 16.0.R3  |
| Platforms   | All  |

**spi-load-balancing** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Enable SPI use in hashing   |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">load-balancing</a> <a href="#">spi-load-balancing</a> <i>boolean</i> |
| Tree        | <a href="#">spi-load-balancing</a>  |
| Description | When configured to <b>true</b> , the router uses the Security Parameter Index (SPI) in hashing for ESP and AH encrypted IPv4 and IPv6 traffic. This is a per-interface setting.     |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**teid-load-balancing** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable use of TEID in hashing  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">load-balancing</a> <a href="#">teid-load-balancing</a> <i>boolean</i> |
| Tree       | <a href="#">teid-load-balancing</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**loopback** *boolean*

|          |                                       |
|----------|---------------------------------------|
| Synopsis | Use interface as a loopback interface |
|----------|---------------------------------------|



---

|            |  |
|------------|--|
| Context    | <b>configure service ies</b> <i>string interface string loopback boolean</i> |
| Tree       | <a href="#">loopback</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **mac string**

|            |  |
|------------|--|
| Synopsis   | MAC address for the interface  |
| Context    | <b>configure service ies</b> <i>string interface string mac string</i> |
| Tree       | <a href="#">mac</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **mac-accounting boolean**

|            |  |
|------------|--|
| Synopsis   | Enable MAC accounting functionality  |
| Context    | <b>configure service ies</b> <i>string interface string mac-accounting boolean</i> |
| Tree       | <a href="#">mac-accounting</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **monitor-oper-group reference**

|            |  |
|------------|--|
| Synopsis   | Operational group to monitor   |
| Context    | <b>configure service ies</b> <i>string interface string monitor-oper-group reference</i> |
| Tree       | <a href="#">monitor-oper-group</a>   |
| Reference  | <b>configure service oper-group</b> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **multi-chassis-shunting-profile reference**

|          |                                     |
|----------|-------------------------------------|
| Synopsis | Multi-chassis shunting profile name |
|----------|-------------------------------------|

|             |   |
|-------------|---|
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">multi-chassis-shunting-profile</a> <i>reference</i>            |
| Tree        | <a href="#">multi-chassis-shunting-profile</a>  |
| Description | This command configures the name of a multi-chassis shunting profile to use on public or private tunnel interfaces.   |
| Reference   | <b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ipsec</a> <a href="#">multi-chassis-shunting-profile</a> <i>string</i>                                      |
| Notes       | The following elements are part of a choice: <b>multi-chassis-shunting-profile</b> or ( <b>dynamic-tunnel-redundant-nexthop</b> and <b>static-tunnel-redundant-nexthop</b> ). |
| Introduced  | 22.5.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **multicast-network-domain** *reference*

|            |  |
|------------|--|
| Synopsis   | Network domain name  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">multicast-network-domain</a> <i>reference</i> |
| Tree       | <a href="#">multicast-network-domain</a>   |
| Reference  | <b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">network-domains</a> <a href="#">network-domain</a> <i>string</i>                           |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **ping-template**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>ping-template</b> context  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ping-template</a> |
| Tree       | <a href="#">ping-template</a>  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the ping template   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ping-template</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 20.10.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## destination-address *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Ping template destination address

Context **configure** [service ies](#) *string* [interface](#) *string* [ping-template](#) [destination-address](#) *string*

Tree [destination-address](#)

Description This command configures the address to where the ICMP echo requests are directed to test connectivity. The source of the ICMP echo request is the primary IPv4 address of the interface under which the ping-template is configured. The destination address must be on the same subnet as the source IP address. A configuration warning message displays if the primary IPv4 address and the destination are not on the same subnet, INFO: PIP #2092 Ping template misconfiguration - destination-address and primary IP address should fall in the same subnet.

Unnumbered interfaces and loopback addresses are not supported.

The config service ies|vprn interface ping-template must be administratively disabled to remove or change the destination-address ip-address.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## name *reference*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Ping template name

Context **configure** [service ies](#) *string* [interface](#) *string* [ping-template](#) [name](#) *reference*

Tree [name](#)

Description This command configures the name of the ping template to be assigned to the IP interface.

Reference **configure** [test-oam icmp ping-template](#) *string*

Notes This element is mandatory.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ptp-hw-assist**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ptp-hw-assist</b> context  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>ptp-hw-assist</b> |
| Tree       | <a href="#">ptp-hw-assist</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**admin-state** *keyword*

|             |  |
|-------------|--|
| Synopsis    | Administrative state of the PTP time stamping assist   |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>ptp-hw-assist</b> <b>admin-state</b> <i>keyword</i>  |
| Tree        | <a href="#">admin-state</a>  |
| Description | This command controls the administrative state of port-based time stamping assist of PTP packets at the physical interface. This capability is supported on specific hardware. The command may be blocked if not all hardware has the required level of support.<br><br>Only one interface per physical port can have ptp-hw-assist enabled. This feature cannot be enabled if the physical port supporting the interface is configured as a PTP port. |
| Options     | enable, disable  |
| Default     | disable  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**radius-auth-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | Authentication policy   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>radius-auth-policy</b> <i>reference</i> |
| Tree       | <a href="#">radius-auth-policy</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <b>radius-authentication-policy</b> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**sap** [[sap-id](#)] *string*

|          |                                    |
|----------|------------------------------------|
| Synopsis | Enter the <b>sap</b> list instance |
|----------|------------------------------------|

|                |   |
|----------------|---|
| Context        | <b>configure service ies string interface string sap string</b> |
| Tree           | <b>sap</b>  |
| Max. Instances | 1   |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

**[sap-id] string**

|               |   |
|---------------|---|
| Synopsis      | SAP ID  |
| Context       | <b>configure service ies string interface string sap string</b> |
| Tree          | <b>sap</b>  |
| String Length | 1 to 45   |
| Notes         | This element is part of a list key.                             |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**aarp**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>aarp</b> context                                       |
| Context    | <b>configure service ies string interface string sap string aarp</b> |
| Tree       | <b>aarp</b>  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                         |

**id reference**

|            |   |
|------------|---|
| Synopsis   | AARP instance ID  |
| Context    | <b>configure service ies string interface string sap string aarp id reference</b> |
| Tree       | <b>id</b>   |
| Reference  | <b>configure application-assurance aarp number</b>                                |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                      |

**type keyword**

|            |   |
|------------|---|
| Synopsis   | Role referenced by the AARP   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">aarp</a> <a href="#">type</a> <i>keyword</i> |
| Tree       | <a href="#">type</a>  |
| Options    | dual-homed, dual-homed-secondary  |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**accounting-policy reference**

|            |   |
|------------|---|
| Synopsis   | Accounting policy   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">accounting-policy</a> <i>reference</i> |
| Tree       | <a href="#">accounting-policy</a>   |
| Reference  | <b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**admin-state keyword**

|            |   |
|------------|---|
| Synopsis   | Administrative state of the SAP   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**anti-spoof keyword**

|            |  |
|------------|--|
| Synopsis   | Anti-spoof filtering   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">anti-spoof</a> <i>keyword</i> |
| Tree       | <a href="#">anti-spoof</a>   |
| Options    | source-ip-addr, source-mac-addr, source-ip-and-mac-addr, next-hop-ip-and-mac-addr  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**app-profile** *reference*

|            |   |
|------------|---|
| Synopsis   | Application profile name  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">app-profile</a> <i>reference</i>   |
| Tree       | <a href="#">app-profile</a>   |
| Reference  | <b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i> |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**bandwidth** *number*

|            |  |
|------------|--|
| Synopsis   | SAP bandwidth  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">bandwidth</a> <i>number</i> |
| Tree       | <a href="#">bandwidth</a>  |
| Range      | 1 to 6400000000  |
| Units      | kilobps  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**calling-station-id** *string*

|               |   |
|---------------|---|
| Synopsis      | Calling station ID  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">calling-station-id</a> <i>string</i> |
| Tree          | <a href="#">calling-station-id</a>  |
| String Length | 1 to 64   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**collect-stats** *boolean*

|            |   |
|------------|---|
| Synopsis   | Collect accounting statistics   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">collect-stats</a> <i>boolean</i> |
| Tree       | <a href="#">collect-stats</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |

Platforms All

## cpu-protection

Synopsis Enter the **cpu-protection** context

Context **configure service ies string interface string sap string cpu-protection**

Tree [cpu-protection](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## eth-cfm-monitoring

Synopsis Enable the **eth-cfm-monitoring** context

Context **configure service ies string interface string sap string cpu-protection eth-cfm-monitoring**

Tree [eth-cfm-monitoring](#)

Notes The following elements are part of a choice: **eth-cfm-monitoring**, **ip-src-monitoring**, or **mac-monitoring**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## aggregate

Synopsis Apply rate limit to the sum of the per peer packet rates

Context **configure service ies string interface string sap string cpu-protection eth-cfm-monitoring aggregate**

Tree [aggregate](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## car

Synopsis Ignore Ethernet CFM packets when enforcing overall rate

Context **configure service ies string interface string sap string cpu-protection eth-cfm-monitoring car**

Tree [car](#)

Introduced 16.0.R1



Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## ip-src-monitoring

Synopsis Enable IP source monitoring for CPU protection

Context **configure** [service ies string](#) [interface string](#) [sap string](#) [cpu-protection ip-src-monitoring](#)

Tree [ip-src-monitoring](#)

Notes The following elements are part of a choice: **eth-cfm-monitoring**, **ip-src-monitoring**, or **mac-monitoring**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## mac-monitoring

Synopsis Monitor MAC for CPU protection

Context **configure** [service ies string](#) [interface string](#) [sap string](#) [cpu-protection mac-monitoring](#)

Tree [mac-monitoring](#)

Notes The following elements are part of a choice: **eth-cfm-monitoring**, **ip-src-monitoring**, or **mac-monitoring**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## policy-id *reference*

Synopsis CPM protection policy

Context **configure** [service ies string](#) [interface string](#) [sap string](#) [cpu-protection policy-id reference](#)

Tree [policy-id](#)

Reference **configure** [system security cpu-protection policy number](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## description *string*

Synopsis Text description

Context **configure** [service ies string](#) [interface string](#) [sap string](#) [description string](#)

Tree [description](#)

String Length 1 to 160  
 Introduced 16.0.R1  
 Platforms All

### **dist-cpu-protection** *reference*

Synopsis Distributed CPU protection policy for SAP  
 Context **configure** [service ies string](#) [interface string](#) [sap string](#) [dist-cpu-protection reference](#)  
 Tree [dist-cpu-protection](#)  
 Reference **configure** [system security dist-cpu-protection policy string](#)  
 Introduced 16.0.R1  
 Platforms All

### **egress**

Synopsis Enter the **egress** context  
 Context **configure** [service ies string](#) [interface string](#) [sap string](#) [egress](#)  
 Tree [egress](#)  
 Introduced 16.0.R1  
 Platforms All

### **agg-rate**

Synopsis Enter the **agg-rate** context  
 Context **configure** [service ies string](#) [interface string](#) [sap string](#) [egress](#) [agg-rate](#)  
 Tree [agg-rate](#)  
 Notes The following elements are part of a choice: **agg-rate** or **percent-agg-rate**.  
 Introduced 16.0.R1  
 Platforms All

### **adaptation-rule** *keyword*

Synopsis Adaptation rule to compute the operational PIR value when an aggregate shaper is used  
 Context **configure** [service ies string](#) [interface string](#) [sap string](#) [egress](#) [agg-rate](#) [adaptation-rule keyword](#)

|            |                                 |
|------------|---------------------------------|
| Tree       | <a href="#">adaptation-rule</a> |
| Options    | max, min, closest               |
| Default    | closest                         |
| Introduced | 22.10.R1                        |
| Platforms  | 7750 SR-1, 7750 SR-s            |

### **burst-limit** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Shaping burst size when an aggregate shaper is used   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a> <a href="#">burst-limit</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">burst-limit</a>   |
| Range      | 1 to 14000000   |
| Units      | bytes   |
| Options    | auto  |
| Default    | auto  |
| Introduced | 22.10.R1  |
| Platforms  | 7750 SR-1, 7750 SR-s  |

### **limit-unused-bandwidth** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable aggregate rate overrun protection   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a> <a href="#">limit-unused-bandwidth</a> <i>boolean</i> |
| Tree       | <a href="#">limit-unused-bandwidth</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **queue-frame-based-accounting** *boolean*

|          |  |
|----------|--|
| Synopsis | Enable frame based accounting on policers and queues   |
| Context  | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a> <a href="#">queue-frame-based-accounting</a> <i>boolean</i> |
| Tree     | <a href="#">queue-frame-based-accounting</a>   |
| Default  | false  |

Introduced 16.0.R1  
 Platforms All

### **rate number**

Synopsis Enforced aggregate rate for all queues  
 Context **configure** [service ies string](#) [interface string](#) [sap string](#) [egress agg-rate rate number](#)  
 Tree [rate](#)  
 Range 1 to 6400000000  
 Units kilobps  
 Introduced 16.0.R1  
 Platforms All

### **filter**

Synopsis Enter the **filter** context  
 Context **configure** [service ies string](#) [interface string](#) [sap string](#) [egress filter](#)  
 Tree [filter](#)  
 Introduced 16.0.R1  
 Platforms All

### **ip reference**

Synopsis IPv4 filter policy name  
 Context **configure** [service ies string](#) [interface string](#) [sap string](#) [egress filter ip reference](#)  
 Tree [ip](#)  
 Reference **configure** [filter ip-filter string](#)  
 Introduced 16.0.R1  
 Platforms All

### **ipv6 reference**

Synopsis IPv6 filter policy name  
 Context **configure** [service ies string](#) [interface string](#) [sap string](#) [egress filter ipv6 reference](#)  
 Tree [ipv6](#)

|            |   |
|------------|---|
| Reference  | <b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## qos

|            |   |
|------------|---|
| Synopsis   | Enter the <b>qos</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> |
| Tree       | <a href="#">qos</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## policer-control-policy

|            |  |
|------------|--|
| Synopsis   | Enter the <b>policer-control-policy</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> |
| Tree       | <a href="#">policer-control-policy</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

## overrides

|            |  |
|------------|--|
| Synopsis   | Enable the <b>overrides</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> |
| Tree       | <a href="#">overrides</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

## root

|            |   |
|------------|---|
| Synopsis   | Enter the <b>root</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> |
| Tree       | <a href="#">root</a>  |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **max-rate** (*number* | *keyword*)

Synopsis Maximum frame-based bandwidth limit

Context **configure service ies** *string* **interface** *string* **sap** *string* **egress qos policer-control-policy overrides root max-rate** (*number* | *keyword*)

Tree [max-rate](#)

Range 1 to 6400000000

Options max

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **priority-mbs-thresholds**

Synopsis Enter the **priority-mbs-thresholds** context

Context **configure service ies** *string* **interface** *string* **sap** *string* **egress qos policer-control-policy overrides root priority-mbs-thresholds**

Tree [priority-mbs-thresholds](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **min-thresh-separation** (*number* | *keyword*)

Synopsis Minimum amount of separation buffer space

Context **configure service ies** *string* **interface** *string* **sap** *string* **egress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation** (*number* | *keyword*)

Tree [min-thresh-separation](#)

Range 0 to 16777216

Units bytes

Options auto

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**priority** [*priority-level*] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>priority</b> list instance   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress</b> <b>qos</b> <b>policer-control-policy</b> <b>overrides</b> <b>root</b> <b>priority-mbs-thresholds</b> <b>priority</b> <i>number</i> |
| Tree       | <b>priority</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**[priority-level]** *number*

|            |   |
|------------|---|
| Synopsis   | Priority level  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress</b> <b>qos</b> <b>policer-control-policy</b> <b>overrides</b> <b>root</b> <b>priority-mbs-thresholds</b> <b>priority</b> <i>number</i> |
| Tree       | <b>priority</b>   |
| Range      | 1 to 8  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**mbs-contribution** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Minimum amount of cumulative buffer space allowed  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress</b> <b>qos</b> <b>policer-control-policy</b> <b>overrides</b> <b>root</b> <b>priority-mbs-thresholds</b> <b>priority</b> <i>number</i> <b>mbs-contribution</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <b>mbs-contribution</b>  |
| Range      | 0 to 16777216  |
| Units      | bytes  |
| Options    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**policy-name** *reference*

|          |                             |
|----------|-----------------------------|
| Synopsis | Policer control policy name |
|----------|-----------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos policer-control-policy</b> <i>policy-name</i> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure qos policer-control-policy</b> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

### **qinq-mark-top-only** *boolean*

|            |  |
|------------|--|
| Synopsis   | Mark top Q-tags  |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos qinq-mark-top-only</b> <i>boolean</i> |
| Tree       | <a href="#">qinq-mark-top-only</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **sap-egress**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>sap-egress</b> context   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress</b> |
| Tree       | <a href="#">sap-egress</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **overrides**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>overrides</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides</b> |
| Tree       | <a href="#">overrides</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **hs-secondary-shaper** *string*

|          |                     |
|----------|---------------------|
| Synopsis | HS Secondary Shaper |
|----------|---------------------|



|               |   |
|---------------|---|
| Context       | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides</b><br><b>hs-secondary-shaper</b> <i>string</i> |
| Tree          | <b>hs-secondary-shaper</b>  |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | 7750 SR-7/12/12e  |

### **hs-wrr-group** [**group-id**] *reference*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>hs-wrr-group</b> list instance   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides</b><br><b>hs-wrr-group</b> <i>reference</i> |
| Tree       | <b>hs-wrr-group</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR-7/12/12e  |

### **[group-id]** *reference*

|            |   |
|------------|---|
| Synopsis   | HS WRR group identifier   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides</b><br><b>hs-wrr-group</b> <i>reference</i> |
| Tree       | <b>hs-wrr-group</b>   |
| Reference  | <b>configure qos sap-egress</b> <i>string</i> <b>hs-wrr-group</b> <i>number</i>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR-7/12/12e  |

### **hs-class-weight** *number*

|            |  |
|------------|--|
| Synopsis   | Class weight override of the WRR group   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides</b><br><b>hs-wrr-group</b> <i>reference</i> <b>hs-class-weight</b> <i>number</i> |
| Tree       | <b>hs-class-weight</b>   |
| Range      | 1   2   4   8  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR-7/12/12e   |

**percent-rate** *decimal-number*

|            |   |
|------------|---|
| Synopsis   | Percent rate override applied to the HS WRR group   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">hs-wrr-group</a> <a href="#">reference</a> <b>percent-rate</b> <i>decimal-number</i> |
| Tree       | <a href="#">percent-rate</a>  |
| Range      | 0.01 to 100.00  |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR-7/12/12e  |

**rate** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Scheduling rate override applied to the HS WRR group   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">hs-wrr-group</a> <a href="#">reference</a> <b>rate</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">rate</a>   |
| Range      | 1 to 2000000000  |
| Units      | kilobps  |
| Options    | max  |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR-7/12/12e   |

**policer** [[policer-id](#)] *reference*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>policer</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> |
| Tree       | <a href="#">policer</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**[policer-id]** *reference*

|          |                   |
|----------|-------------------|
| Synopsis | Policer unique ID |
|----------|-------------------|

|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> |
| Tree       | <a href="#">policer</a>  |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">sap-egress</a> <i>string</i> <a href="#">policer</a> <i>number</i>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**cbs** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | CBS   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">cbs</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cbs</a>   |
| Range      | 0 to 268435456  |
| Units      | bytes   |
| Options    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**mbs** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | MBS   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">mbs</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">mbs</a>   |
| Range      | 0 to 268435456  |
| Units      | bytes   |
| Options    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**packet-byte-offset** *number*

|          |   |
|----------|---|
| Synopsis | Packet size modification for policing information |
|----------|---|

|            |  |
|------------|--|
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides</b><br><b>policer reference packet-byte-offset</b> <i>number</i> |
| Tree       | <b>packet-byte-offset</b>  |
| Range      | -64 to 31  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

### **percent-rate**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>percent-rate</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides</b><br><b>policer reference percent-rate</b> |
| Tree       | <b>percent-rate</b>  |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

### **cir decimal-number**

|            |  |
|------------|--|
| Synopsis   | CIR percent rate   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides</b><br><b>policer reference percent-rate cir</b> <i>decimal-number</i> |
| Tree       | <b>cir</b>   |
| Range      | 0.00 to 100.00   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

### **pir decimal-number**

|            |  |
|------------|--|
| Synopsis   | PIR percent rate   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides</b><br><b>policer reference percent-rate pir</b> <i>decimal-number</i> |
| Tree       | <b>pir</b>   |
| Range      | 0.01 to 100.00   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

## rate

|            |  |
|------------|--|
| Synopsis   | Enter the <b>rate</b> context  |
| Context    | <b>configure service ies string interface string sap string egress qos sap-egress overrides policer reference rate</b> |
| Tree       | <b>rate</b>  |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .                                      |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

## cir (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | CIR rate  |
| Context    | <b>configure service ies string interface string sap string egress qos sap-egress overrides policer reference rate cir (<i>number</i>   <i>keyword</i>)</b> |
| Tree       | <b>cir</b>  |
| Range      | 0 to 6400000000   |
| Units      | kilobps   |
| Options    | max   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

## pir (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | PIR rate  |
| Context    | <b>configure service ies string interface string sap string egress qos sap-egress overrides policer reference rate pir (<i>number</i>   <i>keyword</i>)</b> |
| Tree       | <b>pir</b>  |
| Range      | 1 to 6400000000   |
| Units      | kilobps   |
| Options    | max   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**stat-mode** *keyword*

|            |   |
|------------|---|
| Synopsis   | Mode of statistics collected by the policer   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos sap-egress overrides policer reference</a> <a href="#">stat-mode</a> <i>keyword</i> |
| Tree       | <a href="#">stat-mode</a>   |
| Options    | no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile                |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**queue** [[queue-id](#)] *reference*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>queue</b> list instance   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos sap-egress overrides queue reference</a> |
| Tree       | <a href="#">queue</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[queue-id]** *reference*

|            |  |
|------------|--|
| Synopsis   | Policer unique ID  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos sap-egress overrides queue reference</a> |
| Tree       | <a href="#">queue</a>  |
| Reference  | <b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">queue</a> <i>number</i>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**adaptation-rule**

|          |  |
|----------|--|
| Synopsis | Enter the <b>adaptation-rule</b> context   |
| Context  | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos sap-egress overrides queue reference</a> <a href="#">adaptation-rule</a> |
| Tree     | <a href="#">adaptation-rule</a>  |

Introduced 16.0.R1  
 Platforms All

### **cir** *keyword*

Synopsis Constraint used when deriving the operational CIR value  
 Context **configure** [service ies string](#) [interface string](#) [sap string](#) [egress qos](#) [sap-egress overrides](#) [queue reference](#) [adaptation-rule](#) [cir keyword](#)  
 Tree [cir](#)  
 Options max, min, closest  
 Introduced 16.0.R1  
 Platforms All

### **pir** *keyword*

Synopsis Constraint used when deriving the operational PIR value  
 Context **configure** [service ies string](#) [interface string](#) [sap string](#) [egress qos](#) [sap-egress overrides](#) [queue reference](#) [adaptation-rule](#) [pir keyword](#)  
 Tree [pir](#)  
 Options max, min, closest  
 Introduced 16.0.R1  
 Platforms All

### **avg-frame-overhead** *decimal-number*

Synopsis Average packet-to-frame encapsulation overhead  
 Context **configure** [service ies string](#) [interface string](#) [sap string](#) [egress qos](#) [sap-egress overrides](#) [queue reference](#) [avg-frame-overhead decimal-number](#)  
 Tree [avg-frame-overhead](#)  
 Range 0.00 to 100.00  
 Introduced 16.0.R1  
 Platforms All

### **burst-limit** (*number* | *keyword*)

Synopsis Explicit shaping burst size for the queue

|            |  |
|------------|--|
| Context    | <b>configure service ies string interface string sap string egress qos sap-egress overrides queue reference burst-limit (number   keyword)</b> |
| Tree       | <a href="#">burst-limit</a>  |
| Range      | 1 to 14000000  |
| Units      | bytes  |
| Options    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **cbs (number | keyword)**

|            |  |
|------------|--|
| Synopsis   | CBS  |
| Context    | <b>configure service ies string interface string sap string egress qos sap-egress overrides queue reference cbs (number   keyword)</b> |
| Tree       | <a href="#">cbs</a>  |
| Range      | 0 to 1048576   |
| Units      | kilobytes  |
| Options    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **drop-tail**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>drop-tail</b> context  |
| Context    | <b>configure service ies string interface string sap string egress qos sap-egress overrides queue reference drop-tail</b> |
| Tree       | <a href="#">drop-tail</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **low**

|          |   |
|----------|---|
| Synopsis | Enter the <b>low</b> context  |
| Context  | <b>configure service ies string interface string sap string egress qos sap-egress overrides queue reference drop-tail low</b> |
| Tree     | <a href="#">low</a>   |



Introduced 16.0.R1  
 Platforms All

### **percent-reduction-from-mbs** (*number* | *keyword*)

Synopsis Percentage reduction from the MBS for a queue drop tail  
 Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#) [reference](#) [drop-tail](#) [low](#) [percent-reduction-from-mbs](#) (*number* | *keyword*)  
 Tree [percent-reduction-from-mbs](#)  
 Range 0 to 100  
 Options auto  
 Introduced 16.0.R1  
 Platforms All

### **hs-class-weight** *number*

Synopsis Class weight override for the queue  
 Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#) [reference](#) [hs-class-weight](#) *number*  
 Tree [hs-class-weight](#)  
 Range 1 | 2 | 4 | 8  
 Introduced 16.0.R1  
 Platforms 7750 SR-7/12/12e

### **hs-wred-queue**

Synopsis Enter the **hs-wred-queue** context  
 Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#) [reference](#) [hs-wred-queue](#)  
 Tree [hs-wred-queue](#)  
 Introduced 16.0.R1  
 Platforms 7750 SR-7/12/12e

### **policy** *reference*

Synopsis Slope policy applied to the HSQ queue group queue

|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">service ies string interface string sap string egress qos sap-egress overrides queue reference hs-wred-queue policy reference</a> |
| Tree       | <a href="#">policy</a>   |
| Reference  | <b>configure</b> <a href="#">qos slope-policy string</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR-7/12/12e   |

### **hs-wrr-weight** *number*

|            |  |
|------------|--|
| Synopsis   | WRR weight to parent with the queue into the scheduler   |
| Context    | <b>configure</b> <a href="#">service ies string interface string sap string egress qos sap-egress overrides queue reference hs-wrr-weight number</a> |
| Tree       | <a href="#">hs-wrr-weight</a>  |
| Range      | 1 to 127   |
| Default    | 1  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR-7/12/12e   |

### **mbs** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | MBS  |
| Context    | <b>configure</b> <a href="#">service ies string interface string sap string egress qos sap-egress overrides queue reference mbs (number   keyword)</a> |
| Tree       | <a href="#">mbs</a>  |
| Range      | 0 to 1073741824  |
| Units      | bytes  |
| Options    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **monitor-queue-depth**

|          |   |
|----------|---|
| Synopsis | Enable the <b>monitor-queue-depth</b> context   |
| Context  | <b>configure</b> <a href="#">service ies string interface string sap string egress qos sap-egress overrides queue reference monitor-queue-depth</a> |
| Tree     | <a href="#">monitor-queue-depth</a>   |

|            |          |
|------------|----------|
| Introduced | 20.10.R1 |
| Platforms  | All      |

### **fast-polling** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Enable fast polling of the queue depth   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">monitor-queue-depth</a> <b>fast-polling</b> <i>boolean</i> |
| Tree        | <a href="#">fast-polling</a>   |
| Description | When configured to <b>true</b> , this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth.<br>When configured to <b>false</b> , fast queue polling is not enabled.   |
| Default     | false  |
| Introduced  | 20.10.R1   |
| Platforms   | All  |

### **violation-threshold** *decimal-number*

|             |  |
|-------------|--|
| Synopsis    | Threshold for queue depth before violation is raised   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">monitor-queue-depth</a> <b>violation-threshold</b> <i>decimal-number</i> |
| Tree        | <a href="#">violation-threshold</a>  |
| Description | This command specifies the threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.   |
| Range       | 0.01 to 99.99  |
| Introduced  | 20.10.R1   |
| Platforms   | All  |

### **parent**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>parent</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>parent</b> |
| Tree       | <a href="#">parent</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **cir-weight** *number*

|            |  |
|------------|--|
| Synopsis   | CIR parameter that overrides parent for queue group  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">parent</a> <b>cir-weight</b> <i>number</i> |
| Tree       | <a href="#">cir-weight</a>   |
| Range      | 0 to 100   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **weight** *number*

|            |  |
|------------|--|
| Synopsis   | PIR parameter that overrides parent for queue group  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">parent</a> <b>weight</b> <i>number</i> |
| Tree       | <a href="#">weight</a>   |
| Range      | 0 to 100   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **percent-rate**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>percent-rate</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>percent-rate</b> |
| Tree       | <a href="#">percent-rate</a>  |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **cir** *decimal-number*

|          |   |
|----------|---|
| Synopsis | CIR percent rate  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">percent-rate</a> <b>cir</b> <i>decimal-number</i> |
| Tree     | <a href="#">cir</a>   |

|            |                |
|------------|----------------|
| Range      | 0.00 to 100.00 |
| Introduced | 16.0.R1        |
| Platforms  | All            |

### **pir** *decimal-number*

|            |  |
|------------|--|
| Synopsis   | PIR percent rate   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">percent-rate</a> <b>pir</b> <i>decimal-number</i> |
| Tree       | <a href="#">pir</a>  |
| Range      | 0.01 to 100.00   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **rate**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>rate</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>rate</b> |
| Tree       | <a href="#">rate</a>   |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **cir** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | CIR rate   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>rate</b> <b>cir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cir</a>  |
| Range      | 0 to 6400000000  |
| Units      | kilobps  |
| Options    | max  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**pir** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | PIR rate   |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">egress qos sap-egress overrides</a> <a href="#">queue reference rate</a> <b>pir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">pir</a>  |
| Range      | 1 to 6400000000  |
| Units      | kilobps  |
| Options    | max  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**policy-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Policy ID to associate with SAP for mirrored service  |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">egress qos sap-egress</a> <a href="#">policy-name reference</a> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos sap-egress string</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**port-redirect-group**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>port-redirect-group</b> context  |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">egress qos sap-egress</a> <a href="#">port-redirect-group</a> |
| Tree       | <a href="#">port-redirect-group</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**group-name** *reference*

|          |  |
|----------|--|
| Synopsis | Name of the queue group redirect list policy   |
| Context  | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">egress qos sap-egress</a> <a href="#">port-redirect-group</a> <a href="#">group-name reference</a> |

|            |   |
|------------|---|
| Tree       | <a href="#">group-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>string</i> |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **instance** *number*

|            |   |
|------------|---|
| Synopsis   | Instance of port queue group  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">port-redirect-group</a> <a href="#">instance</a> <i>number</i> |
| Tree       | <a href="#">instance</a>  |
| Range      | 1 to 65535  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **scheduler-policy**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>scheduler-policy</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> |
| Tree       | <a href="#">scheduler-policy</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **overrides**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>overrides</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> |
| Tree       | <a href="#">overrides</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **scheduler** [[scheduler-name](#)] *string*

|          |  |
|----------|--|
| Synopsis | Enter the <b>scheduler</b> list instance |
|----------|--|

|            |   |
|------------|---|
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos scheduler-policy overrides scheduler</b> <i>string</i> |
| Tree       | <b>scheduler</b>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **[scheduler-name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Scheduler name   |
| Context       | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos scheduler-policy overrides scheduler</b> <i>string</i>  |
| Tree          | <b>scheduler</b>   |
| Description   | <p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (<b>#</b>, <b>\$</b>, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.</p> |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

### **parent**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>parent</b> context   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos scheduler-policy overrides scheduler</b> <i>string</i> <b>parent</b> |
| Tree       | <b>parent</b>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |



**cir-weight** *number*

|            |  |
|------------|--|
| Synopsis   | Weight used at the within-CIR port priority level  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a><br><a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">parent</a> <b>cir-weight</b> <i>number</i> |
| Tree       | <a href="#">cir-weight</a>   |
| Range      | 0 to 100   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**weight** *number*

|            |  |
|------------|--|
| Synopsis   | Relative weight of the scheduler to feed the queue   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a><br><a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">parent</a> <b>weight</b> <i>number</i> |
| Tree       | <a href="#">weight</a>   |
| Range      | 0 to 100   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**rate**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>rate</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a><br><a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <b>rate</b> |
| Tree       | <a href="#">rate</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**cir** (*number* | *keyword*)

|          |   |
|----------|---|
| Synopsis | CIR at which the queue it to operate  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a><br><a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <b>rate</b> <b>cir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <a href="#">cir</a>   |
| Range    | 0 to 6400000000   |

|            |          |
|------------|----------|
| Units      | kilobps  |
| Options    | sum, max |
| Introduced | 16.0.R1  |
| Platforms  | All      |

### **pir** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | PIR at which the queue is to operate   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <b>rate</b> <b>pir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">pir</a>  |
| Range      | 1 to 6400000000  |
| Units      | kilobps  |
| Options    | max  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **policy-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Scheduler policy name   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">scheduler-policy</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **queue-group-redirect-list** *reference*

|            |  |
|------------|--|
| Synopsis   | Assign queue-group redirect list   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">queue-group-redirect-list</a> <i>reference</i> |
| Tree       | <a href="#">queue-group-redirect-list</a>  |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">queue-group-redirect-list</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**eth-cfm**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>eth-cfm</b> context  |
| Context    | <b>configure service ies string interface string sap string eth-cfm</b> |
| Tree       | <b>eth-cfm</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS            |

**collect-lmm-fc-stats**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>collect-lmm-fc-stats</b> context  |
| Context     | <b>configure service ies string interface string sap string eth-cfm collect-lmm-fc-stats</b>   |
| Tree        | <b>collect-lmm-fc-stats</b>  |
| Description | <p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands <b>fc-in-profile</b> and <b>fc</b> in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the <b>collect-lmm-stats</b> command are mutually exclusive when there is entity resource contention.</p> |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**fc keyword**

|             |   |
|-------------|---|
| Synopsis    | Forwarding class name for profile-unaware counter   |
| Context     | <b>configure service ies string interface string sap string eth-cfm collect-lmm-fc-stats fc keyword</b>   |
| Tree        | <b>fc</b>   |
| Description | <p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the <b>fc-in-profile</b> command under the <b>collect-lmm-fc-stats</b> context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p> |
| Options     | be, l2, af, l1, h2, ef, h1, nc  |

|                |  |
|----------------|--|
| Max. Instances | 8  |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **fc-in-profile** *keyword*

|                |   |
|----------------|---|
| Synopsis       | Forwarding class name for profile-aware counter   |
| Context        | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm</b> <b>collect-lmm-fc-stats</b> <b>fc-in-profile</b> <i>keyword</i>   |
| Tree           | <b>fc-in-profile</b>  |
| Description    | <p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the <b>fc</b> command under the <b>collect-lmm-fc-stats</b> context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p> |
| Options        | be, l2, af, l1, h2, ef, h1, nc  |
| Max. Instances | 8   |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **collect-lmm-stats** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Collect statistics for loss measurement message tests  |
| Context     | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm</b> <b>collect-lmm-stats</b> <i>boolean</i>  |
| Tree        | <b>collect-lmm-stats</b>   |
| Description | <p>When configured to <b>true</b>, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.</p> <p>The <b>show eth-cfm collect-lmm-stats</b> command displays entities that have been enabled to collect transit and receive counters.</p> <p>When configured to <b>false</b>, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.</p> |
| Default     | false  |
| Introduced  | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mep** *md-admin-name reference ma-admin-name reference mep-id number*

Synopsis Enter the **mep** list instance

Context **configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number**

Tree **mep**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **md-admin-name** *reference*

Synopsis Maintenance Domain (MD) name

Context **configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number**

Tree **mep**

Reference **configure eth-cfm domain string**

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ma-admin-name** *reference*

Synopsis Maintenance Association (MA) name

Context **configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number**

Tree **mep**

Reference **configure eth-cfm domain string association string**

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mep-id** *number*

Synopsis Maintenance Endpoint (MEP) ID

|            |  |
|------------|--|
| Context    | <b>configure</b> <i>service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</i> |
| Tree       | <a href="#">mep</a>  |
| Range      | 1 to 8191  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the MEP  |
| Context    | <b>configure</b> <i>service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number admin-state keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **ais** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable the generation and the reception of AIS messages  |
| Context    | <b>configure</b> <i>service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais boolean</i> |
| Tree       | <a href="#">ais</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **alarm-notification**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>alarm-notification</b> context   |
| Context     | <b>configure</b> <i>service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification</i> |
| Tree        | <a href="#">alarm-notification</a>  |
| Description | Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.                              |

Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.

|            |  |
|------------|--|
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **fng-alarm-time** *number*

|            |  |
|------------|--|
| Synopsis   | Time that must expire before an FNG alarm is raised  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">alarm-notification</a> <b>fng-alarm-time</b> <i>number</i> |
| Tree       | <a href="#">fng-alarm-time</a>   |
| Range      | 250   500   1000   |
| Units      | centiseconds   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **fng-reset-time** *number*

|            |  |
|------------|--|
| Synopsis   | Time that must expire before an FNG alarm is reset   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">alarm-notification</a> <b>fng-reset-time</b> <i>number</i> |
| Tree       | <a href="#">fng-reset-time</a>   |
| Range      | 250   500   1000   |
| Units      | centiseconds   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **ccm** *boolean*

|          |   |
|----------|---|
| Synopsis | Generate CCM messages   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <b>ccm</b> <i>boolean</i> |
| Tree     | <a href="#">ccm</a>   |
| Default  | false   |

|            |  |
|------------|--|
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **ccm-ltm-priority** *number*

|            |   |
|------------|---|
| Synopsis   | Priority of CCM and LTM messages transmitted by the MEP   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <a href="#">reference ma-admin-name</a> <a href="#">reference mep-id</a> <i>number</i> <b>ccm-ltm-priority</b> <i>number</i> |
| Tree       | <a href="#">ccm-ltm-priority</a>  |
| Range      | 0 to 7  |
| Default    | 7   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **ccm-padding-size** *number*

|             |   |
|-------------|---|
| Synopsis    | Number of octets of padding to insert in CCM packets  |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <a href="#">reference ma-admin-name</a> <a href="#">reference mep-id</a> <i>number</i> <b>ccm-padding-size</b> <i>number</i>   |
| Tree        | <a href="#">ccm-padding-size</a>  |
| Description | This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.<br><br>This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through <b>configure eth-cfm domain association ccm-interval</b> ) is less than 1 second. |
| Range       | 3 to 1500   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **csf**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>csf</b> context  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <a href="#">reference ma-admin-name</a> <a href="#">reference mep-id</a> <i>number</i> <b>csf</b> |
| Tree       | <a href="#">csf</a>  |
| Introduced | 16.0.R1  |



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **multiplier** *decimal-number*

Synopsis Multiplication factor used to clear the CSF condition

Context **configure** *service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number csf multiplier decimal-number*

Tree [multiplier](#)

Range 0.0 | 2.0 to 30.0

Default 3.5

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **description** *string*

Synopsis Text description

Context **configure** *service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number description string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **eth-test**

Synopsis Enable the **eth-test** context

Context **configure** *service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test*

Tree [eth-test](#)

Description Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the **oam eth-cfm eth-test** command.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**bit-error-threshold** *number*

|            |  |
|------------|--|
| Synopsis   | Lowest priority defect allowed to generate fault alarm   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">eth-test</a> <a href="#">bit-error-threshold</a> <i>number</i> |
| Tree       | <a href="#">bit-error-threshold</a>  |
| Range      | 0 to 11840   |
| Units      | bit errors   |
| Default    | 1  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**test-pattern**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>test-pattern</b> context   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">eth-test</a> <a href="#">test-pattern</a> |
| Tree        | <a href="#">test-pattern</a>  |
| Description | Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**crc-tlv** *boolean*

|            |  |
|------------|--|
| Synopsis   | Generate a CRC checksum  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">eth-test</a> <a href="#">test-pattern</a> <a href="#">crc-tlv</a> <i>boolean</i> |
| Tree       | <a href="#">crc-tlv</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**pattern** *keyword*

|          |                                       |
|----------|---------------------------------------|
| Synopsis | Test pattern for Ethernet Test frames |
|----------|---------------------------------------|

|             |   |
|-------------|---|
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">eth-test</a> <a href="#">test-pattern</a> <a href="#">pattern</a> <a href="#">keyword</a> |
| Tree        | <a href="#">pattern</a>   |
| Description | This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.   |
| Options     | all-zeros, all-ones   |
| Default     | all-zeros   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **fault-propagation** *keyword*

|            |   |
|------------|---|
| Synopsis   | Fault propagation for the MEP   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">fault-propagation</a> <a href="#">keyword</a> |
| Tree       | <a href="#">fault-propagation</a>   |
| Options    | use-if-status-tlv, suspend-ccm  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **grace**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>grace</b> context  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> |
| Tree        | <a href="#">grace</a>   |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **eth-ed**

|          |  |
|----------|--|
| Synopsis | Enter the <b>eth-ed</b> context  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> <a href="#">eth-ed</a> |

|             |  |
|-------------|--|
| Tree        | <a href="#">eth-ed</a>   |
| Description | Commands in this context configure the ITU-T Y.1731 ETH-ED function. |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS         |

### **max-rx-defect-window** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum received ETH-ED expected defect window duration   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> <a href="#">eth-ed</a> <a href="#">max-rx-defect-window</a> <i>number</i> |
| Tree       | <a href="#">max-rx-defect-window</a>  |
| Range      | 1 to 86400  |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **priority** *number*

|            |   |
|------------|---|
| Synopsis   | Transmission priority for ETH-ED PDUs   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> <a href="#">eth-ed</a> <a href="#">priority</a> <i>number</i> |
| Tree       | <a href="#">priority</a>  |
| Range      | 0 to 7  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **rx-eth-ed** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> <a href="#">eth-ed</a> <a href="#">rx-eth-ed</a> <i>boolean</i> |
| Tree        | <a href="#">rx-eth-ed</a>   |
| Description | This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.  |
| Default     | true  |

|            |  |
|------------|--|
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **tx-eth-ed** *boolean*

|            |  |
|------------|--|
| Synopsis   | Transmit ETH-ED PDUs from the MEP  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> <a href="#">eth-ed</a> <a href="#">tx-eth-ed</a> <a href="#">boolean</a> |
| Tree       | <a href="#">tx-eth-ed</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **eth-vsm-grace**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>eth-vsm-grace</b> context  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> <a href="#">eth-vsm-grace</a> |
| Tree        | <a href="#">eth-vsm-grace</a>   |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function.  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **rx-eth-vsm-grace** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Receive and process Nokia ETH-CFM Grace PDU on the MEP   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> <a href="#">eth-vsm-grace</a> <a href="#">rx-eth-vsm-grace</a> <a href="#">boolean</a> |
| Tree        | <a href="#">rx-eth-vsm-grace</a>   |
| Description | When configured to <b>true</b> , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.<br><br>When configured to <b>false</b> , the router disables the Nokia Grace function.  |
| Default     | true   |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**tx-eth-vsm-grace** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Transmit ETH-ED PDUs from the MEP   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> <a href="#">eth-vsm-grace</a> <a href="#">tx-eth-vsm-grace</a> <i>boolean</i>   |
| Tree        | <a href="#">tx-eth-vsm-grace</a>  |
| Description | <p>When configured to <b>true</b>, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.</p> <p>The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.</p> <p>The operator must configure the <b>configure system eth-cfm grace</b> command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).</p> <p>When configured to <b>false</b>, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.</p> |
| Default     | true  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**low-priority-defect** *keyword*

|            |  |
|------------|--|
| Synopsis   | Lowest priority defect allowed to generate fault alarm   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">low-priority-defect</a> <i>keyword</i> |
| Tree       | <a href="#">low-priority-defect</a>  |
| Options    | all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon   |
| Default    | mac-rem-err-xcon   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**one-way-delay-threshold** *number*

|          |   |
|----------|---|
| Synopsis | Threshold time limit for the one-way delay test   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">one-way-delay-threshold</a> <i>number</i> |
| Tree     | <a href="#">one-way-delay-threshold</a>   |

|            |  |
|------------|--|
| Range      | 0 to 600   |
| Units      | seconds  |
| Default    | 3  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **squelch-ingress-levels** *number*

|             |  |
|-------------|--|
| Synopsis    | Levels for which ETH-CFM packets are silently discarded  |
| Context     | <b>configure</b> <b>service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm</b> <b>squelch-ingress-levels</b> <i>number</i>   |
| Tree        | <a href="#">squelch-ingress-levels</a>   |
| Description | <p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.</p> |
| Range       | 0 to 7   |
| Max.        | 8  |
| Instances   |  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **fwd-wholesale**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>fwd-wholesale</b> context   |
| Context    | <b>configure</b> <b>service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>fwd-wholesale</b> |
| Tree       | <a href="#">fwd-wholesale</a>  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **pppoe-service** *reference*

|          |                    |
|----------|--------------------|
| Synopsis | PPPoE service name |
|----------|--------------------|

|            |  |
|------------|--|
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>fwd-wholesale pppoe-service</b> <i>reference</i> |
| Tree       | <a href="#">pppoe-service</a>  |
| Reference  | <b>configure service epipe</b> <i>string</i>   |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **host-admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of host creation on the SAP  |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>host-admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">host-admin-state</a>  |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **host-lockout-policy** *reference*

|            |  |
|------------|--|
| Synopsis   | Host lockout policy  |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>host-lockout-policy</b> <i>reference</i> |
| Tree       | <a href="#">host-lockout-policy</a>  |
| Reference  | <b>configure subscriber-mgmt</b> <b>host-lockout-policy</b> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **ingress**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ingress</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress</b> |
| Tree       | <a href="#">ingress</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |



## filter

|            |   |
|------------|---|
| Synopsis   | Enter the <b>filter</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">filter</a> |
| Tree       | <a href="#">filter</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## ip reference

|            |  |
|------------|--|
| Synopsis   | IPv4 filter policy name  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">filter</a> <a href="#">ip</a> <a href="#">reference</a> |
| Tree       | <a href="#">ip</a>   |
| Reference  | <b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## ipv6 reference

|            |  |
|------------|--|
| Synopsis   | IPv6 filter policy name  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">filter</a> <a href="#">ipv6</a> <a href="#">reference</a> |
| Tree       | <a href="#">ipv6</a>   |
| Reference  | <b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## qos

|            |  |
|------------|--|
| Synopsis   | Enter the <b>qos</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> |
| Tree       | <a href="#">qos</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**match-qinq-dot1p** *keyword*

|            |   |
|------------|---|
| Synopsis   | Ingress match QinQ Dot1p  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">match-qinq-dot1p</a> <i>keyword</i> |
| Tree       | <a href="#">match-qinq-dot1p</a>  |
| Options    | top, bottom   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**policer-control-policy**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>policer-control-policy</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> |
| Tree       | <a href="#">policer-control-policy</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**overrides**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>overrides</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> |
| Tree       | <a href="#">overrides</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**root**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>root</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> |
| Tree       | <a href="#">root</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**max-rate** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Maximum frame-based bandwidth limit   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <b>max-rate</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">max-rate</a>  |
| Range      | 1 to 6400000000   |
| Options    | max   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**priority-mbs-thresholds**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>priority-mbs-thresholds</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <b>priority-mbs-thresholds</b> |
| Tree       | <a href="#">priority-mbs-thresholds</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**min-thresh-separation** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Minimum amount of separation buffer space  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <b>min-thresh-separation</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">min-thresh-separation</a>  |
| Range      | 0 to 16777216  |
| Units      | bytes  |
| Options    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**priority** [[priority-level](#)] *number*

|          |  |
|----------|--|
| Synopsis | Enter the <b>priority</b> list instance  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <b>priority</b> <i>number</i> |

|            |  |
|------------|--|
| Tree       | <a href="#">priority</a>                               |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

**[priority-level]** *number*

|            |   |
|------------|---|
| Synopsis   | Priority level  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos policer-control-policy overrides root priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i> |
| Tree       | <a href="#">priority</a>  |
| Range      | 1 to 8  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**mbs-contribution** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Minimum amount of cumulative buffer space allowed   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos policer-control-policy overrides root priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i> <a href="#">mbs-contribution</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">mbs-contribution</a>  |
| Range      | 0 to 16777216   |
| Units      | bytes   |
| Options    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**policy-name** *reference*

|            |  |
|------------|--|
| Synopsis   | Policer control policy name  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos policer-control-policy</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos policer-control-policy</a> <i>string</i>  |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## sap-ingress

Synopsis Enter the **sap-ingress** context

Context **configure** *service ies string interface string sap string ingress qos sap-ingress*

Tree [sap-ingress](#)

Introduced 16.0.R1

Platforms All

## fp-redirect-group

Synopsis Enter the **fp-redirect-group** context

Context **configure** *service ies string interface string sap string ingress qos sap-ingress fp-redirect-group*

Tree [fp-redirect-group](#)

Introduced 16.0.R1

Platforms All

## group-name *reference*

Synopsis Queue group template name created on forwarding plane

Context **configure** *service ies string interface string sap string ingress qos sap-ingress fp-redirect-group group-name reference*

Tree [group-name](#)

Reference **configure** *qos queue-group-templates ingress queue-group string*

Introduced 16.0.R1

Platforms All

## instance *number*

Synopsis Queue group instance

Context **configure** *service ies string interface string sap string ingress qos sap-ingress fp-redirect-group instance number*

Tree [instance](#)

Range 1 to 65535

Introduced 16.0.R1  
 Platforms All

### overrides

Synopsis Enter the **overrides** context  
 Context **configure service ies string interface string sap string ingress qos sap-ingress overrides**  
 Tree [overrides](#)  
 Introduced 16.0.R1  
 Platforms All

### ip-criteria

Synopsis Enter the **ip-criteria** context  
 Context **configure service ies string interface string sap string ingress qos sap-ingress overrides ip-criteria**  
 Tree [ip-criteria](#)  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### activate-entry-tag *number*

Synopsis Tag ID activated for IPv4 criteria  
 Context **configure service ies string interface string sap string ingress qos sap-ingress overrides ip-criteria activate-entry-tag number**  
 Tree [activate-entry-tag](#)  
 Range 1 to 255  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### ipv6-criteria

Synopsis Enter the **ipv6-criteria** context  
 Context **configure service ies string interface string sap string ingress qos sap-ingress overrides ipv6-criteria**  
 Tree [ipv6-criteria](#)

|            |  |
|------------|--|
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **activate-entry-tag** *number*

|            |   |
|------------|---|
| Synopsis   | Tag ID activated for IPv6 criteria  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos sap-ingress overrides ipv6-criteria activate-entry-tag</a> <i>number</i> |
| Tree       | <a href="#">activate-entry-tag</a>  |
| Range      | 1 to 255  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **policer** [[policer-id](#)] *reference*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>policer</b> list instance  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos sap-ingress overrides policer</a> <i>reference</i> |
| Tree       | <a href="#">policer</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

### **[policer-id]** *reference*

|            |   |
|------------|---|
| Synopsis   | Policer unique ID   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos sap-ingress overrides policer</a> <i>reference</i> |
| Tree       | <a href="#">policer</a>   |
| Reference  | <b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">policer</a> <i>number</i>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

### **cbs** (*number* | *keyword*)

|          |     |
|----------|-----|
| Synopsis | CBS |
|----------|-----|

|            |  |
|------------|--|
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides</b><br><b>policer reference cbs</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <b>cbs</b>   |
| Range      | 0 to 268435456   |
| Units      | bytes  |
| Options    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

### **mbs** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | MBS  |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides</b><br><b>policer reference mbs</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <b>mbs</b>   |
| Range      | 0 to 268435456   |
| Units      | bytes  |
| Options    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

### **packet-byte-offset** *number*

|            |  |
|------------|--|
| Synopsis   | Packet size modification for policing information  |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides</b><br><b>policer reference packet-byte-offset</b> <i>number</i> |
| Tree       | <b>packet-byte-offset</b>  |
| Range      | -32 to 31  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

### **percent-rate**

|          |  |
|----------|--|
| Synopsis | Enter the <b>percent-rate</b> context  |
| Context  | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides</b><br><b>policer reference percent-rate</b> |



|            |   |
|------------|---|
| Tree       | <a href="#">percent-rate</a>  |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> . |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR                            |

### **cir** *decimal-number*

|            |   |
|------------|---|
| Synopsis   | CIR percent rate  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">percent-rate</a> <b>cir</b> <i>decimal-number</i> |
| Tree       | <a href="#">cir</a>   |
| Range      | 0.00 to 100.00  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

### **pir** *decimal-number*

|            |   |
|------------|---|
| Synopsis   | PIR percent rate  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">percent-rate</a> <b>pir</b> <i>decimal-number</i> |
| Tree       | <a href="#">pir</a>   |
| Range      | 0.01 to 100.00  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

### **rate**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>rate</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>rate</b> |
| Tree       | <a href="#">rate</a>  |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**cir** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | CIR rate  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">rate</a> <b>cir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cir</a>   |
| Range      | 0 to 6400000000   |
| Units      | kilobps   |
| Options    | max   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**pir** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | PIR rate  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">rate</a> <b>pir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">pir</a>   |
| Range      | 1 to 6400000000   |
| Units      | kilobps   |
| Options    | max   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**stat-mode** *keyword*

|            |   |
|------------|---|
| Synopsis   | Mode of statistics collected by the policer   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">stat-mode</a> <i>keyword</i> |
| Tree       | <a href="#">stat-mode</a>   |
| Options    | no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**queue** [[queue-id](#)] *reference*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>queue</b> list instance  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos sap-ingress overrides</a> <a href="#">queue</a> <i>reference</i> |
| Tree       | <a href="#">queue</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[queue-id]** *reference*

|            |   |
|------------|---|
| Synopsis   | Policer unique ID   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos sap-ingress overrides</a> <a href="#">queue</a> <i>reference</i> |
| Tree       | <a href="#">queue</a>   |
| Reference  | <b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">queue</a> <i>number</i>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**adaptation-rule**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>adaptation-rule</b> context  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos sap-ingress overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">adaptation-rule</a> |
| Tree       | <a href="#">adaptation-rule</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**cir** *keyword*

|            |  |
|------------|--|
| Synopsis   | Constraint used when deriving the operational CIR value  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos sap-ingress overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">adaptation-rule</a> <a href="#">cir</a> <i>keyword</i> |
| Tree       | <a href="#">cir</a>  |
| Options    | max, min, closest  |
| Introduced | 16.0.R1  |

Platforms All

### **pir** keyword

Synopsis Constraint used when deriving the operational PIR value

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#) [reference](#) [adaptation-rule](#) **pir** [keyword](#)

Tree [pir](#)

Options max, min, closest

Introduced 16.0.R1

Platforms All

### **cbs** (*number* | *keyword*)

Synopsis CBS

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#) [reference](#) **cbs** (*number* | *keyword*)

Tree [cbs](#)

Range 0 to 1048576

Units kilobytes

Options auto

Introduced 16.0.R1

Platforms All

### **drop-tail**

Synopsis Enter the **drop-tail** context

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#) [reference](#) **drop-tail**

Tree [drop-tail](#)

Introduced 16.0.R1

Platforms All

### **low**

Synopsis Enter the **low** context

|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos sap-ingress</a> <a href="#">overrides queue reference drop-tail low</a> |
| Tree       | <a href="#">low</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **percent-reduction-from-mbs** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Percentage reduction from the MBS for a queue drop tail  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos sap-ingress</a> <a href="#">overrides queue reference drop-tail low percent-reduction-from-mbs</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">percent-reduction-from-mbs</a>   |
| Range      | 0 to 100   |
| Options    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **mbs** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | MBS   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos sap-ingress</a> <a href="#">overrides queue reference mbs</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">mbs</a>   |
| Range      | 0 to 1073741824   |
| Units      | bytes   |
| Options    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **monitor-queue-depth**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>monitor-queue-depth</b> context  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos sap-ingress</a> <a href="#">overrides queue reference monitor-queue-depth</a> |
| Tree       | <a href="#">monitor-queue-depth</a>  |
| Introduced | 21.7.R1  |

Platforms All

### **fast-polling** *boolean*

Synopsis Enable fast polling of the queue depth

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#) [reference](#) [monitor-queue-depth](#) [fast-polling](#) *boolean*

Tree [fast-polling](#)

Default false

Introduced 21.7.R1

Platforms All

### **parent**

Synopsis Enter the **parent** context

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#) [reference](#) [parent](#)

Tree [parent](#)

Introduced 16.0.R1

Platforms All

### **cir-weight** *number*

Synopsis CIR parameter that overrides parent for queue group

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#) [reference](#) [parent](#) [cir-weight](#) *number*

Tree [cir-weight](#)

Range 0 to 100

Introduced 16.0.R1

Platforms All

### **weight** *number*

Synopsis PIR parameter that overrides parent for queue group

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#) [reference](#) [parent](#) [weight](#) *number*

Tree [weight](#)

|            |          |
|------------|----------|
| Range      | 0 to 100 |
| Introduced | 16.0.R1  |
| Platforms  | All      |

### **percent-rate**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>percent-rate</b> context  |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">ingress qos sap-ingress overrides queue reference percent-rate</a> |
| Tree       | <a href="#">percent-rate</a>   |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **cir decimal-number**

|            |   |
|------------|---|
| Synopsis   | CIR percent rate  |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">ingress qos sap-ingress overrides queue reference percent-rate cir decimal-number</a> |
| Tree       | <a href="#">cir</a>   |
| Range      | 0.00 to 100.00  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **pir decimal-number**

|            |   |
|------------|---|
| Synopsis   | PIR percent rate  |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">ingress qos sap-ingress overrides queue reference percent-rate pir decimal-number</a> |
| Tree       | <a href="#">pir</a>   |
| Range      | 0.01 to 100.00  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**rate**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>rate</b> context   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides</b> <b>queue reference rate</b> |
| Tree       | <b>rate</b>   |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**cir** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | CIR rate   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides</b> <b>queue reference rate cir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <b>cir</b>   |
| Range      | 0 to 6400000000  |
| Units      | kilobps  |
| Options    | max  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**pir** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | PIR rate   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides</b> <b>queue reference rate pir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <b>pir</b>   |
| Range      | 1 to 6400000000  |
| Units      | kilobps  |
| Options    | max  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**policy-name** *reference*

|          |           |
|----------|-----------|
| Synopsis | Policy ID |
|----------|-----------|



|            |   |
|------------|---|
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress</b> <b>policy-name</b> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure qos sap-ingress</b> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### queuing-type *keyword*

|            |  |
|------------|--|
| Synopsis   | Queuing type   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress</b> <b>queuing-type</b> <i>keyword</i> |
| Tree       | <a href="#">queuing-type</a>   |
| Options    | shared, multipoint-shared  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR  |

### scheduler-policy

|            |  |
|------------|--|
| Synopsis   | Enter the <b>scheduler-policy</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos scheduler-policy</b> |
| Tree       | <a href="#">scheduler-policy</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### overrides

|            |   |
|------------|---|
| Synopsis   | Enter the <b>overrides</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos scheduler-policy</b> <b>overrides</b> |
| Tree       | <a href="#">overrides</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**scheduler** [*scheduler-name*] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>scheduler</b> list instance   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos scheduler-policy</b><br><b>overrides scheduler</b> <i>string</i> |
| Tree       | <b>scheduler</b>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[scheduler-name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Scheduler name   |
| Context       | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos scheduler-policy</b><br><b>overrides scheduler</b> <i>string</i>   |
| Tree          | <b>scheduler</b>   |
| Description   | <p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.</p> |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**parent**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>parent</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos scheduler-policy</b><br><b>overrides scheduler</b> <i>string</i> <b>parent</b> |
| Tree       | <b>parent</b>  |
| Introduced | 16.0.R1  |

Platforms All

### **cir-weight** *number*

Synopsis Weight used at the within-CIR port priority level

Context **configure** [service ies](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos scheduler-policy overrides scheduler](#) *string* [parent cir-weight](#) *number*

Tree [cir-weight](#)

Range 0 to 100

Introduced 16.0.R1

Platforms All

### **weight** *number*

Synopsis Relative weight of the scheduler to feed the queue

Context **configure** [service ies](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos scheduler-policy overrides scheduler](#) *string* [parent weight](#) *number*

Tree [weight](#)

Range 0 to 100

Introduced 16.0.R1

Platforms All

### **rate**

Synopsis Enter the **rate** context

Context **configure** [service ies](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos scheduler-policy overrides scheduler](#) *string* [rate](#)

Tree [rate](#)

Introduced 16.0.R1

Platforms All

### **cir** (*number* | *keyword*)

Synopsis CIR at which the queue it to operate

Context **configure** [service ies](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos scheduler-policy overrides scheduler](#) *string* [rate cir](#) (*number* | *keyword*)

Tree [cir](#)

|            |                 |
|------------|-----------------|
| Range      | 0 to 6400000000 |
| Units      | kilobps         |
| Options    | sum, max        |
| Introduced | 16.0.R1         |
| Platforms  | All             |

### **pir** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | PIR at which the queue is to operate   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos scheduler-policy overrides scheduler</a> <i>string</i> <b>rate pir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">pir</a>  |
| Range      | 1 to 6400000000  |
| Units      | kilobps  |
| Options    | max  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **policy-name** *reference*

|            |  |
|------------|--|
| Synopsis   | Scheduler policy name  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos scheduler-policy policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos scheduler-policy</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **queue-group-redirect-list** *reference*

|            |   |
|------------|---|
| Synopsis   | Queue group redirect list   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress queue-group-redirect-list</a> <i>reference</i> |
| Tree       | <a href="#">queue-group-redirect-list</a>   |
| Reference  | <b>configure</b> <a href="#">qos queue-group-redirect-list</a> <i>string</i>  |
| Introduced | 16.0.R1   |

Platforms All

### **ip-tunnel** [tunnel-name] *string*

Synopsis Enter the **ip-tunnel** list instance

Context **configure service ies** *string* **interface** *string* **sap** *string* **ip-tunnel** *string*

Tree [ip-tunnel](#)

Description Commands in this context configure an IP-GRE or IP-IP tunnel and associate it with a private tunnel SAP within an IES service.

Max. Instances 1

Introduced 16.0.R1

Platforms All

### **[tunnel-name]** *string*

Synopsis IP tunnel name

Context **configure service ies** *string* **interface** *string* **sap** *string* **ip-tunnel** *string*

Tree [ip-tunnel](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the IP tunnel

Context **configure service ies** *string* **interface** *string* **sap** *string* **ip-tunnel** *string* **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms All

**backup-remote-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Backup remote IP address that is applied to this tunnel   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>backup-remote-ip-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <b>backup-remote-ip-address</b>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**clear-df-bit** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Clear the Do-not-Fragment bit  |
| Context     | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>clear-df-bit</b> <i>boolean</i>   |
| Tree        | <b>clear-df-bit</b>  |
| Description | When configured to <b>true</b> , the DF bit is cleared (set to 0) in all payload IP packets associated with the GRE or IPsec tunnel, before any potential fragmentation resulting from the ip-mtu command. This requires a modification of the header checksum.<br>When configured to <b>false</b> , clearing of the DF bit is disabled. |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**delivery-service** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Service to originate and terminate GRE packets  |
| Context  | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>delivery-service</b> <i>string</i> |

|               |   |
|---------------|---|
| Tree          | <a href="#">delivery-service</a>  |
| Description   | This command specifies the service used to originate and terminate the GRE encapsulated packets belonging to the GRE tunnel. The delivery service may be the same service that owns the private tunnel SAP associated with the GRE tunnel.<br>The GRE tunnel does not come up until a valid delivery service is configured. |
| String Length | 1 to 64   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

### **description** *string*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

### **dest-ip** [[dest-ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Add a list entry for <b>dest-ip</b>  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <a href="#">dest-ip</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <a href="#">dest-ip</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **[dest-ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

|          |   |
|----------|---|
| Synopsis | IP address of the remote IP tunnel endpoint |
|----------|---|

|             |   |
|-------------|---|
| Context     | <b>configure service ies string interface string sap string ip-tunnel string dest-ip</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )   |
| Tree        | <b>dest-ip</b>  |
| Description | This command configures the IP address of the remote IP tunnel endpoint. If the remote IP address is not within the subnet of the IP interface associated with the tunnel, the tunnel fails to come up. |
| Notes       | This element is part of a list key.   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **dscp keyword**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Differentiated Services Code Point (DSCP) name  |
| Context    | <b>configure service ies string interface string sap string ip-tunnel string dscp keyword</b>   |
| Tree       | <b>dscp</b>   |
| Options    | be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63 |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **encapsulated-ip-mtu number**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Maximum size of the encapsulated tunnel packet  |
| Context     | <b>configure service ies string interface string sap string ip-tunnel string encapsulated-ip-mtu number</b>   |
| Tree        | <b>encapsulated-ip-mtu</b>  |
| Description | This command specifies the maximum size of the encapsulated tunnel packet for the IP tunnel. If the packet exceeds this value, the system fragments the packet. |



|            |  |
|------------|--|
| Range      | 512 to 9000                                  |
| Units      | bytes  |
| Introduced | 16.0.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

## gre-header



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enter the <b>gre-header</b> context   |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">ip-tunnel string</a> <a href="#">gre-header</a> |
| Tree       | <a href="#">gre-header</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## admin-state *keyword*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Administrative state of the GRE header in the tunnel  |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">ip-tunnel string</a> <a href="#">gre-header</a> <a href="#">admin-state keyword</a> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## key



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |                              |
|----------|------------------------------|
| Synopsis | Enter the <b>key</b> context |
|----------|------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">ip-tunnel string</a> <a href="#">gre-header key</a> |
| Tree       | <a href="#">key</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **admin-state** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Administrative state of the keys in the GRE header   |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">ip-tunnel string</a> <a href="#">gre-header key</a><br><a href="#">admin-state keyword</a> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **receive number**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Receive key of the GRE header   |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">ip-tunnel string</a> <a href="#">gre-header key</a><br><a href="#">receive number</a> |
| Tree       | <a href="#">receive</a>   |
| Max. Range | 0 to 4294967295   |
| Default    | 0   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## send number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Send key of the GRE header  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <a href="#">gre-header</a> <i>key</i> <a href="#">send</a> <i>number</i> |
| Tree       | <a href="#">send</a>  |
| Max. Range | 0 to 4294967295   |
| Default    | 0   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## icmp-generation

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enter the <b>icmp-generation</b> context   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <a href="#">icmp-generation</a> |
| Tree       | <a href="#">icmp-generation</a>  |
| Introduced | 21.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## frag-required

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enter the <b>frag-required</b> context   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <a href="#">icmp-generation</a> <a href="#">frag-required</a> |
| Tree       | <a href="#">frag-required</a>  |
| Introduced | 21.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**admin-state** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Send fragmentation required messages  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>icmp-generation</b> <b>frag-required</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Introduced | 21.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**interval** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Maximum interval that the ICMP messages can be sent   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>icmp-generation</b> <b>frag-required</b> <b>interval</b> <i>number</i> |
| Tree       | <b>interval</b>   |
| Range      | 1 to 60   |
| Units      | seconds   |
| Default    | 10  |
| Introduced | 21.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**message-count** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |                                      |
|----------|--------------------------------------|
| Synopsis | Maximum number of ICMP messages sent |
|----------|--------------------------------------|

|             |  |
|-------------|--|
| Context     | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>icmp-generation</b> <b>frag-required</b> <b>message-count</b> <i>number</i> |
| Tree        | <b>message-count</b>   |
| Description | This command configures the maximum number of ICMP messages that can be sent during the period specified by the <b>interval</b> command.   |
| Range       | 10 to 1000   |
| Default     | 100  |
| Introduced  | 21.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## icmp6-generation



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enter the <b>icmp6-generation</b> context   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>icmp6-generation</b> |
| Tree       | <b>icmp6-generation</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## packet-too-big



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enter the <b>packet-too-big</b> context   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>icmp6-generation</b> <b>packet-too-big</b> |
| Tree       | <b>packet-too-big</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Administrative state of sending Packet Too Big messages  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <a href="#">icmp6-generation</a> <a href="#">packet-too-big</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**number** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Maximum number of PTB ICMPv6 messages that can be sent   |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <a href="#">icmp6-generation</a> <a href="#">packet-too-big</a> <b>number</b> <i>number</i> |
| Tree        | <a href="#">number</a>   |
| Description | This command configures the maximum number of ICMPv6 messages that can be sent during the configured interval.   |
| Range       | 10 to 1000   |
| Default     | 100  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**seconds** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | Maximum interval when PTB messages can be sent |
|----------|--|

|            |  |
|------------|--|
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>icmp6-generation</b> <b>packet-too-big</b> <b>seconds</b> <i>number</i> |
| Tree       | <b>seconds</b>   |
| Range      | 1 to 60  |
| Units      | seconds  |
| Default    | 10   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **ip-mtu** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | IP MTU for the interface  |
| Context     | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>ip-mtu</b> <i>number</i>   |
| Tree        | <b>ip-mtu</b>   |
| Description | <p>This command specifies the IP MTU for the interface. If the DF bit is not set in the packet, IP packet fragmentation is performed, if necessary, based on this configured value.</p> <p>When unconfigured, all IP packets, regardless of the packet size or DF bit setting, are allowed into the tunnel without fragmentation.</p> |
| Range       | 512 to 9000   |
| Units       | bytes   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **ipsec-transport-mode-profile** *reference*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | IPsec transport mode profile name  |
| Context  | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>ipsec-transport-mode-profile</b> <i>reference</i> |
| Tree     | <b>ipsec-transport-mode-profile</b>  |

|            |   |
|------------|---|
| Reference  | <b>configure ipsec ipsec-transport-mode-profile</b> <i>string</i> |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                      |

### local-ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Local IP address of this tunnel  |
| Context     | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>local-ip-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )  |
| Tree        | <b>local-ip-address</b>  |
| Description | This command specifies the local IP address to use for the IP tunnel. This configuration applies to the outer IP header of the encapsulated packets. The address must belong to one of the IP subnets associated with the public SAP interface of the tunnel group. The source IP address, the remote IP address, and the backup remote IP address of a tunnel must all belong to the same address family (IPv4 or IPv6).<br><br>When this command specifies an IPv6 address, it must be a global unicast address. |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### pmtu-discovery-aging *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Time to age out the learned path MTU  |
| Context     | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>pmtu-discovery-aging</b> <i>number</i> |
| Tree        | <b>pmtu-discovery-aging</b>   |
| Description | This command configures the temporary public MTU expiration time. The temporary public MTU is used for MTU propagation.   |
| Range       | 900 to 3600   |
| Units       | seconds   |
| Default     | 900   |



|            |  |
|------------|--|
| Introduced | 21.5.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **private-tcp-mss-adjust** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | TCP Maximum Segment Size (MSS) on the private side  |
| Context     | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>private-tcp-mss-adjust</b> <i>number</i> |
| Tree        | <b>private-tcp-mss-adjust</b>   |
| Description | This command specifies the TCP MSS to adjust for tunnels on the private side. The value is used to adjust the TCP MSS option in the TCP SYN packet.   |
| Range       | 512 to 9000   |
| Units       | bytes   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **propagate-pmtu-v4** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enable propagation of the path MTU to IPv4 hosts  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>propagate-pmtu-v4</b> <i>boolean</i> |
| Tree       | <b>propagate-pmtu-v4</b>  |
| Introduced | 21.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**propagate-pmtu-v6** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enable propagation of path MTU to IPv6 hosts   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <b>propagate-pmtu-v6</b> <i>boolean</i> |
| Tree       | <a href="#">propagate-pmtu-v6</a>  |
| Introduced | 21.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**public-tcp-mss-adjust** (*number* | *keyword*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | TCP Maximum Segment Size (MSS) on the public side  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <b>public-tcp-mss-adjust</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree        | <a href="#">public-tcp-mss-adjust</a>  |
| Description | This command specifies the TCP MSS for TCP traffic sent from the public network to the private network. The value is used to adjust the TCP MSS option in the TCP SYN packet.  |
| Range       | 512 to 9000  |
| Units       | bytes  |
| Options     | auto   |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**reassemble** (*number* | *keyword*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |                              |
|----------|------------------------------|
| Synopsis | Maximum reassembly wait time |
|----------|------------------------------|

|             |  |
|-------------|--|
| Context     | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>reassemble</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree        | <b>reassemble</b>  |
| Description | This command configures the maximum time to wait to receive all fragments of a particular IPsec or GRE packet for reassembly.  |
| Range       | 1 to 5000  |
| Units       | milliseconds   |
| Options     | use-tunnel-group-setting, none   |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **remote-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Remote IP address of the tunnel  |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>remote-ip-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <b>remote-ip-address</b>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **ipsec-gateway** [**name**] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>ipsec-gateway</b> list instance  |
| Context        | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> |
| Tree           | <b>ipsec-gateway</b>  |
| Max. Instances | 1   |
| Introduced     | 16.0.R4   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **[name]** *string*

|          |                    |
|----------|--------------------|
| Synopsis | IPsec gateway name |
|----------|--------------------|

|               |   |
|---------------|---|
| Context       | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> |
| Tree          | <a href="#">ipsec-gateway</a>   |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R4   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the IPsec gateway   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **cert**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>cert</b> context   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>cert</b> |
| Tree       | <a href="#">cert</a>  |
| Introduced | 19.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **cert-profile** *reference*

|            |  |
|------------|--|
| Synopsis   | Certificate profile name   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>cert</b> <b>cert-profile</b> <i>reference</i> |
| Tree       | <a href="#">cert-profile</a>   |
| Reference  | <b>configure ipsec</b> <b>cert-profile</b> <i>string</i>   |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## status-verify

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>status-verify</b> context  |
| Context     | <b>configure service ies string interface string sap string ipsec-gateway string cert status-verify</b> |
| Tree        | <b>status-verify</b>  |
| Description | Commands in this context configure certificate revocation status verification.                          |
| Introduced  | 19.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## default-result *keyword*

|             |  |
|-------------|--|
| Synopsis    | Default result of Certificate Status Verification (CSV)  |
| Context     | <b>configure service ies string interface string sap string ipsec-gateway string cert status-verify default-result keyword</b> |
| Tree        | <b>default-result</b>  |
| Description | This command specifies the default result when both the primary and secondary methods fail to provide an answer.               |
| Options     | revoked, good  |
| Default     | revoked  |
| Introduced  | 19.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## primary *keyword*

|            |   |
|------------|---|
| Synopsis   | Primary method of CSV to verify the revocation status   |
| Context    | <b>configure service ies string interface string sap string ipsec-gateway string cert status-verify primary keyword</b> |
| Tree       | <b>primary</b>  |
| Options    | crl, ocsp   |
| Default    | crl   |
| Introduced | 19.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**secondary** *keyword*

|            |   |
|------------|---|
| Synopsis   | Secondary method of CSV to verify the revocation status   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">cert</a> <a href="#">status-verify</a> <b>secondary</b> <i>keyword</i> |
| Tree       | <a href="#">secondary</a>   |
| Options    | none, <a href="#">crl</a> , <a href="#">ocsp</a>  |
| Default    | none  |
| Introduced | 19.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**trust-anchor-profile** *reference*

|            |   |
|------------|---|
| Synopsis   | Trust anchor profile name   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">cert</a> <a href="#">trust-anchor-profile</a> <i>reference</i> |
| Tree       | <a href="#">trust-anchor-profile</a>  |
| Reference  | <b>configure</b> <a href="#">ipsec</a> <a href="#">trust-anchor-profile</a> <i>string</i>   |
| Introduced | 19.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**client-db**

|             |  |
|-------------|--|
| Synopsis    | Enable the <b>client-db</b> context  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">client-db</a> |
| Tree        | <a href="#">client-db</a>  |
| Description | Commands in this context configure the IPsec client database. The client database is used to authenticate the IKEv2 dynamic LAN-to-LAN tunnel.   |
| Introduced  | 19.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**fallback** *boolean*

|          |  |
|----------|--|
| Synopsis | Fall back to the default authentication policy   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">client-db</a> <a href="#">fallback</a> <i>boolean</i> |
| Tree     | <a href="#">fallback</a>   |

|             |  |
|-------------|--|
| Description | When configured to <b>true</b> , this command specifies whether the IPsec gateway can fall back to the default authentication policy when the IPsec tunnel authentication request fails to match any clients in the IPsec database.<br><br>When configured to <b>false</b> and the client database lookup fails to return a matched result, the system fails the tunnel setup. |
| Default     | true   |
| Introduced  | 19.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### name reference

|            |  |
|------------|--|
| Synopsis   | Client database name   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>client-db</b> <i>name reference</i> |
| Tree       | <b>name</b>  |
| Reference  | <b>configure ipsec client-db</b> <i>string</i>   |
| Notes      | This element is mandatory.   |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### default-secure-service

|            |   |
|------------|---|
| Synopsis   | Enable the <b>default-secure-service</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>default-secure-service</b> |
| Tree       | <b>default-secure-service</b>   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### interface string



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Private IPsec tunnel interface name   |
| Context  | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>default-secure-service interface</b> <i>string</i> |

|               |  |
|---------------|--|
| Tree          | <a href="#">interface</a>                    |
| String Length | 1 to 32                                      |
| Introduced    | 16.0.R4                                      |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **service-name** *string*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Default security service name  |
| Context       | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">default-secure-service</a> <a href="#">service-name</a> <i>string</i> |
| Tree          | <a href="#">service-name</a>   |
| String Length | 1 to 64  |
| Introduced    | 16.0.R4  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **default-tunnel-template** *reference*

|            |   |
|------------|---|
| Synopsis   | Default tunnel policy template for the gateway  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">default-tunnel-template</a> <i>reference</i> |
| Tree       | <a href="#">default-tunnel-template</a>   |
| Reference  | <b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i>  |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **dhcp-address-assignment**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>dhcp-address-assignment</b> context   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">dhcp-address-assignment</a> |
| Tree       | <a href="#">dhcp-address-assignment</a>  |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |



## dhcpv4

|            |  |
|------------|--|
| Synopsis   | Enable the <b>dhcpv4</b> context   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>dhcp-address-assignment</b> <b>dhcpv4</b> |
| Tree       | <b>dhcpv4</b>  |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the IPsec DHCPv4 server  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>dhcp-address-assignment</b> <b>dhcpv4</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>   |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## gi-address *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Gateway IP address of DHCPv4 packets sent by the system  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>dhcp-address-assignment</b> <b>dhcpv4</b> <b>gi-address</b> <i>string</i> |
| Tree       | <b>gi-address</b>  |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**send-release** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Send DHCPv4 release message when IPsec tunnel removed   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>dhcp-address-assignment</b> <b>dhcpv4</b> <b>send-release</b> <i>boolean</i> |
| Tree       | <b>send-release</b>   |
| Default    | true  |
| Introduced | 19.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**server****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enter the <b>server</b> context  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>dhcp-address-assignment</b> <b>dhcpv4</b> <b>server</b> |
| Tree       | <b>server</b>  |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**address** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | DHCPv4 server addresses   |
| Context     | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>dhcp-address-assignment</b> <b>dhcpv4</b> <b>server</b> <b>address</b> <i>string</i> |
| Tree        | <b>address</b>  |
| Description | This command specifies DHCPv4 server addresses for the DHCPv4-based address assignment. If multiple server addresses are specified, the first advertised DHCPv4 address received is chosen.   |

|                |  |
|----------------|--|
| Max. Instances | 8  |
| Introduced     | 19.7.R1                                      |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### router-instance *string*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Router instance used to reach the DHCPv4 server  |
| Context       | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>dhcp-address-assignment dhcpv4 server router-instance</b> <i>string</i> |
| Tree          | <a href="#">router-instance</a>  |
| String Length | 1 to 64  |
| Introduced    | 19.7.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### dhcpv6

|            |   |
|------------|---|
| Synopsis   | Enable the <b>dhcpv6</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>dhcp-address-assignment dhcpv6</b> |
| Tree       | <a href="#">dhcpv6</a>  |
| Introduced | 19.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the DHCPv6 server  |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>dhcp-address-assignment dhcpv6 admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 19.7.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### link-address *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Link address of the relayed DHCPv6 packets

Context **configure** [service ies](#) *string* [interface](#) *string* [sap](#) *string* [ipsec-gateway](#) *string* [dhcp-address-assignment dhcpv6 link-address](#) *string*

Tree [link-address](#)

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### send-release *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Send DHCPv6 release message when IPsec tunnel removed

Context **configure** [service ies](#) *string* [interface](#) *string* [sap](#) *string* [ipsec-gateway](#) *string* [dhcp-address-assignment dhcpv6 send-release](#) *boolean*

Tree [send-release](#)

Default true

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### server



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **server** context

Context **configure** [service ies](#) *string* [interface](#) *string* [sap](#) *string* [ipsec-gateway](#) *string* [dhcp-address-assignment dhcpv6 server](#)

Tree [server](#)

|            |  |
|------------|--|
| Introduced | 19.7.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### address *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|                |  |
|----------------|--|
| Synopsis       | DHCPv6 server addresses  |
| Context        | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">dhcp-address-assignment dhcpv6 server address</a> <i>string</i> |
| Tree           | <a href="#">address</a>  |
| Description    | This command specifies DHCPv6 server addresses for the DHCPv6-based address assignment. If multiple server addresses are specified, the first advertised DHCPv6 address received is chosen.  |
| Max. Instances | 8  |
| Introduced     | 19.7.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### router-instance *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Router instance to reach the DHCPv6 server   |
| Context       | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">dhcp-address-assignment dhcpv6 server router-instance</a> <i>string</i> |
| Tree          | <a href="#">router-instance</a>  |
| String Length | 1 to 64  |
| Introduced    | 19.7.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### ike-policy *reference*

|          |               |
|----------|---------------|
| Synopsis | IKE policy ID |
|----------|---------------|

|            |  |
|------------|--|
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>ike-policy</b> <i>reference</i> |
| Tree       | <a href="#">ike-policy</a>   |
| Reference  | <b>configure ipsec ike-policy</b> <i>number</i>  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## local

|            |  |
|------------|--|
| Synopsis   | Enter the <b>local</b> context   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>local</b> |
| Tree       | <a href="#">local</a>  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## address-assignment

|            |  |
|------------|--|
| Synopsis   | Enable the <b>address-assignment</b> context   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>local</b> <b>address-assignment</b> |
| Tree       | <a href="#">address-assignment</a>   |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of local address assignments  |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>local</b> <b>address-assignment</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## ipv4

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enable the <b>ipv4</b> context   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local address-assignment ipv4</a> |
| Tree       | <a href="#">ipv4</a>   |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## dhcp-server *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Local DHCPv4 server name   |
| Context       | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local address-assignment ipv4 dhcp-server</a> <i>string</i> |
| Tree          | <a href="#">dhcp-server</a>  |
| String Length | 1 to 32  |
| Notes         | This element is mandatory.   |
| Introduced    | 19.7.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## pool *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Name of the pool defined in the specified DHCPv4 server   |
| Context       | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local address-assignment ipv4 pool</a> <i>string</i> |
| Tree          | <a href="#">pool</a>  |
| String Length | 1 to 32   |

|            |  |
|------------|--|
| Notes      | This element is mandatory.                   |
| Introduced | 19.7.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### router-instance *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Router instance ID for the local DHCPv4 server   |
| Context       | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local address-assignment ipv4</a> <a href="#">router-instance</a> <i>string</i> |
| Tree          | <a href="#">router-instance</a>  |
| String Length | 1 to 64  |
| Notes         | This element is mandatory.   |
| Introduced    | 19.7.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### secondary-pool *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Name of the secondary pool defined in the DHCPv4 server   |
| Context       | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local address-assignment ipv4</a> <a href="#">secondary-pool</a> <i>string</i> |
| Tree          | <a href="#">secondary-pool</a>  |
| String Length | 1 to 32   |
| Introduced    | 19.7.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |



## ipv6

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enable the <b>ipv6</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ipsec-gateway</a> <a href="#">string</a> <a href="#">local</a> <a href="#">address-assignment</a> <a href="#">ipv6</a> |
| Tree       | <a href="#">ipv6</a>   |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## dhcp-server *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Local DHCPv6 server name  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ipsec-gateway</a> <a href="#">string</a> <a href="#">local</a> <a href="#">address-assignment</a> <a href="#">ipv6</a> <a href="#">dhcp-server</a> <a href="#">string</a> |
| Tree          | <a href="#">dhcp-server</a>   |
| String Length | 1 to 32   |
| Notes         | This element is mandatory.  |
| Introduced    | 19.7.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## pool *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Secondary pool name defined in the DHCPv6 server   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ipsec-gateway</a> <a href="#">string</a> <a href="#">local</a> <a href="#">address-assignment</a> <a href="#">ipv6</a> <a href="#">pool</a> <a href="#">string</a> |
| Tree          | <a href="#">pool</a>   |
| String Length | 1 to 32  |

|            |  |
|------------|--|
| Notes      | This element is mandatory.                   |
| Introduced | 19.7.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### router-instance *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Router instance ID hosting the DHCPv6 connection   |
| Context       | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local address-assignment ipv6</a> <a href="#">router-instance</a> <i>string</i> |
| Tree          | <a href="#">router-instance</a>  |
| String Length | 1 to 64  |
| Notes         | This element is mandatory.   |
| Introduced    | 19.7.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### gateway-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Local gateway address of the IPsec gateway   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local gateway-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <a href="#">gateway-address</a>  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### id

|          |   |
|----------|---|
| Synopsis | Enter the <b>id</b> context   |
| Context  | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local id</a> |
| Tree     | <a href="#">id</a>  |

|             |  |
|-------------|--|
| Description | Commands in this context specify the local ID used for the Identification Indicator (IDi) or Identification Responder (IDr) in the IKEv2 tunnel. |
| Introduced  | 16.0.R4  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## auto



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Select ID based on authentication method in IKE policy   |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string sap string ipsec-gateway string</a> <a href="#">local id auto</a> |
| Tree       | <a href="#">auto</a>   |
| Notes      | The following elements are part of a choice: <b>auto</b> , <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## fqdn string



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | FQDN as the local ID type   |
| Context       | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string sap string ipsec-gateway string</a> <a href="#">local id fqdn string</a> |
| Tree          | <a href="#">fqdn</a>  |
| String Length | 1 to 255  |
| Notes         | The following elements are part of a choice: <b>auto</b> , <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .   |
| Introduced    | 16.0.R4   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## ipv4 string

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | IPv4 address as the local ID type   |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">ipsec-gateway string</a> <a href="#">local id ipv4 string</a> |
| Tree       | <a href="#">ipv4</a>  |
| Notes      | The following elements are part of a choice: <b>auto</b> , <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## ipv6 ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#))

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | IPv6 address as the local ID type  |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">ipsec-gateway string</a> <a href="#">local id ipv6 (<a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a>)</a> |
| Tree       | <a href="#">ipv6</a>   |
| Notes      | The following elements are part of a choice: <b>auto</b> , <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## max-history-key-records

|            |  |
|------------|--|
| Synopsis   | Enter the <b>max-history-key-records</b> context   |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">ipsec-gateway string</a> <a href="#">max-history-key-records</a> |
| Tree       | <a href="#">max-history-key-records</a>  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### esp number

|            |  |
|------------|--|
| Synopsis   | Maximum number of recent records   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">max-history-key-records</a> <a href="#">esp</a> <i>number</i> |
| Tree       | <a href="#">esp</a>  |
| Range      | 1 to 48  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### ike number

|            |  |
|------------|--|
| Synopsis   | Maximum number of historical IKE keys recorded   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">max-history-key-records</a> <a href="#">ike</a> <i>number</i> |
| Tree       | <a href="#">ike</a>  |
| Range      | 1 to 3   |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### pre-shared-key string

|               |   |
|---------------|---|
| Synopsis      | Pre-shared key for the IPsec gateway  |
| Context       | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">pre-shared-key</a> <i>string</i> |
| Tree          | <a href="#">pre-shared-key</a>  |
| String Length | 1 to 115  |
| Introduced    | 16.0.R4   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### radius

|            |   |
|------------|---|
| Synopsis   | Enter the <b>radius</b> context   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">radius</a> |
| Tree       | <a href="#">radius</a>  |
| Introduced | 19.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### accounting-policy *reference*

|            |   |
|------------|---|
| Synopsis   | RADIUS accounting policy  |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">ipsec-gateway string</a> <a href="#">radius accounting-policy reference</a> |
| Tree       | <a href="#">accounting-policy</a>   |
| Reference  | <b>configure</b> <a href="#">ipsec radius accounting-policy string</a>  |
| Introduced | 19.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### authentication-policy *reference*

|            |   |
|------------|---|
| Synopsis   | RADIUS authentication policy  |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">ipsec-gateway string</a> <a href="#">radius authentication-policy reference</a> |
| Tree       | <a href="#">authentication-policy</a>   |
| Reference  | <b>configure</b> <a href="#">ipsec radius authentication-policy string</a>  |
| Introduced | 19.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### ts-list *reference*

|            |  |
|------------|--|
| Synopsis   | TS list used for IKEv2 TS negotiation  |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">ipsec-gateway string</a> <a href="#">ts-list reference</a> |
| Tree       | <a href="#">ts-list</a>  |
| Reference  | <b>configure</b> <a href="#">ipsec ts-list string</a>  |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### lag

|            |   |
|------------|---|
| Synopsis   | Enter the <b>lag</b> context  |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">lag</a> |
| Tree       | <a href="#">lag</a>   |
| Introduced | 16.0.R1   |

Platforms All

### **link-map-profile** *number*

Synopsis LAG link map profile for a SAP or network interface

Context **configure** *service ies string interface string sap string lag link-map-profile number*

Tree [link-map-profile](#)

Description This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration.

If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.

Range 1 to 64

Introduced 16.0.R1

Platforms All

### **per-link-hash**

Synopsis Enter the **per-link-hash** context

Context **configure** *service ies string interface string sap string lag per-link-hash*

Tree [per-link-hash](#)

Introduced 16.0.R1

Platforms All

### **class** *number*

Synopsis Class used on LAG egress using weighted per-link-hash

Context **configure** *service ies string interface string sap string lag per-link-hash class number*

Tree [class](#)

Range 1 to 3

Default 1

Introduced 16.0.R1

Platforms All

**weight** *number*

|            |   |
|------------|---|
| Synopsis   | Weight used on LAG egress using weighted per-link-hash  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">lag</a> <a href="#">per-link-hash</a> <a href="#">weight</a> <i>number</i> |
| Tree       | <a href="#">weight</a>  |
| Range      | 1 to 1024   |
| Default    | 1   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**multi-service-site** *reference*

|            |  |
|------------|--|
| Synopsis   | Multi service site name  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">multi-service-site</a> <i>reference</i> |
| Tree       | <a href="#">multi-service-site</a>   |
| Reference  | <b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**static-host**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>static-host</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> |
| Tree       | <a href="#">static-host</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**ipv4** [[ip](#)] *string* [mac](#) *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ipv4</b> list instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> |
| Tree       | <a href="#">ipv4</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |



**[ip] string**

|            |  |
|------------|--|
| Synopsis   | IP address   |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">static-host ipv4 string</a> <a href="#">mac string</a> |
| Tree       | <a href="#">ipv4</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**mac string**

|            |  |
|------------|--|
| Synopsis   | MAC address  |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">static-host ipv4 string</a> <a href="#">mac string</a> |
| Tree       | <a href="#">ipv4</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state keyword**

|            |  |
|------------|--|
| Synopsis   | Administrative state of the static host  |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">static-host ipv4 string</a> <a href="#">mac string</a> <a href="#">admin-state keyword</a> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**ancp-string string**

|               |   |
|---------------|---|
| Synopsis      | ANCP string   |
| Context       | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">static-host ipv4 string</a> <a href="#">mac string</a> <a href="#">ancp-string string</a> |
| Tree          | <a href="#">ancp-string</a>   |
| String Length | 1 to 63   |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## app-profile

|            |  |
|------------|--|
| Synopsis   | Enter the <b>app-profile</b> context   |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string sap string</a> <a href="#">static-host ipv4 string</a> <a href="#">mac string</a> <a href="#">app-profile</a> |
| Tree       | <a href="#">app-profile</a>  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## profile reference

|            |  |
|------------|--|
| Synopsis   | Application profile used by the static host  |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string sap string</a> <a href="#">static-host ipv4 string</a> <a href="#">mac string</a> <a href="#">app-profile profile reference</a> |
| Tree       | <a href="#">profile</a>  |
| Reference  | <b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-profile string</a>   |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## int-dest-id string

|               |   |
|---------------|---|
| Synopsis      | Intermediate destination ID   |
| Context       | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string sap string</a> <a href="#">static-host ipv4 string</a> <a href="#">mac string</a> <a href="#">int-dest-id string</a> |
| Tree          | <a href="#">int-dest-id</a>   |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## sla-profile reference

|          |                  |
|----------|------------------|
| Synopsis | SLA profile name |
|----------|------------------|

|            |   |
|------------|---|
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>sla-profile</b> <i>reference</i> |
| Tree       | <b>sla-profile</b>  |
| Reference  | <b>configure subscriber-mgmt sla-profile</b> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **sub-profile** *reference*

|            |   |
|------------|---|
| Synopsis   | Sub-profile name  |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>sub-profile</b> <i>reference</i> |
| Tree       | <b>sub-profile</b>  |
| Reference  | <b>configure subscriber-mgmt sub-profile</b> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **subscriber-id**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>subscriber-id</b> context   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>subscriber-id</b> |
| Tree       | <b>subscriber-id</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **string** *string*

|               |  |
|---------------|--|
| Synopsis      | Subscriber identification  |
| Context       | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>subscriber-id</b> <i>string</i> <i>string</i> |
| Tree          | <b>string</b>  |
| String Length | 1 to 64  |
| Notes         | The following elements are part of a choice: <b>string</b> or <b>use-sap-id</b> .  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## use-sap-id

|            |  |
|------------|--|
| Synopsis   | Use the SAP id as subscriber ID  |
| Context    | <b>configure</b> <i>service ies string interface string sap string static-host ipv4 string mac string subscriber-id use-sap-id</i> |
| Tree       | <i>use-sap-id</i>  |
| Notes      | The following elements are part of a choice: <b>string</b> or <b>use-sap-id</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## transit-policy

|            |   |
|------------|---|
| Synopsis   | Enable the <b>transit-policy</b> context  |
| Context    | <b>configure</b> <i>service ies string interface string sap string transit-policy</i> |
| Tree       | <i>transit-policy</i>   |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## ip reference

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | IP transit policy ID   |
| Context    | <b>configure</b> <i>service ies string interface string sap string transit-policy ip reference</i>   |
| Tree       | <i>ip</i>  |
| Reference  | <b>configure</b> <i>application-assurance group number partition number transit-ip-policy number</i> |
| Notes      | The following elements are part of a mandatory choice: <b>ip</b> or <b>prefix</b> .                  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## prefix reference

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | IP prefix policy ID   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">transit-policy</a> <a href="#">prefix</a> <i>reference</i> |
| Tree       | <a href="#">prefix</a>  |
| Reference  | <b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-prefix-policy</a> <i>number</i>                      |
| Notes      | The following elements are part of a mandatory choice: <b>ip</b> or <b>prefix</b> .   |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## shcv-policy-ipv4 reference

|            |  |
|------------|--|
| Synopsis   | Host connectivity IPv4 policy  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">shcv-policy-ipv4</a> <i>reference</i> |
| Tree       | <a href="#">shcv-policy-ipv4</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">shcv-policy</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## spoke-sdp [[sdp-bind-id](#)] *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>spoke-sdp</b> list instance   |
| Context        | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> |
| Tree           | <a href="#">spoke-sdp</a>  |
| Max. Instances | 1  |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

## [[sdp-bind-id](#)] *string*

|          |                |
|----------|----------------|
| Synopsis | SDP binding ID |
|----------|----------------|

|               |  |
|---------------|--|
| Context       | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> |
| Tree          | <b>spoke-sdp</b>   |
| String Length | 3 to 16  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

## **aarp**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>aarp</b> context   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>aarp</b> |
| Tree       | <b>aarp</b>  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## **id reference**

|            |   |
|------------|---|
| Synopsis   | AARP instance ID  |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>aarp id reference</b> |
| Tree       | <b>id</b>   |
| Reference  | <b>configure application-assurance aarp</b> <i>number</i>   |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## **type keyword**

|            |   |
|------------|---|
| Synopsis   | Role referenced by the AARP   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>aarp type keyword</b> |
| Tree       | <b>type</b>   |
| Options    | dual-homed, dual-homed-secondary  |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**accounting-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | Policy to collect accounting statistics   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">accounting-policy</a> <i>reference</i> |
| Tree       | <a href="#">accounting-policy</a>   |
| Reference  | <b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the SDP binding to the service  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**app-profile** *reference*

|            |  |
|------------|--|
| Synopsis   | Application profile name for this SDP  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">app-profile</a> <i>reference</i>    |
| Tree       | <a href="#">app-profile</a>  |
| Reference  | <b>configure</b> <a href="#">application-assurance</a> <i>group</i> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i> |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**bfd**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>bfd</b> context   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">bfd</a> |
| Tree       | <a href="#">bfd</a>  |
| Introduced | 21.2.R1  |
| Platforms  | All  |

**bfd-liveness**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>bfd-liveness</b> context   |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">spoke-sdp string</a> <a href="#">bfd</a> <a href="#">bfd-liveness</a> |
| Tree       | <a href="#">bfd-liveness</a>   |
| Introduced | 21.2.R1  |
| Platforms  | All  |

**encap keyword**

|            |  |
|------------|--|
| Synopsis   | BFD encapsulation used on the SDP binding  |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">spoke-sdp string</a> <a href="#">bfd</a> <a href="#">bfd-liveness</a> <a href="#">encap keyword</a> |
| Tree       | <a href="#">encap</a>  |
| Options    | ipv4   |
| Default    | ipv4   |
| Introduced | 21.2.R1  |
| Platforms  | All  |

**bfd-template reference**

|             |   |
|-------------|---|
| Synopsis    | BFD template associated with the SDP binding  |
| Context     | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">spoke-sdp string</a> <a href="#">bfd</a> <a href="#">bfd-template</a> <a href="#">reference</a>  |
| Tree        | <a href="#">bfd-template</a>  |
| Description | This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the <b>configure router bfd</b> context. |
| Reference   | <b>configure</b> <a href="#">bfd</a> <a href="#">bfd-template</a> <a href="#">string</a>  |
| Introduced  | 21.2.R1   |
| Platforms   | All   |

**failure-action keyword**

|          |  |
|----------|--|
| Synopsis | VCCV BFD action taken on the SDP binding   |
| Context  | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">spoke-sdp string</a> <a href="#">bfd</a> <a href="#">failure-action</a> <a href="#">keyword</a> |



|             |   |
|-------------|---|
| Tree        | <a href="#">failure-action</a>  |
| Description | This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the <b>configure router bfd</b> context. |
| Options     | none, down  |
| Default     | none  |
| Introduced  | 21.2.R1   |
| Platforms   | All   |

### **wait-for-up-timer** *number*

|             |  |
|-------------|--|
| Synopsis    | Time waited for BFD up status  |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>bfd</b> <a href="#">wait-for-up-timer</a> <i>number</i>  |
| Tree        | <a href="#">wait-for-up-timer</a>  |
| Description | This command configures the time interval that is used to wait for a BFD session to come up.<br><br>This command is triggered when a spoke-SDP is first administratively enabled and a VCCV BFD session transitions from up to down. The command is required to allow time for BFD sessions to come up, and for BFD to settle before selecting the active spoke-SDP for use in a redundant set. In the case where a VCCV BFD session is bouncing, the timer prevents excessive flapping of the operational state of a spoke-SDP. |
| Range       | 1 to 60  |
| Units       | seconds  |
| Introduced  | 21.2.R1  |
| Platforms   | All  |

### **collect-stats** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow agent to collect accounting statistics   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>collect-stats</b> <i>boolean</i> |
| Tree       | <a href="#">collect-stats</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**control-word** *boolean*

|            |   |
|------------|---|
| Synopsis   | Use the control word as preferred   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>control-word</b> <i>boolean</i> |
| Tree       | <a href="#">control-word</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**cpu-protection**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>cpu-protection</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>cpu-protection</b> |
| Tree       | <a href="#">cpu-protection</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS  |

**eth-cfm-monitoring**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>eth-cfm-monitoring</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">cpu-protection</a> <b>eth-cfm-monitoring</b> |
| Tree       | <a href="#">eth-cfm-monitoring</a>  |
| Notes      | The following elements are part of a choice: <b>eth-cfm-monitoring</b> , <b>ip-src-monitoring</b> , or <b>mac-monitoring</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS   |

**aggregate**

|            |   |
|------------|---|
| Synopsis   | Apply rate limit to the sum of the per peer packet rates  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">eth-cfm-monitoring</a> <b>aggregate</b> |
| Tree       | <a href="#">aggregate</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS   |

## car

|            |   |
|------------|---|
| Synopsis   | Ignore Ethernet CFM packets when enforcing overall rate   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">cpu-protection</a> <a href="#">eth-cfm-monitoring</a> <a href="#">car</a> |
| Tree       | <a href="#">car</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS   |

## ip-src-monitoring

|            |  |
|------------|--|
| Synopsis   | Enable IP source monitoring for CPU protection   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">cpu-protection</a> <a href="#">ip-src-monitoring</a> |
| Tree       | <a href="#">ip-src-monitoring</a>  |
| Notes      | The following elements are part of a choice: <b>eth-cfm-monitoring</b> , <b>ip-src-monitoring</b> , or <b>mac-monitoring</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS  |

## mac-monitoring

|            |   |
|------------|---|
| Synopsis   | Monitor MAC for CPU protection  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">cpu-protection</a> <a href="#">mac-monitoring</a> |
| Tree       | <a href="#">mac-monitoring</a>  |
| Notes      | The following elements are part of a choice: <b>eth-cfm-monitoring</b> , <b>ip-src-monitoring</b> , or <b>mac-monitoring</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS   |

## policy-id *reference*

|          |  |
|----------|--|
| Synopsis | CPM protection policy  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">cpu-protection</a> <a href="#">policy-id</a> <a href="#">reference</a> |
| Tree     | <a href="#">policy-id</a>  |

|            |   |
|------------|---|
| Reference  | <b>configure system security cpu-protection policy number</b> |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

### description *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure service ies string interface string spoke-sdp string description string</b> |
| Tree          | <b>description</b>   |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

### egress

|            |  |
|------------|--|
| Synopsis   | Enter the <b>egress</b> context  |
| Context    | <b>configure service ies string interface string spoke-sdp string egress</b> |
| Tree       | <b>egress</b>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### filter

|            |   |
|------------|---|
| Synopsis   | Enter the <b>filter</b> context   |
| Context    | <b>configure service ies string interface string spoke-sdp string egress filter</b> |
| Tree       | <b>filter</b>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### ip reference

|           |  |
|-----------|--|
| Synopsis  | IPv4 filter policy name  |
| Context   | <b>configure service ies string interface string spoke-sdp string egress filter ip reference</b> |
| Tree      | <b>ip</b>  |
| Reference | <b>configure filter ip-filter string</b>   |

Introduced 16.0.R1  
 Platforms All

### **ipv6** *reference*

Synopsis IPv6 filter policy name  
 Context **configure** [service ies](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [egress filter ipv6](#) *reference*  
 Tree [ipv6](#)  
 Reference **configure** [filter ipv6-filter](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### **qos**

Synopsis Enter the **qos** context  
 Context **configure** [service ies](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [egress qos](#)  
 Tree [qos](#)  
 Introduced 16.0.R1  
 Platforms All

### **network**

Synopsis Enter the **network** context  
 Context **configure** [service ies](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [egress qos network](#)  
 Tree [network](#)  
 Introduced 16.0.R1  
 Platforms All

### **policy-name** *reference*

Synopsis Network policy ID  
 Context **configure** [service ies](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [egress qos network policy-name](#) *reference*  
 Tree [policy-name](#)  
 Reference **configure** [qos network](#) *string*

Introduced 16.0.R1  
 Platforms All

### port-redirect-group

Synopsis Enter the **port-redirect-group** context  
 Context **configure** [service ies string](#) [interface string](#) [spoke-sdp string](#) [egress qos network](#) [port-redirect-group](#)  
 Tree [port-redirect-group](#)  
 Introduced 16.0.R1  
 Platforms All

### group-name *reference*

Synopsis Name of the egress port queue group  
 Context **configure** [service ies string](#) [interface string](#) [spoke-sdp string](#) [egress qos network](#) [port-redirect-group](#) [group-name reference](#)  
 Tree [group-name](#)  
 Reference **configure** [qos queue-group-templates](#) [egress queue-group string](#)  
 Introduced 16.0.R1  
 Platforms All

### instance *number*

Synopsis Queue-group instance ID  
 Context **configure** [service ies string](#) [interface string](#) [spoke-sdp string](#) [egress qos network](#) [port-redirect-group](#) [instance number](#)  
 Tree [instance](#)  
 Range 1 to 65535  
 Introduced 16.0.R1  
 Platforms All

**vc-label** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Egress MPLS VC label to send packets to the far end  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress vc-label</a> <i>number</i> |
| Tree       | <a href="#">vc-label</a>   |
| Range      | 16 to 1048575  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**entropy-label**

|            |  |
|------------|--|
| Synopsis   | Enable the use of entropy labels for spoke SDPs  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">entropy-label</a> |
| Tree       | <a href="#">entropy-label</a>  |
| Notes      | The following elements are part of a choice: <b>entropy-label</b> or <b>hash-label</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**eth-cfm**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>eth-cfm</b> context   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> |
| Tree       | <a href="#">eth-cfm</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**collect-lmm-fc-stats**

|          |   |
|----------|---|
| Synopsis | Enter the <b>collect-lmm-fc-stats</b> context   |
| Context  | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">collect-lmm-fc-stats</a> |
| Tree     | <a href="#">collect-lmm-fc-stats</a>  |

|             |  |
|-------------|--|
| Description | <p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands <b>fc-in-profile</b> and <b>fc</b> in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the <b>collect-lmm-stats</b> command are mutually exclusive when there is entity resource contention.</p> |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **fc** keyword

|                |   |
|----------------|---|
| Synopsis       | Forwarding class name for profile-unaware counter   |
| Context        | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm</b> <b>collect-lmm-fc-stats</b> <b>fc</b> <i>keyword</i>  |
| Tree           | <b>fc</b>   |
| Description    | <p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the <b>fc-in-profile</b> command under the <b>collect-lmm-fc-stats</b> context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p> |
| Options        | be, l2, af, l1, h2, ef, h1, nc  |
| Max. Instances | 8   |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **fc-in-profile** keyword

|             |   |
|-------------|---|
| Synopsis    | Forwarding class name for profile-aware counter   |
| Context     | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm</b> <b>collect-lmm-fc-stats</b> <b>fc-in-profile</b> <i>keyword</i>                       |
| Tree        | <b>fc-in-profile</b>  |
| Description | <p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> |



An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the **fc** command under the **collect-lmm-fc-stats** context.

When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.

|                |  |
|----------------|--|
| Options        | be, l2, af, l1, h2, ef, h1, nc                               |
| Max. Instances | 8  |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **collect-lmm-stats** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Collect statistics for loss measurement message tests  |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <b>collect-lmm-stats</b> <i>boolean</i>   |
| Tree        | <a href="#">collect-lmm-stats</a>  |
| Description | <p>When configured to <b>true</b>, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.</p> <p>The <b>show eth-cfm collect-lmm-stats</b> command displays entities that have been enabled to collect transit and receive counters.</p> <p>When configured to <b>false</b>, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.</p> |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **mep** [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mep</b> list instance   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <b>mep</b> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> |
| Tree       | <a href="#">mep</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**md-admin-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Maintenance Domain (MD) name  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> |
| Tree       | <a href="#">mep</a>   |
| Reference  | <b>configure</b> <a href="#">eth-cfm domain</a> <i>string</i>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**ma-admin-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Maintenance Association (MA) name   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> |
| Tree       | <a href="#">mep</a>   |
| Reference  | <b>configure</b> <a href="#">eth-cfm domain</a> <i>string</i> <a href="#">association</a> <i>string</i>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**mep-id** *number*

|            |   |
|------------|---|
| Synopsis   | Maintenance Endpoint (MEP) ID   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> |
| Tree       | <a href="#">mep</a>   |
| Range      | 1 to 8191   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**admin-state** *keyword*

|          |                                 |
|----------|---------------------------------|
| Synopsis | Administrative state of the MEP |
|----------|---------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">admin-state</a> <a href="#">keyword</a> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**ais** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable the generation and the reception of AIS messages   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">ais</a> <a href="#">boolean</a> |
| Tree       | <a href="#">ais</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**alarm-notification**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>alarm-notification</b> context  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">alarm-notification</a> |
| Tree        | <a href="#">alarm-notification</a>   |
| Description | <p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>   |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**fng-alarm-time** *number*

|          |  |
|----------|--|
| Synopsis | Time that must expire before an FNG alarm is raised  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">alarm-notification</a> <a href="#">fng-alarm-time</a> <a href="#">number</a> |

|            |  |
|------------|--|
| Tree       | <a href="#">fng-alarm-time</a>                               |
| Range      | 250   500   1000   |
| Units      | centiseconds   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **fng-reset-time** *number*

|            |  |
|------------|--|
| Synopsis   | Time that must expire before an FNG alarm is reset   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">alarm-notification</a> <a href="#">fng-reset-time</a> <a href="#">number</a> |
| Tree       | <a href="#">fng-reset-time</a>   |
| Range      | 250   500   1000   |
| Units      | centiseconds   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **ccm** *boolean*

|            |   |
|------------|---|
| Synopsis   | Generate CCM messages   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">ccm</a> <a href="#">boolean</a> |
| Tree       | <a href="#">ccm</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **ccm-ltm-priority** *number*

|          |   |
|----------|---|
| Synopsis | Priority of CCM and LTM messages transmitted by the MEP   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">ccm-ltm-priority</a> <a href="#">number</a> |
| Tree     | <a href="#">ccm-ltm-priority</a>  |
| Range    | 0 to 7  |
| Default  | 7   |

|            |  |
|------------|--|
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **ccm-padding-size** *number*

|             |   |
|-------------|---|
| Synopsis    | Number of octets of padding to insert in CCM packets  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>ccm-padding-size</b> <i>number</i>   |
| Tree        | <a href="#">ccm-padding-size</a>  |
| Description | This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.<br><br>This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through <b>configure eth-cfm domain association ccm-interval</b> ) is less than 1 second. |
| Range       | 3 to 1500   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **csf**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>csf</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>csf</b> |
| Tree       | <a href="#">csf</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **multiplier** *decimal-number*

|          |  |
|----------|--|
| Synopsis | Multiplication factor used to clear the CSF condition  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>csf</b> <b>multiplier</b> <i>decimal-number</i> |
| Tree     | <a href="#">multiplier</a>   |
| Range    | 0.0   2.0 to 30.0  |
| Default  | 3.5  |

|            |  |
|------------|--|
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">description</a> <a href="#">string</a> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **eth-test**

|             |  |
|-------------|--|
| Synopsis    | Enable the <b>eth-test</b> context   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">eth-test</a> |
| Tree        | <a href="#">eth-test</a>   |
| Description | Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the <b>oam eth-cfm eth-test</b> command.  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **bit-error-threshold** *number*

|            |   |
|------------|---|
| Synopsis   | Lowest priority defect allowed to generate fault alarm  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">eth-test</a> <a href="#">bit-error-threshold</a> <a href="#">number</a> |
| Tree       | <a href="#">bit-error-threshold</a>   |
| Range      | 0 to 11840  |
| Units      | bit errors  |
| Default    | 1   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**test-pattern**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>test-pattern</b> context   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test</a> <a href="#">test-pattern</a> |
| Tree        | <a href="#">test-pattern</a>  |
| Description | Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**crc-tlv** *boolean*

|            |  |
|------------|--|
| Synopsis   | Generate a CRC checksum  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test</a> <a href="#">test-pattern</a> <a href="#">crc-tlv</a> <i>boolean</i> |
| Tree       | <a href="#">crc-tlv</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**pattern** *keyword*

|             |  |
|-------------|--|
| Synopsis    | Test pattern for Ethernet Test frames  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test</a> <a href="#">test-pattern</a> <a href="#">pattern</a> <i>keyword</i> |
| Tree        | <a href="#">pattern</a>  |
| Description | This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.  |
| Options     | all-zeros, all-ones  |
| Default     | all-zeros  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**fault-propagation** *keyword*

|            |   |
|------------|---|
| Synopsis   | Fault propagation for the MEP   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <b>fault-propagation</b> <i>keyword</i> |
| Tree       | <a href="#">fault-propagation</a>   |
| Options    | use-if-status-tlv, suspend-ccm  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**grace**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>grace</b> context   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <b>grace</b> |
| Tree        | <a href="#">grace</a>  |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**eth-ed**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>eth-ed</b> context   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> <b>eth-ed</b> |
| Tree        | <a href="#">eth-ed</a>  |
| Description | Commands in this context configure the ITU-T Y.1731 ETH-ED function.  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**max-rx-defect-window** *number*

|          |  |
|----------|--|
| Synopsis | Maximum received ETH-ED expected defect window duration  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> <a href="#">eth-ed</a> <b>max-rx-defect-window</b> <i>number</i> |
| Tree     | <a href="#">max-rx-defect-window</a>   |



|            |  |
|------------|--|
| Range      | 1 to 86400   |
| Units      | seconds  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **priority number**

|            |  |
|------------|--|
| Synopsis   | Transmission priority for ETH-ED PDUs  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace eth-ed</a> <b>priority</b> <i>number</i> |
| Tree       | <a href="#">priority</a>   |
| Range      | 0 to 7   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **rx-eth-ed boolean**

|             |  |
|-------------|--|
| Synopsis    | Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP  |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace eth-ed</a> <b>rx-eth-ed</b> <i>boolean</i> |
| Tree        | <a href="#">rx-eth-ed</a>  |
| Description | This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.   |
| Default     | true   |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **tx-eth-ed boolean**

|            |  |
|------------|--|
| Synopsis   | Transmit ETH-ED PDUs from the MEP  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace eth-ed</a> <b>tx-eth-ed</b> <i>boolean</i> |
| Tree       | <a href="#">tx-eth-ed</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## eth-vsm-grace

Synopsis Enter the **eth-vsm-grace** context

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [spoke-sdp](#) [string](#) [eth-cfm](#) [mep](#) [md-admin-name](#) [reference](#) [ma-admin-name](#) [reference](#) [mep-id](#) [number](#) [grace](#) [eth-vsm-grace](#)

Tree [eth-vsm-grace](#)

Description Commands in this context configure the Nokia ETH-CFM Grace function.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## rx-eth-vsm-grace *boolean*

Synopsis Receive and process Nokia ETH-CFM Grace PDU on the MEP

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [spoke-sdp](#) [string](#) [eth-cfm](#) [mep](#) [md-admin-name](#) [reference](#) [ma-admin-name](#) [reference](#) [mep-id](#) [number](#) [grace](#) [eth-vsm-grace](#) [rx-eth-vsm-grace](#) *boolean*

Tree [rx-eth-vsm-grace](#)

Description When configured to **true**, the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

When configured to **false**, the router disables the Nokia Grace function.

Default true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## tx-eth-vsm-grace *boolean*

Synopsis Transmit ETH-ED PDUs from the MEP

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [spoke-sdp](#) [string](#) [eth-cfm](#) [mep](#) [md-admin-name](#) [reference](#) [ma-admin-name](#) [reference](#) [mep-id](#) [number](#) [grace](#) [eth-vsm-grace](#) [tx-eth-vsm-grace](#) *boolean*

Tree [tx-eth-vsm-grace](#)

Description When configured to **true**, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.

The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

The operator must configure the **configure system eth-cfm grace** command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).

When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.

|            |  |
|------------|--|
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **low-priority-defect** *keyword*

|            |   |
|------------|---|
| Synopsis   | Lowest priority defect allowed to generate fault alarm  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>low-priority-defect</b> <i>keyword</i> |
| Tree       | <a href="#">low-priority-defect</a>   |
| Options    | all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon  |
| Default    | mac-rem-err-xcon  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **one-way-delay-threshold** *number*

|            |  |
|------------|--|
| Synopsis   | Threshold time limit for the one-way delay test  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>one-way-delay-threshold</b> <i>number</i> |
| Tree       | <a href="#">one-way-delay-threshold</a>  |
| Range      | 0 to 600   |
| Units      | seconds  |
| Default    | 3  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **squelch-ingress-levels** *number*

|          |   |
|----------|---|
| Synopsis | Levels for which ETH-CFM packets are silently discarded |
|----------|---|

|                |  |
|----------------|--|
| Context        | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm squelch-ingress-levels</b> <i>number</i>   |
| Tree           | <a href="#">squelch-ingress-levels</a>   |
| Description    | <p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.</p> |
| Range          | 0 to 7   |
| Max. Instances | 8  |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## hash-label

|            |  |
|------------|--|
| Synopsis   | Enable the <b>hash-label</b> context   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>hash-label</b> |
| Tree       | <a href="#">hash-label</a>   |
| Notes      | The following elements are part of a choice: <b>entropy-label</b> or <b>hash-label</b> .                                   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## signal-capability

|            |  |
|------------|--|
| Synopsis   | Enable the signaling of the hash label between PE nodes  |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>hash-label signal-capability</b> |
| Tree       | <a href="#">signal-capability</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## ingress

|          |                                  |
|----------|----------------------------------|
| Synopsis | Enter the <b>ingress</b> context |
|----------|----------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>ingress</b> |
| Tree       | <b>ingress</b>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## filter

|            |  |
|------------|--|
| Synopsis   | Enter the <b>filter</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>ingress filter</b> |
| Tree       | <b>filter</b>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## ip reference

|            |   |
|------------|---|
| Synopsis   | IPv4 filter policy name   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>ingress filter ip reference</b> |
| Tree       | <b>ip</b>   |
| Reference  | <b>configure filter ip-filter</b> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## ipv6 reference

|            |   |
|------------|---|
| Synopsis   | IPv6 filter policy name   |
| Context    | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>ingress filter ipv6 reference</b> |
| Tree       | <b>ipv6</b>   |
| Reference  | <b>configure filter ipv6-filter</b> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## qos

|          |   |
|----------|---|
| Synopsis | Enter the <b>qos</b> context  |
| Context  | <b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>ingress qos</b> |

|            |                     |
|------------|---------------------|
| Tree       | <a href="#">qos</a> |
| Introduced | 16.0.R1             |
| Platforms  | All                 |

## network

|            |   |
|------------|---|
| Synopsis   | Enter the <b>network</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">network</a> |
| Tree       | <a href="#">network</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## fp-redirect-group

|            |   |
|------------|---|
| Synopsis   | Enter the <b>fp-redirect-group</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">network</a> <a href="#">fp-redirect-group</a> |
| Tree       | <a href="#">fp-redirect-group</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## group-name *reference*

|            |   |
|------------|---|
| Synopsis   | Name of the forwarding plane queue group template   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">network</a> <a href="#">fp-redirect-group</a> <a href="#">group-name</a> <i>reference</i> |
| Tree       | <a href="#">group-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">ingress</a> <a href="#">queue-group</a> <a href="#">string</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## instance *number*

|          |  |
|----------|--|
| Synopsis | Instance of FP ingress queue group for the SDP binding   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">network</a> <a href="#">fp-redirect-group</a> <a href="#">instance</a> <i>number</i> |

|            |                          |
|------------|--------------------------|
| Tree       | <a href="#">instance</a> |
| Range      | 1 to 65535               |
| Introduced | 16.0.R1                  |
| Platforms  | All                      |

### **policy-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Network policy ID   |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">spoke-sdp string</a> <a href="#">ingress qos network policy-name reference</a> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos network string</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **vc-label** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Ingress MPLS VC label to send packets to the far end  |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">spoke-sdp string</a> <a href="#">ingress vc-label number</a> |
| Tree       | <a href="#">vc-label</a>  |
| Range      | 1 to 1048575  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **transit-policy**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>transit-policy</b> context   |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">spoke-sdp string</a> <a href="#">transit-policy</a> |
| Tree       | <a href="#">transit-policy</a>   |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## ip reference

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | IP transit policy ID   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">transit-policy ip reference</a> |
| Tree       | <a href="#">ip</a>   |
| Reference  | <b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-ip-policy</a> <i>number</i>                     |
| Notes      | The following elements are part of a mandatory choice: <b>ip</b> or <b>prefix</b> .  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## prefix reference

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | IP prefix policy ID  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">transit-policy prefix reference</a> |
| Tree       | <a href="#">prefix</a>   |
| Reference  | <b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-prefix-policy</a> <i>number</i>                     |
| Notes      | The following elements are part of a mandatory choice: <b>ip</b> or <b>prefix</b> .  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## vc-type keyword

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | Virtual circuit type associated with the SDP binding |
|----------|--|



|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">vc-type</a> <i>keyword</i> |
| Tree       | <a href="#">vc-type</a>   |
| Options    | ether, ipipe  |
| Default    | ether   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **static-tunnel-redundant-nextthop** *string*

|             |   |
|-------------|---|
| Synopsis    | Address for the static ISA tunnel redundant next-hop  |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">static-tunnel-redundant-nextthop</a> <i>string</i>   |
| Tree        | <a href="#">static-tunnel-redundant-nextthop</a>  |
| Description | This command specifies the redundant next-hop address on public or private IPsec interfaces (with a public or private tunnel SAP) for the static IPsec tunnel.<br>The next-hop address is resolved in the routing table of the corresponding service. |
| Notes       | The following elements are part of a choice: <b>multi-chassis-shunting-profile</b> or ( <b>dynamic-tunnel-redundant-nextthop</b> and <b>static-tunnel-redundant-nextthop</b> ).   |
| Introduced  | 19.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **tos-marking-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | TOS marking state   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">tos-marking-state</a> <i>keyword</i> |
| Tree       | <a href="#">tos-marking-state</a>   |
| Options    | trusted, untrusted  |
| Default    | untrusted   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **tunnel** *boolean*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enable/disable tunnel interface  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>tunnel</b> <i>boolean</i> |
| Tree       | <b>tunnel</b>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **vas-if-type** *keyword*

|            |   |
|------------|---|
| Synopsis   | VAS interface type  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>vas-if-type</b> <i>keyword</i> |
| Tree       | <b>vas-if-type</b>  |
| Options    | to-from-access, to-from-network, to-from-both   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **vpls** [**vpls-name**] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>vpls</b> list instance   |
| Context        | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>vpls</b> <i>string</i> |
| Tree           | <b>vpls</b>   |
| Max. Instances | 1   |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

### [**vpls-name**] *string*

|               |   |
|---------------|---|
| Synopsis      | VPLS service  |
| Context       | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>vpls</b> <i>string</i> |
| Tree          | <b>vpls</b>   |
| String Length | 1 to 64   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R4   |
| Platforms     | All   |

## egress

|            |   |
|------------|---|
| Synopsis   | Enter the <b>egress</b> context   |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">vpls string</a> <a href="#">egress</a> |
| Tree       | <a href="#">egress</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## reclassify-using-qos *reference*

|            |  |
|------------|--|
| Synopsis   | Egress QoS policy  |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">vpls string</a> <a href="#">egress</a> <a href="#">reclassify-using-qos reference</a> |
| Tree       | <a href="#">reclassify-using-qos</a>   |
| Reference  | <b>configure</b> <a href="#">qos sap-egress string</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## routed-override-filter

|            |  |
|------------|--|
| Synopsis   | Enter the <b>routed-override-filter</b> context  |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">vpls string</a> <a href="#">egress</a> <a href="#">routed-override-filter</a> |
| Tree       | <a href="#">routed-override-filter</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## ip *reference*

|            |   |
|------------|---|
| Synopsis   | IPv4 filter policy name   |
| Context    | <b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">vpls string</a> <a href="#">egress</a> <a href="#">routed-override-filter</a> <a href="#">ip reference</a> |
| Tree       | <a href="#">ip</a>  |
| Reference  | <b>configure</b> <a href="#">filter ip-filter string</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**ipv6 reference**

|            |  |
|------------|--|
| Synopsis   | IPv6 filter policy name  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">vpls</a> <i>string</i> <a href="#">egress routed-override-filter ipv6 reference</a> |
| Tree       | <a href="#">ipv6</a>   |
| Reference  | <b>configure</b> <a href="#">filter ipv6-filter</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**evpn**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>evpn</b> context  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">vpls</a> <i>string</i> <a href="#">evpn</a> |
| Tree       | <a href="#">evpn</a>   |
| Introduced | 19.10.R1   |
| Platforms  | All  |

**arp**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>arp</b> context   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">vpls</a> <i>string</i> <a href="#">evpn arp</a> |
| Tree       | <a href="#">arp</a>  |
| Introduced | 19.10.R1   |
| Platforms  | All  |

**advertise** [[route-type](#)] *keyword*

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>advertise</b> list instance   |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">vpls</a> <i>string</i> <a href="#">evpn arp advertise</a> <i>keyword</i>  |
| Tree        | <a href="#">advertise</a>  |
| Description | Commands in this context specify the configuration to allow ARP or ND entries that are installed in the ARP or ND cache to be advertised in EVPN MAC/IP routes.<br><br>The <b>learn-dynamic</b> command must be set to <b>false</b> when using this functionality. |
| Introduced  | 19.10.R1   |

Platforms All

### **[route-type]** *keyword*

Synopsis Type of ARP or ND entries that generate host routes

Context **configure** **service** **ies** *string* **interface** *string* **vpls** *string* **evpn** **arp** **advertise** *keyword*

Tree **advertise**

Description This command specifies the type of ARP or ND entries that are installed in the ARP or ND cache into EVPN MAC/IP routes.

Options static, dynamic

Notes This element is part of a list key.

Introduced 19.10.R1

Platforms All

### **route-tag** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Tag value used with the host route from an ARP/ND entry

Context **configure** **service** **ies** *string* **interface** *string* **vpls** *string* **evpn** **arp** **advertise** *keyword* **route-tag** *number*

Tree **route-tag**

Description This command specifies the route tag that is added separately to dynamic or static ARP or ND entries that are advertised in EVPN MAC/IP routes. This tag can be matched on BGP vsi-export (in the R-VPLS) and BGP peer export policies.

Range 0 to 255

Introduced 19.10.R1

Platforms All

### **flood-garp-and-unknown-req** *boolean*

Synopsis Allow CPM originated ARP frames to flood R-VPLS service

Context **configure** **service** **ies** *string* **interface** *string* **vpls** *string* **evpn** **arp** **flood-garp-and-unknown-req** *boolean*

Tree **flood-garp-and-unknown-req**

|             |   |
|-------------|---|
| Description | When configured to <b>true</b> , the system allows CPM-originated ARP frames to be flooded in the R-VPLS service. Any frames that are data path flooded such as the ARP messages received on a SAP, are flooded irrespective of this command.<br>When configured to <b>false</b> , CPM-originated ARP flooding is suppressed. |
| Default     | true  |
| Introduced  | 19.10.R1  |
| Platforms   | All   |

### **learn-dynamic** *boolean*

|            |  |
|------------|--|
| Synopsis   | Process ARP or ND messages on EVPN tunnels   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">vpls</a> <i>string</i> <a href="#">evpn arp</a> <b>learn-dynamic</b> <i>boolean</i> |
| Tree       | <a href="#">learn-dynamic</a>  |
| Default    | true   |
| Introduced | 19.10.R1   |
| Platforms  | All  |

### **nd**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>nd</b> context  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">vpls</a> <i>string</i> <a href="#">evpn</a> <b>nd</b> |
| Tree       | <a href="#">nd</a>   |
| Introduced | 20.5.R1  |
| Platforms  | All  |

### **advertise** [[route-type](#)] *keyword*

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>advertise</b> list instance   |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">vpls</a> <i>string</i> <a href="#">evpn</a> <b>nd</b> <b>advertise</b> <i>keyword</i>   |
| Tree        | <a href="#">advertise</a>  |
| Description | Commands in this context specify the configuration to allow ARP or ND entries that are installed in the ARP or ND cache to be advertised in EVPN MAC/IP routes.<br>The <b>learn-dynamic</b> command must be set to <b>false</b> when using this functionality. |
| Introduced  | 20.5.R1  |
| Platforms   | All  |

**[route-type] keyword**

|             |   |
|-------------|---|
| Synopsis    | Type of ARP or ND entries that generate host routes   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">evpn</a> <a href="#">nd</a> <a href="#">advertise</a> <i>keyword</i> |
| Tree        | <a href="#">advertise</a>   |
| Description | This command specifies the type of ARP or ND entries that are installed in the ARP or ND cache into EVPN MAC/IP routes.   |
| Options     | static, dynamic   |
| Notes       | This element is part of a list key.   |
| Introduced  | 20.5.R1   |
| Platforms   | All   |

**route-tag number****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Tag value used with the host route from an ARP/ND entry   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">evpn</a> <a href="#">nd</a> <a href="#">advertise</a> <i>keyword</i> <a href="#">route-tag</a> <i>number</i> |
| Tree        | <a href="#">route-tag</a>   |
| Description | This command specifies the route tag that is added separately to dynamic or static ARP or ND entries that are advertised in EVPN MAC/IP routes. This tag can be matched on BGP vsi-export (in the R-VPLS) and BGP peer export policies.   |
| Range       | 0 to 255  |
| Introduced  | 20.5.R1   |
| Platforms   | All   |

**learn-dynamic boolean**

|            |   |
|------------|---|
| Synopsis   | Process ARP or ND messages on EVPN tunnels  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">evpn</a> <a href="#">nd</a> <a href="#">learn-dynamic</a> <i>boolean</i> |
| Tree       | <a href="#">learn-dynamic</a>   |
| Default    | true  |
| Introduced | 20.5.R1   |

Platforms All

## ingress

Synopsis Enter the **ingress** context

Context **configure** [service ies string](#) [interface string](#) [vpls string](#) [ingress](#)

Tree [ingress](#)

Introduced 16.0.R1

Platforms All

## routed-override-filter

Synopsis Enter the **routed-override-filter** context

Context **configure** [service ies string](#) [interface string](#) [vpls string](#) [ingress](#) [routed-override-filter](#)

Tree [routed-override-filter](#)

Introduced 16.0.R1

Platforms All

## ip reference

Synopsis IPv4 filter policy name

Context **configure** [service ies string](#) [interface string](#) [vpls string](#) [ingress](#) [routed-override-filter](#) [ip reference](#)

Tree [ip](#)

Reference **configure** [filter ip-filter string](#)

Introduced 16.0.R1

Platforms All

## ipv6 reference

Synopsis IPv6 filter policy name

Context **configure** [service ies string](#) [interface string](#) [vpls string](#) [ingress](#) [routed-override-filter](#) [ipv6 reference](#)

Tree [ipv6](#)

Reference **configure** [filter ipv6-filter string](#)

Introduced 16.0.R1



Platforms All

### **redundant-interface** *[interface-name] string*

Synopsis Enter the **redundant-interface** list instance  
 Context **configure service ies string redundant-interface string**  
 Tree [redundant-interface](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[interface-name] string**

Synopsis Interface name  
 Context **configure service ies string redundant-interface string**  
 Tree [redundant-interface](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state keyword**

Synopsis Administrative state of the interface  
 Context **configure service ies string redundant-interface string admin-state keyword**  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description string**

Synopsis Text description  
 Context **configure service ies string redundant-interface string description string**  
 Tree [description](#)

String Length 1 to 255  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## hold-time

Synopsis Enter the **hold-time** context  
 Context **configure service ies string redundant-interface string hold-time**  
 Tree **hold-time**  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv4

Synopsis Enter the **ipv4** context  
 Context **configure service ies string redundant-interface string hold-time ipv4**  
 Tree **ipv4**  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## down

Synopsis Enter the **down** context  
 Context **configure service ies string redundant-interface string hold-time ipv4 down**  
 Tree **down**  
 Description Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the **init-only** command.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## init-only *boolean*

Synopsis Apply delay only at interface configuration or reboot

|             |  |
|-------------|--|
| Context     | <b>configure service ies</b> <i>string</i> <b>redundant-interface</b> <i>string</i> <b>hold-time ipv4 down</b> <b>init-only</b> <i>boolean</i> |
| Tree        | <b>init-only</b>   |
| Description | This command applies a delay only when the IP interface is first configured or after a system reboot.  |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **seconds** *number*

|            |   |
|------------|---|
| Synopsis   | Down hold time for the IP interface   |
| Context    | <b>configure service ies</b> <i>string</i> <b>redundant-interface</b> <i>string</i> <b>hold-time ipv4 down</b> <b>seconds</b> <i>number</i> |
| Tree       | <b>seconds</b>  |
| Range      | 1 to 1200   |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **up**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>up</b> context   |
| Context     | <b>configure service ies</b> <i>string</i> <b>redundant-interface</b> <i>string</i> <b>hold-time ipv4 up</b>  |
| Tree        | <b>up</b>   |
| Description | Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down. |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **seconds** *number*

|          |   |
|----------|---|
| Synopsis | Up hold time for the IP interface   |
| Context  | <b>configure service ies</b> <i>string</i> <b>redundant-interface</b> <i>string</i> <b>hold-time ipv4 up</b> <b>seconds</b> <i>number</i> |
| Tree     | <b>seconds</b>  |

|            |   |
|------------|---|
| Range      | 1 to 1200   |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **ip-mtu** *number*

|            |   |
|------------|---|
| Synopsis   | IP MTU applied to outgoing packets  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">ip-mtu</a> <i>number</i> |
| Tree       | <a href="#">ip-mtu</a>  |
| Range      | 512 to 9786   |
| Units      | bytes   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ipv4**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ipv4</b> context   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">ipv4</a> |
| Tree       | <a href="#">ipv4</a>  |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **primary**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>primary</b> context   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">primary</a> |
| Tree       | <a href="#">primary</a>   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **address** *string*

|          |   |
|----------|---|
| Synopsis | IPv4 address to be assigned to the interface  |
| Context  | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">primary</a> <a href="#">address</a> <i>string</i> |

|            |   |
|------------|---|
| Tree       | <a href="#">address</a>                                 |
| Notes      | This element is mandatory.                              |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **prefix-length** *number*

|            |   |
|------------|---|
| Synopsis   | IPv4 address prefix length  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">redundant-interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">primary</a> <a href="#">prefix-length</a> <i>number</i> |
| Tree       | <a href="#">prefix-length</a>   |
| Range      | 0 to 32   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **remote-ip** *string*

|            |   |
|------------|---|
| Synopsis   | Remote IP address for the interface   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">redundant-interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">primary</a> <a href="#">remote-ip</a> <i>string</i> |
| Tree       | <a href="#">remote-ip</a>   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **spoke-sdp** [[sdp-bind-id](#)] *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>spoke-sdp</b> list instance   |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">redundant-interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <i>string</i> |
| Tree           | <a href="#">spoke-sdp</a>  |
| Max. Instances | 1  |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**[sdp-bind-id] string**

|               |   |
|---------------|---|
| Synopsis      | SDP binding ID  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">redundant-interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> |
| Tree          | <a href="#">spoke-sdp</a>   |
| String Length | 3 to 16   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**admin-state keyword**

|            |   |
|------------|---|
| Synopsis   | Administrative state of the SDP binding to the service  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">redundant-interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">admin-state</a> <a href="#">keyword</a> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**control-word boolean**

|            |  |
|------------|--|
| Synopsis   | Use the control word as preferred  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">redundant-interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">control-word</a> <a href="#">boolean</a> |
| Tree       | <a href="#">control-word</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**description string**

|          |  |
|----------|--|
| Synopsis | Text description   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">redundant-interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">description</a> <a href="#">string</a> |
| Tree     | <a href="#">description</a>  |

String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## egress

Synopsis Enter the **egress** context  
 Context **configure** [service ies](#) *string* [redundant-interface](#) *string* [spoke-sdp](#) *string* **egress**  
 Tree [egress](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## filter

Synopsis Enter the **filter** context  
 Context **configure** [service ies](#) *string* [redundant-interface](#) *string* [spoke-sdp](#) *string* **egress** **filter**  
 Tree [filter](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ip reference

Synopsis IPv4 filter policy name  
 Context **configure** [service ies](#) *string* [redundant-interface](#) *string* [spoke-sdp](#) *string* **egress** **filter** **ip** *reference*  
 Tree [ip](#)  
 Reference **configure** **filter** [ip-filter](#) *string*  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## vc-label *number*



**WARNING:**  
 Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Egress MPLS VC label to send packets to the far end   |
| Context    | <b>configure service ies</b> <i>string</i> <b>redundant-interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>egress vc-label</b> <i>number</i> |
| Tree       | <b>vc-label</b>   |
| Range      | 16 to 1048575   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## ingress

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ingress</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <b>redundant-interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>ingress</b> |
| Tree       | <b>ingress</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## filter

|            |  |
|------------|--|
| Synopsis   | Enter the <b>filter</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <b>redundant-interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>ingress filter</b> <i>filter</i> |
| Tree       | <b>filter</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## ip reference

|            |  |
|------------|--|
| Synopsis   | IPv4 filter policy name  |
| Context    | <b>configure service ies</b> <i>string</i> <b>redundant-interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>ingress filter ip</b> <i>reference</i> |
| Tree       | <b>ip</b>  |
| Reference  | <b>configure filter ip-filter</b> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |



**vc-label** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Ingress MPLS VC label to send packets to the far end  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress vc-label</a> <i>number</i> |
| Tree       | <a href="#">vc-label</a>  |
| Range      | 1 to 1048575  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**service-id** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Service ID  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">service-id</a> <i>number</i> |
| Tree       | <a href="#">service-id</a>  |
| Range      | 1 to 2147483647   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**subscriber-interface** [[interface-name](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>subscriber-interface</b> list instance   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> |
| Tree       | <a href="#">subscriber-interface</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**[interface-name]** *string*

|          |                           |
|----------|---------------------------|
| Synopsis | Subscriber interface name |
|----------|---------------------------|

|               |   |
|---------------|---|
| Context       | <b>configure service ies string subscriber-interface string</b> |
| Tree          | <a href="#">subscriber-interface</a>                            |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.                             |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR         |

### **admin-state keyword**

|            |   |
|------------|---|
| Synopsis   | Administrative state of the subscriber interface                                    |
| Context    | <b>configure service ies string subscriber-interface string admin-state keyword</b> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                             |

### **description string**

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure service ies string subscriber-interface string description string</b> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 255   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                            |

### **fwd-service reference**



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|           |   |
|-----------|---|
| Synopsis  | Forwarding service name   |
| Context   | <b>configure service ies string subscriber-interface string fwd-service reference</b> |
| Tree      | <a href="#">fwd-service</a>   |
| Reference | <b>configure service vprn string</b>  |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **fwd-subscriber-interface** *reference*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Forwarding subscriber interface name  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">fwd-subscriber-interface</a> <i>reference</i> |
| Tree       | <a href="#">fwd-subscriber-interface</a>  |
| Reference  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **group-interface** [[group-interface-name](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>group-interface</b> list instance  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> |
| Tree       | <a href="#">group-interface</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **[group-interface-name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Group interface name  |
| Context       | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> |
| Tree          | <a href="#">group-interface</a>   |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the interface   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**bonding-parameters**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>bonding-parameters</b> context   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>bonding-parameters</b> |
| Tree       | <b>bonding-parameters</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of ESM connection bonding  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>bonding-parameters</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**connection** [**connection-index**] *number*

|          |   |
|----------|---|
| Synopsis | Enter the <b>connection</b> list instance   |
| Context  | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>bonding-parameters</b> <b>connection</b> <i>number</i> |
| Tree     | <b>connection</b>   |

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[connection-index] number**

Synopsis Bonding connection index  
 Context **configure service ies string subscriber-interface string group-interface string bonding-parameters connection number**  
 Tree [connection](#)  
 Range 1 to 2  
 Notes This element is part of a list key.  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **service string**

Synopsis Connection service  
 Context **configure service ies string subscriber-interface string group-interface string bonding-parameters connection number service string**  
 Tree [service](#)  
 String Length 1 to 64  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **fpe reference**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis FPE that provisions bonding functionality  
 Context **configure service ies string subscriber-interface string group-interface string bonding-parameters fpe reference**  
 Tree [fpe](#)  
 Reference **configure fwd-path-ext fpe number**  
 Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## multicast

Synopsis Enter the **multicast** context

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [bonding-parameters](#) **multicast**

Tree [multicast](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## connection (*number* | *keyword*)



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Multicast connection

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [bonding-parameters](#) **multicast** [connection](#) (*number* | *keyword*)

Tree [connection](#)

Range 1 to 2

Options use-incoming

Default use-incoming

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## brg

Synopsis Enter the **brg** context

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* **brg**

Tree [brg](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of BRG  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">brg</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**authenticated-brg-only** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Allow BRGs that have been pre-authenticated   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">brg</a> <a href="#">authenticated-brg-only</a> <i>boolean</i> |
| Tree       | <a href="#">authenticated-brg-only</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**default-brg-profile** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Default BRG profile for new BRGs   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">brg</a> <a href="#">default-brg-profile</a> <i>reference</i> |
| Tree       | <a href="#">default-brg-profile</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">vrgw</a> <a href="#">brg-profile</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**cflowd-parameters**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>cflowd-parameters</b> context   |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>cflowd-parameters</b> |
| Tree       | <b>cflowd-parameters</b>   |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**sampling** [**sampling-type**] *keyword*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>sampling</b> list instance   |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>cflowd-parameters</b> <b>sampling</b> <i>keyword</i> |
| Tree       | <b>sampling</b>   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**[sampling-type]** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Traffic sampling type   |
| Context     | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>cflowd-parameters</b> <b>sampling</b> <i>keyword</i> |
| Tree        | <b>sampling</b>   |
| Description | This command configures the type of traffic to be sampled on the associated IP interface.   |
| Options     | unicast, multicast, both  |
| Notes       | This element is part of a list key.   |
| Introduced  | 16.0.R4   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**direction** *keyword*

|          |   |
|----------|---|
| Synopsis | Direction of traffic for cflowd sampling  |
| Context  | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>cflowd-parameters</b> <b>sampling</b> <i>keyword</i> <b>direction</b> <i>keyword</i> |



|             |   |
|-------------|---|
| Tree        | <a href="#">direction</a>   |
| Description | This command configures the direction in which sampling occurs on the associated IP interfaces. |
| Options     | ingress-only, egress-only, both   |
| Default     | ingress-only  |
| Introduced  | 16.0.R4   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **sample-profile** (*keyword* | *number*)

|             |   |
|-------------|---|
| Synopsis    | Sample profile ID   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">cflowd-parameters</a> <a href="#">sampling</a> <i>keyword</i> <b>sample-profile</b> ( <i>keyword</i>   <i>number</i> ) |
| Tree        | <a href="#">sample-profile</a>  |
| Description | This command defines the sampling rate profile associated with this interface.  |
| Max. Range  | 0 to 4294967295   |
| Options     | 1   |
| Introduced  | 19.5.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **type** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Type of cflowd analysis   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">cflowd-parameters</a> <a href="#">sampling</a> <i>keyword</i> <b>type</b> <i>keyword</i> |
| Tree        | <a href="#">type</a>  |
| Description | This command configures the cflowd sampling type on the associated IP interface.  |
| Options     | acl, interface  |
| Notes       | This element is mandatory.  |
| Introduced  | 16.0.R4   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **data-trigger**

|          |                                       |
|----------|---------------------------------------|
| Synopsis | Enter the <b>data-trigger</b> context |
|----------|---------------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>data-trigger</b> |
| Tree       | <b>data-trigger</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of data-triggered host creation   |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>data-trigger admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>   |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <b>description</b>   |
| String Length | 1 to 255   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **dynamic-routes-track-srrp**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>dynamic-routes-track-srrp</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>dynamic-routes-track-srrp</b> |
| Tree       | <b>dynamic-routes-track-srrp</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**hold-time** *number*

|            |   |
|------------|---|
| Synopsis   | Time before route state updated after SRRP transition   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>dynamic-routes-track-srrp</b> <b>hold-time</b> <i>number</i> |
| Tree       | <b>hold-time</b>  |
| Range      | 1 to 50   |
| Units      | deciseconds   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**gtp-parameters**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>gtp-parameters</b> context   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>gtp-parameters</b> |
| Tree       | <b>gtp-parameters</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of GTP access  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>gtp-parameters</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**fpe** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | PE that provisions the GTP user interface |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>gtp-parameters fpe reference</i> |
| Tree       | <a href="#">fpe</a>   |
| Reference  | <b>configure fwd-path-ext</b> <a href="#">fpe</a> <i>number</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **gx-policy** *reference*

|            |  |
|------------|--|
| Synopsis   | Diameter application policy  |
| Context    | <b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>gx-policy reference</i> |
| Tree       | <a href="#">gx-policy</a>  |
| Reference  | <b>configure subscriber-mgmt</b> <a href="#">diameter-gx-policy</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **ingress**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ingress</b> context   |
| Context    | <b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ingress</i> |
| Tree       | <a href="#">ingress</a>  |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **policy-accounting** *reference*

|            |  |
|------------|--|
| Synopsis   | Ingress policy accounting template name  |
| Context    | <b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ingress policy-accounting reference</i> |
| Tree       | <a href="#">policy-accounting</a>  |
| Reference  | <b>configure routing-options</b> <a href="#">policy-accounting</a> <a href="#">policy-acct-template</a> <i>string</i>                                  |
| Introduced | 19.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s   |

**ingress-stats** *boolean*

|            |  |
|------------|--|
| Synopsis   | Collect ingress interface statistics   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ingress-stats</a> <i>boolean</i> |
| Tree       | <a href="#">ingress-stats</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**ip-mtu** *number*

|            |  |
|------------|--|
| Synopsis   | Interface IP MTU   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ip-mtu</a> <i>number</i> |
| Tree       | <a href="#">ip-mtu</a>   |
| Range      | 512 to 9786  |
| Units      | bytes  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**ipoe-linking**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipoe-linking</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipoe-linking</a> |
| Tree       | <a href="#">ipoe-linking</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state** *keyword*

|          |   |
|----------|---|
| Synopsis | Administrative state of IPoE host linking   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipoe-linking</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree     | <a href="#">admin-state</a>   |
| Options  | enable, disable   |
| Default  | disable   |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **gratuitous-router-advertisement** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Send unsolicited router advertisement after DHCP setup  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipoe-linking</b> <b>gratuitous-router-advertisement</b> <i>boolean</i> |
| Tree       | <a href="#">gratuitous-router-advertisement</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **shared-circuit-id** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enable circuit ID in DHCPv4 Option82 to validate DHCPv6   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipoe-linking</b> <b>shared-circuit-id</b> <i>boolean</i> |
| Tree       | <a href="#">shared-circuit-id</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ipoe-session**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ipoe-session</b> context   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipoe-session</b> |
| Tree       | <a href="#">ipoe-session</a>  |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of IPoE session management

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipoe-session** **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipoe-session** **description** *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **force-auth**

Synopsis Enter the **force-auth** context

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipoe-session** **force-auth**

Tree [force-auth](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cid-change** *boolean*

Synopsis Ignore min-auth-interval when circuit ID changed

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipoe-session** **force-auth** **cid-change** *boolean*

Tree [cid-change](#)

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **rid-change** *boolean*

|            |  |
|------------|--|
| Synopsis   | Ignore min-auth-interval when remote ID changed  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipoe-session</a> <a href="#">force-auth</a> <b>rid-change</b> <i>boolean</i> |
| Tree       | <a href="#">rid-change</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **ipoe-session-policy** *reference*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | IPoE Session policy to be used for new sessions   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipoe-session</a> <a href="#">ipoe-session-policy</a> <i>reference</i> |
| Tree       | <a href="#">ipoe-session-policy</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ipoe-session-policy</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **min-auth-interval** (*keyword | number*)

|            |   |
|------------|---|
| Synopsis   | Minimum time between two authentication attempts  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipoe-session</a> <b>min-auth-interval</b> ( <i>keyword   number</i> ) |
| Tree       | <a href="#">min-auth-interval</a>   |
| Range      | 1 to 32000000   |
| Units      | seconds   |
| Options    | infinite, always-reauthenticate   |
| Default    | infinite  |
| Introduced | 16.0.R1   |



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-session-timeout** *keyword*

Synopsis Session timeout attribute to be interpreted

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipoe-session** **radius-session-timeout** *keyword*

Tree **radius-session-timeout**

Options absolute, ignore, backwards-compatible

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sap-session-limit** *number*

Synopsis Maximum number of sessions per SAP

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipoe-session** **sap-session-limit** *number*

Tree **sap-session-limit**

Range 1 to 131071

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **session-limit** *number*

Synopsis Maximum number of sessions on this group interface

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipoe-session** **session-limit** *number*

Tree **session-limit**

Range 1 to 500000

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**stateless-redundancy** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Remove IPoE sessions when the system becomes stand-by in a stateless multi-chassis redundancy setup                                     |
| Context    | <b>configure</b> <i>service ies string subscriber-interface string group-interface string ipoe-session stateless-redundancy boolean</i> |
| Tree       | <a href="#">stateless-redundancy</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**user-db** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Local user database for IPoE session authentication  |
| Context    | <b>configure</b> <i>service ies string subscriber-interface string group-interface string ipoe-session user-db reference</i> |
| Tree       | <a href="#">user-db</a>  |
| Reference  | <b>configure</b> <i>subscriber-mgmt local-user-db string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**ipv4**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv4</b> context  |
| Context    | <b>configure</b> <i>service ies string subscriber-interface string group-interface string ipv4</i> |
| Tree       | <a href="#">ipv4</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## arp-host

|            |  |
|------------|--|
| Synopsis   | Enter the <b>arp-host</b> context  |
| Context    | <b>configure service ies string subscriber-interface string group-interface string ipv4 arp-host</b> |
| Tree       | <a href="#">arp-host</a>   |
| Introduced | 16.0.R6  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of ARP hosts  |
| Context    | <b>configure service ies string subscriber-interface string group-interface string ipv4 arp-host admin-state keyword</b> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Introduced | 16.0.R6  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## host-limit *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of ARP hosts  |
| Context    | <b>configure service ies string subscriber-interface string group-interface string ipv4 arp-host host-limit number</b> |
| Tree       | <a href="#">host-limit</a>   |
| Range      | 1 to 524287  |
| Introduced | 16.0.R6  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## min-auth-interval *number*

|          |   |
|----------|---|
| Synopsis | Minimum authentication interval   |
| Context  | <b>configure service ies string subscriber-interface string group-interface string ipv4 arp-host min-auth-interval number</b> |
| Tree     | <a href="#">min-auth-interval</a>   |
| Range    | 1 to 6000   |
| Units    | minutes   |

|            |   |
|------------|---|
| Default    | 15  |
| Introduced | 16.0.R6   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **sap-host-limit** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of ARP hosts per SAP  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 arp-host sap-host-limit</a> <i>number</i> |
| Tree       | <a href="#">sap-host-limit</a>   |
| Range      | 1 to 131071  |
| Default    | 1  |
| Introduced | 16.0.R6  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **dhcp**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>dhcp</b> context   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> |
| Tree       | <a href="#">dhcp</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of DHCP   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **client-applications**

|          |  |
|----------|--|
| Synopsis | Enter the <b>client-applications</b> context |
|----------|--|

|            |  |
|------------|--|
| Context    | <b>configure service ies string subscriber-interface string group-interface string ipv4 dhcp client-applications</b> |
| Tree       | <b>client-applications</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **dhcp boolean**

|            |   |
|------------|---|
| Synopsis   | Enable IPoE clients to use DHCP relay or proxy server   |
| Context    | <b>configure service ies string subscriber-interface string group-interface string ipv4 dhcp client-applications dhcp boolean</b> |
| Tree       | <b>dhcp</b>   |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ppp boolean**

|            |  |
|------------|--|
| Synopsis   | Enable PPPoE clients to use DHCP relay or proxy server   |
| Context    | <b>configure service ies string subscriber-interface string group-interface string ipv4 dhcp client-applications ppp boolean</b> |
| Tree       | <b>ppp</b>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **description string**

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure service ies string subscriber-interface string group-interface string ipv4 dhcp description string</b> |
| Tree          | <b>description</b>  |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**filter reference**

|            |   |
|------------|---|
| Synopsis   | DHCP filter ID for the group interface  |
| Context    | <b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv4 dhcp filter reference</i> |
| Tree       | <i>filter</i>   |
| Reference  | <b>configure filter dhcp-filter</b> <i>number</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**gi-address string**

|             |   |
|-------------|---|
| Synopsis    | GI address for the DHCP relay   |
| Context     | <b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv4 dhcp gi-address string</i>  |
| Tree        | <i>gi-address</i>   |
| Description | <p>This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay.</p> <p>By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.</p> |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**lease-populate**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>lease-populate</b> context   |
| Context    | <b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv4 dhcp lease-populate</i> |
| Tree       | <i>lease-populate</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**I2-header**

|          |                                     |
|----------|-------------------------------------|
| Synopsis | Enable the <b>I2-header</b> context |
|----------|-------------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp lease-populate l2-header</b> |
| Tree       | <b>l2-header</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**mac string**

|            |   |
|------------|---|
| Synopsis   | IEEE address used in anti-spoofing entries for the SAP  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp lease-populate l2-header mac</b> <i>string</i> |
| Tree       | <b>mac</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**max-leases number**

|            |  |
|------------|--|
| Synopsis   | Maximum number of DHCPv4 leases  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp lease-populate max-leases</b> <i>number</i> |
| Tree       | <b>max-leases</b>  |
| Range      | 1 to 511999  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**match-circuit-id boolean**

|            |  |
|------------|--|
| Synopsis   | Enable Option 82 circuit ID on relayed DHCP packets  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp match-circuit-id</b> <i>boolean</i> |
| Tree       | <b>match-circuit-id</b>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## offer-selection

|            |  |
|------------|--|
| Synopsis   | Enter the <b>offer-selection</b> context   |
| Context    | <b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>ipv4 dhcp offer-selection</i> |
| Tree       | <i>offer-selection</i>   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## client-mac

|            |   |
|------------|---|
| Synopsis   | Enter the <b>client-mac</b> context   |
| Context    | <b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>ipv4 dhcp offer-selection client-mac</i> |
| Tree       | <i>client-mac</i>   |
| Notes      | The following elements are part of a choice: <b>client-mac</b> or <b>server</b> .   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## discover-delay *number*

|             |  |
|-------------|--|
| Synopsis    | Delay before sending DHCP Discover messages  |
| Context     | <b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>ipv4 dhcp offer-selection client-mac discover-delay</i> <i>number</i> |
| Tree        | <i>discover-delay</i>  |
| Description | This command configures the time to delay sending DHCP Discover messages from the specified MAC addresses.   |
| Range       | 1 to 100   |
| Units       | deciseconds  |
| Introduced  | 20.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## mac-address *keyword*

|          |  |
|----------|--|
| Synopsis | Designated client MAC addresses for Offer selection  |
| Context  | <b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>ipv4 dhcp offer-selection client-mac mac-address</i> <i>keyword</i> |



|             |   |
|-------------|---|
| Tree        | <a href="#">mac-address</a>   |
| Description | This command specifies the client MAC addresses for which the Discover delay applies. |
| Options     | odd, even   |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                               |

### **discover-delay** *number*

|             |  |
|-------------|--|
| Synopsis    | Delay before sending DHCP Discover messages  |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp offer-selection</a> <a href="#">discover-delay</a> <i>number</i> |
| Tree        | <a href="#">discover-delay</a>   |
| Description | This command configures the time to delay sending DHCP Discover messages. The delay is applied to all DHCP Discover messages for which no per DHCP server or per client MAC delay is configured.   |
| Range       | 1 to 100   |
| Units       | deciseconds  |
| Introduced  | 20.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **server** [[ipv4-address](#)] *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>server</b> list instance  |
| Context        | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp offer-selection</a> <a href="#">server</a> <i>string</i> |
| Tree           | <a href="#">server</a>   |
| Max. Instances | 8  |
| Notes          | The following elements are part of a choice: <b>client-mac</b> or <b>server</b> .  |
| Introduced     | 20.10.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **[ipv4-address]** *string*

|          |  |
|----------|--|
| Synopsis | IP address of the DHCP server  |
| Context  | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp offer-selection</a> <a href="#">server</a> <i>string</i> |

|            |   |
|------------|---|
| Tree       | <a href="#">server</a>                                  |
| Notes      | This element is part of a list key.                     |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **discover-delay** *number*

|             |  |
|-------------|--|
| Synopsis    | Delay before sending DHCP Discover messages  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">offer-selection</a> <a href="#">server</a> <i>string</i> <b>discover-delay</b> <i>number</i> |
| Tree        | <a href="#">discover-delay</a>   |
| Description | This command configures the time to delay DHCP Discover messages sent to the server.   |
| Range       | 1 to 100   |
| Units       | deciseconds  |
| Introduced  | 20.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **option-82**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>option-82</b> context   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <b>option-82</b> |
| Tree        | <a href="#">option-82</a>  |
| Description | Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet.  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **action** *keyword*

|          |  |
|----------|--|
| Synopsis | Action to take with received DHCP Option 82  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <b>action</b> <i>keyword</i> |
| Tree     | <a href="#">action</a>   |
| Options  | replace, drop, keep  |

|            |   |
|------------|---|
| Default    | keep  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## circuit-id

|            |   |
|------------|---|
| Synopsis   | Enter the <b>circuit-id</b> context   |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp option-82 circuit-id</b> |
| Tree       | <b>circuit-id</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## ascii-tuple

|            |   |
|------------|---|
| Synopsis   | Use the ASCII-encoded tuple for the circuit ID  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp option-82 circuit-id ascii-tuple</b> |
| Tree       | <b>ascii-tuple</b>  |
| Notes      | The following elements are part of a choice: <b>ascii-tuple</b> , <b>ifindex</b> , <b>none</b> , <b>sap-id</b> , or <b>vlan-ascii-tuple</b> .                               |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## ifindex

|            |   |
|------------|---|
| Synopsis   | Use the interface index for the circuit ID  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp option-82 circuit-id ifindex</b> |
| Tree       | <b>ifindex</b>  |
| Notes      | The following elements are part of a choice: <b>ascii-tuple</b> , <b>ifindex</b> , <b>none</b> , <b>sap-id</b> , or <b>vlan-ascii-tuple</b> .                           |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## none

|            |  |
|------------|--|
| Synopsis   | Do not include the circuit ID  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>option-82</b> <b>circuit-id</b> <b>none</b> |
| Tree       | <b>none</b>  |
| Notes      | The following elements are part of a choice: <b>ascii-tuple</b> , <b>ifindex</b> , <b>none</b> , <b>sap-id</b> , or <b>vlan-ascii-tuple</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## sap-id

|            |  |
|------------|--|
| Synopsis   | Use the SAP ID   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>option-82</b> <b>circuit-id</b> <b>sap-id</b> |
| Tree       | <b>sap-id</b>  |
| Notes      | The following elements are part of a choice: <b>ascii-tuple</b> , <b>ifindex</b> , <b>none</b> , <b>sap-id</b> , or <b>vlan-ascii-tuple</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## vlan-ascii-tuple

|             |   |
|-------------|---|
| Synopsis    | Include the VLAN ID and dot1p bits in the ASCII tuple   |
| Context     | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>option-82</b> <b>circuit-id</b> <b>vlan-ascii-tuple</b>  |
| Tree        | <b>vlan-ascii-tuple</b>   |
| Description | When configured, the router includes the VLAN ID and dot1p bits with the ASCII-tuple information. This only occurs on dot1q and QinQ-encapsulated ports. When the Option 82 bits are stripped, dot1p bits are copied to the Ethernet header of the outgoing packet.<br><br>When unconfigured, the router leaves the circuit ID sub-option of the DHCP packet empty. |
| Notes       | The following elements are part of a choice: <b>ascii-tuple</b> , <b>ifindex</b> , <b>none</b> , <b>sap-id</b> , or <b>vlan-ascii-tuple</b> .   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**remote-id**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>remote-id</b> context  |
| Context     | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>option-82</b> <b>remote-id</b> |
| Tree        | <b>remote-id</b>  |
| Description | Commands in this context configure the remote IP sub-option of the DHCP packet with the identity of the remote host end (typically the DHCP client).  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**ascii-string** *string*

|               |   |
|---------------|---|
| Synopsis      | User-defined ASCII string for the remote ID   |
| Context       | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>option-82</b> <b>remote-id</b> <b>ascii-string</b> <i>string</i> |
| Tree          | <b>ascii-string</b>   |
| String Length | 1 to 32   |
| Notes         | The following elements are part of a choice: <b>ascii-string</b> , <b>mac</b> , or <b>none</b> .  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**mac**

|            |  |
|------------|--|
| Synopsis   | Use the MAC address for the remote ID  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>option-82</b> <b>remote-id</b> <b>mac</b> |
| Tree       | <b>mac</b>   |
| Notes      | The following elements are part of a choice: <b>ascii-string</b> , <b>mac</b> , or <b>none</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**none**

|          |   |
|----------|---|
| Synopsis | Do not include the remote ID  |
| Context  | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>option-82</b> <b>remote-id</b> <b>none</b> |

|            |  |
|------------|--|
| Tree       | <a href="#">none</a>   |
| Notes      | The following elements are part of a choice: <b>ascii-string</b> , <b>mac</b> , or <b>none</b> . |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## vendor-specific-option

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>vendor-specific-option</b> context   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">vendor-specific-option</a> |
| Tree        | <a href="#">vendor-specific-option</a>  |
| Description | Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## client-mac-address *boolean*

|            |   |
|------------|---|
| Synopsis   | Send the MAC address in the VSO   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">vendor-specific-option</a> <a href="#">client-mac-address</a> <i>boolean</i> |
| Tree       | <a href="#">client-mac-address</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## pool-name *boolean*

|            |  |
|------------|--|
| Synopsis   | Send the pool name in the VSO  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">vendor-specific-option</a> <a href="#">pool-name</a> <i>boolean</i> |
| Tree       | <a href="#">pool-name</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**sap-id** *boolean*

|            |   |
|------------|---|
| Synopsis   | Send SAP ID in the sub-option of the DHCP relay packet  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>option-82</b> <b>vendor-specific-option</b> <b>sap-id</b> <i>boolean</i> |
| Tree       | <b>sap-id</b>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**service-id** *boolean*

|            |   |
|------------|---|
| Synopsis   | Send the service ID in the Vendor Specific Option   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>option-82</b> <b>vendor-specific-option</b> <b>service-id</b> <i>boolean</i> |
| Tree       | <b>service-id</b>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**string** *string*

|               |  |
|---------------|--|
| Synopsis      | User-defined ASCII string for the VSO  |
| Context       | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>option-82</b> <b>vendor-specific-option</b> <b>string</b> <i>string</i> |
| Tree          | <b>string</b>  |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**system-id** *boolean*

|          |  |
|----------|--|
| Synopsis | Send the system ID in the VSO  |
| Context  | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>option-82</b> <b>vendor-specific-option</b> <b>system-id</b> <i>boolean</i> |
| Tree     | <b>system-id</b>   |

|            |   |
|------------|---|
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## proxy-server

|            |   |
|------------|---|
| Synopsis   | Enter the <b>proxy-server</b> context   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>proxy-server</b> |
| Tree       | <b>proxy-server</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## admin-state *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the DHCP proxy server   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>proxy-server</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## emulated-server *string*

|            |  |
|------------|--|
| Synopsis   | IP address used as DHCP server address in SAP context  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>proxy-server</b> <b>emulated-server</b> <i>string</i> |
| Tree       | <b>emulated-server</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## lease-time

|          |                                     |
|----------|-------------------------------------|
| Synopsis | Enter the <b>lease-time</b> context |
|----------|-------------------------------------|



|            |  |
|------------|--|
| Context    | <b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv4 dhcp proxy-server lease-time</i> |
| Tree       | <a href="#">lease-time</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **radius-override** *boolean*

|            |  |
|------------|--|
| Synopsis   | Use lease time information provided by RADIUS server   |
| Context    | <b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv4 dhcp proxy-server lease-time radius-override boolean</i> |
| Tree       | <a href="#">radius-override</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **value** *number*

|            |   |
|------------|---|
| Synopsis   | DHCP lease time   |
| Context    | <b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv4 dhcp proxy-server lease-time value number</i> |
| Tree       | <a href="#">value</a>   |
| Range      | 300 to 315446399  |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **python-policy** *reference*

|             |  |
|-------------|--|
| Synopsis    | Python policy name   |
| Context     | <b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv4 dhcp python-policy reference</i> |
| Tree        | <a href="#">python-policy</a>  |
| Description | This command associates a Python policy name with the interface.   |
| Reference   | <b>configure python</b> <i>python-policy string</i>  |
| Introduced  | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## relay-proxy

Synopsis Enable the **relay-proxy** context

Context **configure service ies** *string* *subscriber-interface* *string* *group-interface* *string* *ipv4 dhcp relay-proxy*

Tree [relay-proxy](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## release-update-src-ip *boolean*

Synopsis Update the source IP address of a DHCP RELEASE message

Context **configure service ies** *string* *subscriber-interface* *string* *group-interface* *string* *ipv4 dhcp relay-proxy release-update-src-ip* *boolean*

Tree [release-update-src-ip](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## siaddr-override *string*

Synopsis DHCP server IP address for address hiding function

Context **configure service ies** *string* *subscriber-interface* *string* *group-interface* *string* *ipv4 dhcp relay-proxy siaddr-override* *string*

Tree [siaddr-override](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## release-include-gi-address *boolean*

Synopsis Include gateway IP address in DHCP Release messages

Context **configure service ies** *string* *subscriber-interface* *string* *group-interface* *string* *ipv4 dhcp release-include-gi-address* *boolean*

Tree [release-include-gi-address](#)

Default false

|            |   |
|------------|---|
| Introduced | 21.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

**server string**

|                |  |
|----------------|--|
| Synopsis       | IP addresses for DHCP server requests  |
| Context        | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp server</a> <i>string</i>   |
| Tree           | <a href="#">server</a>   |
| Description    | This command configures a list of servers that this interface forwards requests to.<br>The operator can enter the list of servers as either IP addresses or fully qualified domain names. The operator must specify at least one server specified for DHCP relay to work. If there are multiple servers, the system forwards the request to all the servers in the list. |
| Max. Instances | 8  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**src-ip-addr keyword**

|            |  |
|------------|--|
| Synopsis   | Type of source address to use for DHCP relay   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp src-ip-addr</a> <i>keyword</i> |
| Tree       | <a href="#">src-ip-addr</a>  |
| Options    | auto, gi-address   |
| Default    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**trusted boolean**

|          |  |
|----------|--|
| Synopsis | Relay untrusted packets  |
| Context  | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp trusted</a> <i>boolean</i> |
| Tree     | <a href="#">trusted</a>  |

|             |   |
|-------------|---|
| Description | <p>When configured to <b>true</b>, the router enables the trusted mode on the interface. When enabled, the relay agent changes the existing GI address (of the request) to the ingress interface, and forwards the request.</p> <p>A DHCP request that contains a GI address of 0.0.0.0 and an Option 82 field in the packet is discarded unless it arrives on a trusted circuit.</p> <p>This behavior only applies if the Relay Agent Information Option action is to keep the existing information. When the Option 82 field is replaced by the relay agent, the original Option 82 information is lost, and there is no reason to enable the trusted option.</p> |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### user-db *reference*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Local user database for authentication   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">user-db</a> <i>reference</i> |
| Tree       | <a href="#">user-db</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### icmp

|            |   |
|------------|---|
| Synopsis   | Enter the <b>icmp</b> context   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 icmp</a> |
| Tree       | <a href="#">icmp</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### mask-reply *boolean*

|          |  |
|----------|--|
| Synopsis | Allow responses to ICMP mask requests on the interface |
|----------|--|

|            |  |
|------------|--|
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp mask-reply</b> <i>boolean</i> |
| Tree       | <b>mask-reply</b>  |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### param-problem

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>param-problem</b> context   |
| Context     | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp param-problem</b> |
| Tree        | <b>param-problem</b>   |
| Description | Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface.  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### admin-state *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of sent Parameter Problem messages   |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp param-problem admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### number *number*

|          |   |
|----------|---|
| Synopsis | Maximum number of Parameter Problem messages to send  |
| Context  | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp param-problem number</b> <i>number</i> |
| Tree     | <b>number</b>   |
| Range    | 10 to 1000  |

|            |   |
|------------|---|
| Default    | 100   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **seconds** *number*

|            |   |
|------------|---|
| Synopsis   | Time used to limit number of Parameter Problem messages   |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp param-problem</b> <b>seconds</b> <i>number</i> |
| Tree       | <b>seconds</b>  |
| Range      | 1 to 60   |
| Units      | seconds   |
| Default    | 10  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **redirects**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>redirects</b> context  |
| Context     | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp redirects</b>  |
| Tree        | <b>redirects</b>  |
| Description | <p>Commands in this context configure the settings for ICMP redirect messages generated by the interface.</p> <p>The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.</p> |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **admin-state** *keyword*

|          |   |
|----------|---|
| Synopsis | Administrative state of sending ICMP redirect messages  |
| Context  | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp redirects admin-state</b> <i>keyword</i> |
| Tree     | <b>admin-state</b>  |
| Options  | enable, disable   |
| Default  | enable  |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **number** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of ICMP redirect messages to send   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>icmp</b> <b>redirects</b> <b>number</b> <i>number</i> |
| Tree       | <b>number</b>  |
| Range      | 10 to 1000   |
| Default    | 100  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **seconds** *number*

|            |   |
|------------|---|
| Synopsis   | Time used to limit the number of ICMP redirect messages   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>icmp</b> <b>redirects</b> <b>seconds</b> <i>number</i> |
| Tree       | <b>seconds</b>  |
| Range      | 1 to 60   |
| Units      | seconds   |
| Default    | 10  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ttl-expired**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>ttl-expired</b> context   |
| Context     | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>icmp</b> <b>ttl-expired</b> |
| Tree        | <b>ttl-expired</b>   |
| Description | Commands in this context configure the settings for ICMP TTL expired messages generated by the interface.  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of sending TTL expired messages   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>icmp</b> <b>tll-expired</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>   |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**number** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of TTL expired messages to send   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>icmp</b> <b>tll-expired</b> <b>number</b> <i>number</i> |
| Tree       | <b>number</b>  |
| Range      | 10 to 2000   |
| Default    | 100  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**seconds** *number*

|            |   |
|------------|---|
| Synopsis   | Time used to limit the number of TTL expired messages   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>icmp</b> <b>tll-expired</b> <b>seconds</b> <i>number</i> |
| Tree       | <b>seconds</b>  |
| Range      | 1 to 60   |
| Units      | seconds   |
| Default    | 10  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |



**use-matching-address** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Use the subscriber interface address as source address  |
| Context     | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>icmp</b> <b>tll-expired</b> <b>use-matching-address</b> <i>boolean</i>   |
| Tree        | <b>use-matching-address</b>   |
| Description | When configured to <b>true</b> , the system uses a matching subscriber interface address as the source address of the ICMP TTL expired message.<br><br>For matching to occur, the source address of the offending packet must be in the same subnet of the subscriber interface address.<br><br>When configured to <b>false</b> , the system uses the first configured address. |
| Default     | false   |
| Introduced  | 22.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**unreachables**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>unreachables</b> context   |
| Context     | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>icmp</b> <b>unreachables</b> |
| Tree        | <b>unreachables</b>   |
| Description | Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface.  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of sending unreachable messages  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>icmp</b> <b>unreachables</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**number** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum number of unreachable messages to send  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>icmp</b> <b>unreachables</b> <b>number</b> <i>number</i> |
| Tree       | <b>number</b>   |
| Range      | 10 to 2000  |
| Default    | 100   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**seconds** *number*

|            |  |
|------------|--|
| Synopsis   | Time to limit the number of ICMP unreachable messages  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>icmp</b> <b>unreachables</b> <b>seconds</b> <i>number</i> |
| Tree       | <b>seconds</b>   |
| Range      | 1 to 60  |
| Units      | seconds  |
| Default    | 10   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**ignore-df-bit** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Ignore DF bit in the IPv4 header when fragmenting  |
| Context     | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>ignore-df-bit</b> <i>boolean</i>  |
| Tree        | <b>ignore-df-bit</b>   |
| Description | <p>When configured to <b>true</b>, fragmentation is applied according to the applicable egress MTU instead of the DF bit for frames egressing the WLAN-GW group. The DF bit is reset for frames that are fragmented.</p> <p>When configured to <b>false</b>, the router fragments a packet larger than the MTU if the DF bit is set to 0 and drops the packet if the DF bit is set to 1.</p> |
| Default     | false  |
| Introduced  | 20.5.R1  |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## neighbor-discovery

|            |  |
|------------|--|
| Synopsis   | Enter the <b>neighbor-discovery</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> |
| Tree       | <a href="#">neighbor-discovery</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## local-proxy-arp *boolean*

|             |   |
|-------------|---|
| Synopsis    | Enable local proxy ARP on interface   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">local-proxy-arp</a> <i>boolean</i> |
| Tree        | <a href="#">local-proxy-arp</a>   |
| Description | When configured to <b>true</b> , the router enables local proxy ARP on the interface.<br>When configured to <b>false</b> , the router does not respond to ARP requests for addresses on the same subnet.  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## populate *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow population of static and dynamic hosts   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">populate</a> <i>boolean</i> |
| Tree       | <a href="#">populate</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## proxy-arp-policy *reference*

|          |  |
|----------|--|
| Synopsis | Proxy ARP policy name  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">proxy-arp-policy</a> <i>reference</i> |
| Tree     | <a href="#">proxy-arp-policy</a>   |

|                |  |
|----------------|--|
| Reference      | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> |
| Max. Instances | 5  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **remote-proxy-arp** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable remote proxy ARP on the interface  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">remote-proxy-arp</a> <i>boolean</i> |
| Tree       | <a href="#">remote-proxy-arp</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **timeout** *number*

|            |   |
|------------|---|
| Synopsis   | Timeout for an ARP entry learned on the interface   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">timeout</a> <i>number</i> |
| Tree       | <a href="#">timeout</a>   |
| Range      | 0 to 65535  |
| Units      | seconds   |
| Default    | 14400   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **qos-route-lookup** *keyword*

|          |  |
|----------|--|
| Synopsis | QoS route lookup   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">qos-route-lookup</a> <i>keyword</i> |
| Tree     | <a href="#">qos-route-lookup</a>   |
| Options  | destination  |

|            |  |
|------------|--|
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

## urpf-check

|            |  |
|------------|--|
| Synopsis   | Enable the <b>urpf-check</b> context   |
| Context    | <b>configure service ies string subscriber-interface string group-interface string ipv4 urpf-check</b> |
| Tree       | <a href="#">urpf-check</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## mode keyword

|            |   |
|------------|---|
| Synopsis   | Unicast RPF check mode  |
| Context    | <b>configure service ies string subscriber-interface string group-interface string ipv4 urpf-check mode keyword</b> |
| Tree       | <a href="#">mode</a>  |
| Options    | strict, loose, strict-no-ecmp   |
| Default    | strict  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## ipv6

|            |   |
|------------|---|
| Synopsis   | Enable the <b>ipv6</b> context  |
| Context    | <b>configure service ies string subscriber-interface string group-interface string ipv6</b> |
| Tree       | <a href="#">ipv6</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                     |

## allow-multiple-wan-addresses boolean

|          |  |
|----------|--|
| Synopsis | Allow multiple WAN addresses   |
| Context  | <b>configure service ies string subscriber-interface string group-interface string ipv6 allow-multiple-wan-addresses boolean</b> |

|            |   |
|------------|---|
| Tree       | <a href="#">allow-multiple-wan-addresses</a>            |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## auto-reply

|            |  |
|------------|--|
| Synopsis   | Enter the <b>auto-reply</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <b>auto-reply</b> |
| Tree       | <a href="#">auto-reply</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## neighbor-solicitation *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable auto-reply for NS   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <b>auto-reply</b> <b>neighbor-solicitation</b> <i>boolean</i> |
| Tree       | <a href="#">neighbor-solicitation</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## router-solicitation *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable auto-reply for RS   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <b>auto-reply</b> <b>router-solicitation</b> <i>boolean</i> |
| Tree       | <a href="#">router-solicitation</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## dhcp6

|            |   |
|------------|---|
| Synopsis   | Enter the <b>dhcp6</b> context  |
| Context    | <b>configure service ies string subscriber-interface string group-interface string ipv6 dhcp6</b> |
| Tree       | <b>dhcp6</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## filter reference

|            |  |
|------------|--|
| Synopsis   | DHCPv6 filter  |
| Context    | <b>configure service ies string subscriber-interface string group-interface string ipv6 dhcp6 filter reference</b> |
| Tree       | <b>filter</b>  |
| Reference  | <b>configure filter dhcp6-filter number</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## option

|            |  |
|------------|--|
| Synopsis   | Enter the <b>option</b> context  |
| Context    | <b>configure service ies string subscriber-interface string group-interface string ipv6 dhcp6 option</b> |
| Tree       | <b>option</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## interface-id

|            |   |
|------------|---|
| Synopsis   | Enter the <b>interface-id</b> context   |
| Context    | <b>configure service ies string subscriber-interface string group-interface string ipv6 dhcp6 option interface-id</b> |
| Tree       | <b>interface-id</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## ascii-tuple

|            |  |
|------------|--|
| Synopsis   | Use ASCII-encoded concatenated tuple   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6</b> <b>option</b> <b>interface-id</b> <b>ascii-tuple</b> |
| Tree       | <a href="#">ascii-tuple</a>  |
| Notes      | The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-index</b> , <b>sap-id</b> , or <b>string</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## if-index

|            |   |
|------------|---|
| Synopsis   | Use interface index in the DHCPv6 relay packet  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6</b> <b>option</b> <b>interface-id</b> <b>if-index</b> |
| Tree       | <a href="#">if-index</a>  |
| Notes      | The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-index</b> , <b>sap-id</b> , or <b>string</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## sap-id

|            |   |
|------------|---|
| Synopsis   | Use SAP ID in interface ID option in relay packet   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6</b> <b>option</b> <b>interface-id</b> <b>sap-id</b> |
| Tree       | <a href="#">sap-id</a>  |
| Notes      | The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-index</b> , <b>sap-id</b> , or <b>string</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## string *string*

|               |   |
|---------------|---|
| Synopsis      | String for interface ID option in DHCPv6 relay packet   |
| Context       | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6</b> <b>option</b> <b>interface-id</b> <b>string</b> <i>string</i> |
| Tree          | <a href="#">string</a>  |
| String Length | 1 to 80   |



|            |  |
|------------|--|
| Notes      | The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-index</b> , <b>sap-id</b> , or <b>string</b> . |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **remote-id** *boolean*

|            |   |
|------------|---|
| Synopsis   | Send remote ID option in the DHCPv6 relay packet  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 option remote-id</b> <i>boolean</i> |
| Tree       | <a href="#">remote-id</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **override-slaac** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow WAN address offered by DHCP to overwrite the WAN address acquired from SLAAC  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 override-slaac</b> <i>boolean</i> |
| Tree       | <a href="#">override-slaac</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **pd-managed-route**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>pd-managed-route</b> context   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 pd-managed-route</b> |
| Tree       | <a href="#">pd-managed-route</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**next-hop** *keyword*

|            |   |
|------------|---|
| Synopsis   | Next hop type   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>pd-managed-route</b> <b>next-hop</b> <i>keyword</i> |
| Tree       | <b>next-hop</b>   |
| Options    | ipv4, ipv6  |
| Default    | ipv6  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**proxy-server**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>proxy-server</b> context  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>proxy-server</b> |
| Tree       | <b>proxy-server</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the DHCPv6 proxy server  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>proxy-server</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>   |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**client-applications**

|          |   |
|----------|---|
| Synopsis | Enter the <b>client-applications</b> context  |
| Context  | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>proxy-server</b> <b>client-applications</b> |
| Tree     | <b>client-applications</b>  |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **dhcp boolean**

|            |   |
|------------|---|
| Synopsis   | Enable IPoE clients to use DHCP relay or proxy server   |
| Context    | <b>configure</b> <a href="#">service ies</a> <a href="#">string subscriber-interface</a> <a href="#">string group-interface</a> <a href="#">string ipv6 dhcp6 proxy-server client-applications dhcp boolean</a> |
| Tree       | <a href="#">dhcp</a>  |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ppp boolean**

|            |  |
|------------|--|
| Synopsis   | Allow PPPoE clients to use DHCP relay functionality  |
| Context    | <b>configure</b> <a href="#">service ies</a> <a href="#">string subscriber-interface</a> <a href="#">string group-interface</a> <a href="#">string ipv6 dhcp6 proxy-server client-applications ppp boolean</a> |
| Tree       | <a href="#">ppp</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **preferred-lifetime (number | keyword)**

|            |  |
|------------|--|
| Synopsis   | Time for prefix to remain preferred on this interface  |
| Context    | <b>configure</b> <a href="#">service ies</a> <a href="#">string subscriber-interface</a> <a href="#">string group-interface</a> <a href="#">string ipv6 dhcp6 proxy-server preferred-lifetime (number   keyword)</a> |
| Tree       | <a href="#">preferred-lifetime</a>   |
| Range      | 300 to 4294967294  |
| Units      | seconds  |
| Options    | infinite   |
| Default    | 3600   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**rebind-timer** *number*

|            |   |
|------------|---|
| Synopsis   | Rebind timer (T2) for this interface  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 proxy-server rebind-timer</b> <i>number</i> |
| Tree       | <b>rebind-timer</b>   |
| Range      | 0 to 1209600  |
| Units      | seconds   |
| Default    | 2880  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**renew-timer** *number*

|            |  |
|------------|--|
| Synopsis   | Renew timer (T1)   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 proxy-server renew-timer</b> <i>number</i> |
| Tree       | <b>renew-timer</b>   |
| Range      | 0 to 604800  |
| Units      | seconds  |
| Default    | 1800   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**server-id**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>server-id</b> context   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 proxy-server server-id</b> |
| Tree       | <b>server-id</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**duid-en-ascii** *string*

|          |   |
|----------|---|
| Synopsis | Vendor-assigned ID based on Enterprise Number (DUID-EN) |
|----------|---|

|               |   |
|---------------|---|
| Context       | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 proxy-server server-id</b> <b>duid-en-ascii</b> <i>string</i> |
| Tree          | <b>duid-en-ascii</b>  |
| String Length | 1 to 58   |
| Notes         | The following elements are part of a choice: <b>duid-en-ascii</b> , <b>duid-en-hex</b> , or <b>duid-ll</b> .  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **duid-en-hex** *string*

|               |   |
|---------------|---|
| Synopsis      | DUID system ID in hexadecimal format  |
| Context       | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 proxy-server server-id</b> <b>duid-en-hex</b> <i>string</i> |
| Tree          | <b>duid-en-hex</b>  |
| String Length | 1 to 118  |
| Notes         | The following elements are part of a choice: <b>duid-en-ascii</b> , <b>duid-en-hex</b> , or <b>duid-ll</b> .  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **duid-ll**

|            |   |
|------------|---|
| Synopsis   | Use link-layer address (DUID-LL) as DUID  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 proxy-server server-id</b> <b>duid-ll</b> |
| Tree       | <b>duid-ll</b>  |
| Notes      | The following elements are part of a choice: <b>duid-en-ascii</b> , <b>duid-en-hex</b> , or <b>duid-ll</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **valid-lifetime** (*number* | *keyword*)

|          |   |
|----------|---|
| Synopsis | Time for prefix to remain valid on this interface   |
| Context  | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 proxy-server</b> <b>valid-lifetime</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <b>valid-lifetime</b>   |
| Range    | 300 to 4294967294   |

|            |   |
|------------|---|
| Units      | seconds   |
| Options    | infinite  |
| Default    | 86400   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **python-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | Python policy   |
| Context    | <b>configure</b> <a href="#">service ies string subscriber-interface string group-interface string ipv6 dhcp6 python-policy reference</a> |
| Tree       | <a href="#">python-policy</a>   |
| Reference  | <b>configure</b> <a href="#">python python-policy string</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **relay**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>relay</b> context  |
| Context    | <b>configure</b> <a href="#">service ies string subscriber-interface string group-interface string ipv6 dhcp6 relay</a> |
| Tree       | <a href="#">relay</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of DHCPv6 Relay  |
| Context    | <b>configure</b> <a href="#">service ies string subscriber-interface string group-interface string ipv6 dhcp6 relay admin-state keyword</a> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## advertise-selection

|            |   |
|------------|---|
| Synopsis   | Enter the <b>advertise-selection</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>ipv6 dhcp6 relay advertise-selection</i> |
| Tree       | <a href="#">advertise-selection</a>   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## client-mac

|            |  |
|------------|--|
| Synopsis   | Enter the <b>client-mac</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>ipv6 dhcp6 relay advertise-selection client-mac</i> |
| Tree       | <a href="#">client-mac</a>   |
| Notes      | The following elements are part of a choice: <b>client-mac</b> or <b>server</b> .  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## mac-address *keyword*

|            |   |
|------------|---|
| Synopsis   | Designated client MAC addresses for Advertise selection   |
| Context    | <b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>ipv6 dhcp6 relay advertise-selection client-mac mac-address</i> <i>keyword</i> |
| Tree       | <a href="#">mac-address</a>   |
| Options    | odd, even   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## preference-option

|          |  |
|----------|--|
| Synopsis | Enter the <b>preference-option</b> context   |
| Context  | <b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>ipv6 dhcp6 relay advertise-selection client-mac preference-option</i> |
| Tree     | <a href="#">preference-option</a>  |

|             |   |
|-------------|---|
| Description | Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message. |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **value** *number*

|            |  |
|------------|--|
| Synopsis   | Preference option value for DHCPv6 Advertise messages  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 relay advertise-selection client-mac preference-option value</b> <i>number</i> |
| Tree       | <b>value</b>   |
| Range      | 0 to 255   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **solicit-delay** *number*

|             |  |
|-------------|--|
| Synopsis    | Delay before sending DHCPv6 Solicit messages   |
| Context     | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 relay advertise-selection client-mac solicit-delay</b> <i>number</i> |
| Tree        | <b>solicit-delay</b>   |
| Description | This command configures the time to delay DHCPv6 Solicit messages sent from the designated client MAC addresses.   |
| Range       | 1 to 100   |
| Units       | deciseconds  |
| Introduced  | 20.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **preference-option**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>preference-option</b> context  |
| Context     | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 relay advertise-selection preference-option</b> |
| Tree        | <b>preference-option</b>  |
| Description | Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message.   |
| Introduced  | 20.10.R1  |



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **value** *number*

Synopsis Preference option value for DHCPv6 Advertise messages

Context **configure** *service ies string subscriber-interface string group-interface string ipv6 dhcp6 relay advertise-selection preference-option value number*

Tree *value*

Range 0 to 255

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **server** [*ipv6-address*] *string*

Synopsis Enter the **server** list instance

Context **configure** *service ies string subscriber-interface string group-interface string ipv6 dhcp6 relay advertise-selection server string*

Tree *server*

Max. Instances 8

Notes The following elements are part of a choice: **client-mac** or **server**.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[ipv6-address]** *string*

Synopsis IP address of the DHCPv6 server

Context **configure** *service ies string subscriber-interface string group-interface string ipv6 dhcp6 relay advertise-selection server string*

Tree *server*

Notes This element is part of a list key.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**preference-option**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>preference-option</b> context  |
| Context     | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 relay advertise-selection server</b> <i>string</i> <b>preference-option</b> |
| Tree        | <b>preference-option</b>  |
| Description | Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message.   |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**value number**

|            |   |
|------------|---|
| Synopsis   | Preference option value for DHCPv6 Advertise messages   |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 relay advertise-selection server</b> <i>string</i> <b>preference-option value</b> <i>number</i> |
| Tree       | <b>value</b>  |
| Range      | 0 to 255  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**solicit-delay number**

|             |   |
|-------------|---|
| Synopsis    | Delay before sending DHCPv6 Solicit messages  |
| Context     | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 relay advertise-selection server</b> <i>string</i> <b>solicit-delay</b> <i>number</i> |
| Tree        | <b>solicit-delay</b>  |
| Description | This command configures the time to delay DHCPv6 Solicit messages sent to the server.   |
| Range       | 1 to 100  |
| Units       | deciseconds   |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**solicit-delay number**

|          |  |
|----------|--|
| Synopsis | Delay before sending DHCPv6 Solicit messages |
|----------|--|

|             |  |
|-------------|--|
| Context     | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 relay advertise-selection solicit-delay</b> <i>number</i>                              |
| Tree        | <b>solicit-delay</b>   |
| Description | This command configures the time to delay DHCPv6 Solicit messages. The delay is applied to DHCPv6 Solicit messages for which no overriding value is configured in the <b>server</b> instance or the <b>client-mac</b> context. |
| Range       | 1 to 100   |
| Units       | deciseconds  |
| Introduced  | 20.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### client-applications

|            |   |
|------------|---|
| Synopsis   | Enter the <b>client-applications</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 relay client-applications</b> |
| Tree       | <b>client-applications</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### dhcp boolean

|            |   |
|------------|---|
| Synopsis   | Enable IPoE clients to use DHCP relay or proxy server   |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 relay client-applications dhcp</b> <i>boolean</i> |
| Tree       | <b>dhcp</b>   |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### ppp boolean

|          |  |
|----------|--|
| Synopsis | Allow PPPoE clients to use DHCP relay functionality  |
| Context  | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 relay client-applications ppp</b> <i>boolean</i> |
| Tree     | <b>ppp</b>   |
| Default  | false  |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **lease-split**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>lease-split</b> context  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <a href="#">lease-split</a>  |
| Tree        | <a href="#">lease-split</a>   |
| Description | <p>Commands in this context configure DHCPv6 lease split.</p> <p>DHCPv6 lease split is active when administratively enabled and for all IA_NA and IA_PD options in the transaction, the configured lease split valid lifetime (short lease time) is less than or equal to one of the following:</p> <ul style="list-style-type: none"> <li>• the renew time T1 committed by the server (long renew time)</li> <li>• half of the preferred lifetime committed by the server when T1 committed by the server equals zero</li> </ul> |
| Introduced  | 21.2.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **admin-state** *keyword*

|          |   |
|----------|---|
| Synopsis | Administrative state of DHCPv6 lease split  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <a href="#">lease-split</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree     | <a href="#">admin-state</a>   |
| Options  | enable, disable   |
| Default  | disable   |

|            |   |
|------------|---|
| Introduced | 21.2.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

**valid-lifetime** *number*

|            |  |
|------------|--|
| Synopsis   | DHCPv6 lease split valid lifetime (short lease time)   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 relay lease-split valid-lifetime</b> <i>number</i> |
| Tree       | <b>valid-lifetime</b>  |
| Range      | 300 to 315446399   |
| Units      | seconds  |
| Default    | 3600   |
| Introduced | 21.2.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**link-address** *string*

|            |  |
|------------|--|
| Synopsis   | Link address for the DHCPv6 relay messages   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 relay link-address</b> <i>string</i> |
| Tree       | <b>link-address</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**server** *string*

|                |  |
|----------------|--|
| Synopsis       | DHCP6 server(s) to which the DHCP6 requests are forwarded  |
| Context        | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 relay server</b> <i>string</i> |
| Tree           | <b>server</b>  |
| Max. Instances | 8  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**source-address** *string*

|            |   |
|------------|---|
| Synopsis   | Source IPv6 address for the DHCPv6 relay messages   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>relay</b> <b>source-address</b> <i>string</i> |
| Tree       | <a href="#">source-address</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**snooping**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>snooping</b> context  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>snooping</b> |
| Tree       | <a href="#">snooping</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of DHCPv6 snooping  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>snooping</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

**user-db** *reference*

|            |  |
|------------|--|
| Synopsis   | Local user database for authentication   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>user-db</b> <i>reference</i> |
| Tree       | <a href="#">user-db</a>  |
| Reference  | <b>configure</b> <b>subscriber-mgmt</b> <b>local-user-db</b> <i>string</i>   |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **user-ident** *keyword*

Synopsis DHCP6 user identification for this interface

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6** **dhcp6** **user-ident** *keyword*

Tree **user-ident**

Options mac, mac-interface-id

Default mac

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipoe-bridged-mode** *boolean*

Synopsis Enable IPv6 IPoE bridged mode

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6** **ipoe-bridged-mode** *boolean*

Tree **ipoe-bridged-mode**

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **neighbor-discovery**

Synopsis Enter the **neighbor-discovery** context

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6** **neighbor-discovery**

Tree **neighbor-discovery**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dad-snooping** *boolean*

Synopsis Populate table via duplicate address detection packets

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6** **neighbor-discovery** **dad-snooping** *boolean*

|            |   |
|------------|---|
| Tree       | <a href="#">dad-snooping</a>                            |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **neighbor-limit** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum neighbor entries learned per SLAAC host  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">neighbor-limit</a> <i>number</i> |
| Tree       | <a href="#">neighbor-limit</a>   |
| Range      | 1 to 8   |
| Default    | 1  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **qos-route-lookup** *keyword*

|            |  |
|------------|--|
| Synopsis   | QoS route lookup   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">qos-route-lookup</a> <i>keyword</i> |
| Tree       | <a href="#">qos-route-lookup</a>   |
| Options    | destination  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

### **router-advertisements**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>router-advertisements</b> context   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisements</a> |
| Tree       | <a href="#">router-advertisements</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |



**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of router advertisements  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>   |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**force-mcast** *keyword*

|            |  |
|------------|--|
| Synopsis   | Protocol with forced multicast   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>force-mcast</b> <i>keyword</i> |
| Tree       | <b>force-mcast</b>   |
| Options    | ip, ip-mac   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**max-advertisement-interval** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum advertisement interval   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>max-advertisement-interval</b> <i>number</i> |
| Tree       | <b>max-advertisement-interval</b>  |
| Range      | 900 to 1800  |
| Units      | seconds  |
| Default    | 1800   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**min-advertisement-interval** *number*

|          |                                |
|----------|--------------------------------|
| Synopsis | Minimum advertisement interval |
|----------|--------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 router-advertisements</b> <b>min-advertisement-interval</b> <i>number</i> |
| Tree       | <b>min-advertisement-interval</b>   |
| Range      | 900 to 1350   |
| Units      | seconds   |
| Default    | 900   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## options

|            |  |
|------------|--|
| Synopsis   | Enter the <b>options</b> context   |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 router-advertisements</b> <b>options</b> |
| Tree       | <b>options</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## current-hop-limit *number*

|            |   |
|------------|---|
| Synopsis   | Hop limit to be advertised  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 router-advertisements</b> <b>options</b> <b>current-hop-limit</b> <i>number</i> |
| Tree       | <b>current-hop-limit</b>  |
| Range      | 0 to 255  |
| Default    | 64  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## dns

|            |   |
|------------|---|
| Synopsis   | Enter the <b>dns</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 router-advertisements</b> <b>options</b> <b>dns</b> |
| Tree       | <b>dns</b>  |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **include-rdnss** *boolean*

Synopsis Include the RDNSS server option 25

Context **configure** **service ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6 router-advertisements options dns include-rdnss** *boolean*

Tree [include-rdnss](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **rdnss-lifetime** (*number* | *keyword*)

Synopsis Maximum time for the RDNSS address to remain valid

Context **configure** **service ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6 router-advertisements options dns rdnss-lifetime** (*number* | *keyword*)

Tree [rdnss-lifetime](#)

Range 900 to 3600

Units seconds

Options infinite

Default 3600

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **managed-configuration** *boolean*

Synopsis Managed address configuration flag

Context **configure** **service ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6 router-advertisements options managed-configuration** *boolean*

Tree [managed-configuration](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mtu** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Advertised MTU value  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>options</b> <b>mtu</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">mtu</a>   |
| Range      | 1280 to 9212  |
| Units      | bytes   |
| Options    | not-included  |
| Default    | not-included  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**other-stateful-configuration** *boolean*

|            |  |
|------------|--|
| Synopsis   | Other stateful configuration flag  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>options</b> <b>other-stateful-configuration</b> <i>boolean</i> |
| Tree       | <a href="#">other-stateful-configuration</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**reachable-time** *number*

|            |   |
|------------|---|
| Synopsis   | Reachable time for advertisements   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>options</b> <b>reachable-time</b> <i>number</i> |
| Tree       | <a href="#">reachable-time</a>  |
| Range      | 0 to 3600000  |
| Units      | milliseconds  |
| Default    | 0   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**retransmit-timer** *number*

|            |   |
|------------|---|
| Synopsis   | Retransmit time in router advertisements from interface   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>options</b> <b>retransmit-timer</b> <i>number</i> |
| Tree       | <a href="#">retransmit-timer</a>  |
| Range      | 0 to 1800000  |
| Units      | seconds   |
| Default    | 0   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**router-lifetime** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Router lifetime   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>options</b> <b>router-lifetime</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">router-lifetime</a>   |
| Range      | 2700 to 9000  |
| Units      | seconds   |
| Options    | no-default-router   |
| Default    | 4500  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**prefix-options**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>prefix-options</b> context  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>prefix-options</b> |
| Tree       | <a href="#">prefix-options</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**autonomous** *boolean*

|          |                              |
|----------|------------------------------|
| Synopsis | Value of the autonomous flag |
|----------|------------------------------|

|            |  |
|------------|--|
| Context    | <b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv6 router-advertisements prefix-options autonomous</i> <i>boolean</i> |
| Tree       | <a href="#">autonomous</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **on-link** *boolean*

|            |   |
|------------|---|
| Synopsis   | Assign the prefix to an interface on the specified link   |
| Context    | <b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv6 router-advertisements prefix-options on-link</i> <i>boolean</i> |
| Tree       | <a href="#">on-link</a>   |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **preferred-lifetime** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Time for a prefix to remain preferred  |
| Context    | <b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv6 router-advertisements prefix-options preferred-lifetime</i> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">preferred-lifetime</a>   |
| Range      | 0 to 4294967294  |
| Units      | seconds  |
| Options    | infinite   |
| Default    | 3600   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **valid-lifetime** (*number* | *keyword*)

|          |  |
|----------|--|
| Synopsis | Time for a prefix to remain valid  |
| Context  | <b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv6 router-advertisements prefix-options valid-lifetime</i> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <a href="#">valid-lifetime</a>   |

|            |   |
|------------|---|
| Range      | 0 to 4294967294   |
| Units      | seconds   |
| Options    | infinite  |
| Default    | 86400   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## router-solicit

|            |  |
|------------|--|
| Synopsis   | Enter the <b>router-solicit</b> context  |
| Context    | <b>configure service ies string subscriber-interface string group-interface string ipv6 router-solicit</b> |
| Tree       | <b>router-solicit</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of router-solicit authentication  |
| Context    | <b>configure service ies string subscriber-interface string group-interface string ipv6 router-solicit admin-state keyword</b> |
| Tree       | <b>admin-state</b>   |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## inactivity-timer (*number* | *keyword*)

|          |  |
|----------|--|
| Synopsis | Time before an inactive host is removed  |
| Context  | <b>configure service ies string subscriber-interface string group-interface string ipv6 router-solicit inactivity-timer (<i>number</i>   <i>keyword</i>)</b> |
| Tree     | <b>inactivity-timer</b>  |
| Range    | 1 to 31536000  |
| Units    | seconds  |
| Options  | infinite   |

|            |   |
|------------|---|
| Default    | 300   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **min-auth-interval** *number*

|            |  |
|------------|--|
| Synopsis   | Minimum time between successive authentication attempts  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 router-solicit</a> <b>min-auth-interval</b> <i>number</i> |
| Tree       | <a href="#">min-auth-interval</a>  |
| Range      | 1 to 360000  |
| Units      | seconds  |
| Default    | 300  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **user-db** *reference*

|            |   |
|------------|---|
| Synopsis   | Local user database used for authentication   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 router-solicit</a> <b>user-db</b> <i>reference</i> |
| Tree       | <a href="#">user-db</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **urpf-check**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>urpf-check</b> context  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 urpf-check</a> |
| Tree       | <a href="#">urpf-check</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |



**mode** *keyword*

|            |  |
|------------|--|
| Synopsis   | Unicast RPF check mode   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>urpf-check</b> <b>mode</b> <i>keyword</i> |
| Tree       | <b>mode</b>  |
| Options    | strict, loose, strict-no-ecmp  |
| Default    | strict   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**local-address-assignment**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>local-address-assignment</b> context   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>local-address-assignment</b> |
| Tree       | <b>local-address-assignment</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of Local Address Assignment  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>local-address-assignment</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**ipv4**

|          |   |
|----------|---|
| Synopsis | Enter the <b>ipv4</b> context   |
| Context  | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>local-address-assignment</b> <b>ipv4</b> |
| Tree     | <b>ipv4</b>   |

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## client-applications

Synopsis Enter the **client-applications** context  
 Context **configure service ies** *string* *subscriber-interface* *string* *group-interface* *string* *local-address-assignment* *ipv4* **client-applications**  
 Tree [client-applications](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipoe *boolean*

Synopsis Request local addresses for non-DHCP/managed IPoE hosts  
 Context **configure service ies** *string* *subscriber-interface* *string* *group-interface* *string* *local-address-assignment* *ipv4* **client-applications ipoe** *boolean*  
 Tree [ipoe](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ppp *boolean*

Synopsis Request local addresses for PPP IPCP hosts  
 Context **configure service ies** *string* *subscriber-interface* *string* *group-interface* *string* *local-address-assignment* *ipv4* **client-applications ppp** *boolean*  
 Tree [ppp](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## default-pool *string*

Synopsis Default pools  
 Context **configure service ies** *string* *subscriber-interface* *string* *group-interface* *string* *local-address-assignment* *ipv4* **default-pool** *string*

|                |   |
|----------------|---|
| Tree           | <a href="#">default-pool</a>                            |
| String Length  | 1 to 32   |
| Max. Instances | 2   |
| Notes          | This element is ordered by the user.                    |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### server reference

|            |  |
|------------|--|
| Synopsis   | Local DHCPv4 server for local pools management   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">local-address-assignment ipv4</a> <a href="#">server reference</a> |
| Tree       | <a href="#">server</a>   |
| Reference  | <b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### ipv6

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ipv6</b> context   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">local-address-assignment ipv6</a> |
| Tree       | <a href="#">ipv6</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### client-applications

|            |   |
|------------|---|
| Synopsis   | Enter the <b>client-applications</b> context  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">local-address-assignment ipv6</a> <a href="#">client-applications</a> |
| Tree       | <a href="#">client-applications</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ipoe-slaac** *boolean*

|            |   |
|------------|---|
| Synopsis   | Request local addresses for IPoE SLAAC hosts  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>local-address-assignment</b> <b>ipv6</b> <b>client-applications</b> <b>ipoe-slaac</b> <i>boolean</i> |
| Tree       | <a href="#">ipoe-slaac</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ipoe-wan** *boolean*

|            |   |
|------------|---|
| Synopsis   | Request local addresses for IPoE IA NA hosts  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>local-address-assignment</b> <b>ipv6</b> <b>client-applications</b> <b>ipoe-wan</b> <i>boolean</i> |
| Tree       | <a href="#">ipoe-wan</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ppp-slaac** *boolean*

|            |  |
|------------|--|
| Synopsis   | Request local addresses for PPP SLAAC hosts  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>local-address-assignment</b> <b>ipv6</b> <b>client-applications</b> <b>ppp-slaac</b> <i>boolean</i> |
| Tree       | <a href="#">ppp-slaac</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **server** *reference*

|          |  |
|----------|--|
| Synopsis | Local DHCPv6 server for local pools management   |
| Context  | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>local-address-assignment</b> <b>ipv6</b> <b>server</b> <i>reference</i> |
| Tree     | <a href="#">server</a>   |

|            |  |
|------------|--|
| Reference  | <b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **mac** *string*

|            |   |
|------------|---|
| Synopsis   | MAC address for the interface   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">mac</a> <i>string</i> |
| Tree       | <a href="#">mac</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **nasreq-auth-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | Diameter NASREQ application policy to use for authentication  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">nasreq-auth-policy</a> <i>reference</i> |
| Tree       | <a href="#">nasreq-auth-policy</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **oper-up-while-empty** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable this group interface without any active SAPs  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">oper-up-while-empty</a> <i>boolean</i> |
| Tree       | <a href="#">oper-up-while-empty</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **pppoe**

|          |   |
|----------|---|
| Synopsis | Enter the <b>pppoe</b> context  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">pppoe</a> |

|            |   |
|------------|---|
| Tree       | <a href="#">pppoe</a>                                   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of PPPoE  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">pppoe</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**anti-spoof** *keyword*

|            |   |
|------------|---|
| Synopsis   | PPPoE anti-spoof filtering  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">pppoe</a> <a href="#">anti-spoof</a> <i>keyword</i> |
| Tree       | <a href="#">anti-spoof</a>  |
| Options    | mac-sid, mac-sid-ip   |
| Default    | mac-sid   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">pppoe</a> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## dhcp-client

|            |   |
|------------|---|
| Synopsis   | Enter the <b>dhcp-client</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">pppoe</a> <a href="#">dhcp-client</a> |
| Tree       | <a href="#">dhcp-client</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## client-id *keyword*

|            |  |
|------------|--|
| Synopsis   | Type of information that DHCP option 61 contains   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">pppoe</a> <a href="#">dhcp-client</a> <a href="#">client-id</a> <i>keyword</i> |
| Tree       | <a href="#">client-id</a>  |
| Options    | mac-pppoe-session-id   |
| Introduced | 16.0.R7  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## policy *reference*

|            |   |
|------------|---|
| Synopsis   | PPPoE policy  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">pppoe</a> <a href="#">policy</a> <i>reference</i> |
| Tree       | <a href="#">policy</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## python-policy *reference*

|           |  |
|-----------|--|
| Synopsis  | Python policy used to modify PPPoE packets   |
| Context   | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">pppoe</a> <a href="#">python-policy</a> <i>reference</i> |
| Tree      | <a href="#">python-policy</a>  |
| Reference | <b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i>  |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **sap-session-limit** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum PPPoE sessions per SAP  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">pppoe</a> <a href="#">sap-session-limit</a> <i>number</i> |
| Tree       | <a href="#">sap-session-limit</a>   |
| Range      | 1 to 131071   |
| Default    | 1   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **session-limit** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum PPPoE sessions  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">pppoe</a> <a href="#">session-limit</a> <i>number</i> |
| Tree       | <a href="#">session-limit</a>   |
| Range      | 1 to 333823   |
| Default    | 1   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **user-db** *reference*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Local user database for authentication   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">pppoe</a> <a href="#">user-db</a> <i>reference</i> |
| Tree       | <a href="#">user-db</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i>   |
| Introduced | 16.0.R1  |



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-auth-policy** *reference*

Synopsis RADIUS authentication policy

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [radius-auth-policy](#) *reference*

Tree [radius-auth-policy](#)

Reference **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **redundant-interface** *reference*

Synopsis Redundant interface

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [redundant-interface](#) *reference*

Tree [redundant-interface](#)

Reference **configure** [service ies](#) *string* [redundant-interface](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sap** [[sap-id](#)] *string*

Synopsis Enter the **sap** list instance

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string*

Tree [sap](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[sap-id]** *string*

Synopsis SAP ID

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string*

Tree [sap](#)

String Length 1 to 45

|            |   |
|------------|---|
| Notes      | This element is part of a list key.                     |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **accounting-policy** *reference*

|            |  |
|------------|--|
| Synopsis   | Accounting policy  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">accounting-policy</a> <i>reference</i> |
| Tree       | <a href="#">accounting-policy</a>  |
| Reference  | <b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the SAP  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **anti-spoof** *keyword*

|            |   |
|------------|---|
| Synopsis   | Type of anti-spoof filtering  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">anti-spoof</a> <i>keyword</i> |
| Tree       | <a href="#">anti-spoof</a>  |
| Options    | source-ip-addr, source-ip-and-mac-addr, next-hop-ip-and-mac-addr  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**app-profile** *reference*

|            |  |
|------------|--|
| Synopsis   | Application profile name   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">app-profile</a> <i>reference</i> |
| Tree       | <a href="#">app-profile</a>  |
| Reference  | <b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i>  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**calling-station-id** *string*

|               |  |
|---------------|--|
| Synopsis      | Calling station ID   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">calling-station-id</a> <i>string</i> |
| Tree          | <a href="#">calling-station-id</a>   |
| String Length | 1 to 64  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**collect-stats** *boolean*

|            |  |
|------------|--|
| Synopsis   | Collect accounting statistics  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">collect-stats</a> <i>boolean</i> |
| Tree       | <a href="#">collect-stats</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**cpu-protection**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>cpu-protection</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cpu-protection</a> |
| Tree       | <a href="#">cpu-protection</a>   |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

## eth-cfm-monitoring

Synopsis Enable the **eth-cfm-monitoring** context

Context **configure** *service ies string subscriber-interface string group-interface string sap string cpu-protection eth-cfm-monitoring*

Tree [eth-cfm-monitoring](#)

Notes The following elements are part of a choice: **eth-cfm-monitoring**, **ip-src-monitoring**, or **mac-monitoring**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

## aggregate

Synopsis Apply rate limit to the sum of the per peer packet rates

Context **configure** *service ies string subscriber-interface string group-interface string sap string cpu-protection eth-cfm-monitoring aggregate*

Tree [aggregate](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

## car

Synopsis Ignore Ethernet CFM packets when enforcing overall rate

Context **configure** *service ies string subscriber-interface string group-interface string sap string cpu-protection eth-cfm-monitoring car*

Tree [car](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

## ip-src-monitoring

Synopsis Enable IP source monitoring for CPU protection

Context **configure** *service ies string subscriber-interface string group-interface string sap string cpu-protection ip-src-monitoring*

Tree [ip-src-monitoring](#)

|            |  |
|------------|--|
| Notes      | The following elements are part of a choice: <b>eth-cfm-monitoring</b> , <b>ip-src-monitoring</b> , or <b>mac-monitoring</b> . |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s  |

## mac-monitoring

|            |  |
|------------|--|
| Synopsis   | Monitor MAC for CPU protection   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>cpu-protection</b> <b>mac-monitoring</b> |
| Tree       | <a href="#">mac-monitoring</a>   |
| Notes      | The following elements are part of a choice: <b>eth-cfm-monitoring</b> , <b>ip-src-monitoring</b> , or <b>mac-monitoring</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s  |

## policy-id *reference*

|            |  |
|------------|--|
| Synopsis   | CPM protection policy  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>cpu-protection</b> <b>policy-id</b> <i>reference</i> |
| Tree       | <a href="#">policy-id</a>  |
| Reference  | <b>configure</b> <b>system</b> <b>security</b> <b>cpu-protection</b> <b>policy</b> <i>number</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s  |

## default-host

|            |  |
|------------|--|
| Synopsis   | Enter the <b>default-host</b> context  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>default-host</b> |
| Tree       | <a href="#">default-host</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

**ipv4** [address] reference prefix-length number

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv4</b> list instance  |
| Context    | <b>configure</b> service ies string subscriber-interface string group-interface string sap string default-host ipv4 reference prefix-length number |
| Tree       | ipv4   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

**[address]** reference

|            |  |
|------------|--|
| Synopsis   | IPv4 default host address  |
| Context    | <b>configure</b> service ies string subscriber-interface string group-interface string sap string default-host ipv4 reference prefix-length number |
| Tree       | ipv4   |
| Reference  | <b>configure</b> service ies string subscriber-interface string ipv4 address string  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

**prefix-length** number

|            |  |
|------------|--|
| Synopsis   | IPv4 address prefix length   |
| Context    | <b>configure</b> service ies string subscriber-interface string group-interface string sap string default-host ipv4 reference prefix-length number |
| Tree       | ipv4   |
| Range      | 0 to 32  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

**next-hop** string**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Next hop IP address   |
| Context    | <b>configure service ies</b> <i>string subscriber-interface string group-interface string sap string default-host ipv4 reference prefix-length number next-hop string</i> |
| Tree       | <a href="#">next-hop</a>  |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s  |

### **ipv6** [[address](#)] *string prefix-length number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv6</b> list instance  |
| Context    | <b>configure service ies</b> <i>string subscriber-interface string group-interface string sap string default-host ipv6 string prefix-length number</i> |
| Tree       | <a href="#">ipv6</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

### **[address]** *string*

|            |  |
|------------|--|
| Synopsis   | IPv6 default host address  |
| Context    | <b>configure service ies</b> <i>string subscriber-interface string group-interface string sap string default-host ipv6 string prefix-length number</i> |
| Tree       | <a href="#">ipv6</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

### **prefix-length** *number*

|            |  |
|------------|--|
| Synopsis   | IPv6 address prefix length   |
| Context    | <b>configure service ies</b> <i>string subscriber-interface string group-interface string sap string default-host ipv6 string prefix-length number</i> |
| Tree       | <a href="#">ipv6</a>   |
| Range      | 0 to 128   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### next-hop *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Next hop IP address

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [default-host](#) [ipv6](#) *string* [prefix-length](#) *number* **next-hop** *string*

Tree [next-hop](#)

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### description *string*

Synopsis Text description

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* **description** *string*

Tree [description](#)

String Length 1 to 160

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### dist-cpu-protection *reference*

Synopsis Distributed CPU protection policy for SAP

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* **dist-cpu-protection** *reference*

Tree [dist-cpu-protection](#)

Reference **configure** [system](#) [security](#) [dist-cpu-protection](#) [policy](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



## egress

|            |  |
|------------|--|
| Synopsis   | Enter the <b>egress</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress</b> |
| Tree       | <b>egress</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## agg-rate

|            |   |
|------------|---|
| Synopsis   | Enter the <b>agg-rate</b> context   |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress agg-rate</b> |
| Tree       | <b>agg-rate</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## adaptation-rule *keyword*

|            |  |
|------------|--|
| Synopsis   | Adaptation rule to compute the operational PIR value when an aggregate shaper is used  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress agg-rate adaptation-rule</b> <i>keyword</i> |
| Tree       | <b>adaptation-rule</b>   |
| Options    | max, min, closest  |
| Default    | closest  |
| Introduced | 22.10.R1   |
| Platforms  | 7750 SR-1, 7750 SR-s   |

## burst-limit (*number* | *keyword*)

|          |  |
|----------|--|
| Synopsis | Shaping burst size when an aggregate shaper is used  |
| Context  | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress agg-rate burst-limit</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <b>burst-limit</b>   |
| Range    | 1 to 14000000  |
| Units    | bytes  |

|            |                      |
|------------|----------------------|
| Options    | auto                 |
| Default    | auto                 |
| Introduced | 22.10.R1             |
| Platforms  | 7750 SR-1, 7750 SR-s |

### **limit-unused-bandwidth** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable aggregate rate overrun protection  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a> <a href="#">limit-unused-bandwidth</a> <i>boolean</i> |
| Tree       | <a href="#">limit-unused-bandwidth</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **queue-frame-based-accounting** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable frame based accounting on policers and queues  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a> <a href="#">queue-frame-based-accounting</a> <i>boolean</i> |
| Tree       | <a href="#">queue-frame-based-accounting</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **rate** *number*

|            |  |
|------------|--|
| Synopsis   | Enforced aggregate rate for all queues   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a> <a href="#">rate</a> <i>number</i> |
| Tree       | <a href="#">rate</a>   |
| Range      | 1 to 6400000000  |
| Units      | kilobps  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## filter

|            |   |
|------------|---|
| Synopsis   | Enter the <b>filter</b> context   |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress filter</b> |
| Tree       | <b>filter</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## ip reference

|            |  |
|------------|--|
| Synopsis   | IPv4 filter policy name  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress filter ip reference</b> |
| Tree       | <b>ip</b>  |
| Reference  | <b>configure filter ip-filter</b> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## ipv6 reference

|            |  |
|------------|--|
| Synopsis   | IPv6 filter policy name  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress filter ipv6 reference</b> |
| Tree       | <b>ipv6</b>  |
| Reference  | <b>configure filter ipv6-filter</b> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## qos

|            |  |
|------------|--|
| Synopsis   | Enter the <b>qos</b> context   |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos</b> |
| Tree       | <b>qos</b>   |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **policer-control-policy**

Synopsis Enter the **policer-control-policy** context

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [egress](#) [qos](#) **policer-control-policy**

Tree [policer-control-policy](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **policy-name** *reference*

Synopsis Policer control policy name

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [egress](#) [qos](#) **policer-control-policy** **policy-name** *reference*

Tree [policy-name](#)

Reference **configure** [qos](#) **policer-control-policy** *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **qinq-mark-top-only** *boolean*

Synopsis Mark top Q-tags

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [egress](#) [qos](#) **qinq-mark-top-only** *boolean*

Tree [qinq-mark-top-only](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sap-egress**

Synopsis Enter the **sap-egress** context

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [egress](#) [qos](#) **sap-egress**

|            |   |
|------------|---|
| Tree       | <a href="#">sap-egress</a>                              |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **policy-name** *reference*

|            |  |
|------------|--|
| Synopsis   | Policy ID to associate with SAP for mirrored service   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos sap-egress</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos sap-egress</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **scheduler-policy**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>scheduler-policy</b> context   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos scheduler-policy</a> |
| Tree       | <a href="#">scheduler-policy</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **policy-name** *reference*

|            |  |
|------------|--|
| Synopsis   | Scheduler policy name  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos scheduler-policy</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos scheduler-policy</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **eth-cfm**

|          |                                  |
|----------|----------------------------------|
| Synopsis | Enter the <b>eth-cfm</b> context |
|----------|----------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> |
| Tree       | <a href="#">eth-cfm</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s  |

### collect-lmm-fc-stats

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>collect-lmm-fc-stats</b> context  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">collect-lmm-fc-stats</a>   |
| Tree        | <a href="#">collect-lmm-fc-stats</a>   |
| Description | <p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands <b>fc-in-profile</b> and <b>fc</b> in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the <b>collect-lmm-stats</b> command are mutually exclusive when there is entity resource contention.</p> |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

### fc keyword

|                |   |
|----------------|---|
| Synopsis       | Forwarding class name for profile-unaware counter   |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">collect-lmm-fc-stats</a> <a href="#">fc</a> <a href="#">keyword</a>   |
| Tree           | <a href="#">fc</a>  |
| Description    | <p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the <b>fc-in-profile</b> command under the <b>collect-lmm-fc-stats</b> context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p> |
| Options        | be, l2, af, l1, h2, ef, h1, nc  |
| Max. Instances | 8   |
| Introduced     | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **fc-in-profile** *keyword*

Synopsis Forwarding class name for profile-aware counter

Context **configure** *service ies string subscriber-interface string group-interface string sap string eth-cfm collect-lmm-fc-stats fc-in-profile keyword*

Tree [fc-in-profile](#)

Description This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.

An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the **fc** command under the **collect-lmm-fc-stats** context.

When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.

Options be, l2, af, l1, h2, ef, h1, nc

Max. Instances 8

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **collect-lmm-stats** *boolean*

Synopsis Collect statistics for loss measurement message tests

Context **configure** *service ies string subscriber-interface string group-interface string sap string eth-cfm collect-lmm-stats boolean*

Tree [collect-lmm-stats](#)

Description When configured to **true**, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.

The **show eth-cfm collect-lmm-stats** command displays entities that have been enabled to collect transit and receive counters.

When configured to **false**, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**mep md-admin-name reference ma-admin-name reference mep-id number**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mep</b> list instance  |
| Context    | <b>configure service ies string subscriber-interface string group-interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</b> |
| Tree       | <b>mep</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s  |

**md-admin-name reference**

|            |   |
|------------|---|
| Synopsis   | Maintenance Domain (MD) name  |
| Context    | <b>configure service ies string subscriber-interface string group-interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</b> |
| Tree       | <b>mep</b>  |
| Reference  | <b>configure eth-cfm domain string</b>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s  |

**ma-admin-name reference**

|            |   |
|------------|---|
| Synopsis   | Maintenance Association (MA) name   |
| Context    | <b>configure service ies string subscriber-interface string group-interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</b> |
| Tree       | <b>mep</b>  |
| Reference  | <b>configure eth-cfm domain string association string</b>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s  |

**mep-id number**

|          |   |
|----------|---|
| Synopsis | Maintenance Endpoint (MEP) ID   |
| Context  | <b>configure service ies string subscriber-interface string group-interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</b> |
| Tree     | <b>mep</b>  |



|            |  |
|------------|--|
| Range      | 1 to 8191  |
| Notes      | This element is part of a list key.                |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the MEP  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm</b> <b>mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>   |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

### **ais** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable the generation and the reception of AIS messages  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm</b> <b>mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>ais</b> <i>boolean</i> |
| Tree       | <b>ais</b>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

### **alarm-notification**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>alarm-notification</b> context  |
| Context     | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm</b> <b>mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>alarm-notification</b> |
| Tree        | <b>alarm-notification</b>  |
| Description | Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.   |

Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.

|            |  |
|------------|--|
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

### **fng-alarm-time** *number*

|            |  |
|------------|--|
| Synopsis   | Time that must expire before an FNG alarm is raised  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">alarm-notification</a> <b>fng-alarm-time</b> <i>number</i> |
| Tree       | <a href="#">fng-alarm-time</a>   |
| Range      | 250   500   1000   |
| Units      | centiseconds   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

### **fng-reset-time** *number*

|            |  |
|------------|--|
| Synopsis   | Time that must expire before an FNG alarm is reset   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">alarm-notification</a> <b>fng-reset-time</b> <i>number</i> |
| Tree       | <a href="#">fng-reset-time</a>   |
| Range      | 250   500   1000   |
| Units      | centiseconds   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

### **ccm** *boolean*

|          |   |
|----------|---|
| Synopsis | Generate CCM messages   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <b>ccm</b> <i>boolean</i> |
| Tree     | <a href="#">ccm</a>   |
| Default  | false   |

|            |  |
|------------|--|
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

### **ccm-ltm-priority** *number*

|            |   |
|------------|---|
| Synopsis   | Priority of CCM and LTM messages transmitted by the MEP   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <b>ccm-ltm-priority</b> <i>number</i> |
| Tree       | <a href="#">ccm-ltm-priority</a>  |
| Range      | 0 to 7  |
| Default    | 7   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s  |

### **ccm-padding-size** *number*

|             |   |
|-------------|---|
| Synopsis    | Number of octets of padding to insert in CCM packets  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <b>ccm-padding-size</b> <i>number</i> |
| Tree        | <a href="#">ccm-padding-size</a>  |
| Description | This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.<br><br>This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through <b>configure eth-cfm domain association ccm-interval</b> ) is less than 1 second.               |
| Range       | 3 to 1500   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s  |

### **csf**

|          |  |
|----------|--|
| Synopsis | Enable the <b>csf</b> context  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <b>csf</b> |

|            |  |
|------------|--|
| Tree       | <a href="#">csf</a>                                |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

### **multiplier** *decimal-number*

|            |  |
|------------|--|
| Synopsis   | Multiplication factor used to clear the CSF condition  |
| Context    | <a href="#">configure</a> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">csf</a> <a href="#">multiplier</a> <i>decimal-number</i> |
| Tree       | <a href="#">multiplier</a>   |
| Range      | 0.0   2.0 to 30.0  |
| Default    | 3.5  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

### **description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <a href="#">configure</a> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s  |

### **eth-test**

|             |  |
|-------------|--|
| Synopsis    | Enable the <b>eth-test</b> context   |
| Context     | <a href="#">configure</a> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test</a> |
| Tree        | <a href="#">eth-test</a>   |
| Description | Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the <b>oam eth-cfm eth-test</b> command.  |

|            |  |
|------------|--|
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

### **bit-error-threshold** *number*

|            |  |
|------------|--|
| Synopsis   | Lowest priority defect allowed to generate fault alarm   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">eth-test</a> <a href="#">bit-error-threshold</a> <i>number</i> |
| Tree       | <a href="#">bit-error-threshold</a>  |
| Range      | 0 to 11840   |
| Units      | bit errors   |
| Default    | 1  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

### **test-pattern**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>test-pattern</b> context   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">eth-test</a> <a href="#">test-pattern</a> |
| Tree        | <a href="#">test-pattern</a>  |
| Description | Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s  |

### **crc-tlv** *boolean*

|            |  |
|------------|--|
| Synopsis   | Generate a CRC checksum  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">eth-test</a> <a href="#">test-pattern</a> <a href="#">crc-tlv</a> <i>boolean</i> |
| Tree       | <a href="#">crc-tlv</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **pattern** *keyword*

Synopsis Test pattern for Ethernet Test frames

Context **configure** *service* *ies* *string* *subscriber-interface* *string* *group-interface* *string* *sap* *string* *eth-cfm* *mep* *md-admin-name* *reference* *ma-admin-name* *reference* *mep-id* *number* *eth-test* *test-pattern* *pattern* *keyword*

Tree [pattern](#)

Description This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.

Options all-zeros, all-ones

Default all-zeros

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **fault-propagation** *keyword*

Synopsis Fault propagation for the MEP

Context **configure** *service* *ies* *string* *subscriber-interface* *string* *group-interface* *string* *sap* *string* *eth-cfm* *mep* *md-admin-name* *reference* *ma-admin-name* *reference* *mep-id* *number* *fault-propagation* *keyword*

Tree [fault-propagation](#)

Options use-if-status-tlv, suspend-ccm

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **grace**

Synopsis Enter the **grace** context

Context **configure** *service* *ies* *string* *subscriber-interface* *string* *group-interface* *string* *sap* *string* *eth-cfm* *mep* *md-admin-name* *reference* *ma-admin-name* *reference* *mep-id* *number* *grace*

Tree [grace](#)

Description Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

## eth-ed

Synopsis Enter the **eth-ed** context

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **eth-cfm** **mep** **md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number* **grace** **eth-ed**

Tree [eth-ed](#)

Description Commands in this context configure the ITU-T Y.1731 ETH-ED function.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

## max-rx-defect-window *number*

Synopsis Maximum received ETH-ED expected defect window duration

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **eth-cfm** **mep** **md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number* **grace** **eth-ed** **max-rx-defect-window** *number*

Tree [max-rx-defect-window](#)

Range 1 to 86400

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

## priority *number*

Synopsis Transmission priority for ETH-ED PDUs

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **eth-cfm** **mep** **md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number* **grace** **eth-ed** **priority** *number*

Tree [priority](#)

Range 0 to 7

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**rx-eth-ed boolean**

|             |  |
|-------------|--|
| Synopsis    | Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> <a href="#">eth-ed</a> <a href="#">rx-eth-ed</a> <a href="#">boolean</a> |
| Tree        | <a href="#">rx-eth-ed</a>  |
| Description | This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.   |
| Default     | true   |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

**tx-eth-ed boolean**

|            |  |
|------------|--|
| Synopsis   | Transmit ETH-ED PDUs from the MEP  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> <a href="#">eth-ed</a> <a href="#">tx-eth-ed</a> <a href="#">boolean</a> |
| Tree       | <a href="#">tx-eth-ed</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

**eth-vsm-grace**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>eth-vsm-grace</b> context  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> <a href="#">eth-vsm-grace</a> |
| Tree        | <a href="#">eth-vsm-grace</a>   |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function.  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s  |

**rx-eth-vsm-grace boolean**

|          |  |
|----------|--|
| Synopsis | Receive and process Nokia ETH-CFM Grace PDU on the MEP |
|----------|--|



|             |   |
|-------------|---|
| Context     | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>grace eth-vsm-grace rx-eth-vsm-grace</b> <i>boolean</i> |
| Tree        | <a href="#">rx-eth-vsm-grace</a>  |
| Description | When configured to <b>true</b> , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.<br>When configured to <b>false</b> , the router disables the Nokia Grace function.   |
| Default     | true  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s  |

### **tx-eth-vsm-grace** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Transmit ETH-ED PDUs from the MEP  |
| Context     | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>grace eth-vsm-grace tx-eth-vsm-grace</b> <i>boolean</i>  |
| Tree        | <a href="#">tx-eth-vsm-grace</a>   |
| Description | When configured to <b>true</b> , the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.<br>The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.<br>The operator must configure the <b>configure system eth-cfm grace</b> command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).<br>When configured to <b>false</b> , the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP. |
| Default     | true   |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

### **low-priority-defect** *keyword*

|          |  |
|----------|--|
| Synopsis | Lowest priority defect allowed to generate fault alarm   |
| Context  | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>low-priority-defect</b> <i>keyword</i> |

|            |  |
|------------|--|
| Tree       | <a href="#">low-priority-defect</a>                              |
| Options    | all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon |
| Default    | mac-rem-err-xcon   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s               |

### **one-way-delay-threshold** *number*

|            |   |
|------------|---|
| Synopsis   | Threshold time limit for the one-way delay test   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>one-way-delay-threshold</b> <i>number</i> |
| Tree       | <a href="#">one-way-delay-threshold</a>   |
| Range      | 0 to 600  |
| Units      | seconds   |
| Default    | 3   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s  |

### **squelch-ingress-levels** *number*

|                |  |
|----------------|--|
| Synopsis       | Levels for which ETH-CFM packets are silently discarded  |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <b>squelch-ingress-levels</b> <i>number</i>  |
| Tree           | <a href="#">squelch-ingress-levels</a>   |
| Description    | <p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.</p> |
| Range          | 0 to 7   |
| Max. Instances | 8  |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

**fwd-wholesale**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>fwd-wholesale</b> context   |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i><br><b>fwd-wholesale</b> |
| Tree       | <b>fwd-wholesale</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**pppoe-service** *reference*

|            |   |
|------------|---|
| Synopsis   | PPPoE service name  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i><br><b>fwd-wholesale pppoe-service</b> <i>reference</i> |
| Tree       | <b>pppoe-service</b>  |
| Reference  | <b>configure service epipe</b> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**host-admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the hosts  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i><br><b>host-admin-state</b> <i>keyword</i> |
| Tree       | <b>host-admin-state</b>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**host-lockout-policy** *reference*

|          |   |
|----------|---|
| Synopsis | Host lockout policy   |
| Context  | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i><br><b>host-lockout-policy</b> <i>reference</i> |
| Tree     | <b>host-lockout-policy</b>  |

|            |  |
|------------|--|
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">host-lockout-policy</a> <i>string</i> |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## igmp-host-tracking

|            |  |
|------------|--|
| Synopsis   | Enter the <b>igmp-host-tracking</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-host-tracking</a> |
| Tree       | <a href="#">igmp-host-tracking</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## expiry-time *number*

|            |  |
|------------|--|
| Synopsis   | Time that the system continues to track inactive hosts   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-host-tracking</a> <a href="#">expiry-time</a> <i>number</i> |
| Tree       | <a href="#">expiry-time</a>  |
| Range      | 1 to 65535   |
| Units      | seconds  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## import-policy *reference*

|            |   |
|------------|---|
| Synopsis   | Import policy that filters IGMP packets   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-host-tracking</a> <a href="#">import-policy</a> <i>reference</i> |
| Tree       | <a href="#">import-policy</a>   |
| Reference  | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**maximum-number-group-sources** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of multicast groups to track per group  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>igmp-host-tracking</b> <b>maximum-number-group-sources</b> <i>number</i> |
| Tree       | <b>maximum-number-group-sources</b>  |
| Range      | 1 to 32000   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**maximum-number-groups** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum number of multicast groups to be tracked  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>igmp-host-tracking</b> <b>maximum-number-groups</b> <i>number</i> |
| Tree       | <b>maximum-number-groups</b>  |
| Range      | 1 to 16000  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**maximum-number-sources** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of multicast sources to be tracked  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>igmp-host-tracking</b> <b>maximum-number-sources</b> <i>number</i> |
| Tree       | <b>maximum-number-sources</b>  |
| Range      | 1 to 1000  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**router-alert-check** *boolean*

|          |   |
|----------|---|
| Synopsis | Enable IGMP router alert check option   |
| Context  | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>igmp-host-tracking</b> <b>router-alert-check</b> <i>boolean</i> |
| Tree     | <b>router-alert-check</b>   |
| Default  | true  |

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ingress

Synopsis Enter the **ingress** context  
 Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [ingress](#)  
 Tree [ingress](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## filter

Synopsis Enter the **filter** context  
 Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [ingress](#) [filter](#)  
 Tree [filter](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ip reference

Synopsis IPv4 filter policy name  
 Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [ingress](#) [filter](#) [ip](#) *reference*  
 Tree [ip](#)  
 Reference **configure** [filter](#) [ip-filter](#) *string*  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv6 reference

Synopsis IPv6 filter policy name  
 Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [ingress](#) [filter](#) [ipv6](#) *reference*

|            |   |
|------------|---|
| Tree       | <a href="#">ipv6</a>  |
| Reference  | <b>configure filter</b> <a href="#">ipv6-filter</a> <i>string</i> |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR           |

## qos

|            |   |
|------------|---|
| Synopsis   | Enter the <b>qos</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> |
| Tree       | <a href="#">qos</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## match-qinq-dot1p *keyword*

|            |   |
|------------|---|
| Synopsis   | Ingress match QinQ Dot1p  |
| Context    | <b>configure service ies</b> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">match-qinq-dot1p</a> <i>keyword</i> |
| Tree       | <a href="#">match-qinq-dot1p</a>  |
| Options    | top, bottom   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## policer-control-policy

|            |  |
|------------|--|
| Synopsis   | Enter the <b>policer-control-policy</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> |
| Tree       | <a href="#">policer-control-policy</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## policy-name *reference*

|          |                             |
|----------|-----------------------------|
| Synopsis | Policer control policy name |
|----------|-----------------------------|

|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">policy-name</a> <a href="#">reference</a> |
| Tree       | <a href="#">policy-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">string</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## **sap-ingress**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>sap-ingress</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> |
| Tree       | <a href="#">sap-ingress</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## **policy-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Policy ID   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">policy-name</a> <a href="#">reference</a> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">string</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## **queuing-type** *keyword*

|            |  |
|------------|--|
| Synopsis   | Queuing type   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">queuing-type</a> <a href="#">keyword</a> |
| Tree       | <a href="#">queuing-type</a>   |
| Options    | shared, multipoint-shared  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR  |



## **scheduler-policy**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>scheduler-policy</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> |
| Tree       | <a href="#">scheduler-policy</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## **policy-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Scheduler policy name   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">scheduler-policy</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## **lag**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>lag</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">lag</a> |
| Tree       | <a href="#">lag</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## **link-map-profile** *number*

|             |  |
|-------------|--|
| Synopsis    | LAG link map profile for a SAP or network interface  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">lag</a> <a href="#">link-map-profile</a> <i>number</i> |
| Tree        | <a href="#">link-map-profile</a>   |
| Description | This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator   |

assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration.

If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.

|            |   |
|------------|---|
| Range      | 1 to 64   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## per-link-hash

|            |   |
|------------|---|
| Synopsis   | Enter the <b>per-link-hash</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">lag</a> <a href="#">per-link-hash</a> |
| Tree       | <a href="#">per-link-hash</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## class *number*

|            |   |
|------------|---|
| Synopsis   | Class used on LAG egress using weighted per-link-hash   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">lag</a> <a href="#">per-link-hash</a> <a href="#">class</a> <i>number</i> |
| Tree       | <a href="#">class</a>   |
| Range      | 1 to 3  |
| Default    | 1   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## weight *number*

|            |  |
|------------|--|
| Synopsis   | Weight used on LAG egress using weighted per-link-hash   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">lag</a> <a href="#">per-link-hash</a> <a href="#">weight</a> <i>number</i> |
| Tree       | <a href="#">weight</a>   |
| Range      | 1 to 1024  |
| Default    | 1  |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **monitor-oper-group** *reference*

Synopsis Monitor operational group

Context **configure service ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **monitor-oper-group** *reference*

Tree **monitor-oper-group**

Reference **configure service oper-group** *string*

Notes The following elements are part of a choice: **monitor-oper-group** or **oper-group**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **multi-service-site** *reference*

Synopsis Multi service site name

Context **configure service ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **multi-service-site** *reference*

Tree **multi-service-site**

Reference **configure service customer** *string* **multi-service-site** *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **oper-group** *reference*

Synopsis Operational group

Context **configure service ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **oper-group** *reference*

Tree **oper-group**

Reference **configure service oper-group** *string*

Notes The following elements are part of a choice: **monitor-oper-group** or **oper-group**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**static-host**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>static-host</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <b>static-host</b> |
| Tree       | <a href="#">static-host</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**ipv4 [ip] string mac string**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv4</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <b>static-host</b> <b>ipv4</b> <a href="#">string</a> <a href="#">mac</a> <a href="#">string</a> |
| Tree       | <a href="#">ipv4</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**[ip] string**

|            |  |
|------------|--|
| Synopsis   | IPv4 address used by the static host   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <b>static-host</b> <b>ipv4</b> <a href="#">string</a> <a href="#">mac</a> <a href="#">string</a> |
| Tree       | <a href="#">ipv4</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**mac string**

|            |  |
|------------|--|
| Synopsis   | MAC address used by the static host  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <b>static-host</b> <b>ipv4</b> <a href="#">string</a> <a href="#">mac</a> <a href="#">string</a> |
| Tree       | <a href="#">ipv4</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the static host  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">static-host</a> <a href="#">ipv4</a> <a href="#">string</a> <a href="#">mac</a> <a href="#">string</a> <a href="#">admin-state</a> <a href="#">keyword</a> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**ancp-string** *string*

|               |   |
|---------------|---|
| Synopsis      | ANCP string   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">static-host</a> <a href="#">ipv4</a> <a href="#">string</a> <a href="#">mac</a> <a href="#">string</a> <a href="#">ancp-string</a> <a href="#">string</a> |
| Tree          | <a href="#">ancp-string</a>   |
| String Length | 1 to 63   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**app-profile**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>app-profile</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">static-host</a> <a href="#">ipv4</a> <a href="#">string</a> <a href="#">mac</a> <a href="#">string</a> <a href="#">app-profile</a> |
| Tree       | <a href="#">app-profile</a>  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**profile** *reference*

|          |  |
|----------|--|
| Synopsis | Application profile used by the static host  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">static-host</a> <a href="#">ipv4</a> <a href="#">string</a> <a href="#">mac</a> <a href="#">string</a> <a href="#">app-profile</a> <a href="#">profile</a> <a href="#">reference</a> |
| Tree     | <a href="#">profile</a>  |

|            |   |
|------------|---|
| Reference  | <b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i> |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**scope** *keyword*

|            |   |
|------------|---|
| Synopsis   | Scope of the static host application profile  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">app-profile</a> <a href="#">scope</a> <i>keyword</i> |
| Tree       | <a href="#">scope</a>   |
| Options    | subscriber, mac   |
| Default    | subscriber  |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**int-dest-id** *string*

|               |  |
|---------------|--|
| Synopsis      | Intermediate destination ID  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">int-dest-id</a> <i>string</i> |
| Tree          | <a href="#">int-dest-id</a>  |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**managed-route** [[prefix](#)] *string*

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>managed-route</b> list instance   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> |
| Tree        | <a href="#">managed-route</a>  |
| Description | Commands in this context configure managed route parameters.   |
| Introduced  | 16.0.R4  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**[prefix] string**

|             |  |
|-------------|--|
| Synopsis    | Managed route prefix associated with IPv4 static host  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> |
| Tree        | <a href="#">managed-route</a>  |
| Description | This command configures the managed route prefix. The prefix length must be in the range of 1 to 32.   |
| Notes       | This element is part of a list key.  |
| Introduced  | 16.0.R4  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**cpe-check**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>cpe-check</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">cpe-check</a> |
| Tree       | <a href="#">cpe-check</a>  |
| Introduced | 22.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**destination-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | IP address of the target CPE device   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">cpe-check</a> <a href="#">destination-ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <a href="#">destination-ip-address</a>  |
| Introduced | 22.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**drop-count number**

|          |  |
|----------|--|
| Synopsis | Consecutive ping replies missed before CPE deemed down |
|----------|--|

|            |  |
|------------|--|
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check drop-count</b> <i>number</i> |
| Tree       | <b>drop-count</b>  |
| Range      | 1 to 255   |
| Default    | 3  |
| Introduced | 22.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **failed-action**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>failed-action</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check failed-action</b> |
| Tree       | <b>failed-action</b>  |
| Introduced | 22.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **metric number**

|            |  |
|------------|--|
| Synopsis   | Metric associated with the provisioned managed route   |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check failed-action metric</b> <i>number</i> |
| Tree       | <b>metric</b>  |
| Max. Range | 0 to 4294967295  |
| Default    | 0  |
| Notes      | The following elements are part of a choice: ( <b>metric</b> , <b>preference</b> , and <b>tag</b> ) or <b>withdraw</b> .   |
| Introduced | 22.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **preference number**

|          |  |
|----------|--|
| Synopsis | Preference associated to the provisioned managed route   |
| Context  | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check failed-action preference</b> <i>number</i> |
| Tree     | <b>preference</b>  |



|            |  |
|------------|--|
| Range      | 0 to 255   |
| Notes      | The following elements are part of a choice: ( <b>metric</b> , <b>preference</b> , and <b>tag</b> ) or <b>withdraw</b> . |
| Introduced | 22.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**tag number**

|            |  |
|------------|--|
| Synopsis   | Route tag used if CPE check fails  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">static-host</a> <a href="#">ipv4</a> <a href="#">string</a> <a href="#">mac</a> <a href="#">string</a> <a href="#">managed-route</a> <a href="#">string</a> <a href="#">cpe-check</a> <a href="#">failed-action</a> <a href="#">tag</a> <a href="#">number</a> |
| Tree       | <a href="#">tag</a>  |
| Max. Range | 0 to 4294967295  |
| Default    | 0  |
| Notes      | The following elements are part of a choice: ( <b>metric</b> , <b>preference</b> , and <b>tag</b> ) or <b>withdraw</b> .   |
| Introduced | 22.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**withdraw boolean**

|            |  |
|------------|--|
| Synopsis   | Withdraw the route when the CPE check fails  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">static-host</a> <a href="#">ipv4</a> <a href="#">string</a> <a href="#">mac</a> <a href="#">string</a> <a href="#">managed-route</a> <a href="#">string</a> <a href="#">cpe-check</a> <a href="#">failed-action</a> <a href="#">withdraw</a> <a href="#">boolean</a> |
| Tree       | <a href="#">withdraw</a>   |
| Default    | false  |
| Notes      | The following elements are part of a choice: ( <b>metric</b> , <b>preference</b> , and <b>tag</b> ) or <b>withdraw</b> .   |
| Introduced | 22.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**interval number**

|          |   |
|----------|---|
| Synopsis | Interval between ICMP pings to target CPE IP address  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">static-host</a> <a href="#">ipv4</a> <a href="#">string</a> <a href="#">mac</a> <a href="#">string</a> <a href="#">managed-route</a> <a href="#">string</a> <a href="#">cpe-check</a> <a href="#">interval</a> <a href="#">number</a> |
| Tree     | <a href="#">interval</a>  |

|            |   |
|------------|---|
| Range      | 1 to 255  |
| Units      | seconds   |
| Default    | 1   |
| Introduced | 22.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **log** *boolean*

|            |   |
|------------|---|
| Synopsis   | Log CPE connectivity checks transitions   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">cpe-check</a> <a href="#">log</a> <i>boolean</i> |
| Tree       | <a href="#">log</a>   |
| Default    | false   |
| Introduced | 22.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **padding-size** *number*

|            |   |
|------------|---|
| Synopsis   | Padding size for CPE connectivity checks  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">cpe-check</a> <a href="#">padding-size</a> <i>number</i> |
| Tree       | <a href="#">padding-size</a>  |
| Range      | 0 to 16384  |
| Units      | bytes   |
| Default    | 56  |
| Introduced | 22.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **source-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

|            |  |
|------------|--|
| Synopsis   | Source IP address used in the ICMP messages  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">cpe-check</a> <a href="#">source-ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <a href="#">source-ip-address</a>  |
| Introduced | 22.10.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **timeout** *number*

Synopsis Time interval determining that a ping is missed

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [static-host ipv4](#) *string* [mac](#) *string* [managed-route](#) *string* [cpe-check](#) [timeout](#) *number*

Tree [timeout](#)

Range 1 to 10

Units seconds

Default 1

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **metric** *number*

Synopsis Metric associated with the provisioned managed route

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [static-host ipv4](#) *string* [mac](#) *string* [managed-route](#) *string* [metric](#) *number*

Tree [metric](#)

Description This command configures a metric to associate with the provisioned managed route.

Max. Range 0 to 4294967295

Default 0

Introduced 22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **preference** *number*

Synopsis Preference associated to the provisioned managed route

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [static-host ipv4](#) *string* [mac](#) *string* [managed-route](#) *string* [preference](#) *number*

Tree [preference](#)

Description This command configures the preference associated with the provisioned managed route.

Range 0 to 255

Default 0

|            |   |
|------------|---|
| Introduced | 22.2.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **tag** *number*

|            |   |
|------------|---|
| Synopsis   | Route tag used if CPE check fails   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <b>tag</b> <i>number</i> |
| Tree       | <a href="#">tag</a>   |
| Max. Range | 0 to 4294967295   |
| Default    | 0   |
| Introduced | 22.2.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **rip-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | RIP policy name   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <b>rip-policy</b> <i>reference</i> |
| Tree       | <a href="#">rip-policy</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">rip-policy</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **shcv**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>shcv</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <b>shcv</b> |
| Tree       | <a href="#">shcv</a>   |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **sla-profile** *reference*

|          |                  |
|----------|------------------|
| Synopsis | SLA profile name |
|----------|------------------|

|            |   |
|------------|---|
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>sla-profile</b> <i>reference</i> |
| Tree       | <a href="#">sla-profile</a>   |
| Reference  | <b>configure subscriber-mgmt sla-profile</b> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **sub-profile** *reference*

|            |   |
|------------|---|
| Synopsis   | Sub-profile name  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>sub-profile</b> <i>reference</i> |
| Tree       | <a href="#">sub-profile</a>   |
| Reference  | <b>configure subscriber-mgmt sub-profile</b> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **subscriber-id**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>subscriber-id</b> context   |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>subscriber-id</b> |
| Tree       | <a href="#">subscriber-id</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **string** *string*

|               |  |
|---------------|--|
| Synopsis      | Subscriber identification  |
| Context       | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>subscriber-id</b> <i>string</i> <i>string</i> |
| Tree          | <a href="#">string</a>   |
| String Length | 1 to 64  |
| Notes         | The following elements are part of a choice: <b>string</b> or <b>use-sap-id</b> .  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**use-sap-id**

|            |   |
|------------|---|
| Synopsis   | Use the SAP id as subscriber ID   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">subscriber-id</a> <a href="#">use-sap-id</a> |
| Tree       | <a href="#">use-sap-id</a>  |
| Notes      | The following elements are part of a choice: <b>string</b> or <b>use-sap-id</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**ipv6 [prefix] string mac string**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv6</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> |
| Tree       | <a href="#">ipv6</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**[prefix] string**

|            |  |
|------------|--|
| Synopsis   | IPv6 prefix  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> |
| Tree       | <a href="#">ipv6</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**mac string**

|          |  |
|----------|--|
| Synopsis | MAC address  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> |
| Tree     | <a href="#">ipv6</a>   |
| Notes    | This element is part of a list key.  |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the static host  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">static-host</a> <a href="#">ipv6</a> <a href="#">string</a> <a href="#">mac</a> <a href="#">string</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **ancc-string** *string*

|               |   |
|---------------|---|
| Synopsis      | ANCP string   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">static-host</a> <a href="#">ipv6</a> <a href="#">string</a> <a href="#">mac</a> <a href="#">string</a> <b>ancc-string</b> <i>string</i> |
| Tree          | <a href="#">ancc-string</a>   |
| String Length | 1 to 63   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **app-profile**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>app-profile</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">static-host</a> <a href="#">ipv6</a> <a href="#">string</a> <a href="#">mac</a> <a href="#">string</a> <b>app-profile</b> |
| Tree       | <a href="#">app-profile</a>   |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **profile** *reference*

|          |   |
|----------|---|
| Synopsis | Application profile used by the static host |
|----------|---|

|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">static-host</a> <a href="#">ipv6</a> <a href="#">string</a> <a href="#">mac</a> <a href="#">string</a> <a href="#">app-profile</a> <a href="#">profile</a> <a href="#">reference</a> |
| Tree       | <a href="#">profile</a>  |
| Reference  | <b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy</a> <a href="#">app-profile</a> <a href="#">string</a>   |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **scope** *keyword*

|            |  |
|------------|--|
| Synopsis   | Scope of the static host application profile   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">static-host</a> <a href="#">ipv6</a> <a href="#">string</a> <a href="#">mac</a> <a href="#">string</a> <a href="#">app-profile</a> <a href="#">scope</a> <a href="#">keyword</a> |
| Tree       | <a href="#">scope</a>  |
| Options    | subscriber, mac  |
| Default    | subscriber   |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **int-dest-id** *string*

|               |   |
|---------------|---|
| Synopsis      | Intermediate destination ID   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">static-host</a> <a href="#">ipv6</a> <a href="#">string</a> <a href="#">mac</a> <a href="#">string</a> <a href="#">int-dest-id</a> <a href="#">string</a> |
| Tree          | <a href="#">int-dest-id</a>   |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **mac-linking** *string*

|            |   |
|------------|---|
| Synopsis   | IPv6 host linked with IPv4 host via learned MAC address   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">static-host</a> <a href="#">ipv6</a> <a href="#">string</a> <a href="#">mac</a> <a href="#">string</a> <a href="#">mac-linking</a> <a href="#">string</a> |
| Tree       | <a href="#">mac-linking</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |



**managed-route** [ipv6-prefix] *string*

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>managed-route</b> list instance  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <b>managed-route</b> <i>string</i> |
| Tree        | <a href="#">managed-route</a>   |
| Description | Commands in this context configure managed route parameters.  |
| Introduced  | 16.0.R4   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**[ipv6-prefix]** *string*

|             |   |
|-------------|---|
| Synopsis    | Managed route prefix associated with IPv6 static host   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <b>managed-route</b> <i>string</i> |
| Tree        | <a href="#">managed-route</a>   |
| Description | This command configures the managed route prefix. The prefix length must be in the range of 1 to 128.   |
| Notes       | This element is part of a list key.   |
| Introduced  | 16.0.R4   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**cpe-check**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>cpe-check</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <b>cpe-check</b> |
| Tree       | <a href="#">cpe-check</a>   |
| Introduced | 22.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**destination-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | IP address of the target CPE device   |
| Context    | <b>configure service ies</b> <i>string subscriber-interface string group-interface string sap string static-host ipv6 string mac string managed-route string cpe-check destination-ip-address (ipv4-address-no-zone   ipv6-address-no-zone)</i> |
| Tree       | <b>destination-ip-address</b>   |
| Introduced | 22.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **drop-count** *number*

|            |  |
|------------|--|
| Synopsis   | Consecutive ping replies missed before CPE deemed down   |
| Context    | <b>configure service ies</b> <i>string subscriber-interface string group-interface string sap string static-host ipv6 string mac string managed-route string cpe-check drop-count number</i> |
| Tree       | <b>drop-count</b>  |
| Range      | 1 to 255   |
| Default    | 3  |
| Introduced | 22.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **failed-action**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>failed-action</b> context   |
| Context    | <b>configure service ies</b> <i>string subscriber-interface string group-interface string sap string static-host ipv6 string mac string managed-route string cpe-check failed-action</i> |
| Tree       | <b>failed-action</b>   |
| Introduced | 22.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **metric** *number*

|            |  |
|------------|--|
| Synopsis   | Metric associated with the provisioned managed route   |
| Context    | <b>configure service ies</b> <i>string subscriber-interface string group-interface string sap string static-host ipv6 string mac string managed-route string cpe-check failed-action metric number</i> |
| Tree       | <b>metric</b>  |
| Max. Range | 0 to 4294967295  |
| Default    | 0  |

|            |  |
|------------|--|
| Notes      | The following elements are part of a choice: ( <b>metric</b> , <b>preference</b> , and <b>tag</b> ) or <b>withdraw</b> . |
| Introduced | 22.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **preference number**

|            |   |
|------------|---|
| Synopsis   | Preference associated to the provisioned managed route  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host</b> <b>ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check</b> <b>failed-action</b> <b>preference</b> <i>number</i> |
| Tree       | <b>preference</b>   |
| Range      | 0 to 255  |
| Notes      | The following elements are part of a choice: ( <b>metric</b> , <b>preference</b> , and <b>tag</b> ) or <b>withdraw</b> .  |
| Introduced | 22.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **tag number**

|            |  |
|------------|--|
| Synopsis   | Route tag used if CPE check fails  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host</b> <b>ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check</b> <b>failed-action</b> <b>tag</b> <i>number</i> |
| Tree       | <b>tag</b>   |
| Max. Range | 0 to 4294967295  |
| Default    | 0  |
| Notes      | The following elements are part of a choice: ( <b>metric</b> , <b>preference</b> , and <b>tag</b> ) or <b>withdraw</b> .   |
| Introduced | 22.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **withdraw boolean**

|          |  |
|----------|--|
| Synopsis | Withdraw the route when the CPE check fails  |
| Context  | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host</b> <b>ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check</b> <b>failed-action</b> <b>withdraw</b> <i>boolean</i> |
| Tree     | <b>withdraw</b>  |
| Default  | false  |

|            |  |
|------------|--|
| Notes      | The following elements are part of a choice: ( <b>metric</b> , <b>preference</b> , and <b>tag</b> ) or <b>withdraw</b> . |
| Introduced | 22.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **interval** *number*

|            |  |
|------------|--|
| Synopsis   | Interval between ICMP pings to target CPE IP address   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host</b> <b>ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check</b> <b>interval</b> <i>number</i> |
| Tree       | <b>interval</b>  |
| Range      | 1 to 255   |
| Units      | seconds  |
| Default    | 1  |
| Introduced | 22.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **log** *boolean*

|            |  |
|------------|--|
| Synopsis   | Log CPE connectivity checks transitions  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host</b> <b>ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check</b> <b>log</b> <i>boolean</i> |
| Tree       | <b>log</b>   |
| Default    | false  |
| Introduced | 22.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **padding-size** *number*

|            |  |
|------------|--|
| Synopsis   | Padding size for CPE connectivity checks   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host</b> <b>ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check</b> <b>padding-size</b> <i>number</i> |
| Tree       | <b>padding-size</b>  |
| Range      | 0 to 16384   |
| Units      | bytes  |
| Default    | 56   |
| Introduced | 22.10.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **source-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Source IP address used in the ICMP messages

Context **configure** **service ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **static-host ipv6** *string* **mac** *string* **managed-route** *string* **cpe-check** **source-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [source-ip-address](#)

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **timeout** *number*

Synopsis Time interval determining that a ping is missed

Context **configure** **service ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **static-host ipv6** *string* **mac** *string* **managed-route** *string* **cpe-check** **timeout** *number*

Tree [timeout](#)

Range 1 to 10

Units seconds

Default 1

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **metric** *number*

Synopsis Metric associated with the provisioned managed route

Context **configure** **service ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **static-host ipv6** *string* **mac** *string* **managed-route** *string* **metric** *number*

Tree [metric](#)

Description This command configures a metric to associate with the provisioned managed route.

Max. Range 0 to 4294967295

Default 0

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**preference number**

|             |   |
|-------------|---|
| Synopsis    | Preference associated to the provisioned managed route  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">preference</a> <i>number</i> |
| Tree        | <a href="#">preference</a>  |
| Description | This command configures the preference associated with the provisioned managed route.   |
| Range       | 0 to 255  |
| Default     | 0   |
| Introduced  | 22.2.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**tag number**

|            |  |
|------------|--|
| Synopsis   | Route tag used if CPE check fails  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">tag</a> <i>number</i> |
| Tree       | <a href="#">tag</a>  |
| Max. Range | 0 to 4294967295  |
| Default    | 0  |
| Introduced | 22.2.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**retail-svc-id number****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Retail service ID  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">retail-svc-id</a> <i>number</i> |
| Tree       | <a href="#">retail-svc-id</a>  |
| Range      | 1 to 2147483647  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## shcv

|            |   |
|------------|---|
| Synopsis   | Enter the <b>shcv</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">shcv</a> |
| Tree       | <a href="#">shcv</a>  |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## sla-profile *reference*

|            |   |
|------------|---|
| Synopsis   | SLA profile name  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">sla-profile</a> <i>reference</i> |
| Tree       | <a href="#">sla-profile</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## sub-profile *reference*

|            |   |
|------------|---|
| Synopsis   | Sub-profile name  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">sub-profile</a> <i>reference</i> |
| Tree       | <a href="#">sub-profile</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## subscriber-id

|            |  |
|------------|--|
| Synopsis   | Enter the <b>subscriber-id</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">subscriber-id</a> |
| Tree       | <a href="#">subscriber-id</a>  |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **string** *string*

Synopsis Subscriber identification

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **static-host** **ipv6** *string* **mac** *string* **subscriber-id** *string* *string*

Tree **string**

String Length 1 to 64

Notes The following elements are part of a choice: **string** or **use-sap-id**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **use-sap-id**

Synopsis Use the SAP id as subscriber ID

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **static-host** **ipv6** *string* **mac** *string* **subscriber-id** **use-sap-id**

Tree **use-sap-id**

Notes The following elements are part of a choice: **string** or **use-sap-id**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mac-learning**

Synopsis Enter the **mac-learning** context

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **static-host** **mac-learning**

Tree **mac-learning**

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **data-triggered** *boolean*

Synopsis Enable learning of MAC addresses from data packets



|            |  |
|------------|--|
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host mac-learning data-triggered</b> <i>boolean</i> |
| Tree       | <b>data-triggered</b>  |
| Default    | false  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **single-mac** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enforce single MAC address and subscriber for the SAP  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host mac-learning single-mac</b> <i>boolean</i> |
| Tree       | <b>single-mac</b>  |
| Default    | false  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **sub-sla-mgmt**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>sub-sla-mgmt</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>sub-sla-mgmt</b> |
| Tree       | <b>sub-sla-mgmt</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of SAP subscriber management   |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>sub-sla-mgmt admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**defaults**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>defaults</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">sub-sla-mgmt</a> <a href="#">defaults</a> |
| Tree       | <a href="#">defaults</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**app-profile** *reference*

|            |  |
|------------|--|
| Synopsis   | Default application profile name for this SAP  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">sub-sla-mgmt</a> <a href="#">defaults</a> <a href="#">app-profile</a> <i>reference</i> |
| Tree       | <a href="#">app-profile</a>  |
| Reference  | <b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy</a> <a href="#">app-profile</a> <a href="#">string</a>   |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**int-dest-id**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>int-dest-id</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">sub-sla-mgmt</a> <a href="#">defaults</a> <a href="#">int-dest-id</a> |
| Tree       | <a href="#">int-dest-id</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**string** *string*

|               |   |
|---------------|---|
| Synopsis      | Use the configured string   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">sub-sla-mgmt</a> <a href="#">defaults</a> <a href="#">int-dest-id</a> <a href="#">string</a> <a href="#">string</a> |
| Tree          | <a href="#">string</a>  |
| String Length | 1 to 32   |
| Notes         | The following elements are part of a choice: <b>string</b> or <b>top-q-tag</b> .  |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## top-q-tag

|            |   |
|------------|---|
| Synopsis   | Use the top Q-tag of this SAP   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">sub-sla-mgmt</a> <a href="#">defaults</a> <a href="#">int-dest-id</a> <a href="#">top-q-tag</a> |
| Tree       | <a href="#">top-q-tag</a>   |
| Notes      | The following elements are part of a choice: <b>string</b> or <b>top-q-tag</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## sla-profile *reference*

|            |  |
|------------|--|
| Synopsis   | Default SLA profile for hosts on this SAP  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">sub-sla-mgmt</a> <a href="#">defaults</a> <a href="#">sla-profile</a> <i>reference</i> |
| Tree       | <a href="#">sla-profile</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <a href="#">string</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## sub-profile *reference*

|            |  |
|------------|--|
| Synopsis   | Default subscriber profile for the SAP   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">sub-sla-mgmt</a> <a href="#">defaults</a> <a href="#">sub-profile</a> <i>reference</i> |
| Tree       | <a href="#">sub-profile</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <a href="#">string</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## subscriber-id

|          |  |
|----------|--|
| Synopsis | Enter the <b>subscriber-id</b> context |
|----------|--|

|            |  |
|------------|--|
| Context    | <b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>sap</i> <i>string</i> <i>sub-sla-mgmt</i> defaults <i>subscriber-id</i> |
| Tree       | <a href="#">subscriber-id</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## auto-id

|            |   |
|------------|---|
| Synopsis   | Use auto-generated subscriber identification string   |
| Context    | <b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>sap</i> <i>string</i> <i>sub-sla-mgmt</i> defaults <i>subscriber-id</i> <i>auto-id</i> |
| Tree       | <a href="#">auto-id</a>   |
| Notes      | The following elements are part of a choice: <b>auto-id</b> , <b>sap-id</b> , or <b>string</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## sap-id

|            |  |
|------------|--|
| Synopsis   | Use SAP ID as default subscriber identification string   |
| Context    | <b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>sap</i> <i>string</i> <i>sub-sla-mgmt</i> defaults <i>subscriber-id</i> <i>sap-id</i> |
| Tree       | <a href="#">sap-id</a>   |
| Notes      | The following elements are part of a choice: <b>auto-id</b> , <b>sap-id</b> , or <b>string</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## string *string*

|               |  |
|---------------|--|
| Synopsis      | Default subscriber identification string for the SAP   |
| Context       | <b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>sap</i> <i>string</i> <i>sub-sla-mgmt</i> defaults <i>subscriber-id</i> <i>string</i> <i>string</i> |
| Tree          | <a href="#">string</a>   |
| String Length | 1 to 64  |
| Notes         | The following elements are part of a choice: <b>auto-id</b> , <b>sap-id</b> , or <b>string</b> .   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## single-sub-parameters

|            |  |
|------------|--|
| Synopsis   | Enter the <b>single-sub-parameters</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">sub-sla-mgmt</a> <a href="#">single-sub-parameters</a> |
| Tree       | <a href="#">single-sub-parameters</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## non-sub-traffic

|            |  |
|------------|--|
| Synopsis   | Enable the <b>non-sub-traffic</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">sub-sla-mgmt</a> <a href="#">single-sub-parameters</a> <a href="#">non-sub-traffic</a> |
| Tree       | <a href="#">non-sub-traffic</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## app-profile *reference*

|            |   |
|------------|---|
| Synopsis   | Application profile name for all non-subscriber traffic   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">sub-sla-mgmt</a> <a href="#">single-sub-parameters</a> <a href="#">non-sub-traffic</a> <a href="#">app-profile</a> <i>reference</i> |
| Tree       | <a href="#">app-profile</a>   |
| Reference  | <b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy</a> <a href="#">app-profile</a> <a href="#">string</a>  |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## sla-profile *reference*

|           |   |
|-----------|---|
| Synopsis  | SLA profile applicable for all non-subscriber traffic   |
| Context   | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">sub-sla-mgmt</a> <a href="#">single-sub-parameters</a> <a href="#">non-sub-traffic</a> <a href="#">sla-profile</a> <i>reference</i> |
| Tree      | <a href="#">sla-profile</a>   |
| Reference | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <a href="#">string</a>   |
| Notes     | This element is mandatory.  |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **sub-profile** *reference*

|            |   |
|------------|---|
| Synopsis   | Subscriber profile all non-subscriber traffic   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">single-sub-parameters</a> <a href="#">non-sub-traffic</a> <a href="#">sub-profile</a> <i>reference</i> |
| Tree       | <a href="#">sub-profile</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i>  |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **subscriber-id** *string*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Subscriber ID applied for all non-subscriber traffic   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">single-sub-parameters</a> <a href="#">non-sub-traffic</a> <a href="#">subscriber-id</a> <i>string</i> |
| Tree          | <a href="#">subscriber-id</a>  |
| String Length | 1 to 64  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **profiled-traffic-only** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include all traffic in subscriber profile   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">single-sub-parameters</a> <a href="#">profiled-traffic-only</a> <i>boolean</i> |
| Tree       | <a href="#">profiled-traffic-only</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sub-ident-policy** *reference*

Synopsis Subscriber identification policy used on this SAP

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [sub-sla-mgmt](#) [sub-ident-policy](#) *reference*

Tree [sub-ident-policy](#)

Reference **configure** [subscriber-mgmt](#) [sub-ident-policy](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **subscriber-limit** (*keyword* | *number*)

Synopsis Maximum number of subscribers on this SAP

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [sub-sla-mgmt](#) [subscriber-limit](#) (*keyword* | *number*)

Tree [subscriber-limit](#)

Range 1 to 131071

Options no-limit

Default 1

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sap-parameters**

Synopsis Enter the **sap-parameters** context

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap-parameters](#)

Tree [sap-parameters](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **anti-spoof** *keyword*

Synopsis Anti-spoof type of the SAP

|            |   |
|------------|---|
| Context    | <b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>sap-parameters anti-spoof</i> <i>keyword</i> |
| Tree       | <a href="#">anti-spoof</a>  |
| Options    | ip-mac, nh-mac  |
| Default    | ip-mac  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### description *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>sap-parameters description</i> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### sub-sla-mgmt

|            |  |
|------------|--|
| Synopsis   | Enter the <b>sub-sla-mgmt</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>sap-parameters sub-sla-mgmt</i> |
| Tree       | <a href="#">sub-sla-mgmt</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### defaults

|            |   |
|------------|---|
| Synopsis   | Enter the <b>defaults</b> context   |
| Context    | <b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>sap-parameters sub-sla-mgmt defaults</i> |
| Tree       | <a href="#">defaults</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |



**app-profile** *reference*

|            |   |
|------------|---|
| Synopsis   | Default application profile name  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap-parameters</a> <a href="#">sub-sla-mgmt</a> <a href="#">defaults</a> <a href="#">app-profile</a> <a href="#">reference</a> |
| Tree       | <a href="#">app-profile</a>   |
| Reference  | <b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy</a> <a href="#">app-profile</a> <a href="#">string</a>  |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**sla-profile** *reference*

|            |   |
|------------|---|
| Synopsis   | Default SLA profile   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap-parameters</a> <a href="#">sub-sla-mgmt</a> <a href="#">defaults</a> <a href="#">sla-profile</a> <a href="#">reference</a> |
| Tree       | <a href="#">sla-profile</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <a href="#">string</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**sub-profile** *reference*

|            |   |
|------------|---|
| Synopsis   | Default subscriber profile  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap-parameters</a> <a href="#">sub-sla-mgmt</a> <a href="#">defaults</a> <a href="#">sub-profile</a> <a href="#">reference</a> |
| Tree       | <a href="#">sub-profile</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <a href="#">string</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**subscriber-id**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>subscriber-id</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap-parameters</a> <a href="#">sub-sla-mgmt</a> <a href="#">defaults</a> <a href="#">subscriber-id</a> |
| Tree       | <a href="#">subscriber-id</a>   |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## auto-id

Synopsis Subscriber ID that is autogenerated

Context **configure service ies string subscriber-interface string group-interface string sap-parameters sub-sla-mgmt defaults subscriber-id auto-id**

Tree [auto-id](#)

Notes The following elements are part of a choice: **auto-id** or **string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## string string

Synopsis String to be used as default subscriber ID

Context **configure service ies string subscriber-interface string group-interface string sap-parameters sub-sla-mgmt defaults subscriber-id string string**

Tree [string](#)

String Length 1 to 64

Notes The following elements are part of a choice: **auto-id** or **string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## sub-ident-policy reference

Synopsis Subscriber identification policy

Context **configure service ies string subscriber-interface string group-interface string sap-parameters sub-sla-mgmt sub-ident-policy reference**

Tree [sub-ident-policy](#)

Reference **configure subscriber-mgmt sub-ident-policy string**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## shcv-policy reference

Synopsis SHCV policy for IPv4 and IPv6 subscriber hosts

|            |   |
|------------|---|
| Context    | <b>configure service ies</b> <i>string subscriber-interface string group-interface string shcv-policy reference</i> |
| Tree       | <a href="#">shcv-policy</a>   |
| Reference  | <b>configure subscriber-mgmt shcv-policy</b> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **shcv-policy-ipv4** *reference*

|            |  |
|------------|--|
| Synopsis   | SHCV for IPv4 subscriber hosts   |
| Context    | <b>configure service ies</b> <i>string subscriber-interface string group-interface string shcv-policy-ipv4 reference</i> |
| Tree       | <a href="#">shcv-policy-ipv4</a>   |
| Reference  | <b>configure subscriber-mgmt shcv-policy</b> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **shcv-policy-ipv6** *reference*

|            |  |
|------------|--|
| Synopsis   | SHCV for IPv6 subscriber hosts   |
| Context    | <b>configure service ies</b> <i>string subscriber-interface string group-interface string shcv-policy-ipv6 reference</i> |
| Tree       | <a href="#">shcv-policy-ipv6</a>   |
| Reference  | <b>configure subscriber-mgmt shcv-policy</b> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **srrp** [[srrp-id](#)] *number*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>srrp</b> list instance   |
| Context        | <b>configure service ies</b> <i>string subscriber-interface string group-interface string srrp number</i> |
| Tree           | <a href="#">srrp</a>  |
| Max. Instances | 1   |
| Introduced     | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[srrp-id]** *number*

Synopsis SRRP instance ID

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **srrp** *number*

Tree **srrp**

Range 1 to 4294967295

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of SRRP

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **srrp** *number* **admin-state** *keyword*

Tree **admin-state**

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **bfd-liveness**

Synopsis Enable the **bfd-liveness** context

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **srrp** *number* **bfd-liveness**

Tree **bfd-liveness**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**dest-ip** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Destination IPv4 prefix  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>srrp</b> <i>number</i> <b>bfd-liveness</b> <b>dest-ip</b> <i>string</i> |
| Tree       | <b>dest-ip</b>   |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**interface-name** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Name of the interface running BFD   |
| Context       | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>srrp</b> <i>number</i> <b>bfd-liveness</b> <b>interface-name</b> <i>string</i> |
| Tree          | <b>interface-name</b>   |
| String Length | 1 to 32   |
| Notes         | This element is mandatory.  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**service-name** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Administrative service name   |
| Context  | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>srrp</b> <i>number</i> <b>bfd-liveness</b> <b>service-name</b> <i>string</i> |
| Tree     | <b>service-name</b>   |

String Length 1 to 64  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [srrp](#) *number* [description](#) *string*  
Tree [description](#)  
String Length 1 to 80  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **gw-mac** *string*

Synopsis Gateway MAC address  
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [srrp](#) *number* [gw-mac](#) *string*  
Tree [gw-mac](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **keep-alive-interval** *number*

Synopsis Interval between SRRP advertisements  
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [srrp](#) *number* [keep-alive-interval](#) *number*  
Tree [keep-alive-interval](#)  
Range 1 to 100  
Units deciseconds  
Default 10  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**message-path** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | SAP to use as the SRRP message path  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">srrp</a> <i>number</i> <a href="#">message-path</a> <i>reference</i> |
| Tree       | <a href="#">message-path</a>   |
| Reference  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**monitor-oper-group**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>monitor-oper-group</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">srrp</a> <i>number</i> <a href="#">monitor-oper-group</a> |
| Tree       | <a href="#">monitor-oper-group</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**group-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Operational group name  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">srrp</a> <i>number</i> <a href="#">monitor-oper-group</a> <a href="#">group-name</a> <i>reference</i> |
| Tree       | <a href="#">group-name</a>  |
| Reference  | <b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**priority-step** *number*

|          |   |
|----------|---|
| Synopsis | Step value to change priority of SRRP instance  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">srrp</a> <i>number</i> <a href="#">monitor-oper-group</a> <a href="#">priority-step</a> <i>number</i> |

|            |   |
|------------|---|
| Tree       | <a href="#">priority-step</a>                           |
| Range      | 1 to 10   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **one-garp-per-sap** *boolean*

|            |   |
|------------|---|
| Synopsis   | Send one gratuitous ARP to each SAP   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">srrp</a> <a href="#">number</a> <b>one-garp-per-sap</b> <i>boolean</i> |
| Tree       | <a href="#">one-garp-per-sap</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **policy** *reference*

|                |   |
|----------------|---|
| Synopsis       | VRRP priority control policy associated with the SRRP   |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">srrp</a> <a href="#">number</a> <b>policy</b> <i>reference</i> |
| Tree           | <a href="#">policy</a>  |
| Reference      | <b>configure</b> <a href="#">vrrp</a> <a href="#">policy</a> <a href="#">number</a>   |
| Max. Instances | 2   |
| Notes          | This element is ordered by the user.  |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **preempt** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow the SRRP instance to override an existing master   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">srrp</a> <a href="#">number</a> <b>preempt</b> <i>boolean</i> |
| Tree       | <a href="#">preempt</a>  |
| Default    | true   |
| Introduced | 16.0.R1  |



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **priority** *number*

Synopsis Priority for this interface at this level

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [srrp](#) *number* [priority](#) *number*

Tree [priority](#)

Range 1 to 254

Default 100

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **send-fib-population-packets** *keyword*

Synopsis Mode used to send FIB population packets on switchover

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [srrp](#) *number* [send-fib-population-packets](#) *keyword*

Tree [send-fib-population-packets](#)

Options all, outer-tag-only

Default all

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **suppress-aa-sub** *boolean*

Synopsis Enable application assurance suppression for ESM subscribers

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [suppress-aa-sub](#) *boolean*

Tree [suppress-aa-sub](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**tos-marking-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | TOS marking state   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <b>tos-marking-state</b> <i>keyword</i> |
| Tree       | <a href="#">tos-marking-state</a>   |
| Options    | trusted, untrusted  |
| Default    | untrusted   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Group interface type   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <b>type</b> <i>keyword</i> |
| Tree       | <a href="#">type</a>   |
| Options    | plain, lns, wlan-gw, gtp, bonding  |
| Default    | plain  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**wlan-gw**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>wlan-gw</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <b>wlan-gw</b> |
| Tree       | <a href="#">wlan-gw</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**admin-state** *keyword*

|          |                                      |
|----------|--------------------------------------|
| Synopsis | Administrative state of WLAN Gateway |
|----------|--------------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b><br><b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **gateway-address** [**address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>gateway-address</b> list instance   |
| Context        | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b><br><b>gateway-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree           | <b>gateway-address</b>   |
| Max. Instances | 10   |
| Introduced     | 16.0.R4  |
| Platforms      | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **[address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

|            |  |
|------------|--|
| Synopsis   | Gateway endpoint address of the WLAN Gateway tunnel  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b><br><b>gateway-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <b>gateway-address</b>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R4  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **purpose**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>purpose</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b><br><b>gateway-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>purpose</b> |
| Tree       | <b>purpose</b>  |
| Introduced | 16.0.R4   |

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **xconnect** *boolean*

Synopsis Use tunnel IP address for crosse-connect traffic

Context **configure** *service ies string subscriber-interface string group-interface string wlan-gw gateway-address (ipv4-address-no-zone | ipv6-address-no-zone) purpose xconnect boolean*

Tree [xconnect](#)

Default false

Introduced 16.0.R4

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **gateway-router** *string*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Routing instance the WLAN-GW endpoint resides in

Context **configure** *service ies string subscriber-interface string group-interface string wlan-gw gateway-router string*

Tree [gateway-router](#)

Introduced 16.0.R4

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **group-encryption**

Synopsis Enter the **group-encryption** context

Context **configure** *service ies string subscriber-interface string group-interface string wlan-gw group-encryption*

Tree [group-encryption](#)

Introduced 21.10.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**encryption-keygroup-inbound** *reference*

|            |   |
|------------|---|
| Synopsis   | Encryption keygroup for inbound traffic   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">group-encryption</a> <a href="#">encryption-keygroup-inbound</a> <i>reference</i> |
| Tree       | <a href="#">encryption-keygroup-inbound</a>   |
| Reference  | <b>configure</b> <a href="#">group-encryption</a> <a href="#">encryption-keygroup</a> <i>number</i>   |
| Introduced | 21.10.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**encryption-keygroup-outbound** *reference*

|            |  |
|------------|--|
| Synopsis   | Encryption keygroup for inbound traffic  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">group-encryption</a> <a href="#">encryption-keygroup-outbound</a> <i>reference</i> |
| Tree       | <a href="#">encryption-keygroup-outbound</a>   |
| Reference  | <b>configure</b> <a href="#">group-encryption</a> <a href="#">encryption-keygroup</a> <i>number</i>  |
| Introduced | 21.10.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**I2-ap**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>I2-ap</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">I2-ap</a> |
| Tree       | <a href="#">I2-ap</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**access-point** [[sap-id](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>access-point</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">I2-ap</a> <a href="#">access-point</a> <i>string</i> |
| Tree       | <a href="#">access-point</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**[sap-id] string**

|               |  |
|---------------|--|
| Synopsis      | SAP ID for the Layer 2 access point  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw l2-ap</a> <a href="#">access-point</a> <i>string</i> |
| Tree          | <a href="#">access-point</a>   |
| String Length | 1 to 45  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**admin-state keyword**

|            |  |
|------------|--|
| Synopsis   | Administrative state of the L2 access points   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw l2-ap</a> <a href="#">access-point</a> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**encap-type keyword****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Service encapsulation type of this access point   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw l2-ap</a> <a href="#">access-point</a> <i>string</i> <b>encap-type</b> <i>keyword</i> |
| Tree       | <a href="#">encap-type</a>  |
| Options    | null, dot1q, qinq   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## epipe-sap-template *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Parameters template for the L2 access point SAP  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw l2-ap access-point</b> <i>string</i> <b>epipe-sap-template</b> <i>reference</i> |
| Tree       | <b>epipe-sap-template</b>  |
| Reference  | <b>configure service template epipe-sap-template</b> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## auto-sub-id-fmt *keyword*

|            |   |
|------------|---|
| Synopsis   | Format of the auto-generated subscriber ID  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw l2-ap auto-sub-id-fmt</b> <i>keyword</i> |
| Tree       | <b>auto-sub-id-fmt</b>  |
| Options    | include-ap-tags, sap-only   |
| Default    | include-ap-tags   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## default-encap-type *keyword*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Default encapsulation type for Layer 2 access points   |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw l2-ap default-encap-type</b> <i>keyword</i> |
| Tree       | <b>default-encap-type</b>  |
| Options    | null, dot1q, qinq  |
| Default    | null   |
| Introduced | 16.0.R1  |

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## lanext



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable the **lanext** context

Context **configure service ies string subscriber-interface string group-interface string wlan-gw lanext**

Tree **lanext**

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## max-bd *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Maximum number of bridge domains

Context **configure service ies string subscriber-interface string group-interface string wlan-gw lanext max-bd number**

Tree **max-bd**

Range 1 to 131071

Default 131071

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## learn-ap-mac

Synopsis Enable the **learn-ap-mac** context

Context **configure service ies string subscriber-interface string group-interface string wlan-gw learn-ap-mac**

Tree **learn-ap-mac**

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**delay-auth** *boolean*

|            |  |
|------------|--|
| Synopsis   | Delay AP-MAC until after ARP/ND authentication response  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b><br><b>learn-ap-mac</b> <b>delay-auth</b> <i>boolean</i> |
| Tree       | <b>delay-auth</b>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**mobility**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mobility</b> context   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b><br><b>mobility</b> |
| Tree       | <b>mobility</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**hold-time** *number*

|            |  |
|------------|--|
| Synopsis   | Minimum time between two mobility events for single UE   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b><br><b>mobility</b> <b>hold-time</b> <i>number</i> |
| Tree       | <b>hold-time</b>   |
| Range      | 0 to 255   |
| Units      | seconds  |
| Default    | 5  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**inter-tunnel-type** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enable mobility between terminating tunnel types  |
| Context    | <b>configure</b> <b>service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b><br><b>mobility inter-tunnel-type</b> <i>boolean</i> |
| Tree       | <b>inter-tunnel-type</b>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **inter-vlan** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow mobility within different VLANs of the same range  |
| Context    | <b>configure</b> <b>service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b><br><b>mobility inter-vlan</b> <i>boolean</i> |
| Tree       | <b>inter-vlan</b>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **trigger**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>trigger</b> context   |
| Context    | <b>configure</b> <b>service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b><br><b>mobility trigger</b> |
| Tree       | <b>trigger</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **control** *boolean*

|            |   |
|------------|---|
| Synopsis   | Use control traffic as a mobility trigger   |
| Context    | <b>configure</b> <b>service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b><br><b>mobility trigger control</b> <i>boolean</i> |
| Tree       | <b>control</b>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**data** *boolean*

|            |  |
|------------|--|
| Synopsis   | Use data traffic as mobility trigger   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b><br><b>mobility trigger</b> <b>data</b> <i>boolean</i> |
| Tree       | <b>data</b>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**iapp** *boolean*

|            |  |
|------------|--|
| Synopsis   | Use IAPP messages as a mobility trigger  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b><br><b>mobility trigger</b> <b>iapp</b> <i>boolean</i> |
| Tree       | <b>iapp</b>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**oper-down-on-group-degrade** *boolean*

|            |  |
|------------|--|
| Synopsis   | Bring interface down when the ISA WLAN Gateway degraded  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b><br><b>oper-down-on-group-degrade</b> <i>boolean</i> |
| Tree       | <b>oper-down-on-group-degrade</b>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**tcp-mss-adjust** *number*

|          |   |
|----------|---|
| Synopsis | TCP Maximum Segment Size (MSS) adjustment for gateway   |
| Context  | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b><br><b>tcp-mss-adjust</b> <i>number</i> |
| Tree     | <b>tcp-mss-adjust</b>   |

|            |                                    |
|------------|------------------------------------|
| Range      | 160 to 10240                       |
| Units      | bytes                              |
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

## tunnel-egress-qos

|            |  |
|------------|--|
| Synopsis   | Enter the <b>tunnel-egress-qos</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <b>tunnel-egress-qos</b> |
| Tree       | <a href="#">tunnel-egress-qos</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## admin-state *keyword*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Administrative state of egress QoS for WLAN-GW tunnels   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <b>tunnel-egress-qos</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## agg-rate-limit (*number* | *keyword*)

|          |   |
|----------|---|
| Synopsis | HQoS aggregate rate limit   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <b>tunnel-egress-qos</b> <b>agg-rate-limit</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <a href="#">agg-rate-limit</a>  |
| Range    | 1 to 100000000  |
| Options  | max   |

|            |                                    |
|------------|------------------------------------|
| Default    | max                                |
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **granularity** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Granularity of the egress shaping for WLAN Gateway  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>tunnel-egress-qos</b> <b>granularity</b> <i>keyword</i> |
| Tree       | <a href="#">granularity</a>   |
| Options    | per-tunnel, per-retailer  |
| Default    | per-tunnel  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **hold-time** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Minimum time to hold egress shaping resources   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>tunnel-egress-qos</b> <b>hold-time</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">hold-time</a>   |
| Range      | 1 to 86400  |
| Units      | seconds   |
| Options    | infinite  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **multi-client-only** *boolean*

|          |   |
|----------|---|
| Synopsis | Allow shaping for tunnel traffic for multiple UEs   |
| Context  | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>tunnel-egress-qos</b> <b>multi-client-only</b> <i>boolean</i> |
| Tree     | <a href="#">multi-client-only</a>   |

|            |                                    |
|------------|------------------------------------|
| Default    | false                              |
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### qos reference



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Egress QoS policy linked with each interface tunnel  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">tunnel-egress-qos</a> <a href="#">qos</a> <i>reference</i> |
| Tree       | <a href="#">qos</a>  |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">sap-egress</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### scheduler-policy reference



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Egress scheduler policy linked with each tunnel   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">tunnel-egress-qos</a> <a href="#">scheduler-policy</a> <i>reference</i> |
| Tree       | <a href="#">scheduler-policy</a>  |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">scheduler-policy</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### tunnel-encaps

|          |   |
|----------|---|
| Synopsis | Enter the <b>tunnel-encaps</b> context  |
| Context  | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">tunnel-encaps</a> |

|            |                                    |
|------------|------------------------------------|
| Tree       | <a href="#">tunnel-encaps</a>      |
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **learn-l2tp-cookie** (*keyword* | *hex-string*)

|               |  |
|---------------|--|
| Synopsis      | System that learns the cookie from L2TP tunnels terminating on this interface  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">tunnel-encaps</a> <a href="#">learn-l2tp-cookie</a> ( <i>keyword</i>   <i>hex-string</i> ) |
| Tree          | <a href="#">learn-l2tp-cookie</a>  |
| String Length | 6  |
| Options       | never, always  |
| Default       | never  |
| Introduced    | 16.0.R1  |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **vlan-range** [[range](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>vlan-range</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> |
| Tree       | <a href="#">vlan-range</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **[range]** *string*

|            |  |
|------------|--|
| Synopsis   | IEEE 802.1q VLAN tag range   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> |
| Tree       | <a href="#">vlan-range</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## authentication

|            |  |
|------------|--|
| Synopsis   | Enter the <b>authentication</b> context  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>authentication</b> |
| Tree       | <b>authentication</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## hold-time *number*

|            |   |
|------------|---|
| Synopsis   | Minimum time UE held down after failed authentication   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>authentication</b> <b>hold-time</b> <i>number</i> |
| Tree       | <b>hold-time</b>  |
| Range      | 0 to 3600   |
| Units      | seconds   |
| Default    | 5   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## local

|            |   |
|------------|---|
| Synopsis   | Enable the <b>local</b> context   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>authentication</b> <b>local</b> |
| Tree       | <b>local</b>  |
| Introduced | 22.2.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## coa-policy *reference*

|           |  |
|-----------|--|
| Synopsis  | RADIUS ISA policy applied to CoA or disconnect messages  |
| Context   | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>authentication</b> <b>local</b> <b>coa-policy</b> <i>reference</i> |
| Tree      | <b>coa-policy</b>  |
| Reference | <b>configure</b> <b>aaa</b> <b>radius</b> <b>isa-policy</b> <i>string</i>  |



Introduced 22.2.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **default-ue-state** *keyword*

Synopsis UE state accepted for immediate authentication  
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [authentication](#) [local](#) **default-ue-state** *keyword*  
Tree [default-ue-state](#)  
Options portal, dsm  
Notes This element is mandatory.  
Introduced 22.2.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **on-control-plane** *boolean*

Synopsis Allow authentication on first control plane packet  
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [authentication](#) [on-control-plane](#) *boolean*  
Tree [on-control-plane](#)  
Default false  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **policy** *reference*

Synopsis RADIUS policy for authentication  
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [authentication](#) [policy](#) *reference*  
Tree [policy](#)  
Reference **configure** [aaa](#) [radius](#) [isa-policy](#) *string*  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**vlan-mismatch-timeout** *number*

|            |   |
|------------|---|
| Synopsis   | Timeout if packet received with a non-matching VLAN tag   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">authentication</a> <a href="#">vlan-mismatch-timeout</a> <i>number</i> |
| Tree       | <a href="#">vlan-mismatch-timeout</a>   |
| Range      | 5 to 60   |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**data-triggered-ue-creation**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>data-triggered-ue-creation</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">data-triggered-ue-creation</a> |
| Tree       | <a href="#">data-triggered-ue-creation</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of data-triggered UE creation   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">data-triggered-ue-creation</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**arp** *boolean*

|          |  |
|----------|--|
| Synopsis | Authenticate ARP packets received from an unknown UE   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">data-triggered-ue-creation</a> <a href="#">arp</a> <i>boolean</i> |
| Tree     | <a href="#">arp</a>  |

|            |                                    |
|------------|------------------------------------|
| Default    | false                              |
| Introduced | 22.7.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### create-proxy-cache-entry

|            |  |
|------------|--|
| Synopsis   | Enter the <b>create-proxy-cache-entry</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">data-triggered-ue-creation</a> <a href="#">create-proxy-cache-entry</a> |
| Tree       | <a href="#">create-proxy-cache-entry</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### mac-format *string*

|               |  |
|---------------|--|
| Synopsis      | MAC address format   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">data-triggered-ue-creation</a> <a href="#">create-proxy-cache-entry</a> <a href="#">mac-format</a> <a href="#">string</a> |
| Tree          | <a href="#">mac-format</a>   |
| String Length | 2 to 7   |
| Default       | aa:  |
| Introduced    | 16.0.R1  |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### proxy-server

|            |   |
|------------|---|
| Synopsis   | Enable the <b>proxy-server</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">data-triggered-ue-creation</a> <a href="#">create-proxy-cache-entry</a> <a href="#">proxy-server</a> |
| Tree       | <a href="#">proxy-server</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### name *string*

|          |                          |
|----------|--------------------------|
| Synopsis | RADIUS Proxy server name |
|----------|--------------------------|

|               |  |
|---------------|--|
| Context       | <b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>wlan-gw vlan-range string</i> <i>data-triggered-ue-creation</i> <i>create-proxy-cache-entry</i> <i>proxy-server name string</i> |
| Tree          | <a href="#">name</a>   |
| String Length | 1 to 32  |
| Notes         | This element is mandatory.   |
| Introduced    | 16.0.R1  |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **router-instance** *string*

|            |   |
|------------|---|
| Synopsis   | Router instance of the RADIUS proxy server  |
| Context    | <b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>wlan-gw vlan-range string</i> <i>data-triggered-ue-creation</i> <i>create-proxy-cache-entry</i> <i>proxy-server router-instance string</i> |
| Tree       | <a href="#">router-instance</a>   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R4   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **dhcp4**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>dhcp4</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>wlan-gw vlan-range string</i> <b>dhcp4</b> |
| Tree       | <a href="#">dhcp4</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **admin-state** *keyword*

|          |   |
|----------|---|
| Synopsis | Administrative state of DHCPv4  |
| Context  | <b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>wlan-gw vlan-range string</i> <b>dhcp4 admin-state keyword</b> |
| Tree     | <a href="#">admin-state</a>   |
| Options  | enable, disable   |
| Default  | disable   |

|            |                                    |
|------------|------------------------------------|
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **dns string**

|                |   |
|----------------|---|
| Synopsis       | DNS servers signaled in DHCP  |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">dhcp4</a> <a href="#">dns</a> <a href="#">string</a> |
| Tree           | <a href="#">dns</a>   |
| Max. Instances | 2   |
| Notes          | This element is ordered by the user.  |
| Introduced     | 16.0.R1   |
| Platforms      | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **l2-aware-ip-address** ([ipv4-unicast-address](#) | [keyword](#))

|            |   |
|------------|---|
| Synopsis   | L2-Aware NAT inside IP address  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">dhcp4</a> <a href="#">l2-aware-ip-address</a> ( <a href="#">ipv4-unicast-address</a>   <a href="#">keyword</a> ) |
| Tree       | <a href="#">l2-aware-ip-address</a>   |
| Options    | <a href="#">from-pool</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **lease-time**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>lease-time</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">dhcp4</a> <a href="#">lease-time</a> |
| Tree       | <a href="#">lease-time</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**active number**

|            |   |
|------------|---|
| Synopsis   | Lease time an authenticated user  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>dhcp4</b> <b>lease-time</b> <b>active</b> <b>number</b> |
| Tree       | <b>active</b>   |
| Range      | 300 to 3600   |
| Units      | seconds   |
| Default    | 600   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**initial number**

|            |  |
|------------|--|
| Synopsis   | Lease time for migrant user (unauthenticated)  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>dhcp4</b> <b>lease-time</b> <b>initial</b> <b>number</b> |
| Tree       | <b>initial</b>   |
| Range      | 300 to 3600  |
| Units      | seconds  |
| Default    | 600  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**nbns string**

|                |   |
|----------------|---|
| Synopsis       | NetBIOS servers signaled in DHCP  |
| Context        | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>dhcp4</b> <b>nbns</b> <b>string</b> |
| Tree           | <b>nbns</b>   |
| Max. Instances | 2   |
| Notes          | This element is ordered by the user.  |
| Introduced     | 16.0.R1   |
| Platforms      | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## dhcp6

|            |   |
|------------|---|
| Synopsis   | Enter the <b>dhcp6</b> context  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>dhcp6</b> |
| Tree       | <b>dhcp6</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## admin-state *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the protocol  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>dhcp6</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## preferred-lifetime

|            |   |
|------------|---|
| Synopsis   | Enter the <b>preferred-lifetime</b> context   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>dhcp6</b> <b>preferred-lifetime</b> |
| Tree       | <b>preferred-lifetime</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## active *number*

|          |   |
|----------|---|
| Synopsis | Preferred signaled lifetime after full authentication   |
| Context  | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>dhcp6</b> <b>preferred-lifetime</b> <b>active</b> <i>number</i> |
| Tree     | <b>active</b>   |
| Range    | 300 to 3600   |
| Units    | seconds   |

|            |                                    |
|------------|------------------------------------|
| Default    | 600                                |
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **initial number**

|            |   |
|------------|---|
| Synopsis   | Signaled preferred lifetime after full authentication   |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <i>string</i> <b>vlan-range</b> <i>string</i> <b>dhcp6 preferred-lifetime initial number</b> |
| Tree       | <b>initial</b>  |
| Range      | 300 to 3600   |
| Units      | seconds   |
| Default    | 300   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **valid-lifetime**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>valid-lifetime</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <i>string</i> <b>vlan-range</b> <i>string</i> <b>dhcp6 valid-lifetime</b> |
| Tree       | <b>valid-lifetime</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **active number**

|            |  |
|------------|--|
| Synopsis   | Signaled valid lifetime after full authentication  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <i>string</i> <b>vlan-range</b> <i>string</i> <b>dhcp6 valid-lifetime active number</b> |
| Tree       | <b>active</b>  |
| Range      | 300 to 3600  |
| Units      | seconds  |
| Default    | 600  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |



**initial number**

|            |  |
|------------|--|
| Synopsis   | Valid signaled lifetime UE is not fully authenticated  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>dhcp6</b> <b>valid-lifetime</b> <b>initial</b> <i>number</i> |
| Tree       | <b>initial</b>   |
| Range      | 300 to 3600  |
| Units      | seconds  |
| Default    | 300  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**dsm**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>dsm</b> context  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>dsm</b> |
| Tree       | <b>dsm</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**accounting-policy** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | ISA Radius Policy for accounting  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>dsm</b> <b>accounting-policy</b> <i>reference</i> |
| Tree       | <b>accounting-policy</b>  |
| Reference  | <b>configure</b> <b>aaa</b> <b>radius</b> <b>isa-policy</b> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## accounting-update

|            |   |
|------------|---|
| Synopsis   | Enable the <b>accounting-update</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">dsm</a> <b>accounting-update</b> |
| Tree       | <a href="#">accounting-update</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## interval *number*

|            |   |
|------------|---|
| Synopsis   | Interim accounting update messages interval   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">dsm</a> <b>accounting-update</b> <b>interval</b> <i>number</i> |
| Tree       | <a href="#">interval</a>  |
| Range      | 5 to 259200   |
| Units      | minutes   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of DSM  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">dsm</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## application-assurance

|          |   |
|----------|---|
| Synopsis | Enter the <b>application-assurance</b> context  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">dsm</a> <b>application-assurance</b> |

Tree [application-assurance](#)  
 Introduced 21.10.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **accounting-statistics** *boolean*

Synopsis Collect AA statistics  
 Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [dsm](#) [application-assurance](#) [accounting-statistics](#) *boolean*  
 Tree [accounting-statistics](#)  
 Default false  
 Introduced 21.10.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **profile** *reference*

Synopsis AA application profile used for portal authentication  
 Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [dsm](#) [application-assurance](#) [profile](#) *reference*  
 Tree [profile](#)  
 Reference **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-profile](#) *string*  
 Introduced 21.10.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **url-parameter** *string*

Synopsis AA URL parameter included for HTTP portal redirect  
 Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [dsm](#) [application-assurance](#) [url-parameter](#) *string*  
 Tree [url-parameter](#)  
 String Length 1 to 247  
 Introduced 22.2.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## egress

|            |   |
|------------|---|
| Synopsis   | Enter the <b>egress</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">dsm</a> <a href="#">egress</a> |
| Tree       | <a href="#">egress</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## policer reference

|            |   |
|------------|---|
| Synopsis   | Policer for egress traffic  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">dsm</a> <a href="#">egress</a> <a href="#">policer</a> <a href="#">reference</a> |
| Tree       | <a href="#">policer</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-policer</a> <a href="#">string</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## ingress

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ingress</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">dsm</a> <a href="#">ingress</a> |
| Tree       | <a href="#">ingress</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## ip-filter reference

|            |  |
|------------|--|
| Synopsis   | Filter for ingress traffic   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">dsm</a> <a href="#">ingress</a> <a href="#">ip-filter</a> <a href="#">reference</a> |
| Tree       | <a href="#">ip-filter</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-filter</a> <a href="#">string</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **policer** *reference*

|            |   |
|------------|---|
| Synopsis   | Policer for ingress traffic   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dsm ingress policer</a> <i>reference</i> |
| Tree       | <a href="#">policer</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt isa-policer</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **soft-quota-exhausted-filter** *reference*

|             |   |
|-------------|---|
| Synopsis    | Filter applied when soft volume quota is reached  |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dsm ingress soft-quota-exhausted-filter</a> <i>reference</i>   |
| Tree        | <a href="#">soft-quota-exhausted-filter</a>   |
| Description | This command applies a filter when a soft volume quota is reached. The filter replaces the currently applied filter (which can be preconfigured using the <b>ip-filter</b> command in the <b>configure service vprn subscriber-interface group-interface wlan-gw vlan-range dsm ingress ip-filter</b> context or be set using a RADIUS CoA message) for the UE upon quota exhaustion. If the quota is extended using a RADIUS CoA message, the filter is automatically reverted. Configuration changes apply only to new DSM UEs and not to existing UEs. |
| Reference   | <b>configure</b> <a href="#">subscriber-mgmt isa-filter</a> <i>string</i>   |
| Introduced  | 21.7.R1   |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **one-time-redirect**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>one-time-redirect</b> context   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dsm one-time-redirect</a> |
| Tree       | <a href="#">one-time-redirect</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**port number**

|            |  |
|------------|--|
| Synopsis   | Destination port of packets for HTTP redirect  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">dsm</a> <a href="#">one-time-redirect</a> <a href="#">port</a> <a href="#">number</a> |
| Tree       | <a href="#">port</a>   |
| Range      | 1 to 65535   |
| Default    | 80   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**url string**

|               |   |
|---------------|---|
| Synopsis      | URL for redirected HTTP protocol packets  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">dsm</a> <a href="#">one-time-redirect</a> <a href="#">url</a> <a href="#">string</a> |
| Tree          | <a href="#">url</a>   |
| String Length | 1 to 255  |
| Introduced    | 16.0.R1   |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**volume-quota-direction keyword**

|             |   |
|-------------|---|
| Synopsis    | Volume quota direction for WLAN GW  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">dsm</a> <a href="#">volume-quota-direction</a> <a href="#">keyword</a> |
| Tree        | <a href="#">volume-quota-direction</a>  |
| Description | This command specifies the direction that volume quotas are applied. Configuration changes apply only to new DSM UEs and not to existing UEs.   |
| Options     | both, ingress, egress   |
| Default     | both  |
| Introduced  | 21.7.R1   |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**extension [[extension-range](#)] string**

|          |                                       |
|----------|---------------------------------------|
| Synopsis | Add a list entry for <b>extension</b> |
|----------|---------------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>extension</b> <i>string</i> |
| Tree       | <b>extension</b>  |
| Introduced | 21.7.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **[extension-range]** *string*

|             |   |
|-------------|---|
| Synopsis    | VLAN tag range used for matching  |
| Context     | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>extension</b> <i>string</i> |
| Tree        | <b>extension</b>  |
| Description | This command configures the additional VLAN range that is used for matching. Any traffic within the extension range is considered part of the same VLAN range for purposes of intra-SSID mobility.      |
| Notes       | This element is part of a list key.   |
| Introduced  | 21.7.R1   |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **http-redirect-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | Default HTTP redirect policy for portal authentication  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>http-redirect-policy</b> <i>reference</i> |
| Tree       | <b>http-redirect-policy</b>   |
| Reference  | <b>configure subscriber-mgmt</b> <b>http-redirect-policy</b> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **idle-timeout-action** *keyword*

|          |  |
|----------|--|
| Synopsis | Action to perform when the idle timeout expires  |
| Context  | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>idle-timeout-action</b> <i>keyword</i> |
| Tree     | <b>idle-timeout-action</b>   |
| Options  | remove, shcv   |
| Default  | remove   |

|            |                                    |
|------------|------------------------------------|
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

## I2-service

|            |  |
|------------|--|
| Synopsis   | Enable the <b>I2-service</b> context   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>I2-service</b> |
| Tree       | <b>I2-service</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of Layer 2 service for VLAN range   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>I2-service</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>   |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## description *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>I2-service</b> <b>description</b> <i>string</i> |
| Tree          | <b>description</b>  |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## service reference

|          |   |
|----------|---|
| Synopsis | Layer 2 service associated with the range |
|----------|---|



|            |  |
|------------|--|
| Context    | <b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>wlan-gw</i> <i>vlan-range</i> <i>string</i> <i>l2-service</i> <i>service</i> <i>reference</i> |
| Tree       | <a href="#">service</a>  |
| Reference  | <b>configure service vpls</b> <i>string</i>  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **nat-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | NAT policy for DSM and ISA portal authentication  |
| Context    | <b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>wlan-gw</i> <i>vlan-range</i> <i>string</i> <i>nat-policy</i> <i>reference</i> |
| Tree       | <a href="#">nat-policy</a>  |
| Reference  | <b>configure service nat</b> <i>nat-policy</i> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **retail-service** *string*

|               |  |
|---------------|--|
| Synopsis      | Default retail service for new UEs in this range   |
| Context       | <b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>wlan-gw</i> <i>vlan-range</i> <i>string</i> <i>retail-service</i> <i>string</i> |
| Tree          | <a href="#">retail-service</a>   |
| String Length | 1 to 64  |
| Introduced    | 16.0.R1  |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **slaac**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>slaac</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>wlan-gw</i> <i>vlan-range</i> <i>string</i> <i>slaac</i> |
| Tree       | <a href="#">slaac</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the protocol   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">slaac</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**preferred-lifetime**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>preferred-lifetime</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">slaac</a> <b>preferred-lifetime</b> |
| Tree       | <a href="#">preferred-lifetime</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**active** *number*

|            |  |
|------------|--|
| Synopsis   | Preferred signaled lifetime after full authentication  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">slaac</a> <b>preferred-lifetime</b> <b>active</b> <i>number</i> |
| Tree       | <a href="#">active</a>   |
| Range      | 300 to 3600  |
| Units      | seconds  |
| Default    | 600  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**initial** *number*

|          |   |
|----------|---|
| Synopsis | Signaled preferred lifetime after full authentication |
|----------|---|

|            |  |
|------------|--|
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>slaac preferred-lifetime initial</b> <i>number</i> |
| Tree       | <b>initial</b>   |
| Range      | 300 to 3600  |
| Units      | seconds  |
| Default    | 300  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **valid-lifetime**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>valid-lifetime</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>slaac valid-lifetime</b> |
| Tree       | <b>valid-lifetime</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **active number**

|            |   |
|------------|---|
| Synopsis   | Signaled valid lifetime after full authentication   |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>slaac valid-lifetime active</b> <i>number</i> |
| Tree       | <b>active</b>   |
| Range      | 300 to 3600   |
| Units      | seconds   |
| Default    | 600   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **initial number**

|          |  |
|----------|--|
| Synopsis | Valid signaled lifetime UE is not fully authenticated  |
| Context  | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>slaac valid-lifetime initial</b> <i>number</i> |
| Tree     | <b>initial</b>   |

|            |                                    |
|------------|------------------------------------|
| Range      | 300 to 3600                        |
| Units      | seconds                            |
| Default    | 300                                |
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

## vrgw

|            |  |
|------------|--|
| Synopsis   | Enter the <b>vrgw</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>vrgw</b> |
| Tree       | <b>vrgw</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## admin-state *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of vRGW  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>vrgw admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## brg

|            |  |
|------------|--|
| Synopsis   | Enter the <b>brg</b> context   |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>vrgw brg</b> |
| Tree       | <b>brg</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**authenticated-brg-only** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Only allow hosts from BRGs pre-authenticated using the radius-proxy   |
| Context    | <b>configure</b> <i>service ies string subscriber-interface string group-interface string wlan-gw vlan-range string vrgw brg authenticated-brg-only boolean</i> |
| Tree       | <i>authenticated-brg-only</i>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**default-brg-profile** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Default BRG profile to use if the AAA server does not specify one  |
| Context    | <b>configure</b> <i>service ies string subscriber-interface string group-interface string wlan-gw vlan-range string vrgw brg default-brg-profile reference</i> |
| Tree       | <i>default-brg-profile</i>   |
| Reference  | <b>configure</b> <i>subscriber-mgmt vrgw brg-profile string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**lanext**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>lanext</b> context   |
| Context    | <b>configure</b> <i>service ies string subscriber-interface string group-interface string wlan-gw vlan-range string vrgw lanext</i> |
| Tree       | <i>lanext</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## access

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enter the <b>access</b> context   |
| Context    | <b>configure service ies string subscriber-interface string group-interface string wlan-gw vlan-range string vrgw lanext access</b> |
| Tree       | <b>access</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## max-mac number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Maximum number of allowed MAC entries on access side   |
| Context    | <b>configure service ies string subscriber-interface string group-interface string wlan-gw vlan-range string vrgw lanext access max-mac number</b> |
| Tree       | <b>max-mac</b>   |
| Range      | 1 to 256   |
| Default    | 20   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## multi-access boolean

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | Allow multiple access points   |
| Context  | <b>configure service ies string subscriber-interface string group-interface string wlan-gw vlan-range string vrgw lanext access multi-access boolean</b> |
| Tree     | <b>multi-access</b>  |
| Default  | false  |

Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **policer** *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Policer for ingress home traffic  
 Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [vrgw lanext access](#) [policer](#) *reference*  
 Tree [policer](#)  
 Reference **configure** [subscriber-mgmt isa-policer](#) *string*  
 Introduced 19.7.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of HLE  
 Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [vrgw lanext](#) [admin-state](#) *keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **assistive-address-resolution** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis ISA assists in address resolution  
 Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [vrgw lanext](#) [assistive-address-resolution](#) *boolean*  
 Tree [assistive-address-resolution](#)

|            |                                    |
|------------|------------------------------------|
| Default    | false                              |
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **bd-mac-prefix** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Prefix of the HLE BD MAC address  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">vrgw</a> <a href="#">lanext</a> <b>bd-mac-prefix</b> <i>string</i> |
| Tree          | <a href="#">bd-mac-prefix</a>   |
| String Length | 8   |
| Introduced    | 16.0.R1   |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **mac-translation** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Allow MAC address translation for HLE services   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">vrgw</a> <a href="#">lanext</a> <b>mac-translation</b> <i>boolean</i> |
| Tree       | <a href="#">mac-translation</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **network**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



|            |  |
|------------|--|
| Synopsis   | Enter the <b>network</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">vrgw</a> <a href="#">lanext</a> <a href="#">network</a> |
| Tree       | <a href="#">network</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **admin-state** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Administrative state of the HLE network  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">vrgw</a> <a href="#">lanext</a> <a href="#">network</a> <a href="#">admin-state</a> <a href="#">keyword</a> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **max-mac** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Maximum number of allowed MAC entries on network side   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">vrgw</a> <a href="#">lanext</a> <a href="#">network</a> <a href="#">max-mac</a> <a href="#">number</a> |
| Tree       | <a href="#">max-mac</a>   |
| Range      | 1 to 64   |
| Default    | 20  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## **policer** *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Policer for ingress data center traffic  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">vrgw</a> <a href="#">lanext</a> <a href="#">network</a> <a href="#">policer</a> <a href="#">reference</a> |
| Tree       | <a href="#">policer</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-policer</a> <a href="#">string</a>  |
| Introduced | 19.7.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## **xconnect**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>xconnect</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">xconnect</a> |
| Tree       | <a href="#">xconnect</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## **accounting**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>accounting</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">xconnect</a> <a href="#">accounting</a> |
| Tree       | <a href="#">accounting</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## **mobility-updates** *boolean*

|          |   |
|----------|---|
| Synopsis | Accounting updates triggered by mobility  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">xconnect</a> <a href="#">accounting</a> <a href="#">mobility-updates</a> <a href="#">boolean</a> |
| Tree     | <a href="#">mobility-updates</a>  |

|            |                                    |
|------------|------------------------------------|
| Default    | false                              |
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### policy reference



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | ISA RADIUS accounting policy for cross-connected UEs  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">xconnect</a> <a href="#">accounting</a> <a href="#">policy</a> <a href="#">reference</a> |
| Tree       | <a href="#">policy</a>  |
| Reference  | <b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <a href="#">string</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### update-interval number

|            |   |
|------------|---|
| Synopsis   | Time between successive interim accounting updates  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">xconnect</a> <a href="#">accounting</a> <a href="#">update-interval</a> <a href="#">number</a> |
| Tree       | <a href="#">update-interval</a>   |
| Range      | 5 to 259200   |
| Units      | minutes   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### admin-state keyword

|          |   |
|----------|---|
| Synopsis | Administrative state of the cross-connect   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">xconnect</a> <a href="#">admin-state</a> <a href="#">keyword</a> |
| Tree     | <a href="#">admin-state</a>   |
| Options  | enable, disable   |
| Default  | disable   |

|            |                                    |
|------------|------------------------------------|
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### wlan-gw-group *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | ID of WLAN Gateway ISA group that gateway binds to  |
| Context    | <b>configure service ies</b> <i>string subscriber-interface string group-interface string wlan-gw wlan-gw-group reference</i> |
| Tree       | <a href="#">wlan-gw-group</a>   |
| Reference  | <b>configure isa wlan-gw-group</b> <i>number</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### wpp

|            |   |
|------------|---|
| Synopsis   | Enable the <b>wpp</b> context   |
| Context    | <b>configure service ies</b> <i>string subscriber-interface string group-interface string wpp</i> |
| Tree       | <a href="#">wpp</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### admin-state *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of WPP   |
| Context    | <b>configure service ies</b> <i>string subscriber-interface string group-interface string wpp admin-state keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**initial**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>initial</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>wpp</i> <b>initial</b> |
| Tree       | <b>initial</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**app-profile** *reference*

|            |   |
|------------|---|
| Synopsis   | Initial application profile name  |
| Context    | <b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>wpp</i> <b>initial</b> <b>app-profile</b> <i>reference</i> |
| Tree       | <b>app-profile</b>  |
| Reference  | <b>configure application-assurance</b> <i>group</i> <i>number</i> <i>partition</i> <i>number</i> <i>policy</i> <b>app-profile</b> <i>string</i>   |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**sla-profile** *reference*

|            |   |
|------------|---|
| Synopsis   | Initial SLA profile   |
| Context    | <b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>wpp</i> <b>initial</b> <b>sla-profile</b> <i>reference</i> |
| Tree       | <b>sla-profile</b>  |
| Reference  | <b>configure subscriber-mgmt</b> <b>sla-profile</b> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**sub-profile** *reference*

|            |   |
|------------|---|
| Synopsis   | Initial subscriber profile  |
| Context    | <b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>wpp</i> <b>initial</b> <b>sub-profile</b> <i>reference</i> |
| Tree       | <b>sub-profile</b>  |
| Reference  | <b>configure subscriber-mgmt</b> <b>sub-profile</b> <i>string</i>   |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lease-time** *number*

Synopsis Lease time

Context **configure** *service ies string subscriber-interface string group-interface string wpp lease-time number*

Tree *lease-time*

Range 10 to 315446399

Units seconds

Default 600

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **portal**

Synopsis Enter the **portal** context

Context **configure** *service ies string subscriber-interface string group-interface string wpp portal*

Tree *portal*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **name** *string*

Synopsis Web portal server name

Context **configure** *service ies string subscriber-interface string group-interface string wpp portal name string*

Tree *name*

String Length 1 to 32

Notes The following elements are part of a choice: **portal-group** or (**name** and **router-instance**).

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**portal-group** *reference*

|            |  |
|------------|--|
| Synopsis   | WPP portal group for this interface  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wpp portal</a> <a href="#">portal-group</a> <i>reference</i> |
| Tree       | <a href="#">portal-group</a>   |
| Reference  | <b>configure</b> <a href="#">aaa wpp portal-group</a> <i>string</i>  |
| Notes      | The following elements are part of a choice: <b>portal-group</b> or ( <b>name</b> and <b>router-instance</b> ).  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**router-instance** *string*

|            |  |
|------------|--|
| Synopsis   | Virtual router instance of WPP portal for interface  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wpp portal</a> <a href="#">router-instance</a> <i>string</i> |
| Tree       | <a href="#">router-instance</a>  |
| Notes      | The following elements are part of a choice: <b>portal-group</b> or ( <b>name</b> and <b>router-instance</b> ).  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**restore-to-initial-on-disconnect** *boolean*

|            |   |
|------------|---|
| Synopsis   | Restore initial profiles after a host has disconnected  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wpp</a> <a href="#">restore-to-initial-on-disconnect</a> <i>boolean</i> |
| Tree       | <a href="#">restore-to-initial-on-disconnect</a>  |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**triggered-hosts** *boolean*

|          |                                |
|----------|--------------------------------|
| Synopsis | Enable/disable triggered hosts |
|----------|--------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wpp triggered-hosts</b> <i>boolean</i> |
| Tree       | <b>triggered-hosts</b>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **user-db** *reference*

|            |   |
|------------|---|
| Synopsis   | User database   |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wpp user-db</b> <i>reference</i> |
| Tree       | <b>user-db</b>  |
| Reference  | <b>configure subscriber-mgmt local-user-db</b> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **hold-time**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>hold-time</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>hold-time</b> |
| Tree       | <b>hold-time</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ipv4**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ipv4</b> context   |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>hold-time</b> <b>ipv4</b> |
| Tree       | <b>ipv4</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **down**

|          |                               |
|----------|-------------------------------|
| Synopsis | Enter the <b>down</b> context |
|----------|-------------------------------|



|             |  |
|-------------|--|
| Context     | <b>configure service ies string subscriber-interface string hold-time ipv4 down</b>  |
| Tree        | <b>down</b>  |
| Description | Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the <b>init-only</b> command. |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **init-only boolean**

|             |   |
|-------------|---|
| Synopsis    | Apply delay only at interface configuration or reboot   |
| Context     | <b>configure service ies string subscriber-interface string hold-time ipv4 down init-only boolean</b> |
| Tree        | <b>init-only</b>  |
| Description | This command applies a delay only when the IP interface is first configured or after a system reboot. |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **seconds number**

|            |  |
|------------|--|
| Synopsis   | Down hold time for the IP interface  |
| Context    | <b>configure service ies string subscriber-interface string hold-time ipv4 down seconds number</b> |
| Tree       | <b>seconds</b>   |
| Range      | 1 to 1200  |
| Units      | seconds  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **up**

|          |   |
|----------|---|
| Synopsis | Enter the <b>up</b> context   |
| Context  | <b>configure service ies string subscriber-interface string hold-time ipv4 up</b> |
| Tree     | <b>up</b>   |

|             |   |
|-------------|---|
| Description | Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down. |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **seconds** *number*

|            |  |
|------------|--|
| Synopsis   | Up hold time for the IP interface  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> <a href="#">up</a> <b>seconds</b> <i>number</i> |
| Tree       | <a href="#">seconds</a>  |
| Range      | 1 to 1200  |
| Units      | seconds  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **ipv6**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv6</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv6</a> |
| Tree       | <a href="#">ipv6</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **down**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>down</b> context   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv6</a> <b>down</b>  |
| Tree        | <a href="#">down</a>  |
| Description | Commands in this context configure the down hold timer, which specifies the delay before activation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the <b>init-only</b> command. |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **init-only** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Apply delay only at interface configuration or reboot   |
| Context     | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>hold-time</b> <b>ipv6</b> <b>down</b> <b>init-only</b> <i>boolean</i> |
| Tree        | <b>init-only</b>  |
| Description | This command applies the delay only when when the IP interface is first configured or after a system reboot.  |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **seconds** *number*

|            |  |
|------------|--|
| Synopsis   | Down hold time for the IP interface  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>hold-time</b> <b>ipv6</b> <b>down</b> <b>seconds</b> <i>number</i> |
| Tree       | <b>seconds</b>   |
| Range      | 1 to 1200  |
| Units      | seconds  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **up**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>up</b> context   |
| Context     | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>hold-time</b> <b>ipv6</b> <b>up</b>   |
| Tree        | <b>up</b>   |
| Description | Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down. |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**seconds** *number*

|            |   |
|------------|---|
| Synopsis   | Up hold time for the IP interface   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">hold-time ipv6 up</a> <a href="#">seconds</a> <i>number</i> |
| Tree       | <a href="#">seconds</a>   |
| Range      | 1 to 1200   |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**ipoe-linking**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipoe-linking</b> context  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipoe-linking</a> |
| Tree       | <a href="#">ipoe-linking</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**gratuitous-router-advertisement** *boolean*

|            |   |
|------------|---|
| Synopsis   | Send unsolicited router advertisement after DHCP setup  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipoe-linking</a> <a href="#">gratuitous-router-advertisement</a> <i>boolean</i> |
| Tree       | <a href="#">gratuitous-router-advertisement</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**ipoe-session**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipoe-session</b> context  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipoe-session</a> |
| Tree       | <a href="#">ipoe-session</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**session-limit** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of sessions on this group interface   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipoe-session</a> <a href="#">session-limit</a> <i>number</i> |
| Tree       | <a href="#">session-limit</a>  |
| Range      | 1 to 500000  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**ipv4**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv4</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> |
| Tree       | <a href="#">ipv4</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**address** [[ipv4-address](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>address</b> list instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">address</a> <i>string</i> |
| Tree       | <a href="#">address</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**[[ipv4-address](#)]** *string*

|            |  |
|------------|--|
| Synopsis   | IP address associated with the subscriber subnet   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">address</a> <i>string</i> |
| Tree       | <a href="#">address</a>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**gateway string**

|            |  |
|------------|--|
| Synopsis   | Gateway IP address within the subnet for SRRP routing  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">address</a> <i>string</i> <a href="#">gateway</a> <i>string</i> |
| Tree       | <a href="#">gateway</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**holdup-time number**

|            |  |
|------------|--|
| Synopsis   | Wait time before accepting new state attribute   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">address</a> <i>string</i> <a href="#">holdup-time</a> <i>number</i> |
| Tree       | <a href="#">holdup-time</a>  |
| Range      | 100 to 5000  |
| Units      | milliseconds   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**populate-host-routes boolean**

|            |  |
|------------|--|
| Synopsis   | Populate subscriber host routes in local FIB   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">address</a> <i>string</i> <a href="#">populate-host-routes</a> <i>boolean</i> |
| Tree       | <a href="#">populate-host-routes</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**prefix-length number**

|          |  |
|----------|--|
| Synopsis | IPv4 address prefix length   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">address</a> <i>string</i> <a href="#">prefix-length</a> <i>number</i> |
| Tree     | <a href="#">prefix-length</a>  |
| Range    | 0 to 32  |

|            |   |
|------------|---|
| Notes      | This element is mandatory.                              |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **track-srrp** *number*

|            |   |
|------------|---|
| Synopsis   | SRRP instance whose state is tracked on this IP address   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4</b> <b>address</b> <i>string</i> <b>track-srrp</b> <i>number</i> |
| Tree       | <a href="#">track-srrp</a>  |
| Range      | 1 to 4294967295   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **allow-unmatching-subnets** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow subscriber hosts without a matching subnet  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4</b> <b>allow-unmatching-subnets</b> <i>boolean</i> |
| Tree       | <a href="#">allow-unmatching-subnets</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **default-dns** *string*

|                |   |
|----------------|---|
| Synopsis       | Default DNS server addresses  |
| Context        | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4</b> <b>default-dns</b> <i>string</i> |
| Tree           | <a href="#">default-dns</a>   |
| Max. Instances | 2   |
| Notes          | This element is ordered by the user.  |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## dhcp

|            |   |
|------------|---|
| Synopsis   | Enter the <b>dhcp</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> |
| Tree       | <a href="#">dhcp</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of DHCP   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## client-applications

|            |   |
|------------|---|
| Synopsis   | Enter the <b>client-applications</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">client-applications</a> |
| Tree       | <a href="#">client-applications</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## dhcp *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable IPoE clients to use the DHCP relay or proxy server   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">client-applications</a> <a href="#">dhcp</a> <i>boolean</i> |
| Tree       | <a href="#">dhcp</a>  |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |



**ppp boolean**

|            |   |
|------------|---|
| Synopsis   | Enable PPPoE clients to use DHCP relay or proxy server  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp client-applications</a> <a href="#">ppp boolean</a> |
| Tree       | <a href="#">ppp</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**description string**

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**gi-address string**

|             |   |
|-------------|---|
| Synopsis    | GI address for the DHCP relay   |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp gi-address</a> <i>string</i>  |
| Tree        | <a href="#">gi-address</a>  |
| Description | <p>This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay.</p> <p>By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.</p> |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**lease-populate**

|          |   |
|----------|---|
| Synopsis | Enter the <b>lease-populate</b> context |
|----------|---|

|            |  |
|------------|--|
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 dhcp lease-populate</b> |
| Tree       | <a href="#">lease-populate</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **max-leases** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum number of DHCPv4 leases   |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 dhcp lease-populate max-leases</b> <i>number</i> |
| Tree       | <a href="#">max-leases</a>  |
| Range      | 0 to 511999   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **option-82**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>option-82</b> context  |
| Context     | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 dhcp option-82</b>                                       |
| Tree        | <a href="#">option-82</a>   |
| Description | Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet. |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **vendor-specific-option**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>vendor-specific-option</b> context  |
| Context     | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 dhcp option-82 vendor-specific-option</b> |
| Tree        | <a href="#">vendor-specific-option</a>   |
| Description | Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**client-mac-address** *boolean*

|            |  |
|------------|--|
| Synopsis   | Send the MAC address in the VSO  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>option-82</b> <b>vendor-specific-option</b> <b>client-mac-address</b> <i>boolean</i> |
| Tree       | <b>client-mac-address</b>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**sap-id** *boolean*

|            |  |
|------------|--|
| Synopsis   | Send SAP ID in the sub-option of the DHCP relay packet   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>option-82</b> <b>vendor-specific-option</b> <b>sap-id</b> <i>boolean</i> |
| Tree       | <b>sap-id</b>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**service-id** *boolean*

|            |  |
|------------|--|
| Synopsis   | Send the service ID in the Vendor Specific Option  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>option-82</b> <b>vendor-specific-option</b> <b>service-id</b> <i>boolean</i> |
| Tree       | <b>service-id</b>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**string** *string*

|          |   |
|----------|---|
| Synopsis | User-defined ASCII string for the VSO   |
| Context  | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>option-82</b> <b>vendor-specific-option</b> <b>string</b> <i>string</i> |
| Tree     | <b>string</b>   |

|               |   |
|---------------|---|
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **system-id** *boolean*

|            |  |
|------------|--|
| Synopsis   | Send the system ID in the VSO  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82 vendor-specific-option</a> <b>system-id</b> <i>boolean</i> |
| Tree       | <a href="#">system-id</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **proxy-server**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>proxy-server</b> context  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp proxy-server</a> |
| Tree       | <a href="#">proxy-server</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the DHCP proxy server   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp proxy-server admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **emulated-server** *string*

|          |   |
|----------|---|
| Synopsis | IP address used as DHCP server address in SAP context |
|----------|---|

|            |  |
|------------|--|
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 dhcp proxy-server emulated-server</b> <i>string</i> |
| Tree       | <b>emulated-server</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## lease-time

|            |   |
|------------|---|
| Synopsis   | Enter the <b>lease-time</b> context   |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 dhcp proxy-server lease-time</b> |
| Tree       | <b>lease-time</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## radius-override *boolean*

|            |  |
|------------|--|
| Synopsis   | Use lease time information provided by RADIUS server   |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 dhcp proxy-server lease-time radius-override</b> <i>boolean</i> |
| Tree       | <b>radius-override</b>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## value *number*

|            |   |
|------------|---|
| Synopsis   | DHCP lease time   |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 dhcp proxy-server lease-time value</b> <i>number</i> |
| Tree       | <b>value</b>  |
| Range      | 300 to 315446399  |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **python-policy** *reference*

|            |  |
|------------|--|
| Synopsis   | Python policy  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">python-policy</a> <i>reference</i> |
| Tree       | <a href="#">python-policy</a>  |
| Reference  | <b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **relay-proxy**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>relay-proxy</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">relay-proxy</a> |
| Tree       | <a href="#">relay-proxy</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **release-update-src-ip** *boolean*

|            |  |
|------------|--|
| Synopsis   | Update the source IP address of a DHCP RELEASE message   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">relay-proxy</a> <a href="#">release-update-src-ip</a> <i>boolean</i> |
| Tree       | <a href="#">release-update-src-ip</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **siaddr-override** *string*

|            |   |
|------------|---|
| Synopsis   | DHCP server IP address for address hiding function  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">relay-proxy</a> <a href="#">siaddr-override</a> <i>string</i> |
| Tree       | <a href="#">siaddr-override</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**release-include-gi-address** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include the GI address in DHCP relay messages   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">release-include-gi-address</a> <i>boolean</i> |
| Tree       | <a href="#">release-include-gi-address</a>  |
| Default    | false   |
| Introduced | 21.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**server** *string*

|                |  |
|----------------|--|
| Synopsis       | DHCP server IP addresses   |
| Context        | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">server</a> <i>string</i> |
| Tree           | <a href="#">server</a>   |
| Max. Instances | 8  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**src-ip-addr** *keyword*

|            |  |
|------------|--|
| Synopsis   | Type of source address to use for DHCP relay   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">src-ip-addr</a> <i>keyword</i> |
| Tree       | <a href="#">src-ip-addr</a>  |
| Options    | auto, gi-address   |
| Default    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**virtual-subnet** *boolean*

|          |   |
|----------|---|
| Synopsis | Enable a virtual subnet for DHCPv4 hosts  |
| Context  | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">virtual-subnet</a> <i>boolean</i> |
| Tree     | <a href="#">virtual-subnet</a>  |

|            |   |
|------------|---|
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **export-host-routes** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow export of subscriber management host routes   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <b>export-host-routes</b> <i>boolean</i> |
| Tree       | <a href="#">export-host-routes</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **unnumbered**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>unnumbered</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <b>unnumbered</b> |
| Tree       | <a href="#">unnumbered</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **ip-address** *string*

|            |  |
|------------|--|
| Synopsis   | IP address for the subscriber interface  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <b>unnumbered</b> <b>ip-address</b> <i>string</i> |
| Tree       | <a href="#">ip-address</a>   |
| Notes      | The following elements are part of a choice: <b>ip-address</b> or <b>ip-int-name</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **ip-int-name** *string*

|          |   |
|----------|---|
| Synopsis | Interface name from which an IPv4 address is borrowed   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <b>unnumbered</b> <b>ip-int-name</b> <i>string</i> |



|               |  |
|---------------|--|
| Tree          | <a href="#">ip-int-name</a>  |
| String Length | 1 to 32  |
| Notes         | The following elements are part of a choice: <b>ip-address</b> or <b>ip-int-name</b> . |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                |

## ipv6

|            |  |
|------------|--|
| Synopsis   | Enable the <b>ipv6</b> context   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> |
| Tree       | <a href="#">ipv6</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## address [[ipv6-address](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>address</b> list instance   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">address</a> <i>string</i> |
| Tree       | <a href="#">address</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## [[ipv6-address](#)] *string*

|            |  |
|------------|--|
| Synopsis   | IPv6 address for the subscriber interface  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">address</a> <i>string</i> |
| Tree       | <a href="#">address</a>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**host-type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Host type for subscriber interface prefixes  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">address</a> <i>string</i> <b>host-type</b> <i>keyword</i> |
| Tree       | <a href="#">host-type</a>  |
| Options    | pd, wan, pd-wan  |
| Default    | pd   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**prefix-length** *number*

|            |   |
|------------|---|
| Synopsis   | IPv6 address prefix length  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">address</a> <i>string</i> <b>prefix-length</b> <i>number</i> |
| Tree       | <a href="#">prefix-length</a>   |
| Range      | 0 to 128  |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**allow-multiple-wan-addresses** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow multiple WAN addresses  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <b>allow-multiple-wan-addresses</b> <i>boolean</i> |
| Tree       | <a href="#">allow-multiple-wan-addresses</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**allow-unmatching-prefixes** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow subscriber hosts without a matching prefix  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">allow-unmatching-prefixes</a> <i>boolean</i> |
| Tree       | <a href="#">allow-unmatching-prefixes</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**default-dns** *string*

|                |  |
|----------------|--|
| Synopsis       | Default DNS server addresses   |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">default-dns</a> <i>string</i> |
| Tree           | <a href="#">default-dns</a>  |
| Max. Instances | 2  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**delegated-prefix-length** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | IPv6 delegated prefix length  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">delegated-prefix-length</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">delegated-prefix-length</a>   |
| Range      | 48 to 64  |
| Options    | variable  |
| Default    | 64  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**dhcp6**

|          |  |
|----------|--|
| Synopsis | Enter the <b>dhcp6</b> context   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> |

|            |   |
|------------|---|
| Tree       | <a href="#">dhcp6</a>                                   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **override-slaac** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow WAN address offered by DHCP to overwrite the WAN address acquired from SLAAC   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 override-slaac</a> <i>boolean</i> |
| Tree       | <a href="#">override-slaac</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **pd-managed-route**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>pd-managed-route</b> context  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 pd-managed-route</a> |
| Tree       | <a href="#">pd-managed-route</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **next-hop** *keyword*

|            |   |
|------------|---|
| Synopsis   | Next hop type   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 pd-managed-route</a> <a href="#">next-hop</a> <i>keyword</i> |
| Tree       | <a href="#">next-hop</a>  |
| Options    | ipv4, ipv6  |
| Default    | ipv6  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## proxy-server

|            |   |
|------------|---|
| Synopsis   | Enter the <b>proxy-server</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">proxy-server</a> |
| Tree       | <a href="#">proxy-server</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the DHCPv6 proxy server  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">proxy-server</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## client-applications

|            |   |
|------------|---|
| Synopsis   | Enter the <b>client-applications</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">proxy-server</a> <a href="#">client-applications</a> |
| Tree       | <a href="#">client-applications</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## dhcp *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable IPoE clients to use DHCP relay or proxy server   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">proxy-server</a> <a href="#">client-applications</a> <a href="#">dhcp</a> <i>boolean</i> |
| Tree       | <a href="#">dhcp</a>  |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**ppp boolean**

|            |   |
|------------|---|
| Synopsis   | Allow PPPoE clients to use DHCP relay functionality   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">proxy-server</a> <a href="#">client-applications</a> <a href="#">ppp</a> <a href="#">boolean</a> |
| Tree       | <a href="#">ppp</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**preferred-lifetime** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Time for prefix to remain preferred on this interface   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">proxy-server</a> <a href="#">preferred-lifetime</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">preferred-lifetime</a>  |
| Range      | 300 to 4294967294   |
| Units      | seconds   |
| Options    | infinite  |
| Default    | 3600  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**rebind-timer** *number*

|            |  |
|------------|--|
| Synopsis   | Rebind timer (T2) for this interface   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">proxy-server</a> <a href="#">rebind-timer</a> <i>number</i> |
| Tree       | <a href="#">rebind-timer</a>   |
| Range      | 0 to 1209600   |
| Units      | seconds  |
| Default    | 2880   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**renew-timer** *number*

|            |   |
|------------|---|
| Synopsis   | Renew timer (T1)  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">proxy-server</a> <a href="#">renew-timer</a> <i>number</i> |
| Tree       | <a href="#">renew-timer</a>   |
| Range      | 0 to 604800   |
| Units      | seconds   |
| Default    | 1800  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**server-id**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>server-id</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">proxy-server</a> <a href="#">server-id</a> |
| Tree       | <a href="#">server-id</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**duid-en-ascii** *string*

|               |   |
|---------------|---|
| Synopsis      | Vendor-assigned ID based on Enterprise Number (DUID-EN)   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">proxy-server</a> <a href="#">server-id</a> <a href="#">duid-en-ascii</a> <i>string</i> |
| Tree          | <a href="#">duid-en-ascii</a>   |
| String Length | 1 to 58   |
| Notes         | The following elements are part of a choice: <b>duid-en-ascii</b> , <b>duid-en-hex</b> , or <b>duid-ll</b> .  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**duid-en-hex** *string*

|          |   |
|----------|---|
| Synopsis | DUID system ID in hexadecimal format  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">proxy-server</a> <a href="#">server-id</a> <a href="#">duid-en-hex</a> <i>string</i> |

|               |  |
|---------------|--|
| Tree          | <a href="#">duid-en-hex</a>  |
| String Length | 1 to 118   |
| Notes         | The following elements are part of a choice: <b>duid-en-ascii</b> , <b>duid-en-hex</b> , or <b>duid-ll</b> . |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## duid-ll

|            |   |
|------------|---|
| Synopsis   | Use link-layer address (DUID-LL) as DUID  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">proxy-server</a> <a href="#">server-id</a> <a href="#">duid-ll</a> |
| Tree       | <a href="#">duid-ll</a>   |
| Notes      | The following elements are part of a choice: <b>duid-en-ascii</b> , <b>duid-en-hex</b> , or <b>duid-ll</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## valid-lifetime (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Time for prefix to remain valid on this interface   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">proxy-server</a> <a href="#">valid-lifetime</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">valid-lifetime</a>  |
| Range      | 300 to 4294967294   |
| Units      | seconds   |
| Options    | infinite  |
| Default    | 86400   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## python-policy *reference*

|           |   |
|-----------|---|
| Synopsis  | Python policy   |
| Context   | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">python-policy</a> <i>reference</i> |
| Tree      | <a href="#">python-policy</a>   |
| Reference | <b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i>   |



Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## relay

Synopsis Enter the **relay** context  
Context **configure service ies string subscriber-interface string ipv6 dhcp6 relay**  
Tree [relay](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis Administrative state of DHCPv6 Relay  
Context **configure service ies string subscriber-interface string ipv6 dhcp6 relay admin-state keyword**  
Tree [admin-state](#)  
Options enable, disable  
Default disable  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## client-applications

Synopsis Enter the **client-applications** context  
Context **configure service ies string subscriber-interface string ipv6 dhcp6 relay client-applications**  
Tree [client-applications](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## dhcp *boolean*

Synopsis Enable IPoE clients to use DHCP relay or proxy server  
Context **configure service ies string subscriber-interface string ipv6 dhcp6 relay client-applications dhcp boolean**

|            |   |
|------------|---|
| Tree       | <a href="#">dhcp</a>                                    |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **ppp** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow PPPoE clients to use DHCP relay functionality   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <a href="#">client-applications</a> <a href="#">ppp</a> <i>boolean</i> |
| Tree       | <a href="#">ppp</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **lease-split**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>lease-split</b> context  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <a href="#">lease-split</a>  |
| Tree        | <a href="#">lease-split</a>   |
| Description | <p>Commands in this context configure DHCPv6 lease split.</p> <p>DHCPv6 lease split is active when administratively enabled and for all IA_NA and IA_PD options in the transaction, the configured lease split valid lifetime (short lease time) is less than or equal to one of the following:</p> <ul style="list-style-type: none"> <li>• the renew time T1 committed by the server (long renew time)</li> <li>• half of the preferred lifetime committed by the server when T1 committed by the server equals zero</li> </ul> |

---

|            |   |
|------------|---|
| Introduced | 21.2.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of DHCPv6 lease split  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>relay</b> <b>lease-split</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 21.2.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**valid-lifetime** *number*

|            |   |
|------------|---|
| Synopsis   | DHCPv6 lease split valid lifetime (short lease time)  |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>relay</b> <b>lease-split</b> <b>valid-lifetime</b> <i>number</i> |
| Tree       | <b>valid-lifetime</b>   |
| Range      | 300 to 315446399  |
| Units      | seconds   |
| Default    | 3600  |
| Introduced | 21.2.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**link-address** *string*

|            |  |
|------------|--|
| Synopsis   | Link address for the DHCPv6 relay messages   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>relay</b> <b>link-address</b> <i>string</i> |
| Tree       | <b>link-address</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**server string**

|                |  |
|----------------|--|
| Synopsis       | DHCP6 server(s) to which the DHCP6 requests are forwarded  |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <a href="#">server</a> <a href="#">string</a> |
| Tree           | <a href="#">server</a>   |
| Max. Instances | 8  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**source-address string**

|            |  |
|------------|--|
| Synopsis   | Source IPv6 address for the DHCPv6 relay messages  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <a href="#">source-address</a> <a href="#">string</a> |
| Tree       | <a href="#">source-address</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**ipoe-bridged-mode boolean**

|            |  |
|------------|--|
| Synopsis   | Enable IPv6 IPoE bridged mode  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">ipoe-bridged-mode</a> <a href="#">boolean</a> |
| Tree       | <a href="#">ipoe-bridged-mode</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**link-local-address**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>link-local-address</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">link-local-address</a> |
| Tree       | <a href="#">link-local-address</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**address string**

|            |  |
|------------|--|
| Synopsis   | IPv6 link local address  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">link-local-address</a> <a href="#">address</a> <a href="#">string</a> |
| Tree       | <a href="#">address</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**prefix [ipv6-prefix] string**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>prefix</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">prefix</a> <a href="#">string</a> |
| Tree       | <a href="#">prefix</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**[ipv6-prefix] string**

|            |  |
|------------|--|
| Synopsis   | IPv6 address for a router interface  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">prefix</a> <a href="#">string</a> |
| Tree       | <a href="#">prefix</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**holdup-time number**

|            |   |
|------------|---|
| Synopsis   | Time to wait before route accepts new state attribute   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">prefix</a> <a href="#">string</a> <a href="#">holdup-time</a> <a href="#">number</a> |
| Tree       | <a href="#">holdup-time</a>   |
| Range      | 100 to 5000   |
| Units      | milliseconds  |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### host-type *keyword*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Host type for subscriber interface prefixes

Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [ipv6](#) [prefix](#) [string](#) [host-type](#) [keyword](#)

Tree [host-type](#)

Options pd, wan, pd-wan

Default pd

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### track-srrp *number*

Synopsis SRRP instance whose state is tracked on this IP address

Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [ipv6](#) [prefix](#) [string](#) [track-srrp](#) [number](#)

Tree [track-srrp](#)

Range 1 to 4294967295

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### router-advertisements

Synopsis Enter the **router-advertisements** context

Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [ipv6](#) [router-advertisements](#)

Tree [router-advertisements](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of router advertisements   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisements</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**force-mcast** *keyword*

|            |   |
|------------|---|
| Synopsis   | Protocol with forced multicast  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisements</a> <a href="#">force-mcast</a> <i>keyword</i> |
| Tree       | <a href="#">force-mcast</a>   |
| Options    | ip, ip-mac  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**max-advertisement-interval** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum advertisement interval  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisements</a> <a href="#">max-advertisement-interval</a> <i>number</i> |
| Tree       | <a href="#">max-advertisement-interval</a>  |
| Range      | 900 to 1800   |
| Units      | seconds   |
| Default    | 1800  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**min-advertisement-interval** *number*

|          |                                |
|----------|--------------------------------|
| Synopsis | Minimum advertisement interval |
|----------|--------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>min-advertisement-interval</b> <i>number</i> |
| Tree       | <b>min-advertisement-interval</b>   |
| Range      | 900 to 1350   |
| Units      | seconds   |
| Default    | 900   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## options

|            |  |
|------------|--|
| Synopsis   | Enter the <b>options</b> context   |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>options</b> |
| Tree       | <b>options</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## current-hop-limit *number*

|            |   |
|------------|---|
| Synopsis   | Hop limit to be advertised  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>options</b> <b>current-hop-limit</b> <i>number</i> |
| Tree       | <b>current-hop-limit</b>  |
| Range      | 0 to 255  |
| Default    | 64  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## dns

|            |   |
|------------|---|
| Synopsis   | Enter the <b>dns</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>options</b> <b>dns</b> |
| Tree       | <b>dns</b>  |
| Introduced | 16.0.R1   |



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **include-rdnss** *boolean*

Synopsis Include the RDNSS server option 25

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **ipv6** **router-advertisements** **options** **dns** **include-rdnss** *boolean*

Tree [include-rdnss](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **rdnss-lifetime** (*number* | *keyword*)

Synopsis Maximum time for the RDNSS address to remain valid

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **ipv6** **router-advertisements** **options** **dns** **rdnss-lifetime** (*number* | *keyword*)

Tree [rdnss-lifetime](#)

Range 900 to 3600

Units seconds

Options infinite

Default 3600

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **managed-configuration** *boolean*

Synopsis Managed address configuration flag

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **ipv6** **router-advertisements** **options** **managed-configuration** *boolean*

Tree [managed-configuration](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mtu** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Advertised MTU value  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">router-advertisements</a><br><a href="#">options</a> <b>mtu</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">mtu</a>   |
| Range      | 1280 to 9212  |
| Units      | bytes   |
| Options    | not-included  |
| Default    | not-included  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**other-stateful-configuration** *boolean*

|            |  |
|------------|--|
| Synopsis   | Other stateful configuration flag  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">router-advertisements</a><br><a href="#">options</a> <b>other-stateful-configuration</b> <i>boolean</i> |
| Tree       | <a href="#">other-stateful-configuration</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**reachable-time** *number*

|            |   |
|------------|---|
| Synopsis   | Reachable time for advertisements   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">router-advertisements</a><br><a href="#">options</a> <b>reachable-time</b> <i>number</i> |
| Tree       | <a href="#">reachable-time</a>  |
| Range      | 0 to 3600000  |
| Units      | milliseconds  |
| Default    | 0   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**retransmit-timer** *number*

|            |   |
|------------|---|
| Synopsis   | Retransmit time in router advertisements from interface   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisements</a> <a href="#">options retransmit-timer</a> <i>number</i> |
| Tree       | <a href="#">retransmit-timer</a>  |
| Range      | 0 to 1800000  |
| Units      | seconds   |
| Default    | 0   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**router-lifetime** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Router lifetime   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisements</a> <a href="#">options router-lifetime</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">router-lifetime</a>   |
| Range      | 2700 to 9000  |
| Units      | seconds   |
| Options    | no-default-router   |
| Default    | 4500  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**prefix-options**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>prefix-options</b> context   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisements</a> <a href="#">prefix-options</a> |
| Tree       | <a href="#">prefix-options</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**autonomous** *boolean*

|          |                              |
|----------|------------------------------|
| Synopsis | Value of the autonomous flag |
|----------|------------------------------|

|            |  |
|------------|--|
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 router-advertisements</b> <b>prefix-options autonomous</b> <i>boolean</i> |
| Tree       | <b>autonomous</b>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**on-link** *boolean*

|            |   |
|------------|---|
| Synopsis   | Assign the prefix to an interface on the specified link   |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 router-advertisements</b> <b>prefix-options on-link</b> <i>boolean</i> |
| Tree       | <b>on-link</b>  |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**preferred-lifetime** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Time for a prefix to remain preferred  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 router-advertisements</b> <b>prefix-options preferred-lifetime</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <b>preferred-lifetime</b>  |
| Range      | 0 to 4294967294  |
| Units      | seconds  |
| Options    | infinite   |
| Default    | 3600   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**valid-lifetime** (*number* | *keyword*)

|          |  |
|----------|--|
| Synopsis | Time for a prefix to remain valid  |
| Context  | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 router-advertisements</b> <b>prefix-options valid-lifetime</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <b>valid-lifetime</b>  |

|            |   |
|------------|---|
| Range      | 0 to 4294967294   |
| Units      | seconds   |
| Options    | infinite  |
| Default    | 86400   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## router-solicit

|            |  |
|------------|--|
| Synopsis   | Enter the <b>router-solicit</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <b>router-solicit</b> |
| Tree       | <a href="#">router-solicit</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## inactivity-timer (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Time before an inactive host is removed   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <b>router-solicit</b> <b>inactivity-timer</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">inactivity-timer</a>  |
| Range      | 1 to 31536000   |
| Units      | seconds   |
| Options    | infinite  |
| Default    | 300   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## local-address-assignment

|            |   |
|------------|---|
| Synopsis   | Enter the <b>local-address-assignment</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <b>local-address-assignment</b> |
| Tree       | <a href="#">local-address-assignment</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of Local Address Assignment  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">local-address-assignment</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ipv4**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ipv4</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">local-address-assignment</a> <a href="#">ipv4</a> |
| Tree       | <a href="#">ipv4</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **client-applications**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>client-applications</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">local-address-assignment</a> <a href="#">ipv4</a> <a href="#">client-applications</a> |
| Tree       | <a href="#">client-applications</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ppp** *boolean*

|            |  |
|------------|--|
| Synopsis   | Request local addresses for PPP IPCP hosts   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">local-address-assignment</a> <a href="#">ipv4</a> <a href="#">client-applications</a> <a href="#">ppp</a> <i>boolean</i> |
| Tree       | <a href="#">ppp</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **default-pool** *string*

Synopsis Default pools

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [local-address-assignment](#) [ipv4](#) [default-pool](#) *string*

Tree [default-pool](#)

String Length 1 to 32

Max. Instances 2

Notes This element is ordered by the user.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **server** *reference*

Synopsis Local DHCPv4 server for local pools management

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [local-address-assignment](#) [ipv4](#) [server](#) *reference*

Tree [server](#)

Reference **configure** [router](#) *string* [dhcp-server](#) [dhcpv4](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv6**

Synopsis Enter the **ipv6** context

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [local-address-assignment](#) [ipv6](#)

Tree [ipv6](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **client-applications**

Synopsis Enter the **client-applications** context

|            |   |
|------------|---|
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>local-address-assignment ipv6 client-applications</b> |
| Tree       | <b>client-applications</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ipoe-slaac** *boolean*

|            |   |
|------------|---|
| Synopsis   | Request local addresses for IPoE SLAAC hosts  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>local-address-assignment ipv6 client-applications ipoe-slaac</b> <i>boolean</i> |
| Tree       | <b>ipoe-slaac</b>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ipoe-wan** *boolean*

|            |   |
|------------|---|
| Synopsis   | Request local addresses for IPoE IA NA hosts  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>local-address-assignment ipv6 client-applications ipoe-wan</b> <i>boolean</i> |
| Tree       | <b>ipoe-wan</b>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ppp-slaac** *boolean*

|            |  |
|------------|--|
| Synopsis   | Request local addresses for PPP SLAAC hosts  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>local-address-assignment ipv6 client-applications ppp-slaac</b> <i>boolean</i> |
| Tree       | <b>ppp-slaac</b>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |



**server reference**

|            |  |
|------------|--|
| Synopsis   | Local DHCPv6 server for local pools management   |
| Context    | <b>configure service ies string subscriber-interface string local-address-assignment ipv6 server reference</b> |
| Tree       | <b>server</b>  |
| Reference  | <b>configure router string dhcp-server dhcpv6 string</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**pppoe**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>pppoe</b> context  |
| Context    | <b>configure service ies string subscriber-interface string pppoe</b> |
| Tree       | <b>pppoe</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR               |

**description string**

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure service ies string subscriber-interface string pppoe description string</b> |
| Tree          | <b>description</b>   |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                  |

**session-limit number**

|            |  |
|------------|--|
| Synopsis   | Maximum PPPoE sessions   |
| Context    | <b>configure service ies string subscriber-interface string pppoe session-limit number</b> |
| Tree       | <b>session-limit</b>   |
| Range      | 1 to 333823  |
| Default    | 1  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                    |

## wan-mode keyword

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Mode of operation for hosts with /128 WAN IPv6 address  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>wan-mode</b> <i>keyword</i> |
| Tree       | <b>wan-mode</b>   |
| Options    | mode64, mode128   |
| Default    | mode64  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## wlan-gw

|            |   |
|------------|---|
| Synopsis   | Enable the <b>wlan-gw</b> context   |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>wlan-gw</b> |
| Tree       | <b>wlan-gw</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## pool-manager

|            |  |
|------------|--|
| Synopsis   | Enter the <b>pool-manager</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>wlan-gw pool-manager</b> |
| Tree       | <b>pool-manager</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## dhcp6-client

|          |   |
|----------|---|
| Synopsis | Enter the <b>dhcp6-client</b> context   |
| Context  | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>wlan-gw pool-manager dhcp6-client</b> |
| Tree     | <b>dhcp6-client</b>   |

|            |                                    |
|------------|------------------------------------|
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

## dhcpv4-nat

|            |  |
|------------|--|
| Synopsis   | Enter the <b>dhcpv4-nat</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">pool-manager</a> <a href="#">dhcp6-client</a> <a href="#">dhcpv4-nat</a> |
| Tree       | <a href="#">dhcpv4-nat</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## admin-state *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the DHCPv6 client entity  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">pool-manager</a> <a href="#">dhcp6-client</a> <a href="#">dhcpv4-nat</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## link-address *string*

|            |   |
|------------|---|
| Synopsis   | IPv6 address in the link address field of relay header  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">pool-manager</a> <a href="#">dhcp6-client</a> <a href="#">dhcpv4-nat</a> <a href="#">link-address</a> <i>string</i> |
| Tree       | <a href="#">link-address</a>  |
| Default    | ::  |
| Introduced | 16.0.R4   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## pool-name *string*

|          |   |
|----------|---|
| Synopsis | Pool name to be sent in the DHCPv6 messages |
|----------|---|

|               |  |
|---------------|--|
| Context       | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>wlan-gw pool-manager dhcp6-client dhcpv4-nat pool-name</b> <i>string</i> |
| Tree          | <a href="#">pool-name</a>  |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## ia-na

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ia-na</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>wlan-gw pool-manager dhcp6-client ia-na</b> |
| Tree       | <a href="#">ia-na</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the DHCPv6 client entity   |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>wlan-gw pool-manager dhcp6-client ia-na admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## link-address *string*

|            |  |
|------------|--|
| Synopsis   | IPv6 address in the link address field of relay header   |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>wlan-gw pool-manager dhcp6-client ia-na link-address</b> <i>string</i> |
| Tree       | <a href="#">link-address</a>   |
| Default    | ::   |
| Introduced | 16.0.R4  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **pool-name** *string*

|               |  |
|---------------|--|
| Synopsis      | Pool name to be sent in the DHCPv6 messages  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">pool-manager</a> <a href="#">dhcp6-client</a> <a href="#">ia-na</a> <b>pool-name</b> <i>string</i> |
| Tree          | <a href="#">pool-name</a>  |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **lease-query**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>lease-query</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">pool-manager</a> <a href="#">dhcp6-client</a> <b>lease-query</b> |
| Tree       | <a href="#">lease-query</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **max-retries** *number*

|            |  |
|------------|--|
| Synopsis   | Retries before lease query assumes no allocated subnets  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">pool-manager</a> <a href="#">dhcp6-client</a> <a href="#">lease-query</a> <b>max-retries</b> <i>number</i> |
| Tree       | <a href="#">max-retries</a>  |
| Range      | 0 to 10  |
| Default    | 2  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **servers** *string*

|          |  |
|----------|--|
| Synopsis | DHCPv6 servers that are used for requesting addresses  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">pool-manager</a> <a href="#">dhcp6-client</a> <b>servers</b> <i>string</i> |
| Tree     | <a href="#">servers</a>  |

|                |                                    |
|----------------|------------------------------------|
| Max. Instances | 8                                  |
| Introduced     | 16.0.R1                            |
| Platforms      | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

## slaac

|            |   |
|------------|---|
| Synopsis   | Enter the <b>slaac</b> context  |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>wlan-gw pool-manager dhcp6-client slaac</b> |
| Tree       | <b>slaac</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the DHCPv6 client entity   |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>wlan-gw pool-manager dhcp6-client slaac admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>   |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## link-address *string*

|            |  |
|------------|--|
| Synopsis   | IPv6 address in the link address field of relay header   |
| Context    | <b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>wlan-gw pool-manager dhcp6-client slaac link-address</b> <i>string</i> |
| Tree       | <b>link-address</b>  |
| Default    | ::   |
| Introduced | 16.0.R4  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **pool-name** *string*

|               |   |
|---------------|---|
| Synopsis      | Pool name to be sent in the DHCPv6 messages   |
| Context       | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>wlan-gw</b> <b>pool-manager</b> <b>dhcp6-client</b> <b>slaac</b> <b>pool-name</b> <i>string</i> |
| Tree          | <b>pool-name</b>  |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **source-ip** (*keyword* | *ipv6-address*)

|            |   |
|------------|---|
| Synopsis   | Source IP address that is used by the DHCPv6 client   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>wlan-gw</b> <b>pool-manager</b> <b>dhcp6-client</b> <b>source-ip</b> ( <i>keyword</i>   <i>ipv6-address</i> ) |
| Tree       | <b>source-ip</b>  |
| Options    | use-interface-ip  |
| Default    | use-interface-ip  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **watermarks**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>watermarks</b> context   |
| Context    | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>wlan-gw</b> <b>pool-manager</b> <b>watermarks</b> |
| Tree       | <b>watermarks</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **high** *number*

|          |   |
|----------|---|
| Synopsis | High watermark when new prefix is allocated   |
| Context  | <b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>wlan-gw</b> <b>pool-manager</b> <b>watermarks</b> <b>high</b> <i>number</i> |
| Tree     | <b>high</b>   |
| Range    | 51 to 99  |

|            |                                    |
|------------|------------------------------------|
| Default    | 95                                 |
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

**low number**

|            |  |
|------------|--|
| Synopsis   | Low watermark when unused prefix is released   |
| Context    | <b>configure service ies string subscriber-interface string wlan-gw pool-manager watermarks low number</b> |
| Tree       | <a href="#">low</a>  |
| Range      | 50 to 98   |
| Default    | 90   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**wlan-gw-group reference**

|            |  |
|------------|--|
| Synopsis   | ID of WLAN gateway group where prefixes are installed  |
| Context    | <b>configure service ies string subscriber-interface string wlan-gw pool-manager wlan-gw-group reference</b> |
| Tree       | <a href="#">wlan-gw-group</a>  |
| Reference  | <b>configure isa wlan-gw-group number</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**redundancy**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>redundancy</b> context  |
| Context    | <b>configure service ies string subscriber-interface string wlan-gw redundancy</b> |
| Tree       | <a href="#">redundancy</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**admin-state keyword**

|          |  |
|----------|--|
| Synopsis | Administrative state of WLAN-GW redundancy |
|----------|--|



|            |  |
|------------|--|
| Context    | <b>configure service ies string subscriber-interface string wlan-gw redundancy admin-state keyword</b> |
| Tree       | <b>admin-state</b>   |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### export string



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Route to export to peer  |
| Context    | <b>configure service ies string subscriber-interface string wlan-gw redundancy export string</b> |
| Tree       | <b>export</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### monitor string



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Peer route to monitor   |
| Context    | <b>configure service ies string subscriber-interface string wlan-gw redundancy monitor string</b> |
| Tree       | <b>monitor</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### subscriber-mgmt

|          |   |
|----------|---|
| Synopsis | Enter the <b>subscriber-mgmt</b> context            |
| Context  | <b>configure service ies string subscriber-mgmt</b> |

|            |   |
|------------|---|
| Tree       | <a href="#">subscriber-mgmt</a>                         |
| Introduced | 22.2.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **multi-chassis-shunt-id** *number*

|             |   |
|-------------|---|
| Synopsis    | Shunt ID for a pair of resilient nodes  |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-mgmt</a> <a href="#">multi-chassis-shunt-id</a> <i>number</i>   |
| Tree        | <a href="#">multi-chassis-shunt-id</a>  |
| Description | <p>This command configures the shunt ID that is used to shunt downstream traffic from a standby node to an active node. Because this ID identifies the traffic service on the standby node, the same ID must be configured per service on each node.</p> <p>This configuration is required for BNG CUPS inter-UPF resiliency shunting, but not for non-BNG CUPS shunting. However, when configured, it is also used for shunting non-BNG CUPS sessions in the same service.</p> |
| Range       | 1 to 8191   |
| Introduced  | 22.2.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **up-resiliency**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>up-resiliency</b> context   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-mgmt</a> <a href="#">up-resiliency</a> |
| Tree       | <a href="#">up-resiliency</a>  |
| Introduced | 22.2.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **monitor-oper-group** [[oper-group](#)] *reference*

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>monitor-oper-group</b> list instance  |
| Context     | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-mgmt</a> <a href="#">up-resiliency</a> <a href="#">monitor-oper-group</a> <i>reference</i>   |
| Tree        | <a href="#">monitor-oper-group</a>   |
| Description | <p>Commands in this context define parameters to derive the service health based on monitored operational groups. The BNG UPF sends the health value to the BNG CPF. The BNG CPF uses the value to determine the need for a BNG UPF status change (active or standby).</p> |

**Note:**

The following is only applicable for the **configure service vpls capture-sap** context. If the configured groups are not the same for all capture SAPs sharing the same underlying port or LAG, the configuration of a Layer 2 access ID alias is required, or else the system chooses arbitrarily one set of configured groups.

|                |   |
|----------------|---|
| Max. Instances | 4   |
| Introduced     | 22.2.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### [oper-group] *reference*

|            |   |
|------------|---|
| Synopsis   | Operational group name  |
| Context    | <b>configure service ies</b> <i>string</i> <a href="#">subscriber-mgmt up-resiliency monitor-oper-group reference</a> |
| Tree       | <a href="#">monitor-oper-group</a>  |
| Reference  | <b>configure service oper-group</b> <i>string</i>   |
| Notes      | This element is part of a list key.   |
| Introduced | 22.2.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### health-drop *number*

|             |   |
|-------------|---|
| Synopsis    | Number subtracted from the health value per failure   |
| Context     | <b>configure service ies</b> <i>string</i> <a href="#">subscriber-mgmt up-resiliency monitor-oper-group reference health-drop number</a>  |
| Tree        | <a href="#">health-drop</a>   |
| Description | This command configures the drop in the health value for every operational group member failure. Every failure of an operational group member decreases the base health value to a possible minimum of 0. |
| Range       | 1 to 255  |
| Default     | 1   |
| Introduced  | 22.2.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### video-interface [[interface-name](#)] *string*

|          |  |
|----------|--|
| Synopsis | Enter the <b>video-interface</b> list instance |
|----------|--|

|                |  |
|----------------|--|
| Context        | <b>configure service ies string video-interface string</b>                             |
| Tree           | <a href="#">video-interface</a>  |
| Max. Instances | 9  |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

### **[interface-name] string**

|               |  |
|---------------|--|
| Synopsis      | Video interface name   |
| Context       | <b>configure service ies string video-interface string</b>                             |
| Tree          | <a href="#">video-interface</a>  |
| String Length | 1 to 29  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

### **accounting-policy reference**

|            |  |
|------------|--|
| Synopsis   | Accounting Policy  |
| Context    | <b>configure service ies string video-interface string accounting-policy reference</b> |
| Tree       | <a href="#">accounting-policy</a>  |
| Reference  | <b>configure log accounting-policy number</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

### **address [ip-address] string**

|            |   |
|------------|---|
| Synopsis   | Add a list entry for <b>address</b>                                       |
| Context    | <b>configure service ies string video-interface string address string</b> |
| Tree       | <a href="#">address</a>   |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### [ip-address] string

Synopsis IPv4 address for the video interface within the service

Context **configure** [service ies](#) *string* [video-interface](#) *string* [address](#) *string*

Tree [address](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### adi



#### WARNING:

This element is deprecated and will be removed in a future release.

Synopsis Enter the **adi** context

Context **configure** [service ies](#) *string* [video-interface](#) *string* [adi](#)

Tree [adi](#)

Introduced 16.0.R1

Deprecated 22.10.R3

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### scte30



#### WARNING:

This element is deprecated and will be removed in a future release.

Synopsis Enter the **scte30** context

Context **configure** [service ies](#) *string* [video-interface](#) *string* [adi](#) [scte30](#)

Tree [scte30](#)

Introduced 16.0.R1

Deprecated 22.10.R3

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **ad-server** [[address](#)] *string*



**WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis Add a list entry for **ad-server**

Context **configure** [service ies](#) *string* [video-interface](#) *string* [adi scte30](#) **ad-server** *string*

Tree [ad-server](#)

Max. Instances 4

Introduced 16.0.R1

Deprecated 22.10.R3

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **[address]** *string*



**WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis Ad server address

Context **configure** [service ies](#) *string* [video-interface](#) *string* [adi scte30](#) **ad-server** *string*

Tree [ad-server](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Deprecated 22.10.R3

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **local-address**



**WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis Enable the **local-address** context

|            |  |
|------------|--|
| Context    | <b>configure service ies string video-interface string adi scte30 local-address</b>    |
| Tree       | <a href="#">local-address</a>  |
| Introduced | 16.0.R1  |
| Deprecated | 22.10.R3   |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

### control string



**WARNING:**

This element is deprecated and will be removed in a future release.

|            |  |
|------------|--|
| Synopsis   | Control  |
| Context    | <b>configure service ies string video-interface string adi scte30 local-address control string</b> |
| Tree       | <a href="#">control</a>  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Deprecated | 22.10.R3   |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s             |

### data string



**WARNING:**

This element is deprecated and will be removed in a future release.

|            |   |
|------------|---|
| Synopsis   | Data  |
| Context    | <b>configure service ies string video-interface string adi scte30 local-address data string</b> |
| Tree       | <a href="#">data</a>  |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Deprecated | 22.10.R3  |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s          |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the video interface  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s   |

**channel** [[mcast-address](#)] *string* [source](#) *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>channel</b> list instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <b>channel</b> <i>string</i> <a href="#">source</a> <i>string</i> |
| Tree       | <a href="#">channel</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s   |

**[mcast-address]** *string*

|            |   |
|------------|---|
| Synopsis   | Multicast channel address   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">channel</a> <i>string</i> <a href="#">source</a> <i>string</i> |
| Tree       | <a href="#">channel</a>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s  |

**source** *string*

|            |   |
|------------|---|
| Synopsis   | Unicast source address  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">channel</a> <i>string</i> <a href="#">source</a> <i>string</i> |
| Tree       | <a href="#">channel</a>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |



Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **channel-name** *string*

Synopsis Channel name

Context **configure** **service ies** *string* **video-interface** *string* **channel** *string* **source** *string* **channel-name** *string*

Tree **channel-name**

String Length 1 to 32

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **description** *string*

Synopsis Text description

Context **configure** **service ies** *string* **video-interface** *string* **channel** *string* **source** *string* **description** *string*

Tree **description**

String Length 1 to 80

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **scte35-action** *keyword*

Synopsis Enable downstream forwarding of SCTE 35 cue avails

Context **configure** **service ies** *string* **video-interface** *string* **channel** *string* **source** *string* **scte35-action** *keyword*

Tree **scte35-action**

Options forward, drop

Default forward

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**zone-channel** [[zone-mcast-address](#)] *string* [zone-source](#) *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>zone-channel</b> list instance  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">channel</a> <i>string</i> <a href="#">source</a> <i>string</i> <a href="#">zone-channel</a> <i>string</i> <a href="#">zone-source</a> <i>string</i> |
| Tree       | <a href="#">zone-channel</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s   |

**[zone-mcast-address]** *string*

|            |  |
|------------|--|
| Synopsis   | Multicast zone channel address   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">channel</a> <i>string</i> <a href="#">source</a> <i>string</i> <a href="#">zone-channel</a> <i>string</i> <a href="#">zone-source</a> <i>string</i> |
| Tree       | <a href="#">zone-channel</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s   |

**zone-source** *string*

|            |  |
|------------|--|
| Synopsis   | Unicast source address   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">channel</a> <i>string</i> <a href="#">source</a> <i>string</i> <a href="#">zone-channel</a> <i>string</i> <a href="#">zone-source</a> <i>string</i> |
| Tree       | <a href="#">zone-channel</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s   |

**adi-channel-name** *string*

|          |   |
|----------|---|
| Synopsis | Zone channel name   |
| Context  | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">channel</a> <i>string</i> <a href="#">source</a> <i>string</i> <a href="#">zone-channel</a> <i>string</i> <a href="#">zone-source</a> <i>string</i> <a href="#">adi-channel-name</a> <i>string</i> |

|               |  |
|---------------|--|
| Tree          | <a href="#">adi-channel-name</a>   |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

### **cpu-protection** *reference*

|            |  |
|------------|--|
| Synopsis   | CPU protection policy  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">cpu-protection</a> <i>reference</i> |
| Tree       | <a href="#">cpu-protection</a>   |
| Reference  | <b>configure</b> <a href="#">system security</a> <a href="#">cpu-protection</a> <i>policy</i> <i>number</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s  |

### **description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s   |

### **multicast-service** *number*

|            |  |
|------------|--|
| Synopsis   | Associated multicast service ID  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">multicast-service</a> <i>number</i> |
| Tree       | <a href="#">multicast-service</a>  |
| Range      | 1 to 2147483647  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s   |

**output-format** *keyword*

|            |  |
|------------|--|
| Synopsis   | Output format  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <b>output-format</b> <i>keyword</i> |
| Tree       | <a href="#">output-format</a>  |
| Options    | udp, rtp-udp   |
| Default    | rtp-udp  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s   |

**rt-client****WARNING:**

This element is deprecated and will be removed in a future release.

|            |   |
|------------|---|
| Synopsis   | Enable the <b>rt-client</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <b>rt-client</b> |
| Tree       | <a href="#">rt-client</a>   |
| Introduced | 16.0.R2   |
| Deprecated | 22.10.R3  |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s  |

**src-address** *string***WARNING:**

This element is deprecated and will be removed in a future release.

|            |   |
|------------|---|
| Synopsis   | IP address for the RET client on the video interface  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">rt-client</a> <b>src-address</b> <i>string</i> |
| Tree       | <a href="#">src-address</a>   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R2   |
| Deprecated | 22.10.R3  |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s  |

## video-sap

|            |  |
|------------|--|
| Synopsis   | Enable the <b>video-sap</b> context  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">video-sap</a> |
| Tree       | <a href="#">video-sap</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s   |

## egress

|            |   |
|------------|---|
| Synopsis   | Enter the <b>egress</b> context   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">video-sap</a> <a href="#">egress</a> |
| Tree       | <a href="#">egress</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s  |

## filter

|            |  |
|------------|--|
| Synopsis   | Enter the <b>filter</b> context  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">video-sap</a> <a href="#">egress</a> <a href="#">filter</a> |
| Tree       | <a href="#">filter</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s   |

## ip reference

|            |   |
|------------|---|
| Synopsis   | IPv4 filter policy name   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">video-sap</a> <a href="#">egress</a> <a href="#">filter</a> <a href="#">ip reference</a> |
| Tree       | <a href="#">ip</a>  |
| Reference  | <b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s  |

## qos

|            |  |
|------------|--|
| Synopsis   | Enter the <b>qos</b> context   |
| Context    | <b>configure service ies string video-interface string video-sap egress qos</b>        |
| Tree       | <b>qos</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

## policy-name *reference*

|            |   |
|------------|---|
| Synopsis   | SAP egress QoS policy ID  |
| Context    | <b>configure service ies string video-interface string video-sap egress qos policy-name reference</b> |
| Tree       | <b>policy-name</b>  |
| Reference  | <b>configure qos sap-egress string</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s                |

## ingress

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ingress</b> context   |
| Context    | <b>configure service ies string video-interface string video-sap ingress</b>           |
| Tree       | <b>ingress</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

## filter

|            |   |
|------------|---|
| Synopsis   | Enter the <b>filter</b> context   |
| Context    | <b>configure service ies string video-interface string video-sap ingress filter</b> |
| Tree       | <b>filter</b>   |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **ip** *reference*

Synopsis IPv4 filter policy name

Context **configure** [service ies](#) *string* [video-interface](#) *string* [video-sap ingress filter ip](#) *reference*

Tree [ip](#)

Reference **configure** [filter ip-filter](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **qos**

Synopsis Enter the **qos** context

Context **configure** [service ies](#) *string* [video-interface](#) *string* [video-sap ingress qos](#)

Tree [qos](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **policy-name** *reference*

Synopsis SAP ingress QoS policy ID

Context **configure** [service ies](#) *string* [video-interface](#) *string* [video-sap ingress qos policy-name](#) *reference*

Tree [policy-name](#)

Reference **configure** [qos sap-ingress](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**video-group-id** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Video group ID   |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">video-sap</a> <a href="#">video-group-id</a> <i>reference</i> |
| Tree       | <a href="#">video-group-id</a>   |
| Reference  | <b>configure</b> <a href="#">isa video-group</a> <i>number</i>   |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s   |

**vpn-id** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | VPN identifier for the service  |
| Context    | <b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">vpn-id</a> <i>number</i> |
| Tree       | <a href="#">vpn-id</a>  |
| Range      | 1 to 2147483647   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**ipfix**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipfix</b> context                 |
| Context    | <b>configure</b> <a href="#">service ipfix</a> |
| Tree       | <a href="#">ipfix</a>                          |
| Introduced | 16.0.R1  |
| Platforms  | All  |



**export-policy** *[name] string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>export-policy</b> list instance                        |
| Context    | <b>configure</b> <a href="#">service ipfix export-policy string</a> |
| Tree       | <a href="#">export-policy</a>                                       |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[name]** *string*

|               |   |
|---------------|---|
| Synopsis      | IPFIX policy name   |
| Context       | <b>configure</b> <a href="#">service ipfix export-policy string</a> |
| Tree          | <a href="#">export-policy</a>                                       |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.                                 |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**collector** [router-instance string ip-address string](#)

|            |  |
|------------|--|
| Synopsis   | Enter the <b>collector</b> list instance   |
| Context    | <b>configure</b> <a href="#">service ipfix export-policy string collector router-instance string ip-address string</a> |
| Tree       | <a href="#">collector</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**router-instance** *string*

|            |  |
|------------|--|
| Synopsis   | Router where the collector is reached  |
| Context    | <b>configure</b> <a href="#">service ipfix export-policy string collector router-instance string ip-address string</a> |
| Tree       | <a href="#">collector</a>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**ip-address** *string*

|            |   |
|------------|---|
| Synopsis   | IPv4 address of the external collector node   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipfix export-policy</a> <i>string</i> <a href="#">collector</a> <a href="#">router-instance</a> <i>string</i> <a href="#">ip-address</a> <i>string</i> |
| Tree       | <a href="#">collector</a>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the collector  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipfix export-policy</a> <i>string</i> <a href="#">collector</a> <a href="#">router-instance</a> <i>string</i> <a href="#">ip-address</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**mtu** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Maximum Transmission Unit   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipfix export-policy</a> <i>string</i> <a href="#">collector</a> <a href="#">router-instance</a> <i>string</i> <a href="#">ip-address</a> <i>string</i> <a href="#">mtu</a> <i>number</i> |
| Tree       | <a href="#">mtu</a>   |
| Range      | 512 to 9212   |
| Units      | octets  |
| Default    | 1500  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**refresh-timeout** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | IPFIX template refresh time  |
| Context    | <b>configure</b> <a href="#">service ipfix export-policy</a> <i>string</i> <a href="#">collector router-instance</a> <i>string</i> <a href="#">ip-address</a> <i>string</i> <b>refresh-timeout</b> <i>number</i> |
| Tree       | <a href="#">refresh-timeout</a>  |
| Range      | 240 to 86400   |
| Units      | seconds  |
| Default    | 600  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**source-ip-address** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Source IP address from which UDP streams are sent  |
| Context    | <b>configure</b> <a href="#">service ipfix export-policy</a> <i>string</i> <a href="#">collector router-instance</a> <i>string</i> <a href="#">ip-address</a> <i>string</i> <b>source-ip-address</b> <i>string</i> |
| Tree       | <a href="#">source-ip-address</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">service ipfix export-policy</a> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**template-format** *keyword*

|            |  |
|------------|--|
| Synopsis   | Template format used by this IPFIX export policy   |
| Context    | <b>configure</b> <a href="#">service ipfix export-policy</a> <i>string</i> <b>template-format</b> <i>keyword</i> |
| Tree       | <a href="#">template-format</a>  |
| Options    | format1, format2   |
| Default    | format1  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**ipipe** [[service-name](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipipe</b> list instance                         |
| Context    | <b>configure</b> <a href="#">service ipipe</a> <i>string</i> |
| Tree       | <a href="#">ipipe</a>  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**[service-name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Administrative service name                                  |
| Context       | <b>configure</b> <a href="#">service ipipe</a> <i>string</i> |
| Tree          | <a href="#">ipipe</a>  |
| String Length | 1 to 64  |
| Notes         | This element is part of a list key.                          |
| Introduced    | 20.10.R1   |
| Platforms     | All  |

**admin-state** *keyword*

|          |  |
|----------|--|
| Synopsis | Administrative state of the service  |
| Context  | <b>configure</b> <a href="#">service ipipe</a> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree     | <a href="#">admin-state</a>  |
| Options  | enable, disable  |
| Default  | disable  |

Introduced 20.10.R1  
 Platforms All

### **ce-address-discovery**

Synopsis Enable the **ce-address-discovery** context  
 Context **configure** [service ipipe](#) *string* [ce-address-discovery](#)  
 Tree [ce-address-discovery](#)  
 Introduced 20.10.R1  
 Platforms All

### **customer** *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Service customer ID  
 Context **configure** [service ipipe](#) *string* [customer](#) *reference*  
 Tree [customer](#)  
 Reference **configure** [service customer](#) *string*  
 Notes This element is mandatory.  
 Introduced 20.10.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [service ipipe](#) *string* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 20.10.R1  
 Platforms All

**endpoint** *[name]* *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>endpoint</b> list instance                      |
| Context        | <b>configure</b> <i>service ipipe string endpoint string</i> |
| Tree           | <i>endpoint</i>  |
| Max. Instances | 2  |
| Introduced     | 20.10.R1   |
| Platforms      | All  |

**[name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Service endpoint name  |
| Context       | <b>configure</b> <i>service ipipe string endpoint string</i> |
| Tree          | <i>endpoint</i>  |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.                          |
| Introduced    | 20.10.R1   |
| Platforms     | All  |

**description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <i>service ipipe string endpoint string description string</i> |
| Tree          | <i>description</i>  |
| String Length | 1 to 80   |
| Introduced    | 20.10.R1  |
| Platforms     | All   |

**hold-time-active** *number*

|          |  |
|----------|--|
| Synopsis | Time before entering standby when MC-LAG SAP goes down                               |
| Context  | <b>configure</b> <i>service ipipe string endpoint string hold-time-active number</i> |
| Tree     | <i>hold-time-active</i>  |
| Range    | 1 to 60  |
| Units    | deciseconds  |

Introduced 20.10.R1  
 Platforms All

### **revert-time** (*number* | *keyword*)

Synopsis Time to wait before reverting to primary spoke SDP  
 Context **configure** *service ipipe string endpoint string revert-time* (*number* | *keyword*)  
 Tree [revert-time](#)  
 Range 1 to 600  
 Units seconds  
 Options never, immediate  
 Default immediate  
 Introduced 20.10.R1  
 Platforms All

### **standby-signaling** *keyword*

Synopsis Endpoint behavior for status of sending PW standby bit  
 Context **configure** *service ipipe string endpoint string standby-signaling keyword*  
 Tree [standby-signaling](#)  
 Options master  
 Introduced 20.10.R1  
 Platforms All

### **sap** [*sap-id*] *string*

Synopsis Enter the **sap** list instance  
 Context **configure** *service ipipe string sap string*  
 Tree [sap](#)  
 Introduced 20.10.R1  
 Platforms All

### **[sap-id]** *string*

Synopsis SAP ID

|               |  |
|---------------|--|
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> |
| Tree          | <a href="#">sap</a>  |
| String Length | 1 to 45  |
| Notes         | This element is part of a list key.  |
| Introduced    | 20.10.R1   |
| Platforms     | All  |

### **accounting-policy** *reference*

|            |  |
|------------|--|
| Synopsis   | Accounting policy  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">accounting-policy</a> <a href="#">reference</a> |
| Tree       | <a href="#">accounting-policy</a>  |
| Reference  | <b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <a href="#">number</a>  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the SAP  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">admin-state</a> <a href="#">keyword</a> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 20.10.R1   |
| Platforms  | All  |

### **app-profile** *reference*

|            |  |
|------------|--|
| Synopsis   | Application profile name   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">app-profile</a> <a href="#">reference</a>   |
| Tree       | <a href="#">app-profile</a>  |
| Reference  | <b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy</a> <a href="#">app-profile</a> <a href="#">string</a> |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |



**bandwidth** *number*

|            |  |
|------------|--|
| Synopsis   | SAP bandwidth  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">bandwidth</a> <i>number</i> |
| Tree       | <a href="#">bandwidth</a>  |
| Range      | 1 to 6400000000  |
| Units      | kilobps  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**ce-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

|            |   |
|------------|---|
| Synopsis   | IP address of the CE device   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ce-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <a href="#">ce-address</a>  |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**collect-stats** *boolean*

|            |   |
|------------|---|
| Synopsis   | Collect accounting statistics   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">collect-stats</a> <i>boolean</i> |
| Tree       | <a href="#">collect-stats</a>   |
| Default    | false   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**cpu-protection**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>cpu-protection</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cpu-protection</a> |
| Tree       | <a href="#">cpu-protection</a>  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS   |

**mac-monitoring**

|            |  |
|------------|--|
| Synopsis   | Monitor MAC for CPU protection   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">mac-monitoring</a> |
| Tree       | <a href="#">mac-monitoring</a>   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS  |

**policy-id** *reference*

|            |  |
|------------|--|
| Synopsis   | CPM protection policy  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">policy-id</a> <i>reference</i> |
| Tree       | <a href="#">policy-id</a>  |
| Reference  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpu-protection</a> <a href="#">policy</a> <i>number</i>   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS  |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 160   |
| Introduced    | 20.10.R1   |
| Platforms     | All  |

**dist-cpu-protection** *reference*

|            |   |
|------------|---|
| Synopsis   | Distributed CPU protection policy for SAP   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">dist-cpu-protection</a> <i>reference</i> |
| Tree       | <a href="#">dist-cpu-protection</a>   |
| Reference  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dist-cpu-protection</a> <a href="#">policy</a> <i>string</i>                           |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**egress**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>egress</b> context                         |
| Context    | <b>configure service ipipe string sap string egress</b> |
| Tree       | <b>egress</b>   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**agg-rate**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>agg-rate</b> context                                |
| Context    | <b>configure service ipipe string sap string egress agg-rate</b> |
| Tree       | <b>agg-rate</b>  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**adaptation-rule** *keyword*

|            |  |
|------------|--|
| Synopsis   | Adaptation rule to compute the operational PIR value when an aggregate shaper is used    |
| Context    | <b>configure service ipipe string sap string egress agg-rate adaptation-rule keyword</b> |
| Tree       | <b>adaptation-rule</b>   |
| Options    | max, min, closest  |
| Default    | closest  |
| Introduced | 22.10.R1   |
| Platforms  | 7750 SR-1, 7750 SR-s   |

**burst-limit** (*number | keyword*)

|          |   |
|----------|---|
| Synopsis | Shaping burst size when an aggregate shaper is used   |
| Context  | <b>configure service ipipe string sap string egress agg-rate burst-limit (number   keyword)</b> |
| Tree     | <b>burst-limit</b>  |
| Range    | 1 to 14000000   |
| Units    | bytes   |
| Options  | auto  |
| Default  | auto  |

|            |                      |
|------------|----------------------|
| Introduced | 22.10.R1             |
| Platforms  | 7750 SR-1, 7750 SR-s |

### **limit-unused-bandwidth** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable aggregate rate overrun protection   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a> <a href="#">limit-unused-bandwidth</a> <i>boolean</i> |
| Tree       | <a href="#">limit-unused-bandwidth</a>   |
| Default    | false  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

### **rate** *number*

|            |   |
|------------|---|
| Synopsis   | Enforced aggregate rate for all queues  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a> <a href="#">rate</a> <i>number</i> |
| Tree       | <a href="#">rate</a>  |
| Range      | 1 to 6400000000   |
| Units      | kilobps   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

### **filter**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>filter</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">filter</a> |
| Tree       | <a href="#">filter</a>   |
| Introduced | 20.10.R1   |
| Platforms  | All  |

### **ip** *reference*

|          |  |
|----------|--|
| Synopsis | MAC filter ID  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">filter</a> <a href="#">ip</a> <i>reference</i> |
| Tree     | <a href="#">ip</a>   |

|            |   |
|------------|---|
| Reference  | <b>configure filter ip-filter</b> <i>string</i> |
| Introduced | 20.10.R1  |
| Platforms  | All   |

### ipv6 reference

|            |  |
|------------|--|
| Synopsis   | IPv6 filter identifier   |
| Context    | <b>configure service ipipe</b> <i>string sap string egress filter ipv6 reference</i> |
| Tree       | <a href="#">ipv6</a>   |
| Reference  | <b>configure filter ipv6-filter</b> <i>string</i>                                    |
| Introduced | 20.10.R1   |
| Platforms  | All  |

### qos

|            |  |
|------------|--|
| Synopsis   | Enter the <b>qos</b> context                                       |
| Context    | <b>configure service ipipe</b> <i>string sap string egress qos</i> |
| Tree       | <a href="#">qos</a>  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

### policer-control-policy

|            |   |
|------------|---|
| Synopsis   | Enter the <b>policer-control-policy</b> context   |
| Context    | <b>configure service ipipe</b> <i>string sap string egress qos policer-control-policy</i> |
| Tree       | <a href="#">policer-control-policy</a>  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR                                    |

### overrides

|            |   |
|------------|---|
| Synopsis   | Enable the <b>overrides</b> context   |
| Context    | <b>configure service ipipe</b> <i>string sap string egress qos policer-control-policy overrides</i> |
| Tree       | <a href="#">overrides</a>   |
| Introduced | 20.10.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## root

Synopsis Enter the **root** context

Context **configure service ipipe string sap string egress qos policer-control-policy overrides root**

Tree **root**

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## max-rate (*number* | *keyword*)

Synopsis Maximum frame-based bandwidth limit

Context **configure service ipipe string sap string egress qos policer-control-policy overrides root max-rate (*number* | *keyword*)**

Tree **max-rate**

Range 1 to 6400000000

Options max

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## priority-mbs-thresholds

Synopsis Enter the **priority-mbs-thresholds** context

Context **configure service ipipe string sap string egress qos policer-control-policy overrides root priority-mbs-thresholds**

Tree **priority-mbs-thresholds**

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## min-thresh-separation (*number* | *keyword*)

Synopsis Minimum amount of separation buffer space

Context **configure service ipipe string sap string egress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation (*number* | *keyword*)**

Tree **min-thresh-separation**

|            |  |
|------------|--|
| Range      | 0 to 16777216  |
| Units      | bytes  |
| Options    | auto   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

### **priority** [[priority-level](#)] *number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>priority</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i> |
| Tree       | <a href="#">priority</a>   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

### **[priority-level]** *number*

|            |  |
|------------|--|
| Synopsis   | Priority level   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i> |
| Tree       | <a href="#">priority</a>   |
| Range      | 1 to 8   |
| Notes      | This element is part of a list key.  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

### **mbs-contribution** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Minimum amount of cumulative buffer space allowed  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i> <a href="#">mbs-contribution</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">mbs-contribution</a>   |
| Range      | 0 to 16777216  |
| Units      | bytes  |
| Options    | auto   |
| Introduced | 20.10.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **policy-name** *reference*

Synopsis Policer control policy name

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [policer-control-policy](#) [policy-name](#) *reference*

Tree [policy-name](#)

Reference **configure** [qos](#) [policer-control-policy](#) *string*

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **qinq-mark-top-only** *boolean*

Synopsis Mark top Q-tags

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [qinq-mark-top-only](#) *boolean*

Tree [qinq-mark-top-only](#)

Default false

Introduced 20.10.R1

Platforms All

### **sap-egress**

Synopsis Enter the **sap-egress** context

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#)

Tree [sap-egress](#)

Introduced 20.10.R1

Platforms All

### **overrides**

Synopsis Enter the **overrides** context

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#)

Tree [overrides](#)

Introduced 20.10.R1



Platforms All

### **hs-secondary-shaper** *string*

Synopsis HS Secondary Shaper

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [hs-secondary-shaper](#) *string*

Tree [hs-secondary-shaper](#)

String Length 1 to 32

Introduced 20.10.R1

Platforms 7750 SR-7/12/12e

### **hs-wrr-group** [[group-id](#)] *reference*

Synopsis Enter the **hs-wrr-group** list instance

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [hs-wrr-group](#) *reference*

Tree [hs-wrr-group](#)

Introduced 20.10.R1

Platforms 7750 SR-7/12/12e

### [[group-id](#)] *reference*

Synopsis HS WRR group identifier

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [hs-wrr-group](#) *reference*

Tree [hs-wrr-group](#)

Reference **configure** [qos](#) [sap-egress](#) *string* [hs-wrr-group](#) *number*

Notes This element is part of a list key.

Introduced 20.10.R1

Platforms 7750 SR-7/12/12e

### **hs-class-weight** *number*

Synopsis Class weight override of the WRR group

|            |  |
|------------|--|
| Context    | <b>configure service ipipe string sap string egress qos sap-egress overrides hs-wrr-group reference hs-class-weight number</b> |
| Tree       | <a href="#">hs-class-weight</a>  |
| Range      | 1   2   4   8  |
| Introduced | 20.10.R1   |
| Platforms  | 7750 SR-7/12/12e   |

### **percent-rate** *decimal-number*

|            |   |
|------------|---|
| Synopsis   | Percent rate override applied to the HS WRR group   |
| Context    | <b>configure service ipipe string sap string egress qos sap-egress overrides hs-wrr-group reference percent-rate decimal-number</b> |
| Tree       | <a href="#">percent-rate</a>  |
| Range      | 0.01 to 100.00  |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .   |
| Introduced | 20.10.R1  |
| Platforms  | 7750 SR-7/12/12e  |

### **rate** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Scheduling rate override applied to the HS WRR group  |
| Context    | <b>configure service ipipe string sap string egress qos sap-egress overrides hs-wrr-group reference rate (number   keyword)</b> |
| Tree       | <a href="#">rate</a>  |
| Range      | 1 to 2000000000   |
| Units      | kilobps   |
| Options    | max   |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .   |
| Introduced | 20.10.R1  |
| Platforms  | 7750 SR-7/12/12e  |

### **policer** [[policer-id](#)] *reference*

|          |  |
|----------|--|
| Synopsis | Enter the <b>policer</b> list instance   |
| Context  | <b>configure service ipipe string sap string egress qos sap-egress overrides policer reference</b> |

|            |  |
|------------|--|
| Tree       | <a href="#">policer</a>                                |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

**[policer-id] reference**

|            |   |
|------------|---|
| Synopsis   | Policer unique ID   |
| Context    | <b>configure service ipipe</b> <i>string sap string egress qos sap-egress overrides policer reference</i> |
| Tree       | <a href="#">policer</a>   |
| Reference  | <b>configure qos sap-egress</b> <i>string policer number</i>  |
| Notes      | This element is part of a list key.   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**cbs (number | keyword)**

|            |  |
|------------|--|
| Synopsis   | CBS  |
| Context    | <b>configure service ipipe</b> <i>string sap string egress qos sap-egress overrides policer reference cbs (number   keyword)</i> |
| Tree       | <a href="#">cbs</a>  |
| Range      | 0 to 268435456   |
| Units      | bytes  |
| Options    | auto   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**mbs (number | keyword)**

|          |  |
|----------|--|
| Synopsis | MBS  |
| Context  | <b>configure service ipipe</b> <i>string sap string egress qos sap-egress overrides policer reference mbs (number   keyword)</i> |
| Tree     | <a href="#">mbs</a>  |
| Range    | 0 to 268435456   |
| Units    | bytes  |
| Options  | auto   |

|            |  |
|------------|--|
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

### **packet-byte-offset** *number*

|            |  |
|------------|--|
| Synopsis   | Packet size modification for policing information  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>packet-byte-offset</b> <i>number</i> |
| Tree       | <a href="#">packet-byte-offset</a>   |
| Range      | -64 to 31  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

### **percent-rate**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>percent-rate</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>percent-rate</b> |
| Tree       | <a href="#">percent-rate</a>   |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

### **cir** *decimal-number*

|            |  |
|------------|--|
| Synopsis   | CIR percent rate   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">percent-rate</a> <b>cir</b> <i>decimal-number</i> |
| Tree       | <a href="#">cir</a>  |
| Range      | 0.00 to 100.00   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

### **pir** *decimal-number*

|          |                  |
|----------|------------------|
| Synopsis | PIR percent rate |
|----------|------------------|

|            |  |
|------------|--|
| Context    | <b>configure service ipipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides policer</b><br><i>reference percent-rate pir decimal-number</i> |
| Tree       | <a href="#">pir</a>  |
| Range      | 0.01 to 100.00   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**rate**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>rate</b> context   |
| Context    | <b>configure service ipipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides policer</b><br><i>reference rate</i> |
| Tree       | <a href="#">rate</a>  |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**cir** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | CIR rate   |
| Context    | <b>configure service ipipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides policer</b><br><i>reference rate cir</i> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cir</a>  |
| Range      | 0 to 6400000000  |
| Units      | kilobps  |
| Options    | max  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**pir** (*number* | *keyword*)

|          |  |
|----------|--|
| Synopsis | PIR rate   |
| Context  | <b>configure service ipipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides policer</b><br><i>reference rate pir</i> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <a href="#">pir</a>  |
| Range    | 1 to 6400000000  |

|            |  |
|------------|--|
| Units      | kilobps  |
| Options    | max  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

### **stat-mode** *keyword*

|            |   |
|------------|---|
| Synopsis   | Mode of statistics collected by the policer   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a><br><i>reference</i> <a href="#">stat-mode</a> <i>keyword</i> |
| Tree       | <a href="#">stat-mode</a>   |
| Options    | no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

### **queue** [[queue-id](#)] *reference*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>queue</b> list instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a><br><i>reference</i> |
| Tree       | <a href="#">queue</a>  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

### **[queue-id]** *reference*

|            |  |
|------------|--|
| Synopsis   | Policer unique ID  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a><br><i>reference</i> |
| Tree       | <a href="#">queue</a>  |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">sap-egress</a> <i>string</i> <a href="#">queue</a> <i>number</i>  |
| Notes      | This element is part of a list key.  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**adaptation-rule**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>adaptation-rule</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">adaptation-rule</a> |
| Tree       | <a href="#">adaptation-rule</a>  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**cir** *keyword*

|            |   |
|------------|---|
| Synopsis   | Constraint used when deriving the operational CIR value   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">adaptation-rule</a> <a href="#">cir</a> <i>keyword</i> |
| Tree       | <a href="#">cir</a>   |
| Options    | max, min, closest   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**pir** *keyword*

|            |   |
|------------|---|
| Synopsis   | Constraint used when deriving the operational PIR value   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">adaptation-rule</a> <a href="#">pir</a> <i>keyword</i> |
| Tree       | <a href="#">pir</a>   |
| Options    | max, min, closest   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**avg-frame-overhead** *decimal-number*

|          |   |
|----------|---|
| Synopsis | Average packet-to-frame encapsulation overhead  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">avg-frame-overhead</a> <i>decimal-number</i> |
| Tree     | <a href="#">avg-frame-overhead</a>  |
| Range    | 0.00 to 100.00  |

Introduced 20.10.R1  
 Platforms All

### **burst-limit** (*number* | *keyword*)

Synopsis Explicit shaping burst size for the queue  
 Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)  
*reference* [burst-limit](#) (*number* | *keyword*)  
 Tree [burst-limit](#)  
 Range 1 to 14000000  
 Units bytes  
 Options auto  
 Introduced 20.10.R1  
 Platforms All

### **cbs** (*number* | *keyword*)

Synopsis CBS  
 Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)  
*reference* [cbs](#) (*number* | *keyword*)  
 Tree [cbs](#)  
 Range 0 to 1048576  
 Units kilobytes  
 Options auto  
 Introduced 20.10.R1  
 Platforms All

### **drop-tail**

Synopsis Enter the **drop-tail** context  
 Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)  
*reference* [drop-tail](#)  
 Tree [drop-tail](#)  
 Introduced 20.10.R1  
 Platforms All



**low**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>low</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a><br><i>reference</i> <a href="#">drop-tail</a> <a href="#">low</a> |
| Tree       | <a href="#">low</a>  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**percent-reduction-from-mbs** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Percentage reduction from the MBS for a queue drop tail  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a><br><i>reference</i> <a href="#">drop-tail</a> <a href="#">low</a> <a href="#">percent-reduction-from-mbs</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">percent-reduction-from-mbs</a>   |
| Range      | 0 to 100   |
| Options    | auto   |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**hs-class-weight** *number*

|            |  |
|------------|--|
| Synopsis   | Class weight override for the queue  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a><br><i>reference</i> <a href="#">hs-class-weight</a> <i>number</i> |
| Tree       | <a href="#">hs-class-weight</a>  |
| Range      | 1   2   4   8  |
| Introduced | 20.10.R1   |
| Platforms  | 7750 SR-7/12/12e   |

**hs-wred-queue**

|          |  |
|----------|--|
| Synopsis | Enter the <b>hs-wred-queue</b> context   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a><br><i>reference</i> <a href="#">hs-wred-queue</a> |
| Tree     | <a href="#">hs-wred-queue</a>  |

Introduced 20.10.R1  
 Platforms 7750 SR-7/12/12e

### **policy reference**

Synopsis Slope policy applied to the HSQ queue group queue  
 Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)  
[reference](#) [hs-wred-queue](#) [policy](#) [reference](#)  
 Tree [policy](#)  
 Reference **configure** [qos](#) [slope-policy](#) *string*  
 Introduced 20.10.R1  
 Platforms 7750 SR-7/12/12e

### **hs-wrr-weight number**

Synopsis WRR weight to parent with the queue into the scheduler  
 Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)  
[reference](#) [hs-wrr-weight](#) *number*  
 Tree [hs-wrr-weight](#)  
 Range 1 to 127  
 Default 1  
 Introduced 20.10.R1  
 Platforms 7750 SR-7/12/12e

### **mbs (number | keyword)**

Synopsis MBS  
 Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)  
[reference](#) [mbs](#) *(number | keyword)*  
 Tree [mbs](#)  
 Range 0 to 1073741824  
 Units bytes  
 Options auto  
 Introduced 20.10.R1  
 Platforms All

**monitor-queue-depth**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>monitor-queue-depth</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>monitor-queue-depth</b> |
| Tree       | <a href="#">monitor-queue-depth</a>   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**fast-polling** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Enable fast polling of the queue depth  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">monitor-queue-depth</a> <b>fast-polling</b> <i>boolean</i> |
| Tree        | <a href="#">fast-polling</a>  |
| Description | When configured to <b>true</b> , this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth.<br>When configured to <b>false</b> , fast queue polling is not enabled.  |
| Default     | false   |
| Introduced  | 20.10.R1  |
| Platforms   | All   |

**violation-threshold** *decimal-number*

|             |   |
|-------------|---|
| Synopsis    | Threshold for queue depth before violation is raised  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">monitor-queue-depth</a> <b>violation-threshold</b> <i>decimal-number</i> |
| Tree        | <a href="#">violation-threshold</a>   |
| Description | This command specifies the threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.  |
| Range       | 0.01 to 99.99   |
| Introduced  | 20.10.R1  |
| Platforms   | All   |

**parent**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>parent</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a><br><i>reference</i> <a href="#">parent</a> |
| Tree       | <a href="#">parent</a>  |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**cir-weight** *number*

|            |  |
|------------|--|
| Synopsis   | CIR parameter that overrides parent for queue group  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a><br><i>reference</i> <a href="#">parent</a> <a href="#">cir-weight</a> <i>number</i> |
| Tree       | <a href="#">cir-weight</a>   |
| Range      | 0 to 100   |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**weight** *number*

|            |  |
|------------|--|
| Synopsis   | PIR parameter that overrides parent for queue group  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a><br><i>reference</i> <a href="#">parent</a> <a href="#">weight</a> <i>number</i> |
| Tree       | <a href="#">weight</a>   |
| Range      | 0 to 100   |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**percent-rate**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>percent-rate</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a><br><i>reference</i> <a href="#">percent-rate</a> |
| Tree       | <a href="#">percent-rate</a>  |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .   |
| Introduced | 20.10.R1  |

Platforms All

### **cir** *decimal-number*

Synopsis CIR percent rate

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)  
*reference* [percent-rate](#) [cir](#) *decimal-number*

Tree [cir](#)

Range 0.00 to 100.00

Introduced 20.10.R1

Platforms All

### **pir** *decimal-number*

Synopsis PIR percent rate

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)  
*reference* [percent-rate](#) [pir](#) *decimal-number*

Tree [pir](#)

Range 0.01 to 100.00

Introduced 20.10.R1

Platforms All

### **rate**

Synopsis Enter the **rate** context

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)  
*reference* [rate](#)

Tree [rate](#)

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 20.10.R1

Platforms All

### **cir** (*number* | *keyword*)

Synopsis CIR rate

|            |  |
|------------|--|
| Context    | <b>configure service ipipe</b> <i>string sap string egress qos sap-egress overrides queue reference rate cir</i> ( <i>number   keyword</i> ) |
| Tree       | <a href="#">cir</a>  |
| Range      | 0 to 6400000000  |
| Units      | kilobps  |
| Options    | max  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

### **pir** (*number | keyword*)

|            |  |
|------------|--|
| Synopsis   | PIR rate   |
| Context    | <b>configure service ipipe</b> <i>string sap string egress qos sap-egress overrides queue reference rate pir</i> ( <i>number   keyword</i> ) |
| Tree       | <a href="#">pir</a>  |
| Range      | 1 to 6400000000  |
| Units      | kilobps  |
| Options    | max  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

### **policy-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Policy ID to associate with SAP for mirrored service  |
| Context    | <b>configure service ipipe</b> <i>string sap string egress qos sap-egress policy-name reference</i> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure qos sap-egress</b> <i>string</i>   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

### **port-redirect-group**

|          |   |
|----------|---|
| Synopsis | Enter the <b>port-redirect-group</b> context  |
| Context  | <b>configure service ipipe</b> <i>string sap string egress qos sap-egress port-redirect-group</i> |
| Tree     | <a href="#">port-redirect-group</a>   |

Introduced 20.10.R1  
Platforms All

### **group-name** *reference*

Synopsis Name of the queue group redirect list policy  
Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [port-redirect-group](#) [group-name](#) *reference*  
Tree [group-name](#)  
Reference **configure** [qos](#) [queue-group-templates](#) [egress](#) [queue-group](#) *string*  
Introduced 20.10.R1  
Platforms All

### **instance** *number*

Synopsis Instance of port queue group  
Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [port-redirect-group](#) [instance](#) *number*  
Tree [instance](#)  
Range 1 to 65535  
Introduced 20.10.R1  
Platforms All

### **scheduler-policy**

Synopsis Enter the **scheduler-policy** context  
Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [scheduler-policy](#)  
Tree [scheduler-policy](#)  
Introduced 20.10.R1  
Platforms All

### **overrides**

Synopsis Enter the **overrides** context  
Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [scheduler-policy](#) [overrides](#)  
Tree [overrides](#)

|            |          |
|------------|----------|
| Introduced | 20.10.R1 |
| Platforms  | All      |

### **scheduler** [[scheduler-name](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>scheduler</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos scheduler-policy overrides</a><br><a href="#">scheduler</a> <i>string</i> |
| Tree       | <a href="#">scheduler</a>   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

### **[scheduler-name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Scheduler name   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos scheduler-policy overrides</a><br><a href="#">scheduler</a> <i>string</i>  |
| Tree          | <a href="#">scheduler</a>  |
| Description   | <p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.</p> |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 20.10.R1   |
| Platforms     | All  |

### **parent**

|          |                                 |
|----------|---------------------------------|
| Synopsis | Enter the <b>parent</b> context |
|----------|---------------------------------|



|            |  |
|------------|--|
| Context    | <b>configure service ipipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos scheduler-policy overrides scheduler</b> <i>string</i> <b>parent</b> |
| Tree       | <b>parent</b>  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

### **cir-weight** *number*

|            |   |
|------------|---|
| Synopsis   | Weight used at the within-CIR port priority level   |
| Context    | <b>configure service ipipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos scheduler-policy overrides scheduler</b> <i>string</i> <b>parent cir-weight</b> <i>number</i> |
| Tree       | <b>cir-weight</b>   |
| Range      | 0 to 100  |
| Introduced | 20.10.R1  |
| Platforms  | All   |

### **weight** *number*

|            |   |
|------------|---|
| Synopsis   | Relative weight of the scheduler to feed the queue  |
| Context    | <b>configure service ipipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos scheduler-policy overrides scheduler</b> <i>string</i> <b>parent weight</b> <i>number</i> |
| Tree       | <b>weight</b>   |
| Range      | 0 to 100  |
| Introduced | 20.10.R1  |
| Platforms  | All   |

### **rate**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>rate</b> context  |
| Context    | <b>configure service ipipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos scheduler-policy overrides scheduler</b> <i>string</i> <b>rate</b> |
| Tree       | <b>rate</b>  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**cir** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | CIR at which the queue it to operate  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">rate</a> <b>cir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cir</a>   |
| Range      | 0 to 6400000000   |
| Units      | kilobps   |
| Options    | sum, max  |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**pir** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | PIR at which the queue is to operate  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">rate</a> <b>pir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">pir</a>   |
| Range      | 1 to 6400000000   |
| Units      | kilobps   |
| Options    | max   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**policy-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Scheduler policy name   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">scheduler-policy</a> <i>string</i>   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**endpoint** *reference*

|          |               |
|----------|---------------|
| Synopsis | Endpoint name |
|----------|---------------|

|            |  |
|------------|--|
| Context    | <b>configure service ipipe</b> <i>string sap string endpoint reference</i> |
| Tree       | <a href="#">endpoint</a>   |
| Reference  | <b>configure service ipipe</b> <i>string endpoint string</i>               |
| Introduced | 20.10.R1   |
| Platforms  | All  |

## ingress

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ingress</b> context                                |
| Context    | <b>configure service ipipe</b> <i>string sap string ingress</i> |
| Tree       | <a href="#">ingress</a>   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

## filter

|            |  |
|------------|--|
| Synopsis   | Enter the <b>filter</b> context  |
| Context    | <b>configure service ipipe</b> <i>string sap string ingress filter</i> |
| Tree       | <a href="#">filter</a>   |
| Introduced | 20.10.R1   |
| Platforms  | All  |

## ip reference

|            |   |
|------------|---|
| Synopsis   | IPv4 filter policy name   |
| Context    | <b>configure service ipipe</b> <i>string sap string ingress filter ip reference</i> |
| Tree       | <a href="#">ip</a>  |
| Reference  | <b>configure filter ip-filter</b> <i>string</i>                                     |
| Introduced | 20.10.R1  |
| Platforms  | All   |

## ipv6 reference

|          |   |
|----------|---|
| Synopsis | IPv6 filter policy name   |
| Context  | <b>configure service ipipe</b> <i>string sap string ingress filter ipv6 reference</i> |

|            |   |
|------------|---|
| Tree       | <a href="#">ipv6</a>  |
| Reference  | <b>configure filter</b> <a href="#">ipv6-filter</a> <i>string</i> |
| Introduced | 20.10.R1  |
| Platforms  | All   |

## qos

|            |   |
|------------|---|
| Synopsis   | Enter the <b>qos</b> context  |
| Context    | <b>configure service ipipe</b> <i>string sap string ingress qos</i> |
| Tree       | <a href="#">qos</a>   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

## match-qinq-dot1p *keyword*

|            |  |
|------------|--|
| Synopsis   | Ingress match QinQ Dot1p   |
| Context    | <b>configure service ipipe</b> <i>string sap string ingress qos match-qinq-dot1p keyword</i> |
| Tree       | <a href="#">match-qinq-dot1p</a>   |
| Options    | top, bottom  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

## policer-control-policy

|            |  |
|------------|--|
| Synopsis   | Enter the <b>policer-control-policy</b> context  |
| Context    | <b>configure service ipipe</b> <i>string sap string ingress qos policer-control-policy</i> |
| Tree       | <a href="#">policer-control-policy</a>   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR                                     |

## overrides

|          |  |
|----------|--|
| Synopsis | Enable the <b>overrides</b> context  |
| Context  | <b>configure service ipipe</b> <i>string sap string ingress qos policer-control-policy overrides</i> |
| Tree     | <a href="#">overrides</a>  |

Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## root

Synopsis Enter the **root** context  
 Context **configure service ipipe string sap string ingress qos policer-control-policy overrides root**  
 Tree [root](#)  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## max-rate (*number | keyword*)

Synopsis Maximum frame-based bandwidth limit  
 Context **configure service ipipe string sap string ingress qos policer-control-policy overrides root**  
[max-rate \(\*number | keyword\*\)](#)  
 Tree [max-rate](#)  
 Range 1 to 6400000000  
 Options max  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## priority-mbs-thresholds

Synopsis Enter the **priority-mbs-thresholds** context  
 Context **configure service ipipe string sap string ingress qos policer-control-policy overrides root**  
[priority-mbs-thresholds](#)  
 Tree [priority-mbs-thresholds](#)  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## min-thresh-separation (*number | keyword*)

Synopsis Minimum amount of separation buffer space  
 Context **configure service ipipe string sap string ingress qos policer-control-policy overrides root**  
[priority-mbs-thresholds min-thresh-separation \(\*number | keyword\*\)](#)

|            |  |
|------------|--|
| Tree       | <a href="#">min-thresh-separation</a>                  |
| Range      | 0 to 16777216  |
| Units      | bytes  |
| Options    | auto   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

### **priority** [[priority-level](#)] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>priority</b> list instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i> |
| Tree       | <a href="#">priority</a>  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

### **[priority-level]** *number*

|            |   |
|------------|---|
| Synopsis   | Priority level  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i> |
| Tree       | <a href="#">priority</a>  |
| Range      | 1 to 8  |
| Notes      | This element is part of a list key.   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

### **mbs-contribution** (*number* | *keyword*)

|          |   |
|----------|---|
| Synopsis | Minimum amount of cumulative buffer space allowed   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i> <a href="#">mbs-contribution</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <a href="#">mbs-contribution</a>  |
| Range    | 0 to 16777216   |
| Units    | bytes   |
| Options  | auto  |

|            |  |
|------------|--|
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

### **policy-name** *reference*

|            |  |
|------------|--|
| Synopsis   | Policer control policy name  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">policer-control-policy</a> <i>string</i>  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

### **sap-ingress**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>sap-ingress</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> |
| Tree       | <a href="#">sap-ingress</a>  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

### **fp-redirect-group**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>fp-redirect-group</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">fp-redirect-group</a> |
| Tree       | <a href="#">fp-redirect-group</a>  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

### **group-name** *reference*

|           |  |
|-----------|--|
| Synopsis  | Queue group template name created on forwarding plane  |
| Context   | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">fp-redirect-group</a> <a href="#">group-name</a> <i>reference</i> |
| Tree      | <a href="#">group-name</a>   |
| Reference | <b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">ingress</a> <a href="#">queue-group</a> <i>string</i>   |

Introduced 20.10.R1  
 Platforms All

### **instance** *number*

Synopsis Queue group instance  
 Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [fp-redirect-group](#)  
[instance](#) *number*  
 Tree [instance](#)  
 Range 1 to 65535  
 Introduced 20.10.R1  
 Platforms All

### **overrides**

Synopsis Enter the **overrides** context  
 Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#)  
 Tree [overrides](#)  
 Introduced 20.10.R1  
 Platforms All

### **policer** [[policer-id](#)] *reference*

Synopsis Enter the **policer** list instance  
 Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [policer](#)  
[reference](#)  
 Tree [policer](#)  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **[policer-id]** *reference*

Synopsis Policer unique ID  
 Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [policer](#)  
[reference](#)  
 Tree [policer](#)



|            |   |
|------------|---|
| Reference  | <b>configure qos sap-ingress</b> <i>string</i> <b>policer</b> <i>number</i> |
| Notes      | This element is part of a list key.   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR                      |

**cbs** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | CBS  |
| Context    | <b>configure service ipipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides policer</b><br><i>reference</i> <b>cbs</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <b>cbs</b>   |
| Range      | 0 to 268435456   |
| Units      | bytes  |
| Options    | auto   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**mbs** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | MBS  |
| Context    | <b>configure service ipipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides policer</b><br><i>reference</i> <b>mbs</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <b>mbs</b>   |
| Range      | 0 to 268435456   |
| Units      | bytes  |
| Options    | auto   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**packet-byte-offset** *number*

|          |  |
|----------|--|
| Synopsis | Packet size modification for policing information  |
| Context  | <b>configure service ipipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides policer</b><br><i>reference</i> <b>packet-byte-offset</b> <i>number</i> |
| Tree     | <b>packet-byte-offset</b>  |
| Range    | -32 to 31  |

|            |  |
|------------|--|
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

## percent-rate

|            |  |
|------------|--|
| Synopsis   | Enter the <b>percent-rate</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>percent-rate</b> |
| Tree       | <a href="#">percent-rate</a>   |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

## cir decimal-number

|            |  |
|------------|--|
| Synopsis   | CIR percent rate   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">percent-rate</a> <b>cir</b> <i>decimal-number</i> |
| Tree       | <a href="#">cir</a>  |
| Range      | 0.00 to 100.00   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

## pir decimal-number

|            |  |
|------------|--|
| Synopsis   | PIR percent rate   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">percent-rate</a> <b>pir</b> <i>decimal-number</i> |
| Tree       | <a href="#">pir</a>  |
| Range      | 0.01 to 100.00   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

## rate

|          |                               |
|----------|-------------------------------|
| Synopsis | Enter the <b>rate</b> context |
|----------|-------------------------------|

|            |  |
|------------|--|
| Context    | <b>configure service ipipe</b> <i>string sap string ingress qos sap-ingress overrides policer reference rate</i> |
| Tree       | <a href="#">rate</a>   |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .                                |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**cir** (*number | keyword*)

|            |  |
|------------|--|
| Synopsis   | CIR rate   |
| Context    | <b>configure service ipipe</b> <i>string sap string ingress qos sap-ingress overrides policer reference rate cir</i> ( <i>number   keyword</i> ) |
| Tree       | <a href="#">cir</a>  |
| Range      | 0 to 6400000000  |
| Units      | kilobps  |
| Options    | max  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**pir** (*number | keyword*)

|            |  |
|------------|--|
| Synopsis   | PIR rate   |
| Context    | <b>configure service ipipe</b> <i>string sap string ingress qos sap-ingress overrides policer reference rate pir</i> ( <i>number   keyword</i> ) |
| Tree       | <a href="#">pir</a>  |
| Range      | 1 to 6400000000  |
| Units      | kilobps  |
| Options    | max  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**stat-mode** *keyword*

|          |  |
|----------|--|
| Synopsis | Mode of statistics collected by the policer  |
| Context  | <b>configure service ipipe</b> <i>string sap string ingress qos sap-ingress overrides policer reference stat-mode</i> <i>keyword</i> |

|            |   |
|------------|---|
| Tree       | <a href="#">stat-mode</a>   |
| Options    | no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

### **queue** [\[queue-id\]](#) *reference*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>queue</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> |
| Tree       | <a href="#">queue</a>   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

### **[queue-id]** *reference*

|            |   |
|------------|---|
| Synopsis   | Policer unique ID   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> |
| Tree       | <a href="#">queue</a>   |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">sap-ingress</a> <i>string</i> <a href="#">queue</a> <i>number</i>  |
| Notes      | This element is part of a list key.   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

### **adaptation-rule**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>adaptation-rule</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">adaptation-rule</a> |
| Tree       | <a href="#">adaptation-rule</a>   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**cir keyword**

|            |   |
|------------|---|
| Synopsis   | Constraint used when deriving the operational CIR value   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a><br><a href="#">reference</a> <a href="#">adaptation-rule</a> <a href="#">cir</a> <a href="#">keyword</a> |
| Tree       | <a href="#">cir</a>   |
| Options    | max, min, closest   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**pir keyword**

|            |   |
|------------|---|
| Synopsis   | Constraint used when deriving the operational PIR value   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a><br><a href="#">reference</a> <a href="#">adaptation-rule</a> <a href="#">pir</a> <a href="#">keyword</a> |
| Tree       | <a href="#">pir</a>   |
| Options    | max, min, closest   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**cbs (number | keyword)**

|            |  |
|------------|--|
| Synopsis   | CBS  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a><br><a href="#">reference</a> <a href="#">cbs</a> <a href="#">(number   keyword)</a> |
| Tree       | <a href="#">cbs</a>  |
| Range      | 0 to 1048576   |
| Units      | kilobytes  |
| Options    | auto   |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**drop-tail**

|          |   |
|----------|---|
| Synopsis | Enter the <b>drop-tail</b> context  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a><br><a href="#">reference</a> <a href="#">drop-tail</a> |

|            |                           |
|------------|---------------------------|
| Tree       | <a href="#">drop-tail</a> |
| Introduced | 20.10.R1                  |
| Platforms  | All                       |

**low**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>low</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">drop-tail</a> <a href="#">low</a> |
| Tree       | <a href="#">low</a>  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**percent-reduction-from-mbs** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Percentage reduction from the MBS for a queue drop tail  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">drop-tail</a> <a href="#">low</a> <a href="#">percent-reduction-from-mbs</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">percent-reduction-from-mbs</a>   |
| Range      | 0 to 100   |
| Options    | auto   |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**mbs** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | MBS   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">mbs</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">mbs</a>   |
| Range      | 0 to 1073741824   |
| Units      | bytes   |
| Options    | auto  |
| Introduced | 20.10.R1  |
| Platforms  | All   |

## monitor-queue-depth

|            |  |
|------------|--|
| Synopsis   | Enable the <b>monitor-queue-depth</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">monitor-queue-depth</a> |
| Tree       | <a href="#">monitor-queue-depth</a>  |
| Introduced | 21.7.R1  |
| Platforms  | All  |

## fast-polling *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable fast polling of the queue depth   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">monitor-queue-depth</a> <a href="#">fast-polling</a> <i>boolean</i> |
| Tree       | <a href="#">fast-polling</a>   |
| Default    | false  |
| Introduced | 21.7.R1  |
| Platforms  | All  |

## parent

|            |   |
|------------|---|
| Synopsis   | Enter the <b>parent</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">parent</a> |
| Tree       | <a href="#">parent</a>  |
| Introduced | 20.10.R1  |
| Platforms  | All   |

## cir-weight *number*

|            |  |
|------------|--|
| Synopsis   | CIR parameter that overrides parent for queue group  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">parent</a> <a href="#">cir-weight</a> <i>number</i> |
| Tree       | <a href="#">cir-weight</a>   |
| Range      | 0 to 100   |
| Introduced | 20.10.R1   |

Platforms All

### **weight** *number*

Synopsis PIR parameter that overrides parent for queue group

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#)  
*reference* [parent](#) [weight](#) *number*

Tree [weight](#)

Range 0 to 100

Introduced 20.10.R1

Platforms All

### **percent-rate**

Synopsis Enter the **percent-rate** context

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#)  
*reference* [percent-rate](#)

Tree [percent-rate](#)

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 20.10.R1

Platforms All

### **cir** *decimal-number*

Synopsis CIR percent rate

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#)  
*reference* [percent-rate](#) [cir](#) *decimal-number*

Tree [cir](#)

Range 0.00 to 100.00

Introduced 20.10.R1

Platforms All

### **pir** *decimal-number*

Synopsis PIR percent rate



|            |   |
|------------|---|
| Context    | <b>configure service ipipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides queue reference percent-rate pir</b> <i>decimal-number</i> |
| Tree       | <a href="#">pir</a>   |
| Range      | 0.01 to 100.00  |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**rate**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>rate</b> context   |
| Context    | <b>configure service ipipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides queue reference rate</b> |
| Tree       | <a href="#">rate</a>  |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**cir** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | CIR rate   |
| Context    | <b>configure service ipipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides queue reference rate cir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cir</a>  |
| Range      | 0 to 6400000000  |
| Units      | kilobps  |
| Options    | max  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**pir** (*number* | *keyword*)

|          |  |
|----------|--|
| Synopsis | PIR rate   |
| Context  | <b>configure service ipipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides queue reference rate pir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <a href="#">pir</a>  |
| Range    | 1 to 6400000000  |

|            |          |
|------------|----------|
| Units      | kilobps  |
| Options    | max      |
| Introduced | 20.10.R1 |
| Platforms  | All      |

### **policy-name** *reference*

|            |  |
|------------|--|
| Synopsis   | Policy ID  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <b>policy-name</b> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">sap-ingress</a> <i>string</i>   |
| Introduced | 20.10.R1   |
| Platforms  | All  |

### **queuing-type** *keyword*

|            |   |
|------------|---|
| Synopsis   | Queuing type  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <b>queuing-type</b> <i>keyword</i> |
| Tree       | <a href="#">queuing-type</a>  |
| Options    | shared, multipoint-shared   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR   |

### **scheduler-policy**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>scheduler-policy</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <b>scheduler-policy</b> |
| Tree       | <a href="#">scheduler-policy</a>   |
| Introduced | 20.10.R1   |
| Platforms  | All  |

### **overrides**

|          |   |
|----------|---|
| Synopsis | Enter the <b>overrides</b> context  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <b>scheduler-policy</b> <b>overrides</b> |

|            |                           |
|------------|---------------------------|
| Tree       | <a href="#">overrides</a> |
| Introduced | 20.10.R1                  |
| Platforms  | All                       |

### **scheduler** [[scheduler-name](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>scheduler</b> list instance  |
| Context    | <a href="#">configure service ipipe string sap string ingress qos scheduler-policy overrides scheduler string</a> |
| Tree       | <a href="#">scheduler</a>   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

### **[scheduler-name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Scheduler name   |
| Context       | <a href="#">configure service ipipe string sap string ingress qos scheduler-policy overrides scheduler string</a>  |
| Tree          | <a href="#">scheduler</a>  |
| Description   | <p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (<code>#</code>, <code>\$</code>, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.</p> |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 20.10.R1   |
| Platforms     | All  |

**parent**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>parent</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <b>parent</b> |
| Tree       | <a href="#">parent</a>  |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**cir-weight** *number*

|            |  |
|------------|--|
| Synopsis   | Weight used at the within-CIR port priority level  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">parent</a> <b>cir-weight</b> <i>number</i> |
| Tree       | <a href="#">cir-weight</a>   |
| Range      | 0 to 100   |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**weight** *number*

|            |  |
|------------|--|
| Synopsis   | Relative weight of the scheduler to feed the queue   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">parent</a> <b>weight</b> <i>number</i> |
| Tree       | <a href="#">weight</a>   |
| Range      | 0 to 100   |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**rate**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>rate</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <b>rate</b> |
| Tree       | <a href="#">rate</a>  |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**cir** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | CIR at which the queue it to operate   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">rate</a> <b>cir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cir</a>  |
| Range      | 0 to 6400000000  |
| Units      | kilobps  |
| Options    | sum, max   |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**pir** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | PIR at which the queue is to operate   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">rate</a> <b>pir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">pir</a>  |
| Range      | 1 to 6400000000  |
| Units      | kilobps  |
| Options    | max  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**policy-name** *reference*

|            |  |
|------------|--|
| Synopsis   | Scheduler policy name  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">scheduler-policy</a> <i>string</i>  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

## lag

|            |  |
|------------|--|
| Synopsis   | Enter the <b>lag</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">lag</a> |
| Tree       | <a href="#">lag</a>  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

## link-map-profile *number*

|             |   |
|-------------|---|
| Synopsis    | LAG link map profile for a SAP or network interface   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">lag</a> <a href="#">link-map-profile</a> <i>number</i>   |
| Tree        | <a href="#">link-map-profile</a>  |
| Description | <p>This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration.</p> <p>If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.</p> |
| Range       | 1 to 64   |
| Introduced  | 20.10.R1  |
| Platforms   | All   |

## per-link-hash

|            |  |
|------------|--|
| Synopsis   | Enter the <b>per-link-hash</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">lag</a> <a href="#">per-link-hash</a> |
| Tree       | <a href="#">per-link-hash</a>  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

## class *number*

|          |  |
|----------|--|
| Synopsis | Class used on LAG egress using weighted per-link-hash  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">lag</a> <a href="#">per-link-hash</a> <a href="#">class</a> <i>number</i> |
| Tree     | <a href="#">class</a>  |
| Range    | 1 to 3   |

|            |          |
|------------|----------|
| Default    | 1        |
| Introduced | 20.10.R1 |
| Platforms  | All      |

**weight** *number*

|            |   |
|------------|---|
| Synopsis   | Weight used on LAG egress using weighted per-link-hash  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">lag</a> <a href="#">per-link-hash</a> <a href="#">weight</a> <i>number</i> |
| Tree       | <a href="#">weight</a>  |
| Range      | 1 to 1024   |
| Default    | 1   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**mac** *string*

|            |  |
|------------|--|
| Synopsis   | MAC address of the Ipipe Ethernet SAP  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">mac</a> <i>string</i> |
| Tree       | <a href="#">mac</a>  |
| Default    | 00:00:00:00:00:00  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**mac-refresh** *number*

|            |  |
|------------|--|
| Synopsis   | MAC refresh interval   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">mac-refresh</a> <i>number</i> |
| Tree       | <a href="#">mac-refresh</a>  |
| Range      | 0 to 65535   |
| Default    | 14400  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**multi-service-site** *reference*

|            |  |
|------------|--|
| Synopsis   | Multi service site name  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">multi-service-site</a> <i>reference</i> |
| Tree       | <a href="#">multi-service-site</a>   |
| Reference  | <b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i>                                   |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**transit-policy**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>transit-policy</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">transit-policy</a> |
| Tree       | <a href="#">transit-policy</a>  |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**prefix** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | IP prefix policy ID  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">transit-policy</a> <a href="#">prefix</a> <i>reference</i>  |
| Tree       | <a href="#">prefix</a>   |
| Reference  | <b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-prefix-policy</a> <i>number</i> |
| Notes      | This element is mandatory.   |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**use-broadcast-mac** *boolean*

|          |   |
|----------|---|
| Synopsis | Allow broadcast MAC on SAP  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">use-broadcast-mac</a> <i>boolean</i> |
| Tree     | <a href="#">use-broadcast-mac</a>   |



|            |          |
|------------|----------|
| Default    | false    |
| Introduced | 20.10.R1 |
| Platforms  | All      |

### **service-id** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Service ID   |
| Context    | <b>configure service ipipe</b> <i>string service-id number</i> |
| Tree       | <a href="#">service-id</a>                                     |
| Range      | 1 to 2147483647  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

### **service-mtu** *number*

|             |   |
|-------------|---|
| Synopsis    | MTU size  |
| Context     | <b>configure service ipipe</b> <i>string service-mtu number</i>   |
| Tree        | <a href="#">service-mtu</a>   |
| Description | This command configures the Maximum Transmission Unit (MTU) value (payload) for the service. The system uses the value to validate the operational state of the SAP and SDP binding within the service. The value overrides the default MTU for the service type. |

The service MTU and a SAP's service delineation encapsulation overhead (4 bytes for a dot1q tag) are used to derive the required MTU of the physical port or channel on which the SAP was created. If the required payload is larger than the port or channel MTU, the SAP is placed in an inoperative state. If the required MTU is equal to or less than the port or channel MTU, the SAP transitions to the operative state.

When binding an SDP to a service, the service MTU is compared to the path MTU associated with the SDP. The path MTU can be administratively defined in the context of the SDP. The default or administrative path MTU can be dynamically reduced due to the MTU capabilities discovered by the tunneling mechanism of the SDP or the egress interface MTU capabilities based on the next hop in the tunnel path. If the service MTU is larger than the path MTU, the SDP binding for the service is placed in an inoperative state. If the service MTU is equal to or less than the path MTU, the SDP binding is placed in an operational state.

If a service MTU, port or channel MTU, or path MTU is dynamically or administratively modified, all associated SAP and SDP binding operational states are automatically reevaluated.

Binding operational states are automatically reevaluated.

For I-VPLS and Epipe bound to a B-VPLS, the service MTU must be at least 18 bytes smaller than the B-VPLS service MTU to accommodate the PBB header.

Because this connects a Layer 2 to a Layer 3 service, adjust the service MTU under the Epipe service. The MTU that is advertised from the Epipe side is service MTU minus EtherHeaderSize.

In the **configure service epipe spoke-sdp** context, the **adv-service-mtu** command can be used to override the configured MTU value used in T-LDP signaling to the far-end of an Epipe spoke-sdp. The **adv-service-mtu** command is also used to validate the value signaled by the far-end PE.

|            |           |
|------------|-----------|
| Range      | 1 to 9194 |
| Introduced | 20.10.R1  |
| Platforms  | All       |

### **spoke-sdp** [**sdp-bind-id**] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>spoke-sdp</b> list instance               |
| Context    | <b>configure service ipipe string spoke-sdp string</b> |
| Tree       | <b>spoke-sdp</b>                                       |
| Introduced | 20.10.R1   |
| Platforms  | All  |

### **[sdp-bind-id]** *string*

|               |  |
|---------------|--|
| Synopsis      | SDP binding ID   |
| Context       | <b>configure service ipipe string spoke-sdp string</b> |
| Tree          | <b>spoke-sdp</b>                                       |
| String Length | 3 to 16  |
| Notes         | This element is part of a list key.                    |
| Introduced    | 20.10.R1   |
| Platforms     | All  |

### **aarp**

|          |                                |
|----------|--------------------------------|
| Synopsis | Enable the <b>aarp</b> context |
|----------|--------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">service ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">aarp</a> |
| Tree       | <a href="#">aarp</a>  |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**id** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | AARP instance ID   |
| Context    | <b>configure</b> <a href="#">service ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">aarp</a> <i>id</i> <i>reference</i> |
| Tree       | <a href="#">id</a>   |
| Reference  | <b>configure</b> <a href="#">application-assurance</a> <a href="#">aarp</a> <i>number</i>  |
| Notes      | This element is mandatory.   |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Role of the spoke SDP referenced by the AARP   |
| Context    | <b>configure</b> <a href="#">service ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">aarp</a> <i>type</i> <i>keyword</i> |
| Tree       | <a href="#">type</a>   |
| Options    | subscriber-side-shunt, network-side-shunt  |
| Notes      | This element is mandatory.   |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**admin-state** *keyword*

|          |  |
|----------|--|
| Synopsis | Administrative state of the SDP binding to the service |
|----------|--|

|            |   |
|------------|---|
| Context    | <b>configure service ipipe</b> <i>string spoke-sdp string admin-state keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 20.10.R1  |
| Platforms  | All   |

### **app-profile** *reference*

|            |   |
|------------|---|
| Synopsis   | Application profile name for this SDP   |
| Context    | <b>configure service ipipe</b> <i>string spoke-sdp string app-profile reference</i>                   |
| Tree       | <a href="#">app-profile</a>   |
| Reference  | <b>configure application-assurance group</b> <i>number partition number policy app-profile string</i> |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **bandwidth** (*number | keyword*)

|            |  |
|------------|--|
| Synopsis   | Bandwidth that is reserved for this SDP binding  |
| Context    | <b>configure service ipipe</b> <i>string spoke-sdp string bandwidth (number   keyword)</i> |
| Tree       | <a href="#">bandwidth</a>  |
| Range      | 0 to 100000000   |
| Units      | kilobps  |
| Options    | max  |
| Default    | 0  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

### **bfd**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>bfd</b> context                                      |
| Context    | <b>configure service ipipe</b> <i>string spoke-sdp string bfd</i> |
| Tree       | <a href="#">bfd</a>   |
| Introduced | 21.2.R1   |
| Platforms  | All   |

**bfd-liveness**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>bfd-liveness</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">bfd</a> <a href="#">bfd-liveness</a> |
| Tree       | <a href="#">bfd-liveness</a>  |
| Introduced | 21.2.R1   |
| Platforms  | All   |

**encap** *keyword*

|            |  |
|------------|--|
| Synopsis   | BFD encapsulation used on the SDP binding  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">bfd</a> <a href="#">bfd-liveness</a> <a href="#">encap</a> <i>keyword</i> |
| Tree       | <a href="#">encap</a>  |
| Options    | ipv4   |
| Default    | ipv4   |
| Introduced | 21.2.R1  |
| Platforms  | All  |

**bfd-template** *reference*

|             |   |
|-------------|---|
| Synopsis    | BFD template associated with the SDP binding  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">bfd</a> <a href="#">bfd-template</a> <i>reference</i>  |
| Tree        | <a href="#">bfd-template</a>  |
| Description | This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the <b>configure router bfd</b> context. |
| Reference   | <b>configure</b> <a href="#">bfd</a> <a href="#">bfd-template</a> <i>string</i>   |
| Introduced  | 21.2.R1   |
| Platforms   | All   |

**ce-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

|          |   |
|----------|---|
| Synopsis | IP address of the CE device   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ce-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |

|            |                            |
|------------|----------------------------|
| Tree       | <a href="#">ce-address</a> |
| Introduced | 20.10.R1                   |
| Platforms  | All                        |

**control-word** *boolean*

|            |   |
|------------|---|
| Synopsis   | Use control word as part of packet encapsulation  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>control-word</b> <i>boolean</i> |
| Tree       | <a href="#">control-word</a>  |
| Default    | false   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 20.10.R1  |
| Platforms     | All   |

**egress**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>egress</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>egress</b> |
| Tree       | <a href="#">egress</a>   |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**filter**

|          |  |
|----------|--|
| Synopsis | Enter the <b>filter</b> context  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>egress</b> <b>filter</b> |
| Tree     | <a href="#">filter</a>   |

Introduced 20.10.R1  
 Platforms All

### **ip reference**

Synopsis IPv4 filter policy name  
 Context **configure** [service ipipe](#) *string* [spoke-sdp](#) *string* [egress filter ip reference](#)  
 Tree [ip](#)  
 Reference **configure** [filter ip-filter](#) *string*  
 Introduced 20.10.R1  
 Platforms All

### **ipv6 reference**

Synopsis IPv6 filter policy name  
 Context **configure** [service ipipe](#) *string* [spoke-sdp](#) *string* [egress filter ipv6 reference](#)  
 Tree [ipv6](#)  
 Reference **configure** [filter ipv6-filter](#) *string*  
 Introduced 20.10.R1  
 Platforms All

### **qos**

Synopsis Enter the **qos** context  
 Context **configure** [service ipipe](#) *string* [spoke-sdp](#) *string* [egress qos](#)  
 Tree [qos](#)  
 Introduced 20.10.R1  
 Platforms All

### **network**

Synopsis Enter the **network** context  
 Context **configure** [service ipipe](#) *string* [spoke-sdp](#) *string* [egress qos network](#)  
 Tree [network](#)  
 Introduced 20.10.R1

Platforms All

### **policy-name** *reference*

Synopsis Network policy ID

Context **configure** [service](#) [ipipe](#) *string* [spoke-sdp](#) *string* [egress](#) [qos](#) [network](#) [policy-name](#) *reference*

Tree [policy-name](#)

Reference **configure** [qos](#) [network](#) *string*

Introduced 20.10.R1

Platforms All

### **port-redirect-group**

Synopsis Enter the **port-redirect-group** context

Context **configure** [service](#) [ipipe](#) *string* [spoke-sdp](#) *string* [egress](#) [qos](#) [network](#) [port-redirect-group](#)

Tree [port-redirect-group](#)

Introduced 20.10.R1

Platforms All

### **group-name** *reference*

Synopsis Name of the egress port queue group

Context **configure** [service](#) [ipipe](#) *string* [spoke-sdp](#) *string* [egress](#) [qos](#) [network](#) [port-redirect-group](#) [group-name](#) *reference*

Tree [group-name](#)

Reference **configure** [qos](#) [queue-group-templates](#) [egress](#) [queue-group](#) *string*

Introduced 20.10.R1

Platforms All

### **instance** *number*

Synopsis Queue-group instance ID

Context **configure** [service](#) [ipipe](#) *string* [spoke-sdp](#) *string* [egress](#) [qos](#) [network](#) [port-redirect-group](#) [instance](#) *number*

Tree [instance](#)



|            |            |
|------------|------------|
| Range      | 1 to 65535 |
| Introduced | 20.10.R1   |
| Platforms  | All        |

**vc-label** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Egress MPLS VC label to send packets to the far end  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">vc-label</a> <i>number</i> |
| Tree       | <a href="#">vc-label</a>   |
| Range      | 16 to 1048575  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**endpoint**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>endpoint</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">endpoint</a> |
| Tree       | <a href="#">endpoint</a>  |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**name** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Endpoint name to which SDP bind is attached  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">endpoint</a> <i>name</i> <i>reference</i> |
| Tree       | <a href="#">name</a>   |
| Reference  | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">endpoint</a> <i>string</i>  |
| Introduced | 20.10.R1   |

Platforms All

### **precedence** (*number* | *keyword*)

Synopsis Precedence when multiple SDP binds are on one endpoint

Context **configure** [service](#) [ipipe](#) *string* [spoke-sdp](#) *string* [endpoint](#) [precedence](#) (*number* | *keyword*)

Tree [precedence](#)

Range 1 to 4

Options primary

Default 4

Introduced 20.10.R1

Platforms All

### **entropy-label**

Synopsis Enable the use of entropy labels for spoke SDPs

Context **configure** [service](#) [ipipe](#) *string* [spoke-sdp](#) *string* [entropy-label](#)

Tree [entropy-label](#)

Notes The following elements are part of a choice: **entropy-label** or **hash-label**.

Introduced 20.10.R1

Platforms All

### **hash-label**

Synopsis Enable the **hash-label** context

Context **configure** [service](#) [ipipe](#) *string* [spoke-sdp](#) *string* [hash-label](#)

Tree [hash-label](#)

Notes The following elements are part of a choice: **entropy-label** or **hash-label**.

Introduced 20.10.R1

Platforms All

### **signal-capability**

Synopsis Enable the signaling of the hash label between PE nodes

|            |  |
|------------|--|
| Context    | <b>configure service ipipe</b> <i>string spoke-sdp string hash-label signal-capability</i> |
| Tree       | <a href="#">signal-capability</a>  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

## ingress

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ingress</b> context                                      |
| Context    | <b>configure service ipipe</b> <i>string spoke-sdp string ingress</i> |
| Tree       | <a href="#">ingress</a>   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

## filter

|            |  |
|------------|--|
| Synopsis   | Enter the <b>filter</b> context  |
| Context    | <b>configure service ipipe</b> <i>string spoke-sdp string ingress filter</i> |
| Tree       | <a href="#">filter</a>   |
| Introduced | 20.10.R1   |
| Platforms  | All  |

## ip reference

|            |   |
|------------|---|
| Synopsis   | IPv4 filter policy name   |
| Context    | <b>configure service ipipe</b> <i>string spoke-sdp string ingress filter ip reference</i> |
| Tree       | <a href="#">ip</a>  |
| Reference  | <b>configure filter ip-filter</b> <i>string</i>   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

## ipv6 reference

|          |   |
|----------|---|
| Synopsis | IPv6 filter policy name   |
| Context  | <b>configure service ipipe</b> <i>string spoke-sdp string ingress filter ipv6 reference</i> |
| Tree     | <a href="#">ipv6</a>  |

|            |   |
|------------|---|
| Reference  | <b>configure</b> <a href="#">filter ipv6-filter</a> <i>string</i> |
| Introduced | 20.10.R1  |
| Platforms  | All   |

## qos

|            |  |
|------------|--|
| Synopsis   | Enter the <b>qos</b> context   |
| Context    | <b>configure</b> <a href="#">service ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress qos</a> |
| Tree       | <a href="#">qos</a>  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

## network

|            |  |
|------------|--|
| Synopsis   | Enter the <b>network</b> context   |
| Context    | <b>configure</b> <a href="#">service ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress qos network</a> |
| Tree       | <a href="#">network</a>  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

## fp-redirect-group

|            |  |
|------------|--|
| Synopsis   | Enter the <b>fp-redirect-group</b> context   |
| Context    | <b>configure</b> <a href="#">service ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress qos network fp-redirect-group</a> |
| Tree       | <a href="#">fp-redirect-group</a>  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

## group-name *reference*

|           |  |
|-----------|--|
| Synopsis  | Name of the forwarding plane queue group template  |
| Context   | <b>configure</b> <a href="#">service ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress qos network fp-redirect-group</a> <a href="#">group-name</a> <i>reference</i> |
| Tree      | <a href="#">group-name</a>   |
| Reference | <b>configure</b> <a href="#">qos queue-group-templates</a> <a href="#">ingress queue-group</a> <i>string</i>   |

Introduced 20.10.R1  
 Platforms All

### **instance** *number*

Synopsis Instance of FP ingress queue group for the SDP binding  
 Context **configure** [service](#) [ipipe](#) *string* [spoke-sdp](#) *string* [ingress](#) [qos](#) [network](#) [fp-redirect-group](#) [instance](#) *number*  
 Tree [instance](#)  
 Range 1 to 65535  
 Introduced 20.10.R1  
 Platforms All

### **policy-name** *reference*

Synopsis Network policy ID  
 Context **configure** [service](#) [ipipe](#) *string* [spoke-sdp](#) *string* [ingress](#) [qos](#) [network](#) [policy-name](#) *reference*  
 Tree [policy-name](#)  
 Reference **configure** [qos](#) [network](#) *string*  
 Introduced 20.10.R1  
 Platforms All

### **vc-label** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Ingress MPLS VC label to send packets to the far end  
 Context **configure** [service](#) [ipipe](#) *string* [spoke-sdp](#) *string* [ingress](#) [vc-label](#) *number*  
 Tree [vc-label](#)  
 Range 1 to 1048575  
 Introduced 20.10.R1  
 Platforms All

## transit-policy

|            |   |
|------------|---|
| Synopsis   | Enable the <b>transit-policy</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">transit-policy</a> |
| Tree       | <a href="#">transit-policy</a>  |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## prefix *reference*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | IP prefix policy ID   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">transit-policy</a> <a href="#">prefix</a> <i>reference</i> |
| Tree       | <a href="#">prefix</a>  |
| Reference  | <b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-prefix-policy</a> <i>number</i>      |
| Notes      | This element is mandatory.  |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## vc-switching *boolean*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Use PW switching signaling for spoke SDPs in service   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">vc-switching</a> <i>boolean</i> |
| Tree       | <a href="#">vc-switching</a>   |
| Default    | false  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**vpn-id** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | VPN identifier for the service                             |
| Context    | <b>configure service ipipe</b> <i>string vpn-id number</i> |
| Tree       | <a href="#">vpn-id</a>                                     |
| Range      | 1 to 2147483647  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**mac-list** [[name](#)] *string*

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>mac-list</b> list instance   |
| Context     | <b>configure service mac-list</b> <i>string</i>   |
| Tree        | <a href="#">mac-list</a>  |
| Description | Commands in this context specify the MAC addresses to be included in a MAC list to be used with the Auto-Learn MAC Protect (ALMP) functionality. The list is used to exclude certain MAC addresses from protection, for example, on SAPs or spoke SDPs configured with ALMP where certain MAC addresses (such as VRRP virtual MAC addresses) must be able to move to other objects. |
| Introduced  | 20.5.R1   |
| Platforms   | All   |

**[name]** *string*

|               |   |
|---------------|---|
| Synopsis      | MAC list name                                   |
| Context       | <b>configure service mac-list</b> <i>string</i> |
| Tree          | <a href="#">mac-list</a>                        |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.             |
| Introduced    | 20.5.R1   |
| Platforms     | All   |

**description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">mac-list</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 20.5.R1   |
| Platforms     | All   |

**mac** [[address](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mac</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">mac-list</a> <i>string</i> <a href="#">mac</a> <i>string</i> |
| Tree       | <a href="#">mac</a>   |
| Introduced | 20.5.R1   |
| Platforms  | All   |

**[address]** *string*

|            |   |
|------------|---|
| Synopsis   | MAC address   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">mac-list</a> <i>string</i> <a href="#">mac</a> <i>string</i> |
| Tree       | <a href="#">mac</a>   |
| Notes      | This element is part of a list key.   |
| Introduced | 20.5.R1   |
| Platforms  | All   |

**mask** *string*

|            |  |
|------------|--|
| Synopsis   | Mask for the MAC address   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">mac-list</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">mask</a> <i>string</i> |
| Tree       | <a href="#">mask</a>   |
| Default    | ff:ff:ff:ff:ff:ff  |
| Introduced | 20.5.R1  |
| Platforms  | All  |



## md-auto-id

|            |                                     |
|------------|-------------------------------------|
| Synopsis   | Enter the <b>md-auto-id</b> context |
| Context    | <b>configure service md-auto-id</b> |
| Tree       | <a href="#">md-auto-id</a>          |
| Introduced | 16.0.R1                             |
| Platforms  | All                                 |

## customer-id-range

|            |   |
|------------|---|
| Synopsis   | Enable the <b>customer-id-range</b> context           |
| Context    | <b>configure service md-auto-id customer-id-range</b> |
| Tree       | <a href="#">customer-id-range</a>                     |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## end number

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Upper bound of the ID range                                      |
| Context    | <b>configure service md-auto-id customer-id-range end number</b> |
| Tree       | <a href="#">end</a>  |
| Range      | 2 to 2147483647  |
| Notes      | This element is mandatory.                                       |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## start number

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |                             |
|----------|-----------------------------|
| Synopsis | Lower bound of the ID range |
|----------|-----------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service md-auto-id customer-id-range start</b> <i>number</i> |
| Tree       | <a href="#">start</a>   |
| Range      | 2 to 2147483647   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## pw-template-id-range

|            |  |
|------------|--|
| Synopsis   | Enable the <b>pw-template-id-range</b> context           |
| Context    | <b>configure service md-auto-id pw-template-id-range</b> |
| Tree       | <a href="#">pw-template-id-range</a>                     |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## end *number*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Upper bound of the PW template ID range                                    |
| Context    | <b>configure service md-auto-id pw-template-id-range end</b> <i>number</i> |
| Tree       | <a href="#">end</a>  |
| Range      | 1 to 2147483647  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## start *number*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Lower bound of the PW template ID range |
|----------|---|

|            |  |
|------------|--|
| Context    | <b>configure service md-auto-id pw-template-id-range start</b> <i>number</i> |
| Tree       | <a href="#">start</a>  |
| Range      | 1 to 2147483647  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## service-id-range

|            |  |
|------------|--|
| Synopsis   | Enable the <b>service-id-range</b> context           |
| Context    | <b>configure service md-auto-id service-id-range</b> |
| Tree       | <a href="#">service-id-range</a>                     |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## end number



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Upper bound of the service ID range                                    |
| Context    | <b>configure service md-auto-id service-id-range end</b> <i>number</i> |
| Tree       | <a href="#">end</a>  |
| Range      | 1 to 2147483647  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## start number



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |                                     |
|----------|-------------------------------------|
| Synopsis | Lower bound of the service ID range |
|----------|-------------------------------------|

---

|            |  |
|------------|--|
| Context    | <b>configure service md-auto-id service-id-range start</b> <i>number</i> |
| Tree       | <a href="#">start</a>  |
| Range      | 1 to 2147483647  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## mrp

|            |                              |
|------------|------------------------------|
| Synopsis   | Enter the <b>mrp</b> context |
| Context    | <b>configure service mrp</b> |
| Tree       | <a href="#">mrp</a>          |
| Introduced | 20.10.R1                     |
| Platforms  | All                          |

## policy [[policy-name](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>policy</b> list instance             |
| Context    | <b>configure service mrp policy</b> <i>string</i> |
| Tree       | <a href="#">policy</a>                            |
| Introduced | 20.10.R1  |
| Platforms  | All   |

## [[policy-name](#)] *string*

|               |   |
|---------------|---|
| Synopsis      | Specify the policy name associated with the MRP   |
| Context       | <b>configure service mrp policy</b> <i>string</i> |
| Tree          | <a href="#">policy</a>                            |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.               |
| Introduced    | 20.10.R1  |
| Platforms     | All   |

**default-action** *keyword*

|            |  |
|------------|--|
| Synopsis   | Action for packets not matching any MRP policy entries   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">mrp</a> <a href="#">policy</a> <i>string</i> <b>default-action</b> <i>keyword</i> |
| Tree       | <a href="#">default-action</a>   |
| Options    | block, allow   |
| Default    | allow  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">mrp</a> <a href="#">policy</a> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 20.10.R1   |
| Platforms     | All  |

**entry** [[entry-id](#)] *number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>entry</b> list instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">mrp</a> <a href="#">policy</a> <i>string</i> <b>entry</b> <i>number</i> |
| Tree       | <a href="#">entry</a>  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**[entry-id]** *number*

|            |  |
|------------|--|
| Synopsis   | Specify an id for the MRP policy entry   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">mrp</a> <a href="#">policy</a> <i>string</i> <b>entry</b> <i>number</i> |
| Tree       | <a href="#">entry</a>  |
| Range      | 1 to 65535   |
| Notes      | This element is part of a list key.  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**action** *keyword*

|            |   |
|------------|---|
| Synopsis   | Action applied for matching packets   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">mrp</a> <a href="#">policy</a> <a href="#">string</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">action</a> <i>keyword</i> |
| Tree       | <a href="#">action</a>  |
| Options    | block, allow, end-station   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">mrp</a> <a href="#">policy</a> <a href="#">string</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 20.10.R1  |
| Platforms     | All   |

**match**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>match</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">mrp</a> <a href="#">policy</a> <a href="#">string</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> |
| Tree       | <a href="#">match</a>   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**isid** [[value](#)] *number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>isid</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">mrp</a> <a href="#">policy</a> <a href="#">string</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">isid</a> <i>number</i> |
| Tree       | <a href="#">isid</a>   |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**[value] number**

|            |  |
|------------|--|
| Synopsis   | Lowest service instance ID to match the entry  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">mrp</a> <a href="#">policy</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">isid</a> <i>number</i> |
| Tree       | <a href="#">isid</a>   |
| Range      | 0 to 16777215  |
| Notes      | This element is part of a list key.  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**higher-value number**

|            |   |
|------------|---|
| Synopsis   | Highest service instance ID to match the entry  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">mrp</a> <a href="#">policy</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">isid</a> <i>number</i> <a href="#">higher-value</a> <i>number</i> |
| Tree       | <a href="#">higher-value</a>  |
| Range      | 0 to 16777215   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**scope keyword**

|            |  |
|------------|--|
| Synopsis   | Specify the scope of the mrp-policy definition   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">mrp</a> <a href="#">policy</a> <i>string</i> <a href="#">scope</a> <i>keyword</i> |
| Tree       | <a href="#">scope</a>  |
| Options    | exclusive, template  |
| Default    | template   |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**nat**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>nat</b> context                                 |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">nat</a> |
| Tree       | <a href="#">nat</a>  |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **classifier** [name] *string*

Synopsis Enter the **classifier** list instance  
 Context **configure service nat classifier** *string*  
 Tree **classifier**  
 Max. Instances 8  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis NAT classifier name  
 Context **configure service nat classifier** *string*  
 Tree **classifier**  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **default**

Synopsis Enter the **default** context  
 Context **configure service nat classifier** *string default*  
 Tree **default**  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **action**

Synopsis Enter the **action** context  
 Context **configure service nat classifier** *string default action*  
 Tree **action**



|            |  |
|------------|--|
| Introduced | 16.0.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

## destination-nat

|            |  |
|------------|--|
| Synopsis   | Enable the <b>destination-nat</b> context  |
| Context    | <b>configure service nat classifier <i>string</i> default action destination-nat</b>   |
| Tree       | <a href="#">destination-nat</a>  |
| Notes      | The following elements are part of a choice: ( <b>destination-nat</b> , <b>dnat</b> , and <b>dnat-ip-address</b> ) or <b>forward</b> . |
| Introduced | 21.2.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## ip-address *string*

|            |   |
|------------|---|
| Synopsis   | Substitute destination IP address of matching packets   |
| Context    | <b>configure service nat classifier <i>string</i> default action destination-nat ip-address <i>string</i></b> |
| Tree       | <a href="#">ip-address</a>  |
| Introduced | 21.2.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## forward



### WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Forward mode of operation  |
| Context    | <b>configure service nat classifier <i>string</i> default action forward</b>   |
| Tree       | <a href="#">forward</a>  |
| Notes      | The following elements are part of a choice: ( <b>destination-nat</b> , <b>dnat</b> , and <b>dnat-ip-address</b> ) or <b>forward</b> . |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**dnat-ip-address** *string***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Default destination IP address for matching entries with dNAT action                               |
| Context    | <b>configure service nat classifier</b> <i>string</i> <b>default dnat-ip-address</b> <i>string</i> |
| Tree       | <a href="#">dnat-ip-address</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure service nat classifier</b> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**entry** [*id*] *number*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>entry</b> list instance   |
| Context        | <b>configure service nat classifier</b> <i>string</i> <b>entry</b> <i>number</i> |
| Tree           | <a href="#">entry</a>  |
| Max. Instances | 32   |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                     |

**[id]** *number*

|          |  |
|----------|--|
| Synopsis | Classifier rule entry ID   |
| Context  | <b>configure service nat classifier</b> <i>string</i> <b>entry</b> <i>number</i> |
| Tree     | <a href="#">entry</a>  |
| Range    | 1 to 1000  |
| Notes    | This element is part of a list key.  |

|            |  |
|------------|--|
| Introduced | 16.0.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

## action

|            |   |
|------------|---|
| Synopsis   | Enter the <b>action</b> context   |
| Context    | <b>configure service nat classifier</b> <i>string entry number action</i> |
| Tree       | <a href="#">action</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                              |

## destination-nat

|            |  |
|------------|--|
| Synopsis   | Enable the <b>destination-nat</b> context  |
| Context    | <b>configure service nat classifier</b> <i>string entry number action destination-nat</i>  |
| Tree       | <a href="#">destination-nat</a>  |
| Notes      | The following elements are part of a choice: ( <b>destination-nat</b> , <b>dnat</b> , and <b>dnat-ip-address</b> ) or <b>forward</b> . |
| Introduced | 21.2.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## ip-address *string*

|            |   |
|------------|---|
| Synopsis   | Replacement destination IP address for packets  |
| Context    | <b>configure service nat classifier</b> <i>string entry number action destination-nat ip-address string</i> |
| Tree       | <a href="#">ip-address</a>  |
| Introduced | 21.2.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## forward



### WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

|          |                           |
|----------|---------------------------|
| Synopsis | Forward mode of operation |
|----------|---------------------------|

---

|            |  |
|------------|--|
| Context    | <b>configure service nat classifier</b> <i>string entry number action forward</i>  |
| Tree       | <b>forward</b>   |
| Notes      | The following elements are part of a choice: ( <b>destination-nat</b> , <b>dnat</b> , and <b>dnat-ip-address</b> ) or <b>forward</b> . |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure service nat classifier</b> <i>string entry number description string</i> |
| Tree          | <b>description</b>  |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **match**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>match</b> context   |
| Context    | <b>configure service nat classifier</b> <i>string entry number match</i> |
| Tree       | <b>match</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                             |

### **dst-port-range**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>dst-port-range</b> context   |
| Context    | <b>configure service nat classifier</b> <i>string entry number match dst-port-range</i> |
| Tree       | <b>dst-port-range</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**end number****WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Upper bound of the port range   |
| Context    | <b>configure</b> <a href="#">service nat classifier</a> <i>string</i> <a href="#">entry number match dst-port-range</a> <b>end number</b> |
| Tree       | <a href="#">end</a>   |
| Range      | 0   1 to 65535  |
| Default    | 65535   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**start number****WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Lower bound of the port range   |
| Context    | <b>configure</b> <a href="#">service nat classifier</a> <i>string</i> <a href="#">entry number match dst-port-range</a> <b>start number</b> |
| Tree       | <a href="#">start</a>   |
| Range      | 0   1 to 65535  |
| Default    | 0   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**foreign-ip-address string****WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Foreign IP address as the match criterion   |
| Context    | <b>configure</b> <a href="#">service nat classifier</a> <i>string</i> <a href="#">entry number match foreign-ip-address</a> <b>string</b> |
| Tree       | <a href="#">foreign-ip-address</a>  |
| Introduced | 19.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**protocol** *keyword***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | IP protocol to match   |
| Context    | <b>configure</b> <a href="#">service nat classifier</a> <i>string</i> <a href="#">entry number match protocol</a> <i>keyword</i> |
| Tree       | <a href="#">protocol</a>   |
| Options    | tcp, udp   |
| Default    | udp  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**deterministic-script**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>deterministic-script</b> context                     |
| Context    | <b>configure</b> <a href="#">service nat deterministic-script</a> |
| Tree       | <a href="#">deterministic-script</a>                              |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                      |

**location** *string*

|               |  |
|---------------|--|
| Synopsis      | Remote location where Python script is exported  |
| Context       | <b>configure</b> <a href="#">service nat deterministic-script location</a> <i>string</i> |
| Tree          | <a href="#">location</a>   |
| String Length | 1 to 180   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**firewall-policy** [[name](#)] *string*

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>firewall-policy</b> list instance  |
| Context     | <b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i>  |
| Tree        | <a href="#">firewall-policy</a>   |
| Description | Commands in this context configure the attributes of the firewall policy, for use in contexts where basic protection from outside attack vectors is required. |

Firewall policies cannot be deleted if they are in use.

|                |                                    |
|----------------|------------------------------------|
| Max. Instances | 2048                               |
| Introduced     | 16.0.R1                            |
| Platforms      | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **[name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Firewall policy name   |
| Context       | <b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> |
| Tree          | <a href="#">firewall-policy</a>  |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **alg**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>alg</b> context   |
| Context     | <b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <b>alg</b>            |
| Tree        | <a href="#">alg</a>  |
| Description | Commands in this context configure the Application Layer Gateway (ALG) attributes of the policy. |
| Introduced  | 16.0.R1  |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **ftp** *boolean*

|            |  |
|------------|--|
| Synopsis   | Use FTP ALG for the policy   |
| Context    | <b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <b>alg ftp</b> <i>boolean</i> |
| Tree       | <a href="#">ftp</a>  |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **rtsp boolean**

|             |  |
|-------------|--|
| Synopsis    | Use RTSP ALG for the policy  |
| Context     | <b>configure service nat firewall-policy string alg rtsp boolean</b>                             |
| Tree        | <a href="#">rtsp</a>   |
| Description | When configured to <b>true</b> , Real-Time Streaming Protocol (RTSP) ALG is used for the policy. |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **sip boolean**

|            |   |
|------------|---|
| Synopsis   | Use SIP ALG for the policy  |
| Context    | <b>configure service nat firewall-policy string alg sip boolean</b> |
| Tree       | <a href="#">sip</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                  |

### **description string**

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure service nat firewall-policy string description string</b> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                     |

### **domain**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>domain</b> context  |
| Context     | <b>configure service nat firewall-policy string domain</b>   |
| Tree        | <a href="#">domain</a>   |
| Description | Commands in this context configure the attributes of the domain for the firewall policy. All associated traffic must be part of the prefixes specified by this domain. |



---

|            |   |
|------------|---|
| Notes      | The following elements are part of a choice: <b>domain</b> or <b>I2-outside</b> . |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **name** *string*

|               |  |
|---------------|--|
| Synopsis      | Firewall domain name   |
| Context       | <b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">domain name</a> <i>string</i> |
| Tree          | <a href="#">name</a>   |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **router-instance** *string*

|             |   |
|-------------|---|
| Synopsis    | Router or VPRN service name   |
| Context     | <b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">domain router-instance</a> <i>string</i>                           |
| Tree        | <a href="#">router-instance</a>   |
| Description | This command specifies the router instance or VPRN service for this domain. All associated traffic must be part of the prefixes specified by this domain. |
| Introduced  | 16.0.R4   |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **filtering** *keyword*

|            |   |
|------------|---|
| Synopsis   | Filtering method for inbound traffic for the policy   |
| Context    | <b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">filtering</a> <i>keyword</i> |
| Tree       | <a href="#">filtering</a>   |
| Options    | endpoint-independent, address-and-port-dependent  |
| Default    | endpoint-independent  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## I2-outside

|             |  |
|-------------|--|
| Synopsis    | Use Layer 2 outside service address location   |
| Context     | <b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">I2-outside</a>                  |
| Tree        | <a href="#">I2-outside</a>   |
| Description | This command specifies Layer 2 outside service address location for the NAT policy instead of Layer 3 outside service. |
| Notes       | The following elements are part of a choice: <b>domain</b> or <b>I2-outside</b> .                                      |
| Introduced  | 16.0.R1  |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## port-limits

|            |  |
|------------|--|
| Synopsis   | Enter the <b>port-limits</b> context   |
| Context    | <b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">port-limits</a> |
| Tree       | <a href="#">port-limits</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## forwarding *number*

|            |   |
|------------|---|
| Synopsis   | Maximum number of port forwarding entries   |
| Context    | <b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">port-limits</a> <a href="#">forwarding</a> <i>number</i> |
| Tree       | <a href="#">forwarding</a>  |
| Range      | 1 to 64   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## priority-sessions

|            |  |
|------------|--|
| Synopsis   | Enter the <b>priority-sessions</b> context   |
| Context    | <b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">priority-sessions</a> |
| Tree       | <a href="#">priority-sessions</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**fc**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>fc</b> context   |
| Context     | <b>configure service nat firewall-policy string priority-sessions fc</b>                        |
| Tree        | <b>fc</b>   |
| Description | Commands in this context specify which Forwarding Class (FC) options have prioritized sessions. |
| Introduced  | 16.0.R1   |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**af boolean**

|             |  |
|-------------|--|
| Synopsis    | Prioritize traffic from AF forwarding classes  |
| Context     | <b>configure service nat firewall-policy string priority-sessions fc af boolean</b>  |
| Tree        | <b>af</b>  |
| Description | When configured to <b>true</b> , traffic from Assured Forwarding (AF) FC sessions is prioritized. When configured to <b>false</b> , AF traffic is not prioritized. |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**be boolean**

|             |   |
|-------------|---|
| Synopsis    | Prioritize traffic from BE forwarding classes   |
| Context     | <b>configure service nat firewall-policy string priority-sessions fc be boolean</b>   |
| Tree        | <b>be</b>   |
| Description | When configured to <b>true</b> , traffic from Best Effort (BE) FC sessions is prioritized. When configured to <b>false</b> , BE traffic is not prioritized. |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**ef boolean**

|          |   |
|----------|---|
| Synopsis | Prioritize traffic from EF forwarding classes                                       |
| Context  | <b>configure service nat firewall-policy string priority-sessions fc ef boolean</b> |

---

|            |                                    |
|------------|------------------------------------|
| Tree       | <a href="#">ef</a>                 |
| Default    | false                              |
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

## **h1** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Prioritize traffic from H1 forwarding classes   |
| Context     | <b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">priority-sessions</a> <a href="#">fc h1</a> <i>boolean</i> |
| Tree        | <a href="#">h1</a>  |
| Description | When configured to <b>true</b> , traffic from H1 sessions is prioritized. When configured to false, H1 traffic is not prioritized.                |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## **h2** *boolean*

|            |   |
|------------|---|
| Synopsis   | Prioritize traffic from H2 forwarding classes   |
| Context    | <b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">priority-sessions</a> <a href="#">fc h2</a> <i>boolean</i> |
| Tree       | <a href="#">h2</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## **l1** *boolean*

|            |   |
|------------|---|
| Synopsis   | Prioritize traffic from L1 forwarding classes   |
| Context    | <b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">priority-sessions</a> <a href="#">fc l1</a> <i>boolean</i> |
| Tree       | <a href="#">l1</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## ***l2 boolean***

|             |  |
|-------------|--|
| Synopsis    | Prioritize traffic from L2 forwarding classes  |
| Context     | <b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">priority-sessions fc l2 boolean</a>         |
| Tree        | <a href="#">l2</a>   |
| Description | When configured to <b>true</b> , traffic from L2 sessions is prioritized. When configured to false, L2 traffic is not prioritized. |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## ***nc boolean***

|            |  |
|------------|--|
| Synopsis   | Prioritize traffic from NC forwarding classes  |
| Context    | <b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">priority-sessions fc nc boolean</a> |
| Tree       | <a href="#">nc</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## **session-limits**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>session-limits</b> context   |
| Context     | <b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">session-limits</a> |
| Tree        | <a href="#">session-limits</a>  |
| Description | Commands in this context configure session-limit attributes for the policy.                               |
| Introduced  | 16.0.R1   |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## ***max number***

|          |  |
|----------|--|
| Synopsis | Maximum number of sessions per subscriber  |
| Context  | <b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">session-limits max number</a> |
| Tree     | <a href="#">max</a>  |
| Range    | 1 to 65535   |
| Default  | 65535  |

|            |                                    |
|------------|------------------------------------|
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **reserved** *number*

|             |  |
|-------------|--|
| Synopsis    | Number of sessions reserved for prioritized sessions   |
| Context     | <b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">session-limits reserved</a> <i>number</i> |
| Tree        | <a href="#">reserved</a>   |
| Description | This command configures the number of sessions per block that are reserved for prioritized sessions.                             |
| Range       | 1 to 65534   |
| Introduced  | 16.0.R1  |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **watermarks**

|             |  |
|-------------|--|
| Synopsis    | Enable the <b>watermarks</b> context   |
| Context     | <b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">session-limits watermarks</a> |
| Tree        | <a href="#">watermarks</a>   |
| Description | This command configures watermarks for NAT resources.  |
| Introduced  | 16.0.R1  |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **high** *number*

|             |   |
|-------------|---|
| Synopsis    | High watermark percentage   |
| Context     | <b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">session-limits watermarks high</a> <i>number</i> |
| Tree        | <a href="#">high</a>  |
| Description | This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.                           |
| Range       | 0 to 100  |
| Units       | percent   |
| Notes       | This element is mandatory.  |
| Introduced  | 16.0.R1   |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**low number**

|             |  |
|-------------|--|
| Synopsis    | Low watermark percentage   |
| Context     | <b>configure service nat firewall-policy string session-limits watermarks low number</b>                     |
| Tree        | <a href="#">low</a>  |
| Description | This command configures the low threshold value as a percentage of the total port-block space in a NAT pool. |
| Range       | 0 to 100   |
| Units       | percent  |
| Notes       | This element is mandatory.   |
| Introduced  | 16.0.R1  |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**tcp**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>tcp</b> context   |
| Context     | <b>configure service nat firewall-policy string tcp</b>  |
| Tree        | <a href="#">tcp</a>  |
| Description | Commands in this context configure the transmission control protocol (TCP) attributes of the policy. |
| Introduced  | 16.0.R1  |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**mss-adjust number**

|             |  |
|-------------|--|
| Synopsis    | TCP MSS adjustment value   |
| Context     | <b>configure service nat firewall-policy string tcp mss-adjust number</b>  |
| Tree        | <a href="#">mss-adjust</a>   |
| Description | This command configures the value to use to adjust the TCP Maximum Segment Size (MSS) option, if not already present or the present value is higher. |
| Range       | 160 to 10240   |
| Introduced  | 16.0.R1  |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## timeouts

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>timeouts</b> context  |
| Context     | <b>configure service nat firewall-policy string timeouts</b>                               |
| Tree        | <a href="#">timeouts</a>   |
| Description | Commands in this context configure the attributes of session idle timeouts for the policy. |
| Introduced  | 16.0.R1  |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## icmp6-query *number*

|            |   |
|------------|---|
| Synopsis   | Timeout applied to an ICMPv6 Query session                                      |
| Context    | <b>configure service nat firewall-policy string timeouts icmp6-query number</b> |
| Tree       | <a href="#">icmp6-query</a>   |
| Range      | 60 to 240   |
| Units      | seconds   |
| Default    | 60  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## sip *number*

|            |   |
|------------|---|
| Synopsis   | SIP inactive media timeout  |
| Context    | <b>configure service nat firewall-policy string timeouts sip number</b> |
| Tree       | <a href="#">sip</a>   |
| Range      | 10 to 7200  |
| Units      | seconds   |
| Default    | 120   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                      |

## tcp

|          |  |
|----------|--|
| Synopsis | Enter the <b>tcp</b> context                                     |
| Context  | <b>configure service nat firewall-policy string timeouts tcp</b> |
| Tree     | <a href="#">tcp</a>  |



---

|             |  |
|-------------|--|
| Description | Commands in this context configure TCP timeout attributes. |
| Introduced  | 16.0.R1  |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR                         |

### **established** *number*

|            |   |
|------------|---|
| Synopsis   | Idle timeout for TCP session in established state   |
| Context    | <b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">timeouts tcp established</a> <i>number</i> |
| Tree       | <a href="#">established</a>   |
| Range      | 60 to 86400   |
| Units      | seconds   |
| Default    | 7440  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **rst** *number*

|             |   |
|-------------|---|
| Synopsis    | Suspend time for TCP connection ports closed by RST   |
| Context     | <b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">timeouts tcp rst</a> <i>number</i>   |
| Tree        | <a href="#">rst</a>   |
| Description | This command configures the suspend time for outside TCP ports that are used in translations for TCP connections, when they are closed by TCP Reset (RST). After the timer expires, the outside ports can be reused for new TCP translations. |
| Range       | 0 to 240  |
| Units       | seconds   |
| Default     | 0   |
| Introduced  | 16.0.R1   |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **syn** *number*

|          |   |
|----------|---|
| Synopsis | TCP session timeout when synchronizing initial sequence   |
| Context  | <b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">timeouts tcp syn</a> <i>number</i> |
| Tree     | <a href="#">syn</a>   |
| Range    | 6 to 86400  |

|            |                                    |
|------------|------------------------------------|
| Units      | seconds                            |
| Default    | 15                                 |
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **time-wait** *number*

|            |   |
|------------|---|
| Synopsis   | Timeout applied to a TCP session in the time-wait state   |
| Context    | <b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">timeouts tcp time-wait</a> <i>number</i> |
| Tree       | <a href="#">time-wait</a>   |
| Range      | 0 to 240  |
| Units      | seconds   |
| Default    | 0   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **transitory** *number*

|            |  |
|------------|--|
| Synopsis   | Idle timeout for TCP session in transitory state   |
| Context    | <b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">timeouts tcp transitory</a> <i>number</i> |
| Tree       | <a href="#">transitory</a>   |
| Range      | 60 to 86400  |
| Units      | seconds  |
| Default    | 240  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **udp**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>udp</b> context  |
| Context     | <b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">timeouts udp</a> |
| Tree        | <a href="#">udp</a>   |
| Description | Commands in this context configure the User Datagram Protocol (UDP) mapping timeout attributes.         |
| Introduced  | 16.0.R1   |

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Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dns number**

Synopsis Timeout applied to UDP session with destination port 53

Context **configure service nat firewall-policy string timeouts udp dns number**

Tree **dns**

Range 15 to 86400

Units seconds

Default 15

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **initial number**

Synopsis UDP mapping timeout applied to new sessions

Context **configure service nat firewall-policy string timeouts udp initial number**

Tree **initial**

Range 10 to 300

Units seconds

Default 15

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **normal number**

Synopsis UDP mapping timeout

Context **configure service nat firewall-policy string timeouts udp normal number**

Tree **normal**

Range 60 to 86400

Units seconds

Default 300

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**unknown-protocol** *number***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Timeout for flows with an unknown protocol   |
| Context    | <b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">timeouts unknown-protocol</a> <i>number</i> |
| Tree       | <a href="#">unknown-protocol</a>   |
| Range      | 60 to 86400  |
| Units      | seconds  |
| Default    | 300  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**udp**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>udp</b> context   |
| Context    | <b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">udp</a> |
| Tree       | <a href="#">udp</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**inbound-refresh** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Extend UDP session timeout on inbound traffic   |
| Context     | <b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">udp inbound-refresh</a> <i>boolean</i>   |
| Tree        | <a href="#">inbound-refresh</a>   |
| Description | When configured to <b>true</b> , this command extends the UDP session timeout on inbound traffic.<br>When configured to <b>false</b> , the UDP session timeout is not extended. |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## unknown-protocols

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>unknown-protocols</b> context  |
| Context     | <b>configure</b> <a href="#">service nat firewall-policy string unknown-protocols</a>   |
| Tree        | <a href="#">unknown-protocols</a>   |
| Description | Commands in this context configure the treatment of flows of unknown Layer 4 protocols that cannot be natively handled by the system. |
| Introduced  | 16.0.R1   |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## all

|             |  |
|-------------|--|
| Synopsis    | Allow all protocols to create unknown flows  |
| Context     | <b>configure</b> <a href="#">service nat firewall-policy string unknown-protocols all</a>  |
| Tree        | <a href="#">all</a>  |
| Description | This command specifies that all protocols are permitted to create unknown flows. Protocol or IPv6 extension header values that are explicitly supported by SR OS will not be treated as unknown protocols. |
| Notes       | The following elements are part of a choice: <b>all</b> or <b>protocol</b> .   |
| Introduced  | 16.0.R1  |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## protocol *number*

|                |   |
|----------------|---|
| Synopsis       | IANA number of protocol allowed to create unknown flow  |
| Context        | <b>configure</b> <a href="#">service nat firewall-policy string unknown-protocols protocol number</a>   |
| Tree           | <a href="#">protocol</a>  |
| Description    | This command specifies the Internet Assigned Numbers Authority (IANA) number of a protocol that is permitted to create unknown flows. Protocol or IPv6 extension header values that are explicitly supported by SR OS can be configured but will not be treated as unknown protocols. |
| Range          | 0 to 255  |
| Max. Instances | 8   |
| Notes          | The following elements are part of a choice: <b>all</b> or <b>protocol</b> .  |
| Introduced     | 16.0.R1   |
| Platforms      | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## map-t

|            |                                    |
|------------|------------------------------------|
| Synopsis   | Enter the <b>map-t</b> context     |
| Context    | <b>configure service nat map-t</b> |
| Tree       | <a href="#">map-t</a>              |
| Introduced | 16.0.R4                            |
| Platforms  | VSR                                |

## domain [[name](#)] *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>domain</b> list instance            |
| Context        | <b>configure service nat map-t domain string</b> |
| Tree           | <a href="#">domain</a>                           |
| Max. Instances | 63   |
| Introduced     | 16.0.R4  |
| Platforms      | VSR  |

## [\[name\]](#) *string*

|               |  |
|---------------|--|
| Synopsis      | MAP domain name                                  |
| Context       | <b>configure service nat map-t domain string</b> |
| Tree          | <a href="#">domain</a>                           |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.              |
| Introduced    | 16.0.R4  |
| Platforms     | VSR  |

## admin-state *keyword*

|          |  |
|----------|--|
| Synopsis | Administrative state of the MAP domain                               |
| Context  | <b>configure service nat map-t domain string admin-state keyword</b> |
| Tree     | <a href="#">admin-state</a>  |
| Options  | enable, disable  |
| Default  | disable  |

Introduced 16.0.R4  
 Platforms VSR

### **description** *string*

Synopsis Text description  
 Context **configure** [service nat map-t domain](#) *string* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R4  
 Platforms VSR

### **dmr-prefix** *string*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis The Default Mapping Rule prefix  
 Context **configure** [service nat map-t domain](#) *string* [dmr-prefix](#) *string*  
 Tree [dmr-prefix](#)  
 Introduced 16.0.R4  
 Platforms VSR

### **ip-fragmentation**

Synopsis Enter the **ip-fragmentation** context  
 Context **configure** [service nat map-t domain](#) *string* [ip-fragmentation](#)  
 Tree [ip-fragmentation](#)  
 Introduced 16.0.R4  
 Platforms VSR

### **v6-frag-header** *boolean*

Synopsis Enable insertion of fragmentation header in IPv6 packet  
 Context **configure** [service nat map-t domain](#) *string* [ip-fragmentation](#) [v6-frag-header](#) *boolean*

|            |                                |
|------------|--------------------------------|
| Tree       | <a href="#">v6-frag-header</a> |
| Default    | false                          |
| Introduced | 16.0.R4                        |
| Platforms  | VSR                            |

### **mapping-rule** [\[rule-name\]](#) *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>mapping-rule</b> list instance  |
| Context        | <b>configure</b> <a href="#">service nat map-t domain</a> <i>string</i> <a href="#">mapping-rule</a> <i>string</i> |
| Tree           | <a href="#">mapping-rule</a>   |
| Max. Instances | 16383  |
| Introduced     | 16.0.R4  |
| Platforms      | VSR  |

### **[rule-name]** *string*

|               |  |
|---------------|--|
| Synopsis      | The name that identifies this mapping rule   |
| Context       | <b>configure</b> <a href="#">service nat map-t domain</a> <i>string</i> <a href="#">mapping-rule</a> <i>string</i> |
| Tree          | <a href="#">mapping-rule</a>   |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R4  |
| Platforms     | VSR  |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the MAP rule  |
| Context    | <b>configure</b> <a href="#">service nat map-t domain</a> <i>string</i> <a href="#">mapping-rule</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R4   |
| Platforms  | VSR   |



**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service nat map-t domain</a> <i>string</i> <a href="#">mapping-rule</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R4  |
| Platforms     | VSR  |

**ea-length** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | The length of the EA bits field in the End-user IPv6 prefix part of the IPv6 Map Address   |
| Context    | <b>configure</b> <a href="#">service nat map-t domain</a> <i>string</i> <a href="#">mapping-rule</a> <i>string</i> <a href="#">ea-length</a> <i>number</i> |
| Tree       | <a href="#">ea-length</a>  |
| Range      | 0 to 48  |
| Default    | 0  |
| Introduced | 16.0.R4  |
| Platforms  | VSR  |

**ipv4-prefix** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | The IPv4 prefix  |
| Context    | <b>configure</b> <a href="#">service nat map-t domain</a> <i>string</i> <a href="#">mapping-rule</a> <i>string</i> <a href="#">ipv4-prefix</a> <i>string</i> |
| Tree       | <a href="#">ipv4-prefix</a>  |
| Introduced | 16.0.R4  |
| Platforms  | VSR  |

**psid-offset** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | The offset of the Port Set ID (PSID) within a 16 bits wide port space  |
| Context    | <b>configure</b> <a href="#">service nat map-t domain</a> <i>string</i> <a href="#">mapping-rule</a> <i>string</i> <a href="#">psid-offset</a> <i>number</i> |
| Tree       | <a href="#">psid-offset</a>  |
| Range      | 0 to 16  |
| Default    | 6  |
| Introduced | 16.0.R4  |
| Platforms  | VSR  |

**rule-prefix** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | The IPv6 prefix  |
| Context    | <b>configure</b> <a href="#">service nat map-t domain</a> <i>string</i> <a href="#">mapping-rule</a> <i>string</i> <a href="#">rule-prefix</a> <i>string</i> |
| Tree       | <a href="#">rule-prefix</a>  |
| Introduced | 16.0.R4  |
| Platforms  | VSR  |

**mtu** *number*

|            |   |
|------------|---|
| Synopsis   | Configure the MTU   |
| Context    | <b>configure</b> <a href="#">service nat map-t domain</a> <i>string</i> <a href="#">mtu</a> <i>number</i> |
| Tree       | <a href="#">mtu</a>   |
| Range      | 160 to 8686   |
| Default    | 8686  |
| Introduced | 16.0.R4   |
| Platforms  | VSR   |

**tcp-mss-adjust** *number*

|            |   |
|------------|---|
| Synopsis   | The value to adjust the TCP Maximum Segment Size (MSS) option   |
| Context    | <b>configure</b> <a href="#">service nat map-t domain</a> <i>string</i> <b>tcp-mss-adjust</b> <i>number</i> |
| Tree       | <a href="#">tcp-mss-adjust</a>  |
| Range      | 0   160 to 8626   |
| Default    | 0   |
| Introduced | 16.0.R4   |
| Platforms  | VSR   |

**nat-policy** [[name](#)] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>nat-policy</b> list instance                             |
| Context        | <b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i> |
| Tree           | <a href="#">nat-policy</a>  |
| Max. Instances | 4096  |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                          |

**[name]** *string*

|               |   |
|---------------|---|
| Synopsis      | NAT policy name   |
| Context       | <b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i> |
| Tree          | <a href="#">nat-policy</a>  |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.                                   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                          |

**alg**

|          |  |
|----------|--|
| Synopsis | Enter the <b>alg</b> context   |
| Context  | <b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i> <b>alg</b> |
| Tree     | <a href="#">alg</a>  |

|             |  |
|-------------|--|
| Description | Commands in this context configure the Application Layer Gateway (ALG) attributes of the policy. |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**ftp boolean**

|            |   |
|------------|---|
| Synopsis   | Use FTP ALG for the policy  |
| Context    | <b>configure</b> <a href="#">service nat nat-policy</a> <i>string alg ftp boolean</i> |
| Tree       | <a href="#">ftp</a>   |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**pptp boolean**

|             |  |
|-------------|--|
| Synopsis    | Use PPTP ALG for the policy  |
| Context     | <b>configure</b> <a href="#">service nat nat-policy</a> <i>string alg pptp boolean</i>   |
| Tree        | <a href="#">pptp</a>   |
| Description | When configured to <b>true</b> , the policy uses Point-to-Point Tunneling Protocol (PPTP) ALG.<br>PPTP sessions can only be initiated from NAT inside.<br>GRE traffic is allowed through NAT only if the corresponding mapping exists.<br>There can be seven calls (GRE tunnels) per control session.<br>When configured to <b>false</b> , PPTP ALG is not used. |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**rtsp boolean**

|             |  |
|-------------|--|
| Synopsis    | Use RTSP ALG for the policy  |
| Context     | <b>configure</b> <a href="#">service nat nat-policy</a> <i>string alg rtsp boolean</i>           |
| Tree        | <a href="#">rtsp</a>   |
| Description | When configured to <b>true</b> , Real-Time Streaming Protocol (RTSP) ALG is used for the policy. |

|            |  |
|------------|--|
| Default    | false  |
| Introduced | 16.0.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

**sip boolean**

|            |  |
|------------|--|
| Synopsis   | Use SIP ALG for the policy                                     |
| Context    | <b>configure service nat nat-policy string alg sip boolean</b> |
| Tree       | <b>sip</b>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                   |

**block-limit number**

|            |   |
|------------|---|
| Synopsis   | Maximum number of port blocks per subscriber                      |
| Context    | <b>configure service nat nat-policy string block-limit number</b> |
| Tree       | <b>block-limit</b>  |
| Range      | 1 to 40   |
| Default    | 1   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                      |

**description string**

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure service nat nat-policy string description string</b> |
| Tree          | <b>description</b>  |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                      |

**dnat**

|          |                               |
|----------|-------------------------------|
| Synopsis | Enter the <b>dnat</b> context |
|----------|-------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service nat nat-policy string dnat</b> |
| Tree       | <b>dnat</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR        |

## classifier reference



### WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | NAT classifier  |
| Context     | <b>configure service nat nat-policy string dnat classifier reference</b>  |
| Tree        | <b>classifier</b>   |
| Description | When configured within the NAT policy, this command references a NAT classifier that activates DNAT functionality. The configuration uses a filter-like approach to identify the traffic that is subjected to DNAT. It is required for translation of the destination IP address. |
| Reference   | <b>configure service nat classifier string</b>  |
| Introduced  | 16.0.R4   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## dnat-only

|             |  |
|-------------|--|
| Synopsis    | Enable the <b>dnat-only</b> context  |
| Context     | <b>configure service nat nat-policy string dnat-only</b>   |
| Tree        | <b>dnat-only</b>   |
| Description | Commands in this context configure the attributes of DNAT-only. When DNAT-only is configured, no source or port NAT (SNAPT) is performed. Only the destination IP address (going from inside to outside) is translated; the source IP address and port are not translated. |
| Notes       | The following elements are part of a choice: <b>dnat-only</b> , <b>I2-outside</b> , or <b>pool</b> .   |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## nat-group *reference*

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | NAT group  |
| Context     | <b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i> <a href="#">dnat-only nat-group</a> <i>reference</i> |
| Tree        | <a href="#">nat-group</a>  |
| Description | This command configures the NAT group in which DNAT translation takes place for the outside routing context.               |
| Reference   | <b>configure</b> <a href="#">isa nat-group</a> <i>number</i>   |
| Notes       | The following elements are part of a mandatory choice: <b>nat-group</b> or <b>wlan-gw-group</b> .                          |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## router-instance *string*

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Router name or VPRN service name  |
| Context    | <b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i> <a href="#">dnat-only router-instance</a> <i>string</i> |
| Tree       | <a href="#">router-instance</a>   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## wlan-gw-group *reference*

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | WLAN GW group used for NAT   |
| Context     | <b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i> <a href="#">dnat-only wlan-gw-group</a> <i>reference</i> |
| Tree        | <a href="#">wlan-gw-group</a>  |
| Description | This command configures the NAT WLAN Gateway (GW) group in which DNAT translation takes place for the outside routing context. |
| Reference   | <b>configure</b> <a href="#">isa wlan-gw-group</a> <i>number</i>   |
| Notes       | The following elements are part of a mandatory choice: <b>nat-group</b> or <b>wlan-gw-group</b> .                              |
| Introduced  | 16.0.R4  |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**filtering** *keyword*

|            |  |
|------------|--|
| Synopsis   | Filtering method for inbound traffic for the policy  |
| Context    | <b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i> <a href="#">filtering</a> <i>keyword</i> |
| Tree       | <a href="#">filtering</a>  |
| Options    | endpoint-independent, address-and-port-dependent   |
| Default    | endpoint-independent   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**flow-log-policy**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>flow-log-policy</b> context  |
| Context    | <b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i> <a href="#">flow-log-policy</a> |
| Tree       | <a href="#">flow-log-policy</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**ipfix** *reference*

|          |  |
|----------|--|
| Synopsis | IPFIX export policy  |
| Context  | <b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i> <a href="#">flow-log-policy ipfix</a> <i>reference</i> |



|             |  |
|-------------|--|
| Tree        | <a href="#">ipfix</a>  |
| Description | This command specifies an IP flow information export policy for the flow-log policy. |
| Reference   | <b>configure</b> <a href="#">service ipfix export-policy</a> <i>string</i>           |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **syslog** *reference*

|             |   |
|-------------|---|
| Synopsis    | Syslog export policy name   |
| Context     | <b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i> <a href="#">flow-log-policy</a> <a href="#">syslog</a> <i>reference</i>   |
| Tree        | <a href="#">syslog</a>  |
| Description | This command configures a syslog export policy with a set of transport parameters used to transmit NAT flow records in syslog format to an external collector node. The policy name is referenced from the NAT policy applied to an inside routing context. |
| Reference   | <b>configure</b> <a href="#">service nat syslog export-policy</a> <i>string</i>   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **I2-outside**

|             |  |
|-------------|--|
| Synopsis    | Use Layer 2 outside service address location   |
| Context     | <b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i> <a href="#">I2-outside</a>                       |
| Tree        | <a href="#">I2-outside</a>   |
| Description | This command specifies Layer 2 outside service address location for the NAT policy instead of Layer 3 outside service. |
| Notes       | The following elements are part of a choice: <b>dnat-only</b> , <b>I2-outside</b> , or <b>pool</b> .                   |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **pool**

|          |  |
|----------|--|
| Synopsis | Enter the <b>pool</b> context  |
| Context  | <b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i> <a href="#">pool</a>           |
| Tree     | <a href="#">pool</a>   |
| Notes    | The following elements are part of a choice: <b>dnat-only</b> , <b>I2-outside</b> , or <b>pool</b> . |

|            |  |
|------------|--|
| Introduced | 16.0.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

**name** *string***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | NAT pool name   |
| Context       | <b>configure</b> <b>service nat nat-policy</b> <i>string</i> <b>pool name</b> <i>string</i> |
| Tree          | <b>name</b>   |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**router-instance** *string***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Router or VPRN service name  |
| Context    | <b>configure</b> <b>service nat nat-policy</b> <i>string</i> <b>pool router-instance</b> <i>string</i> |
| Tree       | <b>router-instance</b>   |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**port-forwarding-range-end** *number*

|             |  |
|-------------|--|
| Synopsis    | End of the port forwarding range   |
| Context     | <b>configure</b> <b>service nat nat-policy</b> <i>string</i> <b>port-forwarding-range-end</b> <i>number</i>  |
| Tree        | <b>port-forwarding-range-end</b>   |
| Description | <p>This command specifies the end of the port range available for port forwarding. The start of the range is always equal to one.</p> <p>The number of ports that can be configured is half of the available block =&gt; <math>64512 / 2 = 32256</math>. In combination with the configured value for <b>port-forwarding-range-end</b>, the formulas are:</p> <p>max port-reservation blocks = <math>65535 - \text{port-forwarding-range-end}</math></p> |

$\text{max port-reservation ports} = (65535 - \text{port-forwarding-range-end}) / 2$

If **port-reservation** is already configured, the following applies for the maximum port-forwarding-range-end:

$\text{max port-forwarding-range-end} = 65535 - \text{port-reservation blocks}$   
 $\text{max port-forwarding-range-end} = 65535 - (\text{port-reservation ports} * 2)$

|            |  |
|------------|--|
| Range      | 1023 to 65535                                |
| Default    | 1023   |
| Introduced | 16.0.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### port-limits

|            |  |
|------------|--|
| Synopsis   | Enter the <b>port-limits</b> context                       |
| Context    | <b>configure service nat nat-policy string port-limits</b> |
| Tree       | <a href="#">port-limits</a>                                |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR               |

### forwarding *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of port forwarding entries                                    |
| Context    | <b>configure service nat nat-policy string port-limits forwarding number</b> |
| Tree       | <a href="#">forwarding</a>   |
| Range      | 1 to 64  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                 |

### reserved *number*

|             |   |
|-------------|---|
| Synopsis    | Number of ports reserved for prioritized sessions   |
| Context     | <b>configure service nat nat-policy string port-limits reserved number</b>                        |
| Tree        | <a href="#">reserved</a>  |
| Description | This command configures the number of ports per block that are reserved for prioritized sessions. |
| Range       | 1 to 65534  |
| Introduced  | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## watermarks

Synopsis Enable the **watermarks** context  
Context **configure service nat nat-policy string port-limits watermarks**  
Tree [watermarks](#)  
Description This command configures watermarks for NAT resources.  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## high number

Synopsis High watermark percentage  
Context **configure service nat nat-policy string port-limits watermarks high number**  
Tree [high](#)  
Description This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.  
Range 0 to 100  
Units percent  
Notes This element is mandatory.  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## low number

Synopsis Low watermark percentage  
Context **configure service nat nat-policy string port-limits watermarks low number**  
Tree [low](#)  
Description This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.  
Range 0 to 100  
Units percent  
Notes This element is mandatory.  
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## priority-sessions

Synopsis Enter the **priority-sessions** context  
 Context **configure service nat nat-policy string priority-sessions**  
 Tree [priority-sessions](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## fc

Synopsis Enter the **fc** context  
 Context **configure service nat nat-policy string priority-sessions fc**  
 Tree [fc](#)  
 Description Commands in this context specify which Forwarding Class (FC) options have prioritized sessions.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## af boolean

Synopsis Prioritize traffic from AF forwarding classes  
 Context **configure service nat nat-policy string priority-sessions fc af boolean**  
 Tree [af](#)  
 Description When configured to **true**, traffic from Assured Forwarding (AF) FC sessions is prioritized. When configured to **false**, AF traffic is not prioritized.  
 Default false  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## be boolean

Synopsis Prioritize traffic from BE forwarding classes  
 Context **configure service nat nat-policy string priority-sessions fc be boolean**  
 Tree [be](#)

---

|             |   |
|-------------|---|
| Description | When configured to <b>true</b> , traffic from Best Effort (BE) FC sessions is prioritized. When configured to <b>false</b> , BE traffic is not prioritized. |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **ef** *boolean*

|            |   |
|------------|---|
| Synopsis   | Prioritize traffic from EF forwarding classes   |
| Context    | <b>configure service nat nat-policy</b> <i>string</i> <b>priority-sessions fc ef</b> <i>boolean</i> |
| Tree       | <a href="#">ef</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **h1** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Prioritize traffic from H1 forwarding classes  |
| Context     | <b>configure service nat nat-policy</b> <i>string</i> <b>priority-sessions fc h1</b> <i>boolean</i>                                |
| Tree        | <a href="#">h1</a>   |
| Description | When configured to <b>true</b> , traffic from H1 sessions is prioritized. When configured to false, H1 traffic is not prioritized. |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **h2** *boolean*

|            |   |
|------------|---|
| Synopsis   | Prioritize traffic from H2 forwarding classes   |
| Context    | <b>configure service nat nat-policy</b> <i>string</i> <b>priority-sessions fc h2</b> <i>boolean</i> |
| Tree       | <a href="#">h2</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**I1 *boolean***

|            |   |
|------------|---|
| Synopsis   | Prioritize traffic from L1 forwarding classes   |
| Context    | <b>configure service nat nat-policy</b> <i>string</i> <b>priority-sessions fc I1</b> <i>boolean</i> |
| Tree       | <b>I1</b>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**I2 *boolean***

|             |  |
|-------------|--|
| Synopsis    | Prioritize traffic from L2 forwarding classes  |
| Context     | <b>configure service nat nat-policy</b> <i>string</i> <b>priority-sessions fc I2</b> <i>boolean</i>                                |
| Tree        | <b>I2</b>  |
| Description | When configured to <b>true</b> , traffic from L2 sessions is prioritized. When configured to false, L2 traffic is not prioritized. |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**nc *boolean***

|            |   |
|------------|---|
| Synopsis   | Prioritize traffic from NC forwarding classes   |
| Context    | <b>configure service nat nat-policy</b> <i>string</i> <b>priority-sessions fc nc</b> <i>boolean</i> |
| Tree       | <b>nc</b>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**session-limits**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>session-limits</b> context                                     |
| Context     | <b>configure service nat nat-policy</b> <i>string</i> <b>session-limits</b> |
| Tree        | <b>session-limits</b>   |
| Description | Commands in this context configure session-limit attributes for the policy. |
| Introduced  | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **max number**

Synopsis Maximum number of sessions per subscriber  
 Context **configure service nat nat-policy string session-limits max number**  
 Tree [max](#)  
 Range 1 to 65535  
 Default 65535  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **reserved number**

Synopsis Number of sessions reserved for prioritized sessions  
 Context **configure service nat nat-policy string session-limits reserved number**  
 Tree [reserved](#)  
 Description This command configures the number of sessions per block that are reserved for prioritized sessions.  
 Range 1 to 65534  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **watermarks**

Synopsis Enable the **watermarks** context  
 Context **configure service nat nat-policy string session-limits watermarks**  
 Tree [watermarks](#)  
 Description This command configures watermarks for NAT resources.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **high number**

Synopsis High watermark percentage



|             |   |
|-------------|---|
| Context     | <b>configure service nat nat-policy</b> <i>string session-limits watermarks high number</i>                   |
| Tree        | <a href="#">high</a>  |
| Description | This command configures the high threshold value as a percentage of the total port-block space in a NAT pool. |
| Range       | 0 to 100  |
| Units       | percent   |
| Notes       | This element is mandatory.  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **low number**

|             |  |
|-------------|--|
| Synopsis    | Low watermark percentage   |
| Context     | <b>configure service nat nat-policy</b> <i>string session-limits watermarks low number</i>                   |
| Tree        | <a href="#">low</a>  |
| Description | This command configures the low threshold value as a percentage of the total port-block space in a NAT pool. |
| Range       | 0 to 100   |
| Units       | percent  |
| Notes       | This element is mandatory.   |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **tcp**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>tcp</b> context   |
| Context     | <b>configure service nat nat-policy</b> <i>string tcp</i>  |
| Tree        | <a href="#">tcp</a>  |
| Description | Commands in this context configure the transmission control protocol (TCP) attributes of the policy. |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**mss-adjust** *number*

|             |  |
|-------------|--|
| Synopsis    | TCP MSS adjustment value   |
| Context     | <b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i> <a href="#">tcp mss-adjust</a> <i>number</i>                                   |
| Tree        | <a href="#">mss-adjust</a>   |
| Description | This command configures the value to use to adjust the TCP Maximum Segment Size (MSS) option, if not already present or the present value is higher. |
| Range       | 160 to 10240   |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**reset-unknown** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Generate TCP reset for packets from unknown flows   |
| Context     | <b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i> <a href="#">tcp reset-unknown</a> <i>boolean</i>  |
| Tree        | <a href="#">reset-unknown</a>   |
| Description | When configured to <b>true</b> , TCP packets are dropped and a TCP reset is generated if the NAT inside receives a TCP packet without the SYN flag set for an unknown flow.<br>When configured to <b>false</b> , no TCP reset is generated. |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**timeouts**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>timeouts</b> context  |
| Context     | <b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i> <a href="#">timeouts</a> |
| Tree        | <a href="#">timeouts</a>   |
| Description | Commands in this context configure the attributes of session idle timeouts for the policy.     |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**icmp-query** *number*

|          |   |
|----------|---|
| Synopsis | Timeout applied to an ICMP Query session  |
| Context  | <b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i> <a href="#">timeouts icmp-query</a> <i>number</i> |

|            |  |
|------------|--|
| Tree       | <a href="#">icmp-query</a>                   |
| Range      | 60 to 240                                    |
| Units      | seconds                                      |
| Default    | 60   |
| Introduced | 16.0.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **sip number**

|            |   |
|------------|---|
| Synopsis   | SIP inactive media timeout  |
| Context    | <b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i> <a href="#">timeouts sip number</a> |
| Tree       | <a href="#">sip</a>   |
| Range      | 10 to 7200  |
| Units      | seconds   |
| Default    | 120   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **subscriber-retention number**

|             |  |
|-------------|--|
| Synopsis    | IP address hold time after host and port blocks expire   |
| Context     | <b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i> <a href="#">timeouts subscriber-retention number</a>   |
| Tree        | <a href="#">subscriber-retention</a>   |
| Description | This command configures the time to keep a NAT subscriber and its associated IP address after all hosts and associated port blocks expire. If a NAT subscriber host appears before the retention timeout elapses, it is given the same outside IP address. |
| Range       | 0 to 1440  |
| Units       | minutes  |
| Default     | 0  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **tcp**

|          |                              |
|----------|------------------------------|
| Synopsis | Enter the <b>tcp</b> context |
|----------|------------------------------|

|             |   |
|-------------|---|
| Context     | <b>configure service nat nat-policy</b> <i>string</i> <b>timeouts tcp</b> |
| Tree        | <b>tcp</b>  |
| Description | Commands in this context configure TCP timeout attributes.                |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                              |

### **established** *number*

|            |   |
|------------|---|
| Synopsis   | Idle timeout for TCP session in established state   |
| Context    | <b>configure service nat nat-policy</b> <i>string</i> <b>timeouts tcp established</b> <i>number</i> |
| Tree       | <b>established</b>  |
| Range      | 60 to 86400   |
| Units      | seconds   |
| Default    | 7440  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **rst** *number*

|             |   |
|-------------|---|
| Synopsis    | Suspend time for TCP connection ports closed by RST   |
| Context     | <b>configure service nat nat-policy</b> <i>string</i> <b>timeouts tcp rst</b> <i>number</i>   |
| Tree        | <b>rst</b>  |
| Description | This command configures the suspend time for outside TCP ports that are used in translations for TCP connections, when they are closed by TCP Reset (RST). After the timer expires, the outside ports can be reused for new TCP translations. |
| Range       | 0 to 240  |
| Units       | seconds   |
| Default     | 0   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **syn** *number*

|          |   |
|----------|---|
| Synopsis | TCP session timeout when synchronizing initial sequence                                     |
| Context  | <b>configure service nat nat-policy</b> <i>string</i> <b>timeouts tcp syn</b> <i>number</i> |

|            |  |
|------------|--|
| Tree       | <a href="#">syn</a>                          |
| Range      | 6 to 86400                                   |
| Units      | seconds                                      |
| Default    | 15   |
| Introduced | 16.0.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **time-wait** *number*

|            |  |
|------------|--|
| Synopsis   | Timeout applied to a TCP session in the time-wait state  |
| Context    | <b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i> <a href="#">timeouts tcp time-wait</a> <i>number</i> |
| Tree       | <a href="#">time-wait</a>  |
| Range      | 0 to 240   |
| Units      | seconds  |
| Default    | 0  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **transitory** *number*

|            |   |
|------------|---|
| Synopsis   | Idle timeout for TCP session in transitory state  |
| Context    | <b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i> <a href="#">timeouts tcp transitory</a> <i>number</i> |
| Tree       | <a href="#">transitory</a>  |
| Range      | 60 to 86400   |
| Units      | seconds   |
| Default    | 240   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **udp**

|          |  |
|----------|--|
| Synopsis | Enter the <b>udp</b> context   |
| Context  | <b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i> <a href="#">timeouts udp</a> |
| Tree     | <a href="#">udp</a>  |

---

|             |   |
|-------------|---|
| Description | Commands in this context configure the User Datagram Protocol (UDP) mapping timeout attributes. |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **dns number**

|            |   |
|------------|---|
| Synopsis   | Timeout applied to UDP session with destination port 53   |
| Context    | <b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i> <a href="#">timeouts udp dns number</a> |
| Tree       | <a href="#">dns</a>   |
| Range      | 15 to 86400   |
| Units      | seconds   |
| Default    | 15  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **initial number**

|            |   |
|------------|---|
| Synopsis   | UDP mapping timeout applied to new sessions   |
| Context    | <b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i> <a href="#">timeouts udp initial number</a> |
| Tree       | <a href="#">initial</a>   |
| Range      | 10 to 300   |
| Units      | seconds   |
| Default    | 15  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **normal number**

|          |  |
|----------|--|
| Synopsis | UDP mapping timeout  |
| Context  | <b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i> <a href="#">timeouts udp normal number</a> |
| Tree     | <a href="#">normal</a>   |
| Range    | 60 to 86400  |
| Units    | seconds  |
| Default  | 300  |

|            |  |
|------------|--|
| Introduced | 16.0.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

## udp

|            |  |
|------------|--|
| Synopsis   | Enter the <b>udp</b> context                       |
| Context    | <b>configure service nat nat-policy string udp</b> |
| Tree       | <a href="#">udp</a>                                |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR       |

## inbound-refresh *boolean*

|             |   |
|-------------|---|
| Synopsis    | Extend UDP session timeout on inbound traffic   |
| Context     | <b>configure service nat nat-policy string udp inbound-refresh boolean</b>  |
| Tree        | <a href="#">inbound-refresh</a>   |
| Description | When configured to <b>true</b> , this command extends the UDP session timeout on inbound traffic.<br>When configured to <b>false</b> , the UDP session timeout is not extended. |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## pcp-server-policy [*name*] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>pcp-server-policy</b> list instance      |
| Context    | <b>configure service nat pcp-server-policy string</b> |
| Tree       | <a href="#">pcp-server-policy</a>                     |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR          |

## [*name*] *string*

|          |   |
|----------|---|
| Synopsis | PCP server policy name                                |
| Context  | <b>configure service nat pcp-server-policy string</b> |

|               |  |
|---------------|--|
| Tree          | <a href="#">pcp-server-policy</a>            |
| String Length | 1 to 32                                      |
| Notes         | This element is part of a list key.          |
| Introduced    | 16.0.R1                                      |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">service nat pcp-server-policy</a> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **lifetime**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>lifetime</b> context  |
| Context    | <b>configure</b> <a href="#">service nat pcp-server-policy</a> <i>string</i> <b>lifetime</b> |
| Tree       | <a href="#">lifetime</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **maximum** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum lifetime of explicit mappings made by the PCP servers   |
| Context    | <b>configure</b> <a href="#">service nat pcp-server-policy</a> <i>string</i> <b>lifetime</b> <b>maximum</b> <i>number</i> |
| Tree       | <a href="#">maximum</a>   |
| Range      | 61 to 86400   |
| Default    | 86400   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |



### **minimum** *number*

|            |  |
|------------|--|
| Synopsis   | Minimum lifetime of explicit mappings made by the PCP servers                        |
| Context    | <b>configure service nat pcp-server-policy</b> <i>string lifetime minimum number</i> |
| Tree       | <a href="#">minimum</a>  |
| Range      | 60 to 86399  |
| Default    | 120  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **max-description-size** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum length of mapping descriptions made by the PCP servers                           |
| Context    | <b>configure service nat pcp-server-policy</b> <i>string max-description-size number</i> |
| Tree       | <a href="#">max-description-size</a>   |
| Range      | 1 to 64  |
| Default    | 64   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **opcode**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>opcode</b> context                                     |
| Context    | <b>configure service nat pcp-server-policy</b> <i>string opcode</i> |
| Tree       | <a href="#">opcode</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                        |

### **announce** *boolean*

|            |  |
|------------|--|
| Synopsis   | Process the announce PCP requests  |
| Context    | <b>configure service nat pcp-server-policy</b> <i>string opcode announce boolean</i> |
| Tree       | <a href="#">announce</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **get** *boolean*

|            |  |
|------------|--|
| Synopsis   | Process the get PCP requests   |
| Context    | <b>configure</b> <a href="#">service nat pcp-server-policy</a> <i>string</i> <a href="#">opcode get</a> <i>boolean</i> |
| Tree       | <a href="#">get</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **map** *boolean*

|            |  |
|------------|--|
| Synopsis   | Process the map PCP requests   |
| Context    | <b>configure</b> <a href="#">service nat pcp-server-policy</a> <i>string</i> <a href="#">opcode map</a> <i>boolean</i> |
| Tree       | <a href="#">map</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **option**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>option</b> context   |
| Context    | <b>configure</b> <a href="#">service nat pcp-server-policy</a> <i>string</i> <a href="#">option</a> |
| Tree       | <a href="#">option</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **description** *boolean*

|            |  |
|------------|--|
| Synopsis   | Text description   |
| Context    | <b>configure</b> <a href="#">service nat pcp-server-policy</a> <i>string</i> <a href="#">option description</a> <i>boolean</i> |
| Tree       | <a href="#">description</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**next** *boolean*

|            |  |
|------------|--|
| Synopsis   | Process the PCP requests that contain the next option  |
| Context    | <b>configure</b> <a href="#">service nat pcp-server-policy</a> <a href="#">string option next</a> <i>boolean</i> |
| Tree       | <a href="#">next</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**port-reservation** *boolean*

|            |  |
|------------|--|
| Synopsis   | Process the PCP requests that contain the prefer failure option  |
| Context    | <b>configure</b> <a href="#">service nat pcp-server-policy</a> <a href="#">string option port-reservation</a> <i>boolean</i> |
| Tree       | <a href="#">port-reservation</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**port-set** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Support the PORT_SET option in PCP MAP requests   |
| Context     | <b>configure</b> <a href="#">service nat pcp-server-policy</a> <a href="#">string option port-set</a> <i>boolean</i>  |
| Tree        | <a href="#">port-set</a>  |
| Description | <p>When configured to <b>true</b>, the PCP MAP option optimizes PCP performance for applications that require multiple sets of port forwards. A range of consecutive port forwards can be requested by the PCP client with a single PCP request.</p> <p>When configured to <b>false</b>, the default behavior is applied, where a plain MAP option is used to allocate a single port in a single request.</p> |
| Default     | false   |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**prefer-failure** *boolean*

|          |  |
|----------|--|
| Synopsis | Process the PCP requests that contain the port reservation option  |
| Context  | <b>configure</b> <a href="#">service nat pcp-server-policy</a> <a href="#">string option prefer-failure</a> <i>boolean</i> |

|            |  |
|------------|--|
| Tree       | <a href="#">prefer-failure</a>               |
| Default    | false  |
| Introduced | 16.0.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **third-party** *boolean*

|            |  |
|------------|--|
| Synopsis   | Process the PCP requests that contain the third party option   |
| Context    | <b>configure</b> <a href="#">service nat pcp-server-policy</a> <i>string</i> <a href="#">option third-party</a> <i>boolean</i> |
| Tree       | <a href="#">third-party</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **reuse-external-ip-address** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Reuse external IP address for NAT subscriber   |
| Context     | <b>configure</b> <a href="#">service nat pcp-server-policy</a> <i>string</i> <a href="#">reuse-external-ip-address</a> <i>boolean</i>  |
| Tree        | <a href="#">reuse-external-ip-address</a>  |
| Description | <p>When configured to <b>true</b>, the system reuses the external IP address assigned to a subscriber when the requested well-known port or external IP mapping is not available.</p> <p>When configured to <b>false</b>, a request for a well-known port is allocated as requested on a different external IP address if the port is already allocated to another subscriber sharing the same external IP address. The existing external IP address is initially allocated to the subscriber as a result of the initial traffic flow.</p> <p>This configuration flag can be set dynamically but the flag affects only PCP port forwards that are created after the flag has been set.</p> |
| Default     | false  |
| Introduced  | 19.10.R3   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **version**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>version</b> context   |
| Context    | <b>configure</b> <a href="#">service nat pcp-server-policy</a> <i>string</i> <a href="#">version</a> |
| Tree       | <a href="#">version</a>  |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **maximum** *number*

Synopsis Maximum protocol version supported by the PCP servers  
Context **configure** [service nat pcp-server-policy](#) *string version maximum number*  
Tree [maximum](#)  
Range 1 to 255  
Default 1  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **minimum** *number*

Synopsis Minimum protocol version supported by the PCP servers  
Context **configure** [service nat pcp-server-policy](#) *string version minimum number*  
Tree [minimum](#)  
Range 1 to 255  
Default 1  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **prefix-list** [[name](#)] *string*

Synopsis Enter the **prefix-list** list instance  
Context **configure** [service nat prefix-list](#) *string*  
Tree [prefix-list](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### [[name](#)] *string*

Synopsis NAT prefix list name  
Context **configure** [service nat prefix-list](#) *string*  
Tree [prefix-list](#)

|               |  |
|---------------|--|
| String Length | 1 to 32                                      |
| Notes         | This element is part of a list key.          |
| Introduced    | 16.0.R1                                      |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **application** *keyword*



#### **WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Prefix list for the application   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">nat</a> <a href="#">prefix-list</a> <i>string</i> <a href="#">application</a> <i>keyword</i> |
| Tree       | <a href="#">application</a>   |
| Options    | I2-aware-dest-to-policy, dnat-only-subscribers  |
| Default    | I2-aware-dest-to-policy   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **prefix** [[ip-prefix](#)] *string*

|                   |   |
|-------------------|---|
| Synopsis          | Enter the <b>prefix</b> list instance   |
| Context           | <b>configure</b> <a href="#">service</a> <a href="#">nat</a> <a href="#">prefix-list</a> <i>string</i> <a href="#">prefix</a> <i>string</i> |
| Tree              | <a href="#">prefix</a>  |
| Max.<br>Instances | 1024  |
| Introduced        | 16.0.R1   |
| Platforms         | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **[ip-prefix]** *string*

|          |   |
|----------|---|
| Synopsis | NAT prefix  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">nat</a> <a href="#">prefix-list</a> <i>string</i> <a href="#">prefix</a> <i>string</i> |
| Tree     | <a href="#">prefix</a>  |

|            |  |
|------------|--|
| Notes      | This element is part of a list key.          |
| Introduced | 16.0.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

## nat-policy *reference*



### WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | NAT policy for LSN  |
| Context    | <b>configure</b> <a href="#">service nat prefix-list</a> <i>string prefix string nat-policy reference</i> |
| Tree       | <a href="#">nat-policy</a>  |
| Reference  | <b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i>                                     |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## syslog

|            |   |
|------------|---|
| Synopsis   | Enter the <b>syslog</b> context                     |
| Context    | <b>configure</b> <a href="#">service nat syslog</a> |
| Tree       | <a href="#">syslog</a>                              |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR        |

## export-policy [[name](#)] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>export-policy</b> list instance                                    |
| Context        | <b>configure</b> <a href="#">service nat syslog export-policy</a> <i>string</i> |
| Tree           | <a href="#">export-policy</a>   |
| Max. Instances | 8   |
| Introduced     | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis Syslog export policy name

Context **configure** [service nat syslog export-policy](#) *string*

Tree [export-policy](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **collector** [router-instance](#) *string* [ip-address](#) *string*

Synopsis Enter the **collector** list instance

Context **configure** [service nat syslog export-policy](#) *string* [collector router-instance](#) *string* [ip-address](#) *string*

Tree [collector](#)

Max. Instances 2

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **router-instance** *string*

Synopsis Router instance

Context **configure** [service nat syslog export-policy](#) *string* [collector router-instance](#) *string* [ip-address](#) *string*

Tree [collector](#)

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-address** *string*

Synopsis IPv4 address of the external collector node



|            |  |
|------------|--|
| Context    | <b>configure service nat syslog export-policy</b> <i>string</i> <b>collector router-instance</b> <i>string</i> <b>ip-address</b> <i>string</i> |
| Tree       | <b>collector</b>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the collector node   |
| Context    | <b>configure service nat syslog export-policy</b> <i>string</i> <b>collector router-instance</b> <i>string</i> <b>ip-address</b> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>   |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **destination-port** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Destination port   |
| Context    | <b>configure service nat syslog export-policy</b> <i>string</i> <b>collector router-instance</b> <i>string</i> <b>ip-address</b> <i>string</i> <b>destination-port</b> <i>number</i> |
| Tree       | <b>destination-port</b>  |
| Range      | 1 to 65535   |
| Default    | 514  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**ipv4-source-address** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | IPv4 source address   |
| Context    | <b>configure</b> <a href="#">service nat syslog export-policy</a> <i>string</i> <a href="#">collector router-instance</a> <i>string</i> <a href="#">ip-address</a> <i>string</i> <b>ipv4-source-address</b> <i>string</i> |
| Tree       | <a href="#">ipv4-source-address</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service nat syslog export-policy</a> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**facility** *keyword*

|            |   |
|------------|---|
| Synopsis   | Facility number in the PRI part of the NAT SYSLOG messages  |
| Context    | <b>configure</b> <a href="#">service nat syslog export-policy</a> <i>string</i> <b>facility</b> <i>keyword</i>  |
| Tree       | <a href="#">facility</a>  |
| Options    | kernel, user, mail, systemd, auth, syslogd, printer, netnews, uucp, cron, authpriv, ftp, ntp, logaudit, logalert, cron2, local0, local1, local2, local3, local4, local5, local6, local7 |
| Default    | local0  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**include**

|          |  |
|----------|--|
| Synopsis | Enter the <b>include</b> context   |
| Context  | <b>configure</b> <a href="#">service nat syslog export-policy</a> <i>string</i> <b>include</b> |

---

|            |  |
|------------|--|
| Tree       | <a href="#">include</a>                      |
| Introduced | 16.0.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **destination-ip** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include the translated destination IP address   |
| Context    | <b>configure</b> <a href="#">service nat syslog export-policy</a> <i>string</i> <a href="#">include destination-ip</a> <i>boolean</i> |
| Tree       | <a href="#">destination-ip</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **foreign-ip** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include the original destination IPv4 address   |
| Context    | <b>configure</b> <a href="#">service nat syslog export-policy</a> <i>string</i> <a href="#">include foreign-ip</a> <i>boolean</i> |
| Tree       | <a href="#">foreign-ip</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **foreign-port** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include the original destination port   |
| Context    | <b>configure</b> <a href="#">service nat syslog export-policy</a> <i>string</i> <a href="#">include foreign-port</a> <i>boolean</i> |
| Tree       | <a href="#">foreign-port</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **nat-policy-name** *boolean*

|          |  |
|----------|--|
| Synopsis | Include the NAT policy name in the flow log  |
| Context  | <b>configure</b> <a href="#">service nat syslog export-policy</a> <i>string</i> <a href="#">include nat-policy-name</a> <i>boolean</i> |

|            |  |
|------------|--|
| Tree       | <a href="#">nat-policy-name</a>              |
| Default    | false  |
| Introduced | 16.0.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

**sub-id** *boolean*

|            |   |
|------------|---|
| Synopsis   | Subscriber ID in subscriber aware NAT   |
| Context    | <b>configure</b> <a href="#">service nat syslog export-policy</a> <i>string</i> <a href="#">include sub-id</a> <i>boolean</i> |
| Tree       | <a href="#">sub-id</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**log-prefix** *string*

|               |  |
|---------------|--|
| Synopsis      | Optional prefix text in the MSG part of the NAT syslog messages  |
| Context       | <b>configure</b> <a href="#">service nat syslog export-policy</a> <i>string</i> <a href="#">log-prefix</a> <i>string</i> |
| Tree          | <a href="#">log-prefix</a>   |
| String Length | 1 to 32  |
| Default       | TMNX   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**max-tx-delay** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum time a syslog message delays in the output buffer to aggregate multiple events                                     |
| Context    | <b>configure</b> <a href="#">service nat syslog export-policy</a> <i>string</i> <a href="#">max-tx-delay</a> <i>number</i> |
| Tree       | <a href="#">max-tx-delay</a>   |
| Range      | 0 to 100   |
| Units      | deciseconds  |
| Default    | 3  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**mtu number**

|            |   |
|------------|---|
| Synopsis   | Maximum transmission unit   |
| Context    | <b>configure service nat syslog export-policy</b> <i>string</i> <b>mtu number</b> |
| Tree       | <a href="#">mtu</a>   |
| Range      | 512 to 9000   |
| Default    | 1500  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                      |

**rate-limit number**

|            |  |
|------------|--|
| Synopsis   | Frame limit  |
| Context    | <b>configure service nat syslog export-policy</b> <i>string</i> <b>rate-limit number</b> |
| Tree       | <a href="#">rate-limit</a>   |
| Range      | 10 to 2147483647   |
| Units      | packets per second   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**severity-level keyword**

|            |   |
|------------|---|
| Synopsis   | Severity level in the PRI part of the syslog messages   |
| Context    | <b>configure service nat syslog export-policy</b> <i>string</i> <b>severity-level keyword</b> |
| Tree       | <a href="#">severity-level</a>  |
| Options    | emergency, alert, critical, error, warning, notice, info, debug                               |
| Default    | info  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**up-nat-policy [name] string**

|          |  |
|----------|--|
| Synopsis | Enter the <b>up-nat-policy</b> list instance             |
| Context  | <b>configure service nat up-nat-policy</b> <i>string</i> |
| Tree     | <a href="#">up-nat-policy</a>                            |

|                |  |
|----------------|--|
| Max. Instances | 32   |
| Introduced     | 20.10.R1                                     |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

**[name]** *string*

|               |   |
|---------------|---|
| Synopsis      | UP NAT policy name  |
| Context       | <b>configure</b> <i>service nat up-nat-policy string</i>  |
| Tree          | <i>up-nat-policy</i>  |
| Description   | This command specifies the UP NAT policy name. The name default has a special meaning representing the default UP NAT policy template. The system uses the default template when the BNG CPF does not receive a more specific name when the subscriber is instantiated. |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 20.10.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**alg**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>alg</b> context   |
| Context     | <b>configure</b> <i>service nat up-nat-policy string alg</i>                                     |
| Tree        | <i>alg</i>   |
| Description | Commands in this context configure the Application Layer Gateway (ALG) attributes of the policy. |
| Introduced  | 20.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**ftp** *boolean*

|            |  |
|------------|--|
| Synopsis   | Use FTP ALG for the policy   |
| Context    | <b>configure</b> <i>service nat up-nat-policy string alg ftp boolean</i> |
| Tree       | <i>ftp</i>   |
| Default    | true   |
| Introduced | 20.10.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **pptp** *boolean*

Synopsis Use PPTP ALG for the policy

Context **configure** [service nat up-nat-policy](#) *string alg pptp boolean*

Tree [pptp](#)

Description When configured to **true**, the policy uses Point-to-Point Tunneling Protocol (PPTP) ALG.  
PPTP sessions can only be initiated from NAT inside.  
GRE traffic is allowed through NAT only if the corresponding mapping exists.  
There can be seven calls (GRE tunnels) per control session.  
When configured to **false**, PPTP ALG is not used.

Default false

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rtsp** *boolean*

Synopsis Use RTSP ALG for the policy

Context **configure** [service nat up-nat-policy](#) *string alg rtsp boolean*

Tree [rtsp](#)

Description When configured to **true**, Real-Time Streaming Protocol (RTSP) ALG is used for the policy.

Default false

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **sip** *boolean*

Synopsis Use SIP ALG for the policy

Context **configure** [service nat up-nat-policy](#) *string alg sip boolean*

Tree [sip](#)

Default false

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## default-host

Synopsis Enable the **default-host** context

Context **configure service nat up-nat-policy string default-host**

Tree **default-host**

Description Commands in this context configure the default DMZ host options. A default DMZ host is a node on the inside to which all unknown traffic is redirected by changing the destination IPv4 address in the traffic header. During this operation, the checksums in the Layer 3 and Layer 4 header (UDP and TCP) are recalculated.

Unknown traffic in NAT represent all unmatched traffic arriving from the outside (where there is no pinhole or a matching flow record created by traffic initiated from the inside). The purpose of the default DMZ host is to capture and analyze the unknown traffic as part of threat analysis.

The rate of redirected unknown traffic can be restricted by configuration.

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## inside-router-instance *string*

Synopsis Router instance of the DMZ

Context **configure service nat up-nat-policy string default-host inside-router-instance string**

Tree **inside-router-instance**

Description This command configures the router instance on the inside where the default DMZ host resides.

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ip-address *string*

Synopsis IP address of the default DMZ host

Context **configure service nat up-nat-policy string default-host ip-address string**

Tree **ip-address**

Description This command configures the IP address of the default DMZ host. Redirection to the default DMZ host is achieved by replacing the destination IP address in the traffic header in the unknown traffic initiated from the outside with the one of the default DMZ host.



|            |  |
|------------|--|
| Introduced | 22.10.R1                                     |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

**rate-limit** *number*

|             |  |
|-------------|--|
| Synopsis    | Rate limit for unknown traffic sent to default DMZ host  |
| Context     | <b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">default-host rate-limit</a> <i>number</i>   |
| Tree        | <a href="#">rate-limit</a>   |
| Description | This command configures the rate limit of the unknown traffic sent to the default DMZ host.<br><br>Unknown traffic sent to the default DMZ host is rate limited by a configurable value expressed in mbps. The rate limit is configurable per NAT pool per ISA, vISA, or ESA-VM. |
| Range       | 1 to 10000   |
| Default     | 10   |
| Introduced  | 22.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 20.10.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**filtering** *keyword*

|            |   |
|------------|---|
| Synopsis   | Filtering method for inbound traffic for the policy   |
| Context    | <b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">filtering</a> <i>keyword</i> |
| Tree       | <a href="#">filtering</a>   |
| Options    | endpoint-independent, address-and-port-dependent  |
| Default    | endpoint-independent  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## flow-log-policy

|            |  |
|------------|--|
| Synopsis   | Enter the <b>flow-log-policy</b> context   |
| Context    | <b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">flow-log-policy</a> |
| Tree       | <a href="#">flow-log-policy</a>  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## ipfix *reference*

|             |  |
|-------------|--|
| Synopsis    | IPFIX export policy  |
| Context     | <b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">flow-log-policy</a> <a href="#">ipfix reference</a> |
| Tree        | <a href="#">ipfix</a>  |
| Description | This command specifies an IP flow information export policy for the flow-log policy.   |
| Reference   | <b>configure</b> <a href="#">service ipfix export-policy</a> <i>string</i>   |
| Introduced  | 20.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## icmp-echo-reply *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable replies to ICMP Echo Request messages  |
| Context    | <b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">icmp-echo-reply</a> <i>boolean</i> |
| Tree       | <a href="#">icmp-echo-reply</a>   |
| Default    | false   |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## port-limits

|            |  |
|------------|--|
| Synopsis   | Enter the <b>port-limits</b> context   |
| Context    | <b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">port-limits</a> |
| Tree       | <a href="#">port-limits</a>  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **reserved** *number*

|             |   |
|-------------|---|
| Synopsis    | Number of ports reserved for prioritized sessions   |
| Context     | <b>configure service nat up-nat-policy</b> <i>string port-limits reserved number</i>              |
| Tree        | <a href="#">reserved</a>  |
| Description | This command configures the number of ports per block that are reserved for prioritized sessions. |
| Range       | 1 to 65534  |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **watermarks**

|             |   |
|-------------|---|
| Synopsis    | Enable the <b>watermarks</b> context  |
| Context     | <b>configure service nat up-nat-policy</b> <i>string port-limits watermarks</i> |
| Tree        | <a href="#">watermarks</a>  |
| Description | This command configures watermarks for NAT resources.                           |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                    |

### **high** *number*

|             |   |
|-------------|---|
| Synopsis    | High watermark percentage   |
| Context     | <b>configure service nat up-nat-policy</b> <i>string port-limits watermarks high number</i>                   |
| Tree        | <a href="#">high</a>  |
| Description | This command configures the high threshold value as a percentage of the total port-block space in a NAT pool. |
| Range       | 0 to 100  |
| Units       | percent   |
| Notes       | This element is mandatory.  |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**low number**

|             |  |
|-------------|--|
| Synopsis    | Low watermark percentage   |
| Context     | <b>configure service nat up-nat-policy</b> <i>string</i> port-limits watermarks <b>low number</b>            |
| Tree        | <b>low</b>   |
| Description | This command configures the low threshold value as a percentage of the total port-block space in a NAT pool. |
| Range       | 0 to 100   |
| Units       | percent  |
| Notes       | This element is mandatory.   |
| Introduced  | 20.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**priority-sessions**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>priority-sessions</b> context  |
| Context    | <b>configure service nat up-nat-policy</b> <i>string</i> <b>priority-sessions</b> |
| Tree       | <b>priority-sessions</b>  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                      |

**fc**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>fc</b> context   |
| Context     | <b>configure service nat up-nat-policy</b> <i>string</i> <b>priority-sessions fc</b>            |
| Tree        | <b>fc</b>   |
| Description | Commands in this context specify which Forwarding Class (FC) options have prioritized sessions. |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**af boolean**

|          |   |
|----------|---|
| Synopsis | Prioritize traffic from AF forwarding classes   |
| Context  | <b>configure service nat up-nat-policy</b> <i>string</i> <b>priority-sessions fc af boolean</b> |
| Tree     | <b>af</b>   |

|             |  |
|-------------|--|
| Description | When configured to <b>true</b> , traffic from Assured Forwarding (AF) FC sessions is prioritized. When configured to <b>false</b> , AF traffic is not prioritized. |
| Default     | false  |
| Introduced  | 20.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**be** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Prioritize traffic from BE forwarding classes   |
| Context     | <b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">priority-sessions fc be</a> <i>boolean</i>                             |
| Tree        | <a href="#">be</a>  |
| Description | When configured to <b>true</b> , traffic from Best Effort (BE) FC sessions is prioritized. When configured to <b>false</b> , BE traffic is not prioritized. |
| Default     | false   |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**ef** *boolean*

|            |   |
|------------|---|
| Synopsis   | Prioritize traffic from EF forwarding classes   |
| Context    | <b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">priority-sessions fc ef</a> <i>boolean</i> |
| Tree       | <a href="#">ef</a>  |
| Default    | false   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**h1** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Prioritize traffic from H1 forwarding classes  |
| Context     | <b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">priority-sessions fc h1</a> <i>boolean</i>    |
| Tree        | <a href="#">h1</a>   |
| Description | When configured to <b>true</b> , traffic from H1 sessions is prioritized. When configured to false, H1 traffic is not prioritized. |
| Default     | false  |
| Introduced  | 20.10.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **h2** *boolean*

Synopsis Prioritize traffic from H2 forwarding classes  
Context **configure** [service nat up-nat-policy](#) *string* [priority-sessions fc h2](#) *boolean*  
Tree [h2](#)  
Default false  
Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **l1** *boolean*

Synopsis Prioritize traffic from L1 forwarding classes  
Context **configure** [service nat up-nat-policy](#) *string* [priority-sessions fc l1](#) *boolean*  
Tree [l1](#)  
Default false  
Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **l2** *boolean*

Synopsis Prioritize traffic from L2 forwarding classes  
Context **configure** [service nat up-nat-policy](#) *string* [priority-sessions fc l2](#) *boolean*  
Tree [l2](#)  
Description When configured to **true**, traffic from L2 sessions is prioritized. When configured to false, L2 traffic is not prioritized.  
Default false  
Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **nc** *boolean*

Synopsis Prioritize traffic from NC forwarding classes  
Context **configure** [service nat up-nat-policy](#) *string* [priority-sessions fc nc](#) *boolean*

|            |  |
|------------|--|
| Tree       | <a href="#">nc</a>                           |
| Default    | false  |
| Introduced | 20.10.R1                                     |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

## session-limits

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>session-limits</b> context   |
| Context     | <b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">session-limits</a> |
| Tree        | <a href="#">session-limits</a>  |
| Description | Commands in this context configure session-limit attributes for the policy.                             |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## max number

|            |  |
|------------|--|
| Synopsis   | Maximum number of sessions per subscriber  |
| Context    | <b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">session-limits max number</a> |
| Tree       | <a href="#">max</a>  |
| Range      | 1 to 65535   |
| Default    | 65535  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## reserved number

|             |   |
|-------------|---|
| Synopsis    | Number of sessions reserved for prioritized sessions  |
| Context     | <b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">session-limits reserved number</a> |
| Tree        | <a href="#">reserved</a>  |
| Description | This command configures the number of sessions per block that are reserved for prioritized sessions.                    |
| Range       | 1 to 65534  |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## watermarks

|             |  |
|-------------|--|
| Synopsis    | Enable the <b>watermarks</b> context   |
| Context     | <b>configure service nat up-nat-policy</b> <i>string session-limits watermarks</i> |
| Tree        | <a href="#">watermarks</a>   |
| Description | This command configures watermarks for NAT resources.                              |
| Introduced  | 20.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                       |

## high number

|             |   |
|-------------|---|
| Synopsis    | High watermark percentage   |
| Context     | <b>configure service nat up-nat-policy</b> <i>string session-limits watermarks high number</i>                |
| Tree        | <a href="#">high</a>  |
| Description | This command configures the high threshold value as a percentage of the total port-block space in a NAT pool. |
| Range       | 0 to 100  |
| Units       | percent   |
| Notes       | This element is mandatory.  |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## low number

|             |  |
|-------------|--|
| Synopsis    | Low watermark percentage   |
| Context     | <b>configure service nat up-nat-policy</b> <i>string session-limits watermarks low number</i>                |
| Tree        | <a href="#">low</a>  |
| Description | This command configures the low threshold value as a percentage of the total port-block space in a NAT pool. |
| Range       | 0 to 100   |
| Units       | percent  |
| Notes       | This element is mandatory.   |
| Introduced  | 20.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |



## tcp

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>tcp</b> context   |
| Context     | <b>configure service nat up-nat-policy</b> <i>string tcp</i>   |
| Tree        | <a href="#">tcp</a>  |
| Description | Commands in this context configure the transmission control protocol (TCP) attributes of the policy. |
| Introduced  | 20.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## mss-adjust *number*

|             |  |
|-------------|--|
| Synopsis    | TCP MSS adjustment value   |
| Context     | <b>configure service nat up-nat-policy</b> <i>string tcp mss-adjust number</i>   |
| Tree        | <a href="#">mss-adjust</a>   |
| Description | This command configures the value to use to adjust the TCP Maximum Segment Size (MSS) option, if not already present or the present value is higher. |
| Range       | 160 to 10240   |
| Introduced  | 20.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## reset-unknown *boolean*

|             |   |
|-------------|---|
| Synopsis    | Generate TCP reset for packets from unknown flows   |
| Context     | <b>configure service nat up-nat-policy</b> <i>string tcp reset-unknown boolean</i>  |
| Tree        | <a href="#">reset-unknown</a>   |
| Description | When configured to <b>true</b> , TCP packets are dropped and a TCP reset is generated if the NAT inside receives a TCP packet without the SYN flag set for an unknown flow.<br>When configured to <b>false</b> , no TCP reset is generated. |
| Default     | false   |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## timeouts

|          |                                   |
|----------|-----------------------------------|
| Synopsis | Enter the <b>timeouts</b> context |
|----------|-----------------------------------|

---

|             |  |
|-------------|--|
| Context     | <b>configure service nat up-nat-policy</b> <i>string timeouts</i>                          |
| Tree        | <a href="#">timeouts</a>   |
| Description | Commands in this context configure the attributes of session idle timeouts for the policy. |
| Introduced  | 20.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **icmp-query** *number*

|            |   |
|------------|---|
| Synopsis   | Timeout applied to an ICMP Query session  |
| Context    | <b>configure service nat up-nat-policy</b> <i>string timeouts icmp-query number</i> |
| Tree       | <a href="#">icmp-query</a>  |
| Range      | 60 to 240   |
| Units      | seconds   |
| Default    | 60  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **sip** *number*

|            |  |
|------------|--|
| Synopsis   | SIP inactive media timeout   |
| Context    | <b>configure service nat up-nat-policy</b> <i>string timeouts sip number</i> |
| Tree       | <a href="#">sip</a>  |
| Range      | 10 to 7200   |
| Units      | seconds  |
| Default    | 120  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                 |

### **subscriber-retention** *number*

|          |   |
|----------|---|
| Synopsis | IP address hold time after host and port blocks expire  |
| Context  | <b>configure service nat up-nat-policy</b> <i>string timeouts subscriber-retention number</i> |
| Tree     | <a href="#">subscriber-retention</a>  |

|             |  |
|-------------|--|
| Description | This command configures the time to keep a NAT subscriber and its associated IP address after all hosts and associated port blocks expire. If a NAT subscriber host appears before the retention timeout elapses, it is given the same outside IP address. |
| Range       | 0 to 1440  |
| Units       | minutes  |
| Default     | 0  |
| Introduced  | 20.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## tcp

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>tcp</b> context                                   |
| Context     | <b>configure service nat up-nat-policy string timeouts tcp</b> |
| Tree        | <a href="#">tcp</a>  |
| Description | Commands in this context configure TCP timeout attributes.     |
| Introduced  | 20.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                   |

## established *number*

|            |  |
|------------|--|
| Synopsis   | Idle timeout for TCP session in established state  |
| Context    | <b>configure service nat up-nat-policy string timeouts tcp established <i>number</i></b> |
| Tree       | <a href="#">established</a>  |
| Range      | 60 to 86400  |
| Units      | seconds  |
| Default    | 7440   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## rst *number*

|          |  |
|----------|--|
| Synopsis | Suspend time for TCP connection ports closed by RST                              |
| Context  | <b>configure service nat up-nat-policy string timeouts tcp rst <i>number</i></b> |
| Tree     | <a href="#">rst</a>  |

|             |   |
|-------------|---|
| Description | This command configures the suspend time for outside TCP ports that are used in translations for TCP connections, when they are closed by TCP Reset (RST). After the timer expires, the outside ports can be reused for new TCP translations. |
| Range       | 0 to 240  |
| Units       | seconds   |
| Default     | 0   |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **syn number**

|            |  |
|------------|--|
| Synopsis   | TCP session timeout when synchronizing initial sequence                          |
| Context    | <b>configure service nat up-nat-policy</b> <i>string timeouts tcp syn number</i> |
| Tree       | <a href="#">syn</a>  |
| Range      | 6 to 86400   |
| Units      | seconds  |
| Default    | 15   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                     |

### **time-wait number**

|            |  |
|------------|--|
| Synopsis   | Timeout applied to a TCP session in the time-wait state                                |
| Context    | <b>configure service nat up-nat-policy</b> <i>string timeouts tcp time-wait number</i> |
| Tree       | <a href="#">time-wait</a>  |
| Range      | 0 to 240   |
| Units      | seconds  |
| Default    | 0  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **transitory number**

|          |   |
|----------|---|
| Synopsis | Idle timeout for TCP session in transitory state  |
| Context  | <b>configure service nat up-nat-policy</b> <i>string timeouts tcp transitory number</i> |

---

|            |  |
|------------|--|
| Tree       | <a href="#">transitory</a>                   |
| Range      | 60 to 86400                                  |
| Units      | seconds                                      |
| Default    | 240  |
| Introduced | 20.10.R1                                     |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

## udp

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>udp</b> context  |
| Context     | <b>configure service nat up-nat-policy</b> <i>string</i> <b>timeouts udp</b>                    |
| Tree        | <a href="#">udp</a>   |
| Description | Commands in this context configure the User Datagram Protocol (UDP) mapping timeout attributes. |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## dns *number*

|            |  |
|------------|--|
| Synopsis   | Timeout applied to UDP session with destination port 53  |
| Context    | <b>configure service nat up-nat-policy</b> <i>string</i> <b>timeouts udp dns</b> <i>number</i> |
| Tree       | <a href="#">dns</a>  |
| Range      | 15 to 86400  |
| Units      | seconds  |
| Default    | 15   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## initial *number*

|          |  |
|----------|--|
| Synopsis | UDP mapping timeout applied to new sessions  |
| Context  | <b>configure service nat up-nat-policy</b> <i>string</i> <b>timeouts udp initial</b> <i>number</i> |
| Tree     | <a href="#">initial</a>  |
| Range    | 10 to 300  |
| Units    | seconds  |

|            |  |
|------------|--|
| Default    | 15   |
| Introduced | 20.10.R1                                     |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **normal** *number*

|            |  |
|------------|--|
| Synopsis   | UDP mapping timeout  |
| Context    | <b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">timeouts udp normal</a> <i>number</i> |
| Tree       | <a href="#">normal</a>   |
| Range      | 60 to 86400  |
| Units      | seconds  |
| Default    | 300  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **udp**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>udp</b> context   |
| Context    | <b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">udp</a> |
| Tree       | <a href="#">udp</a>  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **inbound-refresh** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Extend UDP session timeout on inbound traffic   |
| Context     | <b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">udp inbound-refresh</a> <i>boolean</i>   |
| Tree        | <a href="#">inbound-refresh</a>   |
| Description | When configured to <b>true</b> , this command extends the UDP session timeout on inbound traffic.<br>When configured to <b>false</b> , the UDP session timeout is not extended. |
| Default     | false   |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**oper-group** [*name*] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>oper-group</b> list instance         |
| Context        | <b>configure service oper-group</b> <i>string</i> |
| Tree           | <b>oper-group</b>                                 |
| Max. Instances | 32768   |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

**[name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Operational group name                            |
| Context       | <b>configure service oper-group</b> <i>string</i> |
| Tree          | <b>oper-group</b>                                 |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.               |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**bfd-liveness**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>bfd-liveness</b> context                                |
| Context    | <b>configure service oper-group</b> <i>string</i> <b>bfd-liveness</b> |
| Tree       | <b>bfd-liveness</b>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**dest-ip** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Destination address for BFD   |
| Context  | <b>configure service oper-group</b> <i>string</i> <b>bfd-liveness dest-ip</b> <i>string</i> |
| Tree     | <b>dest-ip</b>  |

|            |                            |
|------------|----------------------------|
| Notes      | This element is mandatory. |
| Introduced | 16.0.R1                    |
| Platforms  | All                        |

### interface-name *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Source interface name   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <i>string</i> <a href="#">bfd-liveness</a> <a href="#">interface-name</a> <i>string</i> |
| Tree          | <a href="#">interface-name</a>  |
| String Length | 1 to 32   |
| Notes         | This element is mandatory.  |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

### router-instance *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Routing context used for route lookup  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <i>string</i> <a href="#">bfd-liveness</a> <a href="#">router-instance</a> <i>string</i> |
| Tree       | <a href="#">router-instance</a>  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### hold-time

|          |   |
|----------|---|
| Synopsis | Enter the <b>hold-time</b> context  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <i>string</i> <a href="#">hold-time</a> |
| Tree     | <a href="#">hold-time</a>   |



---

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **down** *number*

|            |  |
|------------|--|
| Synopsis   | Oper group hold down time  |
| Context    | <b>configure</b> <a href="#">service oper-group</a> <i>string</i> <a href="#">hold-time down</a> <i>number</i> |
| Tree       | <a href="#">down</a>   |
| Range      | 1 to 3600  |
| Units      | seconds  |
| Introduced | 16.0.R3  |
| Platforms  | All  |

### **up** *number*

|            |  |
|------------|--|
| Synopsis   | Oper group hold up time  |
| Context    | <b>configure</b> <a href="#">service oper-group</a> <i>string</i> <a href="#">hold-time up</a> <i>number</i> |
| Tree       | <a href="#">up</a>   |
| Range      | 0 to 3600  |
| Units      | seconds  |
| Default    | 4  |
| Introduced | 16.0.R3  |
| Platforms  | All  |

### **pbb**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>pbb</b> context                 |
| Context    | <b>configure</b> <a href="#">service pbb</a> |
| Tree       | <a href="#">pbb</a>                          |
| Introduced | 16.0.R1                                      |
| Platforms  | All  |

### **mac** [*name*] *string*

|          |                                    |
|----------|------------------------------------|
| Synopsis | Enter the <b>mac</b> list instance |
|----------|------------------------------------|

---

|            |  |
|------------|--|
| Context    | <b>configure service pbb mac</b> <i>string</i> |
| Tree       | <a href="#">mac</a>                            |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[name]** *string*

|               |  |
|---------------|--|
| Synopsis      | MAC name for the MAC address                   |
| Context       | <b>configure service pbb mac</b> <i>string</i> |
| Tree          | <a href="#">mac</a>                            |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.            |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**address** *string*

|            |  |
|------------|--|
| Synopsis   | IEEE address assigned to the MAC name                                |
| Context    | <b>configure service pbb mac</b> <i>string address</i> <i>string</i> |
| Tree       | <a href="#">address</a>  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**mac-notification**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mac-notification</b> context     |
| Context    | <b>configure service pbb mac-notification</b> |
| Tree       | <a href="#">mac-notification</a>              |
| Introduced | 16.0.R1                                       |
| Platforms  | All   |

**count** *number*

|          |                                 |
|----------|---------------------------------|
| Synopsis | MAC notification messages count |
|----------|---------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service pbb mac-notification count</b> <i>number</i> |
| Tree       | <a href="#">count</a>   |
| Range      | 1 to 10   |
| Default    | 3   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **interval** *number*

|            |  |
|------------|--|
| Synopsis   | Interval for MAC-notification messages                               |
| Context    | <b>configure service pbb mac-notification interval</b> <i>number</i> |
| Tree       | <a href="#">interval</a>   |
| Range      | 1 to 100   |
| Units      | deciseconds  |
| Default    | 1  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **source-bmac**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>source-bmac</b> context     |
| Context    | <b>configure service pbb source-bmac</b> |
| Tree       | <a href="#">source-bmac</a>              |
| Introduced | 16.0.R1                                  |
| Platforms  | All                                      |

### **address** *string*

|            |  |
|------------|--|
| Synopsis   | Source B-VPLS MAC address to use with PBB                      |
| Context    | <b>configure service pbb source-bmac address</b> <i>string</i> |
| Tree       | <a href="#">address</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**evpn-etree-leaf-address** *string*

|            |  |
|------------|--|
| Synopsis   | Source Backbone VPLS MAC address to use with Provider Backbone Bridging (PBB)  |
| Context    | <b>configure</b> <a href="#">service pbb</a> <a href="#">source-bmac</a> <a href="#">evpn-etree-leaf-address</a> <i>string</i> |
| Tree       | <a href="#">evpn-etree-leaf-address</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**proxy-arp-nd**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>proxy-arp-nd</b> context                 |
| Context    | <b>configure</b> <a href="#">service proxy-arp-nd</a> |
| Tree       | <a href="#">proxy-arp-nd</a>                          |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**mac-list**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mac-list</b> context  |
| Context    | <b>configure</b> <a href="#">service proxy-arp-nd</a> <a href="#">mac-list</a> |
| Tree       | <a href="#">mac-list</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**list** [[list-name](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>list</b> list instance   |
| Context    | <b>configure</b> <a href="#">service proxy-arp-nd</a> <a href="#">mac-list</a> <a href="#">list</a> <i>string</i> |
| Tree       | <a href="#">list</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[list-name]** *string*

|          |   |
|----------|---|
| Synopsis | Specify name for mac list   |
| Context  | <b>configure</b> <a href="#">service proxy-arp-nd</a> <a href="#">mac-list</a> <a href="#">list</a> <i>string</i> |

|               |                                     |
|---------------|-------------------------------------|
| Tree          | <a href="#">list</a>                |
| String Length | 1 to 32                             |
| Notes         | This element is part of a list key. |
| Introduced    | 16.0.R1                             |
| Platforms     | All                                 |

### **mac** [[address](#)] *string*

|                |  |
|----------------|--|
| Synopsis       | Add a list entry for <b>mac</b>  |
| Context        | <b>configure</b> <a href="#">service proxy-arp-nd mac-list list</a> <i>string mac string</i> |
| Tree           | <a href="#">mac</a>  |
| Max. Instances | 10   |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

### **[address]** *string*

|            |  |
|------------|--|
| Synopsis   | MAC address to be added to the list  |
| Context    | <b>configure</b> <a href="#">service proxy-arp-nd mac-list list</a> <i>string mac string</i> |
| Tree       | <a href="#">mac</a>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **pw-template** [[pw-template-name](#)] *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>pw-template</b> list instance                         |
| Context        | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> |
| Tree           | <a href="#">pw-template</a>  |
| Max. Instances | 2048   |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

**[pw-template-name]** *string*

|               |  |
|---------------|--|
| Synopsis      | SDP template name  |
| Context       | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> |
| Tree          | <a href="#">pw-template</a>  |
| String Length | 1 to 64  |
| Notes         | This element is part of a list key.                                |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**accounting-policy** *number*

|            |  |
|------------|--|
| Synopsis   | Accounting policy  |
| Context    | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">accounting-policy</a> <i>number</i> |
| Tree       | <a href="#">accounting-policy</a>  |
| Range      | 1 to 99  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**allow-fragmentation** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow packets to be sent without setting DF bit   |
| Context    | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">allow-fragmentation</a> <i>boolean</i> |
| Tree       | <a href="#">allow-fragmentation</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**auto-gre-sdp** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | Use a GRE tunnel to automatically create an SDP  |
| Context  | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">auto-gre-sdp</a> <i>boolean</i> |
| Tree     | <a href="#">auto-gre-sdp</a>   |

---

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

**block-on-peer-fault** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable block traffic on peer fault   |
| Context    | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <b>block-on-peer-fault</b> <i>boolean</i> |
| Tree       | <a href="#">block-on-peer-fault</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**collect-stats** *boolean*

|            |  |
|------------|--|
| Synopsis   | Collect statistics   |
| Context    | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <b>collect-stats</b> <i>boolean</i> |
| Tree       | <a href="#">collect-stats</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**control-word** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable/Disable the use of ControlWord   |
| Context    | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <b>control-word</b> <i>boolean</i> |
| Tree       | <a href="#">control-word</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**egress**

|          |  |
|----------|--|
| Synopsis | Enter the <b>egress</b> context  |
| Context  | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <b>egress</b> |

---

|            |                        |
|------------|------------------------|
| Tree       | <a href="#">egress</a> |
| Introduced | 16.0.R1                |
| Platforms  | All                    |

## **filter**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>filter</b> context   |
| Context    | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">egress</a> <b>filter</b> |
| Tree       | <a href="#">filter</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## **ip string**

|               |   |
|---------------|---|
| Synopsis      | IPv4 filter policy name   |
| Context       | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">egress</a> <b>filter</b> <b>ip</b> <i>string</i> |
| Tree          | <a href="#">ip</a>  |
| String Length | 1 to 64   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

## **ipv6 string**

|               |   |
|---------------|---|
| Synopsis      | IPv6 filter policy name   |
| Context       | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">egress</a> <b>filter</b> <b>ipv6</b> <i>string</i> |
| Tree          | <a href="#">ipv6</a>  |
| String Length | 1 to 64   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

## **mac string**

|          |  |
|----------|--|
| Synopsis | MAC filter policy name   |
| Context  | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">egress</a> <b>filter</b> <b>mac</b> <i>string</i> |
| Tree     | <a href="#">mac</a>  |



String Length 1 to 64  
 Introduced 16.0.R1  
 Platforms All

### **mfib-allowed-mda-destinations**

Synopsis Enter the **mfib-allowed-mda-destinations** context  
 Context **configure service pw-template string egress mfib-allowed-mda-destinations**  
 Tree [mfib-allowed-mda-destinations](#)  
 Introduced 16.0.R1  
 Platforms All

### **mda [mda-id] string**

Synopsis Add a list entry for **mda**  
 Context **configure service pw-template string egress mfib-allowed-mda-destinations mda string**  
 Tree [mda](#)  
 Introduced 16.0.R1  
 Platforms All

### **[mda-id] string**

Synopsis MFIB allowed MDA destination  
 Context **configure service pw-template string egress mfib-allowed-mda-destinations mda string**  
 Tree [mda](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **qos**

Synopsis Enter the **qos** context  
 Context **configure service pw-template string egress qos**  
 Tree [qos](#)  
 Introduced 16.0.R1

Platforms All

## network

Synopsis Enter the **network** context

Context **configure** [service pw-template](#) *string* [egress qos network](#)

Tree [network](#)

Introduced 16.0.R1

Platforms All

## policy-name *string*

Synopsis Network policy ID

Context **configure** [service pw-template](#) *string* [egress qos network policy-name](#) *string*

Tree [policy-name](#)

String Length 1 to 64

Introduced 16.0.R1

Platforms All

## port-redirect-group

Synopsis Enter the **port-redirect-group** context

Context **configure** [service pw-template](#) *string* [egress qos network port-redirect-group](#)

Tree [port-redirect-group](#)

Introduced 16.0.R1

Platforms All

## group-name *string*

Synopsis Name of the egress port queue group template

Context **configure** [service pw-template](#) *string* [egress qos network port-redirect-group group-name](#) *string*

Tree [group-name](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms All

### **instance** *number*

Synopsis Instance for FP ingress queue group

Context **configure** [service pw-template](#) *string* [egress qos network port-redirect-group](#) *instance number*

Tree [instance](#)

Range 1 to 65535

Introduced 16.0.R1

Platforms All

### **encryption-keygroup**

Synopsis Enter the **encryption-keygroup** context

Context **configure** [service pw-template](#) *string* [encryption-keygroup](#)

Tree [encryption-keygroup](#)

Introduced 19.10.R1

Platforms VSR

### **inbound** *number*

Synopsis Keygroup identifier in the inbound direction

Context **configure** [service pw-template](#) *string* [encryption-keygroup inbound](#) *number*

Tree [inbound](#)

Range 1 to 127

Introduced 19.10.R1

Platforms VSR

### **outbound** *number*

Synopsis Keygroup identifier in the outbound direction

Context **configure** [service pw-template](#) *string* [encryption-keygroup outbound](#) *number*

Tree [outbound](#)

Range 1 to 127

Introduced 19.10.R1

Platforms VSR

## entropy-label

Synopsis Enable the use of an entropy label

Context **configure** [service pw-template](#) *string* **entropy-label**

Tree [entropy-label](#)

Notes The following elements are part of a choice: **entropy-label** or **hash-label**.

Introduced 16.0.R1

Platforms All

## fdb

Synopsis Enter the **fdb** context

Context **configure** [service pw-template](#) *string* **fdb**

Tree [fdb](#)

Introduced 16.0.R1

Platforms All

## auto-learn-mac-protect *boolean*

Synopsis Enable automatic update of MAC protect list

Context **configure** [service pw-template](#) *string* **fdb auto-learn-mac-protect** *boolean*

Tree [auto-learn-mac-protect](#)

Default false

Introduced 16.0.R1

Platforms All

## auto-learn-mac-protect-exclude-list *string*

Synopsis Name of the MAC protect exclusion list

Context **configure** [service pw-template](#) *string* **fdb auto-learn-mac-protect-exclude-list** *string*

Tree [auto-learn-mac-protect-exclude-list](#)

Description This command configures the name of a MAC protect exclusion list.

Dynamically-learned MAC Source Addresses (SA) are protected if they are learned on an object with ALMP configured and no exclusion list is associated with the object, or if the MAC SA does not match any entry in an associated exclusion list.

An exclusion list can be used in multiple objects of a service. If a list is empty, ALMP does not exclude any learned MAC SAs from protection on the object.

String Length 1 to 32

Introduced 20.5.R1

Platforms All

### **discard-unknown-source** *boolean*

Synopsis Discard frames with unknown source

Context **configure** [service pw-template string fdb discard-unknown-source boolean](#)

Tree [discard-unknown-source](#)

Default false

Introduced 16.0.R1

Platforms All

### **limit-mac-move** *keyword*

Synopsis MAC move limit

Context **configure** [service pw-template string fdb limit-mac-move keyword](#)

Tree [limit-mac-move](#)

Options blockable, non-blockable

Default blockable

Introduced 16.0.R1

Platforms All

### **mac-learning**

Synopsis Enter the **mac-learning** context

Context **configure** [service pw-template string fdb mac-learning](#)

Tree [mac-learning](#)

Introduced 16.0.R1

Platforms All

**aging** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable aging of MAC addresses  |
| Context    | <b>configure</b> <a href="#">service pw-template string fdb mac-learning aging boolean</a> |
| Tree       | <a href="#">aging</a>  |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**learning** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable learning of new MAC addresses  |
| Context    | <b>configure</b> <a href="#">service pw-template string fdb mac-learning learning boolean</a> |
| Tree       | <a href="#">learning</a>  |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**mac-pinning** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable MAC address pinning on this spoke SDP  |
| Context    | <b>configure</b> <a href="#">service pw-template string fdb mac-pinning boolean</a> |
| Tree       | <a href="#">mac-pinning</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**maximum-mac-addresses** *number*

|             |  |
|-------------|--|
| Synopsis    | Maximum number of MAC address entries in the FDB   |
| Context     | <b>configure</b> <a href="#">service pw-template string fdb maximum-mac-addresses number</a>   |
| Tree        | <a href="#">maximum-mac-addresses</a>  |
| Description | <p>This command specifies the maximum number of FDB entries for both learned and static MAC addresses for this PW template.</p> <p>When the configured limit is reached, no new addresses are learned from the SAP or spoke SDP until at least one FDB entry is aged out or cleared.</p> |

When the configured limit is reached and the **configure service pw-template fdb discard-unknown-source** command is set to **true** for this PW template, packets with unknown source MAC addresses are discarded. If **discard-unknown-source** is set to **false**, the packets are forwarded if their destination MAC addresses are known, or flooded if their destination MAC addresses are unknown.

However, if the **configure service vpls fdb discard-unknown** command is set to **true**, packets with unknown destination MAC addresses are discarded, even if the limit of FDB entries on the specific VPLS instance is not reached.

When unconfigured, the PW template uses the global MAC learning limitations.

|            |             |
|------------|-------------|
| Range      | 1 to 511999 |
| Introduced | 16.0.R1     |
| Platforms  | All         |

### **protected-src-mac-violation-action** *keyword*

|            |  |
|------------|--|
| Synopsis   | Action for protected source MAC restriction  |
| Context    | <b>configure service pw-template string fdb protected-src-mac-violation-action keyword</b> |
| Tree       | <a href="#">protected-src-mac-violation-action</a>   |
| Options    | sdp-bind-oper-down, alarm-only, discard  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **force-vc-forwarding** *keyword*

|            |   |
|------------|---|
| Synopsis   | VC forwarding action  |
| Context    | <b>configure service pw-template string force-vc-forwarding keyword</b> |
| Tree       | <a href="#">force-vc-forwarding</a>                                     |
| Options    | vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag                                |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **hash-label**

|          |  |
|----------|--|
| Synopsis | Enable the <b>hash-label</b> context   |
| Context  | <b>configure service pw-template string hash-label</b>                                   |
| Tree     | <a href="#">hash-label</a>   |
| Notes    | The following elements are part of a choice: <b>entropy-label</b> or <b>hash-label</b> . |

Introduced 16.0.R1  
Platforms All

### signal-capability

Synopsis Hash label capability that is signaled to the remote PE  
Context **configure** [service pw-template](#) *string* [hash-label](#) [signal-capability](#)  
Tree [signal-capability](#)  
Introduced 16.0.R1  
Platforms All

### igmp-snooping

Synopsis Enter the **igmp-snooping** context  
Context **configure** [service pw-template](#) *string* [igmp-snooping](#)  
Tree [igmp-snooping](#)  
Introduced 16.0.R1  
Platforms All

### fast-leave *boolean*

Synopsis Allow IGMP fast leave processing  
Context **configure** [service pw-template](#) *string* [igmp-snooping fast-leave](#) *boolean*  
Tree [fast-leave](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### import-policy *string*

Synopsis Import policy that filters IGMP packets  
Context **configure** [service pw-template](#) *string* [igmp-snooping import-policy](#) *string*  
Tree [import-policy](#)  
String Length 1 to 32  
Introduced 16.0.R1



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Platforms All

### **maximum-number-groups** *number*

Synopsis Maximum multicast groups

Context **configure** [service pw-template](#) *string* [igmp-snooping](#) [maximum-number-groups](#) *number*

Tree [maximum-number-groups](#)

Range 1 to 1000

Introduced 16.0.R1

Platforms All

### **query-interval** *number*

Synopsis Time between two consecutive host-query messages

Context **configure** [service pw-template](#) *string* [igmp-snooping](#) [query-interval](#) *number*

Tree [query-interval](#)

Range 2 to 1024

Units seconds

Default 125

Introduced 16.0.R1

Platforms All

### **query-last-member-interval** *number*

Synopsis Time between group-specific query messages

Context **configure** [service pw-template](#) *string* [igmp-snooping](#) [query-last-member-interval](#) *number*

Tree [query-last-member-interval](#)

Range 1 to 50

Units deciseconds

Default 10

Introduced 16.0.R1

Platforms All

**query-response-interval** *number*

|            |  |
|------------|--|
| Synopsis   | Time to wait for a response to the host-query messages   |
| Context    | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">query-response-interval</a> <i>number</i> |
| Tree       | <a href="#">query-response-interval</a>  |
| Range      | 1 to 1023  |
| Units      | seconds  |
| Default    | 10   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**robust-count** *number*

|            |   |
|------------|---|
| Synopsis   | Number of retries after expected message loss   |
| Context    | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">robust-count</a> <i>number</i> |
| Tree       | <a href="#">robust-count</a>  |
| Range      | 2 to 7  |
| Default    | 2   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**send-queries** *boolean*

|            |  |
|------------|--|
| Synopsis   | Generate IGMP general queries  |
| Context    | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">send-queries</a> <i>boolean</i> |
| Tree       | <a href="#">send-queries</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**version** *keyword*

|          |   |
|----------|---|
| Synopsis | IGMP version  |
| Context  | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">version</a> <i>keyword</i> |
| Tree     | <a href="#">version</a>   |
| Options  | 1, 2, 3   |

---

|            |         |
|------------|---------|
| Default    | 3       |
| Introduced | 16.0.R1 |
| Platforms  | All     |

## ingress

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ingress</b> context  |
| Context    | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <b>ingress</b> |
| Tree       | <a href="#">ingress</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## filter

|            |  |
|------------|--|
| Synopsis   | Enter the <b>filter</b> context  |
| Context    | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <b>ingress</b> <a href="#">filter</a> |
| Tree       | <a href="#">filter</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## ip *string*

|               |  |
|---------------|--|
| Synopsis      | IPv4 filter policy name  |
| Context       | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <b>ingress</b> <a href="#">filter</a> <b>ip</b> <i>string</i> |
| Tree          | <a href="#">ip</a>   |
| String Length | 1 to 64  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

## ipv6 *string*

|               |  |
|---------------|--|
| Synopsis      | IPv6 filter policy name  |
| Context       | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <b>ingress</b> <a href="#">filter</a> <b>ipv6</b> <i>string</i> |
| Tree          | <a href="#">ipv6</a>   |
| String Length | 1 to 64  |

Introduced 16.0.R1  
Platforms All

### **mac string**

Synopsis MAC filter policy name  
Context **configure** [service pw-template string ingress filter mac string](#)  
Tree [mac](#)  
String Length 1 to 64  
Introduced 16.0.R1  
Platforms All

### **qos**

Synopsis Enter the **qos** context  
Context **configure** [service pw-template string ingress qos](#)  
Tree [qos](#)  
Introduced 16.0.R1  
Platforms All

### **network**

Synopsis Enter the **network** context  
Context **configure** [service pw-template string ingress qos network](#)  
Tree [network](#)  
Introduced 16.0.R1  
Platforms All

### **fp-redirect-group**

Synopsis Enter the **fp-redirect-group** context  
Context **configure** [service pw-template string ingress qos network fp-redirect-group](#)  
Tree [fp-redirect-group](#)  
Introduced 16.0.R1  
Platforms All

**group-name** *string*

|               |   |
|---------------|---|
| Synopsis      | Name of the forwarding plane queue group template   |
| Context       | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">ingress qos network fp-redirect-group</a> <a href="#">group-name</a> <i>string</i> |
| Tree          | <a href="#">group-name</a>  |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**instance** *number*

|            |   |
|------------|---|
| Synopsis   | Instance for FP ingress queue group   |
| Context    | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">ingress qos network fp-redirect-group</a> <a href="#">instance</a> <i>number</i> |
| Tree       | <a href="#">instance</a>  |
| Range      | 1 to 65535  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**policy-name** *string*

|               |  |
|---------------|--|
| Synopsis      | Network policy ID  |
| Context       | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">ingress qos network</a> <a href="#">policy-name</a> <i>string</i> |
| Tree          | <a href="#">policy-name</a>  |
| String Length | 1 to 64  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**l2pt**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>l2pt</b> context   |
| Context    | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">l2pt</a> |
| Tree       | <a href="#">l2pt</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## termination

|            |  |
|------------|--|
| Synopsis   | Enable the <b>termination</b> context                        |
| Context    | <b>configure service pw-template string l2pt termination</b> |
| Tree       | <a href="#">termination</a>                                  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## protocols

|            |  |
|------------|--|
| Synopsis   | Enter the <b>protocols</b> context                                     |
| Context    | <b>configure service pw-template string l2pt termination protocols</b> |
| Tree       | <a href="#">protocols</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## cdp boolean

|            |  |
|------------|--|
| Synopsis   | Enable Cisco discovery protocol  |
| Context    | <b>configure service pw-template string l2pt termination protocols cdp boolean</b> |
| Tree       | <a href="#">cdp</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## dtp boolean

|            |  |
|------------|--|
| Synopsis   | Enable dynamic trunking protocol   |
| Context    | <b>configure service pw-template string l2pt termination protocols dtp boolean</b> |
| Tree       | <a href="#">dtp</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **pagp** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable port aggregation protocol  |
| Context    | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">l2pt termination protocols</a> <a href="#">pagp</a> <i>boolean</i> |
| Tree       | <a href="#">pagp</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **stp** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable all spanning tree protocols   |
| Context    | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">l2pt termination protocols</a> <a href="#">stp</a> <i>boolean</i> |
| Tree       | <a href="#">stp</a>  |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **udld** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable unidirectional link detection  |
| Context    | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">l2pt termination protocols</a> <a href="#">udld</a> <i>boolean</i> |
| Tree       | <a href="#">udld</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **vtp** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable virtual trunk protocol  |
| Context    | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">l2pt termination protocols</a> <a href="#">vtp</a> <i>boolean</i> |
| Tree       | <a href="#">vtp</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**provisioned-sdp** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Provisioned SDP type  |
| Context    | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">provisioned-sdp</a> <i>keyword</i> |
| Tree       | <a href="#">provisioned-sdp</a>   |
| Options    | use, prefer   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**pw-template-id** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | PW Template Id  |
| Context    | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">pw-template-id</a> <i>number</i> |
| Tree       | <a href="#">pw-template-id</a>  |
| Range      | 1 to 2147483647   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**sdp-exclude** [[group-name](#)] *reference*

|            |   |
|------------|---|
| Synopsis   | Add a list entry for <b>sdp-exclude</b>   |
| Context    | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">sdp-exclude</a> <i>reference</i> |
| Tree       | <a href="#">sdp-exclude</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[group-name]** *reference*

|          |                |
|----------|----------------|
| Synopsis | SDP group name |
|----------|----------------|



|            |   |
|------------|---|
| Context    | <b>configure service pw-template string sdp-exclude reference</b> |
| Tree       | <a href="#">sdp-exclude</a>                                       |
| Reference  | <b>configure service sdp-group group-name string</b>              |
| Notes      | This element is part of a list key.                               |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **sdp-include** [[group-name](#)] *reference*

|            |   |
|------------|---|
| Synopsis   | Add a list entry for <b>sdp-include</b>                           |
| Context    | <b>configure service pw-template string sdp-include reference</b> |
| Tree       | <a href="#">sdp-include</a>                                       |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **[group-name]** *reference*

|            |   |
|------------|---|
| Synopsis   | SDP group name  |
| Context    | <b>configure service pw-template string sdp-include reference</b> |
| Tree       | <a href="#">sdp-include</a>                                       |
| Reference  | <b>configure service sdp-group group-name string</b>              |
| Notes      | This element is part of a list key.                               |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **split-horizon-group**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>split-horizon-group</b> context                    |
| Context    | <b>configure service pw-template string split-horizon-group</b> |
| Tree       | <a href="#">split-horizon-group</a>                             |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">split-horizon-group</a> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**fdb**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>fdb</b> context   |
| Context    | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">split-horizon-group</a> <a href="#">fdb</a> |
| Tree       | <a href="#">fdb</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**saps**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>saps</b> context   |
| Context    | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">split-horizon-group</a> <a href="#">fdb</a> <a href="#">saps</a> |
| Tree       | <a href="#">saps</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**auto-learn-mac-protect** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable automatic update of MAC protect list   |
| Context    | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">split-horizon-group</a> <a href="#">fdb</a> <a href="#">saps</a> <a href="#">auto-learn-mac-protect</a> <i>boolean</i> |
| Tree       | <a href="#">auto-learn-mac-protect</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**discard-unprotected-dest-mac** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable/disable unprotected dest MAC restriction   |
| Context    | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">split-horizon-group fdb saps</a> <a href="#">discard-unprotected-dest-mac</a> <i>boolean</i> |
| Tree       | <a href="#">discard-unprotected-dest-mac</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**protected-src-mac-violation-action** *keyword*

|            |   |
|------------|---|
| Synopsis   | Action for protected source MAC restriction   |
| Context    | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">split-horizon-group fdb saps</a> <a href="#">protected-src-mac-violation-action</a> <i>keyword</i> |
| Tree       | <a href="#">protected-src-mac-violation-action</a>  |
| Options    | sap-oper-down, alarm-only, discard  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**name** *string*

|               |   |
|---------------|---|
| Synopsis      | Split horizon group name to which the SDP belongs   |
| Context       | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">split-horizon-group name</a> <i>string</i> |
| Tree          | <a href="#">name</a>  |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**stp**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>stp</b> context   |
| Context    | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">stp</a> |
| Tree       | <a href="#">stp</a>  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of STP  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">pw-template</a> <i>string</i> <a href="#">stp</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**auto-edge** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable automatic detection of edge port characteristics  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">pw-template</a> <i>string</i> <a href="#">stp</a> <b>auto-edge</b> <i>boolean</i> |
| Tree       | <a href="#">auto-edge</a>  |
| Default    | true   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**edge-port** *boolean*

|            |  |
|------------|--|
| Synopsis   | Designate SAP or SDP as an edge port   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">pw-template</a> <i>string</i> <a href="#">stp</a> <b>edge-port</b> <i>boolean</i> |
| Tree       | <a href="#">edge-port</a>  |
| Default    | false  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**link-type** *keyword*

|            |  |
|------------|--|
| Synopsis   | Configure STP link-type  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">pw-template</a> <i>string</i> <a href="#">stp</a> <b>link-type</b> <i>keyword</i> |
| Tree       | <a href="#">link-type</a>  |
| Options    | pt-pt, shared  |
| Default    | pt-pt  |
| Introduced | 16.0.R4  |

Platforms All

### **path-cost** *number*

Synopsis Configure path-cost  
Context **configure** [service pw-template](#) *string* **stp path-cost** *number*  
Tree [path-cost](#)  
Range 1 to 200000000  
Default 10  
Introduced 16.0.R4  
Platforms All

### **priority** *number*

Synopsis Configure STP priority  
Context **configure** [service pw-template](#) *string* **stp priority** *number*  
Tree [priority](#)  
Range 0 to 255  
Default 128  
Introduced 16.0.R4  
Platforms All

### **root-guard** *boolean*

Synopsis Enable/disable STP root-guard  
Context **configure** [service pw-template](#) *string* **stp root-guard** *boolean*  
Tree [root-guard](#)  
Default false  
Introduced 16.0.R4  
Platforms All

### **vc-type** *keyword*

Synopsis Virtual circuit type associated with the SDP bind  
Context **configure** [service pw-template](#) *string* **vc-type** *keyword*

---

|            |                         |
|------------|-------------------------|
| Tree       | <a href="#">vc-type</a> |
| Options    | ether, vlan             |
| Default    | ether                   |
| Introduced | 16.0.R1                 |
| Platforms  | All                     |

### **vlan-vc-tag** *number*

|            |   |
|------------|---|
| Synopsis   | VLAN VC tag   |
| Context    | <b>configure</b> <a href="#">service pw-template</a> <i>string</i> <b>vlan-vc-tag</b> <i>number</i> |
| Tree       | <a href="#">vlan-vc-tag</a>   |
| Range      | 0 to 4094   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **sdp** [[sdp-id](#)] *number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>sdp</b> list instance                         |
| Context    | <b>configure</b> <a href="#">service sdp</a> <i>number</i> |
| Tree       | <a href="#">sdp</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **[sdp-id]** *number*

|            |  |
|------------|--|
| Synopsis   | Service Distribution Point (SDP) identifier                |
| Context    | <b>configure</b> <a href="#">service sdp</a> <i>number</i> |
| Tree       | <a href="#">sdp</a>  |
| Range      | 1 to 32767   |
| Notes      | This element is part of a list key.                        |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **accounting-policy** *reference*

|             |   |
|-------------|---|
| Synopsis    | Accounting policy associated with an SDP  |
| Context     | <b>configure service sdp number accounting-policy reference</b>   |
| Tree        | <a href="#">accounting-policy</a>   |
| Description | This command associates an accounting policy with an SDP.<br>When unconfigured, there is no accounting policy applied to the SDP. |
| Reference   | <b>configure log accounting-policy number</b>   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the SDP                         |
| Context    | <b>configure service sdp number admin-state keyword</b> |
| Tree       | <a href="#">admin-state</a>                             |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **adv-mtu-override** *boolean*

|            |  |
|------------|--|
| Synopsis   | Override the advertised VC-type MTU using the SDP ID         |
| Context    | <b>configure service sdp number adv-mtu-override boolean</b> |
| Tree       | <a href="#">adv-mtu-override</a>                             |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **allow-fragmentation** *boolean*

|          |   |
|----------|---|
| Synopsis | Allow packets to be sent without setting DF bit                 |
| Context  | <b>configure service sdp number allow-fragmentation boolean</b> |
| Tree     | <a href="#">allow-fragmentation</a>                             |
| Default  | false   |

Introduced 16.0.R1  
Platforms All

### **bgp-tunnel** *boolean*

Synopsis Allow use of BGP route tunnels to reach far-end nodes  
Context **configure** [service sdp](#) *number* **bgp-tunnel** *boolean*  
Tree [bgp-tunnel](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **booking-factor** *number*

Synopsis Percentage of SDP max available bandwidth for VLL CAC  
Context **configure** [service sdp](#) *number* **booking-factor** *number*  
Tree [booking-factor](#)  
Range 0 to 1000  
Default 100  
Introduced 16.0.R1  
Platforms All

### **class-forwarding**

Synopsis Enable the **class-forwarding** context  
Context **configure** [service sdp](#) *number* **class-forwarding**  
Tree [class-forwarding](#)  
Introduced 16.0.R1  
Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of class-based forwarding  
Context **configure** [service sdp](#) *number* **class-forwarding** **admin-state** *keyword*  
Tree [admin-state](#)



|            |                 |
|------------|-----------------|
| Options    | enable, disable |
| Default    | disable         |
| Introduced | 16.0.R1         |
| Platforms  | All             |

### **default-lsp** *reference*

|            |  |
|------------|--|
| Synopsis   | Default LSP for class-based forwarding on the SDP  |
| Context    | <b>configure</b> <a href="#">service sdp number class-forwarding default-lsp reference</a> |
| Tree       | <a href="#">default-lsp</a>  |
| Reference  | <b>configure</b> <a href="#">service sdp number lsp string</a>                             |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **enforce-diffserv-lsp-fc** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable RSVP validation of FC support by the LSP  |
| Context    | <b>configure</b> <a href="#">service sdp number class-forwarding enforce-diffserv-lsp-fc boolean</a> |
| Tree       | <a href="#">enforce-diffserv-lsp-fc</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **fc** [[fc-name](#)] *keyword*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>fc</b> list instance   |
| Context    | <b>configure</b> <a href="#">service sdp number class-forwarding fc keyword</a> |
| Tree       | <a href="#">fc</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **[fc-name]** *keyword*

|          |                                 |
|----------|---------------------------------|
| Synopsis | Forwarding class to LSP mapping |
|----------|---------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service sdp number class-forwarding fc keyword</b> |
| Tree       | <b>fc</b>   |
| Options    | be, l2, af, l1, h2, ef, h1, nc                                  |
| Notes      | This element is part of a list key.                             |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **lsp reference**

|            |   |
|------------|---|
| Synopsis   | LSP name used to forward service packets                                      |
| Context    | <b>configure service sdp number class-forwarding fc keyword lsp reference</b> |
| Tree       | <b>lsp</b>  |
| Reference  | <b>configure service sdp number lsp string</b>                                |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **multicast-lsp reference**

|            |  |
|------------|--|
| Synopsis   | LSP to forward all multicast traffic   |
| Context    | <b>configure service sdp number class-forwarding multicast-lsp reference</b> |
| Tree       | <b>multicast-lsp</b>   |
| Reference  | <b>configure service sdp number lsp string</b>                               |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **collect-stats boolean**

|            |   |
|------------|---|
| Synopsis   | Collect accounting statistics for this SDP                |
| Context    | <b>configure service sdp number collect-stats boolean</b> |
| Tree       | <b>collect-stats</b>                                      |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**delivery-type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Delivery type used by the SDP   |
| Context    | <b>configure</b> <a href="#">service sdp number delivery-type keyword</a> |
| Tree       | <a href="#">delivery-type</a>   |
| Options    | gre, mpls, l2tpv3, gre-eth-bridged  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service sdp number description string</a> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**far-end**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>far-end</b> context                            |
| Context    | <b>configure</b> <a href="#">service sdp number far-end</a> |
| Tree       | <a href="#">far-end</a>                                     |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | IP address of the far end destination router |
|----------|--|

|            |   |
|------------|---|
| Context    | <b>configure service sdp number far-end ip-address</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) |
| Tree       | <a href="#">ip-address</a>  |
| Introduced | 16.0.R3   |
| Platforms  | All   |

## keep-alive

|            |  |
|------------|--|
| Synopsis   | Enter the <b>keep-alive</b> context            |
| Context    | <b>configure service sdp number keep-alive</b> |
| Tree       | <a href="#">keep-alive</a>                     |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of keepalive mechanism for the SDP            |
| Context    | <b>configure service sdp number keep-alive admin-state keyword</b> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## hello-time *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | Time period between SDP keepalive messages                       |
| Context  | <b>configure service sdp number keep-alive hello-time number</b> |
| Tree     | <a href="#">hello-time</a>                                       |
| Range    | 1 to 3600  |
| Units    | seconds  |
| Default  | 10   |

---

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **hold-down-time** *number*

|            |  |
|------------|--|
| Synopsis   | Minimum time the SDP remains in the down state   |
| Context    | <b>configure</b> <a href="#">service sdp</a> <i>number</i> <a href="#">keep-alive</a> <a href="#">hold-down-time</a> <i>number</i> |
| Tree       | <a href="#">hold-down-time</a>   |
| Range      | 0 to 3600  |
| Units      | seconds  |
| Default    | 10   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **maximum-drop-count** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum failed request attempts when SDP is down   |
| Context    | <b>configure</b> <a href="#">service sdp</a> <i>number</i> <a href="#">keep-alive</a> <a href="#">maximum-drop-count</a> <i>number</i> |
| Tree       | <a href="#">maximum-drop-count</a>   |
| Range      | 1 to 5   |
| Default    | 3  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **message-length** *number*

|            |  |
|------------|--|
| Synopsis   | Length of the keepalive request messages transmitted   |
| Context    | <b>configure</b> <a href="#">service sdp</a> <i>number</i> <a href="#">keep-alive</a> <a href="#">message-length</a> <i>number</i> |
| Tree       | <a href="#">message-length</a>   |
| Range      | 40 to 9198   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**timeout** *number*

|            |   |
|------------|---|
| Synopsis   | Time SDP waits before tearing down the session  |
| Context    | <b>configure</b> <a href="#">service sdp</a> <i>number</i> <a href="#">keep-alive</a> <a href="#">timeout</a> <i>number</i> |
| Tree       | <a href="#">timeout</a>   |
| Range      | 1 to 10   |
| Units      | seconds   |
| Default    | 5   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**ldp** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enable LDP-signaled LSPs  |
| Context    | <b>configure</b> <a href="#">service sdp</a> <i>number</i> <a href="#">ldp</a> <i>boolean</i> |
| Tree       | <a href="#">ldp</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**local-end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Local end address of tunnel defined by the SDP   |
| Context    | <b>configure</b> <a href="#">service sdp</a> <i>number</i> <a href="#">local-end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <a href="#">local-end</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**lsp** [*lsp-name*] *string*

|                |  |
|----------------|--|
| Synopsis       | Add a list entry for <b>lsp</b>                |
| Context        | <b>configure service sdp number lsp string</b> |
| Tree           | <b>lsp</b>                                     |
| Max. Instances | 16   |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

**[lsp-name]** *string*

|               |  |
|---------------|--|
| Synopsis      | LSP name to associate with the SDP             |
| Context       | <b>configure service sdp number lsp string</b> |
| Tree          | <b>lsp</b>                                     |
| String Length | 1 to 64  |
| Notes         | This element is part of a list key.            |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**metric** *number*

|            |   |
|------------|---|
| Synopsis   | Metric used in tunnel table manager for decision making |
| Context    | <b>configure service sdp number metric number</b>       |
| Tree       | <b>metric</b>   |
| Range      | 1 to 65535  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**mixed-lsp-mode**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>mixed-lsp-mode</b> context           |
| Context    | <b>configure service sdp number mixed-lsp-mode</b> |
| Tree       | <b>mixed-lsp-mode</b>                              |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**revert-time** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Delay before SDP can revert to higher priority LSP type   |
| Context    | <b>configure service sdp</b> <i>number</i> <b>mixed-lsp-mode revert-time</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">revert-time</a>   |
| Range      | 1 to 600  |
| Units      | seconds   |
| Options    | never, immediate  |
| Default    | immediate   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**network-domain** *reference*

|            |   |
|------------|---|
| Synopsis   | Network domain name associated with the SDP   |
| Context    | <b>configure service sdp</b> <i>number</i> <b>network-domain</b> <i>reference</i>         |
| Tree       | <a href="#">network-domain</a>  |
| Reference  | <b>configure router</b> <i>string</i> <b>network-domains network-domain</b> <i>string</i> |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**path-mtu** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum Transmission Unit (MTU) the SDP can transmit                     |
| Context    | <b>configure service sdp</b> <i>number</i> <b>path-mtu</b> <i>number</i> |
| Tree       | <a href="#">path-mtu</a>   |
| Range      | 576 to 9782  |
| Units      | bytes  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**pbb-etype** *string*

|          |   |
|----------|---|
| Synopsis | Ethertype used for PBB  |
| Context  | <b>configure service sdp</b> <i>number</i> <b>pbb-etype</b> <i>string</i> |



|               |                           |
|---------------|---------------------------|
| Tree          | <a href="#">pbb-etype</a> |
| String Length | 5 to 6                    |
| Default       | 0x88E7                    |
| Introduced    | 16.0.R1                   |
| Platforms     | All                       |

## **pw-port**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>pw-port</b> context                            |
| Context    | <b>configure</b> <a href="#">service sdp number pw-port</a> |
| Tree       | <a href="#">pw-port</a>                                     |
| Introduced | 16.0.R4   |
| Platforms  | All   |

## **binding-port** *string*

|            |   |
|------------|---|
| Synopsis   | Binding port  |
| Context    | <b>configure</b> <a href="#">service sdp number pw-port binding-port string</a> |
| Tree       | <a href="#">binding-port</a>  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

## **sdp-group** [[group-name](#)] *reference*

|            |   |
|------------|---|
| Synopsis   | Add a list entry for <b>sdp-group</b>                                   |
| Context    | <b>configure</b> <a href="#">service sdp number sdp-group reference</a> |
| Tree       | <a href="#">sdp-group</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## **[group-name]** *reference*

|          |   |
|----------|---|
| Synopsis | SDP administrative group name   |
| Context  | <b>configure</b> <a href="#">service sdp number sdp-group reference</a> |
| Tree     | <a href="#">sdp-group</a>   |

|            |   |
|------------|---|
| Reference  | <b>configure service sdp-group</b> <i>group-name string</i> |
| Notes      | This element is part of a list key.                         |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## signaling *keyword*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Signaling protocol used to obtain pseudowire labels  |
| Context     | <b>configure service sdp</b> <i>number signaling keyword</i>   |
| Tree        | <a href="#">signaling</a>  |
| Description | <p>This command specifies the signaling protocol used to obtain the ingress and egress pseudowire labels in frames transmitted and received on the SDP. The signaling value can only be changed while the administrative status of the SDP is down. Additionally, the signaling can only be changed on an SDP if the SDP is not in use by BGP-AD or BGP-VPLS. BGP signaling can only be enabled if the SDP does not already have pseudowires signaled over it. Also, BGP signaling is not supported with mixed mode LSP SDPs.</p> <p><b>Note:</b> If the <b>tldp</b> option is selected as the mechanism for exchanging service labels over an MPLS or GRE SDP and the T-LDP session is automatically established, an explicit T-LDP session that is subsequently configured takes precedence over the automatic T-LDP session. However, if the explicit, manually-configured session is then removed, the system does not revert to the automatic session and the automatic session is also deleted. To address this, recreate the T-LDP session by using the <b>admin-state</b> command to administratively disable and then enable the SDP.</p> |
| Options     | off, tldp, bgp   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

## source-bmac-lsb

|            |  |
|------------|--|
| Synopsis   | Enter the <b>source-bmac-lsb</b> context                   |
| Context    | <b>configure service sdp</b> <i>number source-bmac-lsb</i> |
| Tree       | <a href="#">source-bmac-lsb</a>                            |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**control-pw-vc-id** *number*

|            |   |
|------------|---|
| Synopsis   | VC ID of the control pseudowire   |
| Context    | <b>configure service sdp</b> <i>number</i> <b>source-bmac-lsb</b> <b>control-pw-vc-id</b> <i>number</i> |
| Tree       | <b>control-pw-vc-id</b>   |
| Range      | 1 to 4294967295   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**value** *string*

|            |  |
|------------|--|
| Synopsis   | 16 least significant bits of virtual backbone MAC  |
| Context    | <b>configure service sdp</b> <i>number</i> <b>source-bmac-lsb</b> <b>value</b> <i>string</i> |
| Tree       | <b>value</b>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**sr-isis** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable Segment Routing for IS-IS   |
| Context    | <b>configure service sdp</b> <i>number</i> <b>sr-isis</b> <i>boolean</i> |
| Tree       | <b>sr-isis</b>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**sr-ospf** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable an MPLS SDP of LSP type OSPF Segment Routing                      |
| Context    | <b>configure service sdp</b> <i>number</i> <b>sr-ospf</b> <i>boolean</i> |
| Tree       | <b>sr-ospf</b>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**tunnel-far-end** (*ipv4-address-no-zone | ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | System address of the far-end router for the SDP  |
| Context    | <b>configure service sdp number tunnel-far-end</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) |
| Tree       | <a href="#">tunnel-far-end</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**vlan-vc-etype** *string*

|               |   |
|---------------|---|
| Synopsis      | VLAN VC Ethertype   |
| Context       | <b>configure service sdp number vlan-vc-etype</b> <i>string</i> |
| Tree          | <a href="#">vlan-vc-etype</a>                                   |
| String Length | 5 to 6  |
| Default       | 0x8100  |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**weighted-ecmp** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow weighted load-balancing on an SDP                          |
| Context    | <b>configure service sdp number weighted-ecmp</b> <i>boolean</i> |
| Tree       | <a href="#">weighted-ecmp</a>                                    |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**sdp-group**

|          |                                    |
|----------|------------------------------------|
| Synopsis | Enter the <b>sdp-group</b> context |
| Context  | <b>configure service sdp-group</b> |

|            |                           |
|------------|---------------------------|
| Tree       | <a href="#">sdp-group</a> |
| Introduced | 16.0.R1                   |
| Platforms  | All                       |

### **group-name** [[group-name](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>group-name</b> list instance                            |
| Context    | <b>configure</b> <a href="#">service sdp-group group-name string</a> |
| Tree       | <a href="#">group-name</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **[group-name]** *string*

|               |  |
|---------------|--|
| Synopsis      | SDP administrative group name  |
| Context       | <b>configure</b> <a href="#">service sdp-group group-name string</a> |
| Tree          | <a href="#">group-name</a>   |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.                                  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

### **value** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Unique group value associated with the SDP admin group                            |
| Context    | <b>configure</b> <a href="#">service sdp-group group-name string value number</a> |
| Tree       | <a href="#">value</a>   |
| Range      | 0 to 31   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## system

|            |                                 |
|------------|---------------------------------|
| Synopsis   | Enter the <b>system</b> context |
| Context    | <b>configure service system</b> |
| Tree       | <a href="#">system</a>          |
| Introduced | 16.0.R1                         |
| Platforms  | All                             |

## bgp

|            |                                     |
|------------|-------------------------------------|
| Synopsis   | Enter the <b>bgp</b> context        |
| Context    | <b>configure service system bgp</b> |
| Tree       | <a href="#">bgp</a>                 |
| Introduced | 16.0.R1                             |
| Platforms  | All                                 |

## evpn

|            |  |
|------------|--|
| Synopsis   | Enter the <b>evpn</b> context            |
| Context    | <b>configure service system bgp evpn</b> |
| Tree       | <a href="#">evpn</a>                     |
| Introduced | 16.0.R1                                  |
| Platforms  | All                                      |

## ad-per-es-route

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ad-per-es-route</b> context                 |
| Context    | <b>configure service system bgp evpn ad-per-es-route</b> |
| Tree       | <a href="#">ad-per-es-route</a>                          |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## extended-evi-range *boolean*

|          |  |
|----------|--|
| Synopsis | Reserve extended RD comm-values for AD per-ES routes |
|----------|--|

|             |  |
|-------------|--|
| Context     | <b>configure service system bgp evpn ad-per-es-route extended-evi-range</b> <i>boolean</i>   |
| Tree        | <a href="#">extended-evi-range</a>   |
| Description | When configured to <b>true</b> , the system reserves the Route Distinguisher (RD) comm-values 1 to 65535 out of the type 1 RD that is used for AD per-ES routes. If <b>ad-per-es-route route-target-type</b> is also configured to <b>evi-route-target-set</b> , the system can pack the maximum number of EVI route targets in the AD per-ES routes<br><br>When configured to <b>false</b> , this command only reserves comm-values 1 to 512. |
| Default     | false  |
| Introduced  | 21.10.R1   |
| Platforms   | All  |

### **route-distinguisher-ip-address** *string*

|            |   |
|------------|---|
| Synopsis   | IP address for route distinguisher for EVPN AD-ES routes  |
| Context    | <b>configure service system bgp evpn ad-per-es-route route-distinguisher-ip-address</b> <i>string</i> |
| Tree       | <a href="#">route-distinguisher-ip-address</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **route-target-type** *keyword*

|            |   |
|------------|---|
| Synopsis   | Method for the AD per-ES routes advertisement   |
| Context    | <b>configure service system bgp evpn ad-per-es-route route-target-type</b> <i>keyword</i> |
| Tree       | <a href="#">route-target-type</a>   |
| Options    | evi-route-target, evi-route-target-set  |
| Default    | evi-route-target  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **ethernet-segment** [[ethernet-segment-name](#)] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>ethernet-segment</b> list instance                         |
| Context        | <b>configure service system bgp evpn ethernet-segment</b> <i>string</i> |
| Tree           | <a href="#">ethernet-segment</a>  |
| Max. Instances | 4095  |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### [**ethernet-segment-name**] *string*

|               |   |
|---------------|---|
| Synopsis      | Specify name for Ethernet segment                                       |
| Context       | <b>configure service system bgp evpn ethernet-segment</b> <i>string</i> |
| Tree          | <a href="#">ethernet-segment</a>  |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.                                     |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

### **ac-df-capability** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | AC-influenced DF election capability   |
| Context     | <b>configure service system bgp evpn ethernet-segment</b> <i>string</i> <b>ac-df-capability</b> <i>keyword</i>   |
| Tree        | <a href="#">ac-df-capability</a>   |
| Description | <p>This command configures the Attachment Circuit-influenced (AC-influenced) designated forwarder (DF) election capability (AC-DF) into the DF election for the Ethernet Segment (ES).</p> <p>AC-DF supports EVPN Auto-Discovery per EVI/ES (AD per EVI/ES) routes for a specific PE, to ensure the PE is included in the candidate DF election list.</p> <p>When AC-DF is excluded on a specific ES, the presence or absence of the AD per EVI/ES routes from the ES peers does not modify the candidate DF election list for the ES. Excluding the AC-DF is recommended in ESs that use an operational group monitored by the access LAG to signal the standby LACP or to power-off.</p> |
| Options     | include, exclude   |
| Default     | include  |
| Introduced  | 21.5.R1  |
| Platforms   | All  |



**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the Ethernet segment instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp evpn ethernet-segment</a> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**association**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>association</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp evpn ethernet-segment</a> <i>string</i> <b>association</b> |
| Tree       | <a href="#">association</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**lag** [[lag-name](#)] *reference*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>lag</b> list instance  |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp evpn ethernet-segment</a> <i>string</i> <a href="#">association</a> <b>lag</b> <i>reference</i> |
| Tree           | <a href="#">lag</a>   |
| Max. Instances | 1   |
| Notes          | The following elements are part of a choice: <b>lag</b> , <b>network-interconnect-vxlan</b> , <b>port</b> , <b>pw-port</b> , <b>sdp</b> , or <b>vprn-next-hop</b> .             |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

**[lag-name]** *reference*

|           |   |
|-----------|---|
| Synopsis  | LAG multi-homed with the Ethernet segment entry   |
| Context   | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp evpn ethernet-segment</a> <i>string</i> <a href="#">association</a> <b>lag</b> <i>reference</i> |
| Tree      | <a href="#">lag</a>   |
| Reference | <b>configure</b> <a href="#">lag</a> <i>string</i>  |

|            |                                     |
|------------|-------------------------------------|
| Notes      | This element is part of a list key. |
| Introduced | 21.2.R1                             |
| Platforms  | All                                 |

## virtual-ranges

|            |  |
|------------|--|
| Synopsis   | Enter the <b>virtual-ranges</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp evpn ethernet-segment</a> <a href="#">string</a> <a href="#">association</a> <a href="#">lag</a> <a href="#">reference</a><br><a href="#">virtual-ranges</a> |
| Tree       | <a href="#">virtual-ranges</a>   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

## dot1q

|            |  |
|------------|--|
| Synopsis   | Enter the <b>dot1q</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp evpn ethernet-segment</a> <a href="#">string</a> <a href="#">association</a> <a href="#">lag</a> <a href="#">reference</a><br><a href="#">virtual-ranges</a> <a href="#">dot1q</a> |
| Tree       | <a href="#">dot1q</a>  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

## q-tag [[start](#)] (*number* | *keyword*)

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>q-tag</b> list instance  |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp evpn ethernet-segment</a> <a href="#">string</a> <a href="#">association</a> <a href="#">lag</a> <a href="#">reference</a><br><a href="#">virtual-ranges</a> <a href="#">dot1q</a> <a href="#">q-tag</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree           | <a href="#">q-tag</a>   |
| Max. Instances | 8   |
| Introduced     | 16.0.R4   |
| Platforms      | All   |

## [[start](#)] (*number* | *keyword*)

|          |  |
|----------|--|
| Synopsis | Lower bound of the q-tag VLAN ID range |
|----------|--|

|            |   |
|------------|---|
| Context    | <b>configure service system bgp evpn ethernet-segment</b> <i>string association lag reference virtual-ranges dot1q q-tag</i> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">q-tag</a>   |
| Range      | 0 to 4094   |
| Options    | tag-*   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **end** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Upper bound of the q-tag VLAN ID range  |
| Context    | <b>configure service system bgp evpn ethernet-segment</b> <i>string association lag reference virtual-ranges dot1q q-tag</i> ( <i>number</i>   <i>keyword</i> ) <b>end</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">end</a>   |
| Range      | 0 to 4094   |
| Options    | tag-*   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **qinq**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>qinq</b> context  |
| Context    | <b>configure service system bgp evpn ethernet-segment</b> <i>string association lag reference virtual-ranges</i> <b>qinq</b> |
| Tree       | <a href="#">qinq</a>   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **s-tag** [**start**] (*number* | *keyword*)

|          |   |
|----------|---|
| Synopsis | Enter the <b>s-tag</b> list instance  |
| Context  | <b>configure service system bgp evpn ethernet-segment</b> <i>string association lag reference virtual-ranges qinq</i> <b>s-tag</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <a href="#">s-tag</a>   |

|                |         |
|----------------|---------|
| Max. Instances | 8       |
| Introduced     | 16.0.R4 |
| Platforms      | All     |

**[start]** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Lower bound of the s-tag VLAN ID range   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">lag</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> <a href="#">qinq</a> <a href="#">s-tag</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">s-tag</a>  |
| Range      | 0 to 4094  |
| Options    | tag-*  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**end** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Upper bound of the s-tag VLAN ID range   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">lag</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> <a href="#">qinq</a> <a href="#">s-tag</a> ( <i>number</i>   <i>keyword</i> ) <b>end</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">end</a>  |
| Range      | 0 to 4094  |
| Options    | tag-*  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**s-tag-c-tag** [[s-tag](#)] (*number* | *keyword*) [c-tag-start](#) (*number* | *keyword*)

|          |   |
|----------|---|
| Synopsis | Enter the <b>s-tag-c-tag</b> list instance  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">lag</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> <a href="#">qinq</a> <a href="#">s-tag-c-tag</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">c-tag-start</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <a href="#">s-tag-c-tag</a>   |

|                |         |
|----------------|---------|
| Max. Instances | 8       |
| Introduced     | 16.0.R4 |
| Platforms      | All     |

### **[s-tag]** (*number | keyword*)

|            |   |
|------------|---|
| Synopsis   | Starting value of the qinq s-tag range associated with a virtual ethernet segment   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">lag</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> <a href="#">qinq</a> <a href="#">s-tag-c-tag</a> ( <i>number   keyword</i> ) <a href="#">c-tag-start</a> ( <i>number   keyword</i> ) |
| Tree       | <a href="#">s-tag-c-tag</a>   |
| Range      | 0 to 4094   |
| Options    | tag-*, null   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **c-tag-start** (*number | keyword*)

|            |   |
|------------|---|
| Synopsis   | Starting value of the qinq c-tag range  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">lag</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> <a href="#">qinq</a> <a href="#">s-tag-c-tag</a> ( <i>number   keyword</i> ) <a href="#">c-tag-start</a> ( <i>number   keyword</i> ) |
| Tree       | <a href="#">s-tag-c-tag</a>   |
| Range      | 0 to 4094   |
| Options    | tag-*, null   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **c-tag-end** (*number | keyword*)

|          |   |
|----------|---|
| Synopsis | End value of the qinq c-tag range   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">lag</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> <a href="#">qinq</a> <a href="#">s-tag-c-tag</a> ( <i>number   keyword</i> ) <a href="#">c-tag-start</a> ( <i>number   keyword</i> ) <a href="#">c-tag-end</a> ( <i>number   keyword</i> ) |
| Tree     | <a href="#">c-tag-end</a>   |

|            |                            |
|------------|----------------------------|
| Range      | 0 to 4094                  |
| Options    | tag-*, null                |
| Notes      | This element is mandatory. |
| Introduced | 16.0.R4                    |
| Platforms  | All                        |

### **network-interconnect-vxlan** [[network-interconnect-vxlan-id](#)] *number*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>network-interconnect-vxlan</b> list instance  |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">network-interconnect-vxlan</a> <i>number</i> |
| Tree           | <a href="#">network-interconnect-vxlan</a>   |
| Max. Instances | 1  |
| Notes          | The following elements are part of a choice: <b>lag</b> , <b>network-interconnect-vxlan</b> , <b>port</b> , <b>pw-port</b> , <b>sdp</b> , or <b>vprn-next-hop</b> .  |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

### **[network-interconnect-vxlan-id]** *number*

|            |  |
|------------|--|
| Synopsis   | VXLAN instance ID associated with the virtual ES   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">network-interconnect-vxlan</a> <i>number</i> |
| Tree       | <a href="#">network-interconnect-vxlan</a>   |
| Range      | 1  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **virtual-ranges**

|          |  |
|----------|--|
| Synopsis | Enter the <b>virtual-ranges</b> context  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">network-interconnect-vxlan</a> <i>number</i> <b>virtual-ranges</b> |
| Tree     | <a href="#">virtual-ranges</a>   |

|            |         |
|------------|---------|
| Introduced | 16.0.R4 |
| Platforms  | All     |

### **service-id** [[start](#)] *number*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>service-id</b> list instance  |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">network-interconnect-vxlan</a> <i>number</i> <a href="#">virtual-ranges</a> <a href="#">service-id</a> <i>number</i> |
| Tree           | <a href="#">service-id</a>   |
| Max. Instances | 8  |
| Introduced     | 16.0.R4  |
| Platforms      | All  |

### **[start]** *number*

|            |  |
|------------|--|
| Synopsis   | Lower bound of the service ID range  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">network-interconnect-vxlan</a> <i>number</i> <a href="#">virtual-ranges</a> <a href="#">service-id</a> <i>number</i> |
| Tree       | <a href="#">service-id</a>   |
| Range      | 1 to 2147483647  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **end** *number*

|            |   |
|------------|---|
| Synopsis   | Upper bound of the service ID range   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">network-interconnect-vxlan</a> <i>number</i> <a href="#">virtual-ranges</a> <a href="#">service-id</a> <i>number</i> <b>end</b> <i>number</i> |
| Tree       | <a href="#">end</a>   |
| Range      | 1 to 2147483647   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**port** [[port-id](#)] *reference*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>port</b> list instance   |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp evpn ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">port</a> <i>reference</i> |
| Tree           | <a href="#">port</a>  |
| Max. Instances | 1   |
| Notes          | The following elements are part of a choice: <b>lag</b> , <b>network-interconnect-vxlan</b> , <b>port</b> , <b>pw-port</b> , <b>sdp</b> , or <b>vprn-next-hop</b> .                       |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

**[port-id]** *reference*

|            |   |
|------------|---|
| Synopsis   | Port multi-homed with this Ethernet segment entry   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp evpn ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">port</a> <i>reference</i> |
| Tree       | <a href="#">port</a>  |
| Reference  | <b>configure</b> <a href="#">port</a> <i>string</i>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**virtual-ranges**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>virtual-ranges</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp evpn ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">port</a> <i>reference</i><br><a href="#">virtual-ranges</a> |
| Tree       | <a href="#">virtual-ranges</a>  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**dot1q**

|          |   |
|----------|---|
| Synopsis | Enter the <b>dot1q</b> context  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp evpn ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">port</a> <i>reference</i><br><a href="#">virtual-ranges</a> <a href="#">dot1q</a> |



|            |                       |
|------------|-----------------------|
| Tree       | <a href="#">dot1q</a> |
| Introduced | 16.0.R4               |
| Platforms  | All                   |

**q-tag** [[start](#)] (*number* | *keyword*)

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>q-tag</b> list instance   |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">port</a> <i>reference</i> <a href="#">virtual-ranges</a> <a href="#">dot1q</a> <b>q-tag</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree           | <a href="#">q-tag</a>  |
| Max. Instances | 8  |
| Introduced     | 16.0.R4  |
| Platforms      | All  |

**[start]** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Lower bound of the q-tag VLAN ID range   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">port</a> <i>reference</i> <a href="#">virtual-ranges</a> <a href="#">dot1q</a> <b>q-tag</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">q-tag</a>  |
| Range      | 0 to 4094  |
| Options    | tag-*  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**end** (*number* | *keyword*)

|          |  |
|----------|--|
| Synopsis | Upper bound of the q-tag VLAN ID range   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">port</a> <i>reference</i> <a href="#">virtual-ranges</a> <a href="#">dot1q</a> <b>q-tag</b> ( <i>number</i>   <i>keyword</i> ) <b>end</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <a href="#">end</a>  |
| Range    | 0 to 4094  |
| Options  | tag-*  |
| Notes    | This element is mandatory.   |

|            |         |
|------------|---------|
| Introduced | 16.0.R4 |
| Platforms  | All     |

## qinq

|            |  |
|------------|--|
| Synopsis   | Enter the <b>qinq</b> context  |
| Context    | <b>configure service system bgp evpn ethernet-segment</b> <i>string association port reference virtual-ranges qinq</i> |
| Tree       | <a href="#">qinq</a>   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

## s-tag [[start](#)] (*number | keyword*)

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>s-tag</b> list instance  |
| Context        | <b>configure service system bgp evpn ethernet-segment</b> <i>string association port reference virtual-ranges qinq s-tag (number   keyword)</i> |
| Tree           | <a href="#">s-tag</a>   |
| Max. Instances | 8   |
| Introduced     | 16.0.R4   |
| Platforms      | All   |

## [[start](#)] (*number | keyword*)

|            |   |
|------------|---|
| Synopsis   | Lower bound of the s-tag VLAN ID range  |
| Context    | <b>configure service system bgp evpn ethernet-segment</b> <i>string association port reference virtual-ranges qinq s-tag (number   keyword)</i> |
| Tree       | <a href="#">s-tag</a>   |
| Range      | 0 to 4094   |
| Options    | tag-*   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**end** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Upper bound of the s-tag VLAN ID range  |
| Context    | <b>configure service system bgp evpn ethernet-segment</b> <i>string association port reference virtual-ranges qinq s-tag</i> ( <i>number</i>   <i>keyword</i> ) <b>end</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <b>end</b>  |
| Range      | 0 to 4094   |
| Options    | tag-*   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**s-tag-c-tag** [**s-tag**] (*number* | *keyword*) **c-tag-start** (*number* | *keyword*)

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>s-tag-c-tag</b> list instance  |
| Context        | <b>configure service system bgp evpn ethernet-segment</b> <i>string association port reference virtual-ranges qinq s-tag-c-tag</i> ( <i>number</i>   <i>keyword</i> ) <b>c-tag-start</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree           | <b>s-tag-c-tag</b>  |
| Max. Instances | 8   |
| Introduced     | 16.0.R4   |
| Platforms      | All   |

**[s-tag]** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Starting value of the qinq s-tag range associated with a virtual ethernet segment   |
| Context    | <b>configure service system bgp evpn ethernet-segment</b> <i>string association port reference virtual-ranges qinq s-tag-c-tag</i> ( <i>number</i>   <i>keyword</i> ) <b>c-tag-start</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <b>s-tag-c-tag</b>  |
| Range      | 0 to 4094   |
| Options    | tag-*, null   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**c-tag-start** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Starting value of the qinq c-tag range   |
| Context    | <b>configure</b> <b>service</b> <b>system</b> <b>bgp</b> <b>evpn</b> <b>ethernet-segment</b> <i>string</i> <b>association</b> <b>port</b> <i>reference</i> <b>virtual-ranges</b> <b>qinq</b> <b>s-tag-c-tag</b> ( <i>number</i>   <i>keyword</i> ) <b>c-tag-start</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <b>s-tag-c-tag</b>   |
| Range      | 0 to 4094  |
| Options    | tag-*, null  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**c-tag-end** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | End value of the qinq c-tag range  |
| Context    | <b>configure</b> <b>service</b> <b>system</b> <b>bgp</b> <b>evpn</b> <b>ethernet-segment</b> <i>string</i> <b>association</b> <b>port</b> <i>reference</i> <b>virtual-ranges</b> <b>qinq</b> <b>s-tag-c-tag</b> ( <i>number</i>   <i>keyword</i> ) <b>c-tag-start</b> ( <i>number</i>   <i>keyword</i> ) <b>c-tag-end</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <b>c-tag-end</b>   |
| Range      | 0 to 4094  |
| Options    | tag-*, null  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**pw-port** [**pw-port-id**] *reference*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>pw-port</b> list instance  |
| Context        | <b>configure</b> <b>service</b> <b>system</b> <b>bgp</b> <b>evpn</b> <b>ethernet-segment</b> <i>string</i> <b>association</b> <b>pw-port</b> <i>reference</i>       |
| Tree           | <b>pw-port</b>  |
| Max. Instances | 1   |
| Notes          | The following elements are part of a choice: <b>lag</b> , <b>network-interconnect-vxlan</b> , <b>port</b> , <b>pw-port</b> , <b>sdp</b> , or <b>vprn-next-hop</b> . |
| Introduced     | 16.0.R4   |
| Platforms      | All   |

**[pw-port-id] reference**

|            |  |
|------------|--|
| Synopsis   | Pw-port multi-homed with this Ethernet segment entry   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <a href="#">string</a> <a href="#">association</a> <a href="#">pw-port</a> <a href="#">reference</a> |
| Tree       | <a href="#">pw-port</a>  |
| Reference  | <b>configure</b> <a href="#">pw-port</a> <a href="#">number</a>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**pw-port-headend boolean****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Control state of PW SAPs on PW port using EVPN   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <a href="#">string</a> <a href="#">association</a> <a href="#">pw-port</a> <a href="#">reference</a> <a href="#">pw-port-headend</a> <a href="#">boolean</a> |
| Tree        | <a href="#">pw-port-headend</a>  |
| Description | When configured to <b>true</b> , this command allows EVPN and its multi-homing procedures to control the state of the PW SAPs on the PW port.<br><br>When configured to <b>false</b> , this command disallows EVPN and its multi-homing procedures to control the state of the PW SAPs on the PW port. |
| Default     | false  |
| Introduced  | 22.2.R1  |
| Platforms   | All  |

**virtual-ranges**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>virtual-ranges</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <a href="#">string</a> <a href="#">association</a> <a href="#">pw-port</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> |
| Tree       | <a href="#">virtual-ranges</a>  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**dot1q**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>dot1q</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">pw-port</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> <b>dot1q</b> |
| Tree       | <a href="#">dot1q</a>   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**q-tag** [**start**] (*number* | *keyword*)

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>q-tag</b> list instance   |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">pw-port</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> <a href="#">dot1q</a> <b>q-tag</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree           | <a href="#">q-tag</a>  |
| Max. Instances | 8  |
| Introduced     | 16.0.R4  |
| Platforms      | All  |

**[start]** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Lower bound of the q-tag VLAN ID range   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">pw-port</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> <a href="#">dot1q</a> <b>q-tag</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">q-tag</a>  |
| Range      | 0 to 4094  |
| Options    | tag-*  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**end** (*number* | *keyword*)

|          |  |
|----------|--|
| Synopsis | Upper bound of the q-tag VLAN ID range   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">pw-port</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> <a href="#">dot1q</a> <b>q-tag</b> ( <i>number</i>   <i>keyword</i> ) <b>end</b> ( <i>number</i>   <i>keyword</i> ) |

|            |                            |
|------------|----------------------------|
| Tree       | <a href="#">end</a>        |
| Range      | 0 to 4094                  |
| Options    | tag-*                      |
| Notes      | This element is mandatory. |
| Introduced | 16.0.R4                    |
| Platforms  | All                        |

## qinq

|            |   |
|------------|---|
| Synopsis   | Enter the <b>qinq</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp evpn</a> <a href="#">ethernet-segment</a> <a href="#">string</a> <a href="#">association</a> <a href="#">pw-port</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> <b>qinq</b> |
| Tree       | <a href="#">qinq</a>  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

## s-tag [[start](#)] (*number* | *keyword*)

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>s-tag</b> list instance   |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp evpn</a> <a href="#">ethernet-segment</a> <a href="#">string</a> <a href="#">association</a> <a href="#">pw-port</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> <a href="#">qinq</a> <b>s-tag</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree           | <a href="#">s-tag</a>  |
| Max. Instances | 8  |
| Introduced     | 16.0.R4  |
| Platforms      | All  |

## [[start](#)] (*number* | *keyword*)

|          |  |
|----------|--|
| Synopsis | Lower bound of the s-tag VLAN ID range   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp evpn</a> <a href="#">ethernet-segment</a> <a href="#">string</a> <a href="#">association</a> <a href="#">pw-port</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> <a href="#">qinq</a> <b>s-tag</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <a href="#">s-tag</a>  |
| Range    | 0 to 4094  |
| Options  | tag-*  |
| Notes    | This element is part of a list key.  |

|            |         |
|------------|---------|
| Introduced | 16.0.R4 |
| Platforms  | All     |

**end** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Upper bound of the s-tag VLAN ID range   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">pw-port</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> <a href="#">qinq</a> <a href="#">s-tag</a> ( <i>number</i>   <i>keyword</i> ) <b>end</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">end</a>  |
| Range      | 0 to 4094  |
| Options    | tag-*  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**s-tag-c-tag** [[s-tag](#)] (*number* | *keyword*) [c-tag-start](#) (*number* | *keyword*)

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>s-tag-c-tag</b> list instance  |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">pw-port</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> <a href="#">qinq</a> <a href="#">s-tag-c-tag</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">c-tag-start</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree           | <a href="#">s-tag-c-tag</a>   |
| Max. Instances | 8   |
| Introduced     | 16.0.R4   |
| Platforms      | All   |

**[s-tag]** (*number* | *keyword*)

|          |   |
|----------|---|
| Synopsis | Starting value of the qinq s-tag range associated with a virtual ethernet segment   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">pw-port</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> <a href="#">qinq</a> <a href="#">s-tag-c-tag</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">c-tag-start</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <a href="#">s-tag-c-tag</a>   |
| Range    | 0 to 4094   |
| Options  | tag-*, null   |
| Notes    | This element is part of a list key.   |



|            |         |
|------------|---------|
| Introduced | 16.0.R4 |
| Platforms  | All     |

### **c-tag-start** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Starting value of the qinq c-tag range  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <a href="#">string</a> <a href="#">association</a> <a href="#">pw-port</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> <a href="#">qinq</a> <a href="#">s-tag-c-tag</a> ( <i>number</i>   <i>keyword</i> ) <b>c-tag-start</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">s-tag-c-tag</a>   |
| Range      | 0 to 4094   |
| Options    | tag-*, null   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **c-tag-end** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | End value of the qinq c-tag range   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <a href="#">string</a> <a href="#">association</a> <a href="#">pw-port</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> <a href="#">qinq</a> <a href="#">s-tag-c-tag</a> ( <i>number</i>   <i>keyword</i> ) <b>c-tag-start</b> ( <i>number</i>   <i>keyword</i> ) <b>c-tag-end</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">c-tag-end</a>   |
| Range      | 0 to 4094   |
| Options    | tag-*, null   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **sdp** [[sdp-id](#)] *reference*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>sdp</b> list instance  |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <a href="#">string</a> <a href="#">association</a> <a href="#">sdp</a> <i>reference</i> |
| Tree           | <a href="#">sdp</a>   |
| Max. Instances | 1   |

|            |   |
|------------|---|
| Notes      | The following elements are part of a choice: <b>lag</b> , <b>network-interconnect-vxlan</b> , <b>port</b> , <b>pw-port</b> , <b>sdp</b> , or <b>vprn-next-hop</b> . |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### [sdp-id] *reference*

|            |  |
|------------|--|
| Synopsis   | Sdp multi-homed with this Ethernet segment entry   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp evpn ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">sdp</a> <i>reference</i> |
| Tree       | <a href="#">sdp</a>  |
| Reference  | <b>configure</b> <a href="#">service</a> <a href="#">sdp</a> <i>number</i>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### virtual-ranges

|            |  |
|------------|--|
| Synopsis   | Enter the <b>virtual-ranges</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp evpn ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">sdp</a> <i>reference</i><br><a href="#">virtual-ranges</a> |
| Tree       | <a href="#">virtual-ranges</a>   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### vc-id [[start](#)] *number*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>vc-id</b> list instance   |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp evpn ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">sdp</a> <i>reference</i><br><a href="#">virtual-ranges</a> <a href="#">vc-id</a> <i>number</i> |
| Tree           | <a href="#">vc-id</a>  |
| Max. Instances | 8  |
| Introduced     | 16.0.R4  |
| Platforms      | All  |

**[start] number**

|            |   |
|------------|---|
| Synopsis   | Lower bound of the VC-ID range  |
| Context    | <b>configure service system bgp evpn ethernet-segment</b> <i>string association sdp reference virtual-ranges vc-id number</i> |
| Tree       | <a href="#">vc-id</a>   |
| Range      | 1 to 4294967295   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**end number**

|            |  |
|------------|--|
| Synopsis   | Upper bound of the VC-ID range   |
| Context    | <b>configure service system bgp evpn ethernet-segment</b> <i>string association sdp reference virtual-ranges vc-id number end number</i> |
| Tree       | <a href="#">end</a>  |
| Range      | 1 to 4294967295  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**vprn-next-hop [ip-address] (ipv4-address-no-zone | ipv6-address-no-zone)**

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>vprn-next-hop</b> list instance  |
| Context        | <b>configure service system bgp evpn ethernet-segment</b> <i>string association vprn-next-hop (ipv4-address-no-zone   ipv6-address-no-zone)</i>   |
| Tree           | <a href="#">vprn-next-hop</a>   |
| Description    | Commands in this list instance are used to associate an IPv4 or IPv6 address to an Ethernet segment. A virtual Ethernet segment using this VPRN next-hop association represents a Layer 3 Ethernet segment as described in <i>draft-sajassi-bess-evpn-ip-aliasing</i> . This IP address must be installed in the route table of the VPRN service identified by the EVI so that the Auto-Discovery per-ES or EVI routes for the ES are advertised. Only one VPRN next hop is supported per Ethernet segment. |
| Max. Instances | 1   |
| Notes          | The following elements are part of a choice: <b>lag</b> , <b>network-interconnect-vxlan</b> , <b>port</b> , <b>pw-port</b> , <b>sdp</b> , or <b>vprn-next-hop</b> .   |

Introduced 22.10.R1  
 Platforms All

### [ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis VPRN next-hop address  
 Context **configure** [service](#) [system](#) [bgp evpn ethernet-segment](#) *string* [association](#) [vprn-next-hop](#)  
 (*ipv4-address-no-zone* | *ipv6-address-no-zone*)  
 Tree [vprn-next-hop](#)  
 Notes This element is part of a list key.  
 Introduced 22.10.R1  
 Platforms All

### virtual-ranges

Synopsis Enter the **virtual-ranges** context  
 Context **configure** [service](#) [system](#) [bgp evpn ethernet-segment](#) *string* [association](#) [vprn-next-hop](#)  
 (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [virtual-ranges](#)  
 Tree [virtual-ranges](#)  
 Introduced 22.10.R1  
 Platforms All

### evi [[start](#)] *number*

Synopsis Add a list entry for **evi**  
 Context **configure** [service](#) [system](#) [bgp evpn ethernet-segment](#) *string* [association](#) [vprn-next-hop](#)  
 (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [virtual-ranges](#) [evi](#) *number*  
 Tree [evi](#)  
 Max. 1  
 Instances  
 Introduced 22.10.R1  
 Platforms All

### [[start](#)] *number*

Synopsis EVI range start information

|            |   |
|------------|---|
| Context    | <b>configure service system bgp evpn ethernet-segment</b> <i>string association vprn-next-hop (ipv4-address-no-zone   ipv6-address-no-zone) virtual-ranges evi number</i> |
| Tree       | <a href="#">evi</a>   |
| Range      | 1 to 16777215   |
| Notes      | This element is part of a list key.   |
| Introduced | 22.10.R1  |
| Platforms  | All   |

### **auto-esi** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | EVPN Ethernet segment auto-ESI type  |
| Context     | <b>configure service system bgp evpn ethernet-segment</b> <i>string auto-esi keyword</i>   |
| Tree        | <a href="#">auto-esi</a>   |
| Description | This command configures the auto-ESI type to use in the Ethernet segment (ES).When <b>type-1</b> is configured, a manual ESI cannot be configured and the ESI is automatically derived in accordance with the RFC 7432 ESI type 1 definition.When configured to <b>none</b> , a manual ESI must be configured. |
| Options     | none, type-1   |
| Default     | none   |
| Introduced  | 21.5.R1  |
| Platforms   | All  |

### **df-election**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>df-election</b> context  |
| Context    | <b>configure service system bgp evpn ethernet-segment</b> <i>string df-election</i> |
| Tree       | <a href="#">df-election</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **es-activation-timer** *number*

|          |                                       |
|----------|---------------------------------------|
| Synopsis | Activation timer per Ethernet segment |
|----------|---------------------------------------|

|            |  |
|------------|--|
| Context    | <b>configure service system bgp evpn ethernet-segment</b> <i>string</i> <b>df-election es-activation-timer</b> <i>number</i> |
| Tree       | <a href="#">es-activation-timer</a>  |
| Range      | 0 to 100   |
| Units      | seconds  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## manual

|            |   |
|------------|---|
| Synopsis   | Enter the <b>manual</b> context   |
| Context    | <b>configure service system bgp evpn ethernet-segment</b> <i>string</i> <b>df-election manual</b> |
| Tree       | <a href="#">manual</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## evi [[start](#)] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>evi</b> list instance  |
| Context    | <b>configure service system bgp evpn ethernet-segment</b> <i>string</i> <b>df-election manual evi</b> <i>number</i> |
| Tree       | <a href="#">evi</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## [\[start\]](#) *number*

|            |   |
|------------|---|
| Synopsis   | Lower bound of EVI range for which the PE is primary  |
| Context    | <b>configure service system bgp evpn ethernet-segment</b> <i>string</i> <b>df-election manual evi</b> <i>number</i> |
| Tree       | <a href="#">evi</a>   |
| Range      | 1 to 16777215   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**end number**

|            |  |
|------------|--|
| Synopsis   | Upper bound of EVI range for which the PE is primary   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">df-election</a> <a href="#">manual</a> <a href="#">evi</a><br><i>number end number</i> |
| Tree       | <a href="#">end</a>  |
| Range      | 1 to 16777215  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**isid [[start](#)] number**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>isid</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">df-election</a> <a href="#">manual</a> <a href="#">isid</a><br><i>number</i> |
| Tree       | <a href="#">isid</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[[start](#)] number**

|            |  |
|------------|--|
| Synopsis   | Lower bound of ISID range for which the PE is primary  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">df-election</a> <a href="#">manual</a> <a href="#">isid</a><br><i>number</i> |
| Tree       | <a href="#">isid</a>   |
| Range      | 1 to 16777215  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**end number**

|          |   |
|----------|---|
| Synopsis | Upper bound of ISID range for which the PE is primary   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">df-election</a> <a href="#">manual</a> <a href="#">isid</a><br><i>number end number</i> |

|            |                            |
|------------|----------------------------|
| Tree       | <a href="#">end</a>        |
| Range      | 1 to 16777215              |
| Notes      | This element is mandatory. |
| Introduced | 16.0.R1                    |
| Platforms  | All                        |

## preference

|            |  |
|------------|--|
| Synopsis   | Enable the <b>preference</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <a href="#">string</a> <a href="#">df-election</a> <a href="#">manual</a> <a href="#">preference</a> |
| Tree       | <a href="#">preference</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## mode *keyword*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Method used to elect the DF  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <a href="#">string</a> <a href="#">df-election</a> <a href="#">manual</a> <a href="#">preference</a> <a href="#">mode</a> <i>keyword</i> |
| Tree       | <a href="#">mode</a>   |
| Options    | revertive, non-revertive   |
| Default    | revertive  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## value *number*

|          |  |
|----------|--|
| Synopsis | Preference that is used to elect the designated forwarder  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <a href="#">string</a> <a href="#">df-election</a> <a href="#">manual</a> <a href="#">preference</a> <a href="#">value</a> <i>number</i> |
| Tree     | <a href="#">value</a>  |
| Range    | 0 to 65535   |



|            |         |
|------------|---------|
| Default    | 32767   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **service-carving-mode** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Mode of service carving enabled per EVPN associated with this Ethernet segment entry   |
| Context    | <b>configure service system bgp evpn ethernet-segment</b> <i>string</i> <b>df-election service-carving-mode</b> <i>keyword</i> |
| Tree       | <a href="#">service-carving-mode</a>   |
| Options    | auto, manual, off  |
| Default    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **esi** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Ethernet segment identifier  |
| Context    | <b>configure service system bgp evpn ethernet-segment</b> <i>string</i> <b>esi</b> <i>string</i> |
| Tree       | <a href="#">esi</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **multi-homing-mode** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Multi-homing mode of the Ethernet segment |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure service system bgp evpn ethernet-segment</b> <i>string</i> <b>multi-homing-mode</b> <i>keyword</i> |
| Tree       | <a href="#">multi-homing-mode</a>   |
| Options    | none, single-active, single-active-no-esi-label, all-active   |
| Default    | none  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **oper-group** *reference*

|            |  |
|------------|--|
| Synopsis   | Operational group ID   |
| Context    | <b>configure service system bgp evpn ethernet-segment</b> <i>string</i> <b>oper-group</b> <i>reference</i> |
| Tree       | <a href="#">oper-group</a>   |
| Reference  | <b>configure service oper-group</b> <i>string</i>  |
| Introduced | 19.10.R1   |
| Platforms  | All  |

### **orig-ip** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Originating IP address advertised in the ES route  |
| Context    | <b>configure service system bgp evpn ethernet-segment</b> <i>string</i> <b>orig-ip</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <a href="#">orig-ip</a>  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **pbb**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>pbb</b> context   |
| Context    | <b>configure service system bgp evpn ethernet-segment</b> <i>string</i> <b>pbb</b> |
| Tree       | <a href="#">pbb</a>  |
| Introduced | 16.0.R1  |

Platforms All

### **es-bmac-table-size** *number*

Synopsis Size of virtual backbone mac table for this ethernet segment

Context **configure** [service](#) [system](#) [bgp](#) [evpn](#) [ethernet-segment](#) *string* [pbb](#) **es-bmac-table-size** *number*

Tree [es-bmac-table-size](#)

Range 1 to 511999

Default 8

Introduced 16.0.R1

Platforms All

### **source-bmac-lsb** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Least significant bytes of the B-MAC for packet source

Context **configure** [service](#) [system](#) [bgp](#) [evpn](#) [ethernet-segment](#) *string* [pbb](#) **source-bmac-lsb** *string*

Tree [source-bmac-lsb](#)

Introduced 16.0.R1

Platforms All

### **route-next-hop** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Next-hop IP address for ES and AD per ES routes

Context **configure** [service](#) [system](#) [bgp](#) [evpn](#) [ethernet-segment](#) *string* **route-next-hop** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [route-next-hop](#)

Introduced 16.0.R4

Platforms All

**type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Ethernet Segment type  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <b>type</b> <i>keyword</i> |
| Tree       | <a href="#">type</a>   |
| Options    | none, virtual  |
| Default    | none   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**etree-leaf-label** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Enable E-Tree leaf label for PE   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp evpn</a> <a href="#">etree-leaf-label</a> <i>boolean</i>  |
| Tree        | <a href="#">etree-leaf-label</a>  |
| Description | <p>When configured to <b>true</b>, this command enables EVPN Ethernet-Tree (E-Tree) VPLS services on the router (not B-VPLS), allocates an E-Tree leaf label for the Provider Edge (PE) device, and configures the ILM entry. This command ensures that in-flight traffic can perform an ILM entry lookup at any time, and avoids discards when administratively enabling or disabling services, or reduces the timing window so that it does not occur during normal operation or configuration. The value for the E-Tree leaf label is set via the <b>etree-leaf-label-value</b> command.</p> <p>When configured to <b>false</b>, PE leaf labels are not supported. The <b>bgp-evpn mpls admin-state</b> command in the configure service epipe context cannot be administratively enabled if this command is set to false.</p> |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**etree-leaf-label-value** (*number* | *keyword*)

|          |  |
|----------|--|
| Synopsis | Global E-tree leaf label for PE in EVPN E-Tree services  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp evpn</a> <a href="#">etree-leaf-label-value</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <a href="#">etree-leaf-label-value</a>   |

|            |              |
|------------|--------------|
| Range      | 32 to 524526 |
| Options    | dynamic      |
| Default    | dynamic      |
| Introduced | 21.7.R1      |
| Platforms  | All          |

## ip-prefix-routes

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ip-prefix-routes</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ip-prefix-routes</a> |
| Tree       | <a href="#">ip-prefix-routes</a>  |
| Introduced | 21.2.R1   |
| Platforms  | All   |

## d-path-length-ignore *boolean*

|            |   |
|------------|---|
| Synopsis   | Ignore D-PATH length for BGP path selection of EVPN-IFF   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ip-prefix-routes</a> <a href="#">d-path-length-ignore</a> <i>boolean</i> |
| Tree       | <a href="#">d-path-length-ignore</a>  |
| Default    | false   |
| Introduced | 21.10.R1  |
| Platforms  | All   |

## iff-attribute-uniform-propagation *boolean*

|             |  |
|-------------|--|
| Synopsis    | Enable uniform propagation of BGP attributes   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ip-prefix-routes</a> <a href="#">iff-attribute-uniform-propagation</a> <i>boolean</i>   |
| Tree        | <a href="#">iff-attribute-uniform-propagation</a>  |
| Description | When configured to <b>true</b> , this command enables the uniform propagation of BGP attributes for EVPN-IFF (Interfaceful) routes. EVPN-IFF is used in R-VPLS services with <b>bgp-evpn ip-route-advertisement</b> . When enabled, the received EVPN-IFF routes for the R-VPLS can be propagated with the original BGP path attributes into EVPN-IFL, IPVPN, EVPN-IFF (in other R-VPLS services) or BGP IP routes advertised for the attached VPRN. The command also enables the attribute propagation in the opposite direction, for example, from EVPN-IFL/IPVPN/IP/EVPN-IFF routes into EVPN-IFF routes. |

The propagation follows the uniform mode defined in draft-ietf-bess-evpn-ipvpn-interworking.

When configured to **false**, this command re-originates the BGP Path Attributes when propagating EVPN-IFF routes into other Inter-Subnet Forwarding families.

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 21.2.R1 |
| Platforms  | All     |

### **iff-bgp-path-selection** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Enable BGP path selection for EVPN-IFF routes   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ip-prefix-routes</a> <a href="#">iff-bgp-path-selection</a> <i>boolean</i>   |
| Tree        | <a href="#">iff-bgp-path-selection</a>  |
| Description | <p>When configured to <b>true</b>, this command enables the EVPN-IFF routes to be ordered and selected in a similar manner as IPVPN or EVPN-IFL routes, that is, based on the regular BGP path selection process.</p> <p>When configured to <b>false</b>, this command makes the system order EVPN-IFF routes based on their {RVPLS Iindex, RD, Ethernet Tag}. For example, if two EVPN-IFF routes are received for the same prefix on the same R-VPLS and with different RDs (Route Distinguishers), the route with the lowest RD is selected.</p> |
| Default     | false   |
| Introduced  | 21.2.R1   |
| Platforms   | All   |

### **multicast-leave-sync-propagation** *number*

|             |   |
|-------------|---|
| Synopsis    | Multicast leave group synchronization delay   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">multicast-leave-sync-propagation</a> <i>number</i>   |
| Tree        | <a href="#">multicast-leave-sync-propagation</a>  |
| Description | <p>This command configures the additional amount of time that the system waits before removing a multicast state that was synchronized in an Ethernet Segment via Multicast Join or Leave Synch routes. This value represents a delta corresponding to the time it takes for a BGP advertisement to propagate to ES peers.</p> <p>The node triggering the route computes the maximum response time as the product of the locally configured values, Last Member Query Count and Last Member Query Interval, and adds the delta value to the maximum response time. The query count value is configured in the <b>configure services vrpn igmp robust-count</b> command. The query interval value is taken from the <b>configure service vpls sap igmp-snooping last-member-query-interval</b> or the <b>configure service vpls spoke-sdp igmp-snooping last-member-query-interval</b> configuration, depending on the Ethernet Segment.</p> |

Increasing the maximum response time by this value can help minimize the churn of removing and recreating the state on the node.

This value should be configured consistently in all ES peers.

|            |          |
|------------|----------|
| Range      | 0 to 300 |
| Units      | seconds  |
| Default    | 5        |
| Introduced | 20.7.R1  |
| Platforms  | All      |

### **route-distinguisher** *string*

|            |  |
|------------|--|
| Synopsis   | Route distinguisher for ES routes  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp evpn</a> <a href="#">route-distinguisher</a> <i>string</i> |
| Tree       | <a href="#">route-distinguisher</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **bgp-auto-rd-range**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>bgp-auto-rd-range</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp-auto-rd-range</a> |
| Tree       | <a href="#">bgp-auto-rd-range</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **community-value**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>community-value</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp-auto-rd-range</a> <a href="#">community-value</a> |
| Tree       | <a href="#">community-value</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **end** *number*

|          |  |
|----------|--|
| Synopsis | Upper bound of BGP route distinguisher community range |
|----------|--|

|            |   |
|------------|---|
| Context    | <b>configure service system bgp-auto-rd-range community-value end</b> <i>number</i> |
| Tree       | <a href="#">end</a>   |
| Range      | 1 to 65535  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**start number**

|            |   |
|------------|---|
| Synopsis   | Lower bound of BGP route distinguisher community range                                |
| Context    | <b>configure service system bgp-auto-rd-range community-value start</b> <i>number</i> |
| Tree       | <a href="#">start</a>   |
| Range      | 1 to 65535  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**ip-address string**

|            |  |
|------------|--|
| Synopsis   | IP address used for selecting the route distinguisher                      |
| Context    | <b>configure service system bgp-auto-rd-range ip-address</b> <i>string</i> |
| Tree       | <a href="#">ip-address</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**extended-default-qinq-sap-lookup boolean**

|            |   |
|------------|---|
| Synopsis   | Control the forwarding of the packets   |
| Context    | <b>configure service system extended-default-qinq-sap-lookup</b> <i>boolean</i> |
| Tree       | <a href="#">extended-default-qinq-sap-lookup</a>                                |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR                |

**fdb**

|          |                                     |
|----------|-------------------------------------|
| Synopsis | Enter the <b>fdb</b> context        |
| Context  | <b>configure service system fdb</b> |



|            |                     |
|------------|---------------------|
| Tree       | <a href="#">fdb</a> |
| Introduced | 16.0.R1             |
| Platforms  | All                 |

### **table-size** *number*

|             |  |
|-------------|--|
| Synopsis    | Maximum FDB entries in the system  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">fdb</a> <a href="#">table-size</a> <i>number</i>   |
| Tree        | <a href="#">table-size</a>   |
| Description | This command determines the maximum number of MAC entries in the forwarding database (FDB) for the system instance on this node.<br><br>Do not configure the <b>table-size</b> command. This command is automatically initialized by SR OS on boot up. |
| Range       | 4095 to 2047999  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **gre-eth-bridged**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>gre-eth-bridged</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">gre-eth-bridged</a> |
| Tree       | <a href="#">gre-eth-bridged</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **tunnel-termination** [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

|            |  |
|------------|--|
| Synopsis   | Enter the <b>tunnel-termination</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">gre-eth-bridged</a> <a href="#">tunnel-termination</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <a href="#">tunnel-termination</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

|            |  |
|------------|--|
| Synopsis   | Tunnel end-point IP address in the SR OS node  |
| Context    | <b>configure service system gre-eth-bridged tunnel-termination</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <a href="#">tunnel-termination</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**fpe-id reference****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | FPE ID  |
| Context    | <b>configure service system gre-eth-bridged tunnel-termination</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">fpe-id reference</a> |
| Tree       | <a href="#">fpe-id</a>  |
| Reference  | <b>configure fwd-path-ext fpe</b> <i>number</i>   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**pw-port-list**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>pw-port-list</b> context        |
| Context    | <b>configure service system pw-port-list</b> |
| Tree       | <a href="#">pw-port-list</a>                 |
| Introduced | 16.0.R6                                      |
| Platforms  | VSR  |

**port** [[port-id](#)] *string*

|          |   |
|----------|---|
| Synopsis | Add a list entry for <b>port</b>                                |
| Context  | <b>configure service system pw-port-list port</b> <i>string</i> |

---

|            |                      |
|------------|----------------------|
| Tree       | <a href="#">port</a> |
| Introduced | 16.0.R6              |
| Platforms  | VSR                  |

### **[port-id]** *string*

|            |   |
|------------|---|
| Synopsis   | Port ID   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">pw-port-list</a> <a href="#">port</a> <i>string</i> |
| Tree       | <a href="#">port</a>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R6   |
| Platforms  | VSR   |

### **vpn-gre-source-ip** *string*

|            |   |
|------------|---|
| Synopsis   | VPN GRE source ip-address   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">vpn-gre-source-ip</a> <i>string</i> |
| Tree       | <a href="#">vpn-gre-source-ip</a>   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **vxlan**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>vxlan</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">vxlan</a> |
| Tree       | <a href="#">vxlan</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **assisted-replication**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>assisted-replication</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">vxlan</a> <a href="#">assisted-replication</a> |
| Tree       | <a href="#">assisted-replication</a>   |
| Introduced | 16.0.R1  |

Platforms All

### **ip-address** *string*

Synopsis IP address for assisted replication in the router

Context **configure service system vxlan assisted-replication ip-address** *string*

Tree [ip-address](#)

Introduced 16.0.R1

Platforms All

### **tunnel-termination** [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Enter the **tunnel-termination** list instance

Context **configure service system vxlan tunnel-termination** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [tunnel-termination](#)

Introduced 16.0.R1

Platforms All

### **[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Non-system IP address that terminates the VXLAN

Context **configure service system vxlan tunnel-termination** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [tunnel-termination](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **fpe-id** *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis FPE id for this entry

|            |  |
|------------|--|
| Context    | <b>configure service system vxlan tunnel-termination</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>fpe-id</b> <i>reference</i> |
| Tree       | <b>fpe-id</b>  |
| Reference  | <b>configure fwd-path-ext fpe</b> <i>number</i>  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## template

|            |                                   |
|------------|-----------------------------------|
| Synopsis   | Enter the <b>template</b> context |
| Context    | <b>configure service template</b> |
| Tree       | <b>template</b>                   |
| Introduced | 16.0.R1                           |
| Platforms  | All                               |

## epipe-sap-template [**name**] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>epipe-sap-template</b> list instance                  |
| Context    | <b>configure service template epipe-sap-template</b> <i>string</i> |
| Tree       | <b>epipe-sap-template</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                 |

## [**name**] *string*

|               |  |
|---------------|--|
| Synopsis      | SAP template name  |
| Context       | <b>configure service template epipe-sap-template</b> <i>string</i> |
| Tree          | <b>epipe-sap-template</b>  |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.                                |
| Introduced    | 16.0.R1  |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                 |

## egress

|            |   |
|------------|---|
| Synopsis   | Enter the <b>egress</b> context   |
| Context    | <b>configure</b> <a href="#">service template epipe-sap-template</a> <i>string</i> <a href="#">egress</a> |
| Tree       | <a href="#">egress</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## filter

|            |  |
|------------|--|
| Synopsis   | Enter the <b>filter</b> context  |
| Context    | <b>configure</b> <a href="#">service template epipe-sap-template</a> <i>string</i> <a href="#">egress</a> <a href="#">filter</a> |
| Tree       | <a href="#">filter</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## ip reference

|            |   |
|------------|---|
| Synopsis   | IPv4 filter policy name   |
| Context    | <b>configure</b> <a href="#">service template epipe-sap-template</a> <i>string</i> <a href="#">egress</a> <a href="#">filter</a> <a href="#">ip</a> <a href="#">reference</a> |
| Tree       | <a href="#">ip</a>  |
| Reference  | <b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## ipv6 reference

|            |   |
|------------|---|
| Synopsis   | IPv6 filter policy name   |
| Context    | <b>configure</b> <a href="#">service template epipe-sap-template</a> <i>string</i> <a href="#">egress</a> <a href="#">filter</a> <a href="#">ipv6</a> <a href="#">reference</a> |
| Tree       | <a href="#">ipv6</a>  |
| Reference  | <b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## mac reference

|            |  |
|------------|--|
| Synopsis   | MAC filter policy name   |
| Context    | <b>configure</b> <a href="#">service template epipe-sap-template</a> <i>string</i> <a href="#">egress filter mac reference</a> |
| Tree       | <a href="#">mac</a>  |
| Reference  | <b>configure</b> <a href="#">filter mac-filter</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## qos

|            |   |
|------------|---|
| Synopsis   | Enter the <b>qos</b> context  |
| Context    | <b>configure</b> <a href="#">service template epipe-sap-template</a> <i>string</i> <a href="#">egress qos</a> |
| Tree       | <a href="#">qos</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## policy-name reference

|            |   |
|------------|---|
| Synopsis   | SAP egress QoS policy name to apply to the SAP  |
| Context    | <b>configure</b> <a href="#">service template epipe-sap-template</a> <i>string</i> <a href="#">egress qos policy-name reference</a> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos sap-egress</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## ingress

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ingress</b> context   |
| Context    | <b>configure</b> <a href="#">service template epipe-sap-template</a> <i>string</i> <a href="#">ingress</a> |
| Tree       | <a href="#">ingress</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## filter

|            |   |
|------------|---|
| Synopsis   | Enter the <b>filter</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">template</a> <a href="#">epipe-sap-template</a> <i>string</i> <a href="#">ingress</a> <a href="#">filter</a> |
| Tree       | <a href="#">filter</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## ip reference

|            |   |
|------------|---|
| Synopsis   | IPv4 filter policy name   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">template</a> <a href="#">epipe-sap-template</a> <i>string</i> <a href="#">ingress</a> <a href="#">filter</a> <a href="#">ip</a> <i>reference</i> |
| Tree       | <a href="#">ip</a>  |
| Reference  | <b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## ipv6 reference

|            |   |
|------------|---|
| Synopsis   | IPv6 filter policy name   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">template</a> <a href="#">epipe-sap-template</a> <i>string</i> <a href="#">ingress</a> <a href="#">filter</a> <a href="#">ipv6</a> <i>reference</i> |
| Tree       | <a href="#">ipv6</a>  |
| Reference  | <b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## mac reference

|            |  |
|------------|--|
| Synopsis   | MAC filter policy name   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">template</a> <a href="#">epipe-sap-template</a> <i>string</i> <a href="#">ingress</a> <a href="#">filter</a> <a href="#">mac</a> <i>reference</i> |
| Tree       | <a href="#">mac</a>  |
| Reference  | <b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |



## qos

|            |  |
|------------|--|
| Synopsis   | Enter the <b>qos</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">template</a> <a href="#">epipe-sap-template</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> |
| Tree       | <a href="#">qos</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## policy-name *reference*

|            |   |
|------------|---|
| Synopsis   | SAP ingress QoS policy name to apply to the SAP   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">template</a> <a href="#">epipe-sap-template</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">sap-ingress</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## queuing-type *keyword*

|            |  |
|------------|--|
| Synopsis   | Queuing type   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">template</a> <a href="#">epipe-sap-template</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">queuing-type</a> <i>keyword</i> |
| Tree       | <a href="#">queuing-type</a>   |
| Options    | shared, multipoint-shared  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## upnp

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>upnp</b> context   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">upnp</a>                     |
| Tree        | <a href="#">upnp</a>  |
| Description | Commands in this context configure Universal Plug 'n Play (UPnP) for the service. |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                      |

**policy** [*name*] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>policy</b> list instance                                 |
| Context        | <b>configure service upnp policy</b> <i>string</i>                    |
| Tree           | <i>policy</i>   |
| Description    | Commands in this context configure the attributes of the UPnP policy. |
| Max. Instances | 255   |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                          |

**[name]** *string*

|               |  |
|---------------|--|
| Synopsis      | UPnP policy name                                   |
| Context       | <b>configure service upnp policy</b> <i>string</i> |
| Tree          | <i>policy</i>                                      |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.                |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR       |

**description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure service upnp policy</b> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <i>description</i>  |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**mapping-limit** *number*

|          |   |
|----------|---|
| Synopsis | Maximum number of UPnP mappings per subscriber  |
| Context  | <b>configure service upnp policy</b> <i>string</i> <b>mapping-limit</b> <i>number</i> |
| Tree     | <i>mapping-limit</i>  |

|            |  |
|------------|--|
| Range      | 1 to 256                                     |
| Default    | 256  |
| Introduced | 16.0.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

**port number**

|            |  |
|------------|--|
| Synopsis   | HTTP TCP port to which the UPnP IGD listens  |
| Context    | <b>configure</b> <a href="#">service upnp policy</a> <i>string</i> <b>port</b> <i>number</i> |
| Tree       | <a href="#">port</a>   |
| Range      | 1 to 65535   |
| Default    | 5000   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**strict-mode boolean**

|             |   |
|-------------|---|
| Synopsis    | Enable UPnP strict mode   |
| Context     | <b>configure</b> <a href="#">service upnp policy</a> <i>string</i> <b>strict-mode</b> <i>boolean</i>  |
| Tree        | <a href="#">strict-mode</a>   |
| Description | When configured to <b>true</b> , this command enables UPnP strict mode, in which the system only allows changes to an existing UPnP mapping if the request comes from the same UPnP client. |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**vpls [service-name] string**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>vpls</b> list instance                         |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> |
| Tree       | <a href="#">vpls</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[service-name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Administrative service name   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> |
| Tree          | <a href="#">vpls</a>  |
| String Length | 1 to 64   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the service   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**bgp** [[bgp-instance](#)] *number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>bgp</b> list instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <b>bgp</b> <i>number</i> |
| Tree       | <a href="#">bgp</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[bgp-instance]** *number*

|            |  |
|------------|--|
| Synopsis   | BGP instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <b>bgp</b> <i>number</i> |
| Tree       | <a href="#">bgp</a>  |
| Range      | 1 to 2   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |

Platforms All

### **adv-service-mtu** *number*

Synopsis Advertised service MTU value

Context **configure service vpls string bgp number adv-service-mtu number**

Tree [adv-service-mtu](#)

Description This command configures the MTU signaled value used in the BGP for the service. When configured, the router uses the value for signaling and for validation with the received MTU instead of the service MTU. However, the value does not affect the locally enforced value, which is still based on the service MTU.

Range 0 to 9782

Introduced 22.2.R1

Platforms All

### **pw-template-binding** [[pw-template-name](#)] *reference*

Synopsis Enter the **pw-template-binding** list instance

Context **configure service vpls string bgp number pw-template-binding reference**

Tree [pw-template-binding](#)

Max. Instances 100

Introduced 16.0.R1

Platforms All

### **[pw-template-name]** *reference*

Synopsis Policy name

Context **configure service vpls string bgp number pw-template-binding reference**

Tree [pw-template-binding](#)

Reference **configure service pw-template string**

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

**bfd-liveness** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable BFD   |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp number</a> <a href="#">pw-template-binding reference</a> <b>bfd-liveness</b> <i>boolean</i> |
| Tree       | <a href="#">bfd-liveness</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**bfd-template** *reference*

|            |  |
|------------|--|
| Synopsis   | BFD template name for PW-Template binding  |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp number</a> <a href="#">pw-template-binding reference</a> <b>bfd-template</b> <i>reference</i> |
| Tree       | <a href="#">bfd-template</a>   |
| Reference  | <b>configure</b> <a href="#">bfd</a> <a href="#">bfd-template</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**import-rt** *string*

|                |  |
|----------------|--|
| Synopsis       | Import route-target communities  |
| Context        | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp number</a> <a href="#">pw-template-binding reference</a> <b>import-rt</b> <i>string</i> |
| Tree           | <a href="#">import-rt</a>  |
| String Length  | 10 to 28   |
| Max. Instances | 5  |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

**monitor-oper-group** *reference*

|          |  |
|----------|--|
| Synopsis | Operational group to monitor   |
| Context  | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp number</a> <a href="#">pw-template-binding reference</a> <b>monitor-oper-group</b> <i>reference</i> |
| Tree     | <a href="#">monitor-oper-group</a>   |

|            |   |
|------------|---|
| Reference  | <b>configure</b> <a href="#">service oper-group</a> <i>string</i>                             |
| Notes      | The following elements are part of a choice: <b>monitor-oper-group</b> or <b>oper-group</b> . |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **oper-group** *reference*

|            |   |
|------------|---|
| Synopsis   | Operational group   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">bgp number pw-template-binding</a> <i>reference</i> <a href="#">oper-group</a> <i>reference</i> |
| Tree       | <a href="#">oper-group</a>  |
| Reference  | <b>configure</b> <a href="#">service oper-group</a> <i>string</i>   |
| Notes      | The following elements are part of a choice: <b>monitor-oper-group</b> or <b>oper-group</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **split-horizon-group** *string*

|               |   |
|---------------|---|
| Synopsis      | Split horizon group   |
| Context       | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">bgp number pw-template-binding</a> <i>reference</i> <a href="#">split-horizon-group</a> <i>string</i> |
| Tree          | <a href="#">split-horizon-group</a>   |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

### **route-distinguisher** (*keyword* | *vpn-route-distinguisher*)

|            |  |
|------------|--|
| Synopsis   | High-order 6 bytes that are used as string to compose VSI-ID for use in NLRI   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">bgp number route-distinguisher</a> ( <i>keyword</i>   <i>vpn-route-distinguisher</i> ) |
| Tree       | <a href="#">route-distinguisher</a>  |
| Options    | auto-rd  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## route-target

|            |   |
|------------|---|
| Synopsis   | Enter the <b>route-target</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp number</a> <b>route-target</b> |
| Tree       | <a href="#">route-target</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## export *string*

|               |  |
|---------------|--|
| Synopsis      | Extended community name for default import policy  |
| Context       | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp number</a> <a href="#">route-target</a> <b>export</b> <i>string</i> |
| Tree          | <a href="#">export</a>   |
| String Length | 10 to 28   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

## import *string*

|               |  |
|---------------|--|
| Synopsis      | Extended community name for default import policy  |
| Context       | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp number</a> <a href="#">route-target</a> <b>import</b> <i>string</i> |
| Tree          | <a href="#">import</a>   |
| String Length | 10 to 28   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

## vsi-export *reference*

|                |  |
|----------------|--|
| Synopsis       | VSI export policies  |
| Context        | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp number</a> <b>vsi-export</b> <i>reference</i> |
| Tree           | <a href="#">vsi-export</a>   |
| Reference      | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>                     |
| Max. Instances | 5  |
| Notes          | This element is ordered by the user.   |



|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **vsi-import** *reference*

|                |  |
|----------------|--|
| Synopsis       | VSI import policies  |
| Context        | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp number</a> <a href="#">vsi-import reference</a> |
| Tree           | <a href="#">vsi-import</a>   |
| Reference      | <b>configure</b> <a href="#">policy-options policy-statement string</a>  |
| Max. Instances | 5  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

### **bgp-ad**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>bgp-ad</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-ad</a> |
| Tree       | <a href="#">bgp-ad</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of BGP Auto-Discovery  |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-ad admin-state keyword</a> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**vpls-id** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | VPLS identifier as a 8-byte route distinguisher  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">bgp-ad vpls-id</a> <i>string</i> |
| Tree       | <a href="#">vpls-id</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**vsi-id-prefix** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | VSI prefix value   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">bgp-ad vsi-id-prefix</a> <i>string</i> |
| Tree       | <a href="#">vsi-id-prefix</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**bgp-evpn**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>bgp-evpn</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">bgp-evpn</a> |
| Tree       | <a href="#">bgp-evpn</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**accept-ivpls-evpn-flush** *boolean*

|          |   |
|----------|---|
| Synopsis | Accept and process non-zero ethernet-tag MAC routes   |
| Context  | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">bgp-evpn accept-ivpls-evpn-flush</a> <i>boolean</i> |
| Tree     | <a href="#">accept-ivpls-evpn-flush</a>   |
| Default  | false   |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **evi number**

|             |   |
|-------------|---|
| Synopsis    | EVPN ID   |
| Context     | <b>configure service vpls string bgp-evpn evi number</b>  |
| Tree        | <b>evi</b>  |
| Description | <p>This command configures a 2-byte EVPN instance (EVI) unique in the system. It is used for the service-carving algorithm for multi-homing and auto-deriving route target and route distinguishers.</p> <p>If not specified, the EVPN ID value is zero and no route distinguisher or route targets are auto-derived from it.</p> <p>If the EVI ID value is specified and no other <b>route-distinguisher</b> or <b>route-target</b> is configured in the service, the following rules apply:</p> <ul style="list-style-type: none"> <li>• the route distinguisher is derived from &lt;system_ip&gt;:evi</li> <li>• the route target is derived from &lt;autonomous-system&gt;:evi</li> </ul> <p>If VSI import and export policies are configured, the route target must be configured in the policies and those values take precedence over the auto-derived route targets. If <b>bgp-ad vpls-id</b> and <b>bgp-evpn evi</b> are both configured on the same service, the VPLS ID auto-derived route target or route distinguisher takes precedence over the values auto-derived from the EVI. Use the <b>show service id bgp</b> command to display the operational route target for a service.</p> |
| Range       | 1 to 16777215   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **incl-mcast-orig-ip string**

|            |   |
|------------|---|
| Synopsis   | Originating IP address  |
| Context    | <b>configure service vpls string bgp-evpn incl-mcast-orig-ip string</b> |
| Tree       | <b>incl-mcast-orig-ip</b>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **isid-route-target**

|          |  |
|----------|--|
| Synopsis | Enter the <b>isid-route-target</b> context |
|----------|--|

|            |  |
|------------|--|
| Context    | <b>configure service vpls string</b> <i>bgp-evpn isid-route-target</i> |
| Tree       | <i>isid-route-target</i>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **range** [*start*] *number*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>range</b> list instance  |
| Context        | <b>configure service vpls string</b> <i>bgp-evpn isid-route-target range number</i> |
| Tree           | <i>range</i>  |
| Max. Instances | 8192  |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

### **[start]** *number*

|            |   |
|------------|---|
| Synopsis   | Lower bound of the ISID range   |
| Context    | <b>configure service vpls string</b> <i>bgp-evpn isid-route-target range number</i> |
| Tree       | <i>range</i>  |
| Range      | 1 to 16777215   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **end** *number*

|            |  |
|------------|--|
| Synopsis   | Upper bound of the ISID range  |
| Context    | <b>configure service vpls string</b> <i>bgp-evpn isid-route-target range number end number</i> |
| Tree       | <i>end</i>   |
| Range      | 1 to 16777215  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## route-target *string*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Route for the ISID range   |
| Context       | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn isid-route-target range number</a> <a href="#">route-target string</a> |
| Tree          | <a href="#">route-target</a>   |
| String Length | 10 to 28   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

## type *keyword*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Method used to support the PBB-EVPN ISID-based route target advertisement   |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn isid-route-target range number</a> <a href="#">type keyword</a> |
| Tree       | <a href="#">type</a>  |
| Options    | auto, configured  |
| Default    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## mac-duplication

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mac-duplication</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mac-duplication</a> |
| Tree       | <a href="#">mac-duplication</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**blackhole** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable black hole dup MAC configuration  |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mac-duplication blackhole</a> <i>boolean</i> |
| Tree       | <a href="#">blackhole</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**detect**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>detect</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mac-duplication detect</a> |
| Tree       | <a href="#">detect</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**num-moves** *number*

|            |  |
|------------|--|
| Synopsis   | BGP EVPN MAC duplication detection number of moves   |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mac-duplication detect num-moves</a> <i>number</i> |
| Tree       | <a href="#">num-moves</a>  |
| Range      | 3 to 10  |
| Default    | 5  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**window** *number*

|            |   |
|------------|---|
| Synopsis   | BGP EVPN MAC duplication detection window   |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mac-duplication detect window</a> <i>number</i> |
| Tree       | <a href="#">window</a>  |
| Range      | 1 to 15   |
| Units      | minutes   |
| Default    | 3   |
| Introduced | 16.0.R1   |

Platforms All

### **retry** (*number* | *keyword*)

Synopsis BGP EVPN MAC duplication retry  
 Context **configure service vpls string bgp-evpn mac-duplication retry** (*number* | *keyword*)  
 Tree [retry](#)  
 Range 2 to 60  
 Units minutes  
 Options never  
 Default 9  
 Introduced 16.0.R1  
 Platforms All

### **mpls** [[bgp-instance](#)] *number*

Synopsis Enter the **mpls** list instance  
 Context **configure service vpls string bgp-evpn mpls number**  
 Tree [mpls](#)  
 Introduced 16.0.R1  
 Platforms All

### **[bgp-instance]** *number*

Synopsis BGP instance  
 Context **configure service vpls string bgp-evpn mpls number**  
 Tree [mpls](#)  
 Range 1 to 2  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of BGP EVPN MPLS

|            |   |
|------------|---|
| Context    | <b>configure service vpls string bgp-evpn mpls number admin-state keyword</b> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **auto-bind-tunnel**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>auto-bind-tunnel</b> context                                  |
| Context    | <b>configure service vpls string bgp-evpn mpls number auto-bind-tunnel</b> |
| Tree       | <a href="#">auto-bind-tunnel</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **allow-flex-algo-fallback** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Enable flexible algorithm fallback  |
| Context     | <b>configure service vpls string bgp-evpn mpls number auto-bind-tunnel allow-flex-algo-fallback boolean</b>   |
| Tree        | <a href="#">allow-flex-algo-fallback</a>  |
| Description | <p>When configured to <b>true</b>, a BGP router with a Flex-Algorithm action configured (via the <b>configure policy-options policy-statement entry action flex-algo</b> command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available.</p> <p>When configured to <b>false</b>, the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available.</p> |
| Default     | false   |
| Introduced  | 20.10.R1  |
| Platforms   | All   |

### **ecmp** *number*

|          |  |
|----------|--|
| Synopsis | Maximum ECMP routes information  |
| Context  | <b>configure service vpls string bgp-evpn mpls number auto-bind-tunnel ecmp number</b> |
| Tree     | <a href="#">ecmp</a>   |
| Range    | 1 to 32  |



|            |          |
|------------|----------|
| Default    | 1        |
| Introduced | 19.10.R1 |
| Platforms  | All      |

### **enforce-strict-tunnel-tagging** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable/disable enforcement of strict tunnel tagging  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <i>number</i> <a href="#">auto-bind-tunnel</a> <b>enforce-strict-tunnel-tagging</b> <i>boolean</i> |
| Tree       | <a href="#">enforce-strict-tunnel-tagging</a>  |
| Default    | false  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **resolution** *keyword*

|            |   |
|------------|---|
| Synopsis   | Resolution method for tunnel selection  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <i>number</i> <a href="#">auto-bind-tunnel</a> <b>resolution</b> <i>keyword</i> |
| Tree       | <a href="#">resolution</a>  |
| Options    | none, filter, any   |
| Default    | none  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **resolution-filter**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>resolution-filter</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <i>number</i> <a href="#">auto-bind-tunnel</a> <b>resolution-filter</b> |
| Tree       | <a href="#">resolution-filter</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **bgp** *boolean*

|          |   |
|----------|---|
| Synopsis | Use BGP tunneling for next-hop resolution |
|----------|---|

|             |   |
|-------------|---|
| Context     | <b>configure service vpls string</b> <a href="#">bgp-evpn mpls number auto-bind-tunnel resolution-filter</a> <a href="#">bgp boolean</a>  |
| Tree        | <a href="#">bgp</a>   |
| Description | When configured to <b>true</b> , BGP searches the BGP LSP for the address of the BGP next hop.<br>When configured to <b>false</b> , BGP tunneling is not used and inter-area or inter-as prefixes are not resolved. |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **ldp boolean**

|             |  |
|-------------|--|
| Synopsis    | Use LDP tunneling for next-hop resolution  |
| Context     | <b>configure service vpls string</b> <a href="#">bgp-evpn mpls number auto-bind-tunnel resolution-filter</a> <a href="#">ldp boolean</a>   |
| Tree        | <a href="#">ldp</a>  |
| Description | When configured to <b>true</b> , BGP searches for an LDP LSP with a FEC prefix corresponding to the address of the BGP next hop.<br>When configured to <b>false</b> , LDP tunneling is not used for next-hop resolution. |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **mpls-fwd-policy boolean**

|             |   |
|-------------|---|
| Synopsis    | Use MPLS forwarding policy for next-hop resolution  |
| Context     | <b>configure service vpls string</b> <a href="#">bgp-evpn mpls number auto-bind-tunnel resolution-filter</a> <a href="#">mpls-fwd-policy boolean</a>  |
| Tree        | <a href="#">mpls-fwd-policy</a>   |
| Description | When configured to <b>true</b> , BGP uses the MPLS forwarding policy to determine the address of the BGP next hop.<br>When configured to <b>false</b> , the MPLS forwarding policy is not used for next-hop resolution. |
| Default     | false   |
| Introduced  | 19.5.R1   |
| Platforms   | All   |

**rib-api** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Use RIB API gRPC service for next-hop resolution  |
| Context     | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">auto-bind-tunnel</a> <a href="#">resolution-filter</a><br><a href="#">rib-api</a> <i>boolean</i>  |
| Tree        | <a href="#">rib-api</a>   |
| Description | When configured to <b>true</b> , BGP uses tunnels programmed using the RIB API gRPC service to resolve the next hops of routes imported into the EVPN service.<br><br>When configured to <b>false</b> , the RIB API service tunnels are not used for next-hop resolution. |
| Default     | false   |
| Introduced  | 19.5.R1   |
| Platforms   | All   |

**rsvp** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Use RSVP tunneling for next-hop resolution  |
| Context     | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">auto-bind-tunnel</a> <a href="#">resolution-filter</a><br><a href="#">rsvp</a> <i>boolean</i>   |
| Tree        | <a href="#">rsvp</a>  |
| Description | When configured to <b>true</b> , BGP searches the best metric RSVP LSP to determine the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface used by the BGP instance on the remote node. The LSP metric is provided by MPLS in the tunnel table. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID.<br><br>When configured to <b>false</b> , the RSVP LSP is not used for next-hop resolution. |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**sr-isis** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Use IS-IS SR tunneling for next-hop resolution   |
| Context     | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">auto-bind-tunnel</a> <a href="#">resolution-filter</a><br><a href="#">sr-isis</a> <i>boolean</i> |
| Tree        | <a href="#">sr-isis</a>  |
| Description | When configured to <b>true</b> , BGP uses an IS-IS tunnel type to determine the address of the BGP next hop.   |

The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered IS-IS instance.

When configured to **false**, IS-IS tunneling is not used for next-hop resolution.

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **sr-ospf** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Use OSPF SR tunneling for next-hop resolution  |
| Context     | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">auto-bind-tunnel resolution-filter sr-ospf</a> <i>boolean</i>  |
| Tree        | <a href="#">sr-ospf</a>  |
| Description | When configured to <b>true</b> , BGP uses an OSPF tunnel type to determine the address of the BGP next hop.<br><br>The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OPSF instance.<br><br>When configured to <b>false</b> , OSPF tunneling is not used for next-hop resolution. |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **sr-ospf3** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Use OSPFv3 SR tunneling for next-hop resolution   |
| Context     | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">auto-bind-tunnel resolution-filter sr-ospf3</a> <i>boolean</i>  |
| Tree        | <a href="#">sr-ospf3</a>  |
| Description | When configured to <b>true</b> , BGP uses an OSPF3 tunnel type to determine the address of the BGP next hop.<br><br>The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OPSF3 instance.<br><br>When configured to <b>false</b> , OSPF3 tunneling is not used for next-hop resolution. |
| Default     | false   |
| Introduced  | 19.10.R1  |
| Platforms   | All   |

**sr-policy boolean**

|             |   |
|-------------|---|
| Synopsis    | Use SR policies for next-hop resolution   |
| Context     | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">auto-bind-tunnel</a> <a href="#">resolution-filter sr-policy boolean</a>  |
| Tree        | <a href="#">sr-policy</a>   |
| Description | <p>When configured to <b>true</b>, this command instructs BGP to use an SR policy to determine the address of the BGP next hop. The SR policy search criteria includes a non-null endpoint and color value that matches the BGP next hop and color extended community value, respectively, of the EVPN route.</p> <p>When configured to <b>false</b>, SR policies are not used for next-hop resolution.</p> |
| Default     | false   |
| Introduced  | 19.5.R1   |
| Platforms   | All   |

**sr-te boolean**

|             |   |
|-------------|---|
| Synopsis    | Use SR-TE tunneling for next-hop resolution   |
| Context     | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">auto-bind-tunnel</a> <a href="#">resolution-filter sr-te boolean</a>  |
| Tree        | <a href="#">sr-te</a>   |
| Description | <p>When configured to <b>true</b>, BGP uses an SR-TE tunnel type to determine the address of the BGP next hop.</p> <p>The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered tunnel ID.</p> <p>When configured to <b>false</b>, SR-TE tunneling is not used for next-hop resolution.</p> |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**udp boolean**

|             |  |
|-------------|--|
| Synopsis    | Use MPLS over UDP tunneling for next-hop resolution  |
| Context     | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">auto-bind-tunnel</a> <a href="#">resolution-filter udp boolean</a> |
| Tree        | <a href="#">udp</a>  |
| Description | When configured to <b>true</b> , BGP uses an MPLS over UDP tunnel type to determine the address of the BGP next hop.   |

When configured to **false**, MPLS over UDP tunneling is not used for next-hop resolution.

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **weighted-ecmp** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Allow weighted load balancing  |
| Context     | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">auto-bind-tunnel</a> <b>weighted-ecmp</b> <i>boolean</i>   |
| Tree        | <a href="#">weighted-ecmp</a>  |
| Description | When configured to <b>true</b> , this router enables weighted ECMP for packets using tunnels that a VPLS or Epipe automatically binds to. Packets are sprayed across LSPs in the ECMP according to the outcome of the hash algorithm and the configured load balancing weight of each LSP.<br><br>When configured to <b>false</b> , this command disables weighted ECMP for next-hop tunnel selection. |
| Default     | false  |
| Introduced  | 22.7.R1  |
| Platforms   | All  |

### **control-word** *boolean*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Allow use of the CW bit in the label message   |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls number</a> <b>control-word</b> <i>boolean</i> |
| Tree       | <a href="#">control-word</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**default-route-tag** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Default route tag  |
| Context     | <b>configure</b> <i>service vpls string bgp-evpn mpls number default-route-tag string</i>  |
| Tree        | <i>default-route-tag</i>   |
| Description | <p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p> <p>The following are examples of the conflict priority handling:</p> <ul style="list-style-type: none"> <li>• If a service is configured with both <b>default-route-tag</b> <i>X</i> and <b>proxy-arp evpn-route-tag</b> <i>Y</i>, the EVPN uses route tag <i>Y</i> when sending EVPN proxy-arp routes to the BGP RIB for advertisement.</li> <li>• If a given IP-prefix route is tagged in the route-table with tag <i>A</i> and the R-VPLS, in which the route is advertised, uses <i>B</i> as the <b>default-route-tag</b>, then EVPN keeps tag <i>A</i> when sending the route to the BGP RIB.</li> </ul> <p>The <b>default-route-tag</b> configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.</p> |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

**dynamic-egress-label-limit** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Enables dynamic egress label limit   |
| Context     | <b>configure</b> <i>service vpls string bgp-evpn mpls number dynamic-egress-label-limit boolean</i>  |
| Tree        | <i>dynamic-egress-label-limit</i>  |
| Description | <p>When configured to <b>true</b>, this command relaxes the egress MPLS label limit check when resolving BGP next hops in the tunnel table.</p> <p>For VPRN services, the OAM label is never computed and, therefore, one more egress label is allowed.</p> <p>For EVPN (Epipe and VPLS) services, the system only computes the control word and ESI label if they are used. For the control word, the system reduces the egress label limit by one label if the control word is configured in the service. When configured, the ESI label is not counted for Epipes or VPLS services without an ES.</p> |

When configured to **false** this command, for EVPN, Epipe, and VPLS services, always accounts for the ESI label and control word.

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 22.2.R1 |
| Platforms  | All     |

### **ecmp number**

|            |  |
|------------|--|
| Synopsis   | Maximum ECMP routes information  |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls number</a> <b>ecmp number</b> |
| Tree       | <a href="#">ecmp</a>   |
| Range      | 1 to 32  |
| Default    | 1  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **entropy-label boolean**

|            |  |
|------------|--|
| Synopsis   | Allow use of entropy labels for spoke SDPs   |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls number</a> <b>entropy-label boolean</b> |
| Tree       | <a href="#">entropy-label</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **evi-three-byte-auto-rt boolean**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Auto-derive the BGP EVPN route target   |
| Context     | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls number</a> <b>evi-three-byte-auto-rt boolean</b>   |
| Tree        | <a href="#">evi-three-byte-auto-rt</a>  |
| Description | When configured to <b>true</b> , the BGP-EVPN instance import and export route target is auto-derived as described in RFC 8365 (Global-Administrator:A/Type/D-ID/Service-ID).<br>Where: |



- Global Administrator – is the configured 2-octet AS number; if the configured ASN exceeds the 2 byte limit, the low order 16-bit value is taken
- A=0 (for auto-derivation)
- Type=4 (EVI-based route-target)
- D-ID= [1..2] – encodes the BGP instance, which allows the auto-derivation of different route-targets in multi-instance services; the value is inherited from the corresponding BGP instance
- Service ID=3-octet EVI

When configured to **false**, route target derivation is not allowed.

|            |          |
|------------|----------|
| Default    | false    |
| Introduced | 21.10.R1 |
| Platforms  | All      |

## **fdb**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>fdb</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <i>number</i> <b>fdb</b> |
| Tree       | <a href="#">fdb</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## **protected-src-mac-violation-action** *keyword*

|            |   |
|------------|---|
| Synopsis   | Relearn request for a protected MAC is received action  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <i>number</i> <b>fdb</b> <b>protected-src-mac-violation-action</b> <i>keyword</i> |
| Tree       | <a href="#">protected-src-mac-violation-action</a>  |
| Options    | discard   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## **force-vc-forwarding** *keyword*

|          |   |
|----------|---|
| Synopsis | VC forwarding action  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <i>number</i> <b>force-vc-forwarding</b> <i>keyword</i> |
| Tree     | <a href="#">force-vc-forwarding</a>   |
| Options  | vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag  |

Introduced 16.0.R1  
 Platforms All

### **ingress-replication-bum-label** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Use the same label as the one advertised for unicast traffic  
 Context **configure** [service vpls string](#) [bgp-evpn mpls number](#) [ingress-replication-bum-label boolean](#)  
 Tree [ingress-replication-bum-label](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **mh-mode** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Multihoming mode  
 Context **configure** [service vpls string](#) [bgp-evpn mpls number](#) [mh-mode keyword](#)  
 Tree [mh-mode](#)  
 Description This command configures the multihoming mode for BGP-EVPN. Users can configure only one network instance for the service.  
 If a provider tunnel is enabled for the service instance, this command must be configured using the **network** option.  
 Options access, network  
 Default network  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **oper-group** *reference*

Synopsis Operational group ID

|            |  |
|------------|--|
| Context    | <b>configure service vpls string bgp-evpn mpls number oper-group reference</b> |
| Tree       | <a href="#">oper-group</a>   |
| Reference  | <b>configure service oper-group string</b>                                     |
| Introduced | 19.10.R1   |
| Platforms  | All  |

## route-next-hop

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>route-next-hop</b> context                                  |
| Context     | <b>configure service vpls string bgp-evpn mpls number route-next-hop</b> |
| Tree        | <a href="#">route-next-hop</a>   |
| Description | Commands in this context configure the next hop of the EVPN routes.      |
| Introduced  | 19.10.R1   |
| Platforms   | All  |

## ip-address (*ipv4-address-no-zone | ipv6-address-no-zone*)



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | IP address of the next-hop for the service EVPN route  |
| Context    | <b>configure service vpls string bgp-evpn mpls number route-next-hop ip-address (<i>ipv4-address-no-zone   ipv6-address-no-zone</i>)</b> |
| Tree       | <a href="#">ip-address</a>   |
| Notes      | The following elements are part of a choice: <b>ip-address</b> , <b>system-ipv4</b> , or <b>system-ipv6</b> .                            |
| Introduced | 19.10.R1   |
| Platforms  | All  |

## system-ipv4



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | System IPv4 address for service EVPN route next hop                                  |
| Context  | <b>configure service vpls string bgp-evpn mpls number route-next-hop system-ipv4</b> |

|            |   |
|------------|---|
| Tree       | <a href="#">system-ipv4</a>   |
| Notes      | The following elements are part of a choice: <b>ip-address</b> , <b>system-ipv4</b> , or <b>system-ipv6</b> . |
| Introduced | 19.10.R1  |
| Platforms  | All   |

## system-ipv6



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | System IPv6 address for service EVPN route next hop  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <a href="#">number</a> <a href="#">route-next-hop</a> <a href="#">system-ipv6</a> |
| Tree       | <a href="#">system-ipv6</a>  |
| Notes      | The following elements are part of a choice: <b>ip-address</b> , <b>system-ipv4</b> , or <b>system-ipv6</b> .  |
| Introduced | 19.10.R1   |
| Platforms  | All  |

## send-tunnel-encap

|            |   |
|------------|---|
| Synopsis   | Enter the <b>send-tunnel-encap</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <a href="#">number</a> <a href="#">send-tunnel-encap</a> |
| Tree       | <a href="#">send-tunnel-encap</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## mpls *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Enable MPLS encapsulation   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <a href="#">number</a> <a href="#">send-tunnel-encap</a> <a href="#">mpls</a> <i>boolean</i> |
| Tree     | <a href="#">mpls</a>  |
| Default  | true  |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **mpls-over-udp** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enable MPLS over UDP encapsulation  |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">send-tunnel-encap mpls-over-udp boolean</a> |
| Tree       | <a href="#">mpls-over-udp</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **split-horizon-group** *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Split horizon group   |
| Context     | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">split-horizon-group reference</a> |
| Tree        | <a href="#">split-horizon-group</a>   |
| Description | This command configures the value of split-horizon group for all BGP-EVPN segment routing v6 instances.                                 |
| Reference   | <b>configure</b> <a href="#">service vpls string</a> <a href="#">split-horizon-group string</a>   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **routes**

|          |  |
|----------|--|
| Synopsis | Enter the <b>routes</b> context  |
| Context  | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn routes</a> |
| Tree     | <a href="#">routes</a>   |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

## **incl-mcast**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>incl-mcast</b> context                             |
| Context    | <b>configure service vpls string bgp-evpn routes incl-mcast</b> |
| Tree       | <a href="#">incl-mcast</a>                                      |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## **advertise-ingress-replication *boolean***

|            |  |
|------------|--|
| Synopsis   | BGP EVPN IMET-IR route advertisement   |
| Context    | <b>configure service vpls string bgp-evpn routes incl-mcast advertise-ingress-replication <i>boolean</i></b> |
| Tree       | <a href="#">advertise-ingress-replication</a>  |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## **ip-prefix**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ip-prefix</b> context                             |
| Context    | <b>configure service vpls string bgp-evpn routes ip-prefix</b> |
| Tree       | <a href="#">ip-prefix</a>                                      |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## **advertise *boolean***

|            |   |
|------------|---|
| Synopsis   | Status for the IP prefix routes advertisement   |
| Context    | <b>configure service vpls string bgp-evpn routes ip-prefix advertise <i>boolean</i></b> |
| Tree       | <a href="#">advertise</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |

Platforms All

### **domain-id** *string*

**Synopsis** Domain ID of received BGP route before readvertisement

**Context** **configure** **service vpls** *string* **bgp-evpn routes ip-prefix domain-id** *string*

**Tree** [domain-id](#)

**Description** This command specifies the domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as domain-id:isf\_safi\_type in the D-PATH attribute, as described in *draft-ietf-bess-evpn-ipvpn-interworking*. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances).

Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).

In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N:

Seg Len=1 / 65000:1:128

If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows:

Seg Len=2 / 65000:2:70 / 65000:1:128

That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.

**Introduced** 21.10.R1

**Platforms** All

### **include-direct-interface-host** *boolean*

**Synopsis** Advertise the interface host address in EVPN

**Context** **configure** **service vpls** *string* **bgp-evpn routes ip-prefix include-direct-interface-host** *boolean*

**Tree** [include-direct-interface-host](#)

**Default** false

**Introduced** 16.0.R1

**Platforms** All

## link-bandwidth

|            |   |
|------------|---|
| Synopsis   | Enter the <b>link-bandwidth</b> context   |
| Context    | <b>configure service vpls string</b> <a href="#">bgp-evpn routes ip-prefix link-bandwidth</a> |
| Tree       | <a href="#">link-bandwidth</a>  |
| Introduced | 22.7.R1   |
| Platforms  | All   |

## advertise

|            |   |
|------------|---|
| Synopsis   | Enable the <b>advertise</b> context   |
| Context    | <b>configure service vpls string</b> <a href="#">bgp-evpn routes ip-prefix link-bandwidth advertise</a> |
| Tree       | <a href="#">advertise</a>   |
| Introduced | 22.7.R1   |
| Platforms  | All   |

## max-dynamic-weight *number*

|            |   |
|------------|---|
| Synopsis   | Maximum weight of the advertised evpn-iff route   |
| Context    | <b>configure service vpls string</b> <a href="#">bgp-evpn routes ip-prefix link-bandwidth advertise max-dynamic-weight number</a> |
| Tree       | <a href="#">max-dynamic-weight</a>  |
| Range      | 1 to 128  |
| Default    | 128   |
| Introduced | 22.7.R1   |
| Platforms  | All   |

## weight (*number* | *keyword*)

|          |   |
|----------|---|
| Synopsis | Weight of the advertised evpn-iff route   |
| Context  | <b>configure service vpls string</b> <a href="#">bgp-evpn routes ip-prefix link-bandwidth advertise weight (number   keyword)</a> |
| Tree     | <a href="#">weight</a>  |
| Range    | 1 to 128  |
| Options  | dynamic   |
| Default  | dynamic   |



Introduced 22.7.R1  
Platforms All

### **weighted-ecmp** *boolean*

Synopsis Enable weighted ECMP  
Context **configure** [service](#) [vpls](#) [string](#) [bgp-evpn](#) [routes](#) [ip-prefix](#) [link-bandwidth](#) [weighted-ecmp](#) *boolean*  
Tree [weighted-ecmp](#)  
Default false  
Introduced 22.7.R1  
Platforms All

### **mac-ip**

Synopsis Enter the **mac-ip** context  
Context **configure** [service](#) [vpls](#) [string](#) [bgp-evpn](#) [routes](#) [mac-ip](#)  
Tree [mac-ip](#)  
Introduced 16.0.R1  
Platforms All

### **advertise** *boolean*

Synopsis Status for the BGP-EVPN MAC/IP routes advertisement  
Context **configure** [service](#) [vpls](#) [string](#) [bgp-evpn](#) [routes](#) [mac-ip](#) [advertise](#) *boolean*  
Tree [advertise](#)  
Default true  
Introduced 16.0.R1  
Platforms All

### **cfm-mac** *boolean*

Synopsis Enable advertisement and withdrawal of MAC address  
Context **configure** [service](#) [vpls](#) [string](#) [bgp-evpn](#) [routes](#) [mac-ip](#) [cfm-mac](#) *boolean*  
Tree [cfm-mac](#)  
Default false

Introduced 16.0.R1  
Platforms All

### **unknown-mac** *boolean*

Synopsis Enable advertisement of unknown MAC route in BGP  
Context **configure** [service vpls string bgp-evpn routes mac-ip unknown-mac boolean](#)  
Tree [unknown-mac](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **sel-mcast**

Synopsis Enter the **sel-mcast** context  
Context **configure** [service vpls string bgp-evpn routes sel-mcast](#)  
Tree [sel-mcast](#)  
Introduced 19.10.R2  
Platforms All

### **advertise** *boolean*

Synopsis Advertise Selective Multicast Ethernet Tag routes  
Context **configure** [service vpls string bgp-evpn routes sel-mcast advertise boolean](#)  
Tree [advertise](#)  
Default false  
Introduced 19.10.R2  
Platforms All

### **segment-routing-v6** [[bgp-instance](#)] *number*

Synopsis Enter the **segment-routing-v6** list instance  
Context **configure** [service vpls string bgp-evpn segment-routing-v6 number](#)  
Tree [segment-routing-v6](#)  
Description Commands in this context configure the SRv6 instance used in the service.

|                |   |
|----------------|---|
| Max. Instances | 1   |
| Introduced     | 22.7.R1                                     |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

### **[bgp-instance] number**

|            |  |
|------------|--|
| Synopsis   | BGP instance   |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn segment-routing-v6</a> <i>number</i> |
| Tree       | <a href="#">segment-routing-v6</a>   |
| Range      | 1 to 2   |
| Notes      | This element is part of a list key.  |
| Introduced | 22.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

### **admin-state keyword**

|            |  |
|------------|--|
| Synopsis   | Administrative state of segment routing over IPv6  |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn segment-routing-v6</a> <i>number</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 22.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

### **default-route-tag string**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Default route tag   |
| Context  | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn segment-routing-v6</a> <i>number</i> <b>default-route-tag</b> <i>string</i> |
| Tree     | <a href="#">default-route-tag</a>   |

|             |  |
|-------------|--|
| Description | <p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p> <p>The following are examples of the conflict priority handling:</p> <ul style="list-style-type: none"> <li>• If a service is configured with both <b>default-route-tag X</b> and <b>proxy-arp evpn-route-tag Y</b>, the EVPN uses route tag Y when sending EVPN proxy-arp routes to the BGP RIB for advertisement.</li> <li>• If a given IP-prefix route is tagged in the route-table with tag A and the R-VPLS, in which the route is advertised, uses B as the <b>default-route-tag</b>, then EVPN keeps tag A when sending the route to the BGP RIB.</li> </ul> <p>The <b>default-route-tag</b> configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.</p> |
| Introduced  | 22.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

### **ecmp number**

|            |   |
|------------|---|
| Synopsis   | Maximum ECMP value configured on the service  |
| Context    | <b>configure service vpls string bgp-evpn segment-routing-v6 number ecmp number</b> |
| Tree       | <b>ecmp</b>   |
| Range      | 1 to 32   |
| Default    | 1   |
| Introduced | 22.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

### **evi-three-byte-auto-rt boolean**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Auto-derive the BGP EVPN route target   |
| Context     | <b>configure service vpls string bgp-evpn segment-routing-v6 number evi-three-byte-auto-rt boolean</b>  |
| Tree        | <b>evi-three-byte-auto-rt</b>   |
| Description | When configured to <b>true</b> , the BGP-EVPN instance import and export route target is auto-derived as described in RFC 8365 (Global-Administrator:A/Type/D-ID/Service-ID). |

Where:

- Global Administrator – is the configured 2-octet AS number; if the configured ASN exceeds the 2 byte limit, the low order 16-bit value is taken
- A=0 (for auto-derivation)
- Type=4 (EVI-based route-target)
- D-ID= [1..2] – encodes the BGP instance, which allows the auto-derivation of different route-targets in multi-instance services; the value is inherited from the corresponding BGP instance
- Service ID=3-octet EVI

When configured to **false**, route target derivation is not allowed.

|            |   |
|------------|---|
| Default    | false                                       |
| Introduced | 22.7.R1                                     |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

## **fdb**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>fdb</b> context  |
| Context    | <b>configure service vpls string bgp-evpn segment-routing-v6 number fdb</b> |
| Tree       | <b>fdb</b>  |
| Introduced | 22.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR                                 |

## **protected-src-mac-violation-action keyword**

|            |  |
|------------|--|
| Synopsis   | Relearn request for a protected MAC is received action   |
| Context    | <b>configure service vpls string bgp-evpn segment-routing-v6 number fdb protected-src-mac-violation-action keyword</b> |
| Tree       | <b>protected-src-mac-violation-action</b>  |
| Options    | discard  |
| Introduced | 22.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

## **force-vc-forwarding keyword**

|          |   |
|----------|---|
| Synopsis | Datapath forwarding to force vlan-vc-type   |
| Context  | <b>configure service vpls string bgp-evpn segment-routing-v6 number force-vc-forwarding keyword</b> |

|             |  |
|-------------|--|
| Tree        | <a href="#">force-vc-forwarding</a>  |
| Description | <p>This command allows the system to preserve the VLAN ID and 802.1p bits of the service-delimiting qtag in a new tag added in the customer frame before sending it to the EVPN destinations.</p> <p>This command may be used in conjunction with the <b>sap ingress vlan-translation</b> command. If so used, the configured translated VLAN ID is the VLAN ID sent to the EVPN destinations as opposed to the service-delimiting tag VLAN ID. If the ingress SAP/SDP binding is 'null'-encapsulated, the output VLAN ID and pbits is zero.</p> |
| Options     | vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag   |
| Introduced  | 22.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

### **mh-mode** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Multihoming mode   |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn segment-routing-v6</a> <i>number</i> <b>mh-mode</b> <i>keyword</i> |
| Tree       | <a href="#">mh-mode</a>  |
| Options    | access, network  |
| Default    | network  |
| Introduced | 22.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

### **oper-group** *reference*

|             |  |
|-------------|--|
| Synopsis    | Operational group  |
| Context     | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn segment-routing-v6</a> <i>number</i> <b>oper-group</b> <i>reference</i>  |
| Tree        | <a href="#">oper-group</a>   |
| Description | <p>This command adds the BGP EVPN SRv6 instance or an Ethernet Segment (ES) as a member of the operational group.</p> <p>When configured on a BGP EVPN instance, the operational group is up when it is either empty (meaning that the operational group has no members) or at least an EVPN destination is created under the EVPN instance added as member. When configured, no other SAP, SDP binding, or BGP EVPN instance can be added to the same operational group within the same or different service.</p> |

|            |   |
|------------|---|
| Reference  | <b>configure</b> <a href="#">service oper-group</a> <i>string</i> |
| Introduced | 22.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR                       |

### resolution *keyword*

|            |   |
|------------|---|
| Synopsis   | Resolution options for routes   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">bgp-evpn segment-routing-v6</a> <i>number</i> <a href="#">resolution</a> <i>keyword</i> |
| Tree       | <a href="#">resolution</a>  |
| Options    | route-table, tunnel-table, fallback-tunnel-to-route-table   |
| Default    | route-table   |
| Introduced | 22.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

### route-next-hop

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>route-next-hop</b> context  |
| Context     | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">bgp-evpn segment-routing-v6</a> <i>number</i> <a href="#">route-next-hop</a> |
| Tree        | <a href="#">route-next-hop</a>   |
| Description | Commands in this context configure the next hop of the EVPN routes.  |
| Introduced  | 22.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

### ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | IP address of the next-hop for the service EVPN route   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">bgp-evpn segment-routing-v6</a> <i>number</i> <a href="#">route-next-hop</a> <a href="#">ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <a href="#">ip-address</a>  |
| Notes      | The following elements are part of a choice: <b>ip-address</b> , <b>system-ipv4</b> , or <b>system-ipv6</b> .   |
| Introduced | 22.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

## system-ipv4



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | System IPv4 address for service EVPN route next hop  |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn segment-routing-v6 number</a> <a href="#">route-next-hop system-ipv4</a> |
| Tree       | <a href="#">system-ipv4</a>  |
| Notes      | The following elements are part of a choice: <b>ip-address</b> , <b>system-ipv4</b> , or <b>system-ipv6</b> .                                      |
| Introduced | 22.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

## system-ipv6



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | System IPv6 address for service EVPN route next hop  |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn segment-routing-v6 number</a> <a href="#">route-next-hop system-ipv6</a> |
| Tree       | <a href="#">system-ipv6</a>  |
| Notes      | The following elements are part of a choice: <b>ip-address</b> , <b>system-ipv4</b> , or <b>system-ipv6</b> .                                      |
| Introduced | 22.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

## source-address *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Source IPv6 address   |
| Context  | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn segment-routing-v6 number</a> <a href="#">source-address string</a> |
| Tree     | <a href="#">source-address</a>  |



|             |   |
|-------------|---|
| Description | <p>When configured, this command specifies the source IPv6 address used in the SA field of the outer IPv6 header of the SRv6 encapsulated packet.</p> <p>When not configured, the source IPv6 address is inherited from the configuration of the global default address in the <b>router "base" segment-routing segment-routing-v6 source-address</b> context.</p> <p>A source IPv6 address must be configured in this context or in the base router context.</p> <p>The system does not check if the address entered is a valid local address.</p> |
| Introduced  | 22.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

### split-horizon-group *reference*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Split horizon group   |
| Context     | <b>configure service vpls string bgp-evpn segment-routing-v6 number split-horizon-group reference</b>   |
| Tree        | <a href="#">split-horizon-group</a>   |
| Description | This command configures the value of split-horizon group for all BGP-EVPN segment routing v6 instances. |
| Reference   | <b>configure service vpls string split-horizon-group string</b>   |
| Introduced  | 22.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

### srv6

|            |  |
|------------|--|
| Synopsis   | Enter the <b>srv6</b> context  |
| Context    | <b>configure service vpls string bgp-evpn segment-routing-v6 number srv6</b> |
| Tree       | <a href="#">srv6</a>   |
| Introduced | 22.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR                                  |

**default-locator** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Default route locator   |
| Context     | <b>configure</b> <i>service vpls string bgp-evpn segment-routing-v6 number srv6 default-locator string</i>                      |
| Tree        | <i>default-locator</i>  |
| Description | This command specifies the locator that exists in the SRv6 service instance and is used as the default locator for the service. |
| Introduced  | 22.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

**instance** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Segment Routing SRv6 instance  |
| Context    | <b>configure</b> <i>service vpls string bgp-evpn segment-routing-v6 number srv6 instance reference</i> |
| Tree       | <i>instance</i>  |
| Reference  | <b>configure</b> <i>service vpls string segment-routing-v6 number</i>                                  |
| Introduced | 22.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

**vxlan** [*bgp-instance*] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>vxlan</b> list instance                              |
| Context    | <b>configure</b> <i>service vpls string bgp-evpn vxlan number</i> |
| Tree       | <i>vxlan</i>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[bgp-instance] number**

|            |  |
|------------|--|
| Synopsis   | BGP instance   |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn vxlan number</a> |
| Tree       | <a href="#">vxlan</a>  |
| Range      | 1 to 2   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**admin-state keyword**

|            |  |
|------------|--|
| Synopsis   | Administrative state of VXLAN auto-bindings creation   |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn vxlan number</a> <a href="#">admin-state keyword</a> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**default-route-tag string****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Default route tag  |
| Context     | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn vxlan number</a> <a href="#">default-route-tag string</a>  |
| Tree        | <a href="#">default-route-tag</a>  |
| Description | <p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p> <p>The following are examples of the conflict priority handling:</p> <ul style="list-style-type: none"> <li>If a service is configured with both <b>default-route-tag X</b> and <b>proxy-arp evpn-route-tag Y</b>, the EVPN uses route tag Y when sending EVPN proxy-arp routes to the BGP RIB for advertisement.</li> </ul> |

- If a given IP-prefix route is tagged in the route-table with tag *A* and the R-VPLS, in which the route is advertised, uses *B* as the **default-route-tag**, then EVPN keeps tag *A* when sending the route to the BGP RIB.

The **default-route-tag** configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.

|            |         |
|------------|---------|
| Introduced | 16.0.R4 |
| Platforms  | All     |

### **ecmp number**

|            |  |
|------------|--|
| Synopsis   | Number of paths to reach a specified MAC address                       |
| Context    | <b>configure service vpls string bgp-evpn vxlan number ecmp number</b> |
| Tree       | <b>ecmp</b>  |
| Range      | 1 to 32  |
| Default    | 1  |
| Introduced | 19.5.R1  |
| Platforms  | All  |

### **evi-three-byte-auto-rt boolean**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Auto-derive the BGP EVPN route target  |
| Context     | <b>configure service vpls string bgp-evpn vxlan number evi-three-byte-auto-rt boolean</b>  |
| Tree        | <b>evi-three-byte-auto-rt</b>  |
| Description | <p>When configured to <b>true</b>, the BGP-EVPN instance import and export route target is auto-derived as described in RFC 8365 (Global-Administrator:A/Type/D-ID/Service-ID).</p> <p>Where:</p> <ul style="list-style-type: none"> <li>• Global Administrator – is the configured 2-octet AS number; if the configured ASN exceeds the 2 byte limit, the low order 16-bit value is taken</li> <li>• A=0 (for auto-derivation)</li> <li>• Type=4 (EVI-based route-target)</li> <li>• D-ID= [1..2] – encodes the BGP instance, which allows the auto-derivation of different route-targets in multi-instance services; the value is inherited from the corresponding BGP instance</li> <li>• Service ID=3-octet EVI</li> </ul> |

|            |   |
|------------|---|
|            | When configured to <b>false</b> , route target derivation is not allowed. |
| Default    | false   |
| Introduced | 21.10.R1  |
| Platforms  | All   |

### **mh-mode** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Multi-homing mode  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">bgp-evpn vxlan</a> <i>number</i> <b>mh-mode</b> <i>keyword</i> |
| Tree       | <a href="#">mh-mode</a>  |
| Options    | access, network  |
| Default    | access   |
| Introduced | 19.5.R1  |
| Platforms  | All  |

### **oper-group** *reference*

|            |   |
|------------|---|
| Synopsis   | Operational group ID  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">bgp-evpn vxlan</a> <i>number</i> <b>oper-group</b> <i>reference</i> |
| Tree       | <a href="#">oper-group</a>  |
| Reference  | <b>configure</b> <a href="#">service oper-group</a> <i>string</i>   |
| Introduced | 19.10.R1  |
| Platforms  | All   |

### **routes**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>routes</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">bgp-evpn vxlan</a> <i>number</i> <b>routes</b> |
| Tree       | <a href="#">routes</a>   |
| Introduced | 19.5.R1  |
| Platforms  | All  |

**auto-disc**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>auto-disc</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn vxlan number</a> <a href="#">routes auto-disc</a> |
| Tree       | <a href="#">auto-disc</a>   |
| Introduced | 19.5.R1   |
| Platforms  | All   |

**advertise** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Advertise routes on auto-discovery   |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn vxlan number</a> <a href="#">routes auto-disc advertise</a> <i>boolean</i> |
| Tree       | <a href="#">advertise</a>  |
| Default    | false  |
| Introduced | 19.5.R1  |
| Platforms  | All  |

**send-incl-mcast-ir-on-ndf** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Allow IMET-IR on NDF  |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn vxlan number</a> <a href="#">send-incl-mcast-ir-on-ndf</a> <i>boolean</i> |
| Tree       | <a href="#">send-incl-mcast-ir-on-ndf</a>   |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**send-tunnel-encap** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Send VXLAN value in encapsulation extended community   |
| Context     | <b>configure service vpls string</b> <i>bgp-evpn vxlan number send-tunnel-encap boolean</i>  |
| Tree        | <i>send-tunnel-encap</i>   |
| Description | When configured to <b>true</b> , this command sends the VXLAN value in the encapsulation that is advertised with the EVPN routes for the service. The encapsulation is encoded in RFC5512-based tunnel encapsulation extended communities.<br><br>When configured to <b>false</b> , no encapsulation extended community is sent. |
| Default     | true   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**vxlan-instance** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | VXLAN instance   |
| Context    | <b>configure service vpls string</b> <i>bgp-evpn vxlan number vxlan-instance reference</i> |
| Tree       | <i>vxlan-instance</i>  |
| Reference  | <b>configure service vpls string</b> <i>vxlan instance number</i>                          |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**bgp-mh-site** [*site-name*] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>bgp-mh-site</b> list instance                     |
| Context    | <b>configure service vpls string</b> <i>bgp-mh-site string</i> |
| Tree       | <i>bgp-mh-site</i>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[site-name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Name for the specific site  |
| Context       | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-mh-site string</a> |
| Tree          | <a href="#">bgp-mh-site</a>   |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**activation-timer** *number*

|            |   |
|------------|---|
| Synopsis   | Time that the local sites are in standby status, waiting for BGP updates  |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-mh-site string</a> <a href="#">activation-timer number</a> |
| Tree       | <a href="#">activation-timer</a>  |
| Range      | 0 to 100  |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the VPLS BGP multi-homing site  |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-mh-site string</a> <a href="#">admin-state keyword</a> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**boot-timer** *number*

|          |   |
|----------|---|
| Synopsis | Wait time after reboot to run the DF election algorithm   |
| Context  | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-mh-site string</a> <a href="#">boot-timer number</a> |
| Tree     | <a href="#">boot-timer</a>  |



|            |          |
|------------|----------|
| Range      | 0 to 600 |
| Units      | seconds  |
| Introduced | 16.0.R1  |
| Platforms  | All      |

### **failed-threshold** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Threshold for the site to be declared down   |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-mh-site string</a> <b>failed-threshold</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">failed-threshold</a>   |
| Range      | 1 to 1000  |
| Options    | all  |
| Default    | all  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **id** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Site ID   |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-mh-site string</a> <b>id</b> <i>number</i> |
| Tree       | <a href="#">id</a>  |
| Range      | 1 to 65535  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **mesh-sdp-binds**

|          |   |
|----------|---|
| Synopsis | Specify if a mesh-sdp-binding is associated with this site  |
| Context  | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-mh-site string</a> <b>mesh-sdp-binds</b>             |
| Tree     | <a href="#">mesh-sdp-binds</a>  |
| Notes    | The following elements are part of a choice: <b>mesh-sdp-binds</b> , <b>sap</b> , <b>shg-name</b> , or <b>spoke-sdp</b> . |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **min-down-timer** *number*

|            |   |
|------------|---|
| Synopsis   | Minimum downtime for BGP multi-homing site after transition from up to down   |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-mh-site string</a> <a href="#">min-down-timer number</a> |
| Tree       | <a href="#">min-down-timer</a>  |
| Range      | 0 to 100  |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **monitor-oper-group** *reference*

|            |  |
|------------|--|
| Synopsis   | Operational group to monitor   |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-mh-site string</a> <a href="#">monitor-oper-group reference</a> |
| Tree       | <a href="#">monitor-oper-group</a>   |
| Reference  | <b>configure</b> <a href="#">service oper-group string</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **sap** *string*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | SAP to be associated with this site   |
| Context       | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-mh-site string</a> <a href="#">sap string</a>        |
| Tree          | <a href="#">sap</a>   |
| String Length | 1 to 45   |
| Notes         | The following elements are part of a choice: <b>mesh-sdp-binds</b> , <b>sap</b> , <b>shg-name</b> , or <b>spoke-sdp</b> . |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

## shg-name *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | SHG name to be associated with the site   |
| Context       | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-mh-site string</a> <a href="#">shg-name string</a>   |
| Tree          | <a href="#">shg-name</a>  |
| String Length | 1 to 32   |
| Notes         | The following elements are part of a choice: <b>mesh-sdp-binds</b> , <b>sap</b> , <b>shg-name</b> , or <b>spoke-sdp</b> . |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

## spoke-sdp *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | SDP to be associated with this site   |
| Context       | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-mh-site string</a> <a href="#">spoke-sdp string</a>  |
| Tree          | <a href="#">spoke-sdp</a>   |
| String Length | 3 to 16   |
| Notes         | The following elements are part of a choice: <b>mesh-sdp-binds</b> , <b>sap</b> , <b>shg-name</b> , or <b>spoke-sdp</b> . |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

## bgp-vpls

|            |   |
|------------|---|
| Synopsis   | Enable the <b>bgp-vpls</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-vpls</a> |
| Tree       | <a href="#">bgp-vpls</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the BGP-VPLS instance  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">bgp-vpls</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**maximum-ve-id** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum vpls-edge id for BGP-VPLS   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">bgp-vpls</a> <b>maximum-ve-id</b> <i>number</i> |
| Tree       | <a href="#">maximum-ve-id</a>   |
| Range      | 1 to 65535  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**ve**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ve</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">bgp-vpls</a> <b>ve</b> |
| Tree       | <a href="#">ve</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**id** *number*

|            |  |
|------------|--|
| Synopsis   | VPLS edge ID   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">bgp-vpls</a> <b>ve</b> <b>id</b> <i>number</i> |
| Tree       | <a href="#">id</a>   |
| Range      | 1 to 65535   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**name** *string*

|               |  |
|---------------|--|
| Synopsis      | VPLS Edge instance name  |
| Context       | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">bgp-vpls ve</a> <i>name string</i> |
| Tree          | <a href="#">name</a>   |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**capture-sap** [[sap-id](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>capture-sap</b> list instance  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">capture-sap</a> <i>string</i> |
| Tree       | <a href="#">capture-sap</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**[sap-id]** *string*

|               |   |
|---------------|---|
| Synopsis      | SAP identifier  |
| Context       | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">capture-sap</a> <i>string</i> |
| Tree          | <a href="#">capture-sap</a>   |
| String Length | 1 to 45   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the SAP  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">capture-sap</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **allow-dot1q-msaps** *boolean*

Synopsis Enable support for triggering managed SAP creation  
 Context **configure** [service vpls](#) *string* [capture-sap](#) *string* **allow-dot1q-msaps** *boolean*  
 Tree [allow-dot1q-msaps](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **bandwidth** *number*

Synopsis SAP bandwidth  
 Context **configure** [service vpls](#) *string* [capture-sap](#) *string* **bandwidth** *number*  
 Tree [bandwidth](#)  
 Range 1 to 6400000000  
 Units kilobps  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cpu-protection**

Synopsis Enter the **cpu-protection** context  
 Context **configure** [service vpls](#) *string* [capture-sap](#) *string* **cpu-protection**  
 Tree [cpu-protection](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

### **mac-monitoring**

Synopsis Monitor MAC for CPU protection  
 Context **configure** [service vpls](#) *string* [capture-sap](#) *string* **cpu-protection** **mac-monitoring**  
 Tree [mac-monitoring](#)  
 Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

### **policy-id** *reference*

Synopsis CPM protection policy  
 Context **configure** [service vpls string capture-sap string cpu-protection policy-id reference](#)  
 Tree [policy-id](#)  
 Reference **configure** [system security cpu-protection policy number](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

### **description** *string*

Synopsis Text description  
 Context **configure** [service vpls string capture-sap string description string](#)  
 Tree [description](#)  
 String Length 1 to 160  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dhcp**

Synopsis Enter the **dhcp** context  
 Context **configure** [service vpls string capture-sap string dhcp](#)  
 Tree [dhcp](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **python-policy** *reference*

Synopsis Python policy  
 Context **configure** [service vpls string capture-sap string dhcp python-policy reference](#)  
 Tree [python-policy](#)  
 Reference **configure** [python python-policy string](#)  
 Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **user-db** *reference*

Synopsis Local user database  
 Context **configure** [service vpls string capture-sap string dhcp user-db reference](#)  
 Tree [user-db](#)  
 Reference **configure** [subscriber-mgmt local-user-db string](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dhcp6**

Synopsis Enter the **dhcp6** context  
 Context **configure** [service vpls string capture-sap string dhcp6](#)  
 Tree [dhcp6](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **python-policy** *reference*

Synopsis Python policy  
 Context **configure** [service vpls string capture-sap string dhcp6 python-policy reference](#)  
 Tree [python-policy](#)  
 Reference **configure** [python python-policy string](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **user-db** *reference*

Synopsis Local user database  
 Context **configure** [service vpls string capture-sap string dhcp6 user-db reference](#)  
 Tree [user-db](#)  
 Reference **configure** [subscriber-mgmt local-user-db string](#)  
 Introduced 16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dist-cpu-protection** *reference*

Synopsis Distributed CPU protection policy for SAP  
 Context **configure** [service vpls](#) *string* [capture-sap](#) *string* [dist-cpu-protection](#) *reference*  
 Tree [dist-cpu-protection](#)  
 Reference **configure** [system security](#) [dist-cpu-protection](#) *policy* *string*  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **host-lockout-policy** *reference*

Synopsis Host lockout policy  
 Context **configure** [service vpls](#) *string* [capture-sap](#) *string* [host-lockout-policy](#) *reference*  
 Tree [host-lockout-policy](#)  
 Reference **configure** [subscriber-mgmt](#) [host-lockout-policy](#) *string*  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ingress**

Synopsis Enter the **ingress** context  
 Context **configure** [service vpls](#) *string* [capture-sap](#) *string* [ingress](#)  
 Tree [ingress](#)  
 Introduced 19.5.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **filter**

Synopsis Enter the **filter** context  
 Context **configure** [service vpls](#) *string* [capture-sap](#) *string* [ingress](#) [filter](#)  
 Tree [filter](#)  
 Introduced 19.5.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### mac reference

|            |  |
|------------|--|
| Synopsis   | MAC filter policy name   |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">capture-sap string</a> <a href="#">ingress filter mac reference</a> |
| Tree       | <a href="#">mac</a>  |
| Reference  | <b>configure</b> <a href="#">filter mac-filter string</a>  |
| Introduced | 19.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### ipoe-session

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipoe-session</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">capture-sap string</a> <a href="#">ipoe-session</a> |
| Tree       | <a href="#">ipoe-session</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### admin-state keyword

|            |  |
|------------|--|
| Synopsis   | Administrative state of IPoE session management  |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">capture-sap string</a> <a href="#">ipoe-session admin-state keyword</a> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### description string

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">service vpls string</a> <a href="#">capture-sap string</a> <a href="#">ipoe-session description string</a> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## ipoe-session-policy *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | IPoE Session policy to be used for new sessions  |
| Context    | <b>configure</b> <a href="#">service vpls string capture-sap string ipoe-session ipoe-session-policy reference</a> |
| Tree       | <a href="#">ipoe-session-policy</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt ipoe-session-policy string</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## user-db *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Local user database for IPoE session authentication  |
| Context    | <b>configure</b> <a href="#">service vpls string capture-sap string ipoe-session user-db reference</a> |
| Tree       | <a href="#">user-db</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt local-user-db string</a>                                  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## msap-defaults

|            |   |
|------------|---|
| Synopsis   | Enter the <b>msap-defaults</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string capture-sap string msap-defaults</a> |
| Tree       | <a href="#">msap-defaults</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                               |

**group-interface** *string*

|               |  |
|---------------|--|
| Synopsis      | Group interface  |
| Context       | <b>configure</b> <a href="#">service vpls string</a> <a href="#">capture-sap string</a> <a href="#">msap-defaults group-interface string</a> |
| Tree          | <a href="#">group-interface</a>  |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**policy** *reference*

|            |  |
|------------|--|
| Synopsis   | MSAP policy  |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">capture-sap string</a> <a href="#">msap-defaults policy reference</a> |
| Tree       | <a href="#">policy</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt msap-policy string</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**service-name** *string*

|               |   |
|---------------|---|
| Synopsis      | Administrative service name   |
| Context       | <b>configure</b> <a href="#">service vpls string</a> <a href="#">capture-sap string</a> <a href="#">msap-defaults service-name string</a> |
| Tree          | <a href="#">service-name</a>  |
| String Length | 1 to 64   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**nasreq-auth-policy** *reference*

|            |  |
|------------|--|
| Synopsis   | Diameter NASREQ application policy to use for authentication   |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">capture-sap string</a> <a href="#">nasreq-auth-policy reference</a> |
| Tree       | <a href="#">nasreq-auth-policy</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt diameter-nasreq-policy string</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**pfcp**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>pfcp</b> context                                |
| Context    | <b>configure service vpls string capture-sap string pfcp</b> |
| Tree       | <b>pfcp</b>  |
| Introduced | 20.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR      |

**association reference**

|             |  |
|-------------|--|
| Synopsis    | Association used for PFCP messages on the capture SAP  |
| Context     | <b>configure service vpls string capture-sap string pfcp association reference</b>   |
| Tree        | <b>association</b>   |
| Description | This command links the capture SAP to a PFCP association. This enables CUPS for the capture SAP and any trigger packets are forwarded to the BNG CUPS CPF. |
| Reference   | <b>configure subscriber-mgmt pfcp association string</b>   |
| Introduced  | 20.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**I2-access-id-alias string**

|               |   |
|---------------|---|
| Synopsis      | String used as Layer 2 access ID for the capture SAP  |
| Context       | <b>configure service vpls string capture-sap string pfcp I2-access-id-alias string</b>  |
| Tree          | <b>I2-access-id-alias</b>   |
| Description   | This command defines a Layer 2 access ID alias for the capture SAP. It replaces the default underlying port-based or LAG-based Layer 2 access ID. Different capture SAPs on the same underlying port or LAG can have different Layer 2 access ID aliases. |
| String Length | 1 to 32   |
| Introduced    | 22.2.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**up-resiliency**

|          |  |
|----------|--|
| Synopsis | Enter the <b>up-resiliency</b> context                                     |
| Context  | <b>configure service vpls string capture-sap string pfcp up-resiliency</b> |
| Tree     | <b>up-resiliency</b>   |

|            |   |
|------------|---|
| Introduced | 22.2.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **monitor-oper-group** [[oper-group](#)] *reference*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>monitor-oper-group</b> list instance   |
| Context        | <b>configure service vpls string capture-sap string pfc up-resiliency monitor-oper-group reference</b>  |
| Tree           | <a href="#">monitor-oper-group</a>  |
| Description    | Commands in this context define parameters to derive the service health based on monitored operational groups. The BNG UPF sends the health value to the BNG CPF. The BNG CPF uses the value to determine the need for a BNG UPF status change (active or standby).<br><br><b>Note:</b><br>The following is only applicable for the <b>configure service vpls capture-sap</b> context. If the configured groups are not the same for all capture SAPs sharing the same underlying port or LAG, the configuration of a Layer 2 access ID alias is required, or else the system chooses arbitrarily one set of configured groups. |
| Max. Instances | 4   |
| Introduced     | 22.2.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **[oper-group]** *reference*

|            |  |
|------------|--|
| Synopsis   | Operational group name   |
| Context    | <b>configure service vpls string capture-sap string pfc up-resiliency monitor-oper-group reference</b> |
| Tree       | <a href="#">monitor-oper-group</a>   |
| Reference  | <b>configure service oper-group string</b>   |
| Notes      | This element is part of a list key.  |
| Introduced | 22.2.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **health-drop** *number*

|          |   |
|----------|---|
| Synopsis | Number subtracted from the health value per failure |
|----------|---|

|             |   |
|-------------|---|
| Context     | <b>configure service vpls string capture-sap string pfc up-resiliency monitor-oper-group reference health-drop number</b>   |
| Tree        | <a href="#">health-drop</a>   |
| Description | This command configures the drop in the health value for every operational group member failure. Every failure of an operational group member decreases the base health value to a possible minimum of 0. |
| Range       | 1 to 255  |
| Default     | 1   |
| Introduced  | 22.2.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### pppoe

|            |   |
|------------|---|
| Synopsis   | Enter the <b>pppoe</b> context                                |
| Context    | <b>configure service vpls string capture-sap string pppoe</b> |
| Tree       | <a href="#">pppoe</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR       |

### policy reference

|            |  |
|------------|--|
| Synopsis   | PPP policy   |
| Context    | <b>configure service vpls string capture-sap string pppoe policy reference</b> |
| Tree       | <a href="#">policy</a>   |
| Reference  | <b>configure subscriber-mgmt ppp-policy string</b>                             |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                        |

### python-policy reference

|            |   |
|------------|---|
| Synopsis   | Python policy   |
| Context    | <b>configure service vpls string capture-sap string pppoe python-policy reference</b> |
| Tree       | <a href="#">python-policy</a>   |
| Reference  | <b>configure python python-policy string</b>  |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **user-db** *reference*

Synopsis Local user database  
Context **configure** [service vpls string](#) [capture-sap string](#) [pppoe user-db reference](#)  
Tree [user-db](#)  
Reference **configure** [subscriber-mgmt local-user-db string](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-auth-policy** *reference*

Synopsis RADIUS authentication policy  
Context **configure** [service vpls string](#) [capture-sap string](#) [radius-auth-policy reference](#)  
Tree [radius-auth-policy](#)  
Reference **configure** [subscriber-mgmt radius-authentication-policy string](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **router-solicit**

Synopsis Enter the **router-solicit** context  
Context **configure** [service vpls string](#) [capture-sap string](#) [router-solicit](#)  
Tree [router-solicit](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **user-db** *reference*

Synopsis Local user database  
Context **configure** [service vpls string](#) [capture-sap string](#) [router-solicit user-db reference](#)  
Tree [user-db](#)  
Reference **configure** [subscriber-mgmt local-user-db string](#)  
Introduced 16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **track-srrp** *number*

Synopsis SRRP instance that this capture SAP tracks  
 Context **configure service vpls string capture-sap string track-srrp number**  
 Tree [track-srrp](#)  
 Range 1 to 4294967295  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **trigger-packet**

Synopsis Enter the **trigger-packet** context  
 Context **configure service vpls string capture-sap string trigger-packet**  
 Tree [trigger-packet](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **arp** *boolean*

Synopsis ARP packet  
 Context **configure service vpls string capture-sap string trigger-packet arp boolean**  
 Tree [arp](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **data** *boolean*

Synopsis Data packet  
 Context **configure service vpls string capture-sap string trigger-packet data boolean**  
 Tree [data](#)  
 Default false  
 Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dhcp** *boolean*

Synopsis DHCP packet  
Context **configure** [service](#) [vpls](#) *string* [capture-sap](#) *string* [trigger-packet](#) [dhcp](#) *boolean*  
Tree [dhcp](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dhcp6** *boolean*

Synopsis DHCP6 packet  
Context **configure** [service](#) [vpls](#) *string* [capture-sap](#) *string* [trigger-packet](#) [dhcp6](#) *boolean*  
Tree [dhcp6](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pppoe** *boolean*

Synopsis PPPoE packet  
Context **configure** [service](#) [vpls](#) *string* [capture-sap](#) *string* [trigger-packet](#) [pppoe](#) *boolean*  
Tree [pppoe](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **rtr-solicit** *boolean*

Synopsis Router-solicit packet  
Context **configure** [service](#) [vpls](#) *string* [capture-sap](#) *string* [trigger-packet](#) [rtr-solicit](#) *boolean*  
Tree [rtr-solicit](#)  
Default false

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **customer** *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Service customer ID   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">customer</a> <a href="#">reference</a> |
| Tree       | <a href="#">customer</a>  |
| Reference  | <b>configure</b> <a href="#">service</a> <a href="#">customer</a> <a href="#">string</a>  |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">description</a> <a href="#">string</a> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

### **endpoint** [[name](#)] *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>endpoint</b> list instance  |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">endpoint</a> <a href="#">string</a> |
| Tree           | <a href="#">endpoint</a>   |
| Max. Instances | 10   |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

**[name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Service endpoint name                                       |
| Context       | <b>configure service vpls</b> <i>string endpoint string</i> |
| Tree          | <a href="#">endpoint</a>                                    |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.                         |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**block-on-mesh-failure** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable blocking after the endpoints are in a down state                                   |
| Context    | <b>configure service vpls</b> <i>string endpoint string block-on-mesh-failure boolean</i> |
| Tree       | <a href="#">block-on-mesh-failure</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure service vpls</b> <i>string endpoint string description string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**fdb**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>fdb</b> context                                    |
| Context    | <b>configure service vpls</b> <i>string endpoint string fdb</i> |
| Tree       | <a href="#">fdb</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**auto-learn-mac-protect** *boolean*

|            |  |
|------------|--|
| Synopsis   | Populate automatically MAC protect list with MAC addresses learned on SDP with this endpoint   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">endpoint</a> <i>string</i> <a href="#">fdb</a> <a href="#">auto-learn-mac-protect</a> <i>boolean</i> |
| Tree       | <a href="#">auto-learn-mac-protect</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**mac-pinning** *boolean*

|            |   |
|------------|---|
| Synopsis   | Activate MAC address pinning on this endpoint   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">endpoint</a> <i>string</i> <a href="#">fdb</a> <a href="#">mac-pinning</a> <i>boolean</i> |
| Tree       | <a href="#">mac-pinning</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**maximum-mac-addresses** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum learned and static entries for this end point  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">endpoint</a> <i>string</i> <a href="#">fdb</a> <a href="#">maximum-mac-addresses</a> <i>number</i> |
| Tree       | <a href="#">maximum-mac-addresses</a>  |
| Range      | 1 to 511999  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**protected-src-mac-violation-action** *keyword*

|            |  |
|------------|--|
| Synopsis   | Action when a relearn request for a protected MAC is received on the SDP   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">endpoint</a> <i>string</i> <a href="#">fdb</a> <a href="#">protected-src-mac-violation-action</a> <i>keyword</i> |
| Tree       | <a href="#">protected-src-mac-violation-action</a>   |
| Options    | sdp-bind-oper-down, alarm-only, discard  |
| Introduced | 16.0.R1  |

Platforms All

### **ignore-standby-signaling** *boolean*

Synopsis Ignore standby-bit received from TLDP peers when performing internal tasks  
 Context **configure service vpls** *string endpoint string ignore-standby-signaling boolean*  
 Tree [ignore-standby-signaling](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **mc-endpoint** [[mc-ep-id](#)] *number*

Synopsis Enter the **mc-endpoint** list instance  
 Context **configure service vpls** *string endpoint string mc-endpoint number*  
 Tree [mc-endpoint](#)  
 Max. Instances 1  
 Introduced 22.10.R1  
 Platforms All

### **[mc-ep-id]** *number*

Synopsis MC-EP ID  
 Context **configure service vpls** *string endpoint string mc-endpoint number*  
 Tree [mc-endpoint](#)  
 Description This command configures the identifier associated with the MC-EP. The ID must be the same on both MC-EP peers.  
 Range 1 to 4294967295  
 Notes This element is part of a list key.  
 Introduced 22.10.R1  
 Platforms All

### **mc-ep-peer**

Synopsis Enter the **mc-ep-peer** context

|            |  |
|------------|--|
| Context    | <b>configure service vpls string endpoint string mc-endpoint number mc-ep-peer</b> |
| Tree       | <b>mc-ep-peer</b>  |
| Introduced | 22.10.R1   |
| Platforms  | All  |

**name string**

|               |  |
|---------------|--|
| Synopsis      | Name of the MC-EP peer   |
| Context       | <b>configure service vpls string endpoint string mc-endpoint number mc-ep-peer name string</b> |
| Tree          | <b>name</b>  |
| String Length | 1 to 32  |
| Notes         | The following elements are part of a choice: <b>name</b> or <b>peer-address</b> .              |
| Introduced    | 22.10.R1   |
| Platforms     | All  |

**peer-address reference**

|            |   |
|------------|---|
| Synopsis   | IP address of the MC-EP peer  |
| Context    | <b>configure service vpls string endpoint string mc-endpoint number mc-ep-peer peer-address reference</b> |
| Tree       | <b>peer-address</b>   |
| Reference  | <b>configure redundancy multi-chassis peer (ipv4-address-no-zone   ipv6-address-no-zone)</b>              |
| Notes      | The following elements are part of a choice: <b>name</b> or <b>peer-address</b> .                         |
| Introduced | 22.10.R1  |
| Platforms  | All   |

**revert-time (number | keyword)**

|          |   |
|----------|---|
| Synopsis | Time to wait before reverting to primary spoke SDP                                  |
| Context  | <b>configure service vpls string endpoint string revert-time (number   keyword)</b> |
| Tree     | <b>revert-time</b>  |
| Range    | 1 to 600  |
| Units    | seconds   |
| Options  | never, immediate  |

|            |           |
|------------|-----------|
| Default    | immediate |
| Introduced | 16.0.R1   |
| Platforms  | All       |

### **suppress-standby-signaling** *boolean*

|            |   |
|------------|---|
| Synopsis   | Do not send pseudowire standby bit to TLDP peer when specified spoke SDP is selected as standby   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">endpoint</a> <i>string</i> <b>suppress-standby-signaling</b> <i>boolean</i> |
| Tree       | <a href="#">suppress-standby-signaling</a>  |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **eth-cfm**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>eth-cfm</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <b>eth-cfm</b> |
| Tree       | <a href="#">eth-cfm</a>  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS               |

### **mep** [md-admin-name](#) *reference* [ma-admin-name](#) *reference* **mep-id** *number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mep</b> list instance   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">eth-cfm</a> <b>mep</b> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <b>mep-id</b> <i>number</i> |
| Tree       | <a href="#">mep</a>  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **md-admin-name** *reference*

|          |   |
|----------|---|
| Synopsis | Maintenance Domain (MD) name  |
| Context  | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">eth-cfm</a> <b>mep</b> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> |



|            |  |
|------------|--|
| Tree       | <a href="#">mep</a>  |
| Reference  | <b>configure</b> <a href="#">eth-cfm domain string</a>       |
| Notes      | This element is part of a list key.                          |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **ma-admin-name** *reference*

|            |  |
|------------|--|
| Synopsis   | Maintenance Association (MA) name  |
| Context    | <b>configure</b> <a href="#">service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</a> |
| Tree       | <a href="#">mep</a>  |
| Reference  | <b>configure</b> <a href="#">eth-cfm domain string association string</a>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **mep-id number**

|            |  |
|------------|--|
| Synopsis   | Maintenance Endpoint (MEP) ID  |
| Context    | <b>configure</b> <a href="#">service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</a> |
| Tree       | <a href="#">mep</a>  |
| Range      | 1 to 8191  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **admin-state** *keyword*

|          |  |
|----------|--|
| Synopsis | Administrative state of the MEP  |
| Context  | <b>configure</b> <a href="#">service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number admin-state keyword</a> |
| Tree     | <a href="#">admin-state</a>  |
| Options  | enable, disable  |

|            |  |
|------------|--|
| Default    | disable  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

## alarm-notification

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>alarm-notification</b> context  |
| Context     | <b>configure</b> <a href="#">service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification</a>  |
| Tree        | <a href="#">alarm-notification</a>   |
| Description | <p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p> |
| Introduced  | 16.0.R4  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## fng-alarm-time *number*

|            |   |
|------------|---|
| Synopsis   | Time that must expire before an FNG alarm is raised   |
| Context    | <b>configure</b> <a href="#">service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-alarm-time number</a> |
| Tree       | <a href="#">fng-alarm-time</a>  |
| Range      | 250   500   1000  |
| Units      | centiseconds  |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## fng-reset-time *number*

|          |   |
|----------|---|
| Synopsis | Time that must expire before an FNG alarm is reset  |
| Context  | <b>configure</b> <a href="#">service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-reset-time number</a> |
| Tree     | <a href="#">fng-reset-time</a>  |
| Range    | 250   500   1000  |
| Units    | centiseconds  |

|            |  |
|------------|--|
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

**ccm boolean**

|            |  |
|------------|--|
| Synopsis   | Generate CCM messages  |
| Context    | <b>configure</b> <a href="#">service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm boolean</a> |
| Tree       | <a href="#">ccm</a>  |
| Default    | false  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**ccm-ltm-priority number**

|            |  |
|------------|--|
| Synopsis   | Priority of CCM and LTM messages transmitted by the MEP  |
| Context    | <b>configure</b> <a href="#">service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-ltm-priority number</a> |
| Tree       | <a href="#">ccm-ltm-priority</a>   |
| Range      | 0 to 7   |
| Default    | 7  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**ccm-padding-size number**

|             |   |
|-------------|---|
| Synopsis    | Number of octets of padding to insert in CCM packets  |
| Context     | <b>configure</b> <a href="#">service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-padding-size number</a>  |
| Tree        | <a href="#">ccm-padding-size</a>  |
| Description | This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.<br><br>This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through <b>configure eth-cfm domain association ccm-interval</b> ) is less than 1 second. |
| Range       | 3 to 1500   |

|            |  |
|------------|--|
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **cfm-vlan-tag** *string*

|               |  |
|---------------|--|
| Synopsis      | VLAN tags to apply to CFM PDUs for egress processing   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>cfm-vlan-tag</b> <i>string</i> |
| Tree          | <a href="#">cfm-vlan-tag</a>   |
| String Length | 1 to 9   |
| Introduced    | 21.10.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R4   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **eth-test**

|             |  |
|-------------|--|
| Synopsis    | Enable the <b>eth-test</b> context   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>eth-test</b> |
| Tree        | <a href="#">eth-test</a>   |
| Description | Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the <b>oam eth-cfm eth-test</b> command.                              |
| Introduced  | 16.0.R4  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**bit-error-threshold** *number*

|            |  |
|------------|--|
| Synopsis   | Lowest priority defect allowed to generate fault alarm   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id number</a> <a href="#">eth-test bit-error-threshold</a> <i>number</i> |
| Tree       | <a href="#">bit-error-threshold</a>  |
| Range      | 0 to 11840   |
| Units      | bit errors   |
| Default    | 1  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**test-pattern**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>test-pattern</b> context   |
| Context     | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id number</a> <a href="#">eth-test test-pattern</a> |
| Tree        | <a href="#">test-pattern</a>  |
| Description | Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.  |
| Introduced  | 16.0.R4   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**crc-tlv** *boolean*

|            |  |
|------------|--|
| Synopsis   | Generate a CRC checksum  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id number</a> <a href="#">eth-test test-pattern</a> <a href="#">crc-tlv</a> <i>boolean</i> |
| Tree       | <a href="#">crc-tlv</a>  |
| Default    | false  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**pattern** *keyword*

|          |                                       |
|----------|---------------------------------------|
| Synopsis | Test pattern for Ethernet Test frames |
|----------|---------------------------------------|

|             |   |
|-------------|---|
| Context     | <b>configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern pattern keyword</b>        |
| Tree        | <a href="#">pattern</a>   |
| Description | This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver. |
| Options     | all-zeros, all-ones   |
| Default     | all-zeros   |
| Introduced  | 16.0.R4   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## grace

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>grace</b> context  |
| Context     | <b>configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace</b>                  |
| Tree        | <a href="#">grace</a>   |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function. |
| Introduced  | 16.0.R4   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## eth-ed

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>eth-ed</b> context   |
| Context     | <b>configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed</b> |
| Tree        | <a href="#">eth-ed</a>  |
| Description | Commands in this context configure the ITU-T Y.1731 ETH-ED function.  |
| Introduced  | 16.0.R4   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## max-rx-defect-window *number*

|          |   |
|----------|---|
| Synopsis | Maximum received ETH-ED expected defect window duration   |
| Context  | <b>configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed max-rx-defect-window number</b> |
| Tree     | <a href="#">max-rx-defect-window</a>  |

|            |  |
|------------|--|
| Range      | 1 to 86400   |
| Units      | seconds  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **priority number**

|            |   |
|------------|---|
| Synopsis   | Transmission priority for ETH-ED PDUs   |
| Context    | <b>configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed priority number</b> |
| Tree       | <a href="#">priority</a>  |
| Range      | 0 to 7  |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **rx-eth-ed boolean**

|             |   |
|-------------|---|
| Synopsis    | Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP   |
| Context     | <b>configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed rx-eth-ed boolean</b> |
| Tree        | <a href="#">rx-eth-ed</a>   |
| Description | This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.  |
| Default     | true  |
| Introduced  | 16.0.R4   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **tx-eth-ed boolean**

|            |   |
|------------|---|
| Synopsis   | Transmit ETH-ED PDUs from the MEP   |
| Context    | <b>configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed tx-eth-ed boolean</b> |
| Tree       | <a href="#">tx-eth-ed</a>   |
| Default    | false   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## eth-vsm-grace

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>eth-vsm-grace</b> context   |
| Context     | <b>configure</b> <a href="#">service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace</a> |
| Tree        | <a href="#">eth-vsm-grace</a>  |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function.   |
| Introduced  | 16.0.R4  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## rx-eth-vsm-grace *boolean*

|             |   |
|-------------|---|
| Synopsis    | Receive and process Nokia ETH-CFM Grace PDU on the MEP  |
| Context     | <b>configure</b> <a href="#">service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace rx-eth-vsm-grace boolean</a>   |
| Tree        | <a href="#">rx-eth-vsm-grace</a>  |
| Description | When configured to <b>true</b> , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.<br><br>When configured to <b>false</b> , the router disables the Nokia Grace function. |
| Default     | true  |
| Introduced  | 16.0.R4   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## tx-eth-vsm-grace *boolean*

|             |   |
|-------------|---|
| Synopsis    | Transmit ETH-ED PDUs from the MEP   |
| Context     | <b>configure</b> <a href="#">service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace tx-eth-vsm-grace boolean</a>   |
| Tree        | <a href="#">tx-eth-vsm-grace</a>  |
| Description | When configured to <b>true</b> , the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.<br><br>The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.<br><br>The operator must configure the <b>configure system eth-cfm grace</b> command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED). |



When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.

|            |  |
|------------|--|
| Default    | true   |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **low-priority-defect** *keyword*

|            |  |
|------------|--|
| Synopsis   | Lowest priority defect allowed to generate fault alarm   |
| Context    | <b>configure service vpls string eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id number low-priority-defect keyword</b> |
| Tree       | <a href="#">low-priority-defect</a>  |
| Options    | all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon   |
| Default    | mac-rem-err-xcon   |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **mac-address** *string*

|             |  |
|-------------|--|
| Synopsis    | MAC address of the MEP   |
| Context     | <b>configure service vpls string eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id number mac-address string</b>                                    |
| Tree        | <a href="#">mac-address</a>  |
| Description | This command specifies the MAC address of the MEP.<br>When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used. |
| Introduced  | 16.0.R4  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **one-way-delay-threshold** *number*

|          |   |
|----------|---|
| Synopsis | Threshold time limit for the one-way delay test   |
| Context  | <b>configure service vpls string eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id number one-way-delay-threshold number</b> |
| Tree     | <a href="#">one-way-delay-threshold</a>   |
| Range    | 0 to 600  |
| Units    | seconds   |

|            |  |
|------------|--|
| Default    | 3  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **etree boolean**



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Use VPLS service as an E-Tree VPLS                 |
| Context    | <b>configure service vpls string etree boolean</b> |
| Tree       | <b>etree</b>                                       |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **fdb**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>fdb</b> context             |
| Context    | <b>configure service vpls string fdb</b> |
| Tree       | <b>fdb</b>                               |
| Introduced | 16.0.R1                                  |
| Platforms  | All                                      |

### **discard-unknown boolean**

|            |  |
|------------|--|
| Synopsis   | Discard packets with unknown destination MAC addresses           |
| Context    | <b>configure service vpls string fdb discard-unknown boolean</b> |
| Tree       | <b>discard-unknown</b>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## mac-learning

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mac-learning</b> context                 |
| Context    | <b>configure service vpls string fdb mac-learning</b> |
| Tree       | <a href="#">mac-learning</a>                          |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## aging *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable aging of MAC addresses                                       |
| Context    | <b>configure service vpls string fdb mac-learning aging boolean</b> |
| Tree       | <a href="#">aging</a>   |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## learning *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable learning of new MAC addresses                                   |
| Context    | <b>configure service vpls string fdb mac-learning learning boolean</b> |
| Tree       | <a href="#">learning</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## local-age-time *number*

|            |   |
|------------|---|
| Synopsis   | Aging time for locally learned MAC addresses                                |
| Context    | <b>configure service vpls string fdb mac-learning local-age-time number</b> |
| Tree       | <a href="#">local-age-time</a>  |
| Range      | 60 to 86400   |
| Default    | 300   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**remote-age-time** *number*

|            |  |
|------------|--|
| Synopsis   | Aging time for locally learned MAC addresses   |
| Context    | <b>configure</b> <a href="#">service vpls string fdb mac-learning remote-age-time number</a> |
| Tree       | <a href="#">remote-age-time</a>  |
| Range      | 60 to 86400  |
| Default    | 900  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**mac-move**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mac-move</b> context                                 |
| Context    | <b>configure</b> <a href="#">service vpls string fdb mac-move</a> |
| Tree       | <a href="#">mac-move</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of MAC move  |
| Context    | <b>configure</b> <a href="#">service vpls string fdb mac-move admin-state keyword</a> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**hold-down-time** *number*

|          |   |
|----------|---|
| Synopsis | Wait time before re-enabling disabled SAP   |
| Context  | <b>configure</b> <a href="#">service vpls string fdb mac-move hold-down-time number</a> |
| Tree     | <a href="#">hold-down-time</a>  |
| Range    | 0 to 600  |
| Units    | seconds   |

|            |         |
|------------|---------|
| Default    | 10      |
| Introduced | 19.7.R1 |
| Platforms  | All     |

### **move-frequency** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum rate MACs can be re-learned in the VPLS service   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">fdb mac-move</a> <a href="#">move-frequency</a> <i>number</i> |
| Tree       | <a href="#">move-frequency</a>  |
| Range      | 1 to 10   |
| Default    | 2   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **primary-cumulative-factor** *number*

|            |  |
|------------|--|
| Synopsis   | Factor for MAC-relearn periods for MAC-relearn rate  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">fdb mac-move</a> <a href="#">primary-cumulative-factor</a> <i>number</i> |
| Tree       | <a href="#">primary-cumulative-factor</a>  |
| Range      | 3 to 10  |
| Default    | 3  |
| Introduced | 19.7.R1  |
| Platforms  | All  |

### **retry-count** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Number of retries for re-enabling the SAP or SDP  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">fdb mac-move</a> <a href="#">retry-count</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">retry-count</a>   |
| Range      | 1 to 255  |
| Options    | unlimited   |
| Default    | 3   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**sap** [[sap-id](#)] *reference*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>sap</b> list instance                              |
| Context    | <b>configure service vpls string fdb mac-move sap reference</b> |
| Tree       | <a href="#">sap</a>   |
| Introduced | 19.7.R1   |
| Platforms  | All   |

**[sap-id]** *reference*

|            |   |
|------------|---|
| Synopsis   | SAP identifier  |
| Context    | <b>configure service vpls string fdb mac-move sap reference</b> |
| Tree       | <a href="#">sap</a>   |
| Reference  | <b>configure service vpls string sap string</b>                 |
| Notes      | This element is part of a list key.                             |
| Introduced | 19.7.R1   |
| Platforms  | All   |

**level** *keyword*

|            |   |
|------------|---|
| Synopsis   | Primary or secondary port level   |
| Context    | <b>configure service vpls string fdb mac-move sap reference level keyword</b> |
| Tree       | <a href="#">level</a>   |
| Options    | primary, secondary  |
| Notes      | This element is mandatory.  |
| Introduced | 19.7.R1   |
| Platforms  | All   |

**secondary-cumulative-factor** *number*

|          |  |
|----------|--|
| Synopsis | Number of periods to measure mac-relearn rate  |
| Context  | <b>configure service vpls string fdb mac-move secondary-cumulative-factor number</b> |
| Tree     | <a href="#">secondary-cumulative-factor</a>  |
| Range    | 2 to 9   |
| Default  | 2  |

Introduced 19.7.R1  
 Platforms All

### **spoke-sdp** [[sdp-bind-id](#)] *reference*

Synopsis Enter the **spoke-sdp** list instance  
 Context **configure** [service vpls string fdb mac-move spoke-sdp reference](#)  
 Tree [spoke-sdp](#)  
 Introduced 19.7.R1  
 Platforms All

### **[sdp-bind-id]** *reference*

Synopsis SDP binding ID  
 Context **configure** [service vpls string fdb mac-move spoke-sdp reference](#)  
 Tree [spoke-sdp](#)  
 Reference **configure** [service vpls string spoke-sdp string](#)  
 Notes This element is part of a list key.  
 Introduced 19.7.R1  
 Platforms All

### **level** *keyword*

Synopsis Primary or secondary port level  
 Context **configure** [service vpls string fdb mac-move spoke-sdp reference level keyword](#)  
 Tree [level](#)  
 Options primary, secondary  
 Notes This element is mandatory.  
 Introduced 19.7.R1  
 Platforms All

### **mac-subnet-length** *number*

Synopsis Number of bits performing MAC learning or MAC switching  
 Context **configure** [service vpls string fdb mac-subnet-length number](#)

|            |                                   |
|------------|-----------------------------------|
| Tree       | <a href="#">mac-subnet-length</a> |
| Range      | 24 to 48                          |
| Default    | 48                                |
| Introduced | 16.0.R1                           |
| Platforms  | All                               |

### **selective-learning** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allocate FDB entries on selectively learned line cards                              |
| Context    | <b>configure</b> <a href="#">service vpls string fdb selective-learning boolean</a> |
| Tree       | <a href="#">selective-learning</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **static-mac**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>static-mac</b> context                                 |
| Context    | <b>configure</b> <a href="#">service vpls string fdb static-mac</a> |
| Tree       | <a href="#">static-mac</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **mac** [[mac-address](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mac</b> list instance   |
| Context    | <b>configure</b> <a href="#">service vpls string fdb static-mac mac string</a> |
| Tree       | <a href="#">mac</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **[mac-address]** *string*

|          |  |
|----------|--|
| Synopsis | Static MAC address to SAP/SDP-binding or black-hole                            |
| Context  | <b>configure</b> <a href="#">service vpls string fdb static-mac mac string</a> |



|            |                                     |
|------------|-------------------------------------|
| Tree       | <a href="#">mac</a>                 |
| Notes      | This element is part of a list key. |
| Introduced | 16.0.R1                             |
| Platforms  | All                                 |

## blackhole



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Create a static FDB entry for the MAC address to black-hole traffic  |
| Context    | <b>configure</b> <a href="#">service vpls string fdb static-mac mac string blackhole</a>   |
| Tree       | <a href="#">blackhole</a>  |
| Notes      | The following elements are part of a mandatory choice: <b>blackhole</b> , <b>endpoint</b> , <b>mesh-sdp</b> , <b>sap</b> , or <b>spoke-sdp</b> . |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## endpoint *reference*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Endpoint associated with this MAC  |
| Context    | <b>configure</b> <a href="#">service vpls string fdb static-mac mac string endpoint reference</a>  |
| Tree       | <a href="#">endpoint</a>   |
| Reference  | <b>configure</b> <a href="#">service vpls string endpoint string</a>   |
| Notes      | The following elements are part of a mandatory choice: <b>blackhole</b> , <b>endpoint</b> , <b>mesh-sdp</b> , <b>sap</b> , or <b>spoke-sdp</b> . |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## mesh-sdp *reference*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Mesh SDP bind associated with this MAC   |
| Context    | <b>configure</b> <a href="#">service vpls string fdb static-mac mac string mesh-sdp reference</a>  |
| Tree       | <a href="#">mesh-sdp</a>   |
| Reference  | <b>configure</b> <a href="#">service vpls string mesh-sdp string</a>   |
| Notes      | The following elements are part of a mandatory choice: <b>blackhole</b> , <b>endpoint</b> , <b>mesh-sdp</b> , <b>sap</b> , or <b>spoke-sdp</b> . |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## monitor *keyword*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Entity to be monitored to decide whether this entry can be installed in the FDB                |
| Context    | <b>configure</b> <a href="#">service vpls string fdb static-mac mac string monitor keyword</a> |
| Tree       | <a href="#">monitor</a>  |
| Options    | none, forward-status   |
| Default    | none   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## sap *reference*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | SAP associated with this MAC   |
| Context  | <b>configure</b> <a href="#">service vpls string fdb static-mac mac string sap reference</a> |
| Tree     | <a href="#">sap</a>  |

|            |  |
|------------|--|
| Reference  | <b>configure service vpls string sap string</b>  |
| Notes      | The following elements are part of a mandatory choice: <b>blackhole</b> , <b>endpoint</b> , <b>mesh-sdp</b> , <b>sap</b> , or <b>spoke-sdp</b> . |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **spoke-sdp** *reference*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Spoke SDP bind associated with this MAC  |
| Context    | <b>configure service vpls string fdb static-mac mac string spoke-sdp reference</b>   |
| Tree       | <a href="#">spoke-sdp</a>  |
| Reference  | <b>configure service vpls string spoke-sdp string</b>  |
| Notes      | The following elements are part of a mandatory choice: <b>blackhole</b> , <b>endpoint</b> , <b>mesh-sdp</b> , <b>sap</b> , or <b>spoke-sdp</b> . |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **table**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>table</b> context                 |
| Context    | <b>configure service vpls string fdb table</b> |
| Tree       | <a href="#">table</a>                          |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **high-wmark** *number*

|          |  |
|----------|--|
| Synopsis | High watermark for the FDB table                                 |
| Context  | <b>configure service vpls string fdb table high-wmark number</b> |
| Tree     | <a href="#">high-wmark</a>                                       |
| Range    | 0 to 100   |
| Default  | 95   |

---

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **low-wmark** *number*

|            |  |
|------------|--|
| Synopsis   | Low watermark for the FDB table  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">fdb table</a> <b>low-wmark</b> <i>number</i> |
| Tree       | <a href="#">low-wmark</a>  |
| Range      | 0 to 100   |
| Default    | 90   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **size** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum MAC entries in the FDB  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">fdb table</a> <b>size</b> <i>number</i> |
| Tree       | <a href="#">size</a>  |
| Range      | 1 to 511999   |
| Default    | 250   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **gsmp**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>gsmp</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <b>gsmp</b> |
| Tree       | <a href="#">gsmp</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **admin-state** *keyword*

|          |  |
|----------|--|
| Synopsis | Administrative state of GSMP   |
| Context  | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">gsmp</a> <b>admin-state</b> <i>keyword</i> |

|            |                             |
|------------|-----------------------------|
| Tree       | <a href="#">admin-state</a> |
| Options    | enable, disable             |
| Default    | disable                     |
| Introduced | 16.0.R1                     |
| Platforms  | All                         |

### **group** [[name](#)] *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>group</b> list instance   |
| Context        | <b>configure</b> <a href="#">service vpls string</a> <a href="#">gsmp group string</a> |
| Tree           | <a href="#">group</a>  |
| Max. Instances | 1024   |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

### **[name]** *string*

|               |  |
|---------------|--|
| Synopsis      | GSMP group name  |
| Context       | <b>configure</b> <a href="#">service vpls string</a> <a href="#">gsmp group string</a> |
| Tree          | <a href="#">group</a>  |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the GSMP group   |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">gsmp group string</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**ancp**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ancp</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">gsmp</a> <a href="#">group</a> <i>string</i> <b>ancp</b> |
| Tree       | <a href="#">ancp</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**dynamic-topology-discovery** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable the ANCP dynamic topology discovery capability   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">gsmp</a> <a href="#">group</a> <i>string</i> <b>ancp</b> <b>dynamic-topology-discovery</b> <i>boolean</i> |
| Tree       | <a href="#">dynamic-topology-discovery</a>  |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**oam** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable GSMP ANCP OAM capability at startup of GSMP connection  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">gsmp</a> <a href="#">group</a> <i>string</i> <b>ancp</b> <b>oam</b> <i>boolean</i> |
| Tree       | <a href="#">oam</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">gsmp</a> <a href="#">group</a> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**hold-multiplier** *number*

|            |   |
|------------|---|
| Synopsis   | Hold-multiplier for the GSMP connections in this group  |
| Context    | <b>configure</b> <b>service vpls</b> <i>string</i> <b>gsmp group</b> <i>string</i> <b>hold-multiplier</b> <i>number</i> |
| Tree       | <b>hold-multiplier</b>  |
| Range      | 1 to 100  |
| Default    | 3   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**idle-filter** *boolean*

|            |  |
|------------|--|
| Synopsis   | Filter ANCP messages from IDLE DSL lines   |
| Context    | <b>configure</b> <b>service vpls</b> <i>string</i> <b>gsmp group</b> <i>string</i> <b>idle-filter</b> <i>boolean</i> |
| Tree       | <b>idle-filter</b>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**keepalive** *number*

|            |   |
|------------|---|
| Synopsis   | Keepalive value for the GSMP connections in this group  |
| Context    | <b>configure</b> <b>service vpls</b> <i>string</i> <b>gsmp group</b> <i>string</i> <b>keepalive</b> <i>number</i> |
| Tree       | <b>keepalive</b>  |
| Range      | 1 to 25   |
| Units      | seconds   |
| Default    | 10  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**neighbor** [*remote-address*] *string*

|          |  |
|----------|--|
| Synopsis | Enter the <b>neighbor</b> list instance  |
| Context  | <b>configure</b> <b>service vpls</b> <i>string</i> <b>gsmp group</b> <i>string</i> <b>neighbor</b> <i>string</i> |
| Tree     | <b>neighbor</b>  |

Introduced 16.0.R1  
Platforms All

### **[remote-address] string**

Synopsis GSMP neighbor remote IP address  
Context **configure service vpls string gsmp group string neighbor string**  
Tree [neighbor](#)  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms All

### **admin-state keyword**

Synopsis Administrative state of the GSMP neighbor  
Context **configure service vpls string gsmp group string neighbor string admin-state keyword**  
Tree [admin-state](#)  
Options enable, disable  
Default disable  
Introduced 16.0.R1  
Platforms All

### **description string**

Synopsis Text description  
Context **configure service vpls string gsmp group string neighbor string description string**  
Tree [description](#)  
String Length 1 to 80  
Introduced 16.0.R1  
Platforms All



## local-address *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Restrict connections to this local address only within the service running ANCP   |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">gsmg group string</a> <a href="#">neighbor string</a> <a href="#">local-address string</a> |
| Tree       | <a href="#">local-address</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## priority-marking

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enter the <b>priority-marking</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">gsmg group string</a> <a href="#">neighbor string</a> <a href="#">priority-marking</a> |
| Tree       | <a href="#">priority-marking</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## dscp *keyword*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | DSCP that is used while remarking the in profile packets  |
| Context  | <b>configure</b> <a href="#">service vpls string</a> <a href="#">gsmg group string</a> <a href="#">neighbor string</a> <a href="#">priority-marking</a> <a href="#">dscp keyword</a>  |
| Tree     | <a href="#">dscp</a>  |
| Options  | be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63 |
| Notes    | The following elements are part of a choice: <b>dscp</b> or <b>prec</b> .   |

Introduced 16.0.R1  
 Platforms All

### **prec** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Precedence priority marking  
 Context **configure** [service vpls string](#) [gsmg group string](#) [neighbor string](#) [priority-marking prec number](#)  
 Tree [prec](#)  
 Range 0 to 7  
 Notes The following elements are part of a choice: **dscp** or **prec**.  
 Introduced 16.0.R1  
 Platforms All

### **persistence** *boolean*

Synopsis Store DSL line information when the GSMP connection terminates  
 Context **configure** [service vpls string](#) [gsmg group string](#) [persistence boolean](#)  
 Tree [persistence](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **igmp-host-tracking**

Synopsis Enter the **igmp-host-tracking** context  
 Context **configure** [service vpls string](#) [igmp-host-tracking](#)  
 Tree [igmp-host-tracking](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of IGMP host tracking  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">igmp-host-tracking</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**expiry-time** *number*

|            |  |
|------------|--|
| Synopsis   | Time that the system continues to track inactive hosts   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">igmp-host-tracking</a> <a href="#">expiry-time</a> <i>number</i> |
| Tree       | <a href="#">expiry-time</a>  |
| Range      | 1 to 65535   |
| Units      | seconds  |
| Default    | 260  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**igmp-snooping**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>igmp-snooping</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">igmp-snooping</a> |
| Tree       | <a href="#">igmp-snooping</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**admin-state** *keyword*

|          |  |
|----------|--|
| Synopsis | Administrative state of snooping   |
| Context  | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree     | <a href="#">admin-state</a>  |
| Options  | enable, disable  |
| Default  | disable  |

Introduced 16.0.R1  
 Platforms All

## evpn-proxy

Synopsis Enter the **evpn-proxy** context  
 Context **configure service vpls string igmp-snooping evpn-proxy**  
 Tree [evpn-proxy](#)  
 Introduced 20.10.R1  
 Platforms All

## admin-state *keyword*

Synopsis Administrative state of EVPN proxy  
 Context **configure service vpls string igmp-snooping evpn-proxy admin-state keyword**  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 20.10.R1  
 Platforms All

## mvr

Synopsis Enter the **mvr** context  
 Context **configure service vpls string igmp-snooping mvr**  
 Tree [mvr](#)  
 Introduced 16.0.R1  
 Platforms All

## admin-state *keyword*

Synopsis Administrative state of MVR  
 Context **configure service vpls string igmp-snooping mvr admin-state keyword**  
 Tree [admin-state](#)  
 Options enable, disable

---

|            |         |
|------------|---------|
| Default    | disable |
| Introduced | 16.0.R1 |
| Platforms  | All     |

**description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">service vpls string</a> <a href="#">igmp-snooping mvr description string</a> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**group-policy** *string*

|               |  |
|---------------|--|
| Synopsis      | Policy that applies MVR  |
| Context       | <b>configure</b> <a href="#">service vpls string</a> <a href="#">igmp-snooping mvr group-policy string</a> |
| Tree          | <a href="#">group-policy</a>   |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**query-interval** *number*

|            |  |
|------------|--|
| Synopsis   | Time between two consecutive host-query messages   |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">igmp-snooping query-interval number</a> |
| Tree       | <a href="#">query-interval</a>   |
| Range      | 1 to 65535   |
| Units      | seconds  |
| Default    | 125  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**query-source-address** (*keyword* | *ipv4-address*)

|            |  |
|------------|--|
| Synopsis   | Source address for IGMP queries  |
| Context    | <b>configure service vpls string igmp-snooping query-source-address</b> ( <i>keyword</i>   <i>ipv4-address</i> ) |
| Tree       | <a href="#">query-source-address</a>   |
| Options    | system   |
| Default    | system   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**report-source-address** *string*

|            |  |
|------------|--|
| Synopsis   | Source IP address used when generating IGMP reports                                    |
| Context    | <b>configure service vpls string igmp-snooping report-source-address</b> <i>string</i> |
| Tree       | <a href="#">report-source-address</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**robust-count** *number*

|            |   |
|------------|---|
| Synopsis   | Number of retries after expected message loss                                 |
| Context    | <b>configure service vpls string igmp-snooping robust-count</b> <i>number</i> |
| Tree       | <a href="#">robust-count</a>  |
| Range      | 1 to 255  |
| Default    | 2   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**ignore-l2vpn-mtu-mismatch** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Ignore the L2 VPN MTU mismatch with local service MTU  |
| Context     | <b>configure service vpls string ignore-l2vpn-mtu-mismatch</b> <i>boolean</i>  |
| Tree        | <a href="#">ignore-l2vpn-mtu-mismatch</a>  |
| Description | When configured to <b>true</b> , the router does not check the value of the Layer 2 MTU in the Layer2 Info Extended Community received in a BGP update message against the local |

service MTU or locally signaled MTU. It may, therefore, bring up the BGP VPLS service regardless of any MTU mismatch.

When configured to **false**, an MTU mismatch prevents the system from bringing up a BGP-VPLS service.

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 22.2.R1 |
| Platforms  | All     |

### **interface** [[interface-name](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>interface</b> list instance              |
| Context    | <b>configure service vpls string interface string</b> |
| Tree       | <a href="#">interface</a>                             |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **[interface-name]** *string*

|               |   |
|---------------|---|
| Synopsis      | IP interface name                                     |
| Context       | <b>configure service vpls string interface string</b> |
| Tree          | <a href="#">interface</a>                             |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.                   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the interface                                     |
| Context    | <b>configure service vpls string interface string admin-state keyword</b> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 255  |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

### **hold-time**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>hold-time</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time</a> |
| Tree       | <a href="#">hold-time</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **ipv4**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv4</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> |
| Tree       | <a href="#">ipv4</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **down**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>down</b> context  |
| Context     | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> <a href="#">down</a>  |
| Tree        | <a href="#">down</a>   |
| Description | Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the <b>init-only</b> command. |
| Introduced  | 16.0.R1  |
| Platforms   | All  |



**init-only** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Apply delay only at interface configuration or reboot  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> <a href="#">down</a> <a href="#">init-only</a> <i>boolean</i> |
| Tree        | <a href="#">init-only</a>  |
| Description | This command applies a delay only when the IP interface is first configured or after a system reboot.  |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**seconds** *number*

|            |   |
|------------|---|
| Synopsis   | Down hold time for the IP interface   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> <a href="#">down</a> <a href="#">seconds</a> <i>number</i> |
| Tree       | <a href="#">seconds</a>   |
| Range      | 1 to 1200   |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**up**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>up</b> context   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> <a href="#">up</a>   |
| Tree        | <a href="#">up</a>  |
| Description | Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down. |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**seconds** *number*

|          |   |
|----------|---|
| Synopsis | Up hold time for the IP interface   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> <a href="#">up</a> <a href="#">seconds</a> <i>number</i> |

|            |                         |
|------------|-------------------------|
| Tree       | <a href="#">seconds</a> |
| Range      | 1 to 1200               |
| Units      | seconds                 |
| Introduced | 16.0.R1                 |
| Platforms  | All                     |

## ipv4

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv4</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">interface string</a> <a href="#">ipv4</a> |
| Tree       | <a href="#">ipv4</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## neighbor-discovery

|            |   |
|------------|---|
| Synopsis   | Enter the <b>neighbor-discovery</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">interface string</a> <a href="#">ipv4 neighbor-discovery</a> |
| Tree       | <a href="#">neighbor-discovery</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## static-neighbor [[ipv4-address](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>static-neighbor</b> list instance   |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">interface string</a> <a href="#">ipv4 neighbor-discovery</a> <a href="#">static-neighbor string</a> |
| Tree       | <a href="#">static-neighbor</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## [\[ipv4-address\]](#) *string*

|          |  |
|----------|--|
| Synopsis | IPv4 address that corresponds to the physical address  |
| Context  | <b>configure</b> <a href="#">service vpls string</a> <a href="#">interface string</a> <a href="#">ipv4 neighbor-discovery</a> <a href="#">static-neighbor string</a> |

|            |                                     |
|------------|-------------------------------------|
| Tree       | <a href="#">static-neighbor</a>     |
| Notes      | This element is part of a list key. |
| Introduced | 16.0.R1                             |
| Platforms  | All                                 |

### **mac-address** *string*

|            |   |
|------------|---|
| Synopsis   | MAC address for the static neighbor   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery</a> <a href="#">static-neighbor</a> <i>string</i> <a href="#">mac-address</a> <i>string</i> |
| Tree       | <a href="#">mac-address</a>   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **timeout** *number*

|            |   |
|------------|---|
| Synopsis   | ARP timeout value to determine how long an ARP entry remains in the ARP cache   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery</a> <a href="#">timeout</a> <i>number</i> |
| Tree       | <a href="#">timeout</a>   |
| Range      | 0 to 65535  |
| Units      | seconds   |
| Default    | 14400   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **primary**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>primary</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">primary</a> |
| Tree       | <a href="#">primary</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **address** *string*

|            |   |
|------------|---|
| Synopsis   | IP address of the interface   |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">interface string ipv4 primary address string</a> |
| Tree       | <a href="#">address</a>   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **prefix-length** *number*

|            |   |
|------------|---|
| Synopsis   | IPv4 address prefix length  |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">interface string ipv4 primary prefix-length number</a> |
| Tree       | <a href="#">prefix-length</a>   |
| Range      | 0 to 32   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **mac** *string*

|            |  |
|------------|--|
| Synopsis   | MAC address for the interface  |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">interface string mac string</a> |
| Tree       | <a href="#">mac</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **isid-policy**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>isid-policy</b> context                             |
| Context    | <b>configure</b> <a href="#">service vpls string isid-policy</a> |
| Tree       | <a href="#">isid-policy</a>                                      |
| Introduced | 19.10.R1   |
| Platforms  | All  |

**entry** [*range-entry-id*] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>entry</b> list instance                          |
| Context    | <b>configure service vpls string isid-policy entry number</b> |
| Tree       | <b>entry</b>  |
| Introduced | 19.10.R1  |
| Platforms  | All   |

**[range-entry-id]** *number*

|            |   |
|------------|---|
| Synopsis   | ISID policy entry ID  |
| Context    | <b>configure service vpls string isid-policy entry number</b> |
| Tree       | <b>entry</b>  |
| Range      | 1 to 8191   |
| Notes      | This element is part of a list key.                           |
| Introduced | 19.10.R1  |
| Platforms  | All   |

**advertise-local** *boolean*

|            |   |
|------------|---|
| Synopsis   | Advertise locally-defined I-VPLS ISIDs or static ISIDs                                |
| Context    | <b>configure service vpls string isid-policy entry number advertise-local boolean</b> |
| Tree       | <b>advertise-local</b>  |
| Default    | true  |
| Introduced | 19.10.R1  |
| Platforms  | All   |

**range**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>range</b> context                                      |
| Context    | <b>configure service vpls string isid-policy entry number range</b> |
| Tree       | <b>range</b>  |
| Introduced | 19.10.R1  |
| Platforms  | All   |

### **end number**

|            |  |
|------------|--|
| Synopsis   | Upper bound of the ISID range  |
| Context    | <b>configure service vpls string isid-policy entry number range end number</b> |
| Tree       | <b>end</b>   |
| Range      | 1 to 16777215  |
| Introduced | 19.10.R1   |
| Platforms  | All  |

### **start number**

|            |  |
|------------|--|
| Synopsis   | Lower bound of the ISID range  |
| Context    | <b>configure service vpls string isid-policy entry number range start number</b> |
| Tree       | <b>start</b>   |
| Range      | 1 to 16777215  |
| Introduced | 19.10.R1   |
| Platforms  | All  |

### **use-def-mcast boolean**

|            |   |
|------------|---|
| Synopsis   | Use default multicast tree to propagate ISIS range                                  |
| Context    | <b>configure service vpls string isid-policy entry number use-def-mcast boolean</b> |
| Tree       | <b>use-def-mcast</b>  |
| Default    | false   |
| Introduced | 19.10.R1  |
| Platforms  | All   |

### **load-balancing**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>load-balancing</b> context             |
| Context    | <b>configure service vpls string load-balancing</b> |
| Tree       | <b>load-balancing</b>                               |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**lbl-eth-or-ip-l4-teid** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Enable hashing of MPLS ethernet and IP packets on SAPs   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">load-balancing</a> <a href="#">lbl-eth-or-ip-l4-teid</a> <i>boolean</i>  |
| Tree        | <a href="#">lbl-eth-or-ip-l4-teid</a>  |
| Description | When configured to <b>true</b> , this command enables hashing of MPLS Ethernet and MPLS IP packets received on the Epipe and VPLS service SAP using the MPLS labels, the inner IP addresses, the port numbers, and the GTP TEID field, if read by the system. This capability is supported on line cards that are FP4-based and later. |
| Default     | false  |
| Introduced  | 22.2.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**per-service-hashing** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable per-service hashing for Ethernet services  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">load-balancing</a> <a href="#">per-service-hashing</a> <i>boolean</i> |
| Tree       | <a href="#">per-service-hashing</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**spi-load-balancing** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow use of SPI (Security Parameter Index) in hashing for ESP/AH encrypted IPv4/IPv6 traffic  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">load-balancing</a> <a href="#">spi-load-balancing</a> <i>boolean</i> |
| Tree       | <a href="#">spi-load-balancing</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**teid-load-balancing** *boolean*

|          |   |
|----------|---|
| Synopsis | Include TEID in hashing algorithm for GTP-U/C encapsulated traffic  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">load-balancing</a> <a href="#">teid-load-balancing</a> <i>boolean</i> |
| Tree     | <a href="#">teid-load-balancing</a>   |

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **m-vpls** *boolean*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Specify whether this is a management VPLS  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <b>m-vpls</b> <i>boolean</i> |
| Tree       | <a href="#">m-vpls</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **mac-flush**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mac-flush</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <b>mac-flush</b> |
| Tree       | <a href="#">mac-flush</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **tldp**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>tldp</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <b>mac-flush</b> <b>tldp</b> |
| Tree       | <a href="#">tldp</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **propagate** *boolean*

|          |  |
|----------|--|
| Synopsis | Propagate MAC flush messages received from the T-LDP |
|----------|--|



|            |   |
|------------|---|
| Context    | <b>configure service vpls string mac-flush tldp propagate boolean</b> |
| Tree       | <a href="#">propagate</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **send-on-failure boolean**

|            |   |
|------------|---|
| Synopsis   | Send MAC withdraw message on SAP/Spoke-SDP failure                          |
| Context    | <b>configure service vpls string mac-flush tldp send-on-failure boolean</b> |
| Tree       | <a href="#">send-on-failure</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **mac-protect**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mac-protect</b> context             |
| Context    | <b>configure service vpls string mac-protect</b> |
| Tree       | <a href="#">mac-protect</a>                      |
| Introduced | 19.10.R1   |
| Platforms  | All  |

### **mac [mac-address] string**

|            |   |
|------------|---|
| Synopsis   | Add a list entry for <b>mac</b>                             |
| Context    | <b>configure service vpls string mac-protect mac string</b> |
| Tree       | <a href="#">mac</a>   |
| Introduced | 19.10.R1  |
| Platforms  | All   |

### **[mac-address] string**

|          |   |
|----------|---|
| Synopsis | Protected MAC address                                       |
| Context  | <b>configure service vpls string mac-protect mac string</b> |

|            |                                     |
|------------|-------------------------------------|
| Tree       | <a href="#">mac</a>                 |
| Notes      | This element is part of a list key. |
| Introduced | 19.10.R1                            |
| Platforms  | All                                 |

### **mcast-ipv6-snooping-scope** *keyword*

|            |   |
|------------|---|
| Synopsis   | IPv6 multicast snooping scope   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <b>mcast-ipv6-snooping-scope</b> <i>keyword</i> |
| Tree       | <a href="#">mcast-ipv6-snooping-scope</a>   |
| Options    | sg-based, mac-based   |
| Default    | mac-based   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **mcr-default-gtw**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mcr-default-gtw</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <b>mcr-default-gtw</b> |
| Tree       | <a href="#">mcr-default-gtw</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **ip** *string*

|            |  |
|------------|--|
| Synopsis   | Multi-chassis ring default gateway IP address  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <b>mcr-default-gtw</b> <b>ip</b> <i>string</i> |
| Tree       | <a href="#">ip</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **mac** *string*

|          |   |
|----------|---|
| Synopsis | Multi-chassis ring default gateway MAC address  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <b>mcr-default-gtw</b> <b>mac</b> <i>string</i> |

|            |                     |
|------------|---------------------|
| Tree       | <a href="#">mac</a> |
| Default    | 00:00:00:00:00:00   |
| Introduced | 16.0.R1             |
| Platforms  | All                 |

### **mesh-sdp** [[sdp-bind-id](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mesh-sdp</b> list instance   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <b>mesh-sdp</b> <i>string</i> |
| Tree       | <a href="#">mesh-sdp</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **[sdp-bind-id]** *string*

|               |   |
|---------------|---|
| Synopsis      | SDP binding ID  |
| Context       | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <b>mesh-sdp</b> <i>string</i> |
| Tree          | <a href="#">mesh-sdp</a>  |
| String Length | 3 to 16   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

### **accounting-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | Policy to collect accounting statistics   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <b>mesh-sdp</b> <i>string</i> <b>accounting-policy</b> <i>reference</i> |
| Tree       | <a href="#">accounting-policy</a>   |
| Reference  | <b>configure</b> <a href="#">log</a> <b>accounting-policy</b> <i>number</i>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **admin-state** *keyword*

|          |  |
|----------|--|
| Synopsis | Administrative state of the SDP binding to the service |
|----------|--|

---

|            |  |
|------------|--|
| Context    | <b>configure service vpls string mesh-sdp string admin-state keyword</b> |
| Tree       | <b>admin-state</b>   |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## **bfd**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>bfd</b> context                             |
| Context    | <b>configure service vpls string mesh-sdp string bfd</b> |
| Tree       | <b>bfd</b>   |
| Introduced | 21.2.R1  |
| Platforms  | All  |

## **bfd-liveness**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>bfd-liveness</b> context                                |
| Context    | <b>configure service vpls string mesh-sdp string bfd bfd-liveness</b> |
| Tree       | <b>bfd-liveness</b>   |
| Introduced | 21.2.R1   |
| Platforms  | All   |

## **encap keyword**

|            |   |
|------------|---|
| Synopsis   | BFD encapsulation used on the SDP binding   |
| Context    | <b>configure service vpls string mesh-sdp string bfd bfd-liveness encap keyword</b> |
| Tree       | <b>encap</b>  |
| Options    | ipv4  |
| Default    | ipv4  |
| Introduced | 21.2.R1   |
| Platforms  | All   |

**bfd-template** *reference*

|             |   |
|-------------|---|
| Synopsis    | BFD template associated with the SDP binding  |
| Context     | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">bfd bfd-template</a> <i>reference</i>  |
| Tree        | <a href="#">bfd-template</a>  |
| Description | This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the <b>configure router bfd</b> context. |
| Reference   | <b>configure</b> <a href="#">bfd bfd-template</a> <i>string</i>   |
| Introduced  | 21.2.R1   |
| Platforms   | All   |

**collect-stats** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow agent to collect accounting statistics  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">collect-stats</a> <i>boolean</i> |
| Tree       | <a href="#">collect-stats</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**control-word** *boolean*

|            |  |
|------------|--|
| Synopsis   | Use the control word as preferred  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">control-word</a> <i>boolean</i> |
| Tree       | <a href="#">control-word</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**cpu-protection**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>cpu-protection</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">cpu-protection</a> |
| Tree       | <a href="#">cpu-protection</a>  |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## eth-cfm-monitoring

Synopsis Enable the **eth-cfm-monitoring** context

Context **configure service vpls string mesh-sdp string cpu-protection eth-cfm-monitoring**

Tree [eth-cfm-monitoring](#)

Notes The following elements are part of a choice: **eth-cfm-monitoring** or **mac-monitoring**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## aggregate

Synopsis Apply rate limit to the sum of the per peer packet rates

Context **configure service vpls string mesh-sdp string cpu-protection eth-cfm-monitoring aggregate**

Tree [aggregate](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## car

Synopsis Ignore Ethernet CFM packets when enforcing overall rate

Context **configure service vpls string mesh-sdp string cpu-protection eth-cfm-monitoring car**

Tree [car](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## mac-monitoring

Synopsis Monitor MAC for CPU protection

Context **configure service vpls string mesh-sdp string cpu-protection mac-monitoring**

Tree [mac-monitoring](#)

Notes The following elements are part of a choice: **eth-cfm-monitoring** or **mac-monitoring**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **policy-id** *reference*

Synopsis CPM protection policy  
 Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [cpu-protection](#) [policy-id](#) *reference*  
 Tree [policy-id](#)  
 Reference **configure** [system security](#) [cpu-protection](#) [policy](#) *number*  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **description** *string*

Synopsis Text description  
 Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **dhcp**

Synopsis Enter the **dhcp** context  
 Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [dhcp](#)  
 Tree [dhcp](#)  
 Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [dhcp](#) [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1

Platforms All

### snoop *boolean*

Synopsis Allow DHCP snooping of DHCP messages on the SAP or SDP  
 Context **configure** [service vpls string mesh-sdp string dhcp snoop boolean](#)  
 Tree [snoop](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### egress

Synopsis Enter the **egress** context  
 Context **configure** [service vpls string mesh-sdp string egress](#)  
 Tree [egress](#)  
 Introduced 16.0.R1  
 Platforms All

### filter

Synopsis Enter the **filter** context  
 Context **configure** [service vpls string mesh-sdp string egress filter](#)  
 Tree [filter](#)  
 Introduced 16.0.R1  
 Platforms All

### ip *reference*

Synopsis IPv4 filter policy name  
 Context **configure** [service vpls string mesh-sdp string egress filter ip reference](#)  
 Tree [ip](#)  
 Reference **configure** [filter ip-filter string](#)  
 Introduced 16.0.R1  
 Platforms All



### ipv6 reference

|            |   |
|------------|---|
| Synopsis   | IPv6 filter policy name   |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">mesh-sdp string</a> <a href="#">egress filter ipv6 reference</a> |
| Tree       | <a href="#">ipv6</a>  |
| Reference  | <b>configure</b> <a href="#">filter ipv6-filter string</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### mac reference

|            |  |
|------------|--|
| Synopsis   | MAC filter policy name   |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">mesh-sdp string</a> <a href="#">egress filter mac reference</a> |
| Tree       | <a href="#">mac</a>  |
| Reference  | <b>configure</b> <a href="#">filter mac-filter string</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### mfib-allowed-mda-destinations

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mfib-allowed-mda-destinations</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">mesh-sdp string</a> <a href="#">egress mfib-allowed-mda-destinations</a> |
| Tree       | <a href="#">mfib-allowed-mda-destinations</a>   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### mda [[mda-id](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Add a list entry for <b>mda</b>  |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">mesh-sdp string</a> <a href="#">egress mfib-allowed-mda-destinations</a> <a href="#">mda string</a> |
| Tree       | <a href="#">mda</a>  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**[mda-id] string**

|            |  |
|------------|--|
| Synopsis   | MFIB allowed MDA destination   |
| Context    | <b>configure service vpls string mesh-sdp string egress mfib-allowed-mda-destinations mda string</b> |
| Tree       | <b>mda</b>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**qos**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>qos</b> context                                    |
| Context    | <b>configure service vpls string mesh-sdp string egress qos</b> |
| Tree       | <b>qos</b>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**network**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>network</b> context  |
| Context    | <b>configure service vpls string mesh-sdp string egress qos network</b> |
| Tree       | <b>network</b>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**policy-name reference**

|            |   |
|------------|---|
| Synopsis   | Network policy ID   |
| Context    | <b>configure service vpls string mesh-sdp string egress qos network policy-name reference</b> |
| Tree       | <b>policy-name</b>  |
| Reference  | <b>configure qos network string</b>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## port-redirect-group

|            |   |
|------------|---|
| Synopsis   | Enter the <b>port-redirect-group</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">mesh-sdp string</a> <a href="#">egress qos network</a> <a href="#">port-redirect-group</a> |
| Tree       | <a href="#">port-redirect-group</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## group-name *reference*

|            |  |
|------------|--|
| Synopsis   | Name of the egress port queue group  |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">mesh-sdp string</a> <a href="#">egress qos network</a> <a href="#">port-redirect-group</a> <a href="#">group-name reference</a> |
| Tree       | <a href="#">group-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos queue-group-templates</a> <a href="#">egress queue-group string</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## instance *number*

|            |   |
|------------|---|
| Synopsis   | Queue-group instance ID   |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">mesh-sdp string</a> <a href="#">egress qos network</a> <a href="#">port-redirect-group</a> <a href="#">instance number</a> |
| Tree       | <a href="#">instance</a>  |
| Range      | 1 to 65535  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## vc-label *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Egress MPLS VC label to send packets to the far end   |
| Context  | <b>configure</b> <a href="#">service vpls string</a> <a href="#">mesh-sdp string</a> <a href="#">egress</a> <a href="#">vc-label number</a> |
| Tree     | <a href="#">vc-label</a>  |

|            |               |
|------------|---------------|
| Range      | 16 to 1048575 |
| Introduced | 16.0.R1       |
| Platforms  | All           |

## entropy-label

|            |  |
|------------|--|
| Synopsis   | Enable the use of entropy labels for spoke SDPs  |
| Context    | <b>configure</b> <a href="#">service vpls string mesh-sdp string entropy-label</a>       |
| Tree       | <a href="#">entropy-label</a>  |
| Notes      | The following elements are part of a choice: <b>entropy-label</b> or <b>hash-label</b> . |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## eth-cfm

|            |  |
|------------|--|
| Synopsis   | Enter the <b>eth-cfm</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls string mesh-sdp string eth-cfm</a> |
| Tree       | <a href="#">eth-cfm</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                 |

## collect-lmm-fc-stats

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>collect-lmm-fc-stats</b> context  |
| Context     | <b>configure</b> <a href="#">service vpls string mesh-sdp string eth-cfm collect-lmm-fc-stats</a>  |
| Tree        | <a href="#">collect-lmm-fc-stats</a>   |
| Description | <p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands <b>fc-in-profile</b> and <b>fc</b> in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the <b>collect-lmm-stats</b> command are mutually exclusive when there is entity resource contention.</p> |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**fc keyword**

|                |   |
|----------------|---|
| Synopsis       | Forwarding class name for profile-unaware counter   |
| Context        | <b>configure service vpls string mesh-sdp string eth-cfm collect-lmm-fc-stats fc keyword</b>  |
| Tree           | <b>fc</b>   |
| Description    | <p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the <b>fc-in-profile</b> command under the <b>collect-lmm-fc-stats</b> context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p> |
| Options        | be, l2, af, l1, h2, ef, h1, nc  |
| Max. Instances | 8   |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**fc-in-profile keyword**

|                |   |
|----------------|---|
| Synopsis       | Forwarding class name for profile-aware counter   |
| Context        | <b>configure service vpls string mesh-sdp string eth-cfm collect-lmm-fc-stats fc-in-profile keyword</b>   |
| Tree           | <b>fc-in-profile</b>  |
| Description    | <p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the <b>fc</b> command under the <b>collect-lmm-fc-stats</b> context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p> |
| Options        | be, l2, af, l1, h2, ef, h1, nc  |
| Max. Instances | 8   |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**collect-lmm-stats** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Collect statistics for loss measurement message tests  |
| Context     | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">collect-lmm-stats</a> <i>boolean</i>  |
| Tree        | <a href="#">collect-lmm-stats</a>  |
| Description | <p>When configured to <b>true</b>, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.</p> <p>The <b>show eth-cfm collect-lmm-stats</b> command displays entities that have been enabled to collect transit and receive counters.</p> <p>When configured to <b>false</b>, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.</p> |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**mep** [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mep</b> list instance  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> |
| Tree       | <a href="#">mep</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**md-admin-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Maintenance Domain (MD) name  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> |
| Tree       | <a href="#">mep</a>   |
| Reference  | <b>configure</b> <a href="#">eth-cfm</a> <a href="#">domain</a> <i>string</i>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**ma-admin-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Maintenance Association (MA) name   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> |
| Tree       | <a href="#">mep</a>   |
| Reference  | <b>configure</b> <a href="#">eth-cfm domain</a> <i>string</i> <a href="#">association</a> <i>string</i>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**mep-id** *number*

|            |   |
|------------|---|
| Synopsis   | Maintenance Endpoint (MEP) ID   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> |
| Tree       | <a href="#">mep</a>   |
| Range      | 1 to 8191   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the MEP  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**ais**

|          |                               |
|----------|-------------------------------|
| Synopsis | Enable the <b>ais</b> context |
|----------|-------------------------------|

|            |  |
|------------|--|
| Context    | <b>configure service vpls</b> <i>string</i> <b>mesh-sdp</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>ais</b> |
| Tree       | <b>ais</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **client-meg-level** *number*

|                |   |
|----------------|---|
| Synopsis       | Client MEG level for AIS message generation   |
| Context        | <b>configure service vpls</b> <i>string</i> <b>mesh-sdp</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>ais client-meg-level</b> <i>number</i> |
| Tree           | <b>client-meg-level</b>   |
| Range          | 1 to 7  |
| Max. Instances | 7   |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **interface-support** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable generation of AIS PDUs based on endpoint state   |
| Context    | <b>configure service vpls</b> <i>string</i> <b>mesh-sdp</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>ais interface-support</b> <i>boolean</i> |
| Tree       | <b>interface-support</b>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **interval** *number*

|          |   |
|----------|---|
| Synopsis | Transmission interval for AIS messages  |
| Context  | <b>configure service vpls</b> <i>string</i> <b>mesh-sdp</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>ais interval</b> <i>number</i> |
| Tree     | <b>interval</b>   |
| Range    | 1   60  |
| Units    | seconds   |
| Default  | 1   |



|            |  |
|------------|--|
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **low-priority-defect** *keyword*

|            |  |
|------------|--|
| Synopsis   | Lowest priority defect allowed to generate fault alarm   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>ais</b> <b>low-priority-defect</b> <i>keyword</i> |
| Tree       | <a href="#">low-priority-defect</a>  |
| Options    | all-def, mac-rem-err-xcon  |
| Default    | all-def  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **priority** *number*

|            |  |
|------------|--|
| Synopsis   | Priority of the AIS messages generated by the node   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>ais</b> <b>priority</b> <i>number</i> |
| Tree       | <a href="#">priority</a>   |
| Range      | 0 to 7   |
| Default    | 7  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **alarm-notification**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>alarm-notification</b> context  |
| Context     | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>alarm-notification</b>  |
| Tree        | <a href="#">alarm-notification</a>   |
| Description | <p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p> |
| Introduced  | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fng-alarm-time** *number*

Synopsis Time that must expire before an FNG alarm is raised

Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [eth-cfm mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [alarm-notification](#) **fng-alarm-time** *number*

Tree [fng-alarm-time](#)

Range 250 | 500 | 1000

Units centiseconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fng-reset-time** *number*

Synopsis Time that must expire before an FNG alarm is reset

Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [eth-cfm mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [alarm-notification](#) **fng-reset-time** *number*

Tree [fng-reset-time](#)

Range 250 | 500 | 1000

Units centiseconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm** *boolean*

Synopsis Generate CCM messages

Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [eth-cfm mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* **ccm** *boolean*

Tree [ccm](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ccm-ltm-priority** *number*

|            |   |
|------------|---|
| Synopsis   | Priority of CCM and LTM messages transmitted by the MEP   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>ccm-ltm-priority</b> <i>number</i> |
| Tree       | <a href="#">ccm-ltm-priority</a>  |
| Range      | 0 to 7  |
| Default    | 7   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**ccm-padding-size** *number*

|             |   |
|-------------|---|
| Synopsis    | Number of octets of padding to insert in CCM packets  |
| Context     | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>ccm-padding-size</b> <i>number</i>   |
| Tree        | <a href="#">ccm-padding-size</a>  |
| Description | This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.<br><br>This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through <b>configure eth-cfm domain association ccm-interval</b> ) is less than 1 second. |
| Range       | 3 to 1500   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**cfm-vlan-tag** *string*

|               |   |
|---------------|---|
| Synopsis      | VLAN tags to apply to CFM PDUs for egress processing  |
| Context       | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>cfm-vlan-tag</b> <i>string</i> |
| Tree          | <a href="#">cfm-vlan-tag</a>  |
| String Length | 1 to 9  |
| Introduced    | 21.10.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**csf**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>csf</b> context  |
| Context    | <b>configure service vpls</b> <i>string</i> <b>mesh-sdp</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>csf</b> |
| Tree       | <b>csf</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**multiplier** *decimal-number*

|            |   |
|------------|---|
| Synopsis   | Multiplication factor used to clear the CSF condition   |
| Context    | <b>configure service vpls</b> <i>string</i> <b>mesh-sdp</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>csf multiplier</b> <i>decimal-number</i> |
| Tree       | <b>multiplier</b>   |
| Range      | 0.0   2.0 to 30.0   |
| Default    | 3.5   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure service vpls</b> <i>string</i> <b>mesh-sdp</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>description</b> <i>string</i> |
| Tree          | <b>description</b>   |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**direction** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |                         |
|----------|-------------------------|
| Synopsis | Direction the MEP faces |
|----------|-------------------------|

|            |  |
|------------|--|
| Context    | <b>configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number direction keyword</b> |
| Tree       | <a href="#">direction</a>  |
| Options    | down, up   |
| Default    | down   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## eth-test

|             |   |
|-------------|---|
| Synopsis    | Enable the <b>eth-test</b> context  |
| Context     | <b>configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test</b>   |
| Tree        | <a href="#">eth-test</a>  |
| Description | Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the <b>oam eth-cfm eth-test</b> command. |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## bit-error-threshold *number*

|            |  |
|------------|--|
| Synopsis   | Lowest priority defect allowed to generate fault alarm   |
| Context    | <b>configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test bit-error-threshold number</b> |
| Tree       | <a href="#">bit-error-threshold</a>  |
| Range      | 0 to 11840   |
| Units      | bit errors   |
| Default    | 1  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## test-pattern

|          |  |
|----------|--|
| Synopsis | Enter the <b>test-pattern</b> context  |
| Context  | <b>configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern</b> |

|             |  |
|-------------|--|
| Tree        | <a href="#">test-pattern</a>   |
| Description | Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver. |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **crc-tlv** *boolean*

|            |  |
|------------|--|
| Synopsis   | Generate a CRC checksum  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">mesh-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">eth-test</a> <a href="#">test-pattern</a> <b>crc-tlv</b> <i>boolean</i> |
| Tree       | <a href="#">crc-tlv</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **pattern** *keyword*

|             |  |
|-------------|--|
| Synopsis    | Test pattern for Ethernet Test frames  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">mesh-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">eth-test</a> <a href="#">test-pattern</a> <b>pattern</b> <i>keyword</i> |
| Tree        | <a href="#">pattern</a>  |
| Description | This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.  |
| Options     | all-zeros, all-ones  |
| Default     | all-zeros  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **fault-propagation** *keyword*

|          |  |
|----------|--|
| Synopsis | Fault propagation for the MEP  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">mesh-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <b>fault-propagation</b> <i>keyword</i> |
| Tree     | <a href="#">fault-propagation</a>  |
| Options  | use-if-status-tlv, suspend-ccm   |

|            |  |
|------------|--|
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

## grace

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>grace</b> context  |
| Context     | <b>configure</b> <a href="#">service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</a> <b>grace</b> |
| Tree        | <a href="#">grace</a>   |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.                       |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## eth-ed

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>eth-ed</b> context  |
| Context     | <b>configure</b> <a href="#">service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</a> <b>grace eth-ed</b> |
| Tree        | <a href="#">eth-ed</a>   |
| Description | Commands in this context configure the ITU-T Y.1731 ETH-ED function.   |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## max-rx-defect-window *number*

|            |   |
|------------|---|
| Synopsis   | Maximum received ETH-ED expected defect window duration   |
| Context    | <b>configure</b> <a href="#">service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</a> <b>grace eth-ed max-rx-defect-window</b> <i>number</i> |
| Tree       | <a href="#">max-rx-defect-window</a>  |
| Range      | 1 to 86400  |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**priority number**

|            |   |
|------------|---|
| Synopsis   | Transmission priority for ETH-ED PDUs   |
| Context    | <b>configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed priority number</b> |
| Tree       | <a href="#">priority</a>  |
| Range      | 0 to 7  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**rx-eth-ed boolean**

|             |   |
|-------------|---|
| Synopsis    | Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP   |
| Context     | <b>configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed rx-eth-ed boolean</b> |
| Tree        | <a href="#">rx-eth-ed</a>   |
| Description | This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.  |
| Default     | true  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**tx-eth-ed boolean**

|            |   |
|------------|---|
| Synopsis   | Transmit ETH-ED PDUs from the MEP   |
| Context    | <b>configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed tx-eth-ed boolean</b> |
| Tree       | <a href="#">tx-eth-ed</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**eth-vsm-grace**

|          |  |
|----------|--|
| Synopsis | Enter the <b>eth-vsm-grace</b> context   |
| Context  | <b>configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace</b> |



|             |  |
|-------------|--|
| Tree        | <a href="#">eth-vsm-grace</a>  |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function. |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS         |

### **rx-eth-vsm-grace** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Receive and process Nokia ETH-CFM Grace PDU on the MEP  |
| Context     | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace eth-vsm-grace rx-eth-vsm-grace</a> <i>boolean</i> |
| Tree        | <a href="#">rx-eth-vsm-grace</a>  |
| Description | When configured to <b>true</b> , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.<br><br>When configured to <b>false</b> , the router disables the Nokia Grace function.                           |
| Default     | true  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **tx-eth-vsm-grace** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Transmit ETH-ED PDUs from the MEP  |
| Context     | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace eth-vsm-grace tx-eth-vsm-grace</a> <i>boolean</i>  |
| Tree        | <a href="#">tx-eth-vsm-grace</a>   |
| Description | When configured to <b>true</b> , the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.<br><br>The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.<br><br>The operator must configure the <b>configure system eth-cfm grace</b> command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).<br><br>When configured to <b>false</b> , the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP. |
| Default     | true   |
| Introduced  | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **lbm-svc-act-responder** *boolean*

Synopsis Process service activation streams in ETH-CFM LBM

Context **configure** [service](#) [vpls](#) [string](#) [mesh-sdp](#) [string](#) [eth-cfm](#) [mep](#) [md-admin-name](#) [reference](#) [ma-admin-name](#) [reference](#) [mep-id](#) [number](#) **lbm-svc-act-responder** *boolean*

Tree [lbm-svc-act-responder](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **low-priority-defect** *keyword*

Synopsis Lowest priority defect allowed to generate fault alarm

Context **configure** [service](#) [vpls](#) [string](#) [mesh-sdp](#) [string](#) [eth-cfm](#) [mep](#) [md-admin-name](#) [reference](#) [ma-admin-name](#) [reference](#) [mep-id](#) [number](#) **low-priority-defect** *keyword*

Tree [low-priority-defect](#)

Options all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon

Default mac-rem-err-xcon

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mac-address** *string*

Synopsis MAC address of the MEP

Context **configure** [service](#) [vpls](#) [string](#) [mesh-sdp](#) [string](#) [eth-cfm](#) [mep](#) [md-admin-name](#) [reference](#) [ma-admin-name](#) [reference](#) [mep-id](#) [number](#) **mac-address** *string*

Tree [mac-address](#)

Description This command specifies the MAC address of the MEP.  
When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**one-way-delay-threshold** *number*

|            |  |
|------------|--|
| Synopsis   | Threshold time limit for the one-way delay test  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>one-way-delay-threshold</b> <i>number</i> |
| Tree       | <a href="#">one-way-delay-threshold</a>  |
| Range      | 0 to 600   |
| Units      | seconds  |
| Default    | 3  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**primary-vlan** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | MEP provisioned using MA primary VLAN ID   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>primary-vlan</b> <i>boolean</i> |
| Tree       | <a href="#">primary-vlan</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**mip primary-vlan** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mip</b> list instance  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm mip</a> <b>primary-vlan</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">mip</a>   |
| Introduced | 21.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**primary-vlan** (*number* | *keyword*)

|          |                                      |
|----------|--------------------------------------|
| Synopsis | VLAN ID to which the MIP is attached |
|----------|--------------------------------------|

|             |   |
|-------------|---|
| Context     | <b>configure service vpls string mesh-sdp string eth-cfm mip primary-vlan</b> ( <i>number   keyword</i> )   |
| Tree        | <a href="#">mip</a>   |
| Description | This command provides an option for linking a MIP with a Primary VLAN number or none. When the <b>none</b> option is provided, the MIP does not include the primary vlan. |
| Range       | 1 to 4094   |
| Options     | none  |
| Notes       | This element is part of a list key.   |
| Introduced  | 21.5.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **cfm-vlan-tag string**

|               |  |
|---------------|--|
| Synopsis      | VLAN tags to apply to CFM PDUs for egress processing   |
| Context       | <b>configure service vpls string mesh-sdp string eth-cfm mip primary-vlan</b> ( <i>number   keyword</i> ) <b>cfm-vlan-tag string</b>   |
| Tree          | <a href="#">cfm-vlan-tag</a>   |
| Description   | This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the vc-type vlan or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM PDUs arriving at the same egress. When this command is included under the MEP or MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration. |
| String Length | 1 to 9   |
| Introduced    | 21.10.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **mac-address string**

|            |   |
|------------|---|
| Synopsis   | MAC address of the MIP  |
| Context    | <b>configure service vpls string mesh-sdp string eth-cfm mip primary-vlan</b> ( <i>number   keyword</i> ) <b>mac-address string</b> |
| Tree       | <a href="#">mac-address</a>   |
| Introduced | 21.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**squelch-ingress-ctag-levels** *number*

|                |   |
|----------------|---|
| Synopsis       | Squelch levels using additional VLAN C-Tag space  |
| Context        | <b>configure</b> <a href="#">service vpls string</a> <a href="#">mesh-sdp string</a> <a href="#">eth-cfm</a> <a href="#">squelch-ingress-ctag-levels</a> <i>number</i>  |
| Tree           | <a href="#">squelch-ingress-ctag-levels</a>   |
| Description    | <p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding plus an additional VLAN, up to a maximum tag length of two tags. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level to be dropped.</p> |
| Range          | 0 to 7  |
| Max. Instances | 8   |
| Introduced     | 21.2.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**squelch-ingress-levels** *number*

|                |  |
|----------------|--|
| Synopsis       | Levels for which ETH-CFM packets are silently discarded  |
| Context        | <b>configure</b> <a href="#">service vpls string</a> <a href="#">mesh-sdp string</a> <a href="#">eth-cfm</a> <a href="#">squelch-ingress-levels</a> <i>number</i>  |
| Tree           | <a href="#">squelch-ingress-levels</a>   |
| Description    | <p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.</p> |
| Range          | 0 to 7   |
| Max. Instances | 8  |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**vmep-filter** *boolean*

|            |   |
|------------|---|
| Synopsis   | Suppress eth-cfm PDUs based on level lower than or equal to configured Virtual MEP  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">vmep-filter</a> <i>boolean</i> |
| Tree       | <a href="#">vmep-filter</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**etree-leaf** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enable etree leaf access-circuit status  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">etree-leaf</a> <i>boolean</i> |
| Tree       | <a href="#">etree-leaf</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**etree-root-leaf-tag** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Status for E-tree root leaf tag   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">etree-root-leaf-tag</a> <i>boolean</i> |
| Tree       | <a href="#">etree-root-leaf-tag</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**fdb**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>fdb</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">fdb</a> |
| Tree       | <a href="#">fdb</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**auto-learn-mac-protect** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable automatic population of the MAC protect list  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">fdb</a> <a href="#">auto-learn-mac-protect</a> <i>boolean</i> |
| Tree       | <a href="#">auto-learn-mac-protect</a>   |
| Default    | false  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**auto-learn-mac-protect-exclude-list** *reference*

|             |  |
|-------------|--|
| Synopsis    | Referenced MAC protect exclusion list name   |
| Context     | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">fdb</a> <a href="#">auto-learn-mac-protect-exclude-list</a> <i>reference</i>  |
| Tree        | <a href="#">auto-learn-mac-protect-exclude-list</a>  |
| Description | This command references the name of a MAC protect exclusion list.<br><br>Dynamically-learned MAC Source Addresses (SA) are protected if they are learned on an object with ALMP configured and no exclusion list is associated with the object, or if the MAC SA does not match any entry in an associated exclusion list.<br><br>An exclusion list can be used in multiple objects of a service. If a list is empty, ALMP does not exclude any learned MAC SAs from protection on the object. |
| Reference   | <b>configure</b> <a href="#">service mac-list</a> <i>string</i>  |
| Introduced  | 20.5.R1  |
| Platforms   | All  |

**mac-pinning** *boolean*

|          |   |
|----------|---|
| Synopsis | MAC address pinning in active status  |
| Context  | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">fdb</a> <a href="#">mac-pinning</a> <i>boolean</i> |

|            |                             |
|------------|-----------------------------|
| Tree       | <a href="#">mac-pinning</a> |
| Default    | false                       |
| Introduced | 16.0.R1                     |
| Platforms  | All                         |

### **protected-src-mac-violation-action** *keyword*

|            |   |
|------------|---|
| Synopsis   | Action to take whenever a relearn request for a protected MAC is received   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">fdb</a> <b>protected-src-mac-violation-action</b> <i>keyword</i> |
| Tree       | <a href="#">protected-src-mac-violation-action</a>  |
| Options    | sdp-bind-oper-down, alarm-only, discard   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **force-vc-forwarding** *keyword*

|            |  |
|------------|--|
| Synopsis   | VC forwarding action   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <b>force-vc-forwarding</b> <i>keyword</i> |
| Tree       | <a href="#">force-vc-forwarding</a>  |
| Options    | vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **hash-label**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>hash-label</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <b>hash-label</b> |
| Tree       | <a href="#">hash-label</a>   |
| Notes      | The following elements are part of a choice: <b>entropy-label</b> or <b>hash-label</b> .                             |
| Introduced | 16.0.R1  |
| Platforms  | All  |



## signal-capability

|            |   |
|------------|---|
| Synopsis   | Enable the signaling of the hash label between PE nodes   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">hash-label</a> <a href="#">signal-capability</a> |
| Tree       | <a href="#">signal-capability</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## igmp-snooping

|            |  |
|------------|--|
| Synopsis   | Enter the <b>igmp-snooping</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">igmp-snooping</a> |
| Tree       | <a href="#">igmp-snooping</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## fast-leave *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow IGMP fast leave processing   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">fast-leave</a> <i>boolean</i> |
| Tree       | <a href="#">fast-leave</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## import-policy *reference*

|            |   |
|------------|---|
| Synopsis   | Import policy that filters IGMP packets   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">import-policy</a> <i>reference</i> |
| Tree       | <a href="#">import-policy</a>   |
| Reference  | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**maximum-number-group-sources** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum group source combinations   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">maximum-number-group-sources</a> <i>number</i> |
| Tree       | <a href="#">maximum-number-group-sources</a>  |
| Range      | 1 to 32000  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**maximum-number-groups** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum groups allowed   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">maximum-number-groups</a> <i>number</i> |
| Tree       | <a href="#">maximum-number-groups</a>  |
| Range      | 1 to 16000   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**maximum-number-sources** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum sources that are allowed per group  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">maximum-number-sources</a> <i>number</i> |
| Tree       | <a href="#">maximum-number-sources</a>  |
| Range      | 1 to 1000   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**mcac**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mcac</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">igmp-snooping</a> <b>mcac</b> |
| Tree       | <a href="#">mcac</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**bandwidth**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>bandwidth</b> context  |
| Context    | <b>configure service vpls string mesh-sdp string igmp-snooping mcac bandwidth</b> |
| Tree       | <b>bandwidth</b>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**mandatory** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Pre-reserved bandwidth for all mandatory channels  |
| Context    | <b>configure service vpls string mesh-sdp string igmp-snooping mcac bandwidth mandatory (number   keyword)</b> |
| Tree       | <b>mandatory</b>   |
| Range      | 0 to 2147483647  |
| Options    | unlimited  |
| Default    | unlimited  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**total** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Maximum allowed bandwidth  |
| Context    | <b>configure service vpls string mesh-sdp string igmp-snooping mcac bandwidth total (number   keyword)</b> |
| Tree       | <b>total</b>   |
| Range      | 0 to 2147483647  |
| Options    | unlimited  |
| Default    | unlimited  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**interface-policy** *reference*

|          |  |
|----------|--|
| Synopsis | Name of multicast CAC interface policy |
|----------|--|

|            |  |
|------------|--|
| Context    | <b>configure service vpls string mesh-sdp string igmp-snooping mcac interface-policy reference</b> |
| Tree       | <a href="#">interface-policy</a>   |
| Reference  | <b>configure mcac interface-policy string</b>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **policy reference**

|             |  |
|-------------|--|
| Synopsis    | Multicast CAC policy name  |
| Context     | <b>configure service vpls string mesh-sdp string igmp-snooping mcac policy reference</b>   |
| Tree        | <a href="#">policy</a>   |
| Description | <p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> <li>• subscriber level and redirected interface when redirection is configured</li> <li>• subscriber level and group-interface level when redirection is unconfigured</li> </ul> <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p> |
| Reference   | <b>configure mcac policy string</b>  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **mrouter-port boolean**

|            |   |
|------------|---|
| Synopsis   | Operate port as a multicast router port   |
| Context    | <b>configure service vpls string mesh-sdp string igmp-snooping mrouter-port boolean</b> |
| Tree       | <a href="#">mrouter-port</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |

Platforms All

### **query-interval** *number*

Synopsis Time between two consecutive host-query messages

Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [igmp-snooping](#) [query-interval](#) *number*

Tree [query-interval](#)

Range 2 to 1024

Units seconds

Default 125

Introduced 16.0.R1

Platforms All

### **query-last-member-interval** *number*

Synopsis Time between group-specific query messages

Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [igmp-snooping](#) [query-last-member-interval](#) *number*

Tree [query-last-member-interval](#)

Range 1 to 50

Units deciseconds

Default 10

Introduced 16.0.R1

Platforms All

### **query-response-interval** *number*

Synopsis Time to wait for a response to the host-query messages

Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [igmp-snooping](#) [query-response-interval](#) *number*

Tree [query-response-interval](#)

Range 1 to 1023

Units seconds

Default 10

Introduced 16.0.R1

Platforms All

### **robust-count** *number*

Synopsis Number of retries after expected message loss  
 Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [igmp-snooping](#) [robust-count](#) *number*  
 Tree [robust-count](#)  
 Range 2 to 7  
 Default 2  
 Introduced 16.0.R1  
 Platforms All

### **router-alert-check** *boolean*

Synopsis Enable IP router alert check option  
 Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [igmp-snooping](#) [router-alert-check](#) *boolean*  
 Tree [router-alert-check](#)  
 Default true  
 Introduced 16.0.R1  
 Platforms All

### **send-queries** *boolean*

Synopsis Generate IGMP general queries  
 Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [igmp-snooping](#) [send-queries](#) *boolean*  
 Tree [send-queries](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **static**

Synopsis Enter the **static** context  
 Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [igmp-snooping](#) [static](#)  
 Tree [static](#)

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **group** [group-address] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>group</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">static</a> <a href="#">group</a> <i>string</i> |
| Tree       | <a href="#">group</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### [group-address] *string*

|             |   |
|-------------|---|
| Synopsis    | Group address of static IGMP multicast channel  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">static</a> <a href="#">group</a> <i>string</i> |
| Tree        | <a href="#">group</a>   |
| Description | This command configures an address that receives data on an interface. The IP address must be unique for each static group.   |
| Notes       | This element is part of a list key.   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **source** [source-address] *string*

|            |  |
|------------|--|
| Synopsis   | Add a list entry for <b>source</b>   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">static</a> <a href="#">group</a> <i>string</i> <a href="#">source</a> <i>string</i> |
| Tree       | <a href="#">source</a>   |
| Notes      | The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### [source-address] *string*

|          |   |
|----------|---|
| Synopsis | Source IP address of multicast channel sending data |
|----------|---|

|            |  |
|------------|--|
| Context    | <b>configure service vpls string mesh-sdp string igmp-snooping static group string source string</b> |
| Tree       | <a href="#">source</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R2  |
| Platforms  | All  |

## starg

|            |  |
|------------|--|
| Synopsis   | any source address (*,G)   |
| Context    | <b>configure service vpls string mesh-sdp string igmp-snooping static group string starg</b> |
| Tree       | <a href="#">starg</a>  |
| Notes      | The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .       |
| Introduced | 16.0.R2  |
| Platforms  | All  |

## version keyword

|            |  |
|------------|--|
| Synopsis   | IGMP protocol version  |
| Context    | <b>configure service vpls string mesh-sdp string igmp-snooping version keyword</b> |
| Tree       | <a href="#">version</a>  |
| Options    | 1, 2, 3  |
| Default    | 3  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## ingress

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ingress</b> context                             |
| Context    | <b>configure service vpls string mesh-sdp string ingress</b> |
| Tree       | <a href="#">ingress</a>                                      |
| Introduced | 16.0.R1  |
| Platforms  | All  |



## filter

|            |   |
|------------|---|
| Synopsis   | Enter the <b>filter</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">ingress filter</a> |
| Tree       | <a href="#">filter</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## ip reference

|            |  |
|------------|--|
| Synopsis   | IPv4 filter policy name  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">ingress filter</a> <a href="#">ip reference</a> |
| Tree       | <a href="#">ip</a>   |
| Reference  | <b>configure</b> <a href="#">filter ip-filter</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## ipv6 reference

|            |  |
|------------|--|
| Synopsis   | IPv6 filter policy name  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">ingress filter</a> <a href="#">ipv6 reference</a> |
| Tree       | <a href="#">ipv6</a>   |
| Reference  | <b>configure</b> <a href="#">filter ipv6-filter</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## mac reference

|            |   |
|------------|---|
| Synopsis   | MAC filter policy name  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">ingress filter</a> <a href="#">mac reference</a> |
| Tree       | <a href="#">mac</a>   |
| Reference  | <b>configure</b> <a href="#">filter mac-filter</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**qos**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>qos</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">ingress qos</a> |
| Tree       | <a href="#">qos</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**network**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>network</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">ingress qos network</a> |
| Tree       | <a href="#">network</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**fp-redirect-group**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>fp-redirect-group</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">ingress qos network fp-redirect-group</a> |
| Tree       | <a href="#">fp-redirect-group</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**group-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Name of the forwarding plane queue group template   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">ingress qos network fp-redirect-group</a><br><a href="#">group-name</a> <i>reference</i> |
| Tree       | <a href="#">group-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos queue-group-templates</a> <a href="#">ingress queue-group</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**instance number**

|            |   |
|------------|---|
| Synopsis   | Instance of FP ingress queue group for the SDP binding  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">ingress qos</a> <a href="#">network fp-redirect-group</a> <i>instance number</i> |
| Tree       | <a href="#">instance</a>  |
| Range      | 1 to 65535  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**policy-name reference**

|            |   |
|------------|---|
| Synopsis   | Network policy ID   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">ingress qos</a> <a href="#">network policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos network</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**vc-label number****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Ingress MPLS VC label to send packets to the far end  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">ingress vc-label</a> <i>number</i> |
| Tree       | <a href="#">vc-label</a>  |
| Range      | 1 to 1048575  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**mld-snooping**

|          |   |
|----------|---|
| Synopsis | Enter the <b>mld-snooping</b> context   |
| Context  | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">mld-snooping</a> |

|            |                              |
|------------|------------------------------|
| Tree       | <a href="#">mld-snooping</a> |
| Introduced | 16.0.R1                      |
| Platforms  | All                          |

**fast-leave** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow IGMP fast leave processing   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">mld-snooping</a> <b>fast-leave</b> <i>boolean</i> |
| Tree       | <a href="#">fast-leave</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**import-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | Import policy that filters IGMP packets   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">mld-snooping</a> <b>import-policy</b> <i>reference</i> |
| Tree       | <a href="#">import-policy</a>   |
| Reference  | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**maximum-number-groups** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum groups allowed   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">mld-snooping</a> <b>maximum-number-groups</b> <i>number</i> |
| Tree       | <a href="#">maximum-number-groups</a>  |
| Range      | 1 to 16000   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**mrouter-port** *boolean*

|          |   |
|----------|---|
| Synopsis | Operate port as a multicast router port |
|----------|---|

|            |  |
|------------|--|
| Context    | <b>configure service vpls string mesh-sdp string mld-snooping mrouter-port boolean</b> |
| Tree       | <a href="#">mrouter-port</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **query-interval** *number*

|            |   |
|------------|---|
| Synopsis   | Time between two consecutive host-query messages  |
| Context    | <b>configure service vpls string mesh-sdp string mld-snooping query-interval number</b> |
| Tree       | <a href="#">query-interval</a>  |
| Range      | 2 to 1024   |
| Units      | seconds   |
| Default    | 125   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **query-last-member-interval** *number*

|            |   |
|------------|---|
| Synopsis   | Time between group-specific query messages  |
| Context    | <b>configure service vpls string mesh-sdp string mld-snooping query-last-member-interval number</b> |
| Tree       | <a href="#">query-last-member-interval</a>  |
| Range      | 1 to 50   |
| Units      | deciseconds   |
| Default    | 10  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **query-response-interval** *number*

|          |  |
|----------|--|
| Synopsis | Time to wait for a response to the host-query messages   |
| Context  | <b>configure service vpls string mesh-sdp string mld-snooping query-response-interval number</b> |
| Tree     | <a href="#">query-response-interval</a>  |
| Range    | 1 to 1023  |

---

|            |         |
|------------|---------|
| Units      | seconds |
| Default    | 10      |
| Introduced | 16.0.R1 |
| Platforms  | All     |

**robust-count** *number*

|            |   |
|------------|---|
| Synopsis   | Number of retries after expected message loss   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">mld-snooping</a> <b>robust-count</b> <i>number</i> |
| Tree       | <a href="#">robust-count</a>  |
| Range      | 2 to 7  |
| Default    | 2   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**router-alert-check** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable IP router alert check option  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">mld-snooping</a> <b>router-alert-check</b> <i>boolean</i> |
| Tree       | <a href="#">router-alert-check</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**send-queries** *boolean*

|            |  |
|------------|--|
| Synopsis   | Generate IGMP general queries  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">mld-snooping</a> <b>send-queries</b> <i>boolean</i> |
| Tree       | <a href="#">send-queries</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**static**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>static</b> context  |
| Context    | <b>configure service vpls string mesh-sdp string mld-snooping static</b> |
| Tree       | <b>static</b>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**group [group-address] string**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>group</b> list instance  |
| Context    | <b>configure service vpls string mesh-sdp string mld-snooping static group string</b> |
| Tree       | <b>group</b>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[group-address] string**

|            |   |
|------------|---|
| Synopsis   | Group address of multicast channel  |
| Context    | <b>configure service vpls string mesh-sdp string mld-snooping static group string</b> |
| Tree       | <b>group</b>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**source [source-address] string**

|            |   |
|------------|---|
| Synopsis   | Add a list entry for <b>source</b>  |
| Context    | <b>configure service vpls string mesh-sdp string mld-snooping static group string source string</b> |
| Tree       | <b>source</b>   |
| Notes      | The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .              |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[source-address]** *string*

|            |   |
|------------|---|
| Synopsis   | Source IP address   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">mld-snooping static group</a> <i>string</i> <a href="#">source</a> <i>string</i> |
| Tree       | <a href="#">source</a>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R2   |
| Platforms  | All   |

**starg**

|            |  |
|------------|--|
| Synopsis   | any source address (*,G)   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">mld-snooping static group</a> <i>string</i> <a href="#">starg</a> |
| Tree       | <a href="#">starg</a>  |
| Notes      | The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .   |
| Introduced | 16.0.R2  |
| Platforms  | All  |

**version** *keyword*

|            |  |
|------------|--|
| Synopsis   | Version of MLD running on the SAP or SDP   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">mld-snooping version</a> <i>keyword</i> |
| Tree       | <a href="#">version</a>  |
| Options    | 1, 2   |
| Default    | 2  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**mrp**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mrp</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">mrp</a> |
| Tree       | <a href="#">mrp</a>  |
| Introduced | 20.10.R1   |
| Platforms  | All  |



### **join-time** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum rate for attribute join messages sent on SDP   |
| Context    | <b>configure</b> <b>service vpls</b> <i>string</i> <b>mesh-sdp</b> <i>string</i> <b>mrp</b> <b>join-time</b> <i>number</i> |
| Tree       | <a href="#">join-time</a>  |
| Range      | 1 to 10  |
| Units      | deciseconds  |
| Default    | 2  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

### **leave-all-time** *number*

|            |   |
|------------|---|
| Synopsis   | Frequency of LeaveAll PDUs by LeaveAll state machine  |
| Context    | <b>configure</b> <b>service vpls</b> <i>string</i> <b>mesh-sdp</b> <i>string</i> <b>mrp</b> <b>leave-all-time</b> <i>number</i> |
| Tree       | <a href="#">leave-all-time</a>  |
| Range      | 60 to 300   |
| Units      | deciseconds   |
| Default    | 100   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

### **leave-time** *number*

|            |   |
|------------|---|
| Synopsis   | Time in LV state before transition to MT state  |
| Context    | <b>configure</b> <b>service vpls</b> <i>string</i> <b>mesh-sdp</b> <i>string</i> <b>mrp</b> <b>leave-time</b> <i>number</i> |
| Tree       | <a href="#">leave-time</a>  |
| Range      | 30 to 60  |
| Units      | deciseconds   |
| Default    | 30  |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**periodic-time** *number*

|            |   |
|------------|---|
| Synopsis   | Frequency of periodic events generated by state machine   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">mrp</a> <b>periodic-time</b> <i>number</i> |
| Tree       | <a href="#">periodic-time</a>   |
| Range      | 10 to 100   |
| Units      | deciseconds   |
| Default    | 10  |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**periodic-timer** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable the Periodic Transmission Timer  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">mrp</a> <b>periodic-timer</b> <i>boolean</i> |
| Tree       | <a href="#">periodic-timer</a>  |
| Default    | false   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**policy** *reference*

|            |   |
|------------|---|
| Synopsis   | MRP policy to control Group B-MAC attributes  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">mrp</a> <b>policy</b> <i>reference</i> |
| Tree       | <a href="#">policy</a>  |
| Reference  | <b>configure</b> <a href="#">service mrp</a> <b>policy</b> <i>string</i>  |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**pbb**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>pbb</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <b>pbb</b> |
| Tree       | <a href="#">pbb</a>   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

## fault-propagation

|            |  |
|------------|--|
| Synopsis   | Enter the <b>fault-propagation</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">pbb</a> <a href="#">fault-propagation</a> |
| Tree       | <a href="#">fault-propagation</a>  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

## backbone-mac-address [[address](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Add a list entry for <b>backbone-mac-address</b>  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">pbb</a> <a href="#">fault-propagation</a> <a href="#">backbone-mac-address</a> <i>string</i> |
| Tree       | <a href="#">backbone-mac-address</a>  |
| Introduced | 20.10.R1  |
| Platforms  | All   |

## [[address](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Backbone MAC address  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">pbb</a> <a href="#">fault-propagation</a> <a href="#">backbone-mac-address</a> <i>string</i> |
| Tree       | <a href="#">backbone-mac-address</a>  |
| Notes      | This element is part of a list key.   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

## backbone-mac-name [[name](#)] *reference*

|            |   |
|------------|---|
| Synopsis   | Add a list entry for <b>backbone-mac-name</b>   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">pbb</a> <a href="#">fault-propagation</a> <a href="#">backbone-mac-name</a> <i>reference</i> |
| Tree       | <a href="#">backbone-mac-name</a>   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**[name]** *reference*

|            |  |
|------------|--|
| Synopsis   | Backbone MAC address name  |
| Context    | <b>configure</b> <a href="#">service vpls string mesh-sdp string pbb fault-propagation backbone-mac-name reference</a> |
| Tree       | <a href="#">backbone-mac-name</a>  |
| Reference  | <b>configure</b> <a href="#">service pbb mac string</a>  |
| Notes      | This element is part of a list key.  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**vc-type** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Type of virtual circuit (VC) associated with the SDP binding; VPLS not supported     |
| Context    | <b>configure</b> <a href="#">service vpls string mesh-sdp string vc-type keyword</a> |
| Tree       | <a href="#">vc-type</a>  |
| Options    | ether, vlan  |
| Default    | ether  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**vlan-vc-tag** *number*

|            |   |
|------------|---|
| Synopsis   | SDP bind VC tag   |
| Context    | <b>configure</b> <a href="#">service vpls string mesh-sdp string vlan-vc-tag number</a> |
| Tree       | <a href="#">vlan-vc-tag</a>   |
| Range      | 0 to 4094   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## **mfib**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mfib</b> context             |
| Context    | <b>configure service vpls string mfib</b> |
| Tree       | <a href="#">mfib</a>                      |
| Introduced | 16.0.R1                                   |
| Platforms  | All                                       |

## **table**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>table</b> context                  |
| Context    | <b>configure service vpls string mfib table</b> |
| Tree       | <a href="#">table</a>                           |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## **high-wmark** *number*

|            |   |
|------------|---|
| Synopsis   | High watermark for the MFIB table                                 |
| Context    | <b>configure service vpls string mfib table high-wmark number</b> |
| Tree       | <a href="#">high-wmark</a>  |
| Range      | 0 to 100  |
| Default    | 95  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## **low-wmark** *number*

|            |  |
|------------|--|
| Synopsis   | Low watermark for the MFIB table                                 |
| Context    | <b>configure service vpls string mfib table low-wmark number</b> |
| Tree       | <a href="#">low-wmark</a>  |
| Range      | 0 to 100   |
| Default    | 90   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **size number**

|            |   |
|------------|---|
| Synopsis   | Maximum SG entries in the MFIB                              |
| Context    | <b>configure service vpls string mfib table size number</b> |
| Tree       | <a href="#">size</a>  |
| Range      | 1 to 40959  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **mld-snooping**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mld-snooping</b> context             |
| Context    | <b>configure service vpls string mld-snooping</b> |
| Tree       | <a href="#">mld-snooping</a>                      |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **admin-state keyword**

|            |   |
|------------|---|
| Synopsis   | Administrative state of snooping                                      |
| Context    | <b>configure service vpls string mld-snooping admin-state keyword</b> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **evpn-proxy**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>evpn-proxy</b> context                          |
| Context    | <b>configure service vpls string mld-snooping evpn-proxy</b> |
| Tree       | <a href="#">evpn-proxy</a>                                   |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of EVPN proxy  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">evpn-proxy</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**mvr**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mvr</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mld-snooping</a> <b>mvr</b> |
| Tree       | <a href="#">mvr</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of MVR   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mld-snooping</a> <b>mvr</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mld-snooping</a> <b>mvr</b> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |

Platforms All

### **group-policy** *string*

Synopsis Policy that applies MVR  
 Context **configure** [service](#) [vpls](#) *string* [mld-snooping](#) [mvr](#) [group-policy](#) *string*  
 Tree [group-policy](#)  
 String Length 1 to 32  
 Introduced 16.0.R1  
 Platforms All

### **query-interval** *number*

Synopsis Time between two consecutive host-query messages  
 Context **configure** [service](#) [vpls](#) *string* [mld-snooping](#) [query-interval](#) *number*  
 Tree [query-interval](#)  
 Range 1 to 65535  
 Units seconds  
 Default 125  
 Introduced 16.0.R1  
 Platforms All

### **query-source-address** (*keyword* | *ipv6-address*)

Synopsis Source IP address used in MLD queries  
 Context **configure** [service](#) [vpls](#) *string* [mld-snooping](#) [query-source-address](#) (*keyword* | *ipv6-address*)  
 Tree [query-source-address](#)  
 Options system  
 Default system  
 Introduced 16.0.R1  
 Platforms All

### **report-source-address** *string*

Synopsis Source IP address used when generating MLD reports



---

|            |  |
|------------|--|
| Context    | <b>configure service vpls string mld-snooping report-source-address string</b> |
| Tree       | <b>report-source-address</b>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**robust-count** *number*

|            |   |
|------------|---|
| Synopsis   | Number of retries after expected message loss                         |
| Context    | <b>configure service vpls string mld-snooping robust-count number</b> |
| Tree       | <b>robust-count</b>   |
| Range      | 1 to 255  |
| Default    | 2   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**mrp**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mrp</b> context             |
| Context    | <b>configure service vpls string mrp</b> |
| Tree       | <b>mrp</b>                               |
| Introduced | 20.10.R1                                 |
| Platforms  | All                                      |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of MRP                                  |
| Context    | <b>configure service vpls string mrp admin-state keyword</b> |
| Tree       | <b>admin-state</b>   |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

## mmp

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mmp</b> context                 |
| Context    | <b>configure service vpls string mmp mmp</b> |
| Tree       | <a href="#">mmp</a>                          |
| Introduced | 20.10.R1                                     |
| Platforms  | All  |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of MMRP                                     |
| Context    | <b>configure service vpls string mmp mmp admin-state keyword</b> |
| Tree       | <a href="#">admin-state</a>                                      |
| Options    | enable, disable  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

## attribute-table

|            |  |
|------------|--|
| Synopsis   | Enter the <b>attribute-table</b> context                     |
| Context    | <b>configure service vpls string mmp mmp attribute-table</b> |
| Tree       | <a href="#">attribute-table</a>                              |
| Introduced | 20.10.R1   |
| Platforms  | All  |

## high-wmark *number*

|            |  |
|------------|--|
| Synopsis   | High watermark for the MMRP attribute table                                    |
| Context    | <b>configure service vpls string mmp mmp attribute-table high-wmark number</b> |
| Tree       | <a href="#">high-wmark</a>   |
| Range      | 0 to 100   |
| Default    | 95   |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**low-wmark** *number*

|            |  |
|------------|--|
| Synopsis   | Low watermark for the MMRP attribute table   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mrp mmrp attribute-table</a> <a href="#">low-wmark</a> <i>number</i> |
| Tree       | <a href="#">low-wmark</a>  |
| Range      | 0 to 100   |
| Default    | 90   |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**size** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum number of attributes accepted by B-VPLS   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mrp mmrp attribute-table</a> <a href="#">size</a> <i>number</i> |
| Tree       | <a href="#">size</a>  |
| Range      | 1 to 8192   |
| Default    | 2048  |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**end-station-only** *boolean*

|            |  |
|------------|--|
| Synopsis   | Prevent generation or processing of MMRP messages  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mrp mmrp</a> <a href="#">end-station-only</a> <i>boolean</i> |
| Tree       | <a href="#">end-station-only</a>   |
| Default    | false  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**flood-time** *number*

|            |   |
|------------|---|
| Synopsis   | Time when traffic is flooded after status change  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mrp mmrp</a> <a href="#">flood-time</a> <i>number</i> |
| Tree       | <a href="#">flood-time</a>  |
| Range      | 3 to 600  |
| Introduced | 20.10.R1  |

Platforms All

### **multicast-info-policy** *reference*

Synopsis Multicast information policy  
 Context **configure** [service vpls string multicast-info-policy reference](#)  
 Tree [multicast-info-policy](#)  
 Reference **configure** [multicast-management multicast-info-policy string](#)  
 Introduced 16.0.R1  
 Platforms All

### **pbb**

Synopsis Enter the **pbb** context  
 Context **configure** [service vpls string pbb](#)  
 Tree [pbb](#)  
 Introduced 16.0.R1  
 Platforms All

### **backbone-vpls** [[backbone-vpls-service-name](#)] *reference*

Synopsis Enter the **backbone-vpls** list instance  
 Context **configure** [service vpls string pbb backbone-vpls reference](#)  
 Tree [backbone-vpls](#)  
 Max. 1  
 Instances  
 Introduced 16.0.R1  
 Platforms All

### **[backbone-vpls-service-name]** *reference*

Synopsis Service name  
 Context **configure** [service vpls string pbb backbone-vpls reference](#)  
 Tree [backbone-vpls](#)  
 Reference **configure** [service vpls string](#)

|            |                                     |
|------------|-------------------------------------|
| Notes      | This element is part of a list key. |
| Introduced | 16.0.R1                             |
| Platforms  | All                                 |

## **fdb**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>fdb</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference fdb</a> |
| Tree       | <a href="#">fdb</a>  |
| Introduced | 20.2.R1  |
| Platforms  | All  |

## **protected-src-mac-violation-action** *keyword*

|            |   |
|------------|---|
| Synopsis   | Action taken upon a relearn request for protected MAC   |
| Context    | <b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference fdb protected-src-mac-violation-action keyword</a> |
| Tree       | <a href="#">protected-src-mac-violation-action</a>  |
| Options    | discard   |
| Introduced | 20.5.R1   |
| Platforms  | All   |

## **igmp-snooping**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>igmp-snooping</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference igmp-snooping</a> |
| Tree       | <a href="#">igmp-snooping</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## **mrouter-destination** [[mac-reference](#)] *reference*

|          |  |
|----------|--|
| Synopsis | Add a list entry for <b>mrouter-destination</b>  |
| Context  | <b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference igmp-snooping mrouter-destination reference</a> |
| Tree     | <a href="#">mrouter-destination</a>  |

Introduced 16.0.R1  
 Platforms All

### [**mac-reference**] *reference*

Synopsis Mac name reference  
 Context **configure** [service](#) [vpls](#) *string* [pbb](#) [backbone-vpls](#) *reference* [igmp-snooping](#) [mrouter-destination](#) *reference*  
 Tree [mrouter-destination](#)  
 Reference **configure** [service](#) [pbb](#) [mac](#) *string*  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **isid** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Backbone VPLS ISID  
 Context **configure** [service](#) [vpls](#) *string* [pbb](#) [backbone-vpls](#) *reference* **isid** *number*  
 Tree [isid](#)  
 Range 0 to 16777215  
 Notes This element is mandatory.  
 Introduced 16.0.R1  
 Platforms All

### **mesh-sdp** [[sdp-bind-id](#)] *reference*

Synopsis Enter the **mesh-sdp** list instance  
 Context **configure** [service](#) [vpls](#) *string* [pbb](#) [backbone-vpls](#) *reference* [mesh-sdp](#) *reference*  
 Tree [mesh-sdp](#)  
 Introduced 16.0.R1  
 Platforms All

**[sdp-bind-id] reference**

|            |   |
|------------|---|
| Synopsis   | Backbone VPLS SDP Binding ID  |
| Context    | <b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference mesh-sdp reference</a> |
| Tree       | <a href="#">mesh-sdp</a>  |
| Reference  | <b>configure</b> <a href="#">service vpls string mesh-sdp string</a>                                |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**igmp-snooping**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>igmp-snooping</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference mesh-sdp reference igmp-snooping</a> |
| Tree       | <a href="#">igmp-snooping</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**mrouter-port boolean**

|            |  |
|------------|--|
| Synopsis   | Operate port as a multicast router port  |
| Context    | <b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference mesh-sdp reference igmp-snooping mrouter-port boolean</a> |
| Tree       | <a href="#">mrouter-port</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**mld-snooping**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mld-snooping</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference mesh-sdp reference mld-snooping</a> |
| Tree       | <a href="#">mld-snooping</a>   |
| Introduced | 16.0.R1  |

Platforms All

### **mrouter-port** *boolean*

Synopsis Operate port as a multicast router port

Context **configure** [service vpls string pbb backbone-vpls reference mesh-sdp reference mld-snooping mrouter-port boolean](#)

Tree [mrouter-port](#)

Default false

Introduced 16.0.R1

Platforms All

### **mld-snooping**

Synopsis Enter the **mld-snooping** context

Context **configure** [service vpls string pbb backbone-vpls reference mld-snooping](#)

Tree [mld-snooping](#)

Introduced 16.0.R1

Platforms All

### **mrouter-destination** [[mac-reference](#)] *reference*

Synopsis Add a list entry for **mrouter-destination**

Context **configure** [service vpls string pbb backbone-vpls reference mld-snooping mrouter-destination reference](#)

Tree [mrouter-destination](#)

Introduced 16.0.R1

Platforms All

### [[mac-reference](#)] *reference*

Synopsis Mac name reference

Context **configure** [service vpls string pbb backbone-vpls reference mld-snooping mrouter-destination reference](#)

Tree [mrouter-destination](#)

Reference **configure** [service pbb mac string](#)



|            |                                     |
|------------|-------------------------------------|
| Notes      | This element is part of a list key. |
| Introduced | 16.0.R1                             |
| Platforms  | All                                 |

### **sap** [[sap-id](#)] *reference*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>sap</b> list instance   |
| Context    | <b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference sap reference</a> |
| Tree       | <a href="#">sap</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **[sap-id]** *reference*

|            |  |
|------------|--|
| Synopsis   | Backbone VPLS SAP  |
| Context    | <b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference sap reference</a> |
| Tree       | <a href="#">sap</a>  |
| Reference  | <b>configure</b> <a href="#">service vpls string sap string</a>                                |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **igmp-snooping**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>igmp-snooping</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference sap reference igmp-snooping</a> |
| Tree       | <a href="#">igmp-snooping</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **mrouter-port** *boolean*

|          |   |
|----------|---|
| Synopsis | Operate port as a multicast router port   |
| Context  | <b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference sap reference igmp-snooping mrouter-port boolean</a> |

|            |                              |
|------------|------------------------------|
| Tree       | <a href="#">mrouter-port</a> |
| Default    | false                        |
| Introduced | 16.0.R1                      |
| Platforms  | All                          |

## mld-snooping

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mld-snooping</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference sap reference mld-snooping</a> |
| Tree       | <a href="#">mld-snooping</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## mrouter-port *boolean*

|            |  |
|------------|--|
| Synopsis   | Operate port as a multicast router port  |
| Context    | <b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference sap reference mld-snooping mrouter-port boolean</a> |
| Tree       | <a href="#">mrouter-port</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## spoke-sdp [[sdp-bind-id](#)] *reference*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>spoke-sdp</b> list instance   |
| Context    | <b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference spoke-sdp reference</a> |
| Tree       | <a href="#">spoke-sdp</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## [[sdp-bind-id](#)] *reference*

|          |  |
|----------|--|
| Synopsis | Backbone VPLS SDP Binding ID   |
| Context  | <b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference spoke-sdp reference</a> |
| Tree     | <a href="#">spoke-sdp</a>  |

|            |   |
|------------|---|
| Reference  | <b>configure</b> <a href="#">service vpls string spoke-sdp string</a> |
| Notes      | This element is part of a list key.                                   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## igmp-snooping

|            |  |
|------------|--|
| Synopsis   | Enter the <b>igmp-snooping</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference spoke-sdp reference igmp-snooping</a> |
| Tree       | <a href="#">igmp-snooping</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## mrouter-port *boolean*

|            |   |
|------------|---|
| Synopsis   | Operate port as a multicast router port   |
| Context    | <b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference spoke-sdp reference igmp-snooping mrouter-port boolean</a> |
| Tree       | <a href="#">mrouter-port</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## mld-snooping

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mld-snooping</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference spoke-sdp reference mld-snooping</a> |
| Tree       | <a href="#">mld-snooping</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## mrouter-port *boolean*

|          |   |
|----------|---|
| Synopsis | Operate port as a multicast router port |
|----------|---|

|            |  |
|------------|--|
| Context    | <b>configure service vpls string pbb backbone-vpls reference spoke-sdp reference mld-snooping mrouter-port boolean</b> |
| Tree       | <a href="#">mrouter-port</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **force-qtag-forwarding boolean**

|            |  |
|------------|--|
| Synopsis   | Add an IEEE 802.1q tag after C-MAC addresses PBB header                |
| Context    | <b>configure service vpls string pbb force-qtag-forwarding boolean</b> |
| Tree       | <a href="#">force-qtag-forwarding</a>                                  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **i-vpls-mac-flush**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>i-vpls-mac-flush</b> context                 |
| Context    | <b>configure service vpls string pbb i-vpls-mac-flush</b> |
| Tree       | <a href="#">i-vpls-mac-flush</a>                          |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **bgp-evpn**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>bgp-evpn</b> context                                  |
| Context    | <b>configure service vpls string pbb i-vpls-mac-flush bgp-evpn</b> |
| Tree       | <a href="#">bgp-evpn</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **send-to-bvpls boolean**

|          |  |
|----------|--|
| Synopsis | Send b-VPLS EVPN flush   |
| Context  | <b>configure service vpls string pbb i-vpls-mac-flush bgp-evpn send-to-bvpls boolean</b> |

|            |                               |
|------------|-------------------------------|
| Tree       | <a href="#">send-to-bvpls</a> |
| Default    | false                         |
| Introduced | 16.0.R1                       |
| Platforms  | All                           |

## tldp

|            |  |
|------------|--|
| Synopsis   | Enter the <b>tldp</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string pbb i-vpls-mac-flush tldp</a> |
| Tree       | <a href="#">tldp</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## propagate-from-bvpls *boolean*

|            |   |
|------------|---|
| Synopsis   | Propagate MAC flush message from B-VPLS into local I-VPLS   |
| Context    | <b>configure</b> <a href="#">service vpls string pbb i-vpls-mac-flush tldp propagate-from-bvpls boolean</a> |
| Tree       | <a href="#">propagate-from-bvpls</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## send-on-bvpls-failure *boolean*

|            |  |
|------------|--|
| Synopsis   | Send negative flush message (flush-all-from-me) on B-VPLS failure  |
| Context    | <b>configure</b> <a href="#">service vpls string pbb i-vpls-mac-flush tldp send-on-bvpls-failure boolean</a> |
| Tree       | <a href="#">send-on-bvpls-failure</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## send-to-bvpls

|          |  |
|----------|--|
| Synopsis | Enter the <b>send-to-bvpls</b> context   |
| Context  | <b>configure</b> <a href="#">service vpls string pbb i-vpls-mac-flush tldp send-to-bvpls</a> |

|            |                               |
|------------|-------------------------------|
| Tree       | <a href="#">send-to-bvpls</a> |
| Introduced | 16.0.R1                       |
| Platforms  | All                           |

**all-but-mine** *boolean*

|            |   |
|------------|---|
| Synopsis   | Generate LDP MAC withdraw message to b-VPLS   |
| Context    | <b>configure</b> <a href="#">service vpls string pbb i-vpls-mac-flush tldp send-to-bvpls all-but-mine</a><br><i>boolean</i> |
| Tree       | <a href="#">all-but-mine</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**all-from-me** *boolean*

|            |  |
|------------|--|
| Synopsis   | Generate LDP MAC withdraw all from me message to b-VPLS  |
| Context    | <b>configure</b> <a href="#">service vpls string pbb i-vpls-mac-flush tldp send-to-bvpls all-from-me</a><br><i>boolean</i> |
| Tree       | <a href="#">all-from-me</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**mac-notification**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mac-notification</b> context                                 |
| Context    | <b>configure</b> <a href="#">service vpls string pbb mac-notification</a> |
| Tree       | <a href="#">mac-notification</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**admin-state** *keyword*

|          |   |
|----------|---|
| Synopsis | Administrative state of MAC notification messages   |
| Context  | <b>configure</b> <a href="#">service vpls string pbb mac-notification admin-state keyword</a> |

|            |                             |
|------------|-----------------------------|
| Tree       | <a href="#">admin-state</a> |
| Options    | enable, disable             |
| Default    | disable                     |
| Introduced | 16.0.R1                     |
| Platforms  | All                         |

**count** *number*

|            |  |
|------------|--|
| Synopsis   | MAC notification messages count  |
| Context    | <b>configure</b> <a href="#">service vpls string pbb mac-notification count number</a> |
| Tree       | <a href="#">count</a>  |
| Range      | 1 to 10  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**interval** *number*

|            |   |
|------------|---|
| Synopsis   | Interval for MAC notification messages  |
| Context    | <b>configure</b> <a href="#">service vpls string pbb mac-notification interval number</a> |
| Tree       | <a href="#">interval</a>  |
| Range      | 1 to 100  |
| Units      | deciseconds   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**renotify** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Re-notify interval for MAC-notification messages  |
| Context    | <b>configure</b> <a href="#">service vpls string pbb mac-notification renotify (number   keyword)</a> |
| Tree       | <a href="#">renotify</a>  |
| Range      | 240 to 840  |
| Units      | seconds   |
| Options    | none  |
| Default    | none  |
| Introduced | 16.0.R1   |

Platforms All

### source-bmac

Synopsis Enter the **source-bmac** context  
 Context **configure service vpls string pbb source-bmac**  
 Tree [source-bmac](#)  
 Introduced 16.0.R1  
 Platforms All

### address *string*

Synopsis Base source B-MAC address for the B-VPLS  
 Context **configure service vpls string pbb source-bmac address string**  
 Tree [address](#)  
 Introduced 16.0.R1  
 Platforms All

### use-es-bmac-lsb *boolean*

Synopsis Use LSB from Ethernet-segment backbone MAC  
 Context **configure service vpls string pbb source-bmac use-es-bmac-lsb boolean**  
 Tree [use-es-bmac-lsb](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### use-mclag-bmac-lsb *boolean*

Synopsis Use MC LAG backbone MAC LSB  
 Context **configure service vpls string pbb source-bmac use-mclag-bmac-lsb boolean**  
 Tree [use-mclag-bmac-lsb](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All



**pbb-type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | PBB VPLS type   |
| Context    | <b>configure</b> <a href="#">service vpls string pbb-type keyword</a> |
| Tree       | <a href="#">pbb-type</a>  |
| Options    | b-vpls, i-vpls  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**pim-snooping**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>pim-snooping</b> context                            |
| Context    | <b>configure</b> <a href="#">service vpls string pim-snooping</a> |
| Tree       | <a href="#">pim-snooping</a>                                      |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**group-policy** *string*

|                |   |
|----------------|---|
| Synopsis       | Group policy name   |
| Context        | <b>configure</b> <a href="#">service vpls string pim-snooping group-policy string</a> |
| Tree           | <a href="#">group-policy</a>  |
| String Length  | 1 to 255  |
| Max. Instances | 5   |
| Notes          | This element is ordered by the user.  |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

**hold-time** *number*

|          |  |
|----------|--|
| Synopsis | Duration that allows the PIM-snooping switch to snoop all the PIM states in the VPLS |
|----------|--|

---

|            |  |
|------------|--|
| Context    | <b>configure service vpls string pim-snooping hold-time number</b> |
| Tree       | <b>hold-time</b>   |
| Range      | 0 to 300   |
| Units      | seconds  |
| Default    | 90   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## ipv4

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv4</b> context                          |
| Context    | <b>configure service vpls string pim-snooping ipv4</b> |
| Tree       | <b>ipv4</b>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## admin-state keyword

|            |  |
|------------|--|
| Synopsis   | Administrative state of snooping for multicast traffic                     |
| Context    | <b>configure service vpls string pim-snooping ipv4 admin-state keyword</b> |
| Tree       | <b>admin-state</b>   |
| Options    | enable, disable  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## ipv6

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv6</b> context                          |
| Context    | <b>configure service vpls string pim-snooping ipv6</b> |
| Tree       | <b>ipv6</b>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of snooping for multicast traffic  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">pim-snooping ipv6</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**provider-tunnel**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>provider-tunnel</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">provider-tunnel</a> |
| Tree       | <a href="#">provider-tunnel</a>   |
| Introduced | 19.7.R1   |
| Platforms  | All   |

**inclusive****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enter the <b>inclusive</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">provider-tunnel</a> <b>inclusive</b> |
| Tree       | <a href="#">inclusive</a>  |
| Introduced | 19.7.R1  |
| Platforms  | All  |

**admin-state** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | Administrative state of P2MP LSP as the I-PMSI   |
| Context  | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">provider-tunnel</a> <b>inclusive</b> <b>admin-state</b> <i>keyword</i> |
| Tree     | <a href="#">admin-state</a>  |

|            |                 |
|------------|-----------------|
| Options    | enable, disable |
| Default    | disable         |
| Introduced | 19.7.R1         |
| Platforms  | All             |

### **data-delay-interval** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | I-PMSI data delay timer   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">provider-tunnel inclusive data-delay-interval</a> <i>number</i> |
| Tree       | <a href="#">data-delay-interval</a>   |
| Range      | 3 to 180  |
| Units      | seconds   |
| Default    | 15  |
| Introduced | 19.7.R1   |
| Platforms  | All   |

### **mldp**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enable/Disable MLDP  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">provider-tunnel inclusive mldp</a> |
| Tree       | <a href="#">mldp</a>   |
| Notes      | The following elements are part of a choice: <b>mldp</b> or <b>rsvp</b> .                                  |
| Introduced | 19.7.R1  |
| Platforms  | All  |

**owner** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Configure provider-tunnel owner   |
| Context    | <b>configure</b> <i>service vpls string provider-tunnel inclusive owner keyword</i> |
| Tree       | <i>owner</i>  |
| Options    | bgp-ad, bgp-vpls, bgp-evpn-mpls   |
| Introduced | 19.7.R1   |
| Platforms  | All   |

**root-and-leaf** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Configure whether the provider tunnel acts as a leaf or both a root and leaf                |
| Context    | <b>configure</b> <i>service vpls string provider-tunnel inclusive root-and-leaf boolean</i> |
| Tree       | <i>root-and-leaf</i>  |
| Default    | false   |
| Introduced | 19.7.R1   |
| Platforms  | All   |

**rsvp****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enable the <b>rsvp</b> context   |
| Context    | <b>configure</b> <i>service vpls string provider-tunnel inclusive rsvp</i> |
| Tree       | <i>rsvp</i>  |
| Notes      | The following elements are part of a choice: <b>mldp</b> or <b>rsvp</b> .  |
| Introduced | 19.7.R1  |
| Platforms  | All  |

## Isp-template *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Configure LSP template name  |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">provider-tunnel inclusive rsvp</a> <a href="#">Isp-template reference</a> |
| Tree       | <a href="#">Isp-template</a>   |
| Reference  | <b>configure</b> <a href="#">router string mpls</a> <a href="#">Isp-template string</a>  |
| Introduced | 19.7.R1  |
| Platforms  | All  |

## proxy-arp

|            |  |
|------------|--|
| Synopsis   | Enable the <b>proxy-arp</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">proxy-arp</a> |
| Tree       | <a href="#">proxy-arp</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the proxy  |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">proxy-arp admin-state keyword</a> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## age-time (*number* | *keyword*)

|          |  |
|----------|--|
| Synopsis | Aging timer for proxy entries, where entries are flushed upon timer expiry                                 |
| Context  | <b>configure</b> <a href="#">service vpls string</a> <a href="#">proxy-arp age-time (number   keyword)</a> |
| Tree     | <a href="#">age-time</a>   |

|            |             |
|------------|-------------|
| Range      | 60 to 86400 |
| Units      | seconds     |
| Options    | never       |
| Default    | never       |
| Introduced | 16.0.R1     |
| Platforms  | All         |

## duplicate-detect

|            |   |
|------------|---|
| Synopsis   | Enter the <b>duplicate-detect</b> context                                       |
| Context    | <b>configure</b> <a href="#">service vpls string proxy-arp duplicate-detect</a> |
| Tree       | <a href="#">duplicate-detect</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## anti-spoof-mac *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | MAC address to replace the proxy-ARP/ND offending entry's MAC   |
| Context    | <b>configure</b> <a href="#">service vpls string proxy-arp duplicate-detect anti-spoof-mac string</a> |
| Tree       | <a href="#">anti-spoof-mac</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## hold-down-time (*number* | *keyword*)

|          |   |
|----------|---|
| Synopsis | Hold down time for a duplicate entry  |
| Context  | <b>configure</b> <a href="#">service vpls string proxy-arp duplicate-detect hold-down-time (<i>number</i>   <i>keyword</i>)</a> |
| Tree     | <a href="#">hold-down-time</a>  |
| Range    | 2 to 60   |
| Units    | minutes   |
| Options  | max   |

|            |         |
|------------|---------|
| Default    | 9       |
| Introduced | 16.0.R1 |
| Platforms  | All     |

**num-moves** *number*

|            |  |
|------------|--|
| Synopsis   | Number of moves required to declare a duplicate entry  |
| Context    | <b>configure</b> <a href="#">service vpls string proxy-arp duplicate-detect num-moves number</a> |
| Tree       | <a href="#">num-moves</a>  |
| Range      | 3 to 10  |
| Default    | 5  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**static-blackhole** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Consider anti-spoof MAC as black-hole static MAC in FDB  |
| Context    | <b>configure</b> <a href="#">service vpls string proxy-arp duplicate-detect static-blackhole boolean</a> |
| Tree       | <a href="#">static-blackhole</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**window** *number*

|            |   |
|------------|---|
| Synopsis   | Time to monitor the MAC address in the anti-spoofing mechanism                                |
| Context    | <b>configure</b> <a href="#">service vpls string proxy-arp duplicate-detect window number</a> |
| Tree       | <a href="#">window</a>  |
| Range      | 1 to 15   |
| Units      | minutes   |
| Default    | 3   |
| Introduced | 16.0.R1   |



Platforms All

## dynamic-arp

Synopsis Enter the **dynamic-arp** context  
 Context **configure** [service vpls string proxy-arp dynamic-arp](#)  
 Tree [dynamic-arp](#)  
 Introduced 16.0.R1  
 Platforms All

## ip-address [[ipv4-address](#)] *string*

Synopsis Enter the **ip-address** list instance  
 Context **configure** [service vpls string proxy-arp dynamic-arp ip-address string](#)  
 Tree [ip-address](#)  
 Introduced 16.0.R1  
 Platforms All

## [\[ipv4-address\]](#) *string*

Synopsis Proxy ARP IPv4 address  
 Context **configure** [service vpls string proxy-arp dynamic-arp ip-address string](#)  
 Tree [ip-address](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

## mac-list *reference*

Synopsis MAC list for the dynamic entry  
 Context **configure** [service vpls string proxy-arp dynamic-arp ip-address string mac-list reference](#)  
 Tree [mac-list](#)  
 Reference **configure** [service proxy-arp-nd mac-list list string](#)  
 Introduced 16.0.R1  
 Platforms All

**resolve-retry-time** *number*

|            |  |
|------------|--|
| Synopsis   | Frequency at which the resolve messages are sent   |
| Context    | <b>configure</b> <a href="#">service vpls string proxy-arp dynamic-arp ip-address string resolve-retry-time number</a> |
| Tree       | <a href="#">resolve-retry-time</a>   |
| Range      | 1 to 60  |
| Units      | minutes  |
| Default    | 5  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**dynamic-populate** *boolean*

|            |   |
|------------|---|
| Synopsis   | Populate proxy ARP entries from snooped GARP/ARP/ND messages on SAPs/SDP-bindings       |
| Context    | <b>configure</b> <a href="#">service vpls string proxy-arp dynamic-populate boolean</a> |
| Tree       | <a href="#">dynamic-populate</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**evpn**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>evpn</b> context                                       |
| Context    | <b>configure</b> <a href="#">service vpls string proxy-arp evpn</a> |
| Tree       | <a href="#">evpn</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**flood**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>flood</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string proxy-arp evpn flood</a> |
| Tree       | <a href="#">flood</a>   |
| Introduced | 16.0.R1   |

Platforms All

### **gratuitous-arp** *boolean*

Synopsis Flood GARP-requests/GARP-replies to the EVPN  
 Context **configure** [service vpls string proxy-arp evpn flood gratuitous-arp boolean](#)  
 Tree [gratuitous-arp](#)  
 Default true  
 Introduced 16.0.R1  
 Platforms All

### **unknown-arp-req** *boolean*

Synopsis Flood ARP-requests (with source squelching) if there is no active proxy-ARP entry for requested IP  
 Context **configure** [service vpls string proxy-arp evpn flood unknown-arp-req boolean](#)  
 Tree [unknown-arp-req](#)  
 Default true  
 Introduced 16.0.R1  
 Platforms All

### **route-tag** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Route tag used on export policies to match MAC/IP routes generated by proxy-ARP or proxy-ND module  
 Context **configure** [service vpls string proxy-arp evpn route-tag number](#)  
 Tree [route-tag](#)  
 Range 0 | 1 to 255  
 Default 0  
 Introduced 16.0.R1  
 Platforms All

**process-arp-probes** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable replies to DAD ARP probes  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">proxy-arp</a> <a href="#">process-arp-probes</a> <i>boolean</i> |
| Tree       | <a href="#">process-arp-probes</a>  |
| Default    | true  |
| Introduced | 22.7.R1   |
| Platforms  | All   |

**send-refresh** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Time at which to send a refresh message   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">proxy-arp</a> <a href="#">send-refresh</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">send-refresh</a>  |
| Range      | 120 to 86400  |
| Options    | never   |
| Default    | never   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**static-arp**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>static-arp</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">proxy-arp</a> <a href="#">static-arp</a> |
| Tree       | <a href="#">static-arp</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**ip-address** [[ipv4-address](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ip-address</b> list instance   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">proxy-arp</a> <a href="#">static-arp</a> <a href="#">ip-address</a> <i>string</i> |
| Tree       | <a href="#">ip-address</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[ipv4-address] string**

|            |   |
|------------|---|
| Synopsis   | Proxy ARP IPv4 address  |
| Context    | <b>configure service vpls string proxy-arp static-arp ip-address string</b> |
| Tree       | <a href="#">ip-address</a>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**mac string**

|            |  |
|------------|--|
| Synopsis   | Proxy ARP MAC address for static entry   |
| Context    | <b>configure service vpls string proxy-arp static-arp ip-address string mac string</b> |
| Tree       | <a href="#">mac</a>  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**table-size number**

|            |   |
|------------|---|
| Synopsis   | Maximum number of learned and static entries allowed in the proxy table of this service |
| Context    | <b>configure service vpls string proxy-arp table-size number</b>                        |
| Tree       | <a href="#">table-size</a>  |
| Range      | 1 to 16383  |
| Default    | 250   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**proxy-nd**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>proxy-nd</b> context            |
| Context    | <b>configure service vpls string proxy-nd</b> |
| Tree       | <a href="#">proxy-nd</a>                      |
| Introduced | 16.0.R1                                       |
| Platforms  | All   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the proxy                                 |
| Context    | <b>configure service vpls string proxy-nd admin-state keyword</b> |
| Tree       | <a href="#">admin-state</a>                                       |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**age-time** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Aging timer for proxy entries, where entries are flushed upon timer expiry |
| Context    | <b>configure service vpls string proxy-nd age-time (number   keyword)</b>  |
| Tree       | <a href="#">age-time</a>   |
| Range      | 60 to 86400  |
| Units      | seconds  |
| Options    | never  |
| Default    | never  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**duplicate-detect**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>duplicate-detect</b> context                      |
| Context    | <b>configure service vpls string proxy-nd duplicate-detect</b> |
| Tree       | <a href="#">duplicate-detect</a>                               |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**anti-spoof-mac** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | MAC address to replace the proxy-ARP/ND offending entry's MAC                        |
| Context    | <b>configure service vpls string proxy-nd duplicate-detect anti-spoof-mac string</b> |
| Tree       | <a href="#">anti-spoof-mac</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **hold-down-time** (*number | keyword*)

|            |   |
|------------|---|
| Synopsis   | Hold down time for a duplicate entry  |
| Context    | <b>configure service vpls string proxy-nd duplicate-detect hold-down-time (<i>number   keyword</i>)</b> |
| Tree       | <a href="#">hold-down-time</a>  |
| Range      | 2 to 60   |
| Units      | minutes   |
| Options    | max   |
| Default    | 9   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **num-moves** *number*

|            |  |
|------------|--|
| Synopsis   | Number of moves required to declare a duplicate entry                                  |
| Context    | <b>configure service vpls string proxy-nd duplicate-detect num-moves <i>number</i></b> |
| Tree       | <a href="#">num-moves</a>  |
| Range      | 3 to 10  |
| Default    | 5  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **static-blackhole** *boolean*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Consider anti-spoof MAC as black-hole static MAC in FDB |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure service vpls string proxy-nd duplicate-detect static-blackhole boolean</b> |
| Tree       | <a href="#">static-blackhole</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **window number**

|            |  |
|------------|--|
| Synopsis   | Time to monitor the MAC address in the anti-spoofing mechanism               |
| Context    | <b>configure service vpls string proxy-nd duplicate-detect window number</b> |
| Tree       | <a href="#">window</a>   |
| Range      | 1 to 15  |
| Units      | minutes  |
| Default    | 3  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **dynamic-neighbor**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>dynamic-neighbor</b> context                      |
| Context    | <b>configure service vpls string proxy-nd dynamic-neighbor</b> |
| Tree       | <a href="#">dynamic-neighbor</a>                               |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **ip-address [ipv6-address] string**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ip-address</b> list instance  |
| Context    | <b>configure service vpls string proxy-nd dynamic-neighbor ip-address string</b> |
| Tree       | <a href="#">ip-address</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |



**[ipv6-address] string**

|            |  |
|------------|--|
| Synopsis   | Proxy ND IPv6 address  |
| Context    | <b>configure</b> <a href="#">service vpls string proxy-nd dynamic-neighbor ip-address string</a> |
| Tree       | <a href="#">ip-address</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**mac-list reference**

|            |   |
|------------|---|
| Synopsis   | MAC list for the dynamic entry  |
| Context    | <b>configure</b> <a href="#">service vpls string proxy-nd dynamic-neighbor ip-address string mac-list reference</a> |
| Tree       | <a href="#">mac-list</a>  |
| Reference  | <b>configure</b> <a href="#">service proxy-arp-nd mac-list list string</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**resolve-retry-time number**

|            |  |
|------------|--|
| Synopsis   | Frequency at which the resolve messages are sent   |
| Context    | <b>configure</b> <a href="#">service vpls string proxy-nd dynamic-neighbor ip-address string resolve-retry-time number</a> |
| Tree       | <a href="#">resolve-retry-time</a>   |
| Range      | 1 to 60  |
| Units      | minutes  |
| Default    | 5  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**dynamic-populate boolean**

|          |  |
|----------|--|
| Synopsis | Populate proxy ARP entries from snooped GARP/ARP/ND messages on SAPs/SDP-bindings      |
| Context  | <b>configure</b> <a href="#">service vpls string proxy-nd dynamic-populate boolean</a> |
| Tree     | <a href="#">dynamic-populate</a>   |

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

## evpn

|            |  |
|------------|--|
| Synopsis   | Enter the <b>evpn</b> context                                      |
| Context    | <b>configure</b> <a href="#">service vpls string proxy-nd evpn</a> |
| Tree       | <a href="#">evpn</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## advertise-neighbor-type *keyword*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Advertisement type of static or dynamic entries in EVPN  |
| Context     | <b>configure</b> <a href="#">service vpls string proxy-nd evpn advertise-neighbor-type keyword</a>   |
| Tree        | <a href="#">advertise-neighbor-type</a>  |
| Description | <p>This command enables the advertisement of static or dynamic entries that are learned as host, router, or host and router (only one option is possible in a specified service). It also determines the R flag (host or router) when sending Neighbor Advertisement (NA) messages for existing EVPN entries in the proxy-ND table.</p> <p>The <b>router-host</b> command option is only possible when the ARP/ND extended community is advertised along with the MAC/IP routes. It determines that both host and router (dynamic and static) entries are advertised in MAC/IP routes, with an indication whether the entry is host or router in the R flag. These EVPN entries are installed as host or router entries depending on the R flag of the route, and NA messages for them are sent with the proper host or router indication.</p> |
| Options     | router, host   |
| Default     | router   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**flood**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>flood</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <a href="#">string proxy-nd evpn flood</a> |
| Tree       | <a href="#">flood</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**unknown-neighbor-advertise-host** *boolean*

|            |   |
|------------|---|
| Synopsis   | Flood host unsolicited Neighbor Advertisement (NA) replies to EVPN  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <a href="#">string proxy-nd evpn flood unknown-neighbor-advertise-host</a> <i>boolean</i> |
| Tree       | <a href="#">unknown-neighbor-advertise-host</a>   |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**unknown-neighbor-advertise-router** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Flood router unsolicited Neighbor Advertisement (NA) replies to EVPN  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <a href="#">string proxy-nd evpn flood unknown-neighbor-advertise-router</a> <i>boolean</i> |
| Tree       | <a href="#">unknown-neighbor-advertise-router</a>   |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**unknown-neighbor-solicitation** *boolean*

|          |   |
|----------|---|
| Synopsis | Flood unsolicited Neighbor Solicitation messages (with source squelching) into EVPN network   |
| Context  | <b>configure</b> <a href="#">service vpls</a> <a href="#">string proxy-nd evpn flood unknown-neighbor-solicitation</a> <i>boolean</i> |

|            |   |
|------------|---|
| Tree       | <a href="#">unknown-neighbor-solicitation</a> |
| Default    | true  |
| Introduced | 16.0.R1                                       |
| Platforms  | All   |

### **route-tag** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Route tag used on export policies to match MAC/IP routes generated by proxy-ARP or proxy-ND module                                |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">proxy-nd evpn</a> <a href="#">route-tag</a> <i>number</i> |
| Tree       | <a href="#">route-tag</a>   |
| Range      | 0   1 to 255  |
| Default    | 0   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **process-dad-neighbor-solicitations** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable replies to DAD neighbor solicitations   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">proxy-nd process-dad-neighbor-solicitations</a> <i>boolean</i> |
| Tree       | <a href="#">process-dad-neighbor-solicitations</a>   |
| Default    | true   |
| Introduced | 22.7.R1  |
| Platforms  | All  |

### **send-refresh** (*number* | *keyword*)

|          |  |
|----------|--|
| Synopsis | Time at which to send a refresh message  |
| Context  | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">proxy-nd send-refresh</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <a href="#">send-refresh</a>   |
| Range    | 120 to 86400   |
| Options  | never  |

|            |         |
|------------|---------|
| Default    | never   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **static-neighbor**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>static-neighbor</b> context                                      |
| Context    | <b>configure</b> <a href="#">service vpls string proxy-nd static-neighbor</a> |
| Tree       | <a href="#">static-neighbor</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **ip-address** [[ipv6-address](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ip-address</b> list instance   |
| Context    | <b>configure</b> <a href="#">service vpls string proxy-nd static-neighbor ip-address string</a> |
| Tree       | <a href="#">ip-address</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **[ipv6-address]** *string*

|            |   |
|------------|---|
| Synopsis   | Proxy ND IPv6 address   |
| Context    | <b>configure</b> <a href="#">service vpls string proxy-nd static-neighbor ip-address string</a> |
| Tree       | <a href="#">ip-address</a>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **mac** *string*

|          |  |
|----------|--|
| Synopsis | Proxy ARP MAC address for static entry   |
| Context  | <b>configure</b> <a href="#">service vpls string proxy-nd static-neighbor ip-address string mac string</a> |
| Tree     | <a href="#">mac</a>  |
| Notes    | This element is mandatory.   |

Introduced 16.0.R1  
Platforms All

### **type** *keyword*

Synopsis Entry type  
Context **configure service vpls string proxy-nd static-neighbor ip-address string type keyword**  
Tree [type](#)  
Options host, router  
Default router  
Introduced 16.0.R1  
Platforms All

### **table-size** *number*

Synopsis Maximum number of learned and static entries allowed in the proxy table of this service  
Context **configure service vpls string proxy-nd table-size number**  
Tree [table-size](#)  
Range 1 to 16383  
Default 250  
Introduced 16.0.R1  
Platforms All

### **routed-vpls**

Synopsis Enable the **routed-vpls** context  
Context **configure service vpls string routed-vpls**  
Tree [routed-vpls](#)  
Introduced 16.0.R1  
Platforms All

### **evpn-mpls-ecmp** *boolean*

Synopsis Enable ECMP behavior on R-VPLS services  
Context **configure service vpls string routed-vpls evpn-mpls-ecmp boolean**

---

|            |                                |
|------------|--------------------------------|
| Tree       | <a href="#">evpn-mpls-ecmp</a> |
| Default    | false                          |
| Introduced | 19.10.R1                       |
| Platforms  | All                            |

## multicast

|            |   |
|------------|---|
| Synopsis   | Enter the <b>multicast</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">routed-vpls</a> <a href="#">multicast</a> |
| Tree       | <a href="#">multicast</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## evpn-gateway

|            |  |
|------------|--|
| Synopsis   | Enable the <b>evpn-gateway</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">routed-vpls</a> <a href="#">multicast</a> <a href="#">evpn-gateway</a> |
| Tree       | <a href="#">evpn-gateway</a>   |
| Introduced | 21.10.R1   |
| Platforms  | All  |

## admin-state *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the multicast EVPN gateway  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">routed-vpls</a> <a href="#">multicast</a> <a href="#">evpn-gateway</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 21.10.R1  |
| Platforms  | All   |

**advertise** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Type of the multicast EVPN gateway   |
| Context     | <b>configure service vpls string routed-vpls multicast evpn-gateway advertise</b> <i>keyword</i>                                 |
| Tree        | <a href="#">advertise</a>  |
| Description | This command configures EVPN OISM to advertise the type of OISM gateway function in the Inclusive Multicast Ethernet Tag routes. |
| Options     | mvpn-pim, mvpn-only, pim-only  |
| Default     | mvpn-pim   |
| Introduced  | 21.10.R1   |
| Platforms   | All  |

**dr-activation-timer** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | DR activation timer for the EVPN gateway  |
| Context     | <b>configure service vpls string routed-vpls multicast evpn-gateway dr-activation-timer</b> <i>number</i>   |
| Tree        | <a href="#">dr-activation-timer</a>   |
| Description | <p>This command configures the the designated router (DR) activation timer for the EVPN gateway.</p> <p>After the DR activation timer expires, each provider edge router (PE) runs the MEG or PEG DR election. The timer allows the PE to collect Inclusive Multicast Ethernet Tag routes from other MEG or PEG gateways and avoids running the DR election multiple times.</p> |
| Range       | 0 to 100  |
| Units       | seconds   |
| Default     | 3   |
| Introduced  | 21.10.R1  |
| Platforms   | All   |



**non-dr-attract-traffic** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Multicast traffic attraction option on non-DR router GW  |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">routed-vpls multicast evpn-gateway non-dr-attract-traffic keyword</a> |
| Tree       | <a href="#">non-dr-attract-traffic</a>   |
| Options    | none, from-evpn, from-pim-mvpn, from-evpn-pim-mvpn   |
| Default    | from-pim-mvpn  |
| Introduced | 21.10.R1   |
| Platforms  | All  |

**ip-multicast-ecmp** *boolean*

|            |  |
|------------|--|
| Synopsis   | ECMP behaviour for multicast traffic on bgp-evpn mpls and vxlan  |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">routed-vpls multicast ip-multicast-ecmp boolean</a> |
| Tree       | <a href="#">ip-multicast-ecmp</a>  |
| Default    | false  |
| Introduced | 19.10.R1   |
| Platforms  | All  |

**ipv4**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ipv4</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">routed-vpls multicast ipv4</a> |
| Tree       | <a href="#">ipv4</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**forward-to-ip-interface** *boolean*

|          |   |
|----------|---|
| Synopsis | Forward IPv4 multicast from RVPLS to L3 interface   |
| Context  | <b>configure</b> <a href="#">service vpls string</a> <a href="#">routed-vpls multicast ipv4 forward-to-ip-interface boolean</a> |
| Tree     | <a href="#">forward-to-ip-interface</a>   |

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

## igmp-snooping

|            |  |
|------------|--|
| Synopsis   | Enter the <b>igmp-snooping</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">routed-vpls</a> <a href="#">multicast</a> <a href="#">ipv4</a> <a href="#">igmp-snooping</a> |
| Tree       | <a href="#">igmp-snooping</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## mrouter-port *boolean*

|            |  |
|------------|--|
| Synopsis   | Operate VPLS L3 interface as a multicast router port   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">routed-vpls</a> <a href="#">multicast</a> <a href="#">ipv4</a> <a href="#">igmp-snooping</a> <a href="#">mrouter-port</a> <i>boolean</i> |
| Tree       | <a href="#">mrouter-port</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## ipv6

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv6</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">routed-vpls</a> <a href="#">multicast</a> <a href="#">ipv6</a> |
| Tree       | <a href="#">ipv6</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## forward-to-ip-interface *boolean*

|          |   |
|----------|---|
| Synopsis | Forward IPv6 multicast from RVPLS to L3 interface   |
| Context  | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">routed-vpls</a> <a href="#">multicast</a> <a href="#">ipv6</a> <a href="#">forward-to-ip-interface</a> <i>boolean</i> |
| Tree     | <a href="#">forward-to-ip-interface</a>   |
| Default  | false   |

Introduced 16.0.R1  
 Platforms All

## mld-snooping

Synopsis Enter the **mld-snooping** context  
 Context **configure** [service vpls string](#) [routed-vpls multicast ipv6 mld-snooping](#)  
 Tree [mld-snooping](#)  
 Introduced 16.0.R1  
 Platforms All

## mrouter-port *boolean*

Synopsis Operate VPLS L3 interface as a multicast router port  
 Context **configure** [service vpls string](#) [routed-vpls multicast ipv6 mld-snooping mrouter-port](#) *boolean*  
 Tree [mrouter-port](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

## vxlan-ipv4-tep-ecmp *boolean*

Synopsis Use ECMP on VXLAN IPv4 destinations for R-VPLS services  
 Context **configure** [service vpls string](#) [routed-vpls vxlan-ipv4-tep-ecmp](#) *boolean*  
 Tree [vxlan-ipv4-tep-ecmp](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

## sap [[sap-id](#)] *string*

Synopsis Enter the **sap** list instance  
 Context **configure** [service vpls string](#) [sap string](#)  
 Tree [sap](#)  
 Introduced 16.0.R1

Platforms All

### **[sap-id]** *string*

Synopsis SAP identifier  
Context **configure** [service vpls string sap string](#)  
Tree [sap](#)  
String Length 1 to 45  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms All

### **accounting-policy** *reference*

Synopsis Accounting policy  
Context **configure** [service vpls string sap string accounting-policy reference](#)  
Tree [accounting-policy](#)  
Reference **configure** [log accounting-policy number](#)  
Introduced 16.0.R1  
Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the SAP  
Context **configure** [service vpls string sap string admin-state keyword](#)  
Tree [admin-state](#)  
Options enable, disable  
Default enable  
Introduced 16.0.R1  
Platforms All

### **anti-spoof** *keyword*

Synopsis Type of anti-spoof filtering  
Context **configure** [service vpls string sap string anti-spoof keyword](#)

|            |   |
|------------|---|
| Tree       | <a href="#">anti-spoof</a>  |
| Options    | source-ip-addr, source-mac-addr, source-ip-and-mac-addr, next-hop-ip-and-mac-addr |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                           |

### **app-profile** *reference*

|            |   |
|------------|---|
| Synopsis   | Application profile name  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">app-profile</a> <i>reference</i>  |
| Tree       | <a href="#">app-profile</a>   |
| Reference  | <b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i> |
| Introduced | 16.0.R2   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **arp-host**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>arp-host</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">arp-host</a> |
| Tree       | <a href="#">arp-host</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of ARP hosts   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">arp-host</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **host-limit** *number*

|          |   |
|----------|---|
| Synopsis | Maximum number of ARP triggered hosts   |
| Context  | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">arp-host</a> <a href="#">host-limit</a> <i>number</i> |

|            |   |
|------------|---|
| Tree       | <a href="#">host-limit</a>                              |
| Range      | 1 to 131071   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **min-auth-interval** *number*

|            |   |
|------------|---|
| Synopsis   | Minimum authentication interval   |
| Context    | <b>configure</b> <a href="#">service vpls string sap string arp-host min-auth-interval number</a> |
| Tree       | <a href="#">min-auth-interval</a>   |
| Range      | 1 to 6000   |
| Units      | minutes   |
| Default    | 15  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **arp-reply-agent** *keyword*

|            |   |
|------------|---|
| Synopsis   | Enable arp-reply-agent function   |
| Context    | <b>configure</b> <a href="#">service vpls string sap string arp-reply-agent keyword</a> |
| Tree       | <a href="#">arp-reply-agent</a>   |
| Options    | true, with-subscr-ident   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **bandwidth** *number*

|            |  |
|------------|--|
| Synopsis   | SAP bandwidth  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string bandwidth number</a> |
| Tree       | <a href="#">bandwidth</a>  |
| Range      | 1 to 6400000000  |
| Units      | kilobps  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**bgp-vpls-mh-veid** *number*

|             |  |
|-------------|--|
| Synopsis    | BGP-VPLS multi-homing VE-ID  |
| Context     | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>bgp-vpls-mh-veid</b> <i>number</i>  |
| Tree        | <a href="#">bgp-vpls-mh-veid</a>   |
| Description | This command specifies a VE ID that is configured on SAPs that are part of an EVPN single-active Ethernet Segment. The configuration of this command allows the advertisement of L2VPN routes that indicate the state of multi-homed SAPs to the remote BGP-VPLS PEs, which can trigger a MAC flush operation on the service to avoid traffic from being blackholed when a failure occurs in the active PE.<br><br>When unconfigured from the SAP, L2VPN routes are withdrawn, which causes MAC flush processing on the remote BGP-VPLS. |
| Range       | 1 to 65535   |
| Introduced  | 20.5.R1  |
| Platforms   | All  |

**bpdu-translation** *keyword*

|            |  |
|------------|--|
| Synopsis   | Bpdu translation on this SAP   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>bpdu-translation</b> <i>keyword</i> |
| Tree       | <a href="#">bpdu-translation</a>   |
| Options    | auto, pvst, stp, pvst-rw, auto-rw  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**calling-station-id** *string*

|               |   |
|---------------|---|
| Synopsis      | Calling station ID  |
| Context       | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>calling-station-id</b> <i>string</i> |
| Tree          | <a href="#">calling-station-id</a>  |
| String Length | 1 to 64   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**cflowd** *boolean*

|          |   |
|----------|---|
| Synopsis | Enable Cflowd collection and analysis on this SAP |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">service vpls string sap string cflowd</a> <i>boolean</i> |
| Tree       | <a href="#">cflowd</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **collect-stats** *boolean*

|            |  |
|------------|--|
| Synopsis   | Collect accounting statistics  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string collect-stats</a> <i>boolean</i> |
| Tree       | <a href="#">collect-stats</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **cpu-protection**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>cpu-protection</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string cpu-protection</a> |
| Tree       | <a href="#">cpu-protection</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS                  |

### **eth-cfm-monitoring**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>eth-cfm-monitoring</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string cpu-protection eth-cfm-monitoring</a> |
| Tree       | <a href="#">eth-cfm-monitoring</a>  |
| Notes      | The following elements are part of a choice: <b>eth-cfm-monitoring</b> or <b>mac-monitoring</b> . |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS                                     |

### **aggregate**

|          |  |
|----------|--|
| Synopsis | Apply rate limit to the sum of the per peer packet rates |
|----------|--|



|            |   |
|------------|---|
| Context    | <b>configure service vpls string sap string</b> <a href="#">cpu-protection eth-cfm-monitoring aggregate</a> |
| Tree       | <a href="#">aggregate</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS   |

**car**

|            |   |
|------------|---|
| Synopsis   | Ignore Ethernet CFM packets when enforcing overall rate   |
| Context    | <b>configure service vpls string sap string</b> <a href="#">cpu-protection eth-cfm-monitoring car</a> |
| Tree       | <a href="#">car</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS   |

**mac-monitoring**

|            |   |
|------------|---|
| Synopsis   | Monitor MAC for CPU protection  |
| Context    | <b>configure service vpls string sap string</b> <a href="#">cpu-protection mac-monitoring</a>     |
| Tree       | <a href="#">mac-monitoring</a>  |
| Notes      | The following elements are part of a choice: <b>eth-cfm-monitoring</b> or <b>mac-monitoring</b> . |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS                                     |

**policy-id reference**

|            |  |
|------------|--|
| Synopsis   | CPM protection policy  |
| Context    | <b>configure service vpls string sap string</b> <a href="#">cpu-protection policy-id reference</a> |
| Tree       | <a href="#">policy-id</a>  |
| Reference  | <b>configure system security cpu-protection policy</b> <i>number</i>                               |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS                                      |

**description string**

|          |  |
|----------|--|
| Synopsis | Text description   |
| Context  | <b>configure service vpls string sap string</b> <a href="#">description string</a> |

---

|               |                             |
|---------------|-----------------------------|
| Tree          | <a href="#">description</a> |
| String Length | 1 to 160                    |
| Introduced    | 16.0.R1                     |
| Platforms     | All                         |

## dhcp

|            |   |
|------------|---|
| Synopsis   | Enter the <b>dhcp</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>dhcp</b> |
| Tree       | <a href="#">dhcp</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## admin-state *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of DHCP  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>dhcp</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## description *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>dhcp</b> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

## lease-populate

|          |   |
|----------|---|
| Synopsis | Enter the <b>lease-populate</b> context   |
| Context  | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>dhcp</b> <b>lease-populate</b> |

|            |                                |
|------------|--------------------------------|
| Tree       | <a href="#">lease-populate</a> |
| Introduced | 16.0.R1                        |
| Platforms  | All                            |

### **max-leases** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum number of DHCPv4 leases   |
| Context    | <b>configure</b> <a href="#">service vpls string sap string dhcp lease-populate max-leases number</a> |
| Tree       | <a href="#">max-leases</a>  |
| Range      | 0 to 131071   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **option-82**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>option-82</b> context  |
| Context     | <b>configure</b> <a href="#">service vpls string sap string dhcp option-82</a>  |
| Tree        | <a href="#">option-82</a>   |
| Description | Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet. |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **action** *keyword*

|            |   |
|------------|---|
| Synopsis   | Action to take with received DHCP Option 82   |
| Context    | <b>configure</b> <a href="#">service vpls string sap string dhcp option-82 action keyword</a> |
| Tree       | <a href="#">action</a>  |
| Options    | replace, drop, keep   |
| Default    | keep  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**circuit-id**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>circuit-id</b> context                                       |
| Context    | <b>configure service vpls string sap string dhcp option-82 circuit-id</b> |
| Tree       | <a href="#">circuit-id</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**ascii-tuple**

|            |  |
|------------|--|
| Synopsis   | Use the ASCII-encoded tuple for the circuit ID   |
| Context    | <b>configure service vpls string sap string dhcp option-82 circuit-id ascii-tuple</b>  |
| Tree       | <a href="#">ascii-tuple</a>  |
| Notes      | The following elements are part of a choice: <b>ascii-tuple</b> , <b>hex-string</b> , <b>none</b> , or <b>vlan-ascii-tuple</b> . |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**hex-string** *string*

|               |  |
|---------------|--|
| Synopsis      | User-defined hexadecimal value of the option   |
| Context       | <b>configure service vpls string sap string dhcp option-82 circuit-id hex-string string</b>                                      |
| Tree          | <a href="#">hex-string</a>   |
| String Length | 1 to 66  |
| Notes         | The following elements are part of a choice: <b>ascii-tuple</b> , <b>hex-string</b> , <b>none</b> , or <b>vlan-ascii-tuple</b> . |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**none**

|          |  |
|----------|--|
| Synopsis | Do not include the circuit ID  |
| Context  | <b>configure service vpls string sap string dhcp option-82 circuit-id none</b>   |
| Tree     | <a href="#">none</a>   |
| Notes    | The following elements are part of a choice: <b>ascii-tuple</b> , <b>hex-string</b> , <b>none</b> , or <b>vlan-ascii-tuple</b> . |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### vlan-ascii-tuple

|             |   |
|-------------|---|
| Synopsis    | Include the VLAN ID and dot1p bits in the ASCII tuple   |
| Context     | <b>configure</b> <a href="#">service vpls string sap string dhcp option-82 circuit-id</a> <a href="#">vlan-ascii-tuple</a>  |
| Tree        | <a href="#">vlan-ascii-tuple</a>  |
| Description | When configured, the router includes the VLAN ID and dot1p bits with the ASCII-tuple information. This only occurs on dot1q and QinQ-encapsulated ports. When the Option 82 bits are stripped, dot1p bits are copied to the Ethernet header of the outgoing packet.<br>When unconfigured, the router leaves the circuit ID sub-option of the DHCP packet empty. |
| Notes       | The following elements are part of a choice: <b>ascii-tuple</b> , <b>hex-string</b> , <b>none</b> , or <b>vlan-ascii-tuple</b> .  |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### remote-id

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>remote-id</b> context   |
| Context     | <b>configure</b> <a href="#">service vpls string sap string dhcp option-82</a> <a href="#">remote-id</a>   |
| Tree        | <a href="#">remote-id</a>  |
| Description | Commands in this context configure the remote IP sub-option of the DHCP packet with the identity of the remote host end (typically the DHCP client). |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### ascii-string *string*

|               |   |
|---------------|---|
| Synopsis      | User-defined ASCII string for the remote ID   |
| Context       | <b>configure</b> <a href="#">service vpls string sap string dhcp option-82 remote-id</a> <a href="#">ascii-string</a> <i>string</i> |
| Tree          | <a href="#">ascii-string</a>  |
| String Length | 1 to 32   |
| Notes         | The following elements are part of a choice: <b>ascii-string</b> , <b>hex-string</b> , <b>mac</b> , or <b>none</b> .                |
| Introduced    | 16.0.R1   |

Platforms All

### hex-string *string*

Synopsis Option as a hexadecimal string

Context **configure** [service vpls string sap string dhcp option-82 remote-id hex-string string](#)

Tree [hex-string](#)

String Length 1 to 66

Notes The following elements are part of a choice: **ascii-string**, **hex-string**, **mac**, or **none**.

Introduced 16.0.R1

Platforms All

### mac

Synopsis Use the MAC address for the remote ID

Context **configure** [service vpls string sap string dhcp option-82 remote-id mac](#)

Tree [mac](#)

Notes The following elements are part of a choice: **ascii-string**, **hex-string**, **mac**, or **none**.

Introduced 16.0.R1

Platforms All

### none

Synopsis Do not include the remote ID

Context **configure** [service vpls string sap string dhcp option-82 remote-id none](#)

Tree [none](#)

Notes The following elements are part of a choice: **ascii-string**, **hex-string**, **mac**, or **none**.

Introduced 16.0.R1

Platforms All

### vendor-specific-option

Synopsis Enter the **vendor-specific-option** context

Context **configure** [service vpls string sap string dhcp option-82 vendor-specific-option](#)

Tree [vendor-specific-option](#)

---

|             |   |
|-------------|---|
| Description | Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet. |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **client-mac-address** *boolean*

|            |   |
|------------|---|
| Synopsis   | Send the MAC address in the VSO   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">dhcp option-82 vendor-specific-option</a> <a href="#">client-mac-address</a> <i>boolean</i> |
| Tree       | <a href="#">client-mac-address</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **sap-id** *boolean*

|            |   |
|------------|---|
| Synopsis   | Send SAP ID in the sub-option of the DHCP relay packet  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">dhcp option-82 vendor-specific-option</a> <a href="#">sap-id</a> <i>boolean</i> |
| Tree       | <a href="#">sap-id</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **service-id** *boolean*

|            |   |
|------------|---|
| Synopsis   | Send the service ID in the Vendor Specific Option   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">dhcp option-82 vendor-specific-option</a> <a href="#">service-id</a> <i>boolean</i> |
| Tree       | <a href="#">service-id</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**string** *string*

|               |   |
|---------------|---|
| Synopsis      | User-defined ASCII string for the VSO   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">vendor-specific-option</a> <a href="#">string</a> <a href="#">string</a> |
| Tree          | <a href="#">string</a>  |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**system-id** *boolean*

|            |   |
|------------|---|
| Synopsis   | Send the system ID in the VSO   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">vendor-specific-option</a> <a href="#">system-id</a> <a href="#">boolean</a> |
| Tree       | <a href="#">system-id</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**proxy-server**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>proxy-server</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">dhcp</a> <a href="#">proxy-server</a> |
| Tree       | <a href="#">proxy-server</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the DHCP proxy server   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">dhcp</a> <a href="#">proxy-server</a> <a href="#">admin-state</a> <a href="#">keyword</a> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |



Platforms All

### **emulated-server** *string*

Synopsis IP address used as DHCP server address in SAP context  
 Context **configure** [service vpls string sap string dhcp proxy-server emulated-server string](#)  
 Tree [emulated-server](#)  
 Introduced 16.0.R1  
 Platforms All

### **lease-time**

Synopsis Enter the **lease-time** context  
 Context **configure** [service vpls string sap string dhcp proxy-server lease-time](#)  
 Tree [lease-time](#)  
 Introduced 16.0.R1  
 Platforms All

### **radius-override** *boolean*

Synopsis Use lease time information provided by RADIUS server  
 Context **configure** [service vpls string sap string dhcp proxy-server lease-time radius-override boolean](#)  
 Tree [radius-override](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **value** *number*

Synopsis DHCP lease time  
 Context **configure** [service vpls string sap string dhcp proxy-server lease-time value number](#)  
 Tree [value](#)  
 Range 300 to 315446399  
 Units seconds  
 Introduced 16.0.R1

---

Platforms All

### **snoop** *boolean*

Synopsis Enable DHCP snooping on the SAP  
Context **configure** [service vpls](#) *string* [sap](#) *string* [dhcp snoop](#) *boolean*  
Tree [snoop](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **dist-cpu-protection** *reference*

Synopsis Distributed CPU protection policy for SAP  
Context **configure** [service vpls](#) *string* [sap](#) *string* [dist-cpu-protection](#) *reference*  
Tree [dist-cpu-protection](#)  
Reference **configure** [system security](#) [dist-cpu-protection](#) *policy* *string*  
Introduced 16.0.R1  
Platforms All

### **egress**

Synopsis Enter the **egress** context  
Context **configure** [service vpls](#) *string* [sap](#) *string* [egress](#)  
Tree [egress](#)  
Introduced 16.0.R1  
Platforms All

### **agg-rate**

Synopsis Enter the **agg-rate** context  
Context **configure** [service vpls](#) *string* [sap](#) *string* [egress](#) [agg-rate](#)  
Tree [agg-rate](#)  
Notes The following elements are part of a choice: **agg-rate** or **percent-agg-rate**.  
Introduced 16.0.R1

Platforms All

### **adaptation-rule** *keyword*

Synopsis Adaptation rule to compute the operational PIR value when an aggregate shaper is used  
Context **configure** [service vpls](#) *string* [sap](#) *string* [egress agg-rate](#) [adaptation-rule](#) *keyword*  
Tree [adaptation-rule](#)  
Options max, min, closest  
Default closest  
Introduced 22.10.R1  
Platforms 7750 SR-1, 7750 SR-s

### **burst-limit** (*number* | *keyword*)

Synopsis Shaping burst size when an aggregate shaper is used  
Context **configure** [service vpls](#) *string* [sap](#) *string* [egress agg-rate](#) [burst-limit](#) (*number* | *keyword*)  
Tree [burst-limit](#)  
Range 1 to 14000000  
Units bytes  
Options auto  
Default auto  
Introduced 22.10.R1  
Platforms 7750 SR-1, 7750 SR-s

### **limit-unused-bandwidth** *boolean*

Synopsis Enable aggregate rate overrun protection  
Context **configure** [service vpls](#) *string* [sap](#) *string* [egress agg-rate](#) [limit-unused-bandwidth](#) *boolean*  
Tree [limit-unused-bandwidth](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **queue-frame-based-accounting** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable frame based accounting on policers and queues  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress agg-rate</a> <a href="#">queue-frame-based-accounting</a> <i>boolean</i> |
| Tree       | <a href="#">queue-frame-based-accounting</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **rate** *number*

|            |  |
|------------|--|
| Synopsis   | Enforced aggregate rate for all queues   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress agg-rate</a> <a href="#">rate</a> <i>number</i> |
| Tree       | <a href="#">rate</a>   |
| Range      | 1 to 6400000000  |
| Units      | kilobps  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **dest-mac-rewrite** *string*

|            |   |
|------------|---|
| Synopsis   | Destination MAC overwrite for unicast   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress dest-mac-rewrite</a> <i>string</i> |
| Tree       | <a href="#">dest-mac-rewrite</a>  |
| Introduced | 16.0.R5   |
| Platforms  | All   |

### **filter**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>filter</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress filter</a> |
| Tree       | <a href="#">filter</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### ip reference

|            |  |
|------------|--|
| Synopsis   | IPv4 filter policy name  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress filter ip reference</a> |
| Tree       | <a href="#">ip</a>   |
| Reference  | <b>configure</b> <a href="#">filter ip-filter</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### ipv6 reference

|            |  |
|------------|--|
| Synopsis   | IPv6 filter policy name  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress filter ipv6 reference</a> |
| Tree       | <a href="#">ipv6</a>   |
| Reference  | <b>configure</b> <a href="#">filter ipv6-filter</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### mac reference

|            |   |
|------------|---|
| Synopsis   | MAC filter policy name  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress filter mac reference</a> |
| Tree       | <a href="#">mac</a>   |
| Reference  | <b>configure</b> <a href="#">filter mac-filter</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### qos

|            |  |
|------------|--|
| Synopsis   | Enter the <b>qos</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos</a> |
| Tree       | <a href="#">qos</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## **policer-control-policy**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>policer-control-policy</b> context                                   |
| Context    | <b>configure service vpls string sap string egress qos policer-control-policy</b> |
| Tree       | <a href="#">policer-control-policy</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR                            |

## **overrides**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>overrides</b> context   |
| Context    | <b>configure service vpls string sap string egress qos policer-control-policy overrides</b> |
| Tree       | <a href="#">overrides</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR                                      |

## **root**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>root</b> context  |
| Context    | <b>configure service vpls string sap string egress qos policer-control-policy overrides root</b> |
| Tree       | <a href="#">root</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

## **max-rate** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Maximum frame-based bandwidth limit   |
| Context    | <b>configure service vpls string sap string egress qos policer-control-policy overrides root</b><br><a href="#">max-rate</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">max-rate</a>  |
| Range      | 1 to 6400000000   |
| Options    | max   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**priority-mbs-thresholds**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>priority-mbs-thresholds</b> context   |
| Context    | <b>configure service vpls string sap string egress qos policer-control-policy overrides root priority-mbs-thresholds</b> |
| Tree       | <a href="#">priority-mbs-thresholds</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**min-thresh-separation** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Minimum amount of separation buffer space   |
| Context    | <b>configure service vpls string sap string egress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">min-thresh-separation</a>   |
| Range      | 0 to 16777216   |
| Units      | bytes   |
| Options    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**priority** [[priority-level](#)] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>priority</b> list instance   |
| Context    | <b>configure service vpls string sap string egress qos policer-control-policy overrides root priority-mbs-thresholds priority</b> <i>number</i> |
| Tree       | <a href="#">priority</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**[priority-level]** *number*

|          |   |
|----------|---|
| Synopsis | Priority level  |
| Context  | <b>configure service vpls string sap string egress qos policer-control-policy overrides root priority-mbs-thresholds priority</b> <i>number</i> |
| Tree     | <a href="#">priority</a>  |
| Range    | 1 to 8  |

|            |  |
|------------|--|
| Notes      | This element is part of a list key.                    |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

### **mbs-contribution** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Minimum amount of cumulative buffer space allowed  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos</a> <a href="#">policer-control-policy overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i> <b>mbs-contribution</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">mbs-contribution</a>   |
| Range      | 0 to 16777216  |
| Units      | bytes  |
| Options    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

### **policy-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Policer control policy name   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos</a> <a href="#">policer-control-policy</a> <b>policy-name</b> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">policer-control-policy</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

### **qinq-mark-top-only** *boolean*

|            |   |
|------------|---|
| Synopsis   | Mark top Q-tags   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos</a> <b>qinq-mark-top-only</b> <i>boolean</i> |
| Tree       | <a href="#">qinq-mark-top-only</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |



**sap-egress**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>sap-egress</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress</a> |
| Tree       | <a href="#">sap-egress</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**overrides**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>overrides</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress overrides</a> |
| Tree       | <a href="#">overrides</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**hs-secondary-shaper** *string*

|               |  |
|---------------|--|
| Synopsis      | HS Secondary Shaper  |
| Context       | <b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress overrides hs-secondary-shaper string</a> |
| Tree          | <a href="#">hs-secondary-shaper</a>  |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7750 SR-7/12/12e   |

**hs-wrr-group** [[group-id](#)] *reference*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>hs-wrr-group</b> list instance  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress overrides hs-wrr-group reference</a> |
| Tree       | <a href="#">hs-wrr-group</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR-7/12/12e   |

**[group-id] reference**

|            |  |
|------------|--|
| Synopsis   | HS WRR group identifier  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress overrides hs-wrr-group reference</a> |
| Tree       | <a href="#">hs-wrr-group</a>   |
| Reference  | <b>configure</b> <a href="#">qos sap-egress string hs-wrr-group number</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR-7/12/12e   |

**hs-class-weight number**

|            |   |
|------------|---|
| Synopsis   | Class weight override of the WRR group  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress overrides hs-wrr-group reference hs-class-weight number</a> |
| Tree       | <a href="#">hs-class-weight</a>   |
| Range      | 1   2   4   8   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR-7/12/12e  |

**percent-rate decimal-number**

|            |  |
|------------|--|
| Synopsis   | Percent rate override applied to the HS WRR group  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress overrides hs-wrr-group reference percent-rate decimal-number</a> |
| Tree       | <a href="#">percent-rate</a>   |
| Range      | 0.01 to 100.00   |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR-7/12/12e   |

**rate (number | keyword)**

|          |  |
|----------|--|
| Synopsis | Scheduling rate override applied to the HS WRR group   |
| Context  | <b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress overrides hs-wrr-group reference rate (number   keyword)</a> |

|            |   |
|------------|---|
| Tree       | <a href="#">rate</a>  |
| Range      | 1 to 2000000000   |
| Units      | kilobps   |
| Options    | max   |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> . |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR-7/12/12e  |

### **policer** [[policer-id](#)] *reference*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>policer</b> list instance  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress overrides policer reference</a> |
| Tree       | <a href="#">policer</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

### **[policer-id]** *reference*

|            |   |
|------------|---|
| Synopsis   | Policer unique ID   |
| Context    | <b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress overrides policer reference</a> |
| Tree       | <a href="#">policer</a>   |
| Reference  | <b>configure</b> <a href="#">qos sap-egress string policer number</a>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

### **cbs** (*number* | *keyword*)

|          |  |
|----------|--|
| Synopsis | CBS  |
| Context  | <b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress overrides policer reference cbs (number   keyword)</a> |
| Tree     | <a href="#">cbs</a>  |
| Range    | 0 to 268435456   |
| Units    | bytes  |

|            |  |
|------------|--|
| Options    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

### **mbs** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | MBS  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> <b>mbs</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">mbs</a>  |
| Range      | 0 to 268435456   |
| Units      | bytes  |
| Options    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

### **packet-byte-offset** *number*

|            |  |
|------------|--|
| Synopsis   | Packet size modification for policing information  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> <b>packet-byte-offset</b> <i>number</i> |
| Tree       | <a href="#">packet-byte-offset</a>   |
| Range      | -64 to 31  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

### **percent-rate**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>percent-rate</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> <b>percent-rate</b> |
| Tree       | <a href="#">percent-rate</a>   |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**cir** *decimal-number*

|            |   |
|------------|---|
| Synopsis   | CIR percent rate  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress overrides policer reference percent-rate cir decimal-number</a> |
| Tree       | <a href="#">cir</a>   |
| Range      | 0.00 to 100.00  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**pir** *decimal-number*

|            |   |
|------------|---|
| Synopsis   | PIR percent rate  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress overrides policer reference percent-rate pir decimal-number</a> |
| Tree       | <a href="#">pir</a>   |
| Range      | 0.01 to 100.00  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**rate**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>rate</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress overrides policer reference rate</a> |
| Tree       | <a href="#">rate</a>   |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .                                      |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**cir** (*number* | *keyword*)

|          |   |
|----------|---|
| Synopsis | CIR rate  |
| Context  | <b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress overrides policer reference rate cir (number   keyword)</a> |
| Tree     | <a href="#">cir</a>   |

|            |  |
|------------|--|
| Range      | 0 to 6400000000  |
| Units      | kilobps  |
| Options    | max  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

### **pir** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | PIR rate  |
| Context    | <b>configure service vpls string sap string egress qos sap-egress overrides policer reference rate pir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">pir</a>   |
| Range      | 1 to 6400000000   |
| Units      | kilobps   |
| Options    | max   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

### **stat-mode** *keyword*

|            |  |
|------------|--|
| Synopsis   | Mode of statistics collected by the policer  |
| Context    | <b>configure service vpls string sap string egress qos sap-egress overrides policer reference stat-mode keyword</b>  |
| Tree       | <a href="#">stat-mode</a>  |
| Options    | no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

### **queue** [*queue-id*] *reference*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>queue</b> list instance  |
| Context    | <b>configure service vpls string sap string egress qos sap-egress overrides queue reference</b> |
| Tree       | <a href="#">queue</a>   |
| Introduced | 16.0.R1   |

Platforms All

### **[queue-id] reference**

Synopsis Policer unique ID

Context **configure service vpls string sap string egress qos sap-egress overrides queue reference**

Tree [queue](#)

Reference **configure qos sap-egress string queue number**

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **adaptation-rule**

Synopsis Enter the **adaptation-rule** context

Context **configure service vpls string sap string egress qos sap-egress overrides queue reference adaptation-rule**

Tree [adaptation-rule](#)

Introduced 16.0.R1

Platforms All

### **cir keyword**

Synopsis Constraint used when deriving the operational CIR value

Context **configure service vpls string sap string egress qos sap-egress overrides queue reference adaptation-rule cir keyword**

Tree [cir](#)

Options max, min, closest

Introduced 16.0.R1

Platforms All

### **pir keyword**

Synopsis Constraint used when deriving the operational PIR value

|            |   |
|------------|---|
| Context    | <b>configure service vpls string sap string egress qos sap-egress overrides queue reference adaptation-rule pir keyword</b> |
| Tree       | <a href="#">pir</a>   |
| Options    | max, min, closest   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **avg-frame-overhead** *decimal-number*

|            |   |
|------------|---|
| Synopsis   | Average packet-to-frame encapsulation overhead  |
| Context    | <b>configure service vpls string sap string egress qos sap-egress overrides queue reference avg-frame-overhead decimal-number</b> |
| Tree       | <a href="#">avg-frame-overhead</a>  |
| Range      | 0.00 to 100.00  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **burst-limit** (*number | keyword*)

|            |  |
|------------|--|
| Synopsis   | Explicit shaping burst size for the queue  |
| Context    | <b>configure service vpls string sap string egress qos sap-egress overrides queue reference burst-limit (number   keyword)</b> |
| Tree       | <a href="#">burst-limit</a>  |
| Range      | 1 to 14000000  |
| Units      | bytes  |
| Options    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **cbs** (*number | keyword*)

|          |  |
|----------|--|
| Synopsis | CBS  |
| Context  | <b>configure service vpls string sap string egress qos sap-egress overrides queue reference cbs (number   keyword)</b> |
| Tree     | <a href="#">cbs</a>  |
| Range    | 0 to 1048576   |



|            |           |
|------------|-----------|
| Units      | kilobytes |
| Options    | auto      |
| Introduced | 16.0.R1   |
| Platforms  | All       |

## drop-tail

|            |   |
|------------|---|
| Synopsis   | Enter the <b>drop-tail</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress overrides queue reference drop-tail</a> |
| Tree       | <a href="#">drop-tail</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## low

|            |   |
|------------|---|
| Synopsis   | Enter the <b>low</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress overrides queue reference drop-tail low</a> |
| Tree       | <a href="#">low</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## percent-reduction-from-mbs (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Percentage reduction from the MBS for a queue drop tail   |
| Context    | <b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress overrides queue reference drop-tail low percent-reduction-from-mbs (<i>number</i>   <i>keyword</i>)</a> |
| Tree       | <a href="#">percent-reduction-from-mbs</a>  |
| Range      | 0 to 100  |
| Options    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**hs-class-weight** *number*

|            |  |
|------------|--|
| Synopsis   | Class weight override for the queue  |
| Context    | <b>configure service vpls string sap string egress qos sap-egress overrides queue reference hs-class-weight number</b> |
| Tree       | <a href="#">hs-class-weight</a>  |
| Range      | 1   2   4   8  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR-7/12/12e   |

**hs-wred-queue**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>hs-wred-queue</b> context  |
| Context    | <b>configure service vpls string sap string egress qos sap-egress overrides queue reference hs-wred-queue</b> |
| Tree       | <a href="#">hs-wred-queue</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR-7/12/12e  |

**policy** *reference*

|            |  |
|------------|--|
| Synopsis   | Slope policy applied to the HSQ queue group queue  |
| Context    | <b>configure service vpls string sap string egress qos sap-egress overrides queue reference hs-wred-queue policy reference</b> |
| Tree       | <a href="#">policy</a>   |
| Reference  | <b>configure qos slope-policy string</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR-7/12/12e   |

**hs-wrr-weight** *number*

|          |  |
|----------|--|
| Synopsis | WRR weight to parent with the queue into the scheduler   |
| Context  | <b>configure service vpls string sap string egress qos sap-egress overrides queue reference hs-wrr-weight number</b> |
| Tree     | <a href="#">hs-wrr-weight</a>  |
| Range    | 1 to 127   |
| Default  | 1  |

|            |                  |
|------------|------------------|
| Introduced | 16.0.R1          |
| Platforms  | 7750 SR-7/12/12e |

### **mbs** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | MBS   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>mbs</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">mbs</a>   |
| Range      | 0 to 1073741824   |
| Units      | bytes   |
| Options    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **monitor-queue-depth**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>monitor-queue-depth</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>monitor-queue-depth</b> |
| Tree       | <a href="#">monitor-queue-depth</a>  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

### **fast-polling** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Enable fast polling of the queue depth   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">monitor-queue-depth</a> <b>fast-polling</b> <i>boolean</i> |
| Tree        | <a href="#">fast-polling</a>   |
| Description | When configured to <b>true</b> , this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth.<br>When configured to <b>false</b> , fast queue polling is not enabled.   |
| Default     | false  |
| Introduced  | 20.10.R1   |
| Platforms   | All  |

**violation-threshold** *decimal-number*

|             |  |
|-------------|--|
| Synopsis    | Threshold for queue depth before violation is raised   |
| Context     | <b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress overrides queue reference monitor-queue-depth violation-threshold decimal-number</a> |
| Tree        | <a href="#">violation-threshold</a>  |
| Description | This command specifies the threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.                                   |
| Range       | 0.01 to 99.99  |
| Introduced  | 20.10.R1   |
| Platforms   | All  |

**parent**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>parent</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress overrides queue reference parent</a> |
| Tree       | <a href="#">parent</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**cir-weight** *number*

|            |  |
|------------|--|
| Synopsis   | CIR parameter that overrides parent for queue group  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress overrides queue reference parent cir-weight number</a> |
| Tree       | <a href="#">cir-weight</a>   |
| Range      | 0 to 100   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**weight** *number*

|          |  |
|----------|--|
| Synopsis | PIR parameter that overrides parent for queue group  |
| Context  | <b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress overrides queue reference parent weight number</a> |
| Tree     | <a href="#">weight</a>   |

|            |          |
|------------|----------|
| Range      | 0 to 100 |
| Introduced | 16.0.R1  |
| Platforms  | All      |

### **percent-rate**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>percent-rate</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress overrides queue reference percent-rate</a> |
| Tree       | <a href="#">percent-rate</a>   |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **cir decimal-number**

|            |   |
|------------|---|
| Synopsis   | CIR percent rate  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress overrides queue reference percent-rate cir decimal-number</a> |
| Tree       | <a href="#">cir</a>   |
| Range      | 0.00 to 100.00  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **pir decimal-number**

|            |   |
|------------|---|
| Synopsis   | PIR percent rate  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress overrides queue reference percent-rate pir decimal-number</a> |
| Tree       | <a href="#">pir</a>   |
| Range      | 0.01 to 100.00  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**rate**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>rate</b> context  |
| Context    | <b>configure service vpls string sap string egress qos sap-egress overrides queue reference rate</b> |
| Tree       | <a href="#">rate</a>   |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .                    |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**cir** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | CIR rate  |
| Context    | <b>configure service vpls string sap string egress qos sap-egress overrides queue reference rate cir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cir</a>   |
| Range      | 0 to 6400000000   |
| Units      | kilobps   |
| Options    | max   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**pir** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | PIR rate  |
| Context    | <b>configure service vpls string sap string egress qos sap-egress overrides queue reference rate pir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">pir</a>   |
| Range      | 1 to 6400000000   |
| Units      | kilobps   |
| Options    | max   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**policy-name** *reference*

|          |  |
|----------|--|
| Synopsis | Policy ID to associate with SAP for mirrored service |
|----------|--|

|            |   |
|------------|---|
| Context    | <b>configure service vpls string sap string egress qos sap-egress policy-name reference</b> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure qos sap-egress string</b>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### port-redirect-group

|            |   |
|------------|---|
| Synopsis   | Enter the <b>port-redirect-group</b> context  |
| Context    | <b>configure service vpls string sap string egress qos sap-egress port-redirect-group</b> |
| Tree       | <a href="#">port-redirect-group</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### group-name *reference*

|            |  |
|------------|--|
| Synopsis   | Name of the queue group redirect list policy   |
| Context    | <b>configure service vpls string sap string egress qos sap-egress port-redirect-group group-name reference</b> |
| Tree       | <a href="#">group-name</a>   |
| Reference  | <b>configure qos queue-group-templates egress queue-group string</b>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### instance *number*

|            |   |
|------------|---|
| Synopsis   | Instance of port queue group  |
| Context    | <b>configure service vpls string sap string egress qos sap-egress port-redirect-group instance number</b> |
| Tree       | <a href="#">instance</a>  |
| Range      | 1 to 65535  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## scheduler-policy

|            |   |
|------------|---|
| Synopsis   | Enter the <b>scheduler-policy</b> context                                   |
| Context    | <b>configure service vpls string sap string egress qos scheduler-policy</b> |
| Tree       | <a href="#">scheduler-policy</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## overrides

|            |   |
|------------|---|
| Synopsis   | Enter the <b>overrides</b> context  |
| Context    | <b>configure service vpls string sap string egress qos scheduler-policy overrides</b> |
| Tree       | <a href="#">overrides</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## scheduler [[scheduler-name](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>scheduler</b> list instance   |
| Context    | <b>configure service vpls string sap string egress qos scheduler-policy overrides scheduler string</b> |
| Tree       | <a href="#">scheduler</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## [\[scheduler-name\]](#) *string*

|             |  |
|-------------|--|
| Synopsis    | Scheduler name   |
| Context     | <b>configure service vpls string sap string egress qos scheduler-policy overrides scheduler string</b>   |
| Tree        | <a href="#">scheduler</a>  |
| Description | This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands. |



If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.

If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.

|               |                                     |
|---------------|-------------------------------------|
| String Length | 1 to 32                             |
| Notes         | This element is part of a list key. |
| Introduced    | 16.0.R1                             |
| Platforms     | All                                 |

## parent

|            |  |
|------------|--|
| Synopsis   | Enter the <b>parent</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <a href="#">string</a> <b>parent</b> |
| Tree       | <a href="#">parent</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## cir-weight *number*

|            |   |
|------------|---|
| Synopsis   | Weight used at the within-CIR port priority level   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <a href="#">string</a> <a href="#">parent</a> <b>cir-weight</b> <i>number</i> |
| Tree       | <a href="#">cir-weight</a>  |
| Range      | 0 to 100  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## weight *number*

|          |   |
|----------|---|
| Synopsis | Relative weight of the scheduler to feed the queue  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <a href="#">string</a> <a href="#">parent</a> <b>weight</b> <i>number</i> |
| Tree     | <a href="#">weight</a>  |
| Range    | 0 to 100  |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

**rate**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>rate</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <a href="#">string</a> <b>rate</b> |
| Tree       | <a href="#">rate</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**cir** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | CIR at which the queue it to operate   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <a href="#">string</a> <b>rate</b> <b>cir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cir</a>  |
| Range      | 0 to 6400000000  |
| Units      | kilobps  |
| Options    | sum, max   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**pir** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | PIR at which the queue is to operate   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <a href="#">string</a> <b>rate</b> <b>pir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">pir</a>  |
| Range      | 1 to 6400000000  |
| Units      | kilobps  |
| Options    | max  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**policy-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Scheduler policy name   |
| Context    | <b>configure</b> <a href="#">service vpls string sap string egress qos scheduler-policy policy-name reference</a> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos scheduler-policy string</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**eth-cfm**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>eth-cfm</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string eth-cfm</a> |
| Tree       | <a href="#">eth-cfm</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS            |

**collect-lmm-fc-stats**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>collect-lmm-fc-stats</b> context  |
| Context     | <b>configure</b> <a href="#">service vpls string sap string eth-cfm collect-lmm-fc-stats</a>   |
| Tree        | <a href="#">collect-lmm-fc-stats</a>   |
| Description | <p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands <b>fc-in-profile</b> and <b>fc</b> in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the <b>collect-lmm-stats</b> command are mutually exclusive when there is entity resource contention.</p> |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**fc** *keyword*

|          |   |
|----------|---|
| Synopsis | Forwarding class name for profile-unaware counter   |
| Context  | <b>configure</b> <a href="#">service vpls string sap string eth-cfm collect-lmm-fc-stats fc keyword</a> |

|                |   |
|----------------|---|
| Tree           | <a href="#">fc</a>  |
| Description    | <p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the <b>fc-in-profile</b> command under the <b>collect-imm-fc-stats</b> context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p> |
| Options        | be, l2, af, l1, h2, ef, h1, nc  |
| Max. Instances | 8   |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **fc-in-profile** *keyword*

|                |   |
|----------------|---|
| Synopsis       | Forwarding class name for profile-aware counter   |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">collect-imm-fc-stats</a> <a href="#">fc-in-profile</a> <i>keyword</i>   |
| Tree           | <a href="#">fc-in-profile</a>   |
| Description    | <p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the <b>fc</b> command under the <b>collect-imm-fc-stats</b> context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p> |
| Options        | be, l2, af, l1, h2, ef, h1, nc  |
| Max. Instances | 8   |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **collect-imm-stats** *boolean*

|          |  |
|----------|--|
| Synopsis | Collect statistics for loss measurement message tests  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">collect-imm-stats</a> <i>boolean</i> |
| Tree     | <a href="#">collect-imm-stats</a>  |

|            |  |
|------------|--|
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **mep** *md-admin-name reference ma-admin-name reference mep-id number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mep</b> list instance  |
| Context    | <b>configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</b> |
| Tree       | <b>mep</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **md-admin-name reference**

|            |   |
|------------|---|
| Synopsis   | Maintenance Domain (MD) name  |
| Context    | <b>configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</b> |
| Tree       | <b>mep</b>  |
| Reference  | <b>configure eth-cfm domain string</b>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **ma-admin-name reference**

|            |   |
|------------|---|
| Synopsis   | Maintenance Association (MA) name   |
| Context    | <b>configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</b> |
| Tree       | <b>mep</b>  |
| Reference  | <b>configure eth-cfm domain string association string</b>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### mep-id *number*

|            |  |
|------------|--|
| Synopsis   | Maintenance Endpoint (MEP) ID  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> |
| Tree       | <a href="#">mep</a>  |
| Range      | 1 to 8191  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### admin-state *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the MEP   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### ais

|            |  |
|------------|--|
| Synopsis   | Enable the <b>ais</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ais</a> |
| Tree       | <a href="#">ais</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### client-meg-level *number*

|          |   |
|----------|---|
| Synopsis | Client MEG level for AIS message generation   |
| Context  | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ais</a> <a href="#">client-meg-level</a> <i>number</i> |
| Tree     | <a href="#">client-meg-level</a>  |

|                |  |
|----------------|--|
| Range          | 1 to 7   |
| Max. Instances | 7  |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **interface-support** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable generation of AIS PDUs based on endpoint state  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ais</a> <b>interface-support</b> <i>boolean</i> |
| Tree       | <a href="#">interface-support</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **interval** *number*

|            |  |
|------------|--|
| Synopsis   | Transmission interval for AIS messages   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ais</a> <b>interval</b> <i>number</i> |
| Tree       | <a href="#">interval</a>   |
| Range      | 1   60   |
| Units      | seconds  |
| Default    | 1  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **low-priority-defect** *keyword*

|          |  |
|----------|--|
| Synopsis | Lowest priority defect allowed to generate fault alarm   |
| Context  | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ais</a> <b>low-priority-defect</b> <i>keyword</i> |
| Tree     | <a href="#">low-priority-defect</a>  |
| Options  | all-def, mac-rem-err-xcon  |
| Default  | all-def  |

|            |  |
|------------|--|
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **priority** *number*

|            |  |
|------------|--|
| Synopsis   | Priority of the AIS messages generated by the node   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ais</a> <b>priority</b> <i>number</i> |
| Tree       | <a href="#">priority</a>   |
| Range      | 0 to 7   |
| Default    | 7  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **alarm-notification**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>alarm-notification</b> context  |
| Context     | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>alarm-notification</b>   |
| Tree        | <a href="#">alarm-notification</a>   |
| Description | <p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p> |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **fng-alarm-time** *number*

|            |   |
|------------|---|
| Synopsis   | Time that must expire before an FNG alarm is raised   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">alarm-notification</a> <b>fng-alarm-time</b> <i>number</i> |
| Tree       | <a href="#">fng-alarm-time</a>  |
| Range      | 250   500   1000  |
| Units      | centiseconds  |
| Introduced | 16.0.R1   |



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fng-reset-time** *number*

Synopsis Time that must expire before an FNG alarm is reset

Context **configure** [service vpls](#) *string* [sap](#) *string* [eth-cfm mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [alarm-notification](#) [fng-reset-time](#) *number*

Tree [fng-reset-time](#)

Range 250 | 500 | 1000

Units centiseconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm** *boolean*

Synopsis Generate CCM messages

Context **configure** [service vpls](#) *string* [sap](#) *string* [eth-cfm mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [ccm](#) *boolean*

Tree [ccm](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm-ltm-priority** *number*

Synopsis Priority of CCM and LTM messages transmitted by the MEP

Context **configure** [service vpls](#) *string* [sap](#) *string* [eth-cfm mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [ccm-ltm-priority](#) *number*

Tree [ccm-ltm-priority](#)

Range 0 to 7

Default 7

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ccm-padding-size** *number*

|             |   |
|-------------|---|
| Synopsis    | Number of octets of padding to insert in CCM packets  |
| Context     | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>ccm-padding-size</b> <i>number</i>  |
| Tree        | <a href="#">ccm-padding-size</a>  |
| Description | This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.<br><br>This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through <b>configure eth-cfm domain association ccm-interval</b> ) is less than 1 second. |
| Range       | 3 to 1500   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**cfm-vlan-tag** *string*

|               |  |
|---------------|--|
| Synopsis      | VLAN tags to apply to CFM PDUs for egress processing   |
| Context       | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>cfm-vlan-tag</b> <i>string</i> |
| Tree          | <a href="#">cfm-vlan-tag</a>   |
| String Length | 1 to 9   |
| Introduced    | 21.10.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**csf**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>csf</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>csf</b> |
| Tree       | <a href="#">csf</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**multiplier** *decimal-number*

|            |   |
|------------|---|
| Synopsis   | Multiplication factor used to clear the CSF condition   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <a href="#">string sap</a> <a href="#">string eth-cfm mep</a> <a href="#">md-admin-name</a> <a href="#">reference ma-admin-name</a> <a href="#">reference mep-id</a> <a href="#">number csf</a> <b>multiplier</b> <i>decimal-number</i> |
| Tree       | <a href="#">multiplier</a>  |
| Range      | 0.0   2.0 to 30.0   |
| Default    | 3.5   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service vpls</a> <a href="#">string sap</a> <a href="#">string eth-cfm mep</a> <a href="#">md-admin-name</a> <a href="#">reference ma-admin-name</a> <a href="#">reference mep-id</a> <a href="#">number</a> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**direction** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Direction the MEP faces   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <a href="#">string sap</a> <a href="#">string eth-cfm mep</a> <a href="#">md-admin-name</a> <a href="#">reference ma-admin-name</a> <a href="#">reference mep-id</a> <a href="#">number</a> <b>direction</b> <i>keyword</i> |
| Tree       | <a href="#">direction</a>   |
| Options    | down, up  |
| Default    | down  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**eth-test**

|             |  |
|-------------|--|
| Synopsis    | Enable the <b>eth-test</b> context   |
| Context     | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>eth-test</b> |
| Tree        | <a href="#">eth-test</a>   |
| Description | Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the <b>oam eth-cfm eth-test</b> command.                                |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**bit-error-threshold** *number*

|            |  |
|------------|--|
| Synopsis   | Lowest priority defect allowed to generate fault alarm   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>eth-test bit-error-threshold</b> <i>number</i> |
| Tree       | <a href="#">bit-error-threshold</a>  |
| Range      | 0 to 11840   |
| Units      | bit errors   |
| Default    | 1  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**test-pattern**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>test-pattern</b> context   |
| Context     | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>eth-test test-pattern</b> |
| Tree        | <a href="#">test-pattern</a>  |
| Description | Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**crc-tlv** *boolean*

|          |                         |
|----------|-------------------------|
| Synopsis | Generate a CRC checksum |
|----------|-------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern crc-tlv boolean</b> |
| Tree       | <a href="#">crc-tlv</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **pattern keyword**

|             |   |
|-------------|---|
| Synopsis    | Test pattern for Ethernet Test frames   |
| Context     | <b>configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern pattern keyword</b> |
| Tree        | <a href="#">pattern</a>   |
| Description | This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.     |
| Options     | all-zeros, all-ones   |
| Default     | all-zeros   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **fault-propagation keyword**

|            |   |
|------------|---|
| Synopsis   | Fault propagation for the MEP   |
| Context    | <b>configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number fault-propagation keyword</b> |
| Tree       | <a href="#">fault-propagation</a>   |
| Options    | use-if-status-tlv, suspend-ccm  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **grace**

|          |   |
|----------|---|
| Synopsis | Enter the <b>grace</b> context  |
| Context  | <b>configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace</b> |
| Tree     | <a href="#">grace</a>   |

|             |   |
|-------------|---|
| Description | Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function. |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## eth-ed

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>eth-ed</b> context   |
| Context     | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace eth-ed</a> |
| Tree        | <a href="#">eth-ed</a>  |
| Description | Commands in this context configure the ITU-T Y.1731 ETH-ED function.  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## max-rx-defect-window *number*

|            |  |
|------------|--|
| Synopsis   | Maximum received ETH-ED expected defect window duration  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace eth-ed max-rx-defect-window</a> <i>number</i> |
| Tree       | <a href="#">max-rx-defect-window</a>   |
| Range      | 1 to 86400   |
| Units      | seconds  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## priority *number*

|            |  |
|------------|--|
| Synopsis   | Transmission priority for ETH-ED PDUs  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace eth-ed priority</a> <i>number</i> |
| Tree       | <a href="#">priority</a>   |
| Range      | 0 to 7   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**rx-eth-ed** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> <a href="#">eth-ed</a> <a href="#">rx-eth-ed</a> <i>boolean</i> |
| Tree        | <a href="#">rx-eth-ed</a>   |
| Description | This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.  |
| Default     | true  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**tx-eth-ed** *boolean*

|            |   |
|------------|---|
| Synopsis   | Transmit ETH-ED PDUs from the MEP   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> <a href="#">eth-ed</a> <a href="#">tx-eth-ed</a> <i>boolean</i> |
| Tree       | <a href="#">tx-eth-ed</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**eth-vsm-grace**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>eth-vsm-grace</b> context  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> <a href="#">eth-vsm-grace</a> |
| Tree        | <a href="#">eth-vsm-grace</a>   |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function.  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**rx-eth-vsm-grace** *boolean*

|          |  |
|----------|--|
| Synopsis | Receive and process Nokia ETH-CFM Grace PDU on the MEP |
|----------|--|

|             |   |
|-------------|---|
| Context     | <b>configure service vpls</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>grace eth-vsm-grace rx-eth-vsm-grace</b> <i>boolean</i>   |
| Tree        | <a href="#">rx-eth-vsm-grace</a>  |
| Description | When configured to <b>true</b> , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.<br><br>When configured to <b>false</b> , the router disables the Nokia Grace function. |
| Default     | true  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **tx-eth-vsm-grace** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Transmit ETH-ED PDUs from the MEP  |
| Context     | <b>configure service vpls</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>grace eth-vsm-grace tx-eth-vsm-grace</b> <i>boolean</i>  |
| Tree        | <a href="#">tx-eth-vsm-grace</a>   |
| Description | When configured to <b>true</b> , the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.<br><br>The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.<br><br>The operator must configure the <b>configure system eth-cfm grace</b> command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).<br><br>When configured to <b>false</b> , the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP. |
| Default     | true   |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **lbm-svc-act-responder** *boolean*

|            |  |
|------------|--|
| Synopsis   | Process service activation streams in ETH-CFM LBM  |
| Context    | <b>configure service vpls</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>lbm-svc-act-responder</b> <i>boolean</i> |
| Tree       | <a href="#">lbm-svc-act-responder</a>  |
| Introduced | 16.0.R1  |



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **low-priority-defect** *keyword*

Synopsis Lowest priority defect allowed to generate fault alarm

Context **configure service vpls** *string sap string eth-cfm mep md-admin-name* *reference ma-admin-name reference mep-id number low-priority-defect keyword*

Tree [low-priority-defect](#)

Options all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon

Default mac-rem-err-xcon

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mac-address** *string*

Synopsis MAC address of the MEP

Context **configure service vpls** *string sap string eth-cfm mep md-admin-name* *reference ma-admin-name reference mep-id number mac-address string*

Tree [mac-address](#)

Description This command specifies the MAC address of the MEP.  
When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **one-way-delay-threshold** *number*

Synopsis Threshold time limit for the one-way delay test

Context **configure service vpls** *string sap string eth-cfm mep md-admin-name* *reference ma-admin-name reference mep-id number one-way-delay-threshold number*

Tree [one-way-delay-threshold](#)

Range 0 to 600

Units seconds

Default 3

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**primary-vlan** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | MEP provisioned using MA primary VLAN ID  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>primary-vlan</b> <i>boolean</i> |
| Tree       | <a href="#">primary-vlan</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**mip primary-vlan** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mip</b> list instance  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mip primary-vlan</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">mip</a>   |
| Introduced | 21.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**primary-vlan** (*number* | *keyword*)

|             |   |
|-------------|---|
| Synopsis    | VLAN ID to which the MIP is attached  |
| Context     | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mip primary-vlan</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree        | <a href="#">mip</a>   |
| Description | This command provides an option for linking a MIP with a Primary VLAN number or none. When the <b>none</b> option is provided, the MIP does not include the primary vlan. |
| Range       | 1 to 4094   |
| Options     | none  |
| Notes       | This element is part of a list key.   |
| Introduced  | 21.5.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**cfm-vlan-tag** *string*

|               |  |
|---------------|--|
| Synopsis      | VLAN tags to apply to CFM PDUs for egress processing   |
| Context       | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mip primary-vlan</a> ( <i>number</i>   <i>keyword</i> )<br><a href="#">cfm-vlan-tag</a> <i>string</i>  |
| Tree          | <a href="#">cfm-vlan-tag</a>   |
| Description   | This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the vc-type vlan or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM PDUs arriving at the same egress. When this command is included under the MEP or MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration. |
| String Length | 1 to 9   |
| Introduced    | 21.10.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**mac-address** *string*

|            |  |
|------------|--|
| Synopsis   | MAC address of the MIP   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mip primary-vlan</a> ( <i>number</i>   <i>keyword</i> )<br><a href="#">mac-address</a> <i>string</i> |
| Tree       | <a href="#">mac-address</a>  |
| Introduced | 21.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**squelch-ingress-ctag-levels** *number*

|             |  |
|-------------|--|
| Synopsis    | Squelch levels using additional VLAN C-Tag space   |
| Context     | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm squelch-ingress-ctag-levels</a> <i>number</i>  |
| Tree        | <a href="#">squelch-ingress-ctag-levels</a>  |
| Description | This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding plus an additional VLAN, up to a maximum tag length of two tags. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.<br><br>The list of levels must be a complete contiguous list from 0 up to the highest level to be dropped. |

|                |  |
|----------------|--|
| Range          | 0 to 7   |
| Max. Instances | 8  |
| Introduced     | 21.2.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **squelch-ingress-levels** *number*

|                |  |
|----------------|--|
| Synopsis       | Levels for which ETH-CFM packets are silently discarded  |
| Context        | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>eth-cfm</b> <b>squelch-ingress-levels</b> <i>number</i>   |
| Tree           | <a href="#">squelch-ingress-levels</a>   |
| Description    | <p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.</p> |
| Range          | 0 to 7   |
| Max. Instances | 8  |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **vmep-filter** *boolean*

|            |  |
|------------|--|
| Synopsis   | Suppress eth-cfm PDUs based on level lower than or equal to configured Virtual MEP   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>eth-cfm</b> <b>vmep-filter</b> <i>boolean</i> |
| Tree       | <a href="#">vmep-filter</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**eth-ring** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Ethernet ring operation   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>eth-ring</b> <i>number</i> |
| Tree       | <a href="#">eth-ring</a>  |
| Range      | 1 to 128  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**etree-leaf** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enable etree leaf access-circuit status  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>etree-leaf</b> <i>boolean</i> |
| Tree       | <a href="#">etree-leaf</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**etree-root-leaf-tag**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>etree-root-leaf-tag</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>etree-root-leaf-tag</b> |
| Tree       | <a href="#">etree-root-leaf-tag</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**leaf number****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Leaf tag value  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string etree-root-leaf-tag leaf number</a> |
| Tree       | <a href="#">leaf</a>  |
| Range      | 1 to 4094   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**fdb**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>fdb</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string fdb</a> |
| Tree       | <a href="#">fdb</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**auto-learn-mac-protect boolean**

|            |  |
|------------|--|
| Synopsis   | Enable automatic update of MAC protect list  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string fdb auto-learn-mac-protect boolean</a> |
| Tree       | <a href="#">auto-learn-mac-protect</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**auto-learn-mac-protect-exclude-list reference**

|          |   |
|----------|---|
| Synopsis | Referenced MAC protect exclusion list   |
| Context  | <b>configure</b> <a href="#">service vpls string sap string fdb auto-learn-mac-protect-exclude-list reference</a> |
| Tree     | <a href="#">auto-learn-mac-protect-exclude-list</a>   |

|             |   |
|-------------|---|
| Description | <p>This command references the name of a MAC protect exclusion list.</p> <p>Dynamically-learned MAC Source Addresses (SA) are protected if they are learned on an object with ALMP configured and no exclusion list is associated with the object, or if the MAC SA does not match any entry in an associated exclusion list.</p> <p>An exclusion list can be used in multiple objects of a service. If a list is empty, ALMP does not exclude any learned MAC SAs from protection on the object.</p> |
| Reference   | <b>configure</b> <a href="#">service mac-list</a> <i>string</i>   |
| Introduced  | 20.5.R1   |
| Platforms   | All   |

### **discard-unknown-source** *boolean*

|            |   |
|------------|---|
| Synopsis   | Discard frames with unknown source  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">fdb</a> <a href="#">discard-unknown-source</a> <i>boolean</i> |
| Tree       | <a href="#">discard-unknown-source</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **discard-unprotected-dest-mac** *boolean*

|            |   |
|------------|---|
| Synopsis   | Discard packet with unprotected destination MAC address   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">fdb</a> <a href="#">discard-unprotected-dest-mac</a> <i>boolean</i> |
| Tree       | <a href="#">discard-unprotected-dest-mac</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **limit-mac-move** *keyword*

|            |   |
|------------|---|
| Synopsis   | MAC move  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">fdb</a> <a href="#">limit-mac-move</a> <i>keyword</i> |
| Tree       | <a href="#">limit-mac-move</a>  |
| Options    | blockable, non-blockable  |
| Default    | blockable   |
| Introduced | 16.0.R1   |

Platforms All

## mac-learning

Synopsis Enter the **mac-learning** context  
Context **configure service vpls string sap string fdb mac-learning**  
Tree [mac-learning](#)  
Introduced 16.0.R1  
Platforms All

## aging *boolean*

Synopsis Enable aging of MAC addresses  
Context **configure service vpls string sap string fdb mac-learning aging *boolean***  
Tree [aging](#)  
Default true  
Introduced 16.0.R1  
Platforms All

## learning *boolean*

Synopsis Enable learning of new MAC addresses  
Context **configure service vpls string sap string fdb mac-learning learning *boolean***  
Tree [learning](#)  
Default true  
Introduced 16.0.R1  
Platforms All

## mac-pinning *boolean*

Synopsis Enable MAC address pinning on this SAP  
Context **configure service vpls string sap string fdb mac-pinning *boolean***  
Tree [mac-pinning](#)  
Default false  
Introduced 16.0.R1



Platforms All

### **maximum-mac-addresses** *number*

Synopsis Maximum number of MAC entries in the FDB  
 Context **configure** [service vpls string sap string fdb maximum-mac-addresses number](#)  
 Tree [maximum-mac-addresses](#)  
 Range 1 to 511999  
 Introduced 16.0.R1  
 Platforms All

### **protected-src-mac-violation-action** *keyword*

Synopsis Action to take whenever a relearn request for a protected MAC is received  
 Context **configure** [service vpls string sap string fdb protected-src-mac-violation-action keyword](#)  
 Tree [protected-src-mac-violation-action](#)  
 Options sap-oper-down, alarm-only, discard  
 Introduced 16.0.R1  
 Platforms All

### **host-admin-state** *keyword*

Synopsis Administrative state of the hosts  
 Context **configure** [service vpls string sap string host-admin-state keyword](#)  
 Tree [host-admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **host-lockout-policy** *reference*

Synopsis Host lockout policy  
 Context **configure** [service vpls string sap string host-lockout-policy reference](#)  
 Tree [host-lockout-policy](#)

---

|            |  |
|------------|--|
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">host-lockout-policy</a> <i>string</i> |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **i-vpls-mac-flush**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>i-vpls-mac-flush</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">i-vpls-mac-flush</a> |
| Tree       | <a href="#">i-vpls-mac-flush</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **bgp-evpn**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>bgp-evpn</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">i-vpls-mac-flush</a> <a href="#">bgp-evpn</a> |
| Tree       | <a href="#">bgp-evpn</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **send-to-bvpls** *boolean*

|            |  |
|------------|--|
| Synopsis   | Send B-VPLS EVPN flush   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">i-vpls-mac-flush</a> <a href="#">bgp-evpn</a> <a href="#">send-to-bvpls</a> <i>boolean</i> |
| Tree       | <a href="#">send-to-bvpls</a>  |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **igmp-host-tracking**

|          |  |
|----------|--|
| Synopsis | Enter the <b>igmp-host-tracking</b> context  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-host-tracking</a> |
| Tree     | <a href="#">igmp-host-tracking</a>   |

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **expiry-time** *number*

Synopsis Time that the system continues to track inactive hosts  
 Context **configure** [service vpls](#) *string* [sap](#) *string* [igmp-host-tracking](#) [expiry-time](#) *number*  
 Tree [expiry-time](#)  
 Range 1 to 65535  
 Units seconds  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **import-policy** *reference*

Synopsis Import policy that filters IGMP packets  
 Context **configure** [service vpls](#) *string* [sap](#) *string* [igmp-host-tracking](#) [import-policy](#) *reference*  
 Tree [import-policy](#)  
 Reference **configure** [policy-options](#) [policy-statement](#) *string*  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-group-sources** *number*

Synopsis Maximum number of multicast groups to track per group  
 Context **configure** [service vpls](#) *string* [sap](#) *string* [igmp-host-tracking](#) [maximum-number-group-sources](#) *number*  
 Tree [maximum-number-group-sources](#)  
 Range 1 to 32000  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-groups** *number*

Synopsis Maximum number of multicast groups to be tracked

|            |   |
|------------|---|
| Context    | <b>configure service vpls string sap string igmp-host-tracking maximum-number-groups number</b> |
| Tree       | <a href="#">maximum-number-groups</a>   |
| Range      | 1 to 16000  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **maximum-number-sources number**

|            |  |
|------------|--|
| Synopsis   | Maximum number of multicast sources to be tracked  |
| Context    | <b>configure service vpls string sap string igmp-host-tracking maximum-number-sources number</b> |
| Tree       | <a href="#">maximum-number-sources</a>   |
| Range      | 1 to 1000  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **router-alert-check boolean**

|            |   |
|------------|---|
| Synopsis   | Enable IGMP router alert check option   |
| Context    | <b>configure service vpls string sap string igmp-host-tracking router-alert-check boolean</b> |
| Tree       | <a href="#">router-alert-check</a>  |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                       |

### **igmp-snooping**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>igmp-snooping</b> context                        |
| Context    | <b>configure service vpls string sap string igmp-snooping</b> |
| Tree       | <a href="#">igmp-snooping</a>                                 |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**fast-leave** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow IGMP fast leave processing  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">fast-leave</a> <i>boolean</i> |
| Tree       | <a href="#">fast-leave</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**import-policy** *reference*

|            |  |
|------------|--|
| Synopsis   | Import policy that filters IGMP packets  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">import-policy</a> <i>reference</i> |
| Tree       | <a href="#">import-policy</a>  |
| Reference  | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**maximum-number-group-sources** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum group source combinations  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">maximum-number-group-sources</a> <i>number</i> |
| Tree       | <a href="#">maximum-number-group-sources</a>   |
| Range      | 1 to 32000   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**maximum-number-groups** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum groups allowed  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">maximum-number-groups</a> <i>number</i> |
| Tree       | <a href="#">maximum-number-groups</a>   |
| Range      | 1 to 16000  |
| Introduced | 16.0.R1   |

Platforms All

### **maximum-number-sources** *number*

Synopsis Maximum sources that are allowed per group

Context **configure** [service vpls string sap string igmp-snooping maximum-number-sources number](#)

Tree [maximum-number-sources](#)

Range 1 to 1000

Introduced 16.0.R1

Platforms All

### **mcac**

Synopsis Enter the **mcac** context

Context **configure** [service vpls string sap string igmp-snooping mcac](#)

Tree [mcac](#)

Introduced 16.0.R1

Platforms All

### **bandwidth**

Synopsis Enter the **bandwidth** context

Context **configure** [service vpls string sap string igmp-snooping mcac bandwidth](#)

Tree [bandwidth](#)

Introduced 16.0.R1

Platforms All

### **mandatory** (*number* | *keyword*)

Synopsis Pre-reserved bandwidth for all mandatory channels

Context **configure** [service vpls string sap string igmp-snooping mcac bandwidth mandatory \(number | keyword\)](#)

Tree [mandatory](#)

Range 0 to 2147483647

Options unlimited

|            |           |
|------------|-----------|
| Default    | unlimited |
| Introduced | 16.0.R1   |
| Platforms  | All       |

### **total** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Maximum allowed bandwidth  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">mcac</a> <a href="#">bandwidth</a> <b>total</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">total</a>  |
| Range      | 0 to 2147483647  |
| Options    | unlimited  |
| Default    | unlimited  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **interface-policy** *reference*

|            |  |
|------------|--|
| Synopsis   | Name of multicast CAC interface policy   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">mcac</a> <a href="#">interface-policy</a> <i>reference</i> |
| Tree       | <a href="#">interface-policy</a>   |
| Reference  | <b>configure</b> <a href="#">mcac</a> <a href="#">interface-policy</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **mc-constraints**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mc-constraints</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">mcac</a> <a href="#">mc-constraints</a> |
| Tree       | <a href="#">mc-constraints</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**level** [*level-id*] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>level</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">level</a> <i>number</i> |
| Tree       | <a href="#">level</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[level-id]** *number*

|            |   |
|------------|---|
| Synopsis   | Bandwidth level ID for an MCAC constraint   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">level</a> <i>number</i> |
| Tree       | <a href="#">level</a>   |
| Range      | 1 to 8  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**bandwidth** *number*

|            |   |
|------------|---|
| Synopsis   | Bandwidth available for this level  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">level</a> <i>number</i> <a href="#">bandwidth</a> <i>number</i> |
| Tree       | <a href="#">bandwidth</a>   |
| Range      | 0 to 2147483647   |
| Units      | kilobps   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**number-down** [*number-lag-port-down*] *number*

|          |   |
|----------|---|
| Synopsis | Enter the <b>number-down</b> list instance  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">number-down</a> <i>number</i> |



|            |                             |
|------------|-----------------------------|
| Tree       | <a href="#">number-down</a> |
| Introduced | 16.0.R1                     |
| Platforms  | All                         |

### **[number-lag-port-down]** *number*

|            |  |
|------------|--|
| Synopsis   | Number of ports that are down in this LAG link   |
| Context    | <b>configure</b> <a href="#">service vpls string sap string igmp-snooping mcac mc-constraints number-down number</a> |
| Tree       | <a href="#">number-down</a>  |
| Range      | 1 to 64  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **level** *number*

|             |   |
|-------------|---|
| Synopsis    | Level ID to associate with number of down LAG ports   |
| Context     | <b>configure</b> <a href="#">service vpls string sap string igmp-snooping mcac mc-constraints number-down number level number</a> |
| Tree        | <a href="#">level</a>   |
| Description | This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.     |
| Range       | 1 to 8  |
| Notes       | This element is mandatory.  |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **use-lag-port-weight** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Use LAG port weight in calculating MCAC constraints  |
| Context     | <b>configure</b> <a href="#">service vpls string sap string igmp-snooping mcac mc-constraints use-lag-port-weight boolean</a>  |
| Tree        | <a href="#">use-lag-port-weight</a>  |
| Description | When configured to <b>true</b> , port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper |

operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs.

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **policy reference**

|             |   |
|-------------|---|
| Synopsis    | Multicast CAC policy name   |
| Context     | <b>configure service vpls string sap string igmp-snooping mcac policy reference</b>   |
| Tree        | <a href="#">policy</a>  |
| Description | <p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> <li>• subscriber level and redirected interface when redirection is configured</li> <li>• subscriber level and group-interface level when redirection is unconfigured</li> </ul> <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p> |
| Reference   | <b>configure mcac policy string</b>   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **mrouter-port boolean**

|            |  |
|------------|--|
| Synopsis   | Operate port as a multicast router port  |
| Context    | <b>configure service vpls string sap string igmp-snooping mrouter-port boolean</b> |
| Tree       | <a href="#">mrouter-port</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## **mvr**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mvr</b> context                                      |
| Context    | <b>configure service vpls string sap string igmp-snooping mvr</b> |
| Tree       | <b>mvr</b>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## **from-vpls** *reference*

|            |   |
|------------|---|
| Synopsis   | MVR VPLS from which the multicast channels are taken                                  |
| Context    | <b>configure service vpls string sap string igmp-snooping mvr from-vpls reference</b> |
| Tree       | <b>from-vpls</b>  |
| Reference  | <b>configure service vpls string</b>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## **to-sap** *string*

|               |   |
|---------------|---|
| Synopsis      | Multicast channels copied to SAP  |
| Context       | <b>configure service vpls string sap string igmp-snooping mvr to-sap string</b> |
| Tree          | <b>to-sap</b>   |
| String Length | 1 to 45   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

## **query-interval** *number*

|            |   |
|------------|---|
| Synopsis   | Time between two consecutive host-query messages                                    |
| Context    | <b>configure service vpls string sap string igmp-snooping query-interval number</b> |
| Tree       | <b>query-interval</b>   |
| Range      | 2 to 1024   |
| Units      | seconds   |
| Default    | 125   |
| Introduced | 16.0.R1   |

Platforms All

### **query-last-member-interval** *number*

Synopsis Time between group-specific query messages

Context **configure** [service vpls](#) *string* [sap](#) *string* [igmp-snooping](#) [query-last-member-interval](#) *number*

Tree [query-last-member-interval](#)

Range 1 to 50

Units deciseconds

Default 10

Introduced 16.0.R1

Platforms All

### **query-response-interval** *number*

Synopsis Time to wait for a response to the host-query messages

Context **configure** [service vpls](#) *string* [sap](#) *string* [igmp-snooping](#) [query-response-interval](#) *number*

Tree [query-response-interval](#)

Range 1 to 1023

Units seconds

Default 10

Introduced 16.0.R1

Platforms All

### **robust-count** *number*

Synopsis Number of retries after expected message loss

Context **configure** [service vpls](#) *string* [sap](#) *string* [igmp-snooping](#) [robust-count](#) *number*

Tree [robust-count](#)

Range 2 to 7

Default 2

Introduced 16.0.R1

Platforms All

**router-alert-check** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable IP router alert check option   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">igmp-snooping</a> <a href="#">router-alert-check</a> <i>boolean</i> |
| Tree       | <a href="#">router-alert-check</a>  |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**send-queries** *boolean*

|            |   |
|------------|---|
| Synopsis   | Generate IGMP general queries   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">igmp-snooping</a> <a href="#">send-queries</a> <i>boolean</i> |
| Tree       | <a href="#">send-queries</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**static**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>static</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">igmp-snooping</a> <a href="#">static</a> |
| Tree       | <a href="#">static</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**group** [[group-address](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>group</b> list instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">igmp-snooping</a> <a href="#">static</a> <a href="#">group</a> <i>string</i> |
| Tree       | <a href="#">group</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[group-address]** *string*

|             |  |
|-------------|--|
| Synopsis    | Group address of static IGMP multicast channel   |
| Context     | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">static group</a> <i>string</i> |
| Tree        | <a href="#">group</a>  |
| Description | This command configures an address that receives data on an interface. The IP address must be unique for each static group.  |
| Notes       | This element is part of a list key.  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**source** [[source-address](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Add a list entry for <b>source</b>  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">static group</a> <i>string</i> <a href="#">source</a> <i>string</i> |
| Tree       | <a href="#">source</a>  |
| Notes      | The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[source-address]** *string*

|            |   |
|------------|---|
| Synopsis   | Source IP address of multicast channel sending data   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">static group</a> <i>string</i> <a href="#">source</a> <i>string</i> |
| Tree       | <a href="#">source</a>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R2   |
| Platforms  | All   |

**starg**

|            |  |
|------------|--|
| Synopsis   | any source address (*,G)   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">static group</a> <i>string</i> <a href="#">starg</a> |
| Tree       | <a href="#">starg</a>  |
| Notes      | The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .   |
| Introduced | 16.0.R2  |

Platforms All

### **version** *keyword*

Synopsis IGMP protocol version  
 Context **configure** [service vpls](#) *string* [sap](#) *string* [igmp-snooping](#) [version](#) *keyword*  
 Tree [version](#)  
 Options 1, 2, 3  
 Default 3  
 Introduced 16.0.R1  
 Platforms All

### **ingress**

Synopsis Enter the **ingress** context  
 Context **configure** [service vpls](#) *string* [sap](#) *string* [ingress](#)  
 Tree [ingress](#)  
 Introduced 16.0.R1  
 Platforms All

### **filter**

Synopsis Enter the **filter** context  
 Context **configure** [service vpls](#) *string* [sap](#) *string* [ingress](#) [filter](#)  
 Tree [filter](#)  
 Introduced 16.0.R1  
 Platforms All

### **ip** *reference*

Synopsis IPv4 filter policy name  
 Context **configure** [service vpls](#) *string* [sap](#) *string* [ingress](#) [filter](#) [ip](#) *reference*  
 Tree [ip](#)  
 Reference **configure** [filter](#) [ip-filter](#) *string*  
 Introduced 16.0.R1

Platforms All

### ipv6 reference

Synopsis IPv6 filter policy name  
 Context **configure** [service vpls string sap string ingress filter ipv6 reference](#)  
 Tree [ipv6](#)  
 Reference **configure** [filter ipv6-filter string](#)  
 Introduced 16.0.R1  
 Platforms All

### mac reference

Synopsis MAC filter policy name  
 Context **configure** [service vpls string sap string ingress filter mac reference](#)  
 Tree [mac](#)  
 Reference **configure** [filter mac-filter string](#)  
 Introduced 16.0.R1  
 Platforms All

### qos

Synopsis Enter the **qos** context  
 Context **configure** [service vpls string sap string ingress qos](#)  
 Tree [qos](#)  
 Introduced 16.0.R1  
 Platforms All

### match-qinq-dot1p keyword

Synopsis Ingress match QinQ Dot1p  
 Context **configure** [service vpls string sap string ingress qos match-qinq-dot1p keyword](#)  
 Tree [match-qinq-dot1p](#)  
 Options top, bottom  
 Introduced 16.0.R1



Platforms All

## **policer-control-policy**

Synopsis Enter the **policer-control-policy** context

Context **configure service vpls string sap string ingress qos policer-control-policy**

Tree [policer-control-policy](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## **overrides**

Synopsis Enable the **overrides** context

Context **configure service vpls string sap string ingress qos policer-control-policy overrides**

Tree [overrides](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## **root**

Synopsis Enter the **root** context

Context **configure service vpls string sap string ingress qos policer-control-policy overrides root**

Tree [root](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## **max-rate** (*number* | *keyword*)

Synopsis Maximum frame-based bandwidth limit

Context **configure service vpls string sap string ingress qos policer-control-policy overrides root**  
[max-rate](#) (*number* | *keyword*)

Tree [max-rate](#)

Range 1 to 6400000000

Options max

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### priority-mbs-thresholds

Synopsis Enter the **priority-mbs-thresholds** context

Context **configure service vpls string sap string ingress qos policer-control-policy overrides root priority-mbs-thresholds**

Tree [priority-mbs-thresholds](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### min-thresh-separation (*number* | *keyword*)

Synopsis Minimum amount of separation buffer space

Context **configure service vpls string sap string ingress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation (*number* | *keyword*)**

Tree [min-thresh-separation](#)

Range 0 to 16777216

Units bytes

Options auto

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### priority [*priority-level*] *number*

Synopsis Enter the **priority** list instance

Context **configure service vpls string sap string ingress qos policer-control-policy overrides root priority-mbs-thresholds priority *number***

Tree [priority](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### [*priority-level*] *number*

Synopsis Priority level

Context **configure service vpls string sap string ingress qos policer-control-policy overrides root priority-mbs-thresholds priority *number***

|            |  |
|------------|--|
| Tree       | <a href="#">priority</a>                               |
| Range      | 1 to 8   |
| Notes      | This element is part of a list key.                    |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

### **mbs-contribution** (*number | keyword*)

|            |   |
|------------|---|
| Synopsis   | Minimum amount of cumulative buffer space allowed   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i> <a href="#">mbs-contribution</a> ( <i>number   keyword</i> ) |
| Tree       | <a href="#">mbs-contribution</a>  |
| Range      | 0 to 16777216   |
| Units      | bytes   |
| Options    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

### **policy-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Policer control policy name   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos</a> <a href="#">policer-control-policy</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">policer-control-policy</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

### **sap-ingress**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>sap-ingress</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos</a> <a href="#">sap-ingress</a> |
| Tree       | <a href="#">sap-ingress</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**fp-redirect-group**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>fp-redirect-group</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">fp-redirect-group</a> |
| Tree       | <a href="#">fp-redirect-group</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**group-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Queue group template name created on forwarding plane   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">fp-redirect-group</a> <a href="#">group-name</a> <i>reference</i> |
| Tree       | <a href="#">group-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">ingress</a> <a href="#">queue-group</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**instance** *number*

|            |  |
|------------|--|
| Synopsis   | Queue group instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">fp-redirect-group</a> <a href="#">instance</a> <i>number</i> |
| Tree       | <a href="#">instance</a>   |
| Range      | 1 to 65535   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**overrides**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>overrides</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> |
| Tree       | <a href="#">overrides</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## ip-criteria

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ip-criteria</b> context  |
| Context    | <b>configure service vpls string sap string ingress qos sap-ingress overrides ip-criteria</b> |
| Tree       | <a href="#">ip-criteria</a>   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                                  |

## activate-entry-tag *number*

|            |  |
|------------|--|
| Synopsis   | Tag ID activated for IPv4 criteria   |
| Context    | <b>configure service vpls string sap string ingress qos sap-ingress overrides ip-criteria activate-entry-tag <i>number</i></b> |
| Tree       | <a href="#">activate-entry-tag</a>   |
| Range      | 1 to 255   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## ipv6-criteria

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ipv6-criteria</b> context  |
| Context    | <b>configure service vpls string sap string ingress qos sap-ingress overrides ipv6-criteria</b> |
| Tree       | <a href="#">ipv6-criteria</a>   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                                    |

## activate-entry-tag *number*

|            |  |
|------------|--|
| Synopsis   | Tag ID activated for IPv6 criteria   |
| Context    | <b>configure service vpls string sap string ingress qos sap-ingress overrides ipv6-criteria activate-entry-tag <i>number</i></b> |
| Tree       | <a href="#">activate-entry-tag</a>   |
| Range      | 1 to 255   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**policer** [*policer-id*] *reference*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>policer</b> list instance  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string ingress qos sap-ingress overrides policer reference</a> |
| Tree       | <a href="#">policer</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**[policer-id]** *reference*

|            |   |
|------------|---|
| Synopsis   | Policer unique ID   |
| Context    | <b>configure</b> <a href="#">service vpls string sap string ingress qos sap-ingress overrides policer reference</a> |
| Tree       | <a href="#">policer</a>   |
| Reference  | <b>configure</b> <a href="#">qos sap-ingress string policer number</a>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**cbs** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | CBS  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string ingress qos sap-ingress overrides policer reference cbs (number   keyword)</a> |
| Tree       | <a href="#">cbs</a>  |
| Range      | 0 to 268435456   |
| Units      | bytes  |
| Options    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**mbs** (*number* | *keyword*)

|          |     |
|----------|-----|
| Synopsis | MBS |
|----------|-----|

|            |   |
|------------|---|
| Context    | <b>configure service vpls string sap string ingress qos sap-ingress overrides policer reference mbs</b> ( <i>number   keyword</i> ) |
| Tree       | <a href="#">mbs</a>   |
| Range      | 0 to 268435456  |
| Units      | bytes   |
| Options    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

### **packet-byte-offset** *number*

|            |   |
|------------|---|
| Synopsis   | Packet size modification for policing information   |
| Context    | <b>configure service vpls string sap string ingress qos sap-ingress overrides policer reference packet-byte-offset number</b> |
| Tree       | <a href="#">packet-byte-offset</a>  |
| Range      | -32 to 31   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

### **percent-rate**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>percent-rate</b> context  |
| Context    | <b>configure service vpls string sap string ingress qos sap-ingress overrides policer reference percent-rate</b> |
| Tree       | <a href="#">percent-rate</a>   |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .                                |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

### **cir** *decimal-number*

|          |   |
|----------|---|
| Synopsis | CIR percent rate  |
| Context  | <b>configure service vpls string sap string ingress qos sap-ingress overrides policer reference percent-rate cir decimal-number</b> |
| Tree     | <a href="#">cir</a>   |
| Range    | 0.00 to 100.00  |

|            |  |
|------------|--|
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

### **pir** *decimal-number*

|            |   |
|------------|---|
| Synopsis   | PIR percent rate  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">percent-rate</a> <b>pir</b> <i>decimal-number</i> |
| Tree       | <a href="#">pir</a>   |
| Range      | 0.01 to 100.00  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

### **rate**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>rate</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>rate</b> |
| Tree       | <a href="#">rate</a>  |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

### **cir** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | CIR rate   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">rate</a> <b>cir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cir</a>  |
| Range      | 0 to 6400000000  |
| Units      | kilobps  |
| Options    | max  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |



**pir** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | PIR rate   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">rate</a> <b>pir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">pir</a>  |
| Range      | 1 to 6400000000  |
| Units      | kilobps  |
| Options    | max  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**stat-mode** *keyword*

|            |  |
|------------|--|
| Synopsis   | Mode of statistics collected by the policer  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">stat-mode</a> <i>keyword</i> |
| Tree       | <a href="#">stat-mode</a>  |
| Options    | no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**queue** [[queue-id](#)] *reference*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>queue</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> |
| Tree       | <a href="#">queue</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[queue-id]** *reference*

|          |   |
|----------|---|
| Synopsis | Policer unique ID   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> |

|            |  |
|------------|--|
| Tree       | <a href="#">queue</a>  |
| Reference  | <b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">queue</a> <i>number</i> |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## adaptation-rule

|            |  |
|------------|--|
| Synopsis   | Enter the <b>adaptation-rule</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos sap-ingress overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">adaptation-rule</a> |
| Tree       | <a href="#">adaptation-rule</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## cir keyword

|            |   |
|------------|---|
| Synopsis   | Constraint used when deriving the operational CIR value   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos sap-ingress overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">adaptation-rule</a> <a href="#">cir</a> <i>keyword</i> |
| Tree       | <a href="#">cir</a>   |
| Options    | max, min, closest   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## pir keyword

|            |   |
|------------|---|
| Synopsis   | Constraint used when deriving the operational PIR value   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos sap-ingress overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">adaptation-rule</a> <a href="#">pir</a> <i>keyword</i> |
| Tree       | <a href="#">pir</a>   |
| Options    | max, min, closest   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**cbs** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | CBS  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string ingress qos sap-ingress overrides queue reference cbs</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cbs</a>  |
| Range      | 0 to 1048576   |
| Units      | kilobytes  |
| Options    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**drop-tail**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>drop-tail</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string ingress qos sap-ingress overrides queue reference drop-tail</a> |
| Tree       | <a href="#">drop-tail</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**low**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>low</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string ingress qos sap-ingress overrides queue reference drop-tail low</a> |
| Tree       | <a href="#">low</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**percent-reduction-from-mbs** (*number* | *keyword*)

|          |   |
|----------|---|
| Synopsis | Percentage reduction from the MBS for a queue drop tail   |
| Context  | <b>configure</b> <a href="#">service vpls string sap string ingress qos sap-ingress overrides queue reference drop-tail low percent-reduction-from-mbs</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <a href="#">percent-reduction-from-mbs</a>  |
| Range    | 0 to 100  |

|            |         |
|------------|---------|
| Options    | auto    |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **mbs** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | MBS  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string ingress qos sap-ingress overrides queue reference mbs</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">mbs</a>  |
| Range      | 0 to 1073741824  |
| Units      | bytes  |
| Options    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **monitor-queue-depth**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>monitor-queue-depth</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls string sap string ingress qos sap-ingress overrides queue reference monitor-queue-depth</a> |
| Tree       | <a href="#">monitor-queue-depth</a>   |
| Introduced | 21.7.R1   |
| Platforms  | All   |

### **fast-polling** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable fast polling of the queue depth   |
| Context    | <b>configure</b> <a href="#">service vpls string sap string ingress qos sap-ingress overrides queue reference monitor-queue-depth fast-polling boolean</a> |
| Tree       | <a href="#">fast-polling</a>   |
| Default    | false  |
| Introduced | 21.7.R1  |
| Platforms  | All  |

## parent

|            |  |
|------------|--|
| Synopsis   | Enter the <b>parent</b> context  |
| Context    | <b>configure service vpls string sap string ingress qos sap-ingress overrides queue reference parent</b> |
| Tree       | <b>parent</b>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## cir-weight *number*

|            |  |
|------------|--|
| Synopsis   | CIR parameter that overrides parent for queue group  |
| Context    | <b>configure service vpls string sap string ingress qos sap-ingress overrides queue reference parent cir-weight number</b> |
| Tree       | <b>cir-weight</b>  |
| Range      | 0 to 100   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## weight *number*

|            |  |
|------------|--|
| Synopsis   | PIR parameter that overrides parent for queue group  |
| Context    | <b>configure service vpls string sap string ingress qos sap-ingress overrides queue reference parent weight number</b> |
| Tree       | <b>weight</b>  |
| Range      | 0 to 100   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## percent-rate

|            |  |
|------------|--|
| Synopsis   | Enter the <b>percent-rate</b> context  |
| Context    | <b>configure service vpls string sap string ingress qos sap-ingress overrides queue reference percent-rate</b> |
| Tree       | <b>percent-rate</b>  |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .                              |
| Introduced | 16.0.R1  |

Platforms All

### **cir** *decimal-number*

Synopsis CIR percent rate

Context **configure** [service vpls string sap string ingress qos sap-ingress overrides queue reference percent-rate cir decimal-number](#)

Tree [cir](#)

Range 0.00 to 100.00

Introduced 16.0.R1

Platforms All

### **pir** *decimal-number*

Synopsis PIR percent rate

Context **configure** [service vpls string sap string ingress qos sap-ingress overrides queue reference percent-rate pir decimal-number](#)

Tree [pir](#)

Range 0.01 to 100.00

Introduced 16.0.R1

Platforms All

### **rate**

Synopsis Enter the **rate** context

Context **configure** [service vpls string sap string ingress qos sap-ingress overrides queue reference rate](#)

Tree [rate](#)

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 16.0.R1

Platforms All

### **cir** (*number* | *keyword*)

Synopsis CIR rate

|            |  |
|------------|--|
| Context    | <b>configure service vpls string sap string ingress qos sap-ingress overrides queue reference rate cir</b> ( <i>number   keyword</i> ) |
| Tree       | <a href="#">cir</a>  |
| Range      | 0 to 6400000000  |
| Units      | kilobps  |
| Options    | max  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**pir** (*number | keyword*)

|            |  |
|------------|--|
| Synopsis   | PIR rate   |
| Context    | <b>configure service vpls string sap string ingress qos sap-ingress overrides queue reference rate pir</b> ( <i>number   keyword</i> ) |
| Tree       | <a href="#">pir</a>  |
| Range      | 1 to 6400000000  |
| Units      | kilobps  |
| Options    | max  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**policy-name** *reference*

|            |  |
|------------|--|
| Synopsis   | Policy ID  |
| Context    | <b>configure service vpls string sap string ingress qos sap-ingress policy-name</b> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>  |
| Reference  | <b>configure qos sap-ingress string</b>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**queuing-type** *keyword*

|          |   |
|----------|---|
| Synopsis | Queuing type  |
| Context  | <b>configure service vpls string sap string ingress qos sap-ingress queuing-type</b> <i>keyword</i> |
| Tree     | <a href="#">queuing-type</a>  |

|            |   |
|------------|---|
| Options    | shared, multipoint-shared                             |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR |

## **scheduler-policy**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>scheduler-policy</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string ingress qos scheduler-policy</a> |
| Tree       | <a href="#">scheduler-policy</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## **overrides**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>overrides</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls string sap string ingress qos scheduler-policy overrides</a> |
| Tree       | <a href="#">overrides</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## **scheduler** [[scheduler-name](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>scheduler</b> list instance  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string ingress qos scheduler-policy overrides scheduler string</a> |
| Tree       | <a href="#">scheduler</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## **[scheduler-name]** *string*

|          |   |
|----------|---|
| Synopsis | Scheduler name  |
| Context  | <b>configure</b> <a href="#">service vpls string sap string ingress qos scheduler-policy overrides scheduler string</a> |
| Tree     | <a href="#">scheduler</a>   |



|               |  |
|---------------|--|
| Description   | <p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.</p> |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

## parent

|            |  |
|------------|--|
| Synopsis   | Enter the <b>parent</b> context  |
| Context    | <b>configure service vpls</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos scheduler-policy overrides scheduler</b> <i>string</i> <b>parent</b> |
| Tree       | <b>parent</b>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## cir-weight *number*

|            |   |
|------------|---|
| Synopsis   | Weight used at the within-CIR port priority level   |
| Context    | <b>configure service vpls</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos scheduler-policy overrides scheduler</b> <i>string</i> <b>parent cir-weight</b> <i>number</i> |
| Tree       | <b>cir-weight</b>   |
| Range      | 0 to 100  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**weight number**

|            |  |
|------------|--|
| Synopsis   | Relative weight of the scheduler to feed the queue   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <a href="#">string sap</a> <a href="#">string ingress qos scheduler-policy overrides scheduler</a> <a href="#">string parent weight number</a> |
| Tree       | <a href="#">weight</a>   |
| Range      | 0 to 100   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**rate**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>rate</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <a href="#">string sap</a> <a href="#">string ingress qos scheduler-policy overrides scheduler</a> <a href="#">string rate</a> |
| Tree       | <a href="#">rate</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**cir (number | keyword)**

|            |   |
|------------|---|
| Synopsis   | CIR at which the queue it to operate  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <a href="#">string sap</a> <a href="#">string ingress qos scheduler-policy overrides scheduler</a> <a href="#">string rate cir (number   keyword)</a> |
| Tree       | <a href="#">cir</a>   |
| Range      | 0 to 6400000000   |
| Units      | kilobps   |
| Options    | sum, max  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**pir (number | keyword)**

|          |   |
|----------|---|
| Synopsis | PIR at which the queue is to operate  |
| Context  | <b>configure</b> <a href="#">service vpls</a> <a href="#">string sap</a> <a href="#">string ingress qos scheduler-policy overrides scheduler</a> <a href="#">string rate pir (number   keyword)</a> |
| Tree     | <a href="#">pir</a>   |

|            |                 |
|------------|-----------------|
| Range      | 1 to 6400000000 |
| Units      | kilobps         |
| Options    | max             |
| Introduced | 16.0.R1         |
| Platforms  | All             |

### **policy-name** *reference*

|            |  |
|------------|--|
| Synopsis   | Scheduler policy name  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string ingress qos scheduler-policy policy-name reference</a> |
| Tree       | <a href="#">policy-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos scheduler-policy string</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **qtag-manipulation**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>qtag-manipulation</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string ingress qtag-manipulation</a> |
| Tree       | <a href="#">qtag-manipulation</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **c-tag** (*number | keyword*)

|            |  |
|------------|--|
| Synopsis   | Inner ingress vlan translation for two service delimiting vlan values  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string ingress qtag-manipulation c-tag (number   keyword)</a> |
| Tree       | <a href="#">c-tag</a>  |
| Range      | 0 to 4094  |
| Options    | tag-*  |
| Notes      | The following elements are part of a choice: <b>push-dot1q-vlan</b> or ( <b>c-tag</b> and <b>s-tag</b> ).          |
| Introduced | 22.10.R1   |
| Platforms  | All  |

**push-dot1q-vlan** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | VLAN translation information   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qtag-manipulation</a> <a href="#">push-dot1q-vlan</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">push-dot1q-vlan</a>  |
| Range      | 0 to 4094  |
| Options    | use-sap-svlan  |
| Notes      | The following elements are part of a choice: <b>push-dot1q-vlan</b> or ( <b>c-tag</b> and <b>s-tag</b> ).  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**s-tag** *number*

|            |   |
|------------|---|
| Synopsis   | Outer ingress VLAN translation for two service delimiting VLAN values   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qtag-manipulation</a> <a href="#">s-tag</a> <i>number</i> |
| Tree       | <a href="#">s-tag</a>   |
| Range      | 0 to 4094   |
| Notes      | The following elements are part of a choice: <b>push-dot1q-vlan</b> or ( <b>c-tag</b> and <b>s-tag</b> ).   |
| Introduced | 22.10.R1  |
| Platforms  | All   |

**l2pt**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>l2pt</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">l2pt</a> |
| Tree       | <a href="#">l2pt</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**force-boundary**

|          |   |
|----------|---|
| Synopsis | Enable the <b>force-boundary</b> context  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">l2pt</a> <a href="#">force-boundary</a> |
| Tree     | <a href="#">force-boundary</a>  |

Introduced 16.0.R1  
 Platforms All

## protocols

Synopsis Enter the **protocols** context  
 Context **configure** [service vpls string sap string l2pt force-boundary protocols](#)  
 Tree [protocols](#)  
 Introduced 16.0.R1  
 Platforms All

## cdp boolean

Synopsis Enable Cisco discovery protocol  
 Context **configure** [service vpls string sap string l2pt force-boundary protocols cdp boolean](#)  
 Tree [cdp](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

## dtp boolean

Synopsis Enable dynamic trunking protocol  
 Context **configure** [service vpls string sap string l2pt force-boundary protocols dtp boolean](#)  
 Tree [dtp](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

## pagp boolean

Synopsis Enable port aggregation protocol  
 Context **configure** [service vpls string sap string l2pt force-boundary protocols pagp boolean](#)  
 Tree [pagp](#)  
 Default false

Introduced 16.0.R1  
Platforms All

### **stp** *boolean*

Synopsis Enable all spanning tree protocols  
Context **configure** [service](#) [vpls](#) [string](#) [sap](#) [string](#) [l2pt](#) [force-boundary](#) [protocols](#) [stp](#) *boolean*  
Tree [stp](#)  
Default true  
Introduced 16.0.R1  
Platforms All

### **udld** *boolean*

Synopsis Enable unidirectional link detection  
Context **configure** [service](#) [vpls](#) [string](#) [sap](#) [string](#) [l2pt](#) [force-boundary](#) [protocols](#) [udld](#) *boolean*  
Tree [udld](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **vtp** *boolean*

Synopsis Enable virtual trunk protocol  
Context **configure** [service](#) [vpls](#) [string](#) [sap](#) [string](#) [l2pt](#) [force-boundary](#) [protocols](#) [vtp](#) *boolean*  
Tree [vtp](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **termination**

Synopsis Enable the **termination** context  
Context **configure** [service](#) [vpls](#) [string](#) [sap](#) [string](#) [l2pt](#) [termination](#)  
Tree [termination](#)

---

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

## protocols

|            |  |
|------------|--|
| Synopsis   | Enter the <b>protocols</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls string sap string l2pt termination protocols</a> |
| Tree       | <a href="#">protocols</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## cdp boolean

|            |  |
|------------|--|
| Synopsis   | Enable Cisco discovery protocol  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string l2pt termination protocols cdp boolean</a> |
| Tree       | <a href="#">cdp</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## dtp boolean

|            |  |
|------------|--|
| Synopsis   | Enable dynamic trunking protocol   |
| Context    | <b>configure</b> <a href="#">service vpls string sap string l2pt termination protocols dtp boolean</a> |
| Tree       | <a href="#">dtp</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## pagp boolean

|          |   |
|----------|---|
| Synopsis | Enable port aggregation protocol  |
| Context  | <b>configure</b> <a href="#">service vpls string sap string l2pt termination protocols pagp boolean</a> |
| Tree     | <a href="#">pagp</a>  |
| Default  | false   |

Introduced 16.0.R1  
Platforms All

### **stp boolean**

Synopsis Enable all spanning tree protocols  
Context **configure service vpls string sap string l2pt termination protocols stp boolean**  
Tree [stp](#)  
Default true  
Introduced 16.0.R1  
Platforms All

### **udld boolean**

Synopsis Enable unidirectional link detection  
Context **configure service vpls string sap string l2pt termination protocols udld boolean**  
Tree [udld](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **vtp boolean**

Synopsis Enable virtual trunk protocol  
Context **configure service vpls string sap string l2pt termination protocols vtp boolean**  
Tree [vtp](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **l2tpv3-session**

Synopsis Enable the **l2tpv3-session** context  
Context **configure service vpls string sap string l2tpv3-session**  
Tree [l2tpv3-session](#)



|            |         |
|------------|---------|
| Introduced | 16.0.R4 |
| Platforms  | All     |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the session for the service  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">l2tpv3-session</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **pseudo-wire**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enter the <b>pseudo-wire</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">l2tpv3-session</a> <b>pseudo-wire</b> |
| Tree       | <a href="#">pseudo-wire</a>   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **ethernet**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enable the Ethernet PW-type for the L2TPv3 session   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">l2tpv3-session</a> <a href="#">pseudo-wire</a> <b>ethernet</b> |
| Tree       | <a href="#">ethernet</a>   |
| Notes      | The following elements are part of a choice: <b>ethernet</b> or <b>ethernet-vlan-id</b> .  |
| Introduced | 16.0.R4  |

Platforms All

## ethernet-vlan-id *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Ethernet-VLAN PW-type ID for the L2TPv3 session  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string l2tpv3-session pseudo-wire ethernet-vlan-id number</a> |
| Tree       | <a href="#">ethernet-vlan-id</a>   |
| Range      | 0 to 4095  |
| Notes      | The following elements are part of a choice: <b>ethernet</b> or <b>ethernet-vlan-id</b> .                          |
| Introduced | 16.0.R4  |
| Platforms  | All  |

## router



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enter the <b>router</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls string sap string l2tpv3-session router</a> |
| Tree       | <a href="#">router</a>  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

## group *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | Tunnel group name  |
| Context  | <b>configure</b> <a href="#">service vpls string sap string l2tpv3-session router group string</a> |
| Tree     | <a href="#">group</a>  |

String Length 1 to 32  
 Introduced 16.0.R4  
 Platforms All

### **router-instance** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Router name used to identify the router instance  
 Context **configure** [service vpls string sap string l2tpv3-session](#) [router router-instance string](#)  
 Tree [router-instance](#)  
 String Length 1 to 64  
 Introduced 16.0.R4  
 Platforms All

### **vc-id** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis VC ID for the L2TPv3 session  
 Context **configure** [service vpls string sap string l2tpv3-session](#) [vc-id number](#)  
 Tree [vc-id](#)  
 Range 1 to 4294967295  
 Introduced 16.0.R4  
 Platforms All

### **lag**

Synopsis Enter the **lag** context  
 Context **configure** [service vpls string sap string](#) [lag](#)  
 Tree [lag](#)  
 Introduced 16.0.R1  
 Platforms All

### **link-map-profile** *number*

|             |   |
|-------------|---|
| Synopsis    | LAG link map profile for a SAP or network interface   |
| Context     | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">lag</a> <a href="#">link-map-profile</a> <i>number</i>  |
| Tree        | <a href="#">link-map-profile</a>  |
| Description | <p>This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration.</p> <p>If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.</p> |
| Range       | 1 to 64   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **per-link-hash**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>per-link-hash</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">lag</a> <a href="#">per-link-hash</a> |
| Tree       | <a href="#">per-link-hash</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **class** *number*

|            |   |
|------------|---|
| Synopsis   | Class used on LAG egress using weighted per-link-hash   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">lag</a> <a href="#">per-link-hash</a> <a href="#">class</a> <i>number</i> |
| Tree       | <a href="#">class</a>   |
| Range      | 1 to 3  |
| Default    | 1   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **weight** *number*

|          |  |
|----------|--|
| Synopsis | Weight used on LAG egress using weighted per-link-hash |
|----------|--|

|            |   |
|------------|---|
| Context    | <b>configure service vpls string sap string lag per-link-hash weight number</b> |
| Tree       | <b>weight</b>   |
| Range      | 1 to 1024   |
| Default    | 1   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## managed-vlan-list

|            |   |
|------------|---|
| Synopsis   | Enter the <b>managed-vlan-list</b> context                        |
| Context    | <b>configure service vpls string sap string managed-vlan-list</b> |
| Tree       | <b>managed-vlan-list</b>  |
| Introduced | 19.10.R1  |
| Platforms  | All   |

## range [vlan-range] string

|            |  |
|------------|--|
| Synopsis   | Add a list entry for <b>range</b>  |
| Context    | <b>configure service vpls string sap string managed-vlan-list range string</b> |
| Tree       | <b>range</b>   |
| Introduced | 19.10.R1   |
| Platforms  | All  |

## [vlan-range] string

|            |  |
|------------|--|
| Synopsis   | Range of VLANs associated with the M-VPLS SAP                                  |
| Context    | <b>configure service vpls string sap string managed-vlan-list range string</b> |
| Tree       | <b>range</b>   |
| Notes      | This element is part of a list key.  |
| Introduced | 19.10.R1   |
| Platforms  | All  |

## mc-ring

|          |                                   |
|----------|-----------------------------------|
| Synopsis | Enable the <b>mc-ring</b> context |
|----------|-----------------------------------|

---

|            |   |
|------------|---|
| Context    | <b>configure service vpls string sap string mc-ring</b> |
| Tree       | <b>mc-ring</b>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **ring-node** *string*

|               |  |
|---------------|--|
| Synopsis      | Name for the ring node associated with this SAP                          |
| Context       | <b>configure service vpls string sap string mc-ring ring-node string</b> |
| Tree          | <b>ring-node</b>   |
| String Length | 1 to 32  |
| Notes         | This element is mandatory.   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

### **mld-snooping**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mld-snooping</b> context                        |
| Context    | <b>configure service vpls string sap string mld-snooping</b> |
| Tree       | <b>mld-snooping</b>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **fast-leave** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow IGMP fast leave processing  |
| Context    | <b>configure service vpls string sap string mld-snooping fast-leave boolean</b> |
| Tree       | <b>fast-leave</b>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **import-policy** *reference*

|          |   |
|----------|---|
| Synopsis | Import policy that filters IGMP packets |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">import-policy</a> <i>reference</i> |
| Tree       | <a href="#">import-policy</a>   |
| Reference  | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **maximum-number-groups** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum groups allowed   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">maximum-number-groups</a> <i>number</i> |
| Tree       | <a href="#">maximum-number-groups</a>  |
| Range      | 1 to 16000   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **mrouter-port** *boolean*

|            |  |
|------------|--|
| Synopsis   | Operate port as a multicast router port  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">mrouter-port</a> <i>boolean</i> |
| Tree       | <a href="#">mrouter-port</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **mvr**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mvr</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">mvr</a> |
| Tree       | <a href="#">mvr</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **from-vpls** *reference*

|          |  |
|----------|--|
| Synopsis | MVR VPLS from which the multicast channels are taken |
|----------|--|

|            |  |
|------------|--|
| Context    | <b>configure service vpls string sap string mld-snooping mvr from-vpls reference</b> |
| Tree       | <a href="#">from-vpls</a>  |
| Reference  | <b>configure service vpls string</b>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **to-sap string**

|               |  |
|---------------|--|
| Synopsis      | SAP to which the multicast channels are copied                                 |
| Context       | <b>configure service vpls string sap string mld-snooping mvr to-sap string</b> |
| Tree          | <a href="#">to-sap</a>   |
| String Length | 1 to 45  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

### **query-interval number**

|            |  |
|------------|--|
| Synopsis   | Time between two consecutive host-query messages                                   |
| Context    | <b>configure service vpls string sap string mld-snooping query-interval number</b> |
| Tree       | <a href="#">query-interval</a>   |
| Range      | 2 to 1024  |
| Units      | seconds  |
| Default    | 125  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **query-last-member-interval number**

|          |  |
|----------|--|
| Synopsis | Time between group-specific query messages   |
| Context  | <b>configure service vpls string sap string mld-snooping query-last-member-interval number</b> |
| Tree     | <a href="#">query-last-member-interval</a>   |
| Range    | 1 to 50  |
| Units    | deciseconds  |
| Default  | 10   |



---

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **query-response-interval** *number*

|            |  |
|------------|--|
| Synopsis   | Time to wait for a response to the host-query messages   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">query-response-interval</a> <i>number</i> |
| Tree       | <a href="#">query-response-interval</a>  |
| Range      | 1 to 1023  |
| Units      | seconds  |
| Default    | 10   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **robust-count** *number*

|            |   |
|------------|---|
| Synopsis   | Number of retries after expected message loss   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">robust-count</a> <i>number</i> |
| Tree       | <a href="#">robust-count</a>  |
| Range      | 2 to 7  |
| Default    | 2   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **router-alert-check** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable IP router alert check option  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">router-alert-check</a> <i>boolean</i> |
| Tree       | <a href="#">router-alert-check</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**send-queries** *boolean*

|            |  |
|------------|--|
| Synopsis   | Generate IGMP general queries  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">send-queries</a> <i>boolean</i> |
| Tree       | <a href="#">send-queries</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**static**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>static</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">static</a> |
| Tree       | <a href="#">static</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**group** [[group-address](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>group</b> list instance  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">static</a> <a href="#">group</a> <i>string</i> |
| Tree       | <a href="#">group</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[group-address]** *string*

|            |   |
|------------|---|
| Synopsis   | Group address of multicast channel  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">static</a> <a href="#">group</a> <i>string</i> |
| Tree       | <a href="#">group</a>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**source** [[source-address](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Add a list entry for <b>source</b>   |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">sap string</a> <a href="#">mld-snooping static group string</a> <a href="#">source string</a> |
| Tree       | <a href="#">source</a>   |
| Notes      | The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[source-address]** *string*

|            |  |
|------------|--|
| Synopsis   | Source IP address  |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">sap string</a> <a href="#">mld-snooping static group string</a> <a href="#">source string</a> |
| Tree       | <a href="#">source</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R2  |
| Platforms  | All  |

**starg**

|            |  |
|------------|--|
| Synopsis   | any source address (*,G)   |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">sap string</a> <a href="#">mld-snooping static group string</a> <a href="#">starg</a> |
| Tree       | <a href="#">starg</a>  |
| Notes      | The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .   |
| Introduced | 16.0.R2  |
| Platforms  | All  |

**version** *keyword*

|            |  |
|------------|--|
| Synopsis   | Version of MLD running on the SAP or SDP   |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">sap string</a> <a href="#">mld-snooping</a> <a href="#">version keyword</a> |
| Tree       | <a href="#">version</a>  |
| Options    | 1, 2   |
| Default    | 2  |
| Introduced | 16.0.R1  |

Platforms All

### **monitor-oper-group** *reference*

Synopsis Monitor operational group

Context **configure** [service vpls string sap string monitor-oper-group reference](#)

Tree [monitor-oper-group](#)

Reference **configure** [service oper-group string](#)

Notes The following elements are part of a choice: **monitor-oper-group** or **oper-group**.

Introduced 16.0.R1

Platforms All

### **mrp**

Synopsis Enter the **mrp** context

Context **configure** [service vpls string sap string mrp](#)

Tree [mrp](#)

Introduced 20.10.R1

Platforms All

### **join-time** *number*

Synopsis Interval between transmit opportunities

Context **configure** [service vpls string sap string mrp join-time number](#)

Tree [join-time](#)

Range 1 to 10

Default 2

Introduced 20.10.R1

Platforms All

### **leave-all-time** *number*

Synopsis Frequency that LeaveAll PDUs are generated

Context **configure** [service vpls string sap string mrp leave-all-time number](#)

Tree [leave-all-time](#)

---

|            |           |
|------------|-----------|
| Range      | 60 to 300 |
| Default    | 100       |
| Introduced | 20.10.R1  |
| Platforms  | All       |

**leave-time** *number*

|            |  |
|------------|--|
| Synopsis   | Time in leave state before transitioning to MT state   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">mrp</a> <a href="#">leave-time</a> <i>number</i> |
| Tree       | <a href="#">leave-time</a>   |
| Range      | 30 to 60   |
| Default    | 30   |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**periodic-time** *number*

|            |   |
|------------|---|
| Synopsis   | Frequency of periodic events generation   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">mrp</a> <a href="#">periodic-time</a> <i>number</i> |
| Tree       | <a href="#">periodic-time</a>   |
| Range      | 10 to 100   |
| Default    | 10  |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**periodic-timer** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable the periodic transmission timer  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">mrp</a> <a href="#">periodic-timer</a> <i>boolean</i> |
| Tree       | <a href="#">periodic-timer</a>  |
| Default    | false   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**policy reference**

|            |  |
|------------|--|
| Synopsis   | MMRP policy name   |
| Context    | <b>configure service vpls string sap string mrp policy reference</b> |
| Tree       | <a href="#">policy</a>   |
| Reference  | <b>configure service mrp policy string</b>                           |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**multi-service-site reference**

|            |  |
|------------|--|
| Synopsis   | Multi service site name  |
| Context    | <b>configure service vpls string sap string multi-service-site reference</b> |
| Tree       | <a href="#">multi-service-site</a>   |
| Reference  | <b>configure service customer string multi-service-site string</b>           |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**oper-group reference**

|            |   |
|------------|---|
| Synopsis   | Operational group   |
| Context    | <b>configure service vpls string sap string oper-group reference</b>                          |
| Tree       | <a href="#">oper-group</a>  |
| Reference  | <b>configure service oper-group string</b>  |
| Notes      | The following elements are part of a choice: <b>monitor-oper-group</b> or <b>oper-group</b> . |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**pbb**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>pbb</b> context                        |
| Context    | <b>configure service vpls string sap string pbb</b> |
| Tree       | <a href="#">pbb</a>                                 |
| Introduced | 20.10.R1  |
| Platforms  | All   |

## fault-propagation

|            |   |
|------------|---|
| Synopsis   | Enter the <b>fault-propagation</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">pbb</a> <a href="#">fault-propagation</a> |
| Tree       | <a href="#">fault-propagation</a>   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

## backbone-mac-address [[address](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Add a list entry for <b>backbone-mac-address</b>   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">pbb</a> <a href="#">fault-propagation</a> <a href="#">backbone-mac-address</a> <i>string</i> |
| Tree       | <a href="#">backbone-mac-address</a>   |
| Introduced | 20.10.R1   |
| Platforms  | All  |

## [[address](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Backbone MAC address   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">pbb</a> <a href="#">fault-propagation</a> <a href="#">backbone-mac-address</a> <i>string</i> |
| Tree       | <a href="#">backbone-mac-address</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

## backbone-mac-name [[name](#)] *reference*

|            |  |
|------------|--|
| Synopsis   | Add a list entry for <b>backbone-mac-name</b>  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">pbb</a> <a href="#">fault-propagation</a> <a href="#">backbone-mac-name</a> <i>reference</i> |
| Tree       | <a href="#">backbone-mac-name</a>  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**[name] reference**

|            |   |
|------------|---|
| Synopsis   | Backbone MAC address name   |
| Context    | <b>configure</b> <a href="#">service vpls string sap string pbb fault-propagation backbone-mac-name reference</a> |
| Tree       | <a href="#">backbone-mac-name</a>   |
| Reference  | <b>configure</b> <a href="#">service pbb mac string</a>   |
| Notes      | This element is part of a list key.   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**pim-snooping**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>pim-snooping</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string pim-snooping</a> |
| Tree       | <a href="#">pim-snooping</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**maximum-number-groups number**

|            |   |
|------------|---|
| Synopsis   | Maximum groups for this interface   |
| Context    | <b>configure</b> <a href="#">service vpls string sap string pim-snooping maximum-number-groups number</a> |
| Tree       | <a href="#">maximum-number-groups</a>   |
| Range      | 1 to 16000  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**process-cpm-traffic-on-sap-down boolean**

|            |   |
|------------|---|
| Synopsis   | Process CPM traffic on SAP down event   |
| Context    | <b>configure</b> <a href="#">service vpls string sap string process-cpm-traffic-on-sap-down boolean</a> |
| Tree       | <a href="#">process-cpm-traffic-on-sap-down</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |



Platforms All

### **radius-auth-policy** *reference*

Synopsis RADIUS authentication policy  
 Context **configure** [service vpls string sap string radius-auth-policy reference](#)  
 Tree [radius-auth-policy](#)  
 Reference **configure** [subscriber-mgmt radius-authentication-policy string](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **shcv-policy-ipv4** *reference*

Synopsis Subscriber host connectivity verification policy for IPv4  
 Context **configure** [service vpls string sap string shcv-policy-ipv4 reference](#)  
 Tree [shcv-policy-ipv4](#)  
 Reference **configure** [subscriber-mgmt shcv-policy string](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **spb**

Synopsis Enable the **spb** context  
 Context **configure** [service vpls string sap string spb](#)  
 Tree [spb](#)  
 Introduced 21.10.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Admin state  
 Context **configure** [service vpls string sap string spb admin-state keyword](#)  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable

Introduced 21.10.R1  
 Platforms All

### **level** [*id*] *number*

Synopsis Enter the **level** list instance  
 Context **configure** *service vpls string sap string spb level number*  
 Tree [level](#)  
 Introduced 21.10.R1  
 Platforms All

### **[id]** *number*

Synopsis Level identifier  
 Context **configure** *service vpls string sap string spb level number*  
 Tree [level](#)  
 Range 1  
 Notes This element is part of a list key.  
 Introduced 21.10.R1  
 Platforms All

### **hello-interval** *number*

Synopsis Hello interval  
 Context **configure** *service vpls string sap string spb level number hello-interval number*  
 Tree [hello-interval](#)  
 Range 1 to 20000  
 Units seconds  
 Default 9  
 Introduced 21.10.R1  
 Platforms All

### **hello-multiplier** *number*

Synopsis Hello multiplier

|            |  |
|------------|--|
| Context    | <b>configure service vpls string sap string spb level number hello-multiplier number</b> |
| Tree       | <a href="#">hello-multiplier</a>   |
| Range      | 2 to 100   |
| Default    | 3  |
| Introduced | 21.10.R1   |
| Platforms  | All  |

**metric number**

|            |  |
|------------|--|
| Synopsis   | Metric   |
| Context    | <b>configure service vpls string sap string spb level number metric number</b> |
| Tree       | <a href="#">metric</a>   |
| Range      | 0 to 16777215  |
| Default    | 0  |
| Introduced | 21.10.R1   |
| Platforms  | All  |

**lsp-pacing-interval number**

|            |  |
|------------|--|
| Synopsis   | Lsp pacing interval  |
| Context    | <b>configure service vpls string sap string spb lsp-pacing-interval number</b> |
| Tree       | <a href="#">lsp-pacing-interval</a>  |
| Range      | 0 to 65535   |
| Units      | milliseconds   |
| Default    | 100  |
| Introduced | 21.10.R1   |
| Platforms  | All  |

**retransmit-interval number**

|          |  |
|----------|--|
| Synopsis | Retransmit interval  |
| Context  | <b>configure service vpls string sap string spb retransmit-interval number</b> |
| Tree     | <a href="#">retransmit-interval</a>  |
| Range    | 1 to 65535   |
| Units    | seconds  |

|            |          |
|------------|----------|
| Default    | 5        |
| Introduced | 21.10.R1 |
| Platforms  | All      |

### **split-horizon-group** *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Split horizon group   |
| Context    | <b>configure</b> <a href="#">service vpls string sap string split-horizon-group reference</a> |
| Tree       | <a href="#">split-horizon-group</a>   |
| Reference  | <b>configure</b> <a href="#">service vpls string split-horizon-group string</a>               |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **static-host**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>static-host</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string static-host</a> |
| Tree       | <a href="#">static-host</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                     |

### **ipv4** [[ip](#)] [string](#) [mac string](#)

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv4</b> list instance  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string static-host ipv4 string mac string</a> |
| Tree       | <a href="#">ipv4</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **[ip]** [string](#)

|          |            |
|----------|------------|
| Synopsis | IP address |
|----------|------------|

|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">service vpls string sap string static-host ipv4 string mac string</a> |
| Tree       | <a href="#">ipv4</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**mac string**

|            |  |
|------------|--|
| Synopsis   | MAC address  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string static-host ipv4 string mac string</a> |
| Tree       | <a href="#">ipv4</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state keyword**

|            |  |
|------------|--|
| Synopsis   | Administrative state of the static host  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string static-host ipv4 string mac string admin-state keyword</a> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**ancp-string string**

|               |   |
|---------------|---|
| Synopsis      | ANCP string   |
| Context       | <b>configure</b> <a href="#">service vpls string sap string static-host ipv4 string mac string ancp-string string</a> |
| Tree          | <a href="#">ancp-string</a>   |
| String Length | 1 to 63   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**app-profile**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>app-profile</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls string sap string static-host ipv4 string mac string app-profile</a> |
| Tree       | <a href="#">app-profile</a>  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**profile reference**

|            |  |
|------------|--|
| Synopsis   | Application profile used by the static host  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string static-host ipv4 string mac string app-profile profile reference</a> |
| Tree       | <a href="#">profile</a>  |
| Reference  | <b>configure</b> <a href="#">application-assurance group number partition number policy app-profile string</a>                   |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**int-dest-id string**

|               |   |
|---------------|---|
| Synopsis      | Intermediate destination ID   |
| Context       | <b>configure</b> <a href="#">service vpls string sap string static-host ipv4 string mac string int-dest-id string</a> |
| Tree          | <a href="#">int-dest-id</a>   |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**shcv**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>shcv</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls string sap string static-host ipv4 string mac string shcv</a> |
| Tree       | <a href="#">shcv</a>  |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**sla-profile** *reference*

|            |  |
|------------|--|
| Synopsis   | SLA profile name   |
| Context    | <b>configure</b> <a href="#">service vpls string sap string static-host ipv4 string mac string sla-profile reference</a> |
| Tree       | <a href="#">sla-profile</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt sla-profile string</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**sub-profile** *reference*

|            |  |
|------------|--|
| Synopsis   | Sub-profile name   |
| Context    | <b>configure</b> <a href="#">service vpls string sap string static-host ipv4 string mac string sub-profile reference</a> |
| Tree       | <a href="#">sub-profile</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**subscriber-id**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>subscriber-id</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls string sap string static-host ipv4 string mac string subscriber-id string string</a> |
| Tree       | <a href="#">subscriber-id</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**string** *string*

|               |  |
|---------------|--|
| Synopsis      | Subscriber identification  |
| Context       | <b>configure</b> <a href="#">service vpls string sap string static-host ipv4 string mac string subscriber-id string string</a> |
| Tree          | <a href="#">string</a>   |
| String Length | 1 to 64  |
| Notes         | The following elements are part of a choice: <b>string</b> or <b>use-sap-id</b> .  |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **use-sap-id**

|            |   |
|------------|---|
| Synopsis   | Use the SAP id as subscriber ID   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">subscriber-id</a> <a href="#">use-sap-id</a> |
| Tree       | <a href="#">use-sap-id</a>  |
| Notes      | The following elements are part of a choice: <b>string</b> or <b>use-sap-id</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **static-isid**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>static-isid</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-isid</a> |
| Tree       | <a href="#">static-isid</a>   |
| Introduced | 19.10.R1  |
| Platforms  | All   |

### **range** [[range-id](#)] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>range</b> list instance  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-isid</a> <a href="#">range</a> <i>number</i> |
| Tree       | <a href="#">range</a>   |
| Introduced | 19.10.R1  |
| Platforms  | All   |

### **[range-id]** *number*

|          |   |
|----------|---|
| Synopsis | Range ID for static ISID  |
| Context  | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-isid</a> <a href="#">range</a> <i>number</i> |
| Tree     | <a href="#">range</a>   |
| Range    | 1 to 8191   |



|            |                                     |
|------------|-------------------------------------|
| Notes      | This element is part of a list key. |
| Introduced | 19.10.R1                            |
| Platforms  | All                                 |

**end number**

|            |  |
|------------|--|
| Synopsis   | Upper bound of the ISID range  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string sap string static-isid range number end number</i> |
| Tree       | <a href="#">end</a>  |
| Range      | 1 to 16777215  |
| Introduced | 19.10.R1   |
| Platforms  | All  |

**start number**

|            |  |
|------------|--|
| Synopsis   | Lower bound of the ISID range  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string sap string static-isid range number start number</i> |
| Tree       | <a href="#">start</a>  |
| Range      | 1 to 16777215  |
| Introduced | 19.10.R1   |
| Platforms  | All  |

**stp**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>stp</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string sap string stp</i> |
| Tree       | <a href="#">stp</a>  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**admin-state keyword**

|          |  |
|----------|--|
| Synopsis | Administrative state of STP  |
| Context  | <b>configure</b> <a href="#">service vpls</a> <i>string sap string stp admin-state keyword</i> |
| Tree     | <a href="#">admin-state</a>  |

|            |                 |
|------------|-----------------|
| Options    | enable, disable |
| Introduced | 16.0.R4         |
| Platforms  | All             |

### **auto-edge** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable automatic detection of edge port characteristics   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">stp</a> <b>auto-edge</b> <i>boolean</i> |
| Tree       | <a href="#">auto-edge</a>   |
| Default    | true  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **edge-port** *boolean*

|            |   |
|------------|---|
| Synopsis   | Designate SAP or SDP as an edge port  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">stp</a> <b>edge-port</b> <i>boolean</i> |
| Tree       | <a href="#">edge-port</a>   |
| Default    | false   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **link-type** *keyword*

|            |   |
|------------|---|
| Synopsis   | Configure STP link-type   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">stp</a> <b>link-type</b> <i>keyword</i> |
| Tree       | <a href="#">link-type</a>   |
| Options    | pt-pt, shared   |
| Default    | pt-pt   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **mst-instance** [[mst-inst-number](#)] *number*

|          |   |
|----------|---|
| Synopsis | Enter the <b>mst-instance</b> list instance |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure service vpls string sap string stp mst-instance number</b> |
| Tree       | <b>mst-instance</b>   |
| Introduced | 19.10.R1  |
| Platforms  | All   |

### **[mst-inst-number] number**

|            |   |
|------------|---|
| Synopsis   | Multiple Spanning Tree Instance number                                  |
| Context    | <b>configure service vpls string sap string stp mst-instance number</b> |
| Tree       | <b>mst-instance</b>   |
| Range      | 1 to 4094   |
| Notes      | This element is part of a list key.                                     |
| Introduced | 19.10.R1  |
| Platforms  | All   |

### **mst-path-cost number**

|            |  |
|------------|--|
| Synopsis   | MSTI path cost   |
| Context    | <b>configure service vpls string sap string stp mst-instance number mst-path-cost number</b> |
| Tree       | <b>mst-path-cost</b>   |
| Range      | 1 to 200000000   |
| Default    | 10   |
| Introduced | 19.10.R1   |
| Platforms  | All  |

### **mst-port-priority number**

|            |  |
|------------|--|
| Synopsis   | MSTI port priority   |
| Context    | <b>configure service vpls string sap string stp mst-instance number mst-port-priority number</b> |
| Tree       | <b>mst-port-priority</b>   |
| Range      | 0   16   32   48   64   80   96   112   128   144   160   176   192   208   224   240            |
| Default    | 128  |
| Introduced | 19.10.R1   |
| Platforms  | All  |

**path-cost** *number*

|            |   |
|------------|---|
| Synopsis   | Configure path-cost   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">stp</a> <a href="#">path-cost</a> <i>number</i> |
| Tree       | <a href="#">path-cost</a>   |
| Range      | 1 to 200000000  |
| Default    | 10  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**port-num** *number*

|            |  |
|------------|--|
| Synopsis   | Configure virtual port number  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">stp</a> <a href="#">port-num</a> <i>number</i> |
| Tree       | <a href="#">port-num</a>   |
| Range      | 1 to 2047  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**priority** *number*

|            |  |
|------------|--|
| Synopsis   | Configure STP priority   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">stp</a> <a href="#">priority</a> <i>number</i> |
| Tree       | <a href="#">priority</a>   |
| Range      | 0 to 255   |
| Default    | 128  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**root-guard** *boolean*

|          |   |
|----------|---|
| Synopsis | Enable/disable STP root-guard   |
| Context  | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">stp</a> <a href="#">root-guard</a> <i>boolean</i> |
| Tree     | <a href="#">root-guard</a>  |
| Default  | false   |

|            |         |
|------------|---------|
| Introduced | 16.0.R4 |
| Platforms  | All     |

## sub-sla-mgmt

|            |  |
|------------|--|
| Synopsis   | Enter the <b>sub-sla-mgmt</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string sub-sla-mgmt</a> |
| Tree       | <a href="#">sub-sla-mgmt</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                      |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of SAP subscriber management  |
| Context    | <b>configure</b> <a href="#">service vpls string sap string sub-sla-mgmt admin-state keyword</a> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## defaults

|            |   |
|------------|---|
| Synopsis   | Enter the <b>defaults</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls string sap string sub-sla-mgmt defaults</a> |
| Tree       | <a href="#">defaults</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                               |

## app-profile *reference*

|           |  |
|-----------|--|
| Synopsis  | Default application profile name for this SAP  |
| Context   | <b>configure</b> <a href="#">service vpls string sap string sub-sla-mgmt defaults app-profile reference</a>    |
| Tree      | <a href="#">app-profile</a>  |
| Reference | <b>configure</b> <a href="#">application-assurance group number partition number policy app-profile string</a> |

Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **int-dest-id**

Synopsis Enter the **int-dest-id** context  
Context **configure service vpls string sap string sub-sla-mgmt defaults int-dest-id**  
Tree [int-dest-id](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **string string**

Synopsis Use the configured string  
Context **configure service vpls string sap string sub-sla-mgmt defaults int-dest-id string string**  
Tree [string](#)  
String Length 1 to 32  
Notes The following elements are part of a choice: **string** or **top-q-tag**.  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **top-q-tag**

Synopsis Use the top Q-tag of this SAP  
Context **configure service vpls string sap string sub-sla-mgmt defaults int-dest-id top-q-tag**  
Tree [top-q-tag](#)  
Notes The following elements are part of a choice: **string** or **top-q-tag**.  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sla-profile reference**

Synopsis Default SLA profile for hosts on this SAP  
Context **configure service vpls string sap string sub-sla-mgmt defaults sla-profile reference**  
Tree [sla-profile](#)

|            |  |
|------------|--|
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                    |

### **sub-profile** *reference*

|            |  |
|------------|--|
| Synopsis   | Default subscriber profile for the SAP   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">defaults</a> <a href="#">sub-profile</a> <i>reference</i> |
| Tree       | <a href="#">sub-profile</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **subscriber-id**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>subscriber-id</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">defaults</a> <a href="#">subscriber-id</a> |
| Tree       | <a href="#">subscriber-id</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **auto-id**

|            |   |
|------------|---|
| Synopsis   | Use auto-generated subscriber identification string   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">defaults</a> <a href="#">subscriber-id</a> <a href="#">auto-id</a> |
| Tree       | <a href="#">auto-id</a>   |
| Notes      | The following elements are part of a choice: <b>auto-id</b> , <b>sap-id</b> , or <b>string</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **sap-id**

|          |  |
|----------|--|
| Synopsis | Use SAP ID as default subscriber identification string   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">defaults</a> <a href="#">subscriber-id</a> <a href="#">sap-id</a> |
| Tree     | <a href="#">sap-id</a>   |

|            |  |
|------------|--|
| Notes      | The following elements are part of a choice: <b>auto-id</b> , <b>sap-id</b> , or <b>string</b> . |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **string** *string*

|               |   |
|---------------|---|
| Synopsis      | Default subscriber identification string for the SAP  |
| Context       | <b>configure</b> <a href="#">service vpls</a> <a href="#">string sap</a> <a href="#">string sub-sla-mgmt defaults subscriber-id</a> <a href="#">string string</a> |
| Tree          | <a href="#">string</a>  |
| String Length | 1 to 64   |
| Notes         | The following elements are part of a choice: <b>auto-id</b> , <b>sap-id</b> , or <b>string</b> .  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **mac-da-hashing** *boolean*

|            |   |
|------------|---|
| Synopsis   | Use destination MAC address instead of subscriber ID to select egress LAG link  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <a href="#">string sap</a> <a href="#">string sub-sla-mgmt mac-da-hashing</a> <a href="#">boolean</a> |
| Tree       | <a href="#">mac-da-hashing</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **single-sub-parameters**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>single-sub-parameters</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <a href="#">string sap</a> <a href="#">string sub-sla-mgmt single-sub-parameters</a> |
| Tree       | <a href="#">single-sub-parameters</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **non-sub-traffic**

|          |   |
|----------|---|
| Synopsis | Enable the <b>non-sub-traffic</b> context |
|----------|---|



|            |  |
|------------|--|
| Context    | <b>configure service vpls string sap string sub-sla-mgmt single-sub-parameters non-sub-traffic</b> |
| Tree       | <a href="#">non-sub-traffic</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **app-profile** *reference*

|            |  |
|------------|--|
| Synopsis   | Application profile name for all non-subscriber traffic  |
| Context    | <b>configure service vpls string sap string sub-sla-mgmt single-sub-parameters non-sub-traffic app-profile reference</b> |
| Tree       | <a href="#">app-profile</a>  |
| Reference  | <b>configure application-assurance group number partition number policy app-profile string</b>                           |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **sla-profile** *reference*

|            |  |
|------------|--|
| Synopsis   | SLA profile applicable for all non-subscriber traffic  |
| Context    | <b>configure service vpls string sap string sub-sla-mgmt single-sub-parameters non-sub-traffic sla-profile reference</b> |
| Tree       | <a href="#">sla-profile</a>  |
| Reference  | <b>configure subscriber-mgmt sla-profile string</b>  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **sub-profile** *reference*

|            |  |
|------------|--|
| Synopsis   | Subscriber profile all non-subscriber traffic  |
| Context    | <b>configure service vpls string sap string sub-sla-mgmt single-sub-parameters non-sub-traffic sub-profile reference</b> |
| Tree       | <a href="#">sub-profile</a>  |
| Reference  | <b>configure subscriber-mgmt sub-profile string</b>  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### subscriber-id *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Subscriber ID applied for all non-subscriber traffic

Context **configure** [service vpls string sap string sub-sla-mgmt single-sub-parameters non-sub-traffic subscriber-id string](#)

Tree [subscriber-id](#)

String Length 1 to 64

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### profiled-traffic-only *boolean*

Synopsis Include all traffic in subscriber profile

Context **configure** [service vpls string sap string sub-sla-mgmt single-sub-parameters profiled-traffic-only boolean](#)

Tree [profiled-traffic-only](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### sub-ident-policy *reference*

Synopsis Subscriber identification policy used on this SAP

Context **configure** [service vpls string sap string sub-sla-mgmt sub-ident-policy reference](#)

Tree [sub-ident-policy](#)

Reference **configure** [subscriber-mgmt sub-ident-policy string](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**subscriber-limit** (*keyword* | *number*)

|            |  |
|------------|--|
| Synopsis   | Maximum number of subscribers on this SAP  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">subscriber-limit</a> ( <i>keyword</i>   <i>number</i> ) |
| Tree       | <a href="#">subscriber-limit</a>   |
| Range      | 1 to 131071  |
| Options    | no-limit   |
| Default    | 1  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**transit-policy**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>transit-policy</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">transit-policy</a> |
| Tree       | <a href="#">transit-policy</a>   |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**ip reference****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | IP transit policy ID   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">transit-policy</a> <a href="#">ip reference</a>                          |
| Tree       | <a href="#">ip</a>   |
| Reference  | <b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-ip-policy</a> <i>number</i> |
| Notes      | The following elements are part of a mandatory choice: <b>ip</b> or <b>prefix</b> .  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**prefix reference****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | IP prefix policy ID   |
| Context    | <b>configure service vpls string sap string transit-policy prefix reference</b>                   |
| Tree       | <a href="#">prefix</a>  |
| Reference  | <b>configure application-assurance group number partition number transit-prefix-policy number</b> |
| Notes      | The following elements are part of a mandatory choice: <b>ip</b> or <b>prefix</b> .               |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**segment-routing-v6 [instance] number**

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>segment-routing-v6</b> list instance              |
| Context        | <b>configure service vpls string segment-routing-v6 number</b> |
| Tree           | <a href="#">segment-routing-v6</a>                             |
| Max. Instances | 1  |
| Introduced     | 22.7.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR                    |

**[instance] number**

|            |  |
|------------|--|
| Synopsis   | Segment routing v6 instance                                    |
| Context    | <b>configure service vpls string segment-routing-v6 number</b> |
| Tree       | <a href="#">segment-routing-v6</a>                             |
| Range      | 1  |
| Notes      | This element is part of a list key.                            |
| Introduced | 22.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR                    |

**locator** [[locator-name](#)] *reference*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>locator</b> list instance  |
| Context        | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">segment-routing-v6</a> <i>number</i> <a href="#">locator</a> <i>reference</i> |
| Tree           | <a href="#">locator</a>   |
| Max. Instances | 1   |
| Introduced     | 22.7.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

**[locator-name]** *reference*

|            |  |
|------------|--|
| Synopsis   | SRv6 locator name  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">segment-routing-v6</a> <i>number</i> <a href="#">locator</a> <i>reference</i>          |
| Tree       | <a href="#">locator</a>  |
| Reference  | <b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">locator</a> <i>string</i> |
| Notes      | This element is part of a list key.  |
| Introduced | 22.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

**function**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>function</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">segment-routing-v6</a> <i>number</i> <a href="#">locator</a> <i>reference</i> <a href="#">function</a> |
| Tree       | <a href="#">function</a>   |
| Introduced | 22.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

**end-dt2m**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>end-dt2m</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">segment-routing-v6</a> <i>number</i> <a href="#">locator</a> <i>reference</i> <a href="#">function</a><br><a href="#">end-dt2m</a> |
| Tree       | <a href="#">end-dt2m</a>   |
| Introduced | 22.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

**value number**

|             |  |
|-------------|--|
| Synopsis    | SRv6 function value  |
| Context     | <b>configure service vpls string segment-routing-v6 number locator reference function end-dt2m value number</b>  |
| Tree        | <b>value</b>   |
| Description | This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance.<br>When unconfigured, the system allocates a value dynamically. |
| Range       | 1 to 1048575   |
| Introduced  | 22.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

**end-dt2u**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>end-dt2u</b> context   |
| Context    | <b>configure service vpls string segment-routing-v6 number locator reference function end-dt2u</b> |
| Tree       | <b>end-dt2u</b>  |
| Introduced | 22.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

**value number**

|             |  |
|-------------|--|
| Synopsis    | SRv6 function value  |
| Context     | <b>configure service vpls string segment-routing-v6 number locator reference function end-dt2u value number</b>  |
| Tree        | <b>value</b>   |
| Description | This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance.<br>When unconfigured, the system allocates a value dynamically. |
| Range       | 1 to 1048575   |
| Introduced  | 22.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

**micro-segment-locator** [*locator-name*] *reference*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>micro-segment-locator</b> list instance   |
| Context        | <b>configure service vpls string segment-routing-v6 number micro-segment-locator reference</b> |
| Tree           | <a href="#">micro-segment-locator</a>  |
| Max. Instances | 1  |
| Introduced     | 22.10.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

**[locator-name]** *reference*

|             |   |
|-------------|---|
| Synopsis    | Micro-segment SRv6 locator name   |
| Context     | <b>configure service vpls string segment-routing-v6 number micro-segment-locator reference</b>  |
| Tree        | <a href="#">micro-segment-locator</a>   |
| Description | This command associates a pre-defined micro-segment SRv6 locator (defined in the <b>configure router segment-routing segment-routing-v6</b> context) with the SRv6 instance in the service. The same micro-segment locator can be referenced in multiple BGP instances used by IPVPN or EVPN. |
| Reference   | <b>configure router string segment-routing segment-routing-v6 micro-segment-locator string</b>  |
| Notes       | This element is part of a list key.   |
| Introduced  | 22.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

**function**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>function</b> context   |
| Context    | <b>configure service vpls string segment-routing-v6 number micro-segment-locator reference function</b> |
| Tree       | <a href="#">function</a>  |
| Introduced | 22.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

## udt2m

|             |   |
|-------------|---|
| Synopsis    | Enable the <b>udt2m</b> context   |
| Context     | <b>configure</b> <a href="#">service vpls string</a> <a href="#">segment-routing-v6 number</a> <a href="#">micro-segment-locator reference</a> <a href="#">function udt2m</a>   |
| Tree        | <a href="#">udt2m</a>   |
| Description | Commands in this context configure the SRv6 uDT2M behavior and the function value that is associated to the SRv6 instance in the service. When configured, decapsulation and table lookup for IPv6 prefixes occurs in the VPLS service. |
| Introduced  | 22.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

## value number

|             |   |
|-------------|---|
| Synopsis    | SRv6 function value   |
| Context     | <b>configure</b> <a href="#">service vpls string</a> <a href="#">segment-routing-v6 number</a> <a href="#">micro-segment-locator reference</a> <a href="#">function udt2m value</a> <i>number</i> |
| Tree        | <a href="#">value</a>   |
| Description | This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance.<br><br>When unconfigured, the system allocates a value dynamically.                  |
| Range       | 1 to 1048575  |
| Introduced  | 22.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

## udt2u

|             |   |
|-------------|---|
| Synopsis    | Enable the <b>udt2u</b> context   |
| Context     | <b>configure</b> <a href="#">service vpls string</a> <a href="#">segment-routing-v6 number</a> <a href="#">micro-segment-locator reference</a> <a href="#">function udt2u</a>   |
| Tree        | <a href="#">udt2u</a>   |
| Description | Commands in this context configure the SRv6 uDT2U behavior and the function value that is associated to the SRv6 instance in the service. When configured, decapsulation and table lookup for IPv6 prefixes occurs in the VPLS service. |
| Introduced  | 22.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |



**value number**

|             |  |
|-------------|--|
| Synopsis    | SRv6 function value  |
| Context     | <b>configure service vpls string segment-routing-v6 number micro-segment-locator reference function udt2u value number</b>   |
| Tree        | <b>value</b>   |
| Description | This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance.<br>When unconfigured, the system allocates a value dynamically. |
| Range       | 1 to 1048575   |
| Introduced  | 22.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

**service-id number****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Service ID   |
| Context    | <b>configure service vpls string service-id number</b> |
| Tree       | <b>service-id</b>                                      |
| Range      | 1 to 2147483647  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**service-mtu number**

|             |  |
|-------------|--|
| Synopsis    | MTU size   |
| Context     | <b>configure service vpls string service-mtu number</b>  |
| Tree        | <b>service-mtu</b>   |
| Description | This command configures the Maximum Transmission Unit (MTU) value (payload) for the service. The system uses the value to validate the operational state of the SAP and SDP binding within the service. The value overrides the default MTU for the service type.<br><br>The service MTU and a SAP's service delineation encapsulation overhead (4 bytes for a dot1q tag) are used to derive the required MTU of the physical port or channel on which the SAP was created. If the required payload is larger than the port or channel MTU, the SAP is placed in an inoperative state. If the required MTU is equal to or less than the port or channel MTU, the SAP transitions to the operative state. |

When binding an SDP to a service, the service MTU is compared to the path MTU associated with the SDP. The path MTU can be administratively defined in the context of the SDP. The default or administrative path MTU can be dynamically reduced due to the MTU capabilities discovered by the tunneling mechanism of the SDP or the egress interface MTU capabilities based on the next hop in the tunnel path. If the service MTU is larger than the path MTU, the SDP binding for the service is placed in an inoperative state. If the service MTU is equal to or less than the path MTU, the SDP binding is placed in an operational state.

If a service MTU, port or channel MTU, or path MTU is dynamically or administratively modified, all associated SAP and SDP binding operational states are automatically reevaluated.

Binding operational states are automatically reevaluated.

For I-VPLS and Epipes bound to a B-VPLS, the service MTU must be at least 18 bytes smaller than the B-VPLS service MTU to accommodate the PBB header.

Because this connects a Layer 2 to a Layer 3 service, adjust the service MTU under the Epipe service. The MTU that is advertised from the Epipe side is service MTU minus EtherHeaderSize.

In the **configure service epipe spoke-sdp** context, the **adv-service-mtu** command can be used to override the configured MTU value used in T-LDP signaling to the far-end of an Epipe spoke-sdp. The **adv-service-mtu** command is also used to validate the value signaled by the far-end PE.

|            |           |
|------------|-----------|
| Range      | 1 to 9782 |
| Introduced | 16.0.R1   |
| Platforms  | All       |

### **shcv-policy-ipv4** *reference*

|            |   |
|------------|---|
| Synopsis   | Subscriber host connectivity verification policy for IPv4       |
| Context    | <b>configure service vpls string shcv-policy-ipv4 reference</b> |
| Tree       | <a href="#">shcv-policy-ipv4</a>                                |
| Reference  | <b>configure subscriber-mgmt shcv-policy string</b>             |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR         |

### **spb**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>spb</b> context            |
| Context    | <b>configure service vpls string spb</b> |
| Tree       | <a href="#">spb</a>                      |
| Introduced | 21.10.R1                                 |

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of SPB  
 Context **configure** *service vpls string spb admin-state keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 21.10.R1  
 Platforms All

### **fid** *number*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis FID identifier  
 Context **configure** *service vpls string spb fid number*  
 Tree [fid](#)  
 Range 1 to 4095  
 Default 1  
 Introduced 21.10.R1  
 Platforms All

### **isis-instance** *number*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis ISIS instance  
 Context **configure** *service vpls string spb isis-instance number*  
 Tree [isis-instance](#)  
 Range 1024 to 2047  
 Default 1024

Introduced 21.10.R1  
Platforms All

### **level** [*id*] *number*

Synopsis Enter the **level** list instance  
Context **configure service vpls string spb level number**  
Tree [level](#)  
Introduced 21.10.R1  
Platforms All

### **[id]** *number*

Synopsis Level identifier  
Context **configure service vpls string spb level number**  
Tree [level](#)  
Range 1  
Notes This element is part of a list key.  
Introduced 21.10.R1  
Platforms All

### **bridge-priority** *number*

Synopsis SPB Bridge priority  
Context **configure service vpls string spb level number bridge-priority number**  
Tree [bridge-priority](#)  
Range 0 to 15  
Default 8  
Introduced 21.10.R1  
Platforms All

### **ect-high-path-fid** [*fid*] *number*

Synopsis Add a list entry for **ect-high-path-fid**  
Context **configure service vpls string spb level number ect-high-path-fid number**

|            |                                   |
|------------|-----------------------------------|
| Tree       | <a href="#">ect-high-path-fid</a> |
| Introduced | 21.10.R1                          |
| Platforms  | All                               |

**[fid]** *number*

|            |  |
|------------|--|
| Synopsis   | SPB control vpls FID   |
| Context    | <b>configure</b> <a href="#">service vpls string spb level number ect-high-path-fid number</a> |
| Tree       | <a href="#">ect-high-path-fid</a>  |
| Range      | 1 to 4095  |
| Notes      | This element is part of a list key.  |
| Introduced | 21.10.R1   |
| Platforms  | All  |

**forwarding-tree**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>forwarding-tree</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string spb level number forwarding-tree</a> |
| Tree       | <a href="#">forwarding-tree</a>   |
| Introduced | 21.10.R1  |
| Platforms  | All   |

**topology** *keyword*

|            |  |
|------------|--|
| Synopsis   | Topology   |
| Context    | <b>configure</b> <a href="#">service vpls string spb level number forwarding-tree topology keyword</a> |
| Tree       | <a href="#">topology</a>   |
| Options    | spf, st  |
| Default    | spf  |
| Introduced | 21.10.R1   |
| Platforms  | All  |

**lsp-lifetime** *number*

|          |   |
|----------|---|
| Synopsis | Time LSP is considered valid by other routers |
|----------|---|

---

|            |  |
|------------|--|
| Context    | <b>configure service vpls string spb lsp-lifetime number</b> |
| Tree       | <a href="#">lsp-lifetime</a>                                 |
| Range      | 350 to 65535   |
| Default    | 1200   |
| Introduced | 21.10.R1   |
| Platforms  | All  |

### **lsp-refresh-interval**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>lsp-refresh-interval</b> context                 |
| Context    | <b>configure service vpls string spb lsp-refresh-interval</b> |
| Tree       | <a href="#">lsp-refresh-interval</a>                          |
| Introduced | 21.10.R1  |
| Platforms  | All   |

### **half-lifetime boolean**

|            |   |
|------------|---|
| Synopsis   | Refresh LSP interval at half the LSP lifetime                                       |
| Context    | <b>configure service vpls string spb lsp-refresh-interval half-lifetime boolean</b> |
| Tree       | <a href="#">half-lifetime</a>   |
| Default    | true  |
| Introduced | 21.10.R1  |
| Platforms  | All   |

### **interval number**

|            |   |
|------------|---|
| Synopsis   | Specify the interval at which LSPs are refreshed                              |
| Context    | <b>configure service vpls string spb lsp-refresh-interval interval number</b> |
| Tree       | <a href="#">interval</a>  |
| Range      | 150 to 65535  |
| Default    | 600   |
| Introduced | 21.10.R1  |
| Platforms  | All   |

## overload

|            |   |
|------------|---|
| Synopsis   | Enable the <b>overload</b> context                                |
| Context    | <b>configure</b> <a href="#">service vpls string spb overload</a> |
| Tree       | <a href="#">overload</a>  |
| Introduced | 21.10.R1  |
| Platforms  | All   |

## timeout *number*

|            |  |
|------------|--|
| Synopsis   | Time the router operates in overloaded state                                     |
| Context    | <b>configure</b> <a href="#">service vpls string spb overload timeout number</a> |
| Tree       | <a href="#">timeout</a>  |
| Range      | 0   60 to 1800   |
| Units      | seconds  |
| Default    | 0  |
| Introduced | 21.10.R1   |
| Platforms  | All  |

## overload-on-boot

|            |   |
|------------|---|
| Synopsis   | Enable the <b>overload-on-boot</b> context                                |
| Context    | <b>configure</b> <a href="#">service vpls string spb overload-on-boot</a> |
| Tree       | <a href="#">overload-on-boot</a>  |
| Introduced | 21.10.R1  |
| Platforms  | All   |

## timeout *number*

|            |  |
|------------|--|
| Synopsis   | Time the router operates in overloaded state   |
| Context    | <b>configure</b> <a href="#">service vpls string spb overload-on-boot timeout number</a> |
| Tree       | <a href="#">timeout</a>  |
| Range      | 0   60 to 1800   |
| Units      | seconds  |
| Default    | 0  |
| Introduced | 21.10.R1   |

Platforms All

## timers

Synopsis Enter the **timers** context  
 Context **configure service vpls string spb timers**  
 Tree [timers](#)  
 Introduced 21.10.R1  
 Platforms All

## lsp-wait

Synopsis Enable the **lsp-wait** context  
 Context **configure service vpls string spb timers lsp-wait**  
 Tree [lsp-wait](#)  
 Introduced 21.10.R1  
 Platforms All

## initial-wait *number*

Synopsis Initial wait  
 Context **configure service vpls string spb timers lsp-wait initial-wait *number***  
 Tree [initial-wait](#)  
 Range 10 to 100000  
 Units milliseconds  
 Default 10  
 Introduced 21.10.R1  
 Platforms All

## max-wait *number*

Synopsis Max wait time  
 Context **configure service vpls string spb timers lsp-wait max-wait *number***  
 Tree [max-wait](#)  
 Range 10 to 120000



---

|            |              |
|------------|--------------|
| Units      | milliseconds |
| Default    | 5000         |
| Introduced | 21.10.R1     |
| Platforms  | All          |

### **second-wait** *number*

|            |   |
|------------|---|
| Synopsis   | Second wait   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spb timers</a> <a href="#">lsp-wait</a> <a href="#">second-wait</a> <i>number</i> |
| Tree       | <a href="#">second-wait</a>   |
| Range      | 10 to 100000  |
| Units      | milliseconds  |
| Default    | 1000  |
| Introduced | 21.10.R1  |
| Platforms  | All   |

### **spf-wait**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>spf-wait</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spb timers</a> <a href="#">spf-wait</a> |
| Tree       | <a href="#">spf-wait</a>  |
| Introduced | 21.10.R1  |
| Platforms  | All   |

### **initial-wait** *number*

|            |  |
|------------|--|
| Synopsis   | Initial wait   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spb timers</a> <a href="#">spf-wait</a> <a href="#">initial-wait</a> <i>number</i> |
| Tree       | <a href="#">initial-wait</a>   |
| Range      | 10 to 100000   |
| Units      | milliseconds   |
| Default    | 1000   |
| Introduced | 21.10.R1   |
| Platforms  | All  |

**max-wait** *number*

|            |  |
|------------|--|
| Synopsis   | Max wait time  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spb timers</a> <a href="#">spf-wait</a> <a href="#">max-wait</a> <i>number</i> |
| Tree       | <a href="#">max-wait</a>   |
| Range      | 10 to 120000   |
| Units      | milliseconds   |
| Default    | 10000  |
| Introduced | 21.10.R1   |
| Platforms  | All  |

**second-wait** *number*

|            |   |
|------------|---|
| Synopsis   | Second wait   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spb timers</a> <a href="#">spf-wait</a> <a href="#">second-wait</a> <i>number</i> |
| Tree       | <a href="#">second-wait</a>   |
| Range      | 10 to 100000  |
| Units      | milliseconds  |
| Default    | 1000  |
| Introduced | 21.10.R1  |
| Platforms  | All   |

**spbm-control-vpls**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>spbm-control-vpls</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spbm-control-vpls</a> |
| Tree       | <a href="#">spbm-control-vpls</a>   |
| Introduced | 21.10.R1  |
| Platforms  | All   |

**fid** *number*

|          |   |
|----------|---|
| Synopsis | SPB control vpls FID  |
| Context  | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spbm-control-vpls</a> <a href="#">fid</a> <i>number</i> |
| Tree     | <a href="#">fid</a>   |

---

|            |           |
|------------|-----------|
| Range      | 1 to 4095 |
| Introduced | 21.10.R1  |
| Platforms  | All       |

**service-name** *string*

|               |   |
|---------------|---|
| Synopsis      | SPB control vpls service  |
| Context       | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spb-control-vpls</a> <a href="#">service-name</a> <i>string</i> |
| Tree          | <a href="#">service-name</a>  |
| String Length | 1 to 64   |
| Introduced    | 21.10.R1  |
| Platforms     | All   |

**split-horizon-group** [[shg-name](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>split-horizon-group</b> list instance  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">split-horizon-group</a> <i>string</i> |
| Tree       | <a href="#">split-horizon-group</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[shg-name]** *string*

|               |   |
|---------------|---|
| Synopsis      | SHG name to which the SDP belongs   |
| Context       | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">split-horizon-group</a> <i>string</i> |
| Tree          | <a href="#">split-horizon-group</a>   |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**description** *string*

|          |   |
|----------|---|
| Synopsis | Text description  |
| Context  | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">split-horizon-group</a> <i>string</i> <a href="#">description</a> <i>string</i> |

|               |                             |
|---------------|-----------------------------|
| Tree          | <a href="#">description</a> |
| String Length | 1 to 80                     |
| Introduced    | 16.0.R1                     |
| Platforms     | All                         |

## **fdb**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>fdb</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">split-horizon-group</a> <a href="#">string</a> <a href="#">fdb</a> |
| Tree       | <a href="#">fdb</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## **saps**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>saps</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">split-horizon-group</a> <a href="#">string</a> <a href="#">fdb</a> <a href="#">saps</a> |
| Tree       | <a href="#">saps</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## **auto-learn-mac-protect** *boolean*

|            |   |
|------------|---|
| Synopsis   | Populate automatically MAC protect list with MAC addresses learned on SDP with split horizon group  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">split-horizon-group</a> <a href="#">string</a> <a href="#">fdb</a> <a href="#">saps</a> <a href="#">auto-learn-mac-protect</a> <a href="#">boolean</a> |
| Tree       | <a href="#">auto-learn-mac-protect</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## **auto-learn-mac-protect-exclude-list** *reference*

|          |  |
|----------|--|
| Synopsis | Referenced MAC protect exclusion list name |
|----------|--|

|             |  |
|-------------|--|
| Context     | <b>configure service vpls string split-horizon-group string fdb saps auto-learn-mac-protect-exclude-list reference</b>   |
| Tree        | <a href="#">auto-learn-mac-protect-exclude-list</a>  |
| Description | This command references the name of a MAC protect exclusion list.<br><br>Dynamically-learned MAC Source Addresses (SA) are protected if they are learned on an object with ALMP configured and no exclusion list is associated with the object, or if the MAC SA does not match any entry in an associated exclusion list.<br><br>An exclusion list can be used in multiple objects of a service. If a list is empty, ALMP does not exclude any learned MAC SAs from protection on the object. |
| Reference   | <b>configure service mac-list string</b>   |
| Introduced  | 20.5.R1  |
| Platforms   | All  |

### **discard-unprotected-dest-mac *boolean***

|            |   |
|------------|---|
| Synopsis   | Discard packet with unprotected destination MAC address   |
| Context    | <b>configure service vpls string split-horizon-group string fdb saps discard-unprotected-dest-mac boolean</b> |
| Tree       | <a href="#">discard-unprotected-dest-mac</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **protected-src-mac-violation-action *keyword***

|            |   |
|------------|---|
| Synopsis   | Action to take whenever a relearn request for a protected MAC is received   |
| Context    | <b>configure service vpls string split-horizon-group string fdb saps protected-src-mac-violation-action keyword</b> |
| Tree       | <a href="#">protected-src-mac-violation-action</a>  |
| Options    | sap-oper-down, alarm-only, discard  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**residential** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Define as a residential split horizon group   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">split-horizon-group</a> <i>string</i> <b>residential</b> <i>boolean</i> |
| Tree       | <a href="#">residential</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**spoke-sdp** [[sdp-bind-id](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>spoke-sdp</b> list instance   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <b>spoke-sdp</b> <i>string</i> |
| Tree       | <a href="#">spoke-sdp</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[sdp-bind-id]** *string*

|               |  |
|---------------|--|
| Synopsis      | SDP binding ID   |
| Context       | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <b>spoke-sdp</b> <i>string</i> |
| Tree          | <a href="#">spoke-sdp</a>  |
| String Length | 3 to 16  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**accounting-policy** *reference*

|          |  |
|----------|--|
| Synopsis | Policy to collect accounting statistics  |
| Context  | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>accounting-policy</b> <i>reference</i> |
| Tree     | <a href="#">accounting-policy</a>  |

|            |  |
|------------|--|
| Reference  | <b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the SDP binding to the service  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **app-profile** *reference*

|            |   |
|------------|---|
| Synopsis   | ISA-AA application profile name for this SDP  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>app-profile</b> <i>reference</i>                             |
| Tree       | <a href="#">app-profile</a>   |
| Reference  | <b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy app-profile</a> <i>string</i> |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **bfd**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>bfd</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>bfd</b> |
| Tree       | <a href="#">bfd</a>  |
| Introduced | 21.2.R1  |
| Platforms  | All  |

### **bfd-liveness**

|          |  |
|----------|--|
| Synopsis | Enable the <b>bfd-liveness</b> context   |
| Context  | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>bfd</b> <b>bfd-liveness</b> |

|            |                              |
|------------|------------------------------|
| Tree       | <a href="#">bfd-liveness</a> |
| Introduced | 21.2.R1                      |
| Platforms  | All                          |

**encap** *keyword*

|            |  |
|------------|--|
| Synopsis   | BFD encapsulation used on the SDP binding  |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string bfd bfd-liveness encap keyword</a> |
| Tree       | <a href="#">encap</a>  |
| Options    | ipv4   |
| Default    | ipv4   |
| Introduced | 21.2.R1  |
| Platforms  | All  |

**bfd-template** *reference*

|             |   |
|-------------|---|
| Synopsis    | BFD template associated with the SDP binding  |
| Context     | <b>configure</b> <a href="#">service vpls string spoke-sdp string bfd bfd-template reference</a>  |
| Tree        | <a href="#">bfd-template</a>  |
| Description | This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the <b>configure router bfd</b> context. |
| Reference   | <b>configure</b> <a href="#">bfd bfd-template string</a>  |
| Introduced  | 21.2.R1   |
| Platforms   | All   |

**failure-action** *keyword*

|             |   |
|-------------|---|
| Synopsis    | VCCV BFD action taken on the SDP binding  |
| Context     | <b>configure</b> <a href="#">service vpls string spoke-sdp string bfd failure-action keyword</a>  |
| Tree        | <a href="#">failure-action</a>  |
| Description | This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the <b>configure router bfd</b> context. |
| Options     | none, down  |



|            |         |
|------------|---------|
| Default    | none    |
| Introduced | 21.2.R1 |
| Platforms  | All     |

### **wait-for-up-timer** *number*

|             |  |
|-------------|--|
| Synopsis    | Time waited for BFD up status  |
| Context     | <b>configure</b> <a href="#">service vpls string spoke-sdp string bfd wait-for-up-timer number</a>   |
| Tree        | <a href="#">wait-for-up-timer</a>  |
| Description | This command configures the time interval that is used to wait for a BFD session to come up.<br><br>This command is triggered when a spoke-SDP is first administratively enabled and a VCCV BFD session transitions from up to down. The command is required to allow time for BFD sessions to come up, and for BFD to settle before selecting the active spoke-SDP for use in a redundant set. In the case where a VCCV BFD session is bouncing, the timer prevents excessive flapping of the operational state of a spoke-SDP. |
| Range       | 1 to 60  |
| Units       | seconds  |
| Introduced  | 21.2.R1  |
| Platforms   | All  |

### **block-on-mesh-failure** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable blocking after all SDPs are operationally down   |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string block-on-mesh-failure boolean</a> |
| Tree       | <a href="#">block-on-mesh-failure</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **bpdu-translation** *keyword*

|            |  |
|------------|--|
| Synopsis   | BPDU format  |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string bpdu-translation keyword</a> |
| Tree       | <a href="#">bpdu-translation</a>   |
| Options    | auto, pvst, stp, pvst-rw, auto-rw  |
| Introduced | 16.0.R1  |

Platforms All

### **collect-stats** *boolean*

Synopsis Allow agent to collect accounting statistics  
 Context **configure** [service vpls](#) *string* [spoke-sdp](#) *string* **collect-stats** *boolean*  
 Tree [collect-stats](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **control-word** *boolean*

Synopsis Use the control word as preferred  
 Context **configure** [service vpls](#) *string* [spoke-sdp](#) *string* **control-word** *boolean*  
 Tree [control-word](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **cpu-protection**

Synopsis Enter the **cpu-protection** context  
 Context **configure** [service vpls](#) *string* [spoke-sdp](#) *string* **cpu-protection**  
 Tree [cpu-protection](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **eth-cfm-monitoring**

Synopsis Enable the **eth-cfm-monitoring** context  
 Context **configure** [service vpls](#) *string* [spoke-sdp](#) *string* [cpu-protection](#) **eth-cfm-monitoring**  
 Tree [eth-cfm-monitoring](#)  
 Notes The following elements are part of a choice: **eth-cfm-monitoring** or **mac-monitoring**.  
 Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## aggregate

Synopsis Apply rate limit to the sum of the per peer packet rates

Context **configure service vpls string spoke-sdp string cpu-protection eth-cfm-monitoring aggregate**

Tree [aggregate](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## car

Synopsis Ignore Ethernet CFM packets when enforcing overall rate

Context **configure service vpls string spoke-sdp string cpu-protection eth-cfm-monitoring car**

Tree [car](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## mac-monitoring

Synopsis Monitor MAC for CPU protection

Context **configure service vpls string spoke-sdp string cpu-protection mac-monitoring**

Tree [mac-monitoring](#)

Notes The following elements are part of a choice: **eth-cfm-monitoring** or **mac-monitoring**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## policy-id *reference*

Synopsis CPM protection policy

Context **configure service vpls string spoke-sdp string cpu-protection policy-id *reference***

Tree [policy-id](#)

Reference **configure system security cpu-protection policy *number***

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **description** *string*

Synopsis Text description  
Context **configure** [service vpls string spoke-sdp string description string](#)  
Tree [description](#)  
String Length 1 to 80  
Introduced 16.0.R1  
Platforms All

### **dhcp**

Synopsis Enter the **dhcp** context  
Context **configure** [service vpls string spoke-sdp string dhcp](#)  
Tree [dhcp](#)  
Introduced 16.0.R1  
Platforms All

### **description** *string*

Synopsis Text description  
Context **configure** [service vpls string spoke-sdp string dhcp description string](#)  
Tree [description](#)  
String Length 1 to 80  
Introduced 16.0.R1  
Platforms All

### **snoop** *boolean*

Synopsis Allow DHCP snooping of DHCP messages on the SAP or SDP  
Context **configure** [service vpls string spoke-sdp string dhcp snoop boolean](#)  
Tree [snoop](#)  
Default false  
Introduced 16.0.R1

Platforms All

## egress

Synopsis Enter the **egress** context  
Context **configure service vpls string spoke-sdp string egress**  
Tree **egress**  
Introduced 16.0.R1  
Platforms All

## filter

Synopsis Enter the **filter** context  
Context **configure service vpls string spoke-sdp string egress filter**  
Tree **filter**  
Introduced 16.0.R1  
Platforms All

## ip reference

Synopsis IPv4 filter policy name  
Context **configure service vpls string spoke-sdp string egress filter ip reference**  
Tree **ip**  
Reference **configure filter ip-filter string**  
Introduced 16.0.R1  
Platforms All

## ipv6 reference

Synopsis IPv6 filter policy name  
Context **configure service vpls string spoke-sdp string egress filter ipv6 reference**  
Tree **ipv6**  
Reference **configure filter ipv6-filter string**  
Introduced 16.0.R1  
Platforms All

**mac reference**

|            |   |
|------------|---|
| Synopsis   | MAC filter policy name  |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string egress filter mac reference</a> |
| Tree       | <a href="#">mac</a>   |
| Reference  | <b>configure</b> <a href="#">filter mac-filter string</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**mfib-allowed-mda-destinations**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mfib-allowed-mda-destinations</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string egress mfib-allowed-mda-destinations</a> |
| Tree       | <a href="#">mfib-allowed-mda-destinations</a>  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**mda [mda-id] string**

|            |   |
|------------|---|
| Synopsis   | Add a list entry for <b>mda</b>   |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string egress mfib-allowed-mda-destinations mda string</a> |
| Tree       | <a href="#">mda</a>   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**[mda-id] string**

|            |   |
|------------|---|
| Synopsis   | MFIB allowed MDA destination  |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string egress mfib-allowed-mda-destinations mda string</a> |
| Tree       | <a href="#">mda</a>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

## qos

|            |  |
|------------|--|
| Synopsis   | Enter the <b>qos</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string egress qos</a> |
| Tree       | <a href="#">qos</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## network

|            |  |
|------------|--|
| Synopsis   | Enter the <b>network</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string egress qos network</a> |
| Tree       | <a href="#">network</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## policy-name *reference*

|            |  |
|------------|--|
| Synopsis   | Network policy ID  |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string egress qos network policy-name reference</a> |
| Tree       | <a href="#">policy-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos network string</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## port-redirect-group

|            |  |
|------------|--|
| Synopsis   | Enter the <b>port-redirect-group</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string egress qos network port-redirect-group</a> |
| Tree       | <a href="#">port-redirect-group</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**group-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Name of the egress port queue group   |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">spoke-sdp string</a> <a href="#">egress qos network port-redirect-group group-name reference</a> |
| Tree       | <a href="#">group-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos queue-group-templates egress queue-group string</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**instance** *number*

|            |  |
|------------|--|
| Synopsis   | Queue-group instance ID  |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">spoke-sdp string</a> <a href="#">egress qos network port-redirect-group instance number</a> |
| Tree       | <a href="#">instance</a>   |
| Range      | 1 to 65535   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**vc-label** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Egress MPLS VC label to send packets to the far end  |
| Context    | <b>configure</b> <a href="#">service vpls string</a> <a href="#">spoke-sdp string</a> <a href="#">egress vc-label number</a> |
| Tree       | <a href="#">vc-label</a>   |
| Range      | 16 to 1048575  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**endpoint**

|          |  |
|----------|--|
| Synopsis | Enter the <b>endpoint</b> context  |
| Context  | <b>configure</b> <a href="#">service vpls string</a> <a href="#">spoke-sdp string</a> <a href="#">endpoint</a> |



|            |                          |
|------------|--------------------------|
| Tree       | <a href="#">endpoint</a> |
| Introduced | 16.0.R1                  |
| Platforms  | All                      |

### **name** *reference*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Name of service endpoint to which SDP bind is attached   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">endpoint</a> <a href="#">name</a> <i>reference</i> |
| Tree       | <a href="#">name</a>   |
| Reference  | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">endpoint</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **precedence** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Precedence of this SDP bind when there are multiple SDP binds attached to one service endpoint   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">endpoint</a> <a href="#">precedence</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">precedence</a>   |
| Range      | 1 to 4   |
| Options    | primary  |
| Default    | 4  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **entropy-label**

|            |   |
|------------|---|
| Synopsis   | Enable the use of entropy labels for spoke SDPs   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">entropy-label</a> |
| Tree       | <a href="#">entropy-label</a>   |
| Notes      | The following elements are part of a choice: <b>entropy-label</b> or <b>hash-label</b> .  |
| Introduced | 16.0.R1   |

Platforms All

## eth-cfm

Synopsis Enter the **eth-cfm** context

Context **configure service vpls string spoke-sdp string eth-cfm**

Tree [eth-cfm](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## collect-lmm-fc-stats

Synopsis Enter the **collect-lmm-fc-stats** context

Context **configure service vpls string spoke-sdp string eth-cfm collect-lmm-fc-stats**

Tree [collect-lmm-fc-stats](#)

Description Commands in this context configure per forwarding class (FC) LMM information collection.

The commands **fc-in-profile** and **fc** in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.

This command and the **collect-lmm-stats** command are mutually exclusive when there is entity resource contention.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## fc keyword

Synopsis Forwarding class name for profile-unaware counter

Context **configure service vpls string spoke-sdp string eth-cfm collect-lmm-fc-stats fc keyword**

Tree [fc](#)

Description This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.

An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the **fc-in-profile** command under the **collect-lmm-fc-stats** context.

When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.

Options be, l2, af, l1, h2, ef, h1, nc

|                |  |
|----------------|--|
| Max. Instances | 8  |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **fc-in-profile** *keyword*

|                |   |
|----------------|---|
| Synopsis       | Forwarding class name for profile-aware counter   |
| Context        | <b>configure</b> <b>service vpls</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm</b> <b>collect-lmm-fc-stats</b> <b>fc-in-profile</b> <i>keyword</i>  |
| Tree           | <b>fc-in-profile</b>  |
| Description    | <p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the <b>fc</b> command under the <b>collect-lmm-fc-stats</b> context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p> |
| Options        | be, l2, af, l1, h2, ef, h1, nc  |
| Max. Instances | 8   |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **collect-lmm-stats** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Collect statistics for loss measurement message tests  |
| Context     | <b>configure</b> <b>service vpls</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm</b> <b>collect-lmm-stats</b> <i>boolean</i>   |
| Tree        | <b>collect-lmm-stats</b>   |
| Description | <p>When configured to <b>true</b>, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.</p> <p>The <b>show eth-cfm collect-lmm-stats</b> command displays entities that have been enabled to collect transit and receive counters.</p> <p>When configured to <b>false</b>, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.</p> |
| Default     | false  |
| Introduced  | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mep** *md-admin-name reference ma-admin-name reference mep-id number*

Synopsis Enter the **mep** list instance

Context **configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number**

Tree [mep](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **md-admin-name reference**

Synopsis Maintenance Domain (MD) name

Context **configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number**

Tree [mep](#)

Reference **configure eth-cfm domain string**

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ma-admin-name reference**

Synopsis Maintenance Association (MA) name

Context **configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number**

Tree [mep](#)

Reference **configure eth-cfm domain string association string**

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mep-id number**

Synopsis Maintenance Endpoint (MEP) ID

|            |   |
|------------|---|
| Context    | <b>configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</b> |
| Tree       | <a href="#">mep</a>   |
| Range      | 1 to 8191   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the MEP   |
| Context    | <b>configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number admin-state keyword</b> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **ais**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>ais</b> context   |
| Context    | <b>configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais</b> |
| Tree       | <a href="#">ais</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **client-meg-level** *number*

|          |   |
|----------|---|
| Synopsis | Client MEG level for AIS message generation   |
| Context  | <b>configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais client-meg-level number</b> |
| Tree     | <a href="#">client-meg-level</a>  |
| Range    | 1 to 7  |

|                |  |
|----------------|--|
| Max. Instances | 7  |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **interface-support** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable generation of AIS PDUs based on endpoint state  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ais</a> <b>interface-support</b> <i>boolean</i> |
| Tree       | <a href="#">interface-support</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **interval** *number*

|            |  |
|------------|--|
| Synopsis   | Transmission interval for AIS messages   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ais</a> <b>interval</b> <i>number</i> |
| Tree       | <a href="#">interval</a>   |
| Range      | 1   60   |
| Units      | seconds  |
| Default    | 1  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **low-priority-defect** *keyword*

|            |  |
|------------|--|
| Synopsis   | Lowest priority defect allowed to generate fault alarm   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ais</a> <b>low-priority-defect</b> <i>keyword</i> |
| Tree       | <a href="#">low-priority-defect</a>  |
| Options    | all-def, mac-rem-err-xcon  |
| Default    | all-def  |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **priority** *number*

Synopsis Priority of the AIS messages generated by the node

Context **configure** [service vpls](#) *string* [spoke-sdp](#) *string* [eth-cfm mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* **ais** *priority* *number*

Tree [priority](#)

Range 0 to 7

Default 7

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **alarm-notification**

Synopsis Enter the **alarm-notification** context

Context **configure** [service vpls](#) *string* [spoke-sdp](#) *string* [eth-cfm mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* **alarm-notification**

Tree [alarm-notification](#)

Description Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.

Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fng-alarm-time** *number*

Synopsis Time that must expire before an FNG alarm is raised

Context **configure** [service vpls](#) *string* [spoke-sdp](#) *string* [eth-cfm mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* **alarm-notification** [fng-alarm-time](#) *number*

Tree [fng-alarm-time](#)

Range 250 | 500 | 1000

Units centiseconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**fng-reset-time** *number*

|            |   |
|------------|---|
| Synopsis   | Time that must expire before an FNG alarm is reset  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">alarm-notification</a> <a href="#">fng-reset-time</a> <i>number</i> |
| Tree       | <a href="#">fng-reset-time</a>  |
| Range      | 250   500   1000  |
| Units      | centiseconds  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**ccm** *boolean*

|            |  |
|------------|--|
| Synopsis   | Generate CCM messages  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">ccm</a> <i>boolean</i> |
| Tree       | <a href="#">ccm</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**ccm-ltm-priority** *number*

|            |  |
|------------|--|
| Synopsis   | Priority of CCM and LTM messages transmitted by the MEP  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">ccm-ltm-priority</a> <i>number</i> |
| Tree       | <a href="#">ccm-ltm-priority</a>   |
| Range      | 0 to 7   |
| Default    | 7  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**ccm-padding-size** *number*

|          |  |
|----------|--|
| Synopsis | Number of octets of padding to insert in CCM packets |
|----------|--|



|             |   |
|-------------|---|
| Context     | <b>configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-padding-size number</b>   |
| Tree        | <b>ccm-padding-size</b>   |
| Description | This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.<br><br>This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through <b>configure eth-cfm domain association ccm-interval</b> ) is less than 1 second. |
| Range       | 3 to 1500   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **cfm-vlan-tag string**

|               |   |
|---------------|---|
| Synopsis      | VLAN tags to apply to CFM PDUs for egress processing  |
| Context       | <b>configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number cfm-vlan-tag string</b> |
| Tree          | <b>cfm-vlan-tag</b>   |
| String Length | 1 to 9  |
| Introduced    | 21.10.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **csf**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>csf</b> context   |
| Context    | <b>configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number csf</b> |
| Tree       | <b>csf</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **multiplier decimal-number**

|          |   |
|----------|---|
| Synopsis | Multiplication factor used to clear the CSF condition   |
| Context  | <b>configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number csf multiplier decimal-number</b> |

|            |  |
|------------|--|
| Tree       | <a href="#">multiplier</a>                                   |
| Range      | 0.0   2.0 to 30.0  |
| Default    | 3.5  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **direction** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Direction the MEP faces  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>direction</b> <i>keyword</i> |
| Tree       | <a href="#">direction</a>  |
| Options    | down, up   |
| Default    | down   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **eth-test**

|          |  |
|----------|--|
| Synopsis | Enable the <b>eth-test</b> context   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>eth-test</b> |
| Tree     | <a href="#">eth-test</a>   |

|             |   |
|-------------|---|
| Description | Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the <b>oam eth-cfm eth-test</b> command. |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **bit-error-threshold** *number*

|            |   |
|------------|---|
| Synopsis   | Lowest priority defect allowed to generate fault alarm  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>eth-test</b> <b>bit-error-threshold</b> <i>number</i> |
| Tree       | <a href="#">bit-error-threshold</a>   |
| Range      | 0 to 11840  |
| Units      | bit errors  |
| Default    | 1   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **test-pattern**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>test-pattern</b> context  |
| Context     | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>eth-test</b> <b>test-pattern</b> |
| Tree        | <a href="#">test-pattern</a>   |
| Description | Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.   |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **crc-tlv** *boolean*

|            |  |
|------------|--|
| Synopsis   | Generate a CRC checksum  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>eth-test</b> <b>test-pattern</b> <b>crc-tlv</b> <i>boolean</i> |
| Tree       | <a href="#">crc-tlv</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **pattern** *keyword*

Synopsis Test pattern for Ethernet Test frames

Context **configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern pattern keyword**

Tree [pattern](#)

Description This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.

Options all-zeros, all-ones

Default all-zeros

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fault-propagation** *keyword*

Synopsis Fault propagation for the MEP

Context **configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number fault-propagation keyword**

Tree [fault-propagation](#)

Options use-if-status-tlv, suspend-ccm

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **grace**

Synopsis Enter the **grace** context

Context **configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace**

Tree [grace](#)

Description Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**eth-ed**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>eth-ed</b> context   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-ed</a> |
| Tree        | <a href="#">eth-ed</a>  |
| Description | Commands in this context configure the ITU-T Y.1731 ETH-ED function.  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**max-rx-defect-window** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum received ETH-ED expected defect window duration  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-ed</a> <a href="#">max-rx-defect-window</a> <i>number</i> |
| Tree       | <a href="#">max-rx-defect-window</a>   |
| Range      | 1 to 86400   |
| Units      | seconds  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**priority** *number*

|            |  |
|------------|--|
| Synopsis   | Transmission priority for ETH-ED PDUs  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-ed</a> <a href="#">priority</a> <i>number</i> |
| Tree       | <a href="#">priority</a>   |
| Range      | 0 to 7   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**rx-eth-ed** *boolean*

|          |  |
|----------|--|
| Synopsis | Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-ed</a> <a href="#">rx-eth-ed</a> <i>boolean</i> |
| Tree     | <a href="#">rx-eth-ed</a>  |

|             |  |
|-------------|--|
| Description | This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP. |
| Default     | true   |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                                 |

### **tx-eth-ed** *boolean*

|            |   |
|------------|---|
| Synopsis   | Transmit ETH-ED PDUs from the MEP   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <a href="#">string spoke-sdp</a> <a href="#">string eth-cfm mep</a> <a href="#">md-admin-name reference</a> <a href="#">ma-admin-name reference</a> <a href="#">mep-id number</a> <a href="#">grace eth-ed tx-eth-ed</a> <i>boolean</i> |
| Tree       | <a href="#">tx-eth-ed</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **eth-vsm-grace**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>eth-vsm-grace</b> context  |
| Context     | <b>configure</b> <a href="#">service vpls</a> <a href="#">string spoke-sdp</a> <a href="#">string eth-cfm mep</a> <a href="#">md-admin-name reference</a> <a href="#">ma-admin-name reference</a> <a href="#">mep-id number</a> <a href="#">grace eth-vsm-grace</a> |
| Tree        | <a href="#">eth-vsm-grace</a>   |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function.  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **rx-eth-vsm-grace** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Receive and process Nokia ETH-CFM Grace PDU on the MEP  |
| Context     | <b>configure</b> <a href="#">service vpls</a> <a href="#">string spoke-sdp</a> <a href="#">string eth-cfm mep</a> <a href="#">md-admin-name reference</a> <a href="#">ma-admin-name reference</a> <a href="#">mep-id number</a> <a href="#">grace eth-vsm-grace rx-eth-vsm-grace</a> <i>boolean</i> |
| Tree        | <a href="#">rx-eth-vsm-grace</a>  |
| Description | When configured to <b>true</b> , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.<br><br>When configured to <b>false</b> , the router disables the Nokia Grace function.         |

|            |  |
|------------|--|
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **tx-eth-vsm-grace** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Transmit ETH-ED PDUs from the MEP   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">eth-vsm-grace</a> <a href="#">tx-eth-vsm-grace</a> <i>boolean</i>   |
| Tree        | <a href="#">tx-eth-vsm-grace</a>  |
| Description | <p>When configured to <b>true</b>, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.</p> <p>The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.</p> <p>The operator must configure the <b>configure system eth-cfm grace</b> command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).</p> <p>When configured to <b>false</b>, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.</p> |
| Default     | true  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **lbm-svc-act-responder** *boolean*

|            |  |
|------------|--|
| Synopsis   | Process service activation streams in ETH-CFM LBM  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">lbm-svc-act-responder</a> <i>boolean</i> |
| Tree       | <a href="#">lbm-svc-act-responder</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **low-priority-defect** *keyword*

|          |  |
|----------|--|
| Synopsis | Lowest priority defect allowed to generate fault alarm |
|----------|--|

|            |   |
|------------|---|
| Context    | <b>configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number low-priority-defect keyword</b> |
| Tree       | <a href="#">low-priority-defect</a>   |
| Options    | all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon  |
| Default    | mac-rem-err-xcon  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **mac-address string**

|             |  |
|-------------|--|
| Synopsis    | MAC address of the MEP   |
| Context     | <b>configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number mac-address string</b>   |
| Tree        | <a href="#">mac-address</a>  |
| Description | This command specifies the MAC address of the MEP.<br><br>When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used. |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **one-way-delay-threshold number**

|            |  |
|------------|--|
| Synopsis   | Threshold time limit for the one-way delay test  |
| Context    | <b>configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number one-way-delay-threshold number</b> |
| Tree       | <a href="#">one-way-delay-threshold</a>  |
| Range      | 0 to 600   |
| Units      | seconds  |
| Default    | 3  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |



**primary-vlan** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | MEP provisioned using MA primary VLAN ID   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">primary-vlan</a> <i>boolean</i> |
| Tree       | <a href="#">primary-vlan</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**mip primary-vlan** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mip</b> list instance  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mip</a> <a href="#">primary-vlan</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">mip</a>   |
| Introduced | 21.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**primary-vlan** (*number* | *keyword*)

|             |   |
|-------------|---|
| Synopsis    | VLAN ID to which the MIP is attached  |
| Context     | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mip</a> <a href="#">primary-vlan</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree        | <a href="#">mip</a>   |
| Description | This command provides an option for linking a MIP with a Primary VLAN number or none. When the <b>none</b> option is provided, the MIP does not include the primary vlan.                       |
| Range       | 1 to 4094   |
| Options     | none  |
| Notes       | This element is part of a list key.   |
| Introduced  | 21.5.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**cfm-vlan-tag** *string*

|               |  |
|---------------|--|
| Synopsis      | VLAN tags to apply to CFM PDUs for egress processing   |
| Context       | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mip primary-vlan</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">cfm-vlan-tag</a> <i>string</i>   |
| Tree          | <a href="#">cfm-vlan-tag</a>   |
| Description   | This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the vc-type vlan or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM PDUs arriving at the same egress. When this command is included under the MEP or MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration. |
| String Length | 1 to 9   |
| Introduced    | 21.10.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**mac-address** *string*

|            |   |
|------------|---|
| Synopsis   | MAC address of the MIP  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mip primary-vlan</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">mac-address</a> <i>string</i> |
| Tree       | <a href="#">mac-address</a>   |
| Introduced | 21.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**squelch-ingress-ctag-levels** *number*

|             |   |
|-------------|---|
| Synopsis    | Squelch levels using additional VLAN C-Tag space  |
| Context     | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm squelch-ingress-ctag-levels</a> <i>number</i>   |
| Tree        | <a href="#">squelch-ingress-ctag-levels</a>   |
| Description | This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding plus an additional VLAN, up to a maximum tag length of two tags. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option. |

The list of levels must be a complete contiguous list from 0 up to the highest level to be dropped.

|                |  |
|----------------|--|
| Range          | 0 to 7   |
| Max. Instances | 8  |
| Introduced     | 21.2.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **sqelch-ingress-levels** *number*

|                |  |
|----------------|--|
| Synopsis       | Levels for which ETH-CFM packets are silently discarded  |
| Context        | <b>configure</b> <a href="#">service vpls string spoke-sdp string eth-cfm sqelch-ingress-levels number</a>   |
| Tree           | <a href="#">sqelch-ingress-levels</a>  |
| Description    | <p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.</p> |
| Range          | 0 to 7   |
| Max. Instances | 8  |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **vmep-filter** *boolean*

|            |   |
|------------|---|
| Synopsis   | Suppress eth-cfm PDUs based on level lower than or equal to configured Virtual MEP                |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string eth-cfm vmep-filter boolean</a> |
| Tree       | <a href="#">vmep-filter</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                                      |

**etree-leaf** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enable etree leaf access-circuit status   |
| Context    | <b>configure</b> <i>service vpls string spoke-sdp string etree-leaf boolean</i> |
| Tree       | <i>etree-leaf</i>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**etree-root-leaf-tag** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | E-tree root leaf tag status  |
| Context    | <b>configure</b> <i>service vpls string spoke-sdp string etree-root-leaf-tag boolean</i> |
| Tree       | <i>etree-root-leaf-tag</i>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**fdb**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>fdb</b> context                                     |
| Context    | <b>configure</b> <i>service vpls string spoke-sdp string fdb</i> |
| Tree       | <i>fdb</i>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**auto-learn-mac-protect** *boolean*

|          |   |
|----------|---|
| Synopsis | Populate automatically MAC protect list with source MAC addresses learned on SDP                |
| Context  | <b>configure</b> <i>service vpls string spoke-sdp string fdb auto-learn-mac-protect boolean</i> |

|            |  |
|------------|--|
| Tree       | <a href="#">auto-learn-mac-protect</a> |
| Default    | false                                  |
| Introduced | 16.0.R1                                |
| Platforms  | All                                    |

### **auto-learn-mac-protect-exclude-list** *reference*

|             |   |
|-------------|---|
| Synopsis    | Referenced MAC protect exclusion list name  |
| Context     | <b>configure</b> <a href="#">service vpls string spoke-sdp string fdb auto-learn-mac-protect-exclude-list reference</a>   |
| Tree        | <a href="#">auto-learn-mac-protect-exclude-list</a>   |
| Description | <p>This command references the name of a MAC protect exclusion list.</p> <p>Dynamically-learned MAC Source Addresses (SA) are protected if they are learned on an object with ALMP configured and no exclusion list is associated with the object, or if the MAC SA does not match any entry in an associated exclusion list.</p> <p>An exclusion list can be used in multiple objects of a service. If a list is empty, ALMP does not exclude any learned MAC SAs from protection on the object.</p> |
| Reference   | <b>configure</b> <a href="#">service mac-list string</a>  |
| Introduced  | 20.5.R1   |
| Platforms   | All   |

### **discard-unknown-source** *boolean*

|            |  |
|------------|--|
| Synopsis   | Discard packets with unknown destination MAC addresses   |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string fdb discard-unknown-source boolean</a> |
| Tree       | <a href="#">discard-unknown-source</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **limit-mac-move** *keyword*

|          |  |
|----------|--|
| Synopsis | MAC move   |
| Context  | <b>configure</b> <a href="#">service vpls string spoke-sdp string fdb limit-mac-move keyword</a> |
| Tree     | <a href="#">limit-mac-move</a>   |
| Options  | blockable, non-blockable   |

---

|            |           |
|------------|-----------|
| Default    | blockable |
| Introduced | 16.0.R1   |
| Platforms  | All       |

### **mac-learning**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mac-learning</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">fdb mac-learning</a> |
| Tree       | <a href="#">mac-learning</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **aging** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable aging of MAC addresses   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">fdb mac-learning aging</a> <i>boolean</i> |
| Tree       | <a href="#">aging</a>   |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **learning** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable learning of new MAC addresses   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">fdb mac-learning learning</a> <i>boolean</i> |
| Tree       | <a href="#">learning</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **mac-pinning** *boolean*

|          |  |
|----------|--|
| Synopsis | MAC address pinning in active status   |
| Context  | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">fdb mac-pinning</a> <i>boolean</i> |
| Tree     | <a href="#">mac-pinning</a>  |

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **maximum-mac-addresses** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum MAC entries in the FDB from this SDP  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">fdb</a> <a href="#">maximum-mac-addresses</a> <i>number</i> |
| Tree       | <a href="#">maximum-mac-addresses</a>   |
| Range      | 1 to 511999   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **protected-src-mac-violation-action** *keyword*

|            |   |
|------------|---|
| Synopsis   | Action when a relearn request for a protected MAC is received on the SDP  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">fdb</a> <a href="#">protected-src-mac-violation-action</a> <i>keyword</i> |
| Tree       | <a href="#">protected-src-mac-violation-action</a>  |
| Options    | sdp-bind-oper-down, alarm-only, discard   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **force-vc-forwarding** *keyword*

|            |  |
|------------|--|
| Synopsis   | VC forwarding action   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">force-vc-forwarding</a> <i>keyword</i> |
| Tree       | <a href="#">force-vc-forwarding</a>  |
| Options    | vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **hash-label**

|          |  |
|----------|--|
| Synopsis | Enable the <b>hash-label</b> context   |
| Context  | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">hash-label</a> |

|            |  |
|------------|--|
| Tree       | <a href="#">hash-label</a>   |
| Notes      | The following elements are part of a choice: <b>entropy-label</b> or <b>hash-label</b> . |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## signal-capability

|            |  |
|------------|--|
| Synopsis   | Enable the signaling of the hash label between PE nodes  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <a href="#">string spoke-sdp</a> <a href="#">string hash-label</a> <a href="#">signal-capability</a> |
| Tree       | <a href="#">signal-capability</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## i-vpls-mac-flush

|            |  |
|------------|--|
| Synopsis   | Enter the <b>i-vpls-mac-flush</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <a href="#">string spoke-sdp</a> <a href="#">string i-vpls-mac-flush</a> |
| Tree       | <a href="#">i-vpls-mac-flush</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## bgp-evpn

|            |   |
|------------|---|
| Synopsis   | Enter the <b>bgp-evpn</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <a href="#">string spoke-sdp</a> <a href="#">string i-vpls-mac-flush</a> <a href="#">bgp-evpn</a> |
| Tree       | <a href="#">bgp-evpn</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## send-to-bvpls *boolean*

|          |  |
|----------|--|
| Synopsis | Send B-VPLS EVPN flush   |
| Context  | <b>configure</b> <a href="#">service vpls</a> <a href="#">string spoke-sdp</a> <a href="#">string i-vpls-mac-flush</a> <a href="#">bgp-evpn</a> <a href="#">send-to-bvpls</a> <i>boolean</i> |
| Tree     | <a href="#">send-to-bvpls</a>  |



|            |         |
|------------|---------|
| Default    | true    |
| Introduced | 16.0.R1 |
| Platforms  | All     |

## igmp-snooping

|            |   |
|------------|---|
| Synopsis   | Enter the <b>igmp-snooping</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string igmp-snooping</a> |
| Tree       | <a href="#">igmp-snooping</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## fast-leave *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow IGMP fast leave processing   |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string igmp-snooping fast-leave boolean</a> |
| Tree       | <a href="#">fast-leave</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## import-policy *reference*

|            |   |
|------------|---|
| Synopsis   | Import policy that filters IGMP packets   |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string igmp-snooping import-policy reference</a> |
| Tree       | <a href="#">import-policy</a>   |
| Reference  | <b>configure</b> <a href="#">policy-options policy-statement string</a>                                     |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## maximum-number-group-sources *number*

|          |   |
|----------|---|
| Synopsis | Maximum group source combinations   |
| Context  | <b>configure</b> <a href="#">service vpls string spoke-sdp string igmp-snooping maximum-number-group-sources number</a> |

|            |  |
|------------|--|
| Tree       | <a href="#">maximum-number-group-sources</a> |
| Range      | 1 to 32000                                   |
| Introduced | 16.0.R1                                      |
| Platforms  | All  |

### **maximum-number-groups** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum groups allowed   |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string igmp-snooping maximum-number-groups number</a> |
| Tree       | <a href="#">maximum-number-groups</a>  |
| Range      | 1 to 16000   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **maximum-number-sources** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum sources that are allowed per group  |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string igmp-snooping maximum-number-sources number</a> |
| Tree       | <a href="#">maximum-number-sources</a>  |
| Range      | 1 to 1000   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **mcac**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mcac</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string igmp-snooping mcac</a> |
| Tree       | <a href="#">mcac</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **bandwidth**

|          |                                    |
|----------|------------------------------------|
| Synopsis | Enter the <b>bandwidth</b> context |
|----------|------------------------------------|

|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string igmp-snooping mcac bandwidth</a> |
| Tree       | <a href="#">bandwidth</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **mandatory** (*number | keyword*)

|            |   |
|------------|---|
| Synopsis   | Pre-reserved bandwidth for all mandatory channels   |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string igmp-snooping mcac bandwidth mandatory (number   keyword)</a> |
| Tree       | <a href="#">mandatory</a>   |
| Range      | 0 to 2147483647   |
| Options    | unlimited   |
| Default    | unlimited   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **total** (*number | keyword*)

|            |   |
|------------|---|
| Synopsis   | Maximum allowed bandwidth   |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string igmp-snooping mcac bandwidth total (number   keyword)</a> |
| Tree       | <a href="#">total</a>   |
| Range      | 0 to 2147483647   |
| Options    | unlimited   |
| Default    | unlimited   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **interface-policy** *reference*

|           |   |
|-----------|---|
| Synopsis  | Name of multicast CAC interface policy  |
| Context   | <b>configure</b> <a href="#">service vpls string spoke-sdp string igmp-snooping mcac interface-policy reference</a> |
| Tree      | <a href="#">interface-policy</a>  |
| Reference | <b>configure</b> <a href="#">mcac interface-policy string</a>   |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **policy reference**

|             |   |
|-------------|---|
| Synopsis    | Multicast CAC policy name   |
| Context     | <b>configure</b> <a href="#">service vpls string spoke-sdp string igmp-snooping mcac policy reference</a>   |
| Tree        | <a href="#">policy</a>  |
| Description | <p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> <li>• subscriber level and redirected interface when redirection is configured</li> <li>• subscriber level and group-interface level when redirection is unconfigured</li> </ul> <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p> |
| Reference   | <b>configure</b> <a href="#">mcac policy string</a>   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **mrouter-port boolean**

|            |  |
|------------|--|
| Synopsis   | Operate port as a multicast router port  |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string igmp-snooping mrouter-port boolean</a> |
| Tree       | <a href="#">mrouter-port</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **query-interval** *number*

|            |  |
|------------|--|
| Synopsis   | Time between two consecutive host-query messages   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">query-interval</a> <i>number</i> |
| Tree       | <a href="#">query-interval</a>   |
| Range      | 2 to 1024  |
| Units      | seconds  |
| Default    | 125  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **query-last-member-interval** *number*

|            |  |
|------------|--|
| Synopsis   | Time between group-specific query messages   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">query-last-member-interval</a> <i>number</i> |
| Tree       | <a href="#">query-last-member-interval</a>   |
| Range      | 1 to 50  |
| Units      | deciseconds  |
| Default    | 10   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **query-response-interval** *number*

|            |   |
|------------|---|
| Synopsis   | Time to wait for a response to the host-query messages  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">query-response-interval</a> <i>number</i> |
| Tree       | <a href="#">query-response-interval</a>   |
| Range      | 1 to 1023   |
| Units      | seconds   |
| Default    | 10  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**robust-count** *number*

|            |   |
|------------|---|
| Synopsis   | Number of retries after expected message loss   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">igmp-snooping</a> <b>robust-count</b> <i>number</i> |
| Tree       | <a href="#">robust-count</a>  |
| Range      | 2 to 7  |
| Default    | 2   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**router-alert-check** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable IP router alert check option  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">igmp-snooping</a> <b>router-alert-check</b> <i>boolean</i> |
| Tree       | <a href="#">router-alert-check</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**send-queries** *boolean*

|            |  |
|------------|--|
| Synopsis   | Generate IGMP general queries  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">igmp-snooping</a> <b>send-queries</b> <i>boolean</i> |
| Tree       | <a href="#">send-queries</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**static**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>static</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">igmp-snooping</a> <b>static</b> |
| Tree       | <a href="#">static</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**group** [*group-address*] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>group</b> list instance   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">igmp-snooping static group</a> <i>string</i> |
| Tree       | <a href="#">group</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[group-address]** *string*

|             |  |
|-------------|--|
| Synopsis    | Group address of static IGMP multicast channel   |
| Context     | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">igmp-snooping static group</a> <i>string</i> |
| Tree        | <a href="#">group</a>  |
| Description | This command configures an address that receives data on an interface. The IP address must be unique for each static group.                                  |
| Notes       | This element is part of a list key.  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**source** [*source-address*] *string*

|            |  |
|------------|--|
| Synopsis   | Add a list entry for <b>source</b>   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">igmp-snooping static group</a> <i>string</i> <b>source</b> <i>string</i> |
| Tree       | <a href="#">source</a>   |
| Notes      | The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[source-address]** *string*

|          |  |
|----------|--|
| Synopsis | Source IP address of multicast channel sending data  |
| Context  | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">igmp-snooping static group</a> <i>string</i> <b>source</b> <i>string</i> |
| Tree     | <a href="#">source</a>   |
| Notes    | This element is part of a list key.  |

|            |         |
|------------|---------|
| Introduced | 16.0.R2 |
| Platforms  | All     |

## starg

|            |   |
|------------|---|
| Synopsis   | any source address (*,G)  |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string igmp-snooping static group string starg</a> |
| Tree       | <a href="#">starg</a>   |
| Notes      | The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .                        |
| Introduced | 16.0.R2   |
| Platforms  | All   |

## version *keyword*

|            |   |
|------------|---|
| Synopsis   | IGMP protocol version   |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string igmp-snooping version keyword</a> |
| Tree       | <a href="#">version</a>   |
| Options    | 1, 2, 3   |
| Default    | 3   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## ignore-standby-signaling *boolean*

|            |  |
|------------|--|
| Synopsis   | Ignore standby-bit received from TLDP peers when performing internal tasks                             |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string ignore-standby-signaling boolean</a> |
| Tree       | <a href="#">ignore-standby-signaling</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## ingress

|          |   |
|----------|---|
| Synopsis | Enter the <b>ingress</b> context  |
| Context  | <b>configure</b> <a href="#">service vpls string spoke-sdp string ingress</a> |



|            |                         |
|------------|-------------------------|
| Tree       | <a href="#">ingress</a> |
| Introduced | 16.0.R1                 |
| Platforms  | All                     |

## filter

|            |  |
|------------|--|
| Synopsis   | Enter the <b>filter</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string ingress filter</a> |
| Tree       | <a href="#">filter</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## ip reference

|            |   |
|------------|---|
| Synopsis   | IPv4 filter policy name   |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string ingress filter ip reference</a> |
| Tree       | <a href="#">ip</a>  |
| Reference  | <b>configure</b> <a href="#">filter ip-filter string</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## ipv6 reference

|            |   |
|------------|---|
| Synopsis   | IPv6 filter policy name   |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string ingress filter ipv6 reference</a> |
| Tree       | <a href="#">ipv6</a>  |
| Reference  | <b>configure</b> <a href="#">filter ipv6-filter string</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## mac reference

|          |  |
|----------|--|
| Synopsis | MAC filter policy name   |
| Context  | <b>configure</b> <a href="#">service vpls string spoke-sdp string ingress filter mac reference</a> |
| Tree     | <a href="#">mac</a>  |

|            |  |
|------------|--|
| Reference  | <b>configure</b> <a href="#">filter mac-filter</a> <i>string</i> |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## qos

|            |   |
|------------|---|
| Synopsis   | Enter the <b>qos</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress qos</a> |
| Tree       | <a href="#">qos</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## network

|            |   |
|------------|---|
| Synopsis   | Enter the <b>network</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress qos network</a> |
| Tree       | <a href="#">network</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## fp-redirect-group

|            |   |
|------------|---|
| Synopsis   | Enter the <b>fp-redirect-group</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress qos network fp-redirect-group</a> |
| Tree       | <a href="#">fp-redirect-group</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## group-name *reference*

|           |   |
|-----------|---|
| Synopsis  | Name of the forwarding plane queue group template   |
| Context   | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress qos network fp-redirect-group</a> <a href="#">group-name</a> <i>reference</i> |
| Tree      | <a href="#">group-name</a>  |
| Reference | <b>configure</b> <a href="#">qos queue-group-templates</a> <a href="#">ingress queue-group</a> <i>string</i>  |

Introduced 16.0.R1  
 Platforms All

### **instance** *number*

Synopsis Instance of FP ingress queue group for the SDP binding  
 Context **configure** [service vpls string spoke-sdp string ingress qos network fp-redirect-group instance number](#)  
 Tree [instance](#)  
 Range 1 to 65535  
 Introduced 16.0.R1  
 Platforms All

### **policy-name** *reference*

Synopsis Network policy ID  
 Context **configure** [service vpls string spoke-sdp string ingress qos network policy-name reference](#)  
 Tree [policy-name](#)  
 Reference **configure** [qos network string](#)  
 Introduced 16.0.R1  
 Platforms All

### **vc-label** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Ingress MPLS VC label to send packets to the far end  
 Context **configure** [service vpls string spoke-sdp string ingress vc-label number](#)  
 Tree [vc-label](#)  
 Range 1 to 1048575  
 Introduced 16.0.R1  
 Platforms All

## **l2pt**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>l2pt</b> context                              |
| Context    | <b>configure service vpls string spoke-sdp string l2pt</b> |
| Tree       | <b>l2pt</b>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## **termination**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>termination</b> context                                  |
| Context    | <b>configure service vpls string spoke-sdp string l2pt termination</b> |
| Tree       | <b>termination</b>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## **protocols**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>protocols</b> context   |
| Context    | <b>configure service vpls string spoke-sdp string l2pt termination protocols</b> |
| Tree       | <b>protocols</b>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## **cdp boolean**

|            |  |
|------------|--|
| Synopsis   | Enable Cisco discovery protocol  |
| Context    | <b>configure service vpls string spoke-sdp string l2pt termination protocols cdp boolean</b> |
| Tree       | <b>cdp</b>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## **dtp boolean**

|          |                                  |
|----------|----------------------------------|
| Synopsis | Enable dynamic trunking protocol |
|----------|----------------------------------|

---

|            |  |
|------------|--|
| Context    | <b>configure service vpls string spoke-sdp string l2pt termination protocols dtp boolean</b> |
| Tree       | <b>dtp</b>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **pagp boolean**

|            |   |
|------------|---|
| Synopsis   | Enable port aggregation protocol  |
| Context    | <b>configure service vpls string spoke-sdp string l2pt termination protocols pagp boolean</b> |
| Tree       | <b>pagp</b>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **stp boolean**

|            |  |
|------------|--|
| Synopsis   | Enable all spanning tree protocols   |
| Context    | <b>configure service vpls string spoke-sdp string l2pt termination protocols stp boolean</b> |
| Tree       | <b>stp</b>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **udld boolean**

|            |   |
|------------|---|
| Synopsis   | Enable unidirectional link detection  |
| Context    | <b>configure service vpls string spoke-sdp string l2pt termination protocols udld boolean</b> |
| Tree       | <b>udld</b>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**vtp** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable virtual trunk protocol   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">l2pt termination protocols vtp</a> <i>boolean</i> |
| Tree       | <a href="#">vtp</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**mld-snooping**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mld-snooping</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">mld-snooping</a> |
| Tree       | <a href="#">mld-snooping</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**fast-leave** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow IGMP fast leave processing   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">mld-snooping fast-leave</a> <i>boolean</i> |
| Tree       | <a href="#">fast-leave</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**import-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | Import policy that filters IGMP packets   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">mld-snooping import-policy</a> <i>reference</i> |
| Tree       | <a href="#">import-policy</a>   |
| Reference  | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**maximum-number-groups** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum groups allowed   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">maximum-number-groups</a> <i>number</i> |
| Tree       | <a href="#">maximum-number-groups</a>  |
| Range      | 1 to 16000   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**mrouter-port** *boolean*

|            |  |
|------------|--|
| Synopsis   | Operate port as a multicast router port  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">mrouter-port</a> <i>boolean</i> |
| Tree       | <a href="#">mrouter-port</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**query-interval** *number*

|            |   |
|------------|---|
| Synopsis   | Time between two consecutive host-query messages  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">query-interval</a> <i>number</i> |
| Tree       | <a href="#">query-interval</a>  |
| Range      | 2 to 1024   |
| Units      | seconds   |
| Default    | 125   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**query-last-member-interval** *number*

|          |   |
|----------|---|
| Synopsis | Time between group-specific query messages  |
| Context  | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">query-last-member-interval</a> <i>number</i> |
| Tree     | <a href="#">query-last-member-interval</a>  |

|            |             |
|------------|-------------|
| Range      | 1 to 50     |
| Units      | deciseconds |
| Default    | 10          |
| Introduced | 16.0.R1     |
| Platforms  | All         |

### **query-response-interval** *number*

|            |  |
|------------|--|
| Synopsis   | Time to wait for a response to the host-query messages   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">query-response-interval</a> <i>number</i> |
| Tree       | <a href="#">query-response-interval</a>  |
| Range      | 1 to 1023  |
| Units      | seconds  |
| Default    | 10   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **robust-count** *number*

|            |   |
|------------|---|
| Synopsis   | Number of retries after expected message loss   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">robust-count</a> <i>number</i> |
| Tree       | <a href="#">robust-count</a>  |
| Range      | 2 to 7  |
| Default    | 2   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **router-alert-check** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable IP router alert check option  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">router-alert-check</a> <i>boolean</i> |
| Tree       | <a href="#">router-alert-check</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |



Platforms All

### **send-queries** *boolean*

Synopsis Generate IGMP general queries

Context **configure** [service vpls string spoke-sdp string mld-snooping send-queries boolean](#)

Tree [send-queries](#)

Default false

Introduced 16.0.R1

Platforms All

### **static**

Synopsis Enter the **static** context

Context **configure** [service vpls string spoke-sdp string mld-snooping static](#)

Tree [static](#)

Introduced 16.0.R1

Platforms All

### **group** [[group-address](#)] *string*

Synopsis Enter the **group** list instance

Context **configure** [service vpls string spoke-sdp string mld-snooping static group string](#)

Tree [group](#)

Introduced 16.0.R1

Platforms All

### **[group-address]** *string*

Synopsis Group address of multicast channel

Context **configure** [service vpls string spoke-sdp string mld-snooping static group string](#)

Tree [group](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

**source** [[source-address](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Add a list entry for <b>source</b>  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">static</a> <a href="#">group</a> <i>string</i> <b>source</b> <i>string</i> |
| Tree       | <a href="#">source</a>  |
| Notes      | The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[source-address]** *string*

|            |   |
|------------|---|
| Synopsis   | Source IP address   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">static</a> <a href="#">group</a> <i>string</i> <b>source</b> <i>string</i> |
| Tree       | <a href="#">source</a>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R2   |
| Platforms  | All   |

**starg**

|            |  |
|------------|--|
| Synopsis   | any source address (*,G)   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">static</a> <a href="#">group</a> <i>string</i> <b>starg</b> |
| Tree       | <a href="#">starg</a>  |
| Notes      | The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .   |
| Introduced | 16.0.R2  |
| Platforms  | All  |

**version** *keyword*

|          |  |
|----------|--|
| Synopsis | Version of MLD running on the SAP or SDP   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">mld-snooping</a> <b>version</b> <i>keyword</i> |
| Tree     | <a href="#">version</a>  |
| Options  | 1, 2   |

|            |         |
|------------|---------|
| Default    | 2       |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **monitor-oper-group** *reference*

|            |  |
|------------|--|
| Synopsis   | Operational group that affects state of the SDP bind   |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string</a> <b>monitor-oper-group</b> <i>reference</i> |
| Tree       | <a href="#">monitor-oper-group</a>   |
| Reference  | <b>configure</b> <a href="#">service oper-group string</a>   |
| Notes      | The following elements are part of a choice: <b>monitor-oper-group</b> or <b>oper-group</b> .                    |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **mrp**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mrp</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string</a> <b>mrp</b> |
| Tree       | <a href="#">mrp</a>  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

### **join-time** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum rate for attribute join messages sent on SDP  |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string</a> <b>mrp</b> <b>join-time</b> <i>number</i> |
| Tree       | <a href="#">join-time</a>   |
| Range      | 1 to 10   |
| Units      | deciseconds   |
| Default    | 2   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**leave-all-time** *number*

|            |  |
|------------|--|
| Synopsis   | Frequency of LeaveAll PDUs by LeaveAll state machine   |
| Context    | <b>configure</b> <b>service vpls</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>mrp</b> <b>leave-all-time</b> <i>number</i> |
| Tree       | <a href="#">leave-all-time</a>   |
| Range      | 60 to 300  |
| Units      | deciseconds  |
| Default    | 100  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**leave-time** *number*

|            |  |
|------------|--|
| Synopsis   | Time in LV state before transition to MT state   |
| Context    | <b>configure</b> <b>service vpls</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>mrp</b> <b>leave-time</b> <i>number</i> |
| Tree       | <a href="#">leave-time</a>   |
| Range      | 30 to 60   |
| Units      | deciseconds  |
| Default    | 30   |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**periodic-time** *number*

|            |   |
|------------|---|
| Synopsis   | Frequency of periodic events generated by state machine   |
| Context    | <b>configure</b> <b>service vpls</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>mrp</b> <b>periodic-time</b> <i>number</i> |
| Tree       | <a href="#">periodic-time</a>   |
| Range      | 10 to 100   |
| Units      | deciseconds   |
| Default    | 10  |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**periodic-timer** *boolean*

|          |  |
|----------|--|
| Synopsis | Enable the Periodic Transmission Timer |
|----------|--|

|            |  |
|------------|--|
| Context    | <b>configure service vpls string spoke-sdp string mrp periodic-timer boolean</b> |
| Tree       | <a href="#">periodic-timer</a>   |
| Default    | false  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

### **policy reference**

|            |  |
|------------|--|
| Synopsis   | MRP policy to control Group B-MAC attributes                               |
| Context    | <b>configure service vpls string spoke-sdp string mrp policy reference</b> |
| Tree       | <a href="#">policy</a>   |
| Reference  | <b>configure service mrp policy string</b>                                 |
| Introduced | 20.10.R1   |
| Platforms  | All  |

### **oper-group reference**

|            |   |
|------------|---|
| Synopsis   | Operational group identifier  |
| Context    | <b>configure service vpls string spoke-sdp string oper-group reference</b>                    |
| Tree       | <a href="#">oper-group</a>  |
| Reference  | <b>configure service oper-group string</b>  |
| Notes      | The following elements are part of a choice: <b>monitor-oper-group</b> or <b>oper-group</b> . |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **pbb**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>pbb</b> context                              |
| Context    | <b>configure service vpls string spoke-sdp string pbb</b> |
| Tree       | <a href="#">pbb</a>                                       |
| Introduced | 20.10.R1  |
| Platforms  | All   |

## fault-propagation

|            |  |
|------------|--|
| Synopsis   | Enter the <b>fault-propagation</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string pbb</a> <b>fault-propagation</b> |
| Tree       | <a href="#">fault-propagation</a>  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

## backbone-mac-address [[address](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Add a list entry for <b>backbone-mac-address</b>   |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string pbb</a> <b>fault-propagation backbone-mac-address string</b> |
| Tree       | <a href="#">backbone-mac-address</a>   |
| Introduced | 20.10.R1   |
| Platforms  | All  |

## [[address](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Backbone MAC address   |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string pbb</a> <b>fault-propagation backbone-mac-address string</b> |
| Tree       | <a href="#">backbone-mac-address</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

## backbone-mac-name [[name](#)] *reference*

|            |  |
|------------|--|
| Synopsis   | Add a list entry for <b>backbone-mac-name</b>  |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string pbb</a> <b>fault-propagation backbone-mac-name reference</b> |
| Tree       | <a href="#">backbone-mac-name</a>  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**[name] reference**

|            |   |
|------------|---|
| Synopsis   | Backbone MAC address name   |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string pbb fault-propagation backbone-mac-name reference</a> |
| Tree       | <a href="#">backbone-mac-name</a>   |
| Reference  | <b>configure</b> <a href="#">service pbb mac string</a>   |
| Notes      | This element is part of a list key.   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**pim-snooping**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>pim-snooping</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string pim-snooping</a> |
| Tree       | <a href="#">pim-snooping</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**maximum-number-groups number**

|            |   |
|------------|---|
| Synopsis   | Maximum groups for this interface   |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string pim-snooping maximum-number-groups number</a> |
| Tree       | <a href="#">maximum-number-groups</a>   |
| Range      | 1 to 16000  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**pw-status**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>pw-status</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string pw-status</a> |
| Tree       | <a href="#">pw-status</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**signaling** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable the use of pseudowire status signaling   |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string pw-status signaling boolean</a> |
| Tree       | <a href="#">signaling</a>   |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**spb**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>spb</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string spb</a> |
| Tree       | <a href="#">spb</a>   |
| Introduced | 21.10.R1  |
| Platforms  | All   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Admin state   |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string spb admin-state keyword</a> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 21.10.R1  |
| Platforms  | All   |

**level** [*id*] *number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>level</b> list instance   |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string spb level number</a> |
| Tree       | <a href="#">level</a>  |
| Introduced | 21.10.R1   |
| Platforms  | All  |



**[id] number**

|            |   |
|------------|---|
| Synopsis   | Level identifier  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">spb level</a> <i>number</i> |
| Tree       | <a href="#">level</a>   |
| Range      | 1   |
| Notes      | This element is part of a list key.   |
| Introduced | 21.10.R1  |
| Platforms  | All   |

**hello-interval number**

|            |  |
|------------|--|
| Synopsis   | Hello interval   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">spb level</a> <i>number</i> <a href="#">hello-interval</a> <i>number</i> |
| Tree       | <a href="#">hello-interval</a>   |
| Range      | 1 to 20000   |
| Units      | seconds  |
| Default    | 9  |
| Introduced | 21.10.R1   |
| Platforms  | All  |

**hello-multiplier number**

|            |  |
|------------|--|
| Synopsis   | Hello multiplier   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">spb level</a> <i>number</i> <a href="#">hello-multiplier</a> <i>number</i> |
| Tree       | <a href="#">hello-multiplier</a>   |
| Range      | 2 to 100   |
| Default    | 3  |
| Introduced | 21.10.R1   |
| Platforms  | All  |

**metric number**

|          |  |
|----------|--|
| Synopsis | Metric   |
| Context  | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">spb level</a> <i>number</i> <a href="#">metric</a> <i>number</i> |

|            |                        |
|------------|------------------------|
| Tree       | <a href="#">metric</a> |
| Range      | 0 to 16777215          |
| Default    | 0                      |
| Introduced | 21.10.R1               |
| Platforms  | All                    |

### **lsp-pacing-interval** *number*

|            |   |
|------------|---|
| Synopsis   | Lsp pacing interval   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">spb</a> <a href="#">lsp-pacing-interval</a> <i>number</i> |
| Tree       | <a href="#">lsp-pacing-interval</a>   |
| Range      | 0 to 65535  |
| Units      | milliseconds  |
| Default    | 100   |
| Introduced | 21.10.R1  |
| Platforms  | All   |

### **retransmit-interval** *number*

|            |   |
|------------|---|
| Synopsis   | Retransmit interval   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">spb</a> <a href="#">retransmit-interval</a> <i>number</i> |
| Tree       | <a href="#">retransmit-interval</a>   |
| Range      | 1 to 65535  |
| Units      | seconds   |
| Default    | 5   |
| Introduced | 21.10.R1  |
| Platforms  | All   |

### **split-horizon-group** *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | Name of the split horizon group where the spoke SDP bind belongs to  |
| Context  | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">split-horizon-group</a> <i>reference</i> |

|            |   |
|------------|---|
| Tree       | <a href="#">split-horizon-group</a>                             |
| Reference  | <b>configure service vpls string split-horizon-group string</b> |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## **static-isid**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>static-isid</b> context                              |
| Context    | <b>configure service vpls string spoke-sdp string static-isid</b> |
| Tree       | <a href="#">static-isid</a>                                       |
| Introduced | 19.10.R1  |
| Platforms  | All   |

## **range [range-id] number**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>range</b> list instance   |
| Context    | <b>configure service vpls string spoke-sdp string static-isid range number</b> |
| Tree       | <a href="#">range</a>  |
| Introduced | 19.10.R1   |
| Platforms  | All  |

## **[range-id] number**

|            |  |
|------------|--|
| Synopsis   | Range ID for static ISID   |
| Context    | <b>configure service vpls string spoke-sdp string static-isid range number</b> |
| Tree       | <a href="#">range</a>  |
| Range      | 1 to 8191  |
| Notes      | This element is part of a list key.  |
| Introduced | 19.10.R1   |
| Platforms  | All  |

## **end number**

|          |   |
|----------|---|
| Synopsis | Upper bound of the ISID range   |
| Context  | <b>configure service vpls string spoke-sdp string static-isid range number end number</b> |

|            |                     |
|------------|---------------------|
| Tree       | <a href="#">end</a> |
| Range      | 1 to 16777215       |
| Introduced | 19.10.R1            |
| Platforms  | All                 |

**start number**

|            |   |
|------------|---|
| Synopsis   | Lower bound of the ISID range   |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string static-isid range number start number</a> |
| Tree       | <a href="#">start</a>   |
| Range      | 1 to 16777215   |
| Introduced | 19.10.R1  |
| Platforms  | All   |

**stp**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>stp</b> context  |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string stp</a> |
| Tree       | <a href="#">stp</a>   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**admin-state keyword**

|            |   |
|------------|---|
| Synopsis   | Administrative state of STP   |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string stp admin-state keyword</a> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**auto-edge boolean**

|          |   |
|----------|---|
| Synopsis | Enable automatic detection of edge port characteristics                                     |
| Context  | <b>configure</b> <a href="#">service vpls string spoke-sdp string stp auto-edge boolean</a> |

---

|            |                           |
|------------|---------------------------|
| Tree       | <a href="#">auto-edge</a> |
| Default    | true                      |
| Introduced | 16.0.R4                   |
| Platforms  | All                       |

### **edge-port** *boolean*

|            |   |
|------------|---|
| Synopsis   | Designate SAP or SDP as an edge port  |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string stp edge-port boolean</a> |
| Tree       | <a href="#">edge-port</a>   |
| Default    | false   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **link-type** *keyword*

|            |   |
|------------|---|
| Synopsis   | Configure STP link-type   |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string stp link-type keyword</a> |
| Tree       | <a href="#">link-type</a>   |
| Options    | pt-pt, shared   |
| Default    | pt-pt   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **path-cost** *number*

|            |  |
|------------|--|
| Synopsis   | Configure path-cost  |
| Context    | <b>configure</b> <a href="#">service vpls string spoke-sdp string stp path-cost number</a> |
| Tree       | <a href="#">path-cost</a>  |
| Range      | 1 to 200000000   |
| Default    | 10   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**port-num** *number*

|            |  |
|------------|--|
| Synopsis   | Virtual port number  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">stp</a> <a href="#">port-num</a> <i>number</i> |
| Tree       | <a href="#">port-num</a>   |
| Range      | 1 to 2047  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**priority** *number*

|            |  |
|------------|--|
| Synopsis   | Configure STP priority   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">stp</a> <a href="#">priority</a> <i>number</i> |
| Tree       | <a href="#">priority</a>   |
| Range      | 0 to 255   |
| Default    | 128  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**root-guard** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable/disable STP root-guard   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">stp</a> <a href="#">root-guard</a> <i>boolean</i> |
| Tree       | <a href="#">root-guard</a>  |
| Default    | false   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**transit-policy**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>transit-policy</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">transit-policy</a> |
| Tree       | <a href="#">transit-policy</a>   |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**prefix reference****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | IP prefix policy ID   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">transit-policy</a> <a href="#">prefix</a> <i>reference</i>    |
| Tree       | <a href="#">prefix</a>  |
| Reference  | <b>configure</b> <a href="#">application-assurance</a> <i>group</i> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-prefix-policy</a> <i>number</i> |
| Notes      | This element is mandatory.  |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**vc-type keyword****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Type of virtual circuit (VC) associated with the SDP binding; VPLS not supported   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">vc-type</a> <i>keyword</i> |
| Tree       | <a href="#">vc-type</a>  |
| Options    | ether, vlan  |
| Default    | ether  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**vlan-vc-tag number**

|            |   |
|------------|---|
| Synopsis   | SDP bind VC tag   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">vlan-vc-tag</a> <i>number</i> |
| Tree       | <a href="#">vlan-vc-tag</a>   |
| Range      | 0 to 4094   |
| Introduced | 16.0.R1   |

Platforms All

## stp

Synopsis Enter the **stp** context  
Context **configure service vpls string stp**  
Tree **stp**  
Introduced 16.0.R4  
Platforms All

## admin-state *keyword*

Synopsis Administrative state of STP  
Context **configure service vpls string stp admin-state keyword**  
Tree **admin-state**  
Options enable, disable  
Default disable  
Introduced 16.0.R4  
Platforms All

## forward-delay *number*

Synopsis Configure forward-delay  
Context **configure service vpls string stp forward-delay number**  
Tree **forward-delay**  
Range 4 to 30  
Default 15  
Introduced 16.0.R4  
Platforms All

## hello-time *number*

Synopsis Configure hello-time  
Context **configure service vpls string stp hello-time number**  
Tree **hello-time**



---

|            |         |
|------------|---------|
| Range      | 1 to 10 |
| Default    | 2       |
| Introduced | 16.0.R4 |
| Platforms  | All     |

### **hold-count** *number*

|            |  |
|------------|--|
| Synopsis   | Configure BPDU transmit hold count   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <b>stp</b> <b>hold-count</b> <i>number</i> |
| Tree       | <a href="#">hold-count</a>   |
| Range      | 1 to 20  |
| Default    | 6  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **maximum-age** *number*

|            |   |
|------------|---|
| Synopsis   | Configure maximum STP information age   |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <b>stp</b> <b>maximum-age</b> <i>number</i> |
| Tree       | <a href="#">maximum-age</a>   |
| Range      | 6 to 40   |
| Default    | 20  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **mode** *keyword*

|            |   |
|------------|---|
| Synopsis   | Configure protocol version  |
| Context    | <b>configure</b> <a href="#">service vpls</a> <i>string</i> <b>stp</b> <b>mode</b> <i>keyword</i> |
| Tree       | <a href="#">mode</a>  |
| Options    | rstp, comp-dot1w, dot1w, mstp, pmstp  |
| Default    | rstp  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**mst-instance** [*mst-inst-number*] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mst-instance</b> list instance                         |
| Context    | <b>configure</b> <i>service vpls string stp mst-instance number</i> |
| Tree       | <i>mst-instance</i>   |
| Introduced | 19.10.R1  |
| Platforms  | All   |

**[mst-inst-number]** *number*

|            |   |
|------------|---|
| Synopsis   | Multiple Spanning Tree Instance number                              |
| Context    | <b>configure</b> <i>service vpls string stp mst-instance number</i> |
| Tree       | <i>mst-instance</i>   |
| Range      | 1 to 4094   |
| Notes      | This element is part of a list key.                                 |
| Introduced | 19.10.R1  |
| Platforms  | All   |

**mst-priority** *number*

|            |   |
|------------|---|
| Synopsis   | Priority of multiple spanning tree instance   |
| Context    | <b>configure</b> <i>service vpls string stp mst-instance number mst-priority number</i>                                 |
| Tree       | <i>mst-priority</i>   |
| Range      | 0   4096   8192   12288   16384   20480   24576   28672   32768   36864   40960   45056   49152   53248   57344   61440 |
| Default    | 32768   |
| Introduced | 19.10.R1  |
| Platforms  | All   |

**vlan-range** [*range*] *string*

|            |   |
|------------|---|
| Synopsis   | Add a list entry for <b>vlan-range</b>  |
| Context    | <b>configure</b> <i>service vpls string stp mst-instance number vlan-range string</i> |
| Tree       | <i>vlan-range</i>   |
| Introduced | 19.10.R1  |

Platforms All

### **[range]** *string*

Synopsis Range of VLANs associated with the M-VPLS SAP  
 Context **configure service vpls string stp mst-instance number vlan-range string**  
 Tree [vlan-range](#)  
 Notes This element is part of a list key.  
 Introduced 19.10.R1  
 Platforms All

### **mst-maximum-hops** *number*

Synopsis Maximum number of hops in an MSTP region  
 Context **configure service vpls string stp mst-maximum-hops number**  
 Tree [mst-maximum-hops](#)  
 Range 1 to 40  
 Default 20  
 Introduced 19.10.R1  
 Platforms All

### **mst-name** *string*

Synopsis MST region name  
 Context **configure service vpls string stp mst-name string**  
 Tree [mst-name](#)  
 String Length 1 to 32  
 Introduced 19.10.R1  
 Platforms All

### **mst-revision** *number*

Synopsis MST configuration revision  
 Context **configure service vpls string stp mst-revision number**  
 Tree [mst-revision](#)

|            |            |
|------------|------------|
| Range      | 0 to 65535 |
| Introduced | 19.10.R1   |
| Platforms  | All        |

**priority number**

|            |  |
|------------|--|
| Synopsis   | STP bridge priority  |
| Context    | <b>configure</b> <a href="#">service vpls string stp priority number</a> |
| Tree       | <a href="#">priority</a>   |
| Range      | 0 to 65535   |
| Default    | 32768  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**temp-flooding number**

|            |   |
|------------|---|
| Synopsis   | Temporary flooding  |
| Context    | <b>configure</b> <a href="#">service vpls string temp-flooding number</a> |
| Tree       | <a href="#">temp-flooding</a>   |
| Range      | 3 to 600  |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**vpn-id number****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | VPN identifier for the service                                     |
| Context    | <b>configure</b> <a href="#">service vpls string vpn-id number</a> |
| Tree       | <a href="#">vpn-id</a>   |
| Range      | 1 to 2147483647  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## vxlan

|            |  |
|------------|--|
| Synopsis   | Enter the <b>vxlan</b> context             |
| Context    | <b>configure service vpls string vxlan</b> |
| Tree       | <a href="#">vxlan</a>                      |
| Introduced | 16.0.R1                                    |
| Platforms  | All  |

## instance [[vxlan-instance](#)] *number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>instance</b> list instance                    |
| Context    | <b>configure service vpls string vxlan instance number</b> |
| Tree       | <a href="#">instance</a>                                   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## [[vxlan-instance](#)] *number*

|            |  |
|------------|--|
| Synopsis   | VXLAN instance   |
| Context    | <b>configure service vpls string vxlan instance number</b> |
| Tree       | <a href="#">instance</a>                                   |
| Range      | 1 to 2   |
| Notes      | This element is part of a list key.                        |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## assisted-replication

|            |   |
|------------|---|
| Synopsis   | Enter the <b>assisted-replication</b> context                                   |
| Context    | <b>configure service vpls string vxlan instance number assisted-replication</b> |
| Tree       | <a href="#">assisted-replication</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## leaf

|            |  |
|------------|--|
| Synopsis   | Enable the <b>leaf</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls string vxlan instance number assisted-replication leaf</a> |
| Tree       | <a href="#">leaf</a>   |
| Notes      | The following elements are part of a choice: <b>leaf</b> or <b>replicator</b> .                      |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## acttime *number*

|            |   |
|------------|---|
| Synopsis   | Time for the leaf to wait before sending traffic to a new replicator  |
| Context    | <b>configure</b> <a href="#">service vpls string vxlan instance number assisted-replication leaf acttime number</a> |
| Tree       | <a href="#">acttime</a>   |
| Range      | 1 to 255  |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## replicator

|            |  |
|------------|--|
| Synopsis   | AR role as replicator  |
| Context    | <b>configure</b> <a href="#">service vpls string vxlan instance number assisted-replication replicator</a> |
| Tree       | <a href="#">replicator</a>   |
| Notes      | The following elements are part of a choice: <b>leaf</b> or <b>replicator</b> .                            |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## egress-vtep [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

|            |  |
|------------|--|
| Synopsis   | Add a list entry for <b>egress-vtep</b>  |
| Context    | <b>configure</b> <a href="#">service vpls string vxlan instance number egress-vtep (ipv4-address-no-zone   ipv6-address-no-zone)</a> |
| Tree       | <a href="#">egress-vtep</a>  |
| Introduced | 16.0.R4  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### [ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis VTEP IP address used when originating VXLAN packets

Context **configure service vpls string vxlan instance number egress-vtep** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [egress-vtep](#)

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### fdb

Synopsis Enter the **fdb** context

Context **configure service vpls string vxlan instance number fdb**

Tree [fdb](#)

Introduced 16.0.R1

Platforms All

### discard-unknown-source *boolean*

Synopsis Discard frames with unknown source

Context **configure service vpls string vxlan instance number fdb discard-unknown-source boolean**

Tree [discard-unknown-source](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### mac-learning

Synopsis Enter the **mac-learning** context

Context **configure service vpls string vxlan instance number fdb mac-learning**

Tree [mac-learning](#)

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **aging** *boolean*

Synopsis Enable/disable aging of MAC addresses  
 Context **configure** [service](#) [vpls](#) *string* [vxlan](#) *instance* *number* [fdb](#) [mac-learning](#) [aging](#) *boolean*  
 Tree [aging](#)  
 Default false  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **learning** *boolean*

Synopsis Enable learning of new MAC addresses  
 Context **configure** [service](#) [vpls](#) *string* [vxlan](#) *instance* *number* [fdb](#) [mac-learning](#) [learning](#) *boolean*  
 Tree [learning](#)  
 Default false  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **maximum-mac-addresses** *number*

Synopsis Maximum number of MAC entries in the FDB from this vxlan instance  
 Context **configure** [service](#) [vpls](#) *string* [vxlan](#) *instance* *number* [fdb](#) [maximum-mac-addresses](#) *number*  
 Tree [maximum-mac-addresses](#)  
 Range 1 to 511999  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **protected-src-mac-violation-action** *keyword*

Synopsis Action when a relearn request for a protected MAC is received  
 Context **configure** [service](#) [vpls](#) *string* [vxlan](#) *instance* *number* [fdb](#) [protected-src-mac-violation-action](#) *keyword*  
 Tree [protected-src-mac-violation-action](#)



|            |         |
|------------|---------|
| Options    | discard |
| Introduced | 16.0.R1 |
| Platforms  | All     |

## igmp-snooping

|            |  |
|------------|--|
| Synopsis   | Enter the <b>igmp-snooping</b> context                                   |
| Context    | <b>configure service vpls string vxlan instance number igmp-snooping</b> |
| Tree       | <a href="#">igmp-snooping</a>  |
| Introduced | 16.0.R5  |
| Platforms  | All  |

## mrouter-port *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable VXLAN binds as multicast router ports   |
| Context    | <b>configure service vpls string vxlan instance number igmp-snooping mrouter-port <i>boolean</i></b> |
| Tree       | <a href="#">mrouter-port</a>   |
| Default    | false  |
| Introduced | 16.0.R5  |
| Platforms  | All  |

## mld-snooping

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mld-snooping</b> context                                   |
| Context    | <b>configure service vpls string vxlan instance number mld-snooping</b> |
| Tree       | <a href="#">mld-snooping</a>  |
| Introduced | 16.0.R5   |
| Platforms  | All   |

## mrouter-port *boolean*

|          |   |
|----------|---|
| Synopsis | Enable VXLAN binds as multicast router ports  |
| Context  | <b>configure service vpls string vxlan instance number mld-snooping mrouter-port <i>boolean</i></b> |
| Tree     | <a href="#">mrouter-port</a>  |
| Default  | false   |

Introduced 16.0.R5  
 Platforms All

## network

Synopsis Enter the **network** context  
 Context **configure** [service](#) [vpls](#) [string](#) [vxlan](#) [instance](#) [number](#) [network](#)  
 Tree [network](#)  
 Introduced 16.0.R1  
 Platforms All

## ingress

Synopsis Enter the **ingress** context  
 Context **configure** [service](#) [vpls](#) [string](#) [vxlan](#) [instance](#) [number](#) [network](#) [ingress](#)  
 Tree [ingress](#)  
 Introduced 16.0.R1  
 Platforms All

## qos

Synopsis Enter the **qos** context  
 Context **configure** [service](#) [vpls](#) [string](#) [vxlan](#) [instance](#) [number](#) [network](#) [ingress](#) [qos](#)  
 Tree [qos](#)  
 Introduced 16.0.R1  
 Platforms All

## network

Synopsis Enter the **network** context  
 Context **configure** [service](#) [vpls](#) [string](#) [vxlan](#) [instance](#) [number](#) [network](#) [ingress](#) [qos](#) [network](#)  
 Tree [network](#)  
 Introduced 16.0.R1  
 Platforms All

**fp-redirect-group**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>fp-redirect-group</b> context   |
| Context    | <b>configure</b> <a href="#">service vpls string vxlan instance number network ingress qos network fp-redirect-group</a> |
| Tree       | <a href="#">fp-redirect-group</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**group-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Name of the forwarding plane queue group template   |
| Context    | <b>configure</b> <a href="#">service vpls string vxlan instance number network ingress qos network fp-redirect-group group-name reference</a> |
| Tree       | <a href="#">group-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos queue-group-templates ingress queue-group string</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**instance** *number*

|            |  |
|------------|--|
| Synopsis   | Instance of the forwarding-plane ingress Queue Group for this SDP binding  |
| Context    | <b>configure</b> <a href="#">service vpls string vxlan instance number network ingress qos network fp-redirect-group instance number</a> |
| Tree       | <a href="#">instance</a>   |
| Range      | 1 to 65535   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**policy-name** *reference*

|            |  |
|------------|--|
| Synopsis   | Ingress network policy name applied to this SDP binding  |
| Context    | <b>configure</b> <a href="#">service vpls string vxlan instance number network ingress qos network policy-name reference</a> |
| Tree       | <a href="#">policy-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos network string</a>  |
| Introduced | 16.0.R1  |

Platforms All

### **rx-discard-on-ndf** *keyword*

Synopsis Received multicast traffic type discarded on NDF

Context **configure** [service vpls](#) *string vxlan instance number rx-discard-on-ndf keyword*

Tree [rx-discard-on-ndf](#)

Options bm, bum, none

Default bm

Introduced 16.0.R4

Platforms All

### **source-vtep-security** *boolean*

Synopsis Enable/disable source vtep security

Context **configure** [service vpls](#) *string vxlan instance number source-vtep-security boolean*

Tree [source-vtep-security](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **vni** *number*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis VNI of the VXLAN

Context **configure** [service vpls](#) *string vxlan instance number vni number*

Tree [vni](#)

Range 1 to 16777215

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

**source-vtep** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

|            |  |
|------------|--|
| Synopsis   | Vxlan source virtual tunnel endpoint information   |
| Context    | <b>configure</b> <b>service vpls</b> <i>string vxlan source-vtep</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <a href="#">source-vtep</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**wlan-gw**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>wlan-gw</b> context                           |
| Context    | <b>configure</b> <b>service vpls</b> <i>string wlan-gw</i> |
| Tree       | <a href="#">wlan-gw</a>                                    |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR                         |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of WLAN-GW   |
| Context    | <b>configure</b> <b>service vpls</b> <i>string wlan-gw admin-state</i> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <b>service vpls</b> <i>string wlan-gw description</i> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**vprn** [*service-name*] *string*

|            |                                      |
|------------|--------------------------------------|
| Synopsis   | Enter the <b>vprn</b> list instance  |
| Context    | <b>configure service vprn string</b> |
| Tree       | <b>vprn</b>                          |
| Introduced | 16.0.R1                              |
| Platforms  | All                                  |

**[service-name]** *string*

|               |                                      |
|---------------|--------------------------------------|
| Synopsis      | Administrative service name          |
| Context       | <b>configure service vprn string</b> |
| Tree          | <b>vprn</b>                          |
| String Length | 1 to 64                              |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1                              |
| Platforms     | All                                  |

**aa-interface** [*interface-name*] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>aa-interface</b> list instance              |
| Context    | <b>configure service vprn string aa-interface string</b> |
| Tree       | <b>aa-interface</b>                                      |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR             |

**[interface-name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Interface name   |
| Context       | <b>configure service vprn string aa-interface string</b> |
| Tree          | <b>aa-interface</b>                                      |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.                      |
| Introduced    | 21.10.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR             |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the interface   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">aa-interface</a> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">aa-interface</a> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 255   |
| Introduced    | 21.10.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**ip-mtu** *number*

|            |   |
|------------|---|
| Synopsis   | IP MTU applied to outgoing packets  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">aa-interface</a> <i>string</i> <b>ip-mtu</b> <i>number</i> |
| Tree       | <a href="#">ip-mtu</a>  |
| Range      | 512 to 9786   |
| Units      | bytes   |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**ipv4**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ipv4</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">aa-interface</a> <i>string</i> <b>ipv4</b> |
| Tree       | <a href="#">ipv4</a>  |
| Introduced | 21.10.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## primary

Synopsis Enable the **primary** context

Context **configure service vprn string aa-interface string ipv4 primary**

Tree [primary](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## address string

Synopsis Primary IPv4 address assigned to the interface

Context **configure service vprn string aa-interface string ipv4 primary address string**

Tree [address](#)

Notes This element is mandatory.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## prefix-length number

Synopsis IPv4 address prefix length

Context **configure service vprn string aa-interface string ipv4 primary prefix-length number**

Tree [prefix-length](#)

Range 0 to 32

Notes This element is mandatory.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## sap [sap-id] string

Synopsis Enter the **sap** list instance

Context **configure service vprn string aa-interface string sap string**

Tree [sap](#)



|                |  |
|----------------|--|
| Max. Instances | 1  |
| Introduced     | 21.10.R1                                     |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

**[sap-id] string**

|               |   |
|---------------|---|
| Synopsis      | SAP ID  |
| Context       | <b>configure</b> <a href="#">service vprn string aa-interface string sap string</a> |
| Tree          | <a href="#">sap</a>   |
| String Length | 1 to 45   |
| Notes         | This element is part of a list key.   |
| Introduced    | 21.10.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state keyword**

|            |   |
|------------|---|
| Synopsis   | Administrative state of the SAP   |
| Context    | <b>configure</b> <a href="#">service vprn string aa-interface string sap string admin-state keyword</a> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**description string**

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service vprn string aa-interface string sap string description string</a> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 160   |
| Introduced    | 21.10.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## egress

|            |  |
|------------|--|
| Synopsis   | Enter the <b>egress</b> context  |
| Context    | <b>configure service vprn string aa-interface string sap string egress</b> |
| Tree       | <a href="#">egress</a>   |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                               |

## filter

|            |   |
|------------|---|
| Synopsis   | Enter the <b>filter</b> context   |
| Context    | <b>configure service vprn string aa-interface string sap string egress filter</b> |
| Tree       | <a href="#">filter</a>  |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                      |

## ip reference

|            |  |
|------------|--|
| Synopsis   | IPv4 filter policy name  |
| Context    | <b>configure service vprn string aa-interface string sap string egress filter ip reference</b> |
| Tree       | <a href="#">ip</a>   |
| Reference  | <b>configure filter ip-filter string</b>   |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## qos

|            |  |
|------------|--|
| Synopsis   | Enter the <b>qos</b> context   |
| Context    | <b>configure service vprn string aa-interface string sap string egress qos</b> |
| Tree       | <a href="#">qos</a>  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                   |

## sap-egress

|          |                                     |
|----------|-------------------------------------|
| Synopsis | Enter the <b>sap-egress</b> context |
|----------|-------------------------------------|

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string aa-interface string sap string egress qos sap-egress</i> |
| Tree       | <a href="#">sap-egress</a>   |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **policy-name** *reference*

|            |  |
|------------|--|
| Synopsis   | Policy ID to associate with SAP for mirrored service   |
| Context    | <b>configure service vprn</b> <i>string aa-interface string sap string egress qos sap-egress policy-name reference</i> |
| Tree       | <a href="#">policy-name</a>  |
| Reference  | <b>configure qos sap-egress</b> <i>string</i>  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **fwd-wholesale**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>fwd-wholesale</b> context   |
| Context    | <b>configure service vprn</b> <i>string aa-interface string sap string fwd-wholesale</i> |
| Tree       | <a href="#">fwd-wholesale</a>  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **pppoe-service** *reference*

|            |  |
|------------|--|
| Synopsis   | PPPoE service name   |
| Context    | <b>configure service vprn</b> <i>string aa-interface string sap string fwd-wholesale pppoe-service reference</i> |
| Tree       | <a href="#">pppoe-service</a>  |
| Reference  | <b>configure service epipe</b> <i>string</i>   |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **ingress**

|          |                                  |
|----------|----------------------------------|
| Synopsis | Enter the <b>ingress</b> context |
|----------|----------------------------------|

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string aa-interface string sap string ingress</i> |
| Tree       | <a href="#">ingress</a>  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                       |

## qos

|            |  |
|------------|--|
| Synopsis   | Enter the <b>qos</b> context   |
| Context    | <b>configure service vprn</b> <i>string aa-interface string sap string ingress qos</i> |
| Tree       | <a href="#">qos</a>  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## sap-ingress

|            |  |
|------------|--|
| Synopsis   | Enter the <b>sap-ingress</b> context   |
| Context    | <b>configure service vprn</b> <i>string aa-interface string sap string ingress qos sap-ingress</i> |
| Tree       | <a href="#">sap-ingress</a>  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## overrides

|            |  |
|------------|--|
| Synopsis   | Enter the <b>overrides</b> context   |
| Context    | <b>configure service vprn</b> <i>string aa-interface string sap string ingress qos sap-ingress overrides</i> |
| Tree       | <a href="#">overrides</a>  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## policy-name *reference*

|          |  |
|----------|--|
| Synopsis | Policy ID  |
| Context  | <b>configure service vprn</b> <i>string aa-interface string sap string ingress qos sap-ingress policy-name reference</i> |
| Tree     | <a href="#">policy-name</a>  |

---

|            |  |
|------------|--|
| Reference  | <b>configure</b> qos sap-ingress <i>string</i> |
| Introduced | 21.10.R1                                       |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## lag

|            |  |
|------------|--|
| Synopsis   | Enter the <b>lag</b> context   |
| Context    | <b>configure</b> service vprn <i>string</i> aa-interface <i>string</i> sap <i>string</i> lag |
| Tree       | lag  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## aaa

|            |   |
|------------|---|
| Synopsis   | Enter the <b>aaa</b> context                    |
| Context    | <b>configure</b> service vprn <i>string</i> aaa |
| Tree       | aaa   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

## remote-servers

|            |  |
|------------|--|
| Synopsis   | Enter the <b>remote-servers</b> context                        |
| Context    | <b>configure</b> service vprn <i>string</i> aaa remote-servers |
| Tree       | remote-servers   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

## radius

|            |   |
|------------|---|
| Synopsis   | Enable the <b>radius</b> context                                      |
| Context    | <b>configure</b> service vprn <i>string</i> aaa remote-servers radius |
| Tree       | radius  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**access-algorithm** *keyword*

|            |  |
|------------|--|
| Synopsis   | Algorithm used to access the set of RADIUS servers   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>aaa remote-servers radius access-algorithm</b> <i>keyword</i> |
| Tree       | <a href="#">access-algorithm</a>   |
| Options    | direct, round-robin  |
| Default    | direct   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**accounting** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable RADIUS command accounting   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>aaa remote-servers radius accounting</b> <i>boolean</i> |
| Tree       | <a href="#">accounting</a>   |
| Default    | false  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**accounting-port** *number*

|            |  |
|------------|--|
| Synopsis   | Port number on RADIUS server for accounting requests   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>aaa remote-servers radius accounting-port</b> <i>number</i> |
| Tree       | <a href="#">accounting-port</a>  |
| Range      | 1 to 65535   |
| Default    | 1813   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**admin-state** *keyword*

|          |   |
|----------|---|
| Synopsis | Administrative state of the authentication server   |
| Context  | <b>configure service vprn</b> <i>string</i> <b>aaa remote-servers radius admin-state</b> <i>keyword</i> |
| Tree     | <a href="#">admin-state</a>   |
| Options  | enable, disable   |

---

|            |         |
|------------|---------|
| Default    | enable  |
| Introduced | 16.0.R4 |
| Platforms  | All     |

### **authorization** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable RADIUS authorization  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aaa remote-servers radius authorization</a> <i>boolean</i> |
| Tree       | <a href="#">authorization</a>  |
| Default    | false  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **interactive-authentication** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable RADIUS interactive authentication  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aaa remote-servers radius interactive-authentication</a> <i>boolean</i> |
| Tree       | <a href="#">interactive-authentication</a>  |
| Default    | false   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **port** *number*

|            |  |
|------------|--|
| Synopsis   | UDP port number on which to contact RADIUS server  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aaa remote-servers radius port</a> <i>number</i> |
| Tree       | <a href="#">port</a>   |
| Range      | 1 to 65535   |
| Default    | 1812   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **server** [[index](#)] *number*

|          |                                       |
|----------|---------------------------------------|
| Synopsis | Enter the <b>server</b> list instance |
|----------|---------------------------------------|

|                |  |
|----------------|--|
| Context        | <b>configure service vprn string aaa remote-servers radius server number</b> |
| Tree           | <b>server</b>  |
| Max. Instances | 5  |
| Introduced     | 16.0.R4  |
| Platforms      | All  |

**[index] number**

|            |  |
|------------|--|
| Synopsis   | RADIUS server ID   |
| Context    | <b>configure service vprn string aaa remote-servers radius server number</b> |
| Tree       | <b>server</b>  |
| Range      | 1 to 5   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**address (ipv4-address-no-zone | ipv6-address-no-zone)**

|            |  |
|------------|--|
| Synopsis   | IP address of the RADIUS server  |
| Context    | <b>configure service vprn string aaa remote-servers radius server number address (ipv4-address-no-zone   ipv6-address-no-zone)</b> |
| Tree       | <b>address</b>   |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**authenticator keyword**

|             |  |
|-------------|--|
| Synopsis    | Authenticator hash algorithm for the RADIUS server   |
| Context     | <b>configure service vprn string aaa remote-servers radius server number authenticator keyword</b>   |
| Tree        | <b>authenticator</b>   |
| Description | This command specifies the hash algorithm used to authenticate RADIUS Access-Request, Access-Accept, Access-Reject, Access-Challenge, Accounting-Request, and Accounting-Response packets. |



|            |          |
|------------|----------|
| Options    | md5, sm3 |
| Default    | md5      |
| Introduced | 22.10.R1 |
| Platforms  | All      |

**secret string**

|               |  |
|---------------|--|
| Synopsis      | Secret key to access the RADIUS server   |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aaa remote-servers radius server</a> <i>number</i> <b>secret</b> <i>string</i> |
| Tree          | <a href="#">secret</a>   |
| String Length | 1 to 115   |
| Introduced    | 16.0.R4  |
| Platforms     | All  |

**tls-client-profile reference**

|             |   |
|-------------|---|
| Synopsis    | TLS client profile for the RADIUS server  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aaa remote-servers radius server</a> <i>number</i> <b>tls-client-profile</b> <i>reference</i> |
| Tree        | <a href="#">tls-client-profile</a>  |
| Description | This command specifies the TLS client profile used to encrypt RADIUS communication. When configured, RADIUS messages are sent using TLS.                              |
| Reference   | <b>configure</b> <a href="#">system security tls</a> <i>client-tls-profile</i> <i>string</i>  |
| Introduced  | 21.10.R1  |
| Platforms   | All   |

**server-retry number**

|            |   |
|------------|---|
| Synopsis   | Number of attempts to retry contacting RADIUS server  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aaa remote-servers radius</a> <i>server-retry</i> <i>number</i> |
| Tree       | <a href="#">server-retry</a>  |
| Range      | 1 to 10   |
| Default    | 3   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**server-timeout** *number*

|            |  |
|------------|--|
| Synopsis   | Time to wait for a response from the RADIUS server   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aaa remote-servers radius</a> <a href="#">server-timeout</a> <i>number</i> |
| Tree       | <a href="#">server-timeout</a>   |
| Range      | 1 to 90  |
| Units      | seconds  |
| Default    | 3  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**use-default-template** *boolean*

|            |   |
|------------|---|
| Synopsis   | Apply the RADIUS default user template to RADIUS user   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aaa remote-servers radius</a> <a href="#">use-default-template</a> <i>boolean</i> |
| Tree       | <a href="#">use-default-template</a>  |
| Default    | false   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**tacplus**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>tacplus</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aaa remote-servers</a> <a href="#">tacplus</a> |
| Tree       | <a href="#">tacplus</a>  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**accounting**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>accounting</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aaa remote-servers tacplus</a> <a href="#">accounting</a> |
| Tree       | <a href="#">accounting</a>  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **record-type** *keyword*

|            |  |
|------------|--|
| Synopsis   | Type of accounting record packet sent to TACACS+ server  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">tacplus</a> <a href="#">accounting</a> <a href="#">record-type</a> <i>keyword</i> |
| Tree       | <a href="#">record-type</a>  |
| Options    | start-stop, stop-only  |
| Default    | stop-only  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the TACACS+ protocol  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">tacplus</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **authorization**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>authorization</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">tacplus</a> <a href="#">authorization</a> |
| Tree       | <a href="#">authorization</a>  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **request-format**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>request-format</b> context   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">tacplus</a> <a href="#">authorization</a> <a href="#">request-format</a> |
| Tree        | <a href="#">request-format</a>  |
| Description | Commands in this context configure access operations that are sent to the TACACS+ server during authorization.  |

|            |          |
|------------|----------|
| Introduced | 21.10.R3 |
| Platforms  | All      |

### **access-operation-cmd** *keyword*

|                |   |
|----------------|---|
| Synopsis       | Access operations sent in authorization requests  |
| Context        | <b>configure service vprn string aaa remote-servers tacplus authorization request-format access-operation-cmd keyword</b>   |
| Tree           | <a href="#">access-operation-cmd</a>  |
| Description    | This command sends an operation argument in authorization requests.<br><br>In model-driven interfaces, this command configures the system to send the operation in the cmd argument, and the path in the cmd-args argument, in TACACS+ authorization requests. This command does not apply to authorization requests in classic interfaces. |
| Options        | delete  |
| Max. Instances | 1   |
| Introduced     | 21.10.R3  |
| Platforms      | All   |

### **use-priv-lvl** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Allow privilege level mapping  |
| Context     | <b>configure service vprn string aaa remote-servers tacplus authorization use-priv-lvl boolean</b>   |
| Tree        | <a href="#">use-priv-lvl</a>   |
| Description | When configured to <b>true</b> , this command automatically performs a single authorization request to the TACACS+ server for cmd* (all commands) immediately after login, and then uses the local profile associated (via the <b>priv-lvl-map</b> ) with the priv-lvl returned by the TACACS+ server for all subsequent authorization (except <b>enable-admin</b> ). After the initial authorization for cmd*, no further authorization requests are sent to the TACACS+ server (except <b>enable-admin</b> ).<br><br>When configured to <b>false</b> , each command is sent to the TACACS+ server for authorization (this is true regardless of whether the <b>tacplus use-default-template</b> setting is enabled). |
| Default     | false  |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

**interactive-authentication** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allows TACACS+ interactive authentication  |
| Context    | <b>configure service vprn</b> <i>string</i> <a href="#">aaa remote-servers tacplus interactive-authentication</a> <i>boolean</i> |
| Tree       | <a href="#">interactive-authentication</a>   |
| Default    | false  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**priv-lvl-map**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>priv-lvl-map</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <a href="#">aaa remote-servers tacplus priv-lvl-map</a> |
| Tree       | <a href="#">priv-lvl-map</a>  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**priv-lvl** [[level](#)] *number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>priv-lvl</b> list instance  |
| Context    | <b>configure service vprn</b> <i>string</i> <a href="#">aaa remote-servers tacplus priv-lvl-map priv-lvl</a> <i>number</i> |
| Tree       | <a href="#">priv-lvl</a>   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**[level]** *number*

|            |  |
|------------|--|
| Synopsis   | Privilege level for the mapping  |
| Context    | <b>configure service vprn</b> <i>string</i> <a href="#">aaa remote-servers tacplus priv-lvl-map priv-lvl</a> <i>number</i> |
| Tree       | <a href="#">priv-lvl</a>   |
| Range      | 0 to 15  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**user-profile-name** *reference*

|            |   |
|------------|---|
| Synopsis   | User profile for the mapping  |
| Context    | <b>configure service vprn</b> <i>string</i> <a href="#">aaa remote-servers tacplus priv-lvl-map priv-lvl</a> <i>number</i> <a href="#">user-profile-name</a> <i>reference</i> |
| Tree       | <a href="#">user-profile-name</a>   |
| Reference  | <b>configure system security aaa local-profiles profile</b> <i>string</i>   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**server** [[index](#)] *number*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>server</b> list instance   |
| Context        | <b>configure service vprn</b> <i>string</i> <a href="#">aaa remote-servers tacplus server</a> <i>number</i> |
| Tree           | <a href="#">server</a>  |
| Max. Instances | 5   |
| Introduced     | 16.0.R4   |
| Platforms      | All   |

**[index]** *number*

|            |   |
|------------|---|
| Synopsis   | TACACS+ server ID   |
| Context    | <b>configure service vprn</b> <i>string</i> <a href="#">aaa remote-servers tacplus server</a> <i>number</i> |
| Tree       | <a href="#">server</a>  |
| Range      | 1 to 5  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

|          |   |
|----------|---|
| Synopsis | IP address of the TACACS+ server  |
| Context  | <b>configure service vprn</b> <i>string</i> <a href="#">aaa remote-servers tacplus server</a> <i>number</i> <a href="#">address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |

|            |                            |
|------------|----------------------------|
| Tree       | <a href="#">address</a>    |
| Notes      | This element is mandatory. |
| Introduced | 16.0.R4                    |
| Platforms  | All                        |

**port number**

|            |   |
|------------|---|
| Synopsis   | TCP port ID on which to contact TACACS+ server  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">aaa remote-servers tacplus server number</a> <a href="#">port number</a> |
| Tree       | <a href="#">port</a>  |
| Range      | 0   1 to 65535  |
| Default    | 49  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**secret string**

|               |   |
|---------------|---|
| Synopsis      | Secret key to access the TACACS+ server   |
| Context       | <b>configure</b> <a href="#">service vprn string</a> <a href="#">aaa remote-servers tacplus server number</a> <a href="#">secret string</a> |
| Tree          | <a href="#">secret</a>  |
| String Length | 1 to 199  |
| Notes         | This element is mandatory.  |
| Introduced    | 16.0.R4   |
| Platforms     | All   |

**server-timeout number**

|            |   |
|------------|---|
| Synopsis   | Time to wait for a response from the TACACS+ server   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">aaa remote-servers tacplus server-timeout number</a> |
| Tree       | <a href="#">server-timeout</a>  |
| Range      | 1 to 90   |
| Units      | seconds   |
| Default    | 3   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**use-default-template** *boolean*

|            |  |
|------------|--|
| Synopsis   | Apply TACACS+ default user-template to TACACS+ user  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">tacplus</a> <b>use-default-template</b> <i>boolean</i> |
| Tree       | <a href="#">use-default-template</a>   |
| Default    | true   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**aarp-interface** [[interface-name](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>aarp-interface</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <b>aarp-interface</b> <i>string</i> |
| Tree       | <a href="#">aarp-interface</a>   |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**[interface-name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Interface name   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <b>aarp-interface</b> <i>string</i> |
| Tree          | <a href="#">aarp-interface</a>   |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 21.10.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the interface  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <b>aarp-interface</b> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 21.10.R1   |



Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
Context **configure** [service vprn](#) *string* [aarp-interface](#) *string* [description](#) *string*  
Tree [description](#)  
String Length 1 to 255  
Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-mtu** *number*

Synopsis IP MTU applied to outgoing packets  
Context **configure** [service vprn](#) *string* [aarp-interface](#) *string* [ip-mtu](#) *number*  
Tree [ip-mtu](#)  
Range 512 to 9786  
Units bytes  
Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **spoke-sdp** [[sdp-bind-id](#)] *string*

Synopsis Enter the **spoke-sdp** list instance  
Context **configure** [service vprn](#) *string* [aarp-interface](#) *string* [spoke-sdp](#) *string*  
Tree [spoke-sdp](#)  
Max. 1  
Instances  
Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[sdp-bind-id]** *string*

Synopsis SDP binding ID  
Context **configure** [service vprn](#) *string* [aarp-interface](#) *string* [spoke-sdp](#) *string*  
Tree [spoke-sdp](#)

|               |  |
|---------------|--|
| String Length | 3 to 16                                      |
| Notes         | This element is part of a list key.          |
| Introduced    | 21.10.R1                                     |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

## aarp

|            |   |
|------------|---|
| Synopsis   | Enable the <b>aarp</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">aarp</a> |
| Tree       | <a href="#">aarp</a>  |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## id reference



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | AARP instance ID   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">aarp</a> <i>id</i> <i>reference</i> |
| Tree       | <a href="#">id</a>   |
| Reference  | <b>configure</b> <a href="#">application-assurance</a> <a href="#">aarp</a> <i>number</i>  |
| Notes      | This element is mandatory.   |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## type keyword



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | Role of the spoke SDP referenced by the AARP   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">aarp</a> <i>type</i> <i>keyword</i> |
| Tree     | <a href="#">type</a>   |

|            |  |
|------------|--|
| Options    | subscriber-side-shunt, network-side-shunt    |
| Notes      | This element is mandatory.                   |
| Introduced | 21.10.R1                                     |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of this service SDP binding  |
| Context    | <b>configure</b> <b>service</b> <b>vpn</b> <i>string</i> <b>aarp-interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <b>service</b> <b>vpn</b> <i>string</i> <b>aarp-interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <b>description</b>   |
| String Length | 1 to 80  |
| Introduced    | 21.10.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **egress**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>egress</b> context   |
| Context    | <b>configure</b> <b>service</b> <b>vpn</b> <i>string</i> <b>aarp-interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>egress</b> |
| Tree       | <b>egress</b>   |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## filter

|            |  |
|------------|--|
| Synopsis   | Enter the <b>filter</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress filter</a> |
| Tree       | <a href="#">filter</a>   |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## ip reference

|            |   |
|------------|---|
| Synopsis   | IP filter identifier  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress filter ip reference</a> |
| Tree       | <a href="#">ip</a>  |
| Reference  | <b>configure</b> <a href="#">filter ip-filter</a> <i>string</i>   |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## vc-label *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Static MPLS VC label to send packets to far-end device  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress vc-label number</a> |
| Tree       | <a href="#">vc-label</a>  |
| Range      | 16 to 1048575   |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## ingress

|          |  |
|----------|--|
| Synopsis | Enter the <b>ingress</b> context   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress</a> |
| Tree     | <a href="#">ingress</a>  |

Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## filter

Synopsis Enter the **filter** context  
 Context **configure** [service](#) [vpn](#) *string* [aarp-interface](#) *string* [spoke-sdp](#) *string* [ingress](#) [filter](#)  
 Tree [filter](#)  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ip reference

Synopsis IP filter ID  
 Context **configure** [service](#) [vpn](#) *string* [aarp-interface](#) *string* [spoke-sdp](#) *string* [ingress](#) [filter](#) [ip](#) [reference](#)  
 Tree [ip](#)  
 Reference **configure** [filter](#) [ip-filter](#) *string*  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## vc-label number



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis VC ingress value that indicates a specific connection  
 Context **configure** [service](#) [vpn](#) *string* [aarp-interface](#) *string* [spoke-sdp](#) *string* [ingress](#) [vc-label](#) [number](#)  
 Tree [vc-label](#)  
 Range 1 to 1048575  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the service  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**aggregates**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>aggregates</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">aggregates</a> |
| Tree       | <a href="#">aggregates</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**aggregate** [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

|            |  |
|------------|--|
| Synopsis   | Enter the <b>aggregate</b> list instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">aggregates</a> <a href="#">aggregate</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) |
| Tree       | <a href="#">aggregate</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

|            |  |
|------------|--|
| Synopsis   | Destination IP address prefix of the aggregate route   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">aggregates</a> <a href="#">aggregate</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) |
| Tree       | <a href="#">aggregate</a>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## aggregator

|            |   |
|------------|---|
| Synopsis   | Enter the <b>aggregator</b> context   |
| Context    | <b>configure service vpn string aggregates aggregate (ipv4-prefix   ipv6-prefix) aggregator</b> |
| Tree       | <b>aggregator</b>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## address string

|            |  |
|------------|--|
| Synopsis   | Aggregator IP address  |
| Context    | <b>configure service vpn string aggregates aggregate (ipv4-prefix   ipv6-prefix) aggregator address string</b> |
| Tree       | <b>address</b>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## as-number number

|            |  |
|------------|--|
| Synopsis   | Aggregator AS number   |
| Context    | <b>configure service vpn string aggregates aggregate (ipv4-prefix   ipv6-prefix) aggregator as-number number</b> |
| Tree       | <b>as-number</b>   |
| Range      | 1 to 4294967295  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## as-set boolean

|             |  |
|-------------|--|
| Synopsis    | Use AS_SET path segment type for the aggregate route   |
| Context     | <b>configure service vpn string aggregates aggregate (ipv4-prefix   ipv6-prefix) as-set boolean</b>  |
| Tree        | <b>as-set</b>  |
| Description | <p>When configured to <b>true</b>, the AS_PATH attribute of the aggregate contains an AS_SET containing all AS numbers from the contributing routes. This can increase the amount of churn due to best-path changes.</p> <p>When configured to <b>false</b>, the AS_PATH attribute contains no AS_SET and will be originated by the ESR.</p> |

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

## blackhole

|            |   |
|------------|---|
| Synopsis   | Enable the <b>blackhole</b> context   |
| Context    | <b>configure service vprn string aggregates aggregate (ipv4-prefix   ipv6-prefix) blackhole</b> |
| Tree       | <b>blackhole</b>  |
| Notes      | The following elements are part of a choice: <b>blackhole</b> or <b>indirect</b> .              |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## generate-icmp *boolean*

|             |  |
|-------------|--|
| Synopsis    | Send ICMP unreachable messages for aggregate routes  |
| Context     | <b>configure service vprn string aggregates aggregate (ipv4-prefix   ipv6-prefix) blackhole generate-icmp boolean</b>  |
| Tree        | <b>generate-icmp</b>   |
| Description | When configured to <b>true</b> , ICMP unreachable messages are sent when packets match an aggregate route in the FIB with a black-hole next-hop.<br>When configured to <b>false</b> , ICMP unreachable messages are not generated. |
| Default     | false  |
| Introduced  | 16.0.R2  |
| Platforms   | All  |

## community *string*

|               |   |
|---------------|---|
| Synopsis      | Community name that is added to the aggregate route   |
| Context       | <b>configure service vprn string aggregates aggregate (ipv4-prefix   ipv6-prefix) community string</b>  |
| Tree          | <b>community</b>  |
| Description   | This command associates a BGP community with the aggregate route. The community name can be matched in route policies and is automatically added to BGP routes exported from the aggregate route. |
| String Length | 1 to 72   |



|                |                                      |
|----------------|--------------------------------------|
| Max. Instances | 12                                   |
| Notes          | This element is ordered by the user. |
| Introduced     | 16.0.R1                              |
| Platforms      | All                                  |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <b>service vprn</b> <i>string aggregates aggregate (ipv4-prefix   ipv6-prefix) description string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**discard-component-communities** *boolean*

|            |   |
|------------|---|
| Synopsis   | Advertise aggregate with aggregate route community set  |
| Context    | <b>configure</b> <b>service vprn</b> <i>string aggregates aggregate (ipv4-prefix   ipv6-prefix) discard-component-communities boolean</i> |
| Tree       | <a href="#">discard-component-communities</a>   |
| Default    | false   |
| Introduced | 19.7.R1   |
| Platforms  | All   |

**indirect** (*ipv4-address-no-zone | ipv6-address-no-zone*)**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | Address of the indirect next hop   |
| Context  | <b>configure</b> <b>service vprn</b> <i>string aggregates aggregate (ipv4-prefix   ipv6-prefix) indirect (ipv4-address-no-zone   ipv6-address-no-zone)</i> |
| Tree     | <a href="#">indirect</a>   |

|             |   |
|-------------|---|
| Description | This command programs aggregate routes into the forwarding table with an indirect next hop. If a packet matches the aggregate route but not a contributing route, it is forwarded toward the indirect next hop rather than being discarded. |
| Notes       | The following elements are part of a choice: <b>blackhole</b> or <b>indirect</b> .  |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **local-preference** *number*

|             |  |
|-------------|--|
| Synopsis    | Local preference used when aggregate route is exported   |
| Context     | <b>configure service vprn string aggregates aggregate</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>local-preference number</b>  |
| Tree        | <a href="#">local-preference</a>   |
| Description | This command configures the local preference value to use when the aggregate route is exported rather than using any of the local preference values assigned for any of the contributing routes. |
| Range       | 0 to 4294967295  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **policy** *reference*

|             |   |
|-------------|---|
| Synopsis    | Policy name for the aggregated route  |
| Context     | <b>configure service vprn string aggregates aggregate</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>policy reference</b>  |
| Tree        | <a href="#">policy</a>  |
| Description | <p>This command associates an aggregate route with a policy reference. The aggregated route is activated only when there is at least one eligible active route in the sub-trees below it that is accepted by the policy evaluation. There is no evaluation into any sub-tree that starts with another active aggregate route. Eligible routes exclude host routes and LDP shortcut routes.</p> <p>If an aggregate route has no policy, or the reference is to an empty policy, this configuration is treated as equivalent to a policy with one rule that accepts all routes.</p> |
| Reference   | <b>configure policy-options policy-statement string</b>   |
| Introduced  | 20.10.R1  |
| Platforms   | All   |

**summary-only *boolean***

|             |  |
|-------------|--|
| Synopsis    | Advertise the aggregate route only   |
| Context     | <b>configure service vpn</b> <i>string</i> <b>aggregates aggregate</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>summary-only</b> <i>boolean</i>  |
| Tree        | <b>summary-only</b>  |
| Description | When configured to <b>true</b> , the router suppresses the advertisement of more specific component routes for the aggregate.<br><br>When configured to <b>false</b> , the router advertises both the aggregate route and its contributing routes. |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**tunnel-group *number***

|             |  |
|-------------|--|
| Synopsis    | Tunnel group from which to associate the MC IPsec state  |
| Context     | <b>configure service vpn</b> <i>string</i> <b>aggregates aggregate</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>tunnel-group</b> <i>number</i> |
| Tree        | <b>tunnel-group</b>  |
| Description | This command adds the MC-IPsec state of the specific tunnel-group to the aggregate route.  |
| Range       | 1 to 64  |
| Introduced  | 20.7.R1  |
| Platforms   | All  |

**allow-export-bgp-vpn *boolean***

|            |   |
|------------|---|
| Synopsis   | Include BGP-VPN routes for export   |
| Context    | <b>configure service vpn</b> <i>string</i> <b>allow-export-bgp-vpn</b> <i>boolean</i> |
| Tree       | <b>allow-export-bgp-vpn</b>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**autonomous-system** *number*

|             |  |
|-------------|--|
| Synopsis    | AS number advertised to peers for this router  |
| Context     | <b>configure service vprn</b> <i>string autonomous-system number</i>   |
| Tree        | <a href="#">autonomous-system</a>  |
| Description | This command configures the autonomous system (AS) number for the router. This value must be set before BGP can be activated.<br><br>If the AS number is changed on a router with an active BGP instance, the new AS number is not used until the BGP instance is restarted. |
| Range       | 1 to 4294967295  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**bgp**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>bgp</b> context                   |
| Context    | <b>configure service vprn</b> <i>string bgp</i> |
| Tree       | <a href="#">bgp</a>                             |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the BGP instance                            |
| Context    | <b>configure service vprn</b> <i>string bgp admin-state keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**advertise-inactive** *boolean*

|          |  |
|----------|--|
| Synopsis | Advertise inactive BGP routes to peers                                     |
| Context  | <b>configure service vprn</b> <i>string bgp advertise-inactive boolean</i> |
| Tree     | <a href="#">advertise-inactive</a>   |

|             |   |
|-------------|---|
| Description | When configured to <b>true</b> , this command allows any inactive BGP route to be advertised, even though it is not the used route.<br><br>When configured to <b>false</b> , the advertisement of inactive BGP routes to other BGP peers is disabled. |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### advertise-ipv6-next-hops

|            |  |
|------------|--|
| Synopsis   | Enter the <b>advertise-ipv6-next-hops</b> context                |
| Context    | <b>configure service vpn string bgp advertise-ipv6-next-hops</b> |
| Tree       | <a href="#">advertise-ipv6-next-hops</a>                         |
| Introduced | 19.5.R1  |
| Platforms  | All  |

### ipv4 *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable IPv4 routes to be advertised   |
| Context    | <b>configure service vpn string bgp advertise-ipv6-next-hops ipv4 boolean</b> |
| Tree       | <a href="#">ipv4</a>  |
| Default    | false   |
| Introduced | 19.5.R1   |
| Platforms  | All   |

### aggregator-id-zero *boolean*

|             |  |
|-------------|--|
| Synopsis    | Set router ID in the BGP AGGREGATOR attribute to 0   |
| Context     | <b>configure service vpn string bgp aggregator-id-zero boolean</b>   |
| Tree        | <a href="#">aggregator-id-zero</a>   |
| Description | When configured to <b>true</b> , the router ID in the BGP AGGREGATOR path attribute is set to 0 when BGP aggregates routes. This prevents different routers within an AS from creating aggregate routes for the same prefix with different path attributes.<br><br>When configured to <b>false</b> , the AS number and router ID are added to the AGGREGATOR path attribute. |
| Default     | false  |

Introduced 16.0.R1  
 Platforms All

### **asn-4-byte** *boolean*

Synopsis Advertise support for 4-byte ASNs  
 Context **configure** [service vprn](#) *string* [bgp asn-4-byte](#) *boolean*  
 Tree [asn-4-byte](#)  
 Default true  
 Introduced 16.0.R1  
 Platforms All

### **authentication-key** *string*

Synopsis BGP authentication key for all peers  
 Context **configure** [service vprn](#) *string* [bgp authentication-key](#) *string*  
 Tree [authentication-key](#)  
 Description This command configures the authentication key used to protect all sessions. The stored format of the authentication key is based on the **configure system security hash-control management-interface md-cli hash-algorithm** setting.  
 String Length 1 to 370  
 Introduced 16.0.R1  
 Platforms All

### **authentication-keychain** *reference*

Synopsis TCP authentication keychain for the session  
 Context **configure** [service vprn](#) *string* [bgp authentication-keychain](#) *reference*  
 Tree [authentication-keychain](#)  
 Description This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session.  
 Reference **configure** [system security keychains](#) [keychain](#) *string*  
 Introduced 16.0.R3  
 Platforms All

## backup-path

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>backup-path</b> context   |
| Context     | <b>configure service vprn string bgp backup-path</b>   |
| Tree        | <a href="#">backup-path</a>  |
| Description | <p>Commands in this context enable the use of a backup path for specified BGP-learned prefixes belonging to the base router. Multiple paths must be received for a prefix in order to take advantage of this feature. When a prefix has a backup path and its primary paths fail, the affected traffic is rapidly diverted to the backup path without waiting for control plane re-convergence to occur. When many prefixes share the same primary paths and in some cases, the same backup path, the time to divert failover traffic to the backup path is independent of the number of prefixes.</p> <p>By default, IPv4 and IPv6 prefixes do not have a backup path installed in the IOM.</p> |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

## ipv4 *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable support for unlabeled unicast IPv4 routes                         |
| Context    | <b>configure service vprn string bgp backup-path ipv4 <i>boolean</i></b> |
| Tree       | <a href="#">ipv4</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## ipv6 *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable support for unlabeled unicast IPv6 routes                         |
| Context    | <b>configure service vprn string bgp backup-path ipv6 <i>boolean</i></b> |
| Tree       | <a href="#">ipv6</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## label-ipv4 *boolean*

|          |  |
|----------|--|
| Synopsis | Enable support for labeled-unicast IPv4 routes                                 |
| Context  | <b>configure service vprn string bgp backup-path label-ipv4 <i>boolean</i></b> |

|            |                            |
|------------|----------------------------|
| Tree       | <a href="#">label-ipv4</a> |
| Default    | false                      |
| Introduced | 16.0.R1                    |
| Platforms  | All                        |

### **label-ipv6** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable support for labeled unicast IPv6 routes  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp backup-path label-ipv6</a> <i>boolean</i> |
| Tree       | <a href="#">label-ipv6</a>  |
| Default    | false   |
| Introduced | 22.2.R1   |
| Platforms  | All   |

### **best-path-selection**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>best-path-selection</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp best-path-selection</a> |
| Tree       | <a href="#">best-path-selection</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **always-compare-med**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>always-compare-med</b> context  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp best-path-selection always-compare-med</a> |
| Tree        | <a href="#">always-compare-med</a>   |
| Description | Commands in this context determine how the BGP decision process is affected by the MED path attribute.                 |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **med-value** *keyword*

|          |                                    |
|----------|------------------------------------|
| Synopsis | Action for a missing MED attribute |
|----------|------------------------------------|



|            |   |
|------------|---|
| Context    | <b>configure service vprn string bgp best-path-selection always-compare-med med-value keyword</b> |
| Tree       | <a href="#">med-value</a>   |
| Options    | off, missing-med-zero, missing-med-infinity, on   |
| Default    | off   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **strict-as boolean**

|             |   |
|-------------|---|
| Synopsis    | Compare MED only for routes from same neighbor AS   |
| Context     | <b>configure service vprn string bgp best-path-selection always-compare-med strict-as boolean</b>   |
| Tree        | <a href="#">strict-as</a>   |
| Description | When configured to <b>true</b> , the route selection process can compare the MED path attribute between routes only if they come from the same neighbor AS.<br><br>When configured to <b>false</b> , the route selection process can compare the MED path attribute between routes even if they come from different neighbor ASs. |
| Default     | true  |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **as-path-ignore**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>as-path-ignore</b> context  |
| Context     | <b>configure service vprn string bgp best-path-selection as-path-ignore</b>  |
| Tree        | <a href="#">as-path-ignore</a>   |
| Description | Commands in this context determine whether the AS path length is considered in the selection process for routes of the specified address families. |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **ipv4 boolean**

|          |  |
|----------|--|
| Synopsis | Ignore AS path length for unlabeled unicast IPv4 routes                                  |
| Context  | <b>configure service vprn string bgp best-path-selection as-path-ignore ipv4 boolean</b> |

---

|            |                      |
|------------|----------------------|
| Tree       | <a href="#">ipv4</a> |
| Default    | false                |
| Introduced | 16.0.R1              |
| Platforms  | All                  |

### **ipv6 *boolean***

|            |   |
|------------|---|
| Synopsis   | Ignore AS path length for unlabeled unicast IPv6 routes   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <a href="#">string</a> <a href="#">bgp best-path-selection as-path-ignore</a> <a href="#">ipv6</a> <i>boolean</i> |
| Tree       | <a href="#">ipv6</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **label-ipv4 *boolean***

|            |   |
|------------|---|
| Synopsis   | Ignore AS path length for labeled-unicast IPv4 routes   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <a href="#">string</a> <a href="#">bgp best-path-selection as-path-ignore</a> <a href="#">label-ipv4</a> <i>boolean</i> |
| Tree       | <a href="#">label-ipv4</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **label-ipv6 *boolean***

|            |   |
|------------|---|
| Synopsis   | Ignore AS path length for labeled unicast IPv6 routes   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <a href="#">string</a> <a href="#">bgp best-path-selection as-path-ignore</a> <a href="#">label-ipv6</a> <i>boolean</i> |
| Tree       | <a href="#">label-ipv6</a>  |
| Default    | false   |
| Introduced | 22.2.R1   |
| Platforms  | All   |

### **compare-origin-validation-state *boolean***

|          |  |
|----------|--|
| Synopsis | Allow comparison of origin validation states |
|----------|--|

|            |  |
|------------|--|
| Context    | <b>configure service vprn string bgp best-path-selection compare-origin-validation-state boolean</b> |
| Tree       | <a href="#">compare-origin-validation-state</a>  |
| Default    | false  |
| Introduced | 19.7.R1  |
| Platforms  | All  |

### **d-path-length-ignore boolean**

|             |  |
|-------------|--|
| Synopsis    | Enable D-PATH length ignore  |
| Context     | <b>configure service vprn string bgp best-path-selection d-path-length-ignore boolean</b>  |
| Tree        | <a href="#">d-path-length-ignore</a>   |
| Description | <p>When configured to <b>true</b>, this command, enables the router to ignore the D-PATH domain segment length during best-path selection.</p> <p>At the base router level (or VPRN BGP level for PE-CE routers), this command allows BGP to ignore the D-PATH domain segment length for best-path selection purposes. BGP ignores the D-PATH length when comparing two VPN routes or two IFL routes within the same RD. However, these VPN/IFL routes are processed in the main-BGP instance.</p> <p>At the VPRN router level, this command allows the VPRN RTM to ignore the D-PATH domain segment length for best-path selection purposes (for routes in VPRN). The user can control whether the RTM considers the D-PATH length when comparing two VPN routes with different RDs.</p> <p>Best-path selection for EVPN-IFF routes against other owners (for example, EVPN-IFL or IPVPN) still relies on RTM preference. When EVPN-IFF RTM preference matches the RTM preference of another BGP owner, the existing RTM selection applies and D-PATH is not considered, irrespective of the <b>d-path-length-ignore</b> configuration.</p> <p>When configured to <b>false</b>, this command disables the ability to ignore the D-PATH domain segment length.</p> |
| Default     | false  |
| Introduced  | 21.10.R1   |
| Platforms   | All  |

### **deterministic-med boolean**

|             |   |
|-------------|---|
| Synopsis    | Group paths based on AS before MED attribute comparison   |
| Context     | <b>configure service vprn string bgp best-path-selection deterministic-med boolean</b>  |
| Tree        | <a href="#">deterministic-med</a>   |
| Description | When configured to <b>true</b> , BGP groups paths from the same AS that are equal up to the MED attribute comparison and then compares the best path from each group to |

select the overall best path. This process ensures that the best-path selection process is deterministic in all cases.

When configured to **false**, paths are not grouped and the overall best-path selection can depend on the order of route arrival.

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

## **ebgp-ibgp-equal**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>ebgp-ibgp-equal</b> context   |
| Context     | <b>configure service vprn string bgp best-path-selection ebgp-ibgp-equal</b>   |
| Tree        | <a href="#">ebgp-ibgp-equal</a>  |
| Description | <p>Commands in this context allow BGP to ignore the difference between EBGP and IBGP routes in selecting the best path and eligible multipaths (if multipath and ECMP are enabled) for the specified address families. The result is a form of EIBGP load-balancing in a multipath scenario. This behavior can be applied selectively to certain address families.</p> <p>By default, the BGP decision process prefers an EBGP learned route over an IBGP learned route.</p> |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

## **ipv4 boolean**

|            |   |
|------------|---|
| Synopsis   | Consider EBGP and IBGP IPv4 routes equal  |
| Context    | <b>configure service vprn string bgp best-path-selection ebgp-ibgp-equal ipv4 boolean</b> |
| Tree       | <a href="#">ipv4</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## **ipv6 boolean**

|          |   |
|----------|---|
| Synopsis | Consider EBGP and IBGP IPv6 routes equal  |
| Context  | <b>configure service vprn string bgp best-path-selection ebgp-ibgp-equal ipv6 boolean</b> |
| Tree     | <a href="#">ipv6</a>  |

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **label-ipv4** *boolean*

|            |   |
|------------|---|
| Synopsis   | Consider EBGP and IBGP label-IPv4 routes equal  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp best-path-selection ebgp-ibgp-equal label-ipv4</a> <i>boolean</i> |
| Tree       | <a href="#">label-ipv4</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **label-ipv6** *boolean*

|            |   |
|------------|---|
| Synopsis   | Consider EBGP and IBGP label-IPv6 routes equal  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp best-path-selection ebgp-ibgp-equal label-ipv6</a> <i>boolean</i> |
| Tree       | <a href="#">label-ipv6</a>  |
| Default    | false   |
| Introduced | 22.2.R1   |
| Platforms  | All   |

### **ignore-nh-metric** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Ignore next-hop distance in best path selection   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp best-path-selection ignore-nh-metric</a> <i>boolean</i>   |
| Tree        | <a href="#">ignore-nh-metric</a>  |
| Description | <p>When configured to <b>true</b>, BGP ignores the resolved distance to the BGP next hop in its route selection process.</p> <p>When configured to <b>false</b>, BGP factors the distance to the next hop into its decision process when it compares two BGP routes with the same NLRI learned from base router BGP peers (in the <b>router</b> context) or IP prefix learned from VPRN BGP peers (in the <b>vprn</b> context).</p> |
| Default     | false   |
| Introduced  | 16.0.R1   |

Platforms All

### ignore-router-id

Synopsis Enable the **ignore-router-id** context

Context **configure service vprn string bgp best-path-selection ignore-router-id**

Tree [ignore-router-id](#)

Description Commands in this context determine whether the BGP selection process ignores the BGP identifier (router ID) comparison of two EBGP paths from different EBGP peers when determining the best path for the specified address families.

By default, BGP selects the path with the lower router ID when it compares two paths from EBGP peers.

Introduced 16.0.R1

Platforms All

### origin-invalid-unusable *boolean*

Synopsis Ignore routes with invalid origin validation state

Context **configure service vprn string bgp best-path-selection origin-invalid-unusable *boolean***

Tree [origin-invalid-unusable](#)

Default false

Introduced 19.7.R1

Platforms All

### bfd-liveness *boolean*

Synopsis Enable BFD

Context **configure service vprn string bgp bfd-liveness *boolean***

Tree [bfd-liveness](#)

Description When configured to **true**, BFD is enabled on all BGP sessions, subject to the association of those BGP sessions with IP interfaces that have BFD configurations.

When configured to **false**, BFD is not enabled globally for all BGP sessions.

Default false

Introduced 16.0.R1

Platforms All

**client-reflect** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Allow client reflection of routes by route reflector  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp client-reflect</a> <i>boolean</i>   |
| Tree        | <a href="#">client-reflect</a>  |
| Description | When configured to <b>true</b> , routes received from neighbors considered to be RR clients are reflected to other peers as expected.<br>When configured to <b>false</b> , routes received from neighbors considered to be RR clients are not reflected to other clients. |
| Default     | true  |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**cluster**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>cluster</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp cluster</a> |
| Tree       | <a href="#">cluster</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**cluster-id** *string*

|             |  |
|-------------|--|
| Synopsis    | Route reflector cluster ID   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp cluster cluster-id</a> <i>string</i>                                   |
| Tree        | <a href="#">cluster-id</a>   |
| Description | The command specifies the cluster ID to associate with the routing instance, effectively making all IBGP peers of the routing instance RR clients. |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**connect-retry** *number*

|          |   |
|----------|---|
| Synopsis | BGP connect retry timer value   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp connect-retry</a> <i>number</i> |
| Tree     | <a href="#">connect-retry</a>   |

|             |   |
|-------------|---|
| Description | This command configures the BGP connect retry timer. When the timer expires, BGP tries to reconnect to the configured peer. |
| Range       | 1 to 65535  |
| Default     | 120   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

## convergence

|            |   |
|------------|---|
| Synopsis   | Enter the <b>convergence</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp convergence</a> |
| Tree       | <a href="#">convergence</a>   |
| Introduced | 19.7.R1   |
| Platforms  | All   |

## family [[family-type](#)] *keyword*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>family</b> list instance   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp convergence family</a> <i>keyword</i> |
| Tree       | <a href="#">family</a>  |
| Introduced | 19.7.R1   |
| Platforms  | All   |

## [[family-type](#)] *keyword*

|            |   |
|------------|---|
| Synopsis   | Address family for which convergence selection applies  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp convergence family</a> <i>keyword</i> |
| Tree       | <a href="#">family</a>  |
| Options    | ipv4, ipv6  |
| Notes      | This element is part of a list key.   |
| Introduced | 19.7.R1   |
| Platforms  | All   |



**max-wait-to-advertise** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum wait time before advertising routes   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp convergence</a> <a href="#">family keyword</a> <a href="#">max-wait-to-advertise number</a> |
| Tree       | <a href="#">max-wait-to-advertise</a>   |
| Range      | 0 to 3600   |
| Default    | 0   |
| Introduced | 19.7.R1   |
| Platforms  | All   |

**min-wait-to-advertise** *number*

|            |  |
|------------|--|
| Synopsis   | Minimum wait time before advertising routes  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp convergence</a> <a href="#">min-wait-to-advertise number</a> |
| Tree       | <a href="#">min-wait-to-advertise</a>  |
| Range      | 0 to 3600  |
| Default    | 0  |
| Introduced | 19.7.R1  |
| Platforms  | All  |

**damp-peer-oscillations**

|             |   |
|-------------|---|
| Synopsis    | Enable the <b>damp-peer-oscillations</b> context  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp damp-peer-oscillations</a>  |
| Tree        | <a href="#">damp-peer-oscillations</a>  |
| Description | Commands in this context specify how long a BGP peer session remains in the idle state after an error causes the session to reset. In the idle state, BGP does not initiate or respond to attempts to establish a new session. Repeated errors that occur a short time after each session reset cause longer and longer hold times in the idle state. |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**error-interval** *number*

|          |  |
|----------|--|
| Synopsis | Time after a reset that the session must be error-free   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp damp-peer-oscillations</a> <a href="#">error-interval number</a> |

|             |   |
|-------------|---|
| Tree        | <a href="#">error-interval</a>  |
| Description | This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time. |
| Range       | 0 to 2048   |
| Default     | 30  |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **idle-hold-time**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>idle-hold-time</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn string bgp damp-peer-oscillations idle-hold-time</a> |
| Tree       | <a href="#">idle-hold-time</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **initial-wait number**

|            |  |
|------------|--|
| Synopsis   | Time session remains in idle state after stabilization   |
| Context    | <b>configure</b> <a href="#">service vprn string bgp damp-peer-oscillations idle-hold-time initial-wait number</a> |
| Tree       | <a href="#">initial-wait</a>   |
| Range      | 0 to 2048  |
| Default    | 0  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **max-wait number**

|          |  |
|----------|--|
| Synopsis | Maximum session idle time after repeated instability   |
| Context  | <b>configure</b> <a href="#">service vprn string bgp damp-peer-oscillations idle-hold-time max-wait number</a> |
| Tree     | <a href="#">max-wait</a>   |
| Range    | 1 to 2048  |
| Default  | 60   |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **second-wait** *number*

|             |   |
|-------------|---|
| Synopsis    | Time that doubles after each session failure  |
| Context     | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp damp-peer-oscillations</b> <b>idle-hold-time</b> <b>second-wait</b> <i>number</i> |
| Tree        | <b>second-wait</b>  |
| Description | This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time.                    |
| Range       | 1 to 2048   |
| Default     | 5   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **damping** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Use BGP route damping to reduce route flap   |
| Context     | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp damping</b> <i>boolean</i>   |
| Tree        | <b>damping</b>   |
| Description | <p>When configured to <b>true</b>, this command enables route damping to reduce the number of update messages sent between BGP peers and reduce the load on peers without affecting the route convergence time for stable routes.</p> <p>Route damping is controlled by profiles set in route policies. If no profile is specified in the route policy, the default damping profile is used with the following parameters:</p> <ul style="list-style-type: none"> <li>• Half-life: 15 minutes</li> <li>• Max-suppress: 60 minutes</li> <li>• Suppress-threshold: 3000</li> <li>• Reuse-threshold: 750</li> </ul> <p>When configured to <b>false</b>, BGP route damping for learned routes is disabled.</p> |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

## default-label-preference

|            |  |
|------------|--|
| Synopsis   | Enter the <b>default-label-preference</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp default-label-preference</a> |
| Tree       | <a href="#">default-label-preference</a>   |
| Introduced | 19.5.R1  |
| Platforms  | All  |

## ebgp number

|            |   |
|------------|---|
| Synopsis   | Default preference for EBGP   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp default-label-preference ebgp</a> <i>number</i> |
| Tree       | <a href="#">ebgp</a>  |
| Range      | 0 to 255  |
| Default    | 0   |
| Introduced | 19.5.R1   |
| Platforms  | All   |

## ibgp number

|            |   |
|------------|---|
| Synopsis   | Default preference for IBGP   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp default-label-preference ibgp</a> <i>number</i> |
| Tree       | <a href="#">ibgp</a>  |
| Range      | 0 to 255  |
| Default    | 0   |
| Introduced | 19.5.R1   |
| Platforms  | All   |

## default-preference

|            |  |
|------------|--|
| Synopsis   | Enter the <b>default-preference</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp default-preference</a> |
| Tree       | <a href="#">default-preference</a>   |
| Introduced | 19.5.R1  |
| Platforms  | All  |

**ebgp number**

|            |   |
|------------|---|
| Synopsis   | Default preference for EBGp   |
| Context    | <b>configure service vprn string bgp default-preference ebgp number</b> |
| Tree       | <b>ebgp</b>   |
| Range      | 0 to 255  |
| Default    | 0   |
| Introduced | 19.5.R1   |
| Platforms  | All   |

**ibgp number**

|            |   |
|------------|---|
| Synopsis   | Default preference for IBGP   |
| Context    | <b>configure service vprn string bgp default-preference ibgp number</b> |
| Tree       | <b>ibgp</b>   |
| Range      | 0 to 255  |
| Default    | 0   |
| Introduced | 19.5.R1   |
| Platforms  | All   |

**description string**

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure service vprn string bgp description string</b> |
| Tree          | <b>description</b>  |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**domain-id string**

|          |   |
|----------|---|
| Synopsis | Domain ID of received BGP route before readvertisement    |
| Context  | <b>configure service vprn string bgp domain-id string</b> |
| Tree     | <b>domain-id</b>  |

|             |  |
|-------------|--|
| Description | <p>This command specifies the domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as domain-id:isf_safi_type in the D-PATH attribute, as described in <i>draft-ietf-bess-evpn-ipvpn-interworking</i>. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances).</p> <p>Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).</p> <p>In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N:</p> <p>Seg Len=1 / 65000:1:128</p> <p>If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows:</p> <p>Seg Len=2 / 65000:2:70 / 65000:1:128</p> <p>That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.</p> |
| Introduced  | 21.10.R1   |
| Platforms   | All  |

### **dynamic-neighbor-limit** *number*

|             |  |
|-------------|--|
| Synopsis    | Max dynamic BGP sessions to accept from remote peers   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>bgp dynamic-neighbor-limit</b> <i>number</i>  |
| Tree        | <a href="#">dynamic-neighbor-limit</a>   |
| Description | This command configures the maximum number of dynamic BGP sessions to accept from remote peers associated with the entire BGP instance. If accepting a new dynamic session causes the instance limit to be exceeded, the new session attempt is rejected and a Notification message is sent back to the remote peer. |
| Range       | 1 to 8192  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **ebgp-default-reject-policy**

|          |   |
|----------|---|
| Synopsis | Enter the <b>ebgp-default-reject-policy</b> context                               |
| Context  | <b>configure service vprn</b> <i>string</i> <b>bgp ebgp-default-reject-policy</b> |
| Tree     | <a href="#">ebgp-default-reject-policy</a>  |

Introduced 19.5.R1  
Platforms All

### **export** *boolean*

Synopsis Enable default reject export policy for external peers  
Context **configure** [service vpn](#) *string* [bgp ebgp-default-reject-policy export](#) *boolean*  
Tree [export](#)  
Default true  
Introduced 19.5.R1  
Platforms All

### **import** *boolean*

Synopsis Enable default reject import policy for external peers  
Context **configure** [service vpn](#) *string* [bgp ebgp-default-reject-policy import](#) *boolean*  
Tree [import](#)  
Default true  
Introduced 19.5.R1  
Platforms All

### **eibgp-loadbalance** *boolean*

Synopsis Use ECMP over BGP VPN and BGP routes  
Context **configure** [service vpn](#) *string* [bgp eibgp-loadbalance](#) *boolean*  
Tree [eibgp-loadbalance](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **enforce-first-as** *boolean*

Synopsis Enforce the configured peer AS value in received routes  
Context **configure** [service vpn](#) *string* [bgp enforce-first-as](#) *boolean*  
Tree [enforce-first-as](#)

|             |  |
|-------------|--|
| Description | <p>When configured to <b>true</b> for an EBGP session, all routes received from an EBGP peer are checked to ensure that the most recent ASN in the AS_PATH attribute of each route matches the configured AS of the session. If there is not a match, the session is reset (if the <b>update-fault-tolerance</b> command in the <b>error-handling</b> context is set to <b>false</b>) or the session is left up but the route is treated as withdrawn (if <b>update-fault-tolerance</b> is set to <b>true</b>).</p> <p>This command does not flap an established session because it applies only to routes received after the command is issued.</p> <p>When configured to <b>false</b>, received routes are not checked for compliance with the rule.</p> |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

## error-handling

|            |   |
|------------|---|
| Synopsis   | Enter the <b>error-handling</b> context                                 |
| Context    | <b>configure</b> <a href="#">service vprn string bgp error-handling</a> |
| Tree       | <a href="#">error-handling</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## update-fault-tolerance *boolean*

|             |  |
|-------------|--|
| Synopsis    | Tolerate non-critical errors in UPDATE messages  |
| Context     | <b>configure</b> <a href="#">service vprn string bgp error-handling update-fault-tolerance boolean</a>   |
| Tree        | <a href="#">update-fault-tolerance</a>   |
| Description | <p>When configured to <b>true</b>, non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset.</p> <p>When configured to <b>false</b>, most errors trigger a session reset.</p> |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

## export

|          |   |
|----------|---|
| Synopsis | Enable the <b>export</b> context                                |
| Context  | <b>configure</b> <a href="#">service vprn string bgp export</a> |



|            |                        |
|------------|------------------------|
| Tree       | <a href="#">export</a> |
| Introduced | 16.0.R1                |
| Platforms  | All                    |

### **policy** (*policy-expr-string* | *string*)

|                |   |
|----------------|---|
| Synopsis       | Export policy name  |
| Context        | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp export policy</a> ( <i>policy-expr-string</i>   <i>string</i> ) |
| Tree           | <a href="#">policy</a>  |
| String Length  | 1 to 255  |
| Max. Instances | 15  |
| Min. Instances | 1   |
| Notes          | This element is ordered by the user.  |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

### **extended-nh-encoding**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>extended-nh-encoding</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp extended-nh-encoding</a> |
| Tree       | <a href="#">extended-nh-encoding</a>   |
| Introduced | 19.5.R1  |
| Platforms  | All  |

### **ipv4** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable/disable family type ipv4.   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp extended-nh-encoding ipv4</a> <i>boolean</i> |
| Tree       | <a href="#">ipv4</a>   |
| Default    | false  |
| Introduced | 19.5.R1  |
| Platforms  | All  |

## family

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>family</b> context  |
| Context     | <b>configure</b> <a href="#">service vprn string bgp family</a>                                      |
| Tree        | <a href="#">family</a>   |
| Description | Commands in this context specify the BGP address families supported by the base router BGP sessions. |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

## flow-ipv4 *boolean*

|            |   |
|------------|---|
| Synopsis   | Advertise support for the flowspec-IPv4 address family                            |
| Context    | <b>configure</b> <a href="#">service vprn string bgp family flow-ipv4 boolean</a> |
| Tree       | <a href="#">flow-ipv4</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## flow-ipv6 *boolean*

|            |   |
|------------|---|
| Synopsis   | Advertise support for the flowspec-IPv6 address family                            |
| Context    | <b>configure</b> <a href="#">service vprn string bgp family flow-ipv6 boolean</a> |
| Tree       | <a href="#">flow-ipv6</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## ipv4 *boolean*

|            |  |
|------------|--|
| Synopsis   | Advertise MP-BGP support for the IPv4 address family                         |
| Context    | <b>configure</b> <a href="#">service vprn string bgp family ipv4 boolean</a> |
| Tree       | <a href="#">ipv4</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**ipv6** *boolean*

|            |  |
|------------|--|
| Synopsis   | Advertise MP-BGP support for the IPv6 address family   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp family ipv6</a> <i>boolean</i> |
| Tree       | <a href="#">ipv6</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**label-ipv4** *boolean*

|            |  |
|------------|--|
| Synopsis   | Advertise support for the label-IPv4 address family  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp family label-ipv4</a> <i>boolean</i> |
| Tree       | <a href="#">label-ipv4</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**mcast-ipv4** *boolean*

|            |  |
|------------|--|
| Synopsis   | Advertise support for the MCAST-IPv4 address family  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp family mcast-ipv4</a> <i>boolean</i> |
| Tree       | <a href="#">mcast-ipv4</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**mcast-ipv6** *boolean*

|            |  |
|------------|--|
| Synopsis   | Advertise support for the MCAST-IPv6 address family  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp family mcast-ipv6</a> <i>boolean</i> |
| Tree       | <a href="#">mcast-ipv6</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**fast-external-failover** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Drop external BGP session immediately when link fails   |
| Context     | <b>configure</b> <a href="#">service vprn string bgp fast-external-failover</a> <i>boolean</i>  |
| Tree        | <a href="#">fast-external-failover</a>  |
| Description | When configured to <b>true</b> , the router drops an external BGP session to a single-hop neighbor immediately when the local interface goes down.<br>When configured to <b>false</b> , the BGP session remains up until the hold time expires. |
| Default     | true  |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**flowspec**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>flowspec</b> context                                 |
| Context    | <b>configure</b> <a href="#">service vprn string bgp flowspec</a> |
| Tree       | <a href="#">flowspec</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**validate-dest-prefix** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Validate destination prefix in FlowSpec-IPv4/IPv6 route   |
| Context     | <b>configure</b> <a href="#">service vprn string bgp flowspec validate-dest-prefix</a> <i>boolean</i>   |
| Tree        | <a href="#">validate-dest-prefix</a>  |
| Description | When configured to <b>true</b> , this command enables validation of received IPv4 and IPv6 FlowSpec routes that contain a destination-prefix subcomponent.<br>A FlowSpec route with a destination-prefix subcomponent is considered invalid if both of the following are true: <ul style="list-style-type: none"> <li>• it was originated outside the local AS of the receiving BGP router</li> <li>• the neighbor AS of the FlowSpec route does not match the neighbor AS of the best match BGP (unicast) route for the destination prefix or the neighbor AS of any longer match BGP (unicast) route for the destination prefix</li> </ul> An invalid route is retained in the BGP but it is not used for filtering traffic or propagated to other BGP routers.<br>When configured to <b>false</b> , destination-prefix validation is disabled. |
| Default     | false   |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **validate-redirect-ip** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Validate the redirect-to-IPv4 action in FlowSpec route   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp flowspec</a> <b>validate-redirect-ip</b> <i>boolean</i>  |
| Tree        | <a href="#">validate-redirect-ip</a>   |
| Description | <p>When configured to <b>true</b>, this command enables procedures to validate the redirect-to-IPv4 action attached to FlowSpec-IPv4 routes that are received by the BGP instance.</p> <p>A FlowSpec-IPv4 route is considered invalid and is not installed as a filter rule if the FlowSpec-IPv4 route is deemed to have originated from a different AS than the IP route that resolves the redirection IPv4 address. The originating AS of a FlowSpec route is determined from its AS path.</p> <p>When configured to <b>false</b>, the validation check is disabled.</p> |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **graceful-restart**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>graceful-restart</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp</a> <b>graceful-restart</b> |
| Tree       | <a href="#">graceful-restart</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **gr-notification** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Perform Graceful Restart procedures  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp graceful-restart</a> <b>gr-notification</b> <i>boolean</i>   |
| Tree        | <a href="#">gr-notification</a>  |
| Description | <p>When configured to <b>true</b>, the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error.</p> <p>When configured to <b>false</b>, NOTIFICATION messages are not supported.</p> |

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

## long-lived

|            |  |
|------------|--|
| Synopsis   | Enable the <b>long-lived</b> context                                 |
| Context    | <b>configure service vprn string bgp graceful-restart long-lived</b> |
| Tree       | <a href="#">long-lived</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## advertise-stale-to-all-neighbors *boolean*

|            |   |
|------------|---|
| Synopsis   | Advertise stale routes to all BGP peers   |
| Context    | <b>configure service vprn string bgp graceful-restart long-lived advertise-stale-to-all-neighbors boolean</b> |
| Tree       | <a href="#">advertise-stale-to-all-neighbors</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## advertised-stale-time *number*

|            |   |
|------------|---|
| Synopsis   | LLGR stale routes time  |
| Context    | <b>configure service vprn string bgp graceful-restart long-lived advertised-stale-time number</b> |
| Tree       | <a href="#">advertised-stale-time</a>   |
| Range      | 0 to 16777215   |
| Default    | 86400   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## family [[family-type](#)] *keyword*

|          |                                       |
|----------|---------------------------------------|
| Synopsis | Enter the <b>family</b> list instance |
|----------|---------------------------------------|

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp graceful-restart long-lived family</b> <i>keyword</i> |
| Tree       | <b>family</b>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **[family-type]** *keyword*

|            |  |
|------------|--|
| Synopsis   | Address family type for LLGR   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp graceful-restart long-lived family</b> <i>keyword</i> |
| Tree       | <b>family</b>  |
| Options    | ipv4, ipv6, flow-ipv4, flow-ipv6, label-ipv4   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **advertised-stale-time** *number*

|            |   |
|------------|---|
| Synopsis   | LLGR stale routes time for family override  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp graceful-restart long-lived family</b> <i>keyword</i> <b>advertised-stale-time</b> <i>number</i> |
| Tree       | <b>advertised-stale-time</b>  |
| Range      | 0 to 16777215   |
| Default    | 86400   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **helper-override-stale-time** *number*

|            |  |
|------------|--|
| Synopsis   | Locally-configured stale routes override time  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp graceful-restart long-lived family</b> <i>keyword</i> <b>helper-override-stale-time</b> <i>number</i> |
| Tree       | <b>helper-override-stale-time</b>  |
| Range      | 0 to 16777215  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**forwarding-bits-set** *keyword*

|             |   |
|-------------|---|
| Synopsis    | BGP LLGR forwarding-bit behavior for address family   |
| Context     | <b>configure service vprn string bgp graceful-restart long-lived forwarding-bits-set keyword</b>  |
| Tree        | <a href="#">forwarding-bits-set</a>   |
| Description | <p>This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family.</p> <p>This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).</p> |
| Options     | none, all, non-fwd  |
| Default     | none  |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**helper-override-restart-time** *number*

|             |  |
|-------------|--|
| Synopsis    | Locally-configured override for restart time   |
| Context     | <b>configure service vprn string bgp graceful-restart long-lived helper-override-restart-time number</b>   |
| Tree        | <a href="#">helper-override-restart-time</a>   |
| Description | <p>This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI.</p> |
| Range       | 0 to 4095  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**helper-override-stale-time** *number*

|          |  |
|----------|--|
| Synopsis | Locally-configured stale routes override time  |
| Context  | <b>configure service vprn string bgp graceful-restart long-lived helper-override-stale-time number</b> |
| Tree     | <a href="#">helper-override-stale-time</a>   |



|             |   |
|-------------|---|
| Description | This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability.<br><br>This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override. |
| Range       | 0 to 16777215   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **without-no-export** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Advertise LLGR stale routes to non-LLGR peers  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp graceful-restart long-lived without-no-export</a> <i>boolean</i>   |
| Tree        | <a href="#">without-no-export</a>  |
| Description | When configured to <b>true</b> , LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0.<br><br>When configured to <b>false</b> , LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0 and a NO_EXPORT standard community is automatically added to the routes. |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **restart-time** *number*

|            |   |
|------------|---|
| Synopsis   | Restart time advertised by GR capability  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp graceful-restart restart-time</a> <i>number</i> |
| Tree       | <a href="#">restart-time</a>  |
| Range      | 0 to 4095   |
| Default    | 120   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**stale-routes-time** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum time to maintain routes after graceful restart   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp graceful-restart</a> <a href="#">stale-routes-time</a> <i>number</i> |
| Tree       | <a href="#">stale-routes-time</a>  |
| Range      | 1 to 3600  |
| Default    | 360  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**group** [[group-name](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>group</b> list instance  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> |
| Tree       | <a href="#">group</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[group-name]** *string*

|               |   |
|---------------|---|
| Synopsis      | BGP peer group name   |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> |
| Tree          | <a href="#">group</a>   |
| String Length | 1 to 64   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the BGP group  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R1  |

Platforms All

### **advertise-inactive** *boolean*

**Synopsis** Advertise an inactive BGP route to peers

**Context** **configure** *service vprn string bgp group string advertise-inactive boolean*

**Tree** [advertise-inactive](#)

**Description** When configured to **true**, this command allows an inactive BGP route to be advertised, even though it is not the most preferred route. The effect of the command on advertised unlabeled, labeled, and multicast IPv4 and IPv6 routes depends on several factors.

- If the active route for the IP prefix is a BGP route, that route is advertised.
- If the active route is a non-BGP route and there are valid inactive BGP routes to the same destination, the best valid inactive route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session.
- If the active route is a non-BGP route and there are no valid BGP routes to the same destination, no route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session.

When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the advertisement of inactive BGP routes to other BGP peers is disabled.

**Introduced** 16.0.R1

**Platforms** All

### **advertise-ipv6-next-hops**

**Synopsis** Enable the **advertise-ipv6-next-hops** context

**Context** **configure** *service vprn string bgp group string advertise-ipv6-next-hops*

**Tree** [advertise-ipv6-next-hops](#)

**Introduced** 19.5.R1

**Platforms** All

### **ipv4** *boolean*

**Synopsis** Enable IPv4 routes to be advertised

**Context** **configure** *service vprn string bgp group string advertise-ipv6-next-hops ipv4 boolean*

**Tree** [ipv4](#)

**Default** false

|            |         |
|------------|---------|
| Introduced | 19.5.R1 |
| Platforms  | All     |

### **aggregator-id-zero** *boolean*

|            |  |
|------------|--|
| Synopsis   | Set router ID in the BGP AGGREGATOR attribute to zero  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <b>aggregator-id-zero</b> <i>boolean</i> |
| Tree       | <a href="#">aggregator-id-zero</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **as-override** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Replace the peer's ASN with the local ASN in AS Path  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <b>as-override</b> <i>boolean</i>   |
| Tree        | <a href="#">as-override</a>   |
| Description | <p>When configured to <b>true</b>, the advertising router's local AS replaces all occurrences of the peer AS in the AS_PATH attribute.</p> <p>This command should be used with caution, as it breaks BGP's loop detection mechanism.</p> <p>When configured to <b>false</b>, no AS override is performed.</p> |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **asn-4-byte** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Advertise the use of 4-byte ASNs   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <b>asn-4-byte</b> <i>boolean</i>   |
| Tree        | <a href="#">asn-4-byte</a>   |
| Description | <p>When this command inherits a value of <b>true</b>, the use of 4-byte ASNs is supported.</p> <p>When unconfigured, the command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>true</b>.</p> <p>When configured to <b>false</b>, this command disables the use of 4-byte ASNs.</p> |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**authentication-key *string***

|               |   |
|---------------|---|
| Synopsis      | BGP authentication key for peers in the group   |
| Context       | <b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <b>authentication-key</b> <i>string</i>  |
| Tree          | <a href="#">authentication-key</a>  |
| Description   | This command configures the authentication key that must be configured on both peers. The stored format of the authentication key is based on the <b>configure system security hash-control management-interface md-cli hash-algorithm</b> setting. |
| String Length | 1 to 370  |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**authentication-keychain *reference***

|             |  |
|-------------|--|
| Synopsis    | TCP authentication keychain for the session  |
| Context     | <b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <b>authentication-keychain</b> <i>reference</i>                         |
| Tree        | <a href="#">authentication-keychain</a>  |
| Description | This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session. |
| Reference   | <b>configure</b> <a href="#">system security keychains</a> <b>keychain</b> <i>string</i>   |
| Introduced  | 16.0.R3  |
| Platforms   | All  |

**bfd-liveness *boolean***

|             |  |
|-------------|--|
| Synopsis    | Enable BFD   |
| Context     | <b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <b>bfd-liveness</b> <i>boolean</i>  |
| Tree        | <a href="#">bfd-liveness</a>   |
| Description | <p>When configured to <b>true</b>, BFD is enabled on a given protocol interface where the state of the protocol interface is tied to the state of the BFD session between the local node and the remote node.</p> <p>When unconfigured, the command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, BFD is removed from the associated protocol adjacency.</p> |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**capability-negotiation** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Enable capability negotiation   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <b>capability-negotiation</b> <i>boolean</i>  |
| Tree        | <a href="#">capability-negotiation</a>  |
| Description | When configured to <b>true</b> , this command enables the exchange of capabilities.<br>When configured to <b>false</b> and the peering is flapped, new capabilities are not negotiated and strictly IPv4 exchanges are supported with the peer. |
| Default     | true  |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**client-reflect** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Allow cluster RR to advertise routes to its clients  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <b>client-reflect</b> <i>boolean</i>   |
| Tree        | <a href="#">client-reflect</a>   |
| Description | When unconfigured, this command inherits the value of the global-level setting ( <b>true</b> or <b>false</b> ). The command cannot be explicitly configured to <b>true</b> .<br>When the command inherits a value of <b>true</b> , client reflection of routes is enabled.<br>When configured to <b>false</b> , this command disables client reflection of routes. |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**cluster**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>cluster</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <b>cluster</b> |
| Tree       | <a href="#">cluster</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**cluster-id** *string*

|          |  |
|----------|--|
| Synopsis | Route reflector cluster ID   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <b>cluster</b> <b>cluster-id</b> <i>string</i> |

|            |                            |
|------------|----------------------------|
| Tree       | <a href="#">cluster-id</a> |
| Introduced | 16.0.R1                    |
| Platforms  | All                        |

### **connect-retry** *number*

|            |   |
|------------|---|
| Synopsis   | BGP connect retry timer value   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">connect-retry</a> <i>number</i> |
| Tree       | <a href="#">connect-retry</a>   |
| Range      | 1 to 65535  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **damp-peer-oscillations**

|             |  |
|-------------|--|
| Synopsis    | Enable the <b>damp-peer-oscillations</b> context   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">damp-peer-oscillations</a>   |
| Tree        | <a href="#">damp-peer-oscillations</a>   |
| Description | <p>Commands in this context specify how long a BGP peer session remains in the idle state after an error causes the session to reset. In the idle state, BGP does not initiate or respond to attempts to establish a new session. Repeated errors that occur a short time after each session reset cause longer and longer hold times in the idle state.</p> <p>When unconfigured, command settings are inherited from the global-level configuration.</p> |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **error-interval** *number*

|             |   |
|-------------|---|
| Synopsis    | Time after a reset that the session must be error-free  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">damp-peer-oscillations</a> <a href="#">error-interval</a> <i>number</i>         |
| Tree        | <a href="#">error-interval</a>  |
| Description | This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time. |
| Range       | 0 to 2048   |
| Default     | 30  |

Introduced 16.0.R1  
Platforms All

### **idle-hold-time**

Synopsis Enter the **idle-hold-time** context  
Context **configure service vprn string bgp group string damp-peer-oscillations idle-hold-time**  
Tree [idle-hold-time](#)  
Introduced 16.0.R1  
Platforms All

### **initial-wait number**

Synopsis Time session remains in idle state after stabilization  
Context **configure service vprn string bgp group string damp-peer-oscillations idle-hold-time initial-wait number**  
Tree [initial-wait](#)  
Range 0 to 2048  
Default 0  
Introduced 16.0.R1  
Platforms All

### **max-wait number**

Synopsis Maximum session idle time after repeated instability  
Context **configure service vprn string bgp group string damp-peer-oscillations idle-hold-time max-wait number**  
Tree [max-wait](#)  
Range 1 to 2048  
Default 60  
Introduced 16.0.R1  
Platforms All

### **second-wait number**

Synopsis Time that doubles after each repeated session failure



|             |   |
|-------------|---|
| Context     | <b>configure service vprn</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>damp-peer-oscillations</b> <b>idle-hold-time</b> <b>second-wait</b> <i>number</i> |
| Tree        | <b>second-wait</b>  |
| Description | This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time.  |
| Range       | 1 to 2048   |
| Default     | 5   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **damping** *boolean*

|            |  |
|------------|--|
| Synopsis   | Use BGP route damping to reduce route flap   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>damping</b> <i>boolean</i> |
| Tree       | <b>damping</b>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **default-label-preference**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>default-label-preference</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>default-label-preference</b> |
| Tree       | <b>default-label-preference</b>  |
| Introduced | 19.5.R1  |
| Platforms  | All  |

### **ebgp** *number*

|            |  |
|------------|--|
| Synopsis   | Default preference for EBGp  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>default-label-preference</b> <b>ebgp</b> <i>number</i> |
| Tree       | <b>ebgp</b>  |
| Range      | 0 to 255   |
| Introduced | 19.5.R1  |
| Platforms  | All  |

### **ibgp number**

|            |  |
|------------|--|
| Synopsis   | Default preference for IBGP  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">default-label-preference</a> <a href="#">ibgp number</a> |
| Tree       | <a href="#">ibgp</a>   |
| Range      | 0 to 255   |
| Introduced | 19.5.R1  |
| Platforms  | All  |

### **default-preference**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>default-preference</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">default-preference</a> |
| Tree       | <a href="#">default-preference</a>   |
| Introduced | 19.5.R1  |
| Platforms  | All  |

### **ebgp number**

|            |  |
|------------|--|
| Synopsis   | Default preference for EBGP  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">default-preference</a> <a href="#">ebgp number</a> |
| Tree       | <a href="#">ebgp</a>   |
| Range      | 0 to 255   |
| Introduced | 19.5.R1  |
| Platforms  | All  |

### **ibgp number**

|            |  |
|------------|--|
| Synopsis   | Default preference for IBGP  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">default-preference</a> <a href="#">ibgp number</a> |
| Tree       | <a href="#">ibgp</a>   |
| Range      | 0 to 255   |
| Introduced | 19.5.R1  |
| Platforms  | All  |

**description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**dynamic-neighbor**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>dynamic-neighbor</b> context  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">dynamic-neighbor</a> |
| Tree        | <a href="#">dynamic-neighbor</a>   |
| Description | Commands in this context configure dynamic BGP sessions for a peer group.  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**interface** [[interface-name](#)] *reference*

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>interface</b> list instance  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">dynamic-neighbor</a> <a href="#">interface</a> <i>reference</i> |
| Tree        | <a href="#">interface</a>   |
| Description | Commands in this context configure an unnumbered VPRN access IP interface for dynamic neighbors.  |

If this interface connects to a network with other BGP routers, sessions with the other routers can be set up automatically without explicitly configuring them as BGP neighbors. The interface must be IPv6 enabled, but because the interface is considered unnumbered, it does not require an IPv4 address or a global-unicast IPv6 address. The sessions are set up using IPv6 link-local addresses.

The BGP unnumbered feature supports all address families that allow IPv6 link-local BGP next-hop addresses. This includes IPv4 with the use of RFC 8950 extensions.

When an interface is added to the list of dynamic-neighbor interfaces, an outgoing connection attempt is initiated toward any directly connected router on the interface that announces itself using an ICMPv6 router advertisement message. The session attempt is unsuccessful if the peer type is not EBGP, the reported AS number of the peer does not match one of the allowed values, or the maximum session limit of the interface would be exceeded.

|            |          |
|------------|----------|
| Introduced | 22.10.R1 |
|------------|----------|

Platforms All

### **[interface-name]** *reference*

Synopsis Name of the dynamic neighbor interface

Context **configure** [service vprn string](#) [bgp group string](#) [dynamic-neighbor interface reference](#)

Tree [interface](#)

Reference **configure** [service vprn string](#) [interface string](#)

Notes This element is part of a list key.

Introduced 22.10.R1

Platforms All

### **allowed-peer-as** *string*

Synopsis Allowed peer AS value or range of acceptable values

Context **configure** [service vprn string](#) [bgp group string](#) [dynamic-neighbor interface reference](#)  
[allowed-peer-as string](#)

Tree [allowed-peer-as](#)

Description This command specifies a singular allowed peer AS value or a range of acceptable values in the format *n1..n2*.  
  
All values greater than or equal to *n1* and less than or equal to *n2* are acceptable. For example, if the acceptable peer AS numbers are 65001 to 65005 (range) and 62100 (singular value), configure this command to use a value of [65001..65005 62100].

Max. Instances 32

Notes This element is ordered by the user.

Introduced 22.10.R1

Platforms All

### **max-sessions** *number*

Synopsis Maximum number of dynamic sessions allowed

Context **configure** [service vprn string](#) [bgp group string](#) [dynamic-neighbor interface reference](#)  
[max-sessions number](#)

Tree [max-sessions](#)

|             |  |
|-------------|--|
| Description | This command specifies the maximum number of dynamic sessions that are allowed to be set up on the interface as a result of accepting sessions from link-local addresses or initiating sessions by receiving IPv6 router advertisements. |
| Range       | 1 to 255   |
| Default     | 1  |
| Introduced  | 22.10.R1   |
| Platforms   | All  |

## match

|            |  |
|------------|--|
| Synopsis   | Enter the <b>match</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">dynamic-neighbor</a> <a href="#">match</a> |
| Tree       | <a href="#">match</a>  |
| Introduced | 19.5.R1  |
| Platforms  | All  |

## prefix [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

|            |   |
|------------|---|
| Synopsis   | Enter the <b>prefix</b> list instance   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">dynamic-neighbor</a> <a href="#">match</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) |
| Tree       | <a href="#">prefix</a>  |
| Introduced | 19.5.R1   |
| Platforms  | All   |

## [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

|            |   |
|------------|---|
| Synopsis   | Dynamic peer prefix for the group   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">dynamic-neighbor</a> <a href="#">match</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) |
| Tree       | <a href="#">prefix</a>  |
| Notes      | This element is part of a list key.   |
| Introduced | 19.5.R1   |
| Platforms  | All   |

**allowed-peer-as** *string*

|                |   |
|----------------|---|
| Synopsis       | Allowed peer AS value or range of acceptable values   |
| Context        | <b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <a href="#">dynamic-neighbor match prefix (ipv4-prefix   ipv6-prefix)</a> <b>allowed-peer-as</b> <i>string</i>  |
| Tree           | <a href="#">allowed-peer-as</a>   |
| Description    | This command specifies a singular allowed peer AS value or a range of acceptable values in the format <i>n1..n2</i> .<br><br>All values greater than or equal to <i>n1</i> and less than or equal to <i>n2</i> are acceptable. For example, if the acceptable peer AS numbers are 65001 to 65005 (range) and 62100 (singular value), configure this command to use a value of [65001..65005 62100]. |
| Max. Instances | 32  |
| Notes          | This element is ordered by the user.  |
| Introduced     | 19.5.R1   |
| Platforms      | All   |

**dynamic-neighbor-limit** *number*

|             |   |
|-------------|---|
| Synopsis    | Maximum dynamic BGP sessions to accept from remote peer   |
| Context     | <b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <b>dynamic-neighbor-limit</b> <i>number</i>   |
| Tree        | <a href="#">dynamic-neighbor-limit</a>  |
| Description | This command configures the maximum number of dynamic BGP sessions that are accepted from remote peers associated with a specific peer group. If accepting a new dynamic session causes the group limit to be exceeded, the new session attempt is rejected and a Notification message is sent back to the remote peer.<br><br>When unconfigured, the setting is inherited from the BGP global-level configuration. |
| Range       | 1 to 8192   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**ebgp-default-reject-policy**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>ebgp-default-reject-policy</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <b>ebgp-default-reject-policy</b> |
| Tree       | <a href="#">ebgp-default-reject-policy</a>  |
| Introduced | 19.5.R1   |
| Platforms  | All   |

### **export** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable default reject export policy for external peers  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">ebgp-default-reject-policy</a> <b>export</b> <i>boolean</i> |
| Tree       | <a href="#">export</a>  |
| Default    | true  |
| Introduced | 19.5.R1   |
| Platforms  | All   |

### **import** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable default reject import policy for external peers  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">ebgp-default-reject-policy</a> <b>import</b> <i>boolean</i> |
| Tree       | <a href="#">import</a>  |
| Default    | true  |
| Introduced | 19.5.R1   |
| Platforms  | All   |

### **enforce-first-as** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enforce the configured peer AS value in received routes   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">enforce-first-as</a> <i>boolean</i> |
| Tree       | <a href="#">enforce-first-as</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **error-handling**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>error-handling</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">error-handling</a> |
| Tree       | <a href="#">error-handling</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**update-fault-tolerance** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Tolerate non-critical errors in UPDATE messages   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">error-handling update-fault-tolerance</a> <i>boolean</i>  |
| Tree        | <a href="#">update-fault-tolerance</a>  |
| Description | <p>When configured to <b>true</b>, non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset.</p> <p>When unconfigured, the command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, all errors trigger a session reset.</p> |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**evpn-link-bandwidth**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>evpn-link-bandwidth</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">evpn-link-bandwidth</a> |
| Tree       | <a href="#">evpn-link-bandwidth</a>   |
| Introduced | 22.7.R1   |
| Platforms  | All   |

**add-to-received-bgp** *number*

|             |  |
|-------------|--|
| Synopsis    | Weight added to received PE-CE BGP routes  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">evpn-link-bandwidth</a> <a href="#">add-to-received-bgp</a> <i>number</i>  |
| Tree        | <a href="#">add-to-received-bgp</a>  |
| Description | <p>This command configures the weight value added to all BGP PE-CE routes for the purpose of weighted ECMP if EVPN-IFL and BGP PE-CE routes are combined into the same ECMP set.</p> <p>For the load-balancing between EVPN-IFL and BGP PE-CE routes the <b>configure service vprn bgp eibgp-loadbalance</b> command must already be configured in the system.</p> |
| Range       | 1 to 128   |
| Introduced  | 22.7.R1  |
| Platforms   | All  |



## export

|            |   |
|------------|---|
| Synopsis   | Enable the <b>export</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <b>export</b> |
| Tree       | <a href="#">export</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## policy (*policy-expr-string* | *string*)

|                |   |
|----------------|---|
| Synopsis       | Export policy name  |
| Context        | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">export policy</a> ( <i>policy-expr-string</i>   <i>string</i> ) |
| Tree           | <a href="#">policy</a>  |
| String Length  | 1 to 255  |
| Max. Instances | 15  |
| Min. Instances | 1   |
| Notes          | This element is ordered by the user.  |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

## extended-nh-encoding

|            |   |
|------------|---|
| Synopsis   | Enable the <b>extended-nh-encoding</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <b>extended-nh-encoding</b> |
| Tree       | <a href="#">extended-nh-encoding</a>  |
| Introduced | 19.5.R1   |
| Platforms  | All   |

## ipv4 *boolean*

|          |   |
|----------|---|
| Synopsis | Enable/disable family type ipv4.  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">extended-nh-encoding</a> <b>ipv4</b> <i>boolean</i> |
| Tree     | <a href="#">ipv4</a>  |
| Default  | false   |

Introduced 19.5.R1  
Platforms All

## family

Synopsis Enable the **family** context  
Context **configure** [service vprn string](#) [bgp group string](#) [family](#)  
Tree [family](#)  
Introduced 16.0.R1  
Platforms All

## flow-ipv4 *boolean*

Synopsis Advertise support for the flowspec-IPv4 address family  
Context **configure** [service vprn string](#) [bgp group string](#) [family flow-ipv4](#) *boolean*  
Tree [flow-ipv4](#)  
Default false  
Introduced 16.0.R1  
Platforms All

## flow-ipv6 *boolean*

Synopsis Advertise support for the flowspec-IPv6 address family  
Context **configure** [service vprn string](#) [bgp group string](#) [family flow-ipv6](#) *boolean*  
Tree [flow-ipv6](#)  
Default false  
Introduced 16.0.R1  
Platforms All

## ipv4 *boolean*

Synopsis Add support for the IPv4 address family  
Context **configure** [service vprn string](#) [bgp group string](#) [family ipv4](#) *boolean*  
Tree [ipv4](#)  
Default false

Introduced 16.0.R1  
Platforms All

### **ipv6** *boolean*

Synopsis Advertise MP-BGP support for the IPv6 address family  
Context **configure** [service vprn](#) *string* [bgp group](#) *string* [family ipv6](#) *boolean*  
Tree [ipv6](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **label-ipv4** *boolean*

Synopsis Advertise support for the label-IPv4 address family  
Context **configure** [service vprn](#) *string* [bgp group](#) *string* [family label-ipv4](#) *boolean*  
Tree [label-ipv4](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **mcast-ipv4** *boolean*

Synopsis Advertise support for the MCAST-IPv4 address family  
Context **configure** [service vprn](#) *string* [bgp group](#) *string* [family mcast-ipv4](#) *boolean*  
Tree [mcast-ipv4](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **mcast-ipv6** *boolean*

Synopsis Advertise support for the MCAST-IPv6 address family  
Context **configure** [service vprn](#) *string* [bgp group](#) *string* [family mcast-ipv6](#) *boolean*  
Tree [mcast-ipv6](#)

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **fast-external-failover** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Drop external BGP session immediately when link fails  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <b>fast-external-failover</b> <i>boolean</i>   |
| Tree        | <a href="#">fast-external-failover</a>   |
| Description | <p>When this command inherits a value of <b>true</b>, the router drops an external BGP session on a single-hop route immediately when the local interface goes down.</p> <p>When unconfigured, the command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>true</b>.</p> <p>When configured to <b>false</b>, the BGP session remains up until the hold time expires.</p> |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **graceful-restart**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>graceful-restart</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <b>graceful-restart</b> |
| Tree       | <a href="#">graceful-restart</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **gr-notification** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Perform graceful restart procedures after NOTIFICATION   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <b>graceful-restart</b> <b>gr-notification</b> <i>boolean</i>  |
| Tree        | <a href="#">gr-notification</a>  |
| Description | <p>When configured to <b>true</b>, the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error.</p> <p>When configured to <b>false</b>, NOTIFICATION messages are not supported.</p> |
| Default     | false  |
| Introduced  | 16.0.R1  |

Platforms All

## long-lived

Synopsis Enable the **long-lived** context

Context **configure service vprn string bgp group string graceful-restart long-lived**

Tree [long-lived](#)

Introduced 16.0.R1

Platforms All

## advertise-stale-to-all-neighbors *boolean*

Synopsis Advertise stale routes to all BGP peers

Context **configure service vprn string bgp group string graceful-restart long-lived advertise-stale-to-all-neighbors boolean**

Tree [advertise-stale-to-all-neighbors](#)

Default false

Introduced 16.0.R1

Platforms All

## advertised-stale-time *number*

Synopsis Advertised long-lived stale time for LLGR routes

Context **configure service vprn string bgp group string graceful-restart long-lived advertised-stale-time number**

Tree [advertised-stale-time](#)

Range 0 to 16777215

Default 86400

Introduced 16.0.R1

Platforms All

## family [*family-type*] *keyword*

Synopsis Enter the **family** list instance

Context **configure service vprn string bgp group string graceful-restart long-lived family keyword**

Tree [family](#)

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

**[family-type]** *keyword*

|            |   |
|------------|---|
| Synopsis   | Address family type for LLGR  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">graceful-restart</a> <a href="#">long-lived</a> <a href="#">family</a> <i>keyword</i> |
| Tree       | <a href="#">family</a>  |
| Options    | ipv4, ipv6, flow-ipv4, flow-ipv6, label-ipv4  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**advertised-stale-time** *number*

|             |   |
|-------------|---|
| Synopsis    | LLGR stale routes time for family override  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">graceful-restart</a> <a href="#">long-lived</a> <a href="#">family</a> <i>keyword</i> <a href="#">advertised-stale-time</a> <i>number</i> |
| Tree        | <a href="#">advertised-stale-time</a>   |
| Description | This command configures the long-lived stale routes time that is advertised by the router in its LLGR capability.<br><br>This command applies to all AFI/SAFI in the advertised LLGR capability with a family-specific override.  |
| Range       | 0 to 16777215   |
| Default     | 86400   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**helper-override-stale-time** *number*

|             |  |
|-------------|--|
| Synopsis    | Locally-configured stale routes override time  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">graceful-restart</a> <a href="#">long-lived</a> <a href="#">family</a> <i>keyword</i> <a href="#">helper-override-stale-time</a> <i>number</i> |
| Tree        | <a href="#">helper-override-stale-time</a>   |
| Description | This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This is a family-specific override value.   |

|            |               |
|------------|---------------|
| Range      | 0 to 16777216 |
| Default    | 16777216      |
| Introduced | 16.0.R1       |
| Platforms  | All           |

### **forwarding-bits-set** *keyword*

|             |   |
|-------------|---|
| Synopsis    | BGP LLGR forwarding-bit behavior for address family   |
| Context     | <b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <a href="#">graceful-restart long-lived forwarding-bits-set keyword</a>   |
| Tree        | <a href="#">forwarding-bits-set</a>   |
| Description | <p>This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family.</p> <p>This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).</p> |
| Options     | none, all, non-fwd  |
| Default     | none  |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **helper-override-restart-time** *number*

|             |  |
|-------------|--|
| Synopsis    | Locally-configured override for restart time   |
| Context     | <b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <a href="#">graceful-restart long-lived helper-override-restart-time number</a>  |
| Tree        | <a href="#">helper-override-restart-time</a>   |
| Description | <p>This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI.</p> |
| Range       | 0 to 4095  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**helper-override-stale-time** *number*

|             |   |
|-------------|---|
| Synopsis    | Locally-configured stale routes override time   |
| Context     | <b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <a href="#">graceful-restart long-lived helper-override-stale-time number</a>   |
| Tree        | <a href="#">helper-override-stale-time</a>  |
| Description | This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability.<br><br>This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override. |
| Range       | 0 to 16777215   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**without-no-export** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Advertise LLGR stale routes to non-LLGR peers  |
| Context     | <b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <a href="#">graceful-restart long-lived without-no-export boolean</a>  |
| Tree        | <a href="#">without-no-export</a>  |
| Description | When configured to <b>true</b> , LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0.<br><br>When configured to <b>false</b> , LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0 and a NO_EXPORT standard community is automatically added to the routes. |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**restart-time** *number*

|          |  |
|----------|--|
| Synopsis | Restart time advertised by GR capability   |
| Context  | <b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <a href="#">graceful-restart restart-time number</a> |
| Tree     | <a href="#">restart-time</a>   |



|            |           |
|------------|-----------|
| Range      | 0 to 4095 |
| Default    | 300       |
| Introduced | 16.0.R1   |
| Platforms  | All       |

### **stale-routes-time** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum time to maintain routes after graceful restart  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <a href="#">graceful-restart stale-routes-time number</a> |
| Tree       | <a href="#">stale-routes-time</a>   |
| Range      | 1 to 3600   |
| Default    | 360   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **hold-time**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>hold-time</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <a href="#">hold-time</a> |
| Tree       | <a href="#">hold-time</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **minimum-hold-time** *number*

|             |   |
|-------------|---|
| Synopsis    | Minimum hold time between successive messages   |
| Context     | <b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <a href="#">hold-time minimum-hold-time number</a>  |
| Tree        | <a href="#">minimum-hold-time</a>   |
| Description | This command specifies the minimum hold time that is accepted for the session. If a peer proposes a hold time lower than this value, the session attempt is rejected.<br>When unconfigured, the command value is inherited from the BGP global-level setting. |
| Range       | 0   3 to 65536  |
| Default     | 0   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**seconds** *number*

|             |  |
|-------------|--|
| Synopsis    | Maximum time BGP waits between successive messages   |
| Context     | <b>configure</b> <i>service vprn string bgp group string hold-time seconds number</i>  |
| Tree        | <i>seconds</i>   |
| Description | <p>This command configures the maximum time BGP waits between successive messages (either keepalive or update) from its peer before closing the connection.</p> <p>Although the implementation allows setting the keepalive timer at the BGP group level times separately, the configured keepalive timer is overridden by this value under the following circumstances.</p> <ul style="list-style-type: none"> <li>• If the specified hold time is less than the configured keepalive time, the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed.</li> <li>• If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. The connection with the peer is up permanently and no keepalive packets are sent to the peer.</li> </ul> <p>When unconfigured, the command setting is inherited from the BGP global-level configuration.</p> |
| Range       | 0   3 to 65535   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**import**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>import</b> context                                    |
| Context    | <b>configure</b> <i>service vprn string bgp group string import</i> |
| Tree       | <i>import</i>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**policy** (*policy-expr-string* | *string*)

|                |  |
|----------------|--|
| Synopsis       | Route policy name  |
| Context        | <b>configure</b> <i>service vprn string bgp group string import policy (policy-expr-string   string)</i> |
| Tree           | <i>policy</i>  |
| String Length  | 1 to 255   |
| Max. Instances | 15   |

|                |                                      |
|----------------|--------------------------------------|
| Min. Instances | 1                                    |
| Notes          | This element is ordered by the user. |
| Introduced     | 16.0.R1                              |
| Platforms      | All                                  |

### **initial-send-delay-zero** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Send BGP updates as soon as the session comes up  |
| Context     | <b>configure</b> <i>service vprn string</i> <i>bgp group string</i> <b>initial-send-delay-zero</b> <i>boolean</i>   |
| Tree        | <a href="#">initial-send-delay-zero</a>   |
| Description | <p>When configured to <b>true</b>, BGP updates are sent as soon as the session comes up.</p> <p>When unconfigured, the command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, BGP waits to send UPDATE messages for the minimum route advertisement time after a session is established.</p> |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **keepalive** *number*

|             |  |
|-------------|--|
| Synopsis    | Time after which the BGP KEEPALIVE message is sent   |
| Context     | <b>configure</b> <i>service vprn string</i> <i>bgp group string</i> <b>keepalive</b> <i>number</i>   |
| Tree        | <a href="#">keepalive</a>  |
| Description | <p>This command configures the BGP keepalive timer value. A keepalive message is sent every time this timer expires.</p> <p>This value is generally one-third of the hold time interval configured in the <b>hold-time seconds</b> context. Although the implementation allows this keepalive value and the hold time interval to be independently set, under the following circumstances, the configured keepalive value is overridden by the hold time interval value:</p> <ul style="list-style-type: none"> <li>• If the specified keepalive value is greater than the configured hold time, the specified keepalive value is ignored and the timer value is set to one third of the current hold time value.</li> <li>• If the specified hold time interval is less than the configured keepalive value, the keepalive value is reset to one third of the specified hold time interval.</li> <li>• If the hold time interval is set to zero, the configured keepalive value is ignored. This means that the connection with the peer is up permanently and no keepalive packets are sent to the peer.</li> </ul> <p>When unconfigured, the command inherits the BGP global-level setting.</p> |

|            |            |
|------------|------------|
| Range      | 0 to 21845 |
| Introduced | 16.0.R1    |
| Platforms  | All        |

### **label-preference** *number*

|            |   |
|------------|---|
| Synopsis   | Route preference for routes from labeled-unicast peers  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <b>label-preference</b> <i>number</i> |
| Tree       | <a href="#">label-preference</a>  |
| Range      | 1 to 255  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **link-bandwidth**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>link-bandwidth</b> context   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <b>link-bandwidth</b>   |
| Tree        | <a href="#">link-bandwidth</a>  |
| Description | <p>Commands in this context specify the handling of the Link Bandwidth Extended Community attached to specific BGP routes.</p> <p>When all used multipaths of an IP prefix correspond to BGP routes with a Link Bandwidth EC, the datapath is programmed to use weighted ECMP across the BGP next hops in proportion to the bandwidth values.</p> |
| Introduced  | 16.0.R3   |
| Platforms   | All   |

### **accept-from-ebgp**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>accept-from-ebgp</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">link-bandwidth</a> <b>accept-from-ebgp</b> |
| Tree       | <a href="#">accept-from-ebgp</a>   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **ipv4 *boolean***

|            |   |
|------------|---|
| Synopsis   | Support Link Bandwidth EC in IPv4 routes  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">link-bandwidth accept-from-ebgp</a> <a href="#">ipv4</a> <i>boolean</i> |
| Tree       | <a href="#">ipv4</a>  |
| Default    | false   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **ipv6 *boolean***

|            |   |
|------------|---|
| Synopsis   | Support Link Bandwidth EC in IPv6 routes  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">link-bandwidth accept-from-ebgp</a> <a href="#">ipv6</a> <i>boolean</i> |
| Tree       | <a href="#">ipv6</a>  |
| Default    | false   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **label-ipv4 *boolean***

|            |   |
|------------|---|
| Synopsis   | Support Link Bandwidth EC in label-IPv4 routes  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">link-bandwidth accept-from-ebgp</a> <a href="#">label-ipv4</a> <i>boolean</i> |
| Tree       | <a href="#">label-ipv4</a>  |
| Default    | false   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **add-to-received-ebgp**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>add-to-received-ebgp</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">link-bandwidth add-to-received-ebgp</a> |
| Tree       | <a href="#">add-to-received-ebgp</a>  |
| Introduced | 16.0.R3   |
| Platforms  | All   |

### **ipv4** *boolean*

|            |  |
|------------|--|
| Synopsis   | Support Link Bandwidth EC in IPv4 routes   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">add-to-received-ebgp</a> <a href="#">ipv4</a> <i>boolean</i> |
| Tree       | <a href="#">ipv4</a>   |
| Default    | false  |
| Introduced | 16.0.R3  |
| Platforms  | All  |

### **ipv6** *boolean*

|            |  |
|------------|--|
| Synopsis   | Support Link Bandwidth EC in IPv6 routes   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">add-to-received-ebgp</a> <a href="#">ipv6</a> <i>boolean</i> |
| Tree       | <a href="#">ipv6</a>   |
| Default    | false  |
| Introduced | 16.0.R3  |
| Platforms  | All  |

### **label-ipv4** *boolean*

|            |  |
|------------|--|
| Synopsis   | Support Link Bandwidth EC in label-IPv4 routes   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">add-to-received-ebgp</a> <a href="#">label-ipv4</a> <i>boolean</i> |
| Tree       | <a href="#">label-ipv4</a>   |
| Default    | false  |
| Introduced | 16.0.R3  |
| Platforms  | All  |

### **aggregate-used-paths**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>aggregate-used-paths</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">aggregate-used-paths</a> |
| Tree       | <a href="#">aggregate-used-paths</a>   |
| Introduced | 16.0.R4  |

Platforms All

### **ipv4** *boolean*

Synopsis Support Link Bandwidth EC in IPv4 routes

Context **configure** [service vprn](#) *string* [bgp group](#) *string* [link-bandwidth aggregate-used-paths](#) [ipv4](#) *boolean*

Tree [ipv4](#)

Default false

Introduced 16.0.R4

Platforms All

### **ipv6** *boolean*

Synopsis Support Link Bandwidth EC in IPv6 routes

Context **configure** [service vprn](#) *string* [bgp group](#) *string* [link-bandwidth aggregate-used-paths](#) [ipv6](#) *boolean*

Tree [ipv6](#)

Default false

Introduced 16.0.R4

Platforms All

### **label-ipv4** *boolean*

Synopsis Support Link Bandwidth EC in label-IPv4 routes

Context **configure** [service vprn](#) *string* [bgp group](#) *string* [link-bandwidth aggregate-used-paths](#) [label-ipv4](#) *boolean*

Tree [label-ipv4](#)

Default false

Introduced 16.0.R4

Platforms All

### **send-to-ebgp**

Synopsis Enter the **send-to-ebgp** context

Context **configure** [service vprn](#) *string* [bgp group](#) *string* [link-bandwidth](#) [send-to-ebgp](#)

---

|            |                              |
|------------|------------------------------|
| Tree       | <a href="#">send-to-ebgp</a> |
| Introduced | 16.0.R4                      |
| Platforms  | All                          |

### **ipv4 boolean**

|            |   |
|------------|---|
| Synopsis   | Support Link Bandwidth EC in IPv4 routes  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">send-to-ebgp</a> <a href="#">ipv4</a> <i>boolean</i> |
| Tree       | <a href="#">ipv4</a>  |
| Default    | false   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **ipv6 boolean**

|            |   |
|------------|---|
| Synopsis   | Support Link Bandwidth EC in IPv6 routes  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">send-to-ebgp</a> <a href="#">ipv6</a> <i>boolean</i> |
| Tree       | <a href="#">ipv6</a>  |
| Default    | false   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **label-ipv4 boolean**

|            |   |
|------------|---|
| Synopsis   | Support Link Bandwidth EC in label-IPv4 routes  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">send-to-ebgp</a> <a href="#">label-ipv4</a> <i>boolean</i> |
| Tree       | <a href="#">label-ipv4</a>  |
| Default    | false   |
| Introduced | 16.0.R4   |
| Platforms  | All   |



**local-address** (*ipv4-address-no-zone | ipv6-address-no-zone | interface-name*)

|               |   |
|---------------|---|
| Synopsis      | Local IP address used when communicating with BGP peers   |
| Context       | <b>configure service vprn</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>local-address</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone   interface-name</i> ) |
| Tree          | <a href="#">local-address</a>   |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**local-as**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>local-as</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>local-as</b> |
| Tree       | <a href="#">local-as</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**as-number** *number*

|            |  |
|------------|--|
| Synopsis   | Local (or virtual) BGP AS number   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>local-as as-number</b> <i>number</i> |
| Tree       | <a href="#">as-number</a>  |
| Range      | 1 to 4294967295  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**prepend-global-as** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Prepend global ASN when advertising routes to BGP peer   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>local-as prepend-global-as</b> <i>boolean</i>  |
| Tree        | <a href="#">prepend-global-as</a>  |
| Description | When configured to <b>true</b> , the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer.<br>When configured to <b>false</b> , the global ASN is not included in the AS_PATH attribute. |
| Default     | true   |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **private** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Hide the local ASN in sent paths learned from peering  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">local-as</a> <a href="#">private</a> <i>boolean</i>  |
| Tree        | <a href="#">private</a>  |
| Description | When configured to <b>true</b> , the local AS number is only advertised to peers that use the local ASN for establishing BGP peering sessions.<br>When configured to <b>false</b> , the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions. |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **local-preference** *number*

|            |  |
|------------|--|
| Synopsis   | Default local preference if not in incoming routes   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">local-preference</a> <i>number</i> |
| Tree       | <a href="#">local-preference</a>   |
| Range      | 0 to 4294967295  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **loop-detect** *keyword*

|            |  |
|------------|--|
| Synopsis   | Strategy for loop detection in the AS path   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">loop-detect</a> <i>keyword</i> |
| Tree       | <a href="#">loop-detect</a>  |
| Options    | drop-peer, ignore-loop, off, discard-route   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**loop-detect-threshold** *number*

|            |   |
|------------|---|
| Synopsis   | Threshold for the global ASN in a received AS path  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>loop-detect-threshold</b> <i>number</i> |
| Tree       | <a href="#">loop-detect-threshold</a>   |
| Range      | 0 to 15   |
| Introduced | 16.0.R6   |
| Platforms  | All   |

**med-out** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Default MED attribute value to advertise to peers  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>med-out</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">med-out</a>  |
| Max. Range | 0 to 4294967295  |
| Options    | igp-cost   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**min-route-advertisement** *number*

|            |   |
|------------|---|
| Synopsis   | Minimum time before a prefix can be advertised to peer  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>min-route-advertisement</b> <i>number</i> |
| Tree       | <a href="#">min-route-advertisement</a>   |
| Range      | 1 to 255  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**monitor**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>monitor</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>monitor</b> |
| Tree       | <a href="#">monitor</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of BMP monitoring  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">monitor</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**all-stations** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Send BMP messages to all configured stations   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">monitor</a> <b>all-stations</b> <i>boolean</i>   |
| Tree        | <a href="#">all-stations</a>   |
| Description | <p>When configured to <b>true</b>, this command specifies that BMP messages are to be sent to all configured BMP monitoring stations.</p> <p>When configured to <b>false</b>, the command is not used to indicate the stations which can receive BMP messages. The <b>station</b> command (at the same context level) identifies the BMP stations for which BMP messages are to be sent.</p> |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**route-monitoring**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>route-monitoring</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">monitor</a> <b>route-monitoring</b> |
| Tree       | <a href="#">route-monitoring</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**post-policy** *boolean*

|          |  |
|----------|--|
| Synopsis | Allow post-policy route-monitoring messages to be sent |
|----------|--|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>monitor route-monitoring post-policy</b> <i>boolean</i> |
| Tree       | <a href="#">post-policy</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **pre-policy** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow pre-policy route-monitoring messages to be sent  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>monitor route-monitoring pre-policy</b> <i>boolean</i> |
| Tree       | <a href="#">pre-policy</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **station** [[station-name](#)] *reference*

|                |  |
|----------------|--|
| Synopsis       | Add a list entry for <b>station</b>  |
| Context        | <b>configure service vprn</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>monitor station</b> <i>reference</i> |
| Tree           | <a href="#">station</a>  |
| Max. Instances | 8  |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

### **[station-name]** *reference*

|            |  |
|------------|--|
| Synopsis   | BMP monitoring station   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>monitor station</b> <i>reference</i> |
| Tree       | <a href="#">station</a>  |
| Reference  | <b>configure bmp station</b> <i>string</i>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **multihop** *number*

|            |   |
|------------|---|
| Synopsis   | TTL in IP packet headers for EBGP peers multi-hops away   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <b>multihop</b> <i>number</i> |
| Tree       | <a href="#">multihop</a>  |
| Range      | 1 to 255  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **multipath-eligible** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow routes from group peers in multipath eligibility   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <b>multipath-eligible</b> <i>boolean</i> |
| Tree       | <a href="#">multipath-eligible</a>   |
| Default    | false  |
| Introduced | 19.5.R1  |
| Platforms  | All  |

### **next-hop-self** *boolean*

|            |   |
|------------|---|
| Synopsis   | Advertise routes with local address as next-hop address   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <b>next-hop-self</b> <i>boolean</i> |
| Tree       | <a href="#">next-hop-self</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **origin-validation**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>origin-validation</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <b>origin-validation</b> |
| Tree       | <a href="#">origin-validation</a>  |
| Introduced | 19.7.R1  |
| Platforms  | All  |

**ipv4 boolean**

|            |  |
|------------|--|
| Synopsis   | Enable/disable family type ipv4.   |
| Context    | <b>configure service vprn string bgp group string origin-validation ipv4 boolean</b> |
| Tree       | <a href="#">ipv4</a>   |
| Default    | false  |
| Introduced | 19.7.R1  |
| Platforms  | All  |

**ipv6 boolean**

|            |  |
|------------|--|
| Synopsis   | Enable support for unlabeled unicast IPv6 routes                                     |
| Context    | <b>configure service vprn string bgp group string origin-validation ipv6 boolean</b> |
| Tree       | <a href="#">ipv6</a>   |
| Default    | false  |
| Introduced | 19.7.R1  |
| Platforms  | All  |

**label-ipv4 boolean**

|            |  |
|------------|--|
| Synopsis   | Enable support for labeled-unicast IPv4 routes   |
| Context    | <b>configure service vprn string bgp group string origin-validation label-ipv4 boolean</b> |
| Tree       | <a href="#">label-ipv4</a>   |
| Default    | false  |
| Introduced | 19.7.R1  |
| Platforms  | All  |

**passive boolean**

|            |   |
|------------|---|
| Synopsis   | Enable passive mode for BGP communication                             |
| Context    | <b>configure service vprn string bgp group string passive boolean</b> |
| Tree       | <a href="#">passive</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**path-mtu-discovery** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Enable Path MTU Discovery  |
| Context     | <b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <b>path-mtu-discovery</b> <i>boolean</i>   |
| Tree        | <a href="#">path-mtu-discovery</a>   |
| Description | <p>When configured to <b>true</b>, Path MTU Discovery (PMTUD) is enabled for the associated TCP connections.</p> <p>When set to true, PMTUD is activated toward an IPv4 BGP neighbor and the Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, this device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value so that the IP MTU constraint can be accommodated.</p> <p>When PMTUD is configured to <b>false</b> and there is no TCP MSS configuration that can be associated with a BGP neighbor (in either the BGP configuration or the first hop IP interface configuration), the router advertises a value of only 1024 bytes as the TCP MSS option value, limiting received TCP segments to that size.</p> |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**peer-as** *number*

|            |  |
|------------|--|
| Synopsis   | Peer AS number   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <b>peer-as</b> <i>number</i> |
| Tree       | <a href="#">peer-as</a>  |
| Range      | 1 to 4294967295  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**peer-ip-tracking** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Enable BGP peer tracking   |
| Context     | <b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <b>peer-ip-tracking</b> <i>boolean</i>   |
| Tree        | <a href="#">peer-ip-tracking</a>   |
| Description | <p>When configured to <b>true</b>, this command enables BGP peer tracking.</p> <p>Peer tracking should be used with caution. Peer tracking can tear a session down even if the loss of connectivity turns out to be short-lived (for example, while the IGP protocol</p> |



is re-converging). Next-hop tracking, which is always enabled, handles temporary connectivity issues more effectively.

When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, peer tracking is disabled.

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **preference** *number*

|            |  |
|------------|--|
| Synopsis   | Route preference for routes learned from all peers   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">preference</a> <i>number</i> |
| Tree       | <a href="#">preference</a>   |
| Range      | 1 to 255   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **prefix-limit** [[family](#)] *keyword*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>prefix-limit</b> list instance   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">prefix-limit</a> <i>keyword</i> |
| Tree       | <a href="#">prefix-limit</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **[family]** *keyword*

|            |   |
|------------|---|
| Synopsis   | Address family to which the limit applies   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">prefix-limit</a> <i>keyword</i> |
| Tree       | <a href="#">prefix-limit</a>  |
| Options    | ipv4, ipv6, mcast-ipv4, flow-ipv4, flow-ipv6, mcast-ipv6, label-ipv4  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**idle-timeout** *number*

|            |  |
|------------|--|
| Synopsis   | Time BGP peering remains idle before reconnecting  |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>prefix-limit</b> <i>keyword</i> <b>idle-timeout</b> <i>number</i> |
| Tree       | <b>idle-timeout</b>  |
| Range      | 1 to 1024  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**log-only** *boolean*

|            |   |
|------------|---|
| Synopsis   | Send warning message at threshold instead of take-down  |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>prefix-limit</b> <i>keyword</i> <b>log-only</b> <i>boolean</i> |
| Tree       | <b>log-only</b>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**maximum** *number*

|             |   |
|-------------|---|
| Synopsis    | Maximum number of routes to be learned from a peer  |
| Context     | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>prefix-limit</b> <i>keyword</i> <b>maximum</b> <i>number</i> |
| Tree        | <b>maximum</b>  |
| Description | This command configures the maximum number of BGP routes that can be received from a peer before administrative action is taken.                  |
| Range       | 1 to 4294967295   |
| Notes       | This element is mandatory.  |
| Introduced  | 16.0.R2   |
| Platforms   | All   |

**post-import** *boolean*

|          |  |
|----------|--|
| Synopsis | Apply limit only to routes accepted by import policies   |
| Context  | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>prefix-limit</b> <i>keyword</i> <b>post-import</b> <i>boolean</i> |
| Tree     | <b>post-import</b>   |
| Default  | false  |

---

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **threshold** *number*

|            |  |
|------------|--|
| Synopsis   | Percentage threshold that triggers a warning message   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">prefix-limit</a> <i>keyword</i> <b>threshold</b> <i>number</i> |
| Tree       | <a href="#">threshold</a>  |
| Range      | 1 to 100   |
| Default    | 90   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **remove-private**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>remove-private</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <b>remove-private</b> |
| Tree       | <a href="#">remove-private</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **limited** *boolean*

|            |  |
|------------|--|
| Synopsis   | Remove private ASNs up to first public ASN encountered   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">remove-private</a> <b>limited</b> <i>boolean</i> |
| Tree       | <a href="#">limited</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **replace** *boolean*

|          |  |
|----------|--|
| Synopsis | Replace private ASN with global ASN before advertising   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">remove-private</a> <b>replace</b> <i>boolean</i> |
| Tree     | <a href="#">replace</a>  |

|            |          |
|------------|----------|
| Default    | false    |
| Introduced | 19.10.R1 |
| Platforms  | All      |

### **skip-peer-as** *boolean*

|            |  |
|------------|--|
| Synopsis   | Keep private ASN if it is the same as the BGP peer ASN   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">remove-private</a> <a href="#">skip-peer-as</a> <i>boolean</i> |
| Tree       | <a href="#">skip-peer-as</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **send-communities**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>send-communities</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">send-communities</a> |
| Tree       | <a href="#">send-communities</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **extended** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Advertise the Extended Communities attribute to peers  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">send-communities</a> <a href="#">extended</a> <i>boolean</i>   |
| Tree        | <a href="#">extended</a>   |
| Description | <p>When unconfigured, this command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>true</b>.</p> <p>When this command inherits a value of <b>true</b>, BGP extended communities are sent to peers in the Extended Communities attribute.</p> <p>When configured to <b>false</b>, all extended communities are removed from all routes advertised to BGP peers.</p> |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

## large *boolean*

|             |   |
|-------------|---|
| Synopsis    | Advertise the Large Communities attribute to peers  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">send-communities large</a> <i>boolean</i>   |
| Tree        | <a href="#">large</a>   |
| Description | <p>When unconfigured, this command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>true</b>.</p> <p>When this command inherits a value of <b>true</b>, BGP large communities are sent to peers in the Large Communities attribute.</p> <p>When configured to <b>false</b>, all large communities are removed from all routes advertised to BGP peers.</p> |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

## standard *boolean*

|             |   |
|-------------|---|
| Synopsis    | Advertise the Communities attribute to peers  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">send-communities standard</a> <i>boolean</i>  |
| Tree        | <a href="#">standard</a>  |
| Description | <p>When unconfigured, this command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>true</b>.</p> <p>When this command inherits a value of <b>true</b>, BGP standard communities are sent to peers in the Communities attribute.</p> <p>When configured to <b>false</b>, all standard communities are removed from all routes advertised to BGP peers.</p> |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

## send-default

|            |  |
|------------|--|
| Synopsis   | Enable the <b>send-default</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">send-default</a> |
| Tree       | <a href="#">send-default</a>   |
| Introduced | 19.7.R1  |
| Platforms  | All  |

**export-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | Export policy name  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">send-default</a> <a href="#">export-policy</a> <i>reference</i> |
| Tree       | <a href="#">export-policy</a>   |
| Reference  | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>  |
| Introduced | 19.7.R1   |
| Platforms  | All   |

**ipv4** *boolean*

|            |  |
|------------|--|
| Synopsis   | Generate and advertise an IPv4 default route (0/0)   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">send-default</a> <a href="#">ipv4</a> <i>boolean</i> |
| Tree       | <a href="#">ipv4</a>   |
| Default    | false  |
| Introduced | 19.7.R1  |
| Platforms  | All  |

**ipv6** *boolean*

|            |  |
|------------|--|
| Synopsis   | Generate and advertise an IPv6 default route (::/0)  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">send-default</a> <a href="#">ipv6</a> <i>boolean</i> |
| Tree       | <a href="#">ipv6</a>   |
| Default    | false  |
| Introduced | 19.7.R1  |
| Platforms  | All  |

**split-horizon** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Prevent routes being reflected back to best-route peer   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">split-horizon</a> <i>boolean</i>   |
| Tree        | <a href="#">split-horizon</a>  |
| Description | When configured to <b>true</b> , this command enables the use of split-horizon.<br>This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGP and IBGP. |

Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary.

When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the use of split-horizon is disabled.

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **static-group** *boolean*

|            |  |
|------------|--|
| Synopsis   | Use group for static peers   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <b>static-group</b> <i>boolean</i> |
| Tree       | <a href="#">static-group</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **tcp-mss** (*number* | *keyword*)

|             |   |
|-------------|---|
| Synopsis    | TCP maximum segment size override   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <b>tcp-mss</b> ( <i>number</i>   <i>keyword</i> )   |
| Tree        | <a href="#">tcp-mss</a>   |
| Description | <p>This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command).</p> <p>The configured value controls two properties of the TCP connection as follows:</p> <p>TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router.</p> <p>TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.</p> |
| Range       | 384 to 9746   |
| Options     | ip-stack  |
| Introduced  | 21.2.R1   |
| Platforms   | All   |

**third-party-nexthop** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Apply third-party next-hop processing to EBGP peers   |
| Context     | <b>configure</b> <i>service vprn string</i> <i>bgp group string</i> <b>third-party-nexthop</b> <i>boolean</i>   |
| Tree        | <b>third-party-nexthop</b>  |
| Description | <p>When configured to <b>true</b>, this command enables the router to send third-party next hop to EBGP peers in the same subnet as the source peer. The address family of the transport must match the address family of the route.</p> <p>When an IPv4 or IPv6 route is received from one EBGP peer and advertised to another EBGP peer in the same IP subnet, the BGP next hop is left unchanged.</p> <p>When unconfigured, the command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, third-party next-hop processing is disabled and the next hop carries the IP address of the interface used to establish the TCP connection to the peer.</p> |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**ttl-security** *number*

|             |  |
|-------------|--|
| Synopsis    | Minimum TTL value for an incoming BGP packet   |
| Context     | <b>configure</b> <i>service vprn string</i> <i>bgp group string</i> <b>ttl-security</b> <i>number</i>  |
| Tree        | <b>ttl-security</b>  |
| Description | This command configures the minimum TTL value that BGP will accept from an incoming packet. A packet with a TTL value less than the minimum configured TTL value is discarded. |
| Range       | 1 to 255   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**type** *keyword*

|            |  |
|------------|--|
| Synopsis   | BGP peer type  |
| Context    | <b>configure</b> <i>service vprn string</i> <i>bgp group string</i> <b>type</b> <i>keyword</i> |
| Tree       | <b>type</b>  |
| Options    | no-type, internal, external  |
| Default    | no-type  |
| Introduced | 16.0.R1  |



Platforms All

## hold-time

Synopsis Enter the **hold-time** context

Context **configure service vprn string bgp hold-time**

Tree **hold-time**

Introduced 16.0.R1

Platforms All

## minimum-hold-time *number*

Synopsis Minimum hold time between successive messages

Context **configure service vprn string bgp hold-time minimum-hold-time number**

Tree **minimum-hold-time**

Description This command specifies the minimum hold time that is accepted for the session. If a peer proposes a hold time lower than this value, the session attempt is rejected.

Range 0 | 3 to 65535

Default 0

Introduced 16.0.R1

Platforms All

## seconds *number*

Synopsis Maximum time BGP waits between successive messages

Context **configure service vprn string bgp hold-time seconds number**

Tree **seconds**

Description This command configures the maximum time BGP waits between successive messages (either keepalive or update) from its peer before closing the connection.

Although the implementation allows setting the keepalive timer at the BGP global level times separately, the configured keepalive timer is overridden by this value under the following circumstances.

- If the specified hold time is less than the configured keepalive time, the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed.
- If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. The connection with the peer is up permanently and no keepalive packets are sent to the peer.

|            |                |
|------------|----------------|
| Range      | 0   3 to 65535 |
| Default    | 90             |
| Introduced | 16.0.R1        |
| Platforms  | All            |

### **ibgp-multipath** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Enable IBGP multipath load balancing   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp ibgp-multipath</a> <i>boolean</i>  |
| Tree        | <a href="#">ibgp-multipath</a>   |
| Description | When configured to <b>true</b> , this command enables IBGP multipath load balancing when adding BGP routes to the route table if the route resolving the BGP next hop offers multiple next hops.<br><br>When configured to <b>false</b> , this command disables IBGP multipath load balancing. |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **import**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>import</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp import</a> |
| Tree       | <a href="#">import</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **policy** (*policy-expr-string* | *string*)

|                |   |
|----------------|---|
| Synopsis       | Import policy name  |
| Context        | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp import policy</a> ( <i>policy-expr-string</i>   <i>string</i> ) |
| Tree           | <a href="#">policy</a>  |
| String Length  | 1 to 255  |
| Max. Instances | 15  |
| Min. Instances | 1   |

---

|            |                                      |
|------------|--------------------------------------|
| Notes      | This element is ordered by the user. |
| Introduced | 16.0.R1                              |
| Platforms  | All                                  |

### **initial-send-delay-zero** *boolean*

|            |  |
|------------|--|
| Synopsis   | Send BGP updates as soon as session comes up                             |
| Context    | <b>configure service vprn string bgp initial-send-delay-zero boolean</b> |
| Tree       | <a href="#">initial-send-delay-zero</a>                                  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **keepalive** *number*

|            |   |
|------------|---|
| Synopsis   | Time after which the BGP KEEPALIVE message is sent        |
| Context    | <b>configure service vprn string bgp keepalive number</b> |
| Tree       | <a href="#">keepalive</a>                                 |
| Range      | 0 to 21845  |
| Default    | 30  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **label-preference** *number*

|            |  |
|------------|--|
| Synopsis   | Route preference for routes from labeled-unicast peers           |
| Context    | <b>configure service vprn string bgp label-preference number</b> |
| Tree       | <a href="#">label-preference</a>                                 |
| Range      | 1 to 255   |
| Default    | 170  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**local-as**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>local-as</b> context                 |
| Context    | <b>configure service vprn string bgp local-as</b> |
| Tree       | <a href="#">local-as</a>                          |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**as-number *number***

|            |   |
|------------|---|
| Synopsis   | Local (or virtual) BGP AS number  |
| Context    | <b>configure service vprn string bgp local-as as-number <i>number</i></b> |
| Tree       | <a href="#">as-number</a>   |
| Range      | 1 to 4294967295   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**prepend-global-as *boolean***

|             |   |
|-------------|---|
| Synopsis    | Prepend global AS when advertising routes to BGP peer   |
| Context     | <b>configure service vprn string bgp local-as prepend-global-as <i>boolean</i></b>  |
| Tree        | <a href="#">prepend-global-as</a>   |
| Description | When configured to <b>true</b> , the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer.<br><br>When configured to <b>false</b> , the global ASN is hidden in paths announced to the EBGPeer. |
| Default     | true  |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**private *boolean***

|             |   |
|-------------|---|
| Synopsis    | Hide the local ASN in sent paths learned from peering                                       |
| Context     | <b>configure service vprn string bgp local-as private <i>boolean</i></b>                    |
| Tree        | <a href="#">private</a>   |
| Description | When configured to <b>true</b> , the local ASN is hidden in paths learned from the peering. |

When configured to **false**, the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions.

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **local-preference** *number*

|            |  |
|------------|--|
| Synopsis   | Default local preference if not in incoming routes   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp local-preference</a> <i>number</i> |
| Tree       | <a href="#">local-preference</a>   |
| Max. Range | 0 to 4294967295  |
| Default    | 100  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **loop-detect** *keyword*

|            |  |
|------------|--|
| Synopsis   | Strategy for loop detection in the AS path   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp loop-detect</a> <i>keyword</i> |
| Tree       | <a href="#">loop-detect</a>  |
| Options    | drop-peer, ignore-loop, off, discard-route   |
| Default    | ignore-loop  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **loop-detect-threshold** *number*

|            |   |
|------------|---|
| Synopsis   | Threshold for the global ASN in a received AS path  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp loop-detect-threshold</a> <i>number</i> |
| Tree       | <a href="#">loop-detect-threshold</a>   |
| Range      | 0 to 15   |
| Default    | 0   |
| Introduced | 16.0.R6   |
| Platforms  | All   |

**med-out** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Default MED attribute value to advertise to peers  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp med-out</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">med-out</a>  |
| Max. Range | 0 to 4294967295  |
| Options    | igp-cost   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**min-route-advertisement** *number*

|            |   |
|------------|---|
| Synopsis   | Minimum time before a prefix can be advertised to peer  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp min-route-advertisement</a> <i>number</i> |
| Tree       | <a href="#">min-route-advertisement</a>   |
| Range      | 1 to 255  |
| Default    | 30  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**monitor**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>monitor</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp monitor</a> |
| Tree       | <a href="#">monitor</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**admin-state** *keyword*

|          |  |
|----------|--|
| Synopsis | Administrative state of BMP monitoring   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp monitor admin-state</a> <i>keyword</i> |
| Tree     | <a href="#">admin-state</a>  |
| Options  | enable, disable  |
| Default  | disable  |

---

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **all-stations** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Send BMP messages to all configured stations   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp monitor all-stations</a> <i>boolean</i>  |
| Tree        | <a href="#">all-stations</a>   |
| Description | <p>When configured to <b>true</b>, this command specifies that BMP messages are to be sent to all configured BMP monitoring stations.</p> <p>When configured to <b>false</b>, the command is not used to indicate the stations which can receive BMP messages. The <b>station</b> command (at the same context level) identifies the BMP stations for which BMP messages are to be sent.</p> |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **route-monitoring**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>route-monitoring</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp monitor route-monitoring</a> |
| Tree       | <a href="#">route-monitoring</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **post-policy** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow post-policy route-monitoring messages to be sent  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp monitor route-monitoring post-policy</a> <i>boolean</i> |
| Tree       | <a href="#">post-policy</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**pre-policy** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow pre-policy route-monitoring messages to be sent  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp monitor route-monitoring pre-policy</a> <i>boolean</i> |
| Tree       | <a href="#">pre-policy</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**station** [[station-name](#)] *reference*

|                |  |
|----------------|--|
| Synopsis       | Add a list entry for <b>station</b>  |
| Context        | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp monitor station</a> <i>reference</i> |
| Tree           | <a href="#">station</a>  |
| Max. Instances | 8  |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

**[station-name]** *reference*

|            |  |
|------------|--|
| Synopsis   | BMP monitoring station   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp monitor station</a> <i>reference</i> |
| Tree       | <a href="#">station</a>  |
| Reference  | <b>configure</b> <a href="#">bmp station</a> <i>string</i>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**multihop** *number*

|             |  |
|-------------|--|
| Synopsis    | TTL in IP packet headers for EBGP peers multi-hops away  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp multihop</a> <i>number</i>   |
| Tree        | <a href="#">multihop</a>   |
| Description | This command configures the Time to Live (TTL) value entered in the IP header of packets sent to an EBGP peer multiple hops away. This command applies only to EBGP. |



|            |          |
|------------|----------|
| Range      | 1 to 255 |
| Introduced | 16.0.R1  |
| Platforms  | All      |

## multipath

|            |  |
|------------|--|
| Synopsis   | Enter the <b>multipath</b> context                 |
| Context    | <b>configure service vprn string bgp multipath</b> |
| Tree       | <b>multipath</b>                                   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## ebgp number

|            |  |
|------------|--|
| Synopsis   | Maximum multipaths per prefix for EBGp learned routes          |
| Context    | <b>configure service vprn string bgp multipath ebgp number</b> |
| Tree       | <b>ebgp</b>  |
| Range      | 1 to 64  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## family [family-type] keyword

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>family</b> list instance  |
| Context     | <b>configure service vprn string bgp multipath family keyword</b>  |
| Tree        | <b>family</b>  |
| Description | <p>Commands in this context set ECMP multipath parameters that apply only to the specified label unicast address family.</p> <p>When multipath is enabled, traffic to the destination is load-shared across a set of paths (BGP routes) that the BGP decision process considers equal to the best path. The distribution of traffic over the multiple paths may or may not be equal. The distribution is based on weights derived from the Link Bandwidth Extended Community.</p> <p>For more information about the criteria a non-best route must meet to qualify as a multipath, see “BGP route installation in the route table” in the <i>7450 ESS 7750 SR 7950 XRS VSR Unicast Routing Protocols User Guide</i>.</p> |
| Introduced  | 19.5.R1  |
| Platforms   | All  |

**[family-type] keyword**

|            |   |
|------------|---|
| Synopsis   | Address family type for the multipath selection                   |
| Context    | <b>configure service vprn string bgp multipath family keyword</b> |
| Tree       | <b>family</b>   |
| Options    | ipv4, ipv6, label-ipv4, label-ipv6                                |
| Notes      | This element is part of a list key.                               |
| Introduced | 19.5.R1   |
| Platforms  | All   |

**ebgp number**

|             |  |
|-------------|--|
| Synopsis    | Maximum multipaths when best path is EBGP learned route  |
| Context     | <b>configure service vprn string bgp multipath family keyword ebgp number</b>  |
| Tree        | <b>ebgp</b>  |
| Description | This command configures the maximum number of multipaths per prefix or NLRI when the best path is an EBGP learned route. The limit configured using this command overrides the limit configured in the <b>max-paths</b> command. If the best path is an EBGP learned route, and this command is set to 1, multipaths are disabled. |
| Range       | 1 to 64  |
| Introduced  | 19.5.R1  |
| Platforms   | All  |

**ibgp number**

|             |   |
|-------------|---|
| Synopsis    | Maximum multipaths when best path is IBGP learned route   |
| Context     | <b>configure service vprn string bgp multipath family keyword ibgp number</b>   |
| Tree        | <b>ibgp</b>   |
| Description | This command configures the maximum number of multipaths per prefix or NLRI when the best path is an IBGP learned route. The limit configured using this command overrides the limit configured in the <b>max-paths</b> command. If the best path is an IBGP learned route and this command is set to 1, multipaths are disabled. |
| Range       | 1 to 64   |
| Introduced  | 19.5.R1   |
| Platforms   | All   |

**max-paths** *number*

|             |   |
|-------------|---|
| Synopsis    | Maximum number of multipaths per prefix or NLRI   |
| Context     | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp multipath family</b> <i>keyword</i> <b>max-paths</b> <i>number</i>  |
| Tree        | <b>max-paths</b>  |
| Description | This command configures the maximum number of multipaths per prefix or NLRI for the IP family option specified using the <b>family</b> command.<br>Consider the following when configuring this command: <ul style="list-style-type: none"> <li>• If the best path is an EBGP-learned route and the <b>ebgp</b> command is configured, the limit configured in the <b>ebgp</b> command overrides the limit configured in this command.</li> <li>• If the best path is an IBGP-learned route and the <b>ibgp</b> command is configured, the limit configured in the <b>ibgp</b> command overrides the limit configured in this command.</li> <li>• If the best path is an EBGP-learned route and the <b>ebgp</b> command is not configured, and this command is configured to 1, multipaths are disabled.</li> <li>• If the best path is an IBGP-learned route and the <b>ibgp</b> command is not configured, and this command is configured to 1, multipaths are disabled.</li> </ul> |
| Range       | 1 to 64   |
| Introduced  | 19.5.R1   |
| Platforms   | All   |

**restrict** *keyword*

|            |  |
|------------|--|
| Synopsis   | AS path restriction for the non-best path  |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp multipath family</b> <i>keyword</i> <b>restrict</b> <i>keyword</i> |
| Tree       | <b>restrict</b>  |
| Options    | same-as-path-length, same-neighbor-as, exact-as-path   |
| Default    | same-as-path-length  |
| Introduced | 19.5.R1  |
| Platforms  | All  |

**unequal-cost** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Ignore differences in the next-hop cost for multipath  |
| Context     | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp multipath family</b> <i>keyword</i> <b>unequal-cost</b> <i>boolean</i> |
| Tree        | <b>unequal-cost</b>  |
| Description | When configured to <b>true</b> , BGP ignores differences in the next-hop cost when determining eligible multipaths.              |

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 19.5.R1 |
| Platforms  | All     |

**ibgp** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum multipaths per prefix for IBGP learned routes  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp multipath ibgp</a> <i>number</i> |
| Tree       | <a href="#">ibgp</a>   |
| Range      | 1 to 64  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**max-paths** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum multipaths per prefix   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp multipath max-paths</a> <i>number</i> |
| Tree       | <a href="#">max-paths</a>   |
| Range      | 1 to 64   |
| Default    | 1   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**restrict** *keyword*

|            |   |
|------------|---|
| Synopsis   | AS path restriction for the non-best path   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp multipath restrict</a> <i>keyword</i> |
| Tree       | <a href="#">restrict</a>  |
| Options    | same-as-path-length, same-neighbor-as, exact-as-path  |
| Default    | same-as-path-length   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**unequal-cost** *boolean*

|            |   |
|------------|---|
| Synopsis   | Ignore differences in the next-hop cost for multipath   |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp multipath unequal-cost</b> <i>boolean</i> |
| Tree       | <b>unequal-cost</b>   |
| Default    | false   |
| Introduced | 19.5.R1   |
| Platforms  | All   |

**neighbor** [**ip-address**] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

|            |  |
|------------|--|
| Synopsis   | Enter the <b>neighbor</b> list instance  |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) |
| Tree       | <b>neighbor</b>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[ip-address]** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

|            |  |
|------------|--|
| Synopsis   | IP address of the BGP peer router  |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) |
| Tree       | <b>neighbor</b>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the BGP neighbor   |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>   |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R1  |

Platforms All

### **advertise-inactive** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Advertise an inactive BGP route to peers  |
| Context     | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>advertise-inactive</b> <i>boolean</i>   |
| Tree        | <a href="#">advertise-inactive</a>  |
| Description | <p>When configured to <b>true</b>, this command allows an inactive BGP route to be advertised, even though it is not the most preferred route. The effect of the command on advertised unlabeled, labeled, and multicast IPv4 and IPv6 routes depends on several factors.</p> <ul style="list-style-type: none"> <li>• If the active route for the IP prefix is a BGP route, that route is advertised.</li> <li>• If the active route is a non-BGP route and there are valid inactive BGP routes to the same destination, the best valid inactive route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session.</li> <li>• If the active route is a non-BGP route and there are no valid BGP routes to the same destination, no route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session.</li> </ul> <p>When unconfigured, the command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, the advertisement of inactive BGP routes to other BGP peers is disabled.</p> |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **advertise-ipv6-next-hops**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>advertise-ipv6-next-hops</b> context   |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>advertise-ipv6-next-hops</b> |
| Tree       | <a href="#">advertise-ipv6-next-hops</a>   |
| Introduced | 19.5.R1  |
| Platforms  | All  |

### **ipv4** *boolean*

|          |   |
|----------|---|
| Synopsis | Enable IPv4 routes to be advertised   |
| Context  | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>advertise-ipv6-next-hops</b> <b>ipv4</b> <i>boolean</i> |

|            |                      |
|------------|----------------------|
| Tree       | <a href="#">ipv4</a> |
| Default    | false                |
| Introduced | 19.5.R1              |
| Platforms  | All                  |

### **aggregator-id-zero** *boolean*

|            |  |
|------------|--|
| Synopsis   | Set router ID in the BGP AGGREGATOR attribute to zero  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">aggregator-id-zero</a> <i>boolean</i> |
| Tree       | <a href="#">aggregator-id-zero</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **as-override** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Replace the peer ASN with the local ASN in AS Path   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">as-override</a> <i>boolean</i>  |
| Tree        | <a href="#">as-override</a>  |
| Description | <p>When configured to <b>true</b>, the advertising router's local AS replaces all occurrences of the peer AS in the AS_PATH attribute.</p> <p>This command should be used with caution, as it breaks BGP's loop detection mechanism.</p> <p>When unconfigured, the command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). This command cannot be explicitly configured to <b>false</b>.</p> <p>When the command inherits a value of <b>false</b>, no AS override is performed.</p> |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **asn-4-byte** *boolean*

|            |  |
|------------|--|
| Synopsis   | Advertise the use of 4-byte ASNs   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">asn-4-byte</a> <i>boolean</i> |
| Tree       | <a href="#">asn-4-byte</a>   |
| Introduced | 16.0.R1  |

Platforms All

### **authentication-key** *string*

Synopsis BGP authentication key

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **authentication-key** *string*

Tree [authentication-key](#)

String Length 1 to 370

Introduced 16.0.R1

Platforms All

### **authentication-keychain** *reference*

Synopsis TCP authentication keychain for the session

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **authentication-keychain** *reference*

Tree [authentication-keychain](#)

Description This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session.

Reference **configure system security keychains** **keychain** *string*

Introduced 16.0.R3

Platforms All

### **bfd-liveness** *boolean*

Synopsis Enable BFD

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **bfd-liveness** *boolean*

Tree [bfd-liveness](#)

Description When configured to **true**, BFD is enabled on a given protocol interface where the state of the protocol interface is tied to the state of the BFD session between the local node and the remote node.

When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, BFD is removed from the associated protocol adjacency.



Introduced 16.0.R1  
Platforms All

### **capability-negotiation** *boolean*

Synopsis Enable capability negotiation  
Context **configure service vprn string bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*) **capability-negotiation boolean**  
Tree [capability-negotiation](#)  
Introduced 16.0.R1  
Platforms All

### **client-reflect** *boolean*

Synopsis Allow cluster RR to advertise routes to its clients  
Context **configure service vprn string bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*) **client-reflect boolean**  
Tree [client-reflect](#)  
Introduced 16.0.R1  
Platforms All

### **cluster**

Synopsis Enter the **cluster** context  
Context **configure service vprn string bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*) **cluster**  
Tree [cluster](#)  
Introduced 16.0.R1  
Platforms All

### **cluster-id** *string*

Synopsis Route reflector cluster ID  
Context **configure service vprn string bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*) **cluster cluster-id string**  
Tree [cluster-id](#)  
Introduced 16.0.R1

Platforms All

### **connect-retry** *number*

Synopsis BGP connect retry timer value

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **connect-retry** *number*

Tree [connect-retry](#)

Range 1 to 65535

Introduced 16.0.R1

Platforms All

### **damp-peer-oscillations**

Synopsis Enable the **damp-peer-oscillations** context

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **damp-peer-oscillations**

Tree [damp-peer-oscillations](#)

Introduced 16.0.R1

Platforms All

### **error-interval** *number*

Synopsis Time after a reset that the session must be error-free

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **damp-peer-oscillations error-interval** *number*

Tree [error-interval](#)

Description This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time.

Range 0 to 2048

Default 30

Introduced 16.0.R1

Platforms All

**idle-hold-time**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>idle-hold-time</b> context   |
| Context    | <b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>damp-peer-oscillations idle-hold-time</b> |
| Tree       | <a href="#">idle-hold-time</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**initial-wait number**

|            |   |
|------------|---|
| Synopsis   | Time session remains in idle state after stabilization  |
| Context    | <b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>damp-peer-oscillations idle-hold-time initial-wait number</b> |
| Tree       | <a href="#">initial-wait</a>  |
| Range      | 0 to 2048   |
| Default    | 0   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**max-wait number**

|            |   |
|------------|---|
| Synopsis   | Maximum session idle time after repeated instability  |
| Context    | <b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>damp-peer-oscillations idle-hold-time max-wait number</b> |
| Tree       | <a href="#">max-wait</a>  |
| Range      | 1 to 2048   |
| Default    | 60  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**second-wait number**

|          |  |
|----------|--|
| Synopsis | Time that doubles after each repeated session failure  |
| Context  | <b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>damp-peer-oscillations idle-hold-time second-wait number</b> |
| Tree     | <a href="#">second-wait</a>  |

|             |  |
|-------------|--|
| Description | This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time. |
| Range       | 1 to 2048  |
| Default     | 5  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **damping** *boolean*

|            |  |
|------------|--|
| Synopsis   | Use BGP route damping to reduce route flap   |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>damping</b> <i>boolean</i> |
| Tree       | <a href="#">damping</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **default-label-preference**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>default-label-preference</b> context  |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>default-label-preference</b> |
| Tree       | <a href="#">default-label-preference</a>   |
| Introduced | 19.5.R1  |
| Platforms  | All  |

### **ebgp** *number*

|            |  |
|------------|--|
| Synopsis   | Default preference for EBGp  |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>default-label-preference</b> <b>ebgp</b> <i>number</i> |
| Tree       | <a href="#">ebgp</a>   |
| Range      | 0 to 255   |
| Introduced | 19.5.R1  |
| Platforms  | All  |

**ibgp number**

|            |  |
|------------|--|
| Synopsis   | Default preference for IBGP  |
| Context    | <b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>default-label-preference ibgp number</b> |
| Tree       | <a href="#">ibgp</a>   |
| Range      | 0 to 255   |
| Introduced | 19.5.R1  |
| Platforms  | All  |

**default-preference**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>default-preference</b> context  |
| Context    | <b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>default-preference</b> |
| Tree       | <a href="#">default-preference</a>   |
| Introduced | 19.5.R1  |
| Platforms  | All  |

**ebgp number**

|            |  |
|------------|--|
| Synopsis   | Default preference for EBGP  |
| Context    | <b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>default-preference ebgp number</b> |
| Tree       | <a href="#">ebgp</a>   |
| Range      | 0 to 255   |
| Introduced | 19.5.R1  |
| Platforms  | All  |

**ibgp number**

|            |  |
|------------|--|
| Synopsis   | Default preference for IBGP  |
| Context    | <b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>default-preference ibgp number</b> |
| Tree       | <a href="#">ibgp</a>   |
| Range      | 0 to 255   |
| Introduced | 19.5.R1  |

Platforms All

### **description** *string*

Synopsis Text description

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **description** *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

### **ebgp-default-reject-policy**

Synopsis Enable the **ebgp-default-reject-policy** context

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **ebgp-default-reject-policy**

Tree [ebgp-default-reject-policy](#)

Introduced 19.5.R1

Platforms All

### **export** *boolean*

Synopsis Enable default reject export policy for external peers

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **ebgp-default-reject-policy export** *boolean*

Tree [export](#)

Default true

Introduced 19.5.R1

Platforms All

### **import** *boolean*

Synopsis Enable default reject import policy for external peers

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **ebgp-default-reject-policy import** *boolean*

Tree [import](#)

|            |         |
|------------|---------|
| Default    | true    |
| Introduced | 19.5.R1 |
| Platforms  | All     |

### **enforce-first-as** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Enforce the configured peer AS value in received routes   |
| Context     | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>enforce-first-as</b> <i>boolean</i>   |
| Tree        | <a href="#">enforce-first-as</a>  |
| Description | <p>When configured to <b>true</b> for an EBGP session, all routes received from an EBGP peer are checked to ensure that the most recent ASN in the AS_PATH attribute of each route matches the configured AS of the session. If there is not a match, the session is reset (if the <b>update-fault-tolerance</b> command in the <b>error-handling</b> context is set to <b>false</b>) or the session is left up but the route is treated as withdrawn (if <b>update-fault-tolerance</b> is set to <b>true</b>).</p> <p>This command does not flap an established session because it applies only to routes received after the command is issued.</p> <p>When unconfigured, the command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, received routes are not checked for compliance with the rule.</p> |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **error-handling**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>error-handling</b> context  |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>error-handling</b> |
| Tree       | <a href="#">error-handling</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **update-fault-tolerance** *boolean*

|          |   |
|----------|---|
| Synopsis | Tolerate non-critical errors in UPDATE messages   |
| Context  | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>error-handling</b> <b>update-fault-tolerance</b> <i>boolean</i> |

|             |  |
|-------------|--|
| Tree        | <a href="#">update-fault-tolerance</a>   |
| Description | <p>When configured to <b>true</b>, non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset.</p> <p>When unconfigured, the command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, all errors trigger a session reset.</p> |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### evpn-link-bandwidth

|            |   |
|------------|---|
| Synopsis   | Enter the <b>evpn-link-bandwidth</b> context  |
| Context    | <b>configure service vprn string bgp neighbor (ipv4-address-with-zone   ipv6-address-with-zone) evpn-link-bandwidth</b> |
| Tree       | <a href="#">evpn-link-bandwidth</a>   |
| Introduced | 22.7.R1   |
| Platforms  | All   |

### add-to-received-bgp *number*

|             |  |
|-------------|--|
| Synopsis    | Weight added to received PE-CE BGP routes  |
| Context     | <b>configure service vprn string bgp neighbor (ipv4-address-with-zone   ipv6-address-with-zone) evpn-link-bandwidth add-to-received-bgp <i>number</i></b>  |
| Tree        | <a href="#">add-to-received-bgp</a>  |
| Description | <p>This command configures the weight value added to all BGP PE-CE routes for the purpose of weighted ECMP if EVPN-IFL and BGP PE-CE routes are combined into the same ECMP set.</p> <p>For the load-balancing between EVPN-IFL and BGP PE-CE routes the <b>configure service vprn bgp eibgp-loadbalance</b> command must already be configured in the system.</p> |
| Range       | 1 to 128   |
| Introduced  | 22.7.R1  |
| Platforms   | All  |

### export

|          |                                  |
|----------|----------------------------------|
| Synopsis | Enable the <b>export</b> context |
|----------|----------------------------------|



|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>export</b> |
| Tree       | <b>export</b>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **policy** (*policy-expr-string* | *string*)

|                |  |
|----------------|--|
| Synopsis       | Export policy name   |
| Context        | <b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>export policy</b> ( <i>policy-expr-string</i>   <i>string</i> ) |
| Tree           | <b>policy</b>  |
| String Length  | 1 to 255   |
| Max. Instances | 15   |
| Min. Instances | 1  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

### **extended-nh-encoding**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>extended-nh-encoding</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>extended-nh-encoding</b> |
| Tree       | <b>extended-nh-encoding</b>   |
| Introduced | 19.5.R1   |
| Platforms  | All   |

### **ipv4** *boolean*

|          |  |
|----------|--|
| Synopsis | Enable/disable family type ipv4.   |
| Context  | <b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>extended-nh-encoding</b> <b>ipv4</b> <i>boolean</i> |
| Tree     | <b>ipv4</b>  |
| Default  | false  |

|            |         |
|------------|---------|
| Introduced | 19.5.R1 |
| Platforms  | All     |

## family

|            |   |
|------------|---|
| Synopsis   | Enable the <b>family</b> context  |
| Context    | <b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family</b> |
| Tree       | <b>family</b>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## flow-ipv4 *boolean*

|            |   |
|------------|---|
| Synopsis   | Advertise support for the flowspec-IPv4 address family  |
| Context    | <b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family flow-ipv4 boolean</b> |
| Tree       | <b>flow-ipv4</b>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## flow-ipv6 *boolean*

|            |   |
|------------|---|
| Synopsis   | Advertise support for the flowspec-IPv6 address family  |
| Context    | <b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family flow-ipv6 boolean</b> |
| Tree       | <b>flow-ipv6</b>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## ipv4 *boolean*

|          |  |
|----------|--|
| Synopsis | Add support for the IPv4 address family  |
| Context  | <b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family ipv4 boolean</b> |

---

|            |                      |
|------------|----------------------|
| Tree       | <a href="#">ipv4</a> |
| Default    | false                |
| Introduced | 16.0.R1              |
| Platforms  | All                  |

### **ipv6** *boolean*

|            |   |
|------------|---|
| Synopsis   | Advertise MP-BGP support for the IPv6 address family  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">family ipv6</a> <i>boolean</i> |
| Tree       | <a href="#">ipv6</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **label-ipv4** *boolean*

|            |   |
|------------|---|
| Synopsis   | Advertise support for the label-IPv4 address family   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">family label-ipv4</a> <i>boolean</i> |
| Tree       | <a href="#">label-ipv4</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **mcast-ipv4** *boolean*

|            |   |
|------------|---|
| Synopsis   | Advertise support for the MCAST-IPv4 address family   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">family mcast-ipv4</a> <i>boolean</i> |
| Tree       | <a href="#">mcast-ipv4</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**mcast-ipv6** *boolean*

|            |  |
|------------|--|
| Synopsis   | Advertise support for the MCAST-IPv6 address family  |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family mcast-ipv6</b> <i>boolean</i> |
| Tree       | <a href="#">mcast-ipv6</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**fast-external-failover** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Drop external BGP session immediately when link fails   |
| Context     | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>fast-external-failover</b> <i>boolean</i>   |
| Tree        | <a href="#">fast-external-failover</a>  |
| Description | <p>When this command inherits a value of <b>true</b>, the router drops an external BGP session on a single-hop route immediately when the local interface goes down.</p> <p>When unconfigured, the command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>true</b>.</p> <p>When configured to <b>false</b>, the BGP session remains up until the hold time expires.</p> |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**graceful-restart**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>graceful-restart</b> context   |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart</b> |
| Tree       | <a href="#">graceful-restart</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**gr-notification** *boolean*

|          |  |
|----------|--|
| Synopsis | Perform graceful restart procedures after NOTIFICATION   |
| Context  | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart</b> <b>gr-notification</b> <i>boolean</i> |

|             |   |
|-------------|---|
| Tree        | <a href="#">gr-notification</a>   |
| Description | When configured to <b>true</b> , the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error.<br><br>When configured to <b>false</b> , NOTIFICATION messages are not supported. |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

## long-lived

|            |  |
|------------|--|
| Synopsis   | Enable the <b>long-lived</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart long-lived</b> |
| Tree       | <a href="#">long-lived</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## advertise-stale-to-all-neighbors *boolean*

|            |  |
|------------|--|
| Synopsis   | Advertise stale routes to all BGP peers  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart long-lived advertise-stale-to-all-neighbors</b> <i>boolean</i> |
| Tree       | <a href="#">advertise-stale-to-all-neighbors</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## advertised-stale-time *number*

|          |  |
|----------|--|
| Synopsis | Advertised long-lived stale time for LLGR routes   |
| Context  | <b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart long-lived advertised-stale-time</b> <i>number</i> |
| Tree     | <a href="#">advertised-stale-time</a>  |
| Range    | 0 to 16777215  |
| Default  | 86400  |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **family** [*family-type*] *keyword*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>family</b> list instance  |
| Context    | <b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>graceful-restart long-lived family keyword</b> |
| Tree       | <b>family</b>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **[family-type]** *keyword*

|            |  |
|------------|--|
| Synopsis   | Address family type for LLGR   |
| Context    | <b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>graceful-restart long-lived family keyword</b> |
| Tree       | <b>family</b>  |
| Options    | ipv4, ipv6, flow-ipv4, flow-ipv6, label-ipv4   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **advertised-stale-time** *number*

|             |  |
|-------------|--|
| Synopsis    | LLGR stale routes time for family override   |
| Context     | <b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>graceful-restart long-lived family keyword advertised-stale-time number</b>                                      |
| Tree        | <b>advertised-stale-time</b>   |
| Description | This command configures the long-lived stale routes time that is advertised by the router in its LLGR capability.<br><br>This command applies to all AFI/SAFI in the advertised LLGR capability with a family-specific override. |
| Range       | 0 to 16777215  |
| Default     | 86400  |
| Introduced  | 16.0.R1  |

Platforms All

### **helper-override-stale-time** *number*

Synopsis Locally-configured stale routes override time

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **graceful-restart long-lived family** *keyword* **helper-override-stale-time** *number*

Tree [helper-override-stale-time](#)

Description This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This is a family-specific override value.

Range 0 to 16777216

Default 16777216

Introduced 16.0.R1

Platforms All

### **forwarding-bits-set** *keyword*

Synopsis BGP LLGR forwarding-bit behavior for address family

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **graceful-restart long-lived** **forwarding-bits-set** *keyword*

Tree [forwarding-bits-set](#)

Description This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family.

This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).

Options none, all, non-fwd

Default none

Introduced 16.0.R1

Platforms All

### **helper-override-restart-time** *number*

Synopsis Locally-configured override for restart time

|             |   |
|-------------|---|
| Context     | <b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart long-lived helper-override-restart-time</b> <i>number</i>   |
| Tree        | <a href="#">helper-override-restart-time</a>  |
| Description | This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI. |
| Range       | 0 to 4095   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **helper-override-stale-time** *number*

|             |   |
|-------------|---|
| Synopsis    | Locally-configured stale routes override time   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart long-lived helper-override-stale-time</b> <i>number</i>   |
| Tree        | <a href="#">helper-override-stale-time</a>  |
| Description | This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability.<br><br>This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override. |
| Range       | 0 to 16777215   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **without-no-export** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Advertise LLGR stale routes to non-LLGR peers  |
| Context     | <b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart long-lived without-no-export</b> <i>boolean</i>  |
| Tree        | <a href="#">without-no-export</a>  |
| Description | When configured to <b>true</b> , LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0.<br><br>When configured to <b>false</b> , LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale |



routes is automatically set to 0 and a NO\_EXPORT standard community is automatically added to the routes.

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **restart-time** *number*

|            |  |
|------------|--|
| Synopsis   | Restart time advertised by GR capability   |
| Context    | <b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>graceful-restart restart-time number</b> |
| Tree       | <a href="#">restart-time</a>   |
| Range      | 0 to 4095  |
| Default    | 300  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **stale-routes-time** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum time to maintain routes after graceful restart  |
| Context    | <b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>graceful-restart stale-routes-time number</b> |
| Tree       | <a href="#">stale-routes-time</a>   |
| Range      | 1 to 3600   |
| Default    | 360   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **group** *reference*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Neighbor to group   |
| Context  | <b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>group reference</b> |

|            |   |
|------------|---|
| Tree       | <a href="#">group</a>   |
| Reference  | <b>configure service vprn</b> <i>string</i> <a href="#">bgp group</a> <i>string</i> |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## hold-time

|            |  |
|------------|--|
| Synopsis   | Enter the <b>hold-time</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">hold-time</a> |
| Tree       | <a href="#">hold-time</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## minimum-hold-time *number*

|            |  |
|------------|--|
| Synopsis   | Minimum time BGP waits between successive messages   |
| Context    | <b>configure service vprn</b> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">hold-time</a> <a href="#">minimum-hold-time</a> <i>number</i> |
| Tree       | <a href="#">minimum-hold-time</a>  |
| Range      | 0   3 to 65536   |
| Default    | 0  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## seconds *number*

|             |   |
|-------------|---|
| Synopsis    | Maximum hold time between successive messages   |
| Context     | <b>configure service vprn</b> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">hold-time</a> <a href="#">seconds</a> <i>number</i>  |
| Tree        | <a href="#">seconds</a>   |
| Description | <p>The BGP hold time specifies the maximum time BGP waits between successive messages (either keepalive or update) from its peer, before closing the connection.</p> <p>Even though the implementation allows setting the keepalive timer at the BGP neighbor level times separately, the configured keepalive timer is overridden by this value under the following circumstances:</p> |

- If the specified hold time is less than the configured keepalive time, then the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed.
- If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. This means that the connection with the peer is up permanently and no keepalive packets are sent to the peer.

When unconfigured, the command setting is inherited from the BGP group-level configuration.

|            |                |
|------------|----------------|
| Range      | 0   3 to 65535 |
| Introduced | 16.0.R1        |
| Platforms  | All            |

## import

|            |  |
|------------|--|
| Synopsis   | Enable the <b>import</b> context   |
| Context    | <b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>import</b> |
| Tree       | <b>import</b>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## policy (*policy-expr-string | string*)

|                |  |
|----------------|--|
| Synopsis       | Route policy name  |
| Context        | <b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>import policy</b> ( <i>policy-expr-string   string</i> ) |
| Tree           | <b>policy</b>  |
| String Length  | 1 to 255   |
| Max. Instances | 15   |
| Min. Instances | 1  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

**initial-send-delay-zero** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Send BGP updates as soon as the session comes up   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">initial-send-delay-zero</a> <i>boolean</i>  |
| Tree        | <a href="#">initial-send-delay-zero</a>  |
| Description | When configured to <b>true</b> , BGP updates are sent as soon as the session comes up.<br>When unconfigured, the command inherits the value of the group-level setting ( <b>true</b> or <b>false</b> ). The command cannot be explicitly configured to <b>false</b> .<br>When this command inherits a value of <b>false</b> , BGP waits to send UPDATE messages for the minimum route advertisement time after a session is established. |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**keepalive** *number*

|            |  |
|------------|--|
| Synopsis   | Time after which the BGP KEEPALIVE message is sent   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">keepalive</a> <i>number</i> |
| Tree       | <a href="#">keepalive</a>  |
| Range      | 0 to 21845   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**label-preference** *number*

|            |   |
|------------|---|
| Synopsis   | Route preference for routes from labeled-unicast peers  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">label-preference</a> <i>number</i> |
| Tree       | <a href="#">label-preference</a>  |
| Range      | 1 to 255  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**link-bandwidth**

|          |   |
|----------|---|
| Synopsis | Enter the <b>link-bandwidth</b> context |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth</b> |
| Tree       | <b>link-bandwidth</b>   |
| Introduced | 16.0.R3   |
| Platforms  | All   |

## accept-from-ebgp

|            |  |
|------------|--|
| Synopsis   | Enable the <b>accept-from-ebgp</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth accept-from-ebgp</b> |
| Tree       | <b>accept-from-ebgp</b>  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

## ipv4 boolean

|            |   |
|------------|---|
| Synopsis   | Support Link Bandwidth EC in IPv4 routes  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth accept-from-ebgp ipv4 boolean</b> |
| Tree       | <b>ipv4</b>   |
| Default    | false   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

## ipv6 boolean

|            |   |
|------------|---|
| Synopsis   | Support Link Bandwidth EC in IPv6 routes  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth accept-from-ebgp ipv6 boolean</b> |
| Tree       | <b>ipv6</b>   |
| Default    | false   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### label-ipv4 *boolean*

|            |   |
|------------|---|
| Synopsis   | Support Link Bandwidth EC in label-IPv4 routes  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth accept-from-ebgp label-ipv4 boolean</b> |
| Tree       | <a href="#">label-ipv4</a>  |
| Default    | false   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### add-to-received-ebgp

|            |  |
|------------|--|
| Synopsis   | Enable the <b>add-to-received-ebgp</b> context   |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth add-to-received-ebgp</b> |
| Tree       | <a href="#">add-to-received-ebgp</a>   |
| Introduced | 16.0.R3  |
| Platforms  | All  |

### ipv4 *boolean*

|            |   |
|------------|---|
| Synopsis   | Support Link Bandwidth EC in IPv4 routes  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth add-to-received-ebgp ipv4 boolean</b> |
| Tree       | <a href="#">ipv4</a>  |
| Default    | false   |
| Introduced | 16.0.R3   |
| Platforms  | All   |

### ipv6 *boolean*

|            |   |
|------------|---|
| Synopsis   | Support Link Bandwidth EC in IPv6 routes  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth add-to-received-ebgp ipv6 boolean</b> |
| Tree       | <a href="#">ipv6</a>  |
| Default    | false   |
| Introduced | 16.0.R3   |

Platforms All

### **label-ipv4** *boolean*

Synopsis Support Link Bandwidth EC in label-IPv4 routes

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **link-bandwidth add-to-received-ebgp label-ipv4** *boolean*

Tree [label-ipv4](#)

Default false

Introduced 16.0.R3

Platforms All

### **aggregate-used-paths**

Synopsis Enable the **aggregate-used-paths** context

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **link-bandwidth aggregate-used-paths**

Tree [aggregate-used-paths](#)

Introduced 16.0.R4

Platforms All

### **ipv4** *boolean*

Synopsis Support Link Bandwidth EC in IPv4 routes

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **link-bandwidth aggregate-used-paths ipv4** *boolean*

Tree [ipv4](#)

Default false

Introduced 16.0.R4

Platforms All

### **ipv6** *boolean*

Synopsis Support Link Bandwidth EC in IPv6 routes

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **link-bandwidth aggregate-used-paths ipv6** *boolean*

Tree [ipv6](#)

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R4 |
| Platforms  | All     |

### **label-ipv4** *boolean*

|            |  |
|------------|--|
| Synopsis   | Support Link Bandwidth EC in label-IPv4 routes   |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth aggregate-used-paths</b> <b>label-ipv4</b> <i>boolean</i> |
| Tree       | <a href="#">label-ipv4</a>   |
| Default    | false  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **send-to-ebgp**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>send-to-ebgp</b> context   |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth</b> <b>send-to-ebgp</b> |
| Tree       | <a href="#">send-to-ebgp</a>   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **ipv4** *boolean*

|            |   |
|------------|---|
| Synopsis   | Support Link Bandwidth EC in IPv4 routes  |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth</b> <b>send-to-ebgp</b> <b>ipv4</b> <i>boolean</i> |
| Tree       | <a href="#">ipv4</a>  |
| Default    | false   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **ipv6** *boolean*

|          |  |
|----------|--|
| Synopsis | Support Link Bandwidth EC in IPv6 routes |
|----------|--|



|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth send-to-ebgp ipv6</b> <i>boolean</i> |
| Tree       | <a href="#">ipv6</a>   |
| Default    | false  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **label-ipv4** *boolean*

|            |  |
|------------|--|
| Synopsis   | Support Link Bandwidth EC in label-IPv4 routes   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth send-to-ebgp</b> <a href="#">label-ipv4</a> <i>boolean</i> |
| Tree       | <a href="#">label-ipv4</a>   |
| Default    | false  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **local-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *interface-name*)

|               |   |
|---------------|---|
| Synopsis      | Local IP address used when communicating with BGP peers   |
| Context       | <b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">local-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>   <i>interface-name</i> ) |
| Tree          | <a href="#">local-address</a>   |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

### **local-as**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>local-as</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">local-as</a> |
| Tree       | <a href="#">local-as</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**as-number** *number*

|            |  |
|------------|--|
| Synopsis   | Local (or virtual) BGP AS number   |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>local-as as-number</b> <i>number</i> |
| Tree       | <b>as-number</b>   |
| Range      | 1 to 4294967295  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**prepend-global-as** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Prepend global ASN when advertising routes to BGP peer   |
| Context     | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>local-as prepend-global-as</b> <i>boolean</i>                                |
| Tree        | <b>prepend-global-as</b>   |
| Description | When configured to <b>true</b> , the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer.<br><br>When configured to <b>false</b> , the global ASN is not included in the AS_PATH attribute. |
| Default     | true   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**private** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Hide the local ASN in sent paths learned from peering  |
| Context     | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>local-as private</b> <i>boolean</i>  |
| Tree        | <b>private</b>   |
| Description | When configured to <b>true</b> , the local AS number is only advertised to peers that use the local ASN for establishing BGP peering sessions.<br><br>When configured to <b>false</b> , the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions. |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**local-preference** *number*

|            |  |
|------------|--|
| Synopsis   | Default local preference if not in incoming routes   |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>local-preference</b> <i>number</i> |
| Tree       | <a href="#">local-preference</a>   |
| Range      | 0 to 4294967295  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**loop-detect** *keyword*

|            |  |
|------------|--|
| Synopsis   | Strategy for loop detection in the AS path   |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>loop-detect</b> <i>keyword</i> |
| Tree       | <a href="#">loop-detect</a>  |
| Options    | drop-peer, ignore-loop, off, discard-route   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**loop-detect-threshold** *number*

|            |   |
|------------|---|
| Synopsis   | Threshold for the global ASN in a received AS path  |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>loop-detect-threshold</b> <i>number</i> |
| Tree       | <a href="#">loop-detect-threshold</a>   |
| Range      | 0 to 15   |
| Introduced | 16.0.R6   |
| Platforms  | All   |

**med-out** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Default MED attribute value to advertise to peers  |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>med-out</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">med-out</a>  |
| Max. Range | 0 to 4294967295  |

|            |          |
|------------|----------|
| Options    | igp-cost |
| Introduced | 16.0.R1  |
| Platforms  | All      |

### **min-route-advertisement** *number*

|            |  |
|------------|--|
| Synopsis   | Minimum interval between successive prefix updates   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">min-route-advertisement</a> <i>number</i> |
| Tree       | <a href="#">min-route-advertisement</a>  |
| Range      | 1 to 255   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **monitor**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>monitor</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">monitor</a> |
| Tree       | <a href="#">monitor</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of BMP monitoring  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">monitor</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **all-stations** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Send BMP messages to all configured stations   |
| Context     | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>monitor all-stations</b> <i>boolean</i>  |
| Tree        | <a href="#">all-stations</a>   |
| Description | <p>When configured to <b>true</b>, this command specifies that BMP messages are to be sent to all configured BMP monitoring stations.</p> <p>When configured to <b>false</b>, the command is not used to indicate the stations which can receive BMP messages. The <b>station</b> command (at the same context level) identifies the BMP stations for which BMP messages are to be sent.</p> |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **route-monitoring**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>route-monitoring</b> context  |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>monitor route-monitoring</b> |
| Tree       | <a href="#">route-monitoring</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **post-policy** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow post-policy route-monitoring messages to be sent  |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>monitor route-monitoring post-policy</b> <i>boolean</i> |
| Tree       | <a href="#">post-policy</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **pre-policy** *boolean*

|          |   |
|----------|---|
| Synopsis | Allow pre-policy route-monitoring messages to be sent |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>monitor route-monitoring pre-policy</b> <i>boolean</i> |
| Tree       | <a href="#">pre-policy</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **station** [[station-name](#)] *reference*

|                |   |
|----------------|---|
| Synopsis       | Add a list entry for <b>station</b>   |
| Context        | <b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>monitor station</b> <i>reference</i> |
| Tree           | <a href="#">station</a>   |
| Max. Instances | 8   |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

### **[station-name]** *reference*

|            |   |
|------------|---|
| Synopsis   | BMP monitoring station  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>monitor station</b> <i>reference</i> |
| Tree       | <a href="#">station</a>   |
| Reference  | <b>configure bmp station</b> <i>string</i>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **multihop** *number*

|          |   |
|----------|---|
| Synopsis | TTL in IP packet headers for EBGP peers multi-hops away   |
| Context  | <b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>multihop</b> <i>number</i> |
| Tree     | <a href="#">multihop</a>  |
| Range    | 1 to 255  |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **multipath-eligible** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow routes from this peer in multipath eligibility   |
| Context    | <b>configure</b> <b>service vpn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>multipath-eligible</b> <i>boolean</i> |
| Tree       | <a href="#">multipath-eligible</a>   |
| Introduced | 19.5.R1  |
| Platforms  | All  |

### **next-hop-self** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Advertise routes with local address as next-hop address  |
| Context     | <b>configure</b> <b>service vpn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>next-hop-self</b> <i>boolean</i>  |
| Tree        | <a href="#">next-hop-self</a>  |
| Description | <p>When configured to <b>true</b>, this command configures BGP to advertise routes to members of a group using a local address of the BGP instance as the BGP next-hop address.</p> <p>Note that this command is set without exception, regardless of the route source (EBGP or IBGP) or its family. When used with VPN-IPv4 and VPN-IPv6 routes, the <b>configure router bgp rr-vpn-forwarding</b> command should also be configured.</p> <p>When unconfigured, the command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, protocol standard behavior is applied to determine whether to set <b>next-hop-self</b> in advertised routes.</p> |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **origin-validation**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>origin-validation</b> context  |
| Context    | <b>configure</b> <b>service vpn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>origin-validation</b> |
| Tree       | <a href="#">origin-validation</a>  |
| Introduced | 19.7.R1  |
| Platforms  | All  |

### **ipv4** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable/disable family type ipv4.  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>origin-validation</b> <b>ipv4</b> <i>boolean</i> |
| Tree       | <a href="#">ipv4</a>  |
| Default    | false   |
| Introduced | 19.7.R1   |
| Platforms  | All   |

### **ipv6** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable support for unlabeled unicast IPv6 routes  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>origin-validation</b> <b>ipv6</b> <i>boolean</i> |
| Tree       | <a href="#">ipv6</a>  |
| Default    | false   |
| Introduced | 19.7.R1   |
| Platforms  | All   |

### **label-ipv4** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable support for labeled-unicast IPv4 routes  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>origin-validation</b> <b>label-ipv4</b> <i>boolean</i> |
| Tree       | <a href="#">label-ipv4</a>  |
| Default    | false   |
| Introduced | 19.7.R1   |
| Platforms  | All   |

### **passive** *boolean*

|          |   |
|----------|---|
| Synopsis | Use passive mode for BGP communication  |
| Context  | <b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>passive</b> <i>boolean</i> |
| Tree     | <a href="#">passive</a>   |



|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **path-mtu-discovery** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Enable path MTU discovery   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>path-mtu-discovery</b> <i>boolean</i>  |
| Tree        | <a href="#">path-mtu-discovery</a>  |
| Description | <p>When configured to <b>true</b>, Path MTU Discovery (PMTUD) is enabled for the associated TCP connections.</p> <p>When set to <b>true</b>, PMTUD is activated toward an IPv4 BGP neighbor and the Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, this device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value so that the IP MTU constraint can be accommodated.</p> <p>When PMTUD is configured to <b>false</b> and there is no TCP MSS configuration that can be associated with a BGP neighbor (in either the BGP configuration or the first hop IP interface configuration), the router advertises a value of only 1024 bytes as the TCP MSS option value, limiting received TCP segments to that size.</p> |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **peer-as** *number*

|             |   |
|-------------|---|
| Synopsis    | Peer AS number  |
| Context     | <b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>peer-as</b> <i>number</i>  |
| Tree        | <a href="#">peer-as</a>   |
| Description | <p>This command configures the autonomous system number for the peer. The peer AS number must be configured for each configured peer.</p> <p>For EBGP peers, the peer AS number configured must be different from the autonomous system number configured for this router under the global level since the peer will be in a different autonomous system than this router.</p> <p>For IBGP peers, the peer AS number must be the same as the autonomous system number of this router configured under the global level.</p> |
| Range       | 1 to 4294967295   |
| Introduced  | 16.0.R1   |

Platforms All

### **peer-creation-type** *keyword*

Synopsis Peer creation type

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **peer-creation-type** *keyword*

Tree [peer-creation-type](#)

Options static, dynamic, dynamic-if-remote, dynamic-if-local

Default static

Introduced 16.0.R1

Platforms All

### **peer-ip-tracking** *boolean*

Synopsis Enable BGP peer tracking

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **peer-ip-tracking** *boolean*

Tree [peer-ip-tracking](#)

Description When configured to **true**, this command enables BGP peer tracking.

Peer tracking should be used with caution. Peer tracking can tear a session down even if the loss of connectivity turns out to be short-lived (for example, while the IGP protocol is re-converging). Next-hop tracking, which is always enabled, handles temporary connectivity issues more effectively.

When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, peer tracking is disabled.

Introduced 16.0.R1

Platforms All

### **preference** *number*

Synopsis Route preference for routes learned from all peers

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **preference** *number*

Tree [preference](#)

Description This command configures the route preference for routes learned from the configured peers.

The lower the preference value, the higher the chance of the route being the active route. The router assigns BGP routes the highest default preference as compared to routes that are direct, static or learned via MPLS or OSPF.

When unconfigured, the command setting is inherited from the group-level configuration.

|            |          |
|------------|----------|
| Range      | 1 to 255 |
| Introduced | 16.0.R1  |
| Platforms  | All      |

### **prefix-limit** [*family*] *keyword*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>prefix-limit</b> list instance  |
| Context    | <b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>prefix-limit keyword</b> |
| Tree       | <a href="#">prefix-limit</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **[family]** *keyword*

|            |  |
|------------|--|
| Synopsis   | Address family to which the limit applies  |
| Context    | <b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>prefix-limit keyword</b> |
| Tree       | <a href="#">prefix-limit</a>   |
| Options    | ipv4, ipv6, mcast-ipv4, flow-ipv4, flow-ipv6, mcast-ipv6, label-ipv4   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **idle-timeout** *number*

|             |   |
|-------------|---|
| Synopsis    | Time which BGP peering remains idle before reconnecting   |
| Context     | <b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>prefix-limit keyword idle-timeout number</b>  |
| Tree        | <a href="#">idle-timeout</a>  |
| Description | This command defines the idle time after an administrative take-down before BGP re-establishes a session and reconnects to a peer.<br>When unconfigured, the command inherits the value from the group-level configuration. |

|            |           |
|------------|-----------|
| Range      | 1 to 1024 |
| Introduced | 16.0.R1   |
| Platforms  | All       |

**log-only** *boolean*

|            |  |
|------------|--|
| Synopsis   | Send warning message at threshold instead of take-down   |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>prefix-limit</b> <i>keyword</i> <b>log-only</b> <i>boolean</i> |
| Tree       | <b>log-only</b>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**maximum** *number*

|             |  |
|-------------|--|
| Synopsis    | Maximum number of routes to be learned from a peer   |
| Context     | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>prefix-limit</b> <i>keyword</i> <b>maximum</b> <i>number</i> |
| Tree        | <b>maximum</b>   |
| Description | This command configures the maximum number of BGP routes than can be received from a peer before administrative action is taken.   |
| Range       | 1 to 4294967295  |
| Notes       | This element is mandatory.   |
| Introduced  | 16.0.R2  |
| Platforms   | All  |

**post-import** *boolean*

|            |   |
|------------|---|
| Synopsis   | Apply limit only to routes accepted by import policies  |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>prefix-limit</b> <i>keyword</i> <b>post-import</b> <i>boolean</i> |
| Tree       | <b>post-import</b>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**threshold** *number*

|            |   |
|------------|---|
| Synopsis   | Percentage threshold that triggers a warning message  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>prefix-limit</b> <i>keyword</i> <b>threshold</b> <i>number</i> |
| Tree       | <b>threshold</b>  |
| Range      | 1 to 100  |
| Default    | 90  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**remove-private**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>remove-private</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>remove-private</b> |
| Tree       | <b>remove-private</b>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**limited** *boolean*

|            |  |
|------------|--|
| Synopsis   | Remove private ASNs up to first public ASN encountered   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>remove-private limited</b> <i>boolean</i> |
| Tree       | <b>limited</b>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**replace** *boolean*

|          |  |
|----------|--|
| Synopsis | Replace private ASN with global ASN before advertising   |
| Context  | <b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>remove-private replace</b> <i>boolean</i> |
| Tree     | <b>replace</b>   |

|            |          |
|------------|----------|
| Default    | false    |
| Introduced | 19.10.R1 |
| Platforms  | All      |

### **skip-peer-as** *boolean*

|            |   |
|------------|---|
| Synopsis   | Keep private ASN if it is the same as the BGP peer ASN  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>remove-private skip-peer-as</b> <i>boolean</i> |
| Tree       | <a href="#">skip-peer-as</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **send-communities**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>send-communities</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>send-communities</b> |
| Tree       | <a href="#">send-communities</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **extended** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Advertise the Extended Communities attribute to peers   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>send-communities extended</b> <i>boolean</i>   |
| Tree        | <a href="#">extended</a>  |
| Description | <p>When unconfigured, this command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>true</b>.</p> <p>When this command inherits a value of <b>true</b>, BGP extended communities are sent to peers in the Extended Communities attribute.</p> <p>When configured to <b>false</b>, all extended communities are removed from all routes advertised to BGP peers.</p> |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**large** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Advertise the Large Communities attribute to peers   |
| Context     | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>send-communities large</b> <i>boolean</i>  |
| Tree        | <b>large</b>   |
| Description | <p>When unconfigured, this command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>true</b>.</p> <p>When this command inherits a value of <b>true</b>, BGP large communities are sent to peers in the Large Communities attribute.</p> <p>When configured to <b>false</b>, all large communities are removed from all routes advertised to BGP peers.</p> |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**standard** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Advertise the Communities attribute to peers   |
| Context     | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>send-communities standard</b> <i>boolean</i>   |
| Tree        | <b>standard</b>  |
| Description | <p>When unconfigured, this command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>true</b>.</p> <p>When this command inherits a value of <b>true</b>, BGP standard communities are sent to peers in the Communities attribute.</p> <p>When configured to <b>false</b>, all standard communities are removed from all routes advertised to BGP peers.</p> |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**send-default**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>send-default</b> context   |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>send-default</b> |
| Tree       | <b>send-default</b>  |
| Introduced | 19.7.R1  |
| Platforms  | All  |

### **export-policy** *reference*

|            |  |
|------------|--|
| Synopsis   | Export policy name   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">send-default</a> <a href="#">export-policy</a> <i>reference</i> |
| Tree       | <a href="#">export-policy</a>  |
| Reference  | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>   |
| Introduced | 19.7.R1  |
| Platforms  | All  |

### **ipv4** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable IPv4 family type   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">send-default</a> <a href="#">ipv4</a> <i>boolean</i> |
| Tree       | <a href="#">ipv4</a>  |
| Default    | false   |
| Introduced | 19.7.R1   |
| Platforms  | All   |

### **ipv6** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable IPv6 family type   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">send-default</a> <a href="#">ipv6</a> <i>boolean</i> |
| Tree       | <a href="#">ipv6</a>  |
| Default    | false   |
| Introduced | 19.7.R1   |
| Platforms  | All   |

### **split-horizon** *boolean*

|          |   |
|----------|---|
| Synopsis | Prevent routes being reflected back to best-route peer  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">split-horizon</a> <i>boolean</i> |
| Tree     | <a href="#">split-horizon</a>   |



|             |  |
|-------------|--|
| Description | <p>When configured to <b>true</b>, this command enables the use of split-horizon.</p> <p>This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGP and IBGP.</p> <p>Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary.</p> <p>When unconfigured, the command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, the use of split-horizon is disabled.</p> |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **tcp-mss** (*number* | *keyword*)

|             |   |
|-------------|---|
| Synopsis    | TCP maximum segment size override   |
| Context     | <b>configure</b> <i>service vprn string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>tcp-mss</b> ( <i>number</i>   <i>keyword</i> )   |
| Tree        | <a href="#">tcp-mss</a>   |
| Description | <p>This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command).</p> <p>The configured value controls two properties of the TCP connection as follows:</p> <p>TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router.</p> <p>TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.</p> |
| Range       | 384 to 9746   |
| Options     | ip-stack  |
| Introduced  | 21.2.R1   |
| Platforms   | All   |

### **third-party-nexthop** *boolean*

|          |   |
|----------|---|
| Synopsis | Apply third-party next-hop processing to EBGP peers   |
| Context  | <b>configure</b> <i>service vprn string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>third-party-nexthop</b> <i>boolean</i> |
| Tree     | <a href="#">third-party-nexthop</a>   |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **ttl-security** *number*

|             |   |
|-------------|---|
| Synopsis    | Minimum TTL value for an incoming BGP packet  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>ttl-security</b> <i>number</i>  |
| Tree        | <a href="#">ttl-security</a>  |
| Description | This command configures the minimum TTL value that BGP will accept from an incoming packet. A packet with a TTL value less than the minimum configured TTL value is discarded.<br><br>When unconfigured, the command inherits the value of the group-level setting. |
| Range       | 1 to 255  |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **type** *keyword*

|            |   |
|------------|---|
| Synopsis   | BGP peer type   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>type</b> <i>keyword</i> |
| Tree       | <a href="#">type</a>  |
| Options    | no-type, internal, external   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **next-hop-resolution**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>next-hop-resolution</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp next-hop-resolution</a> |
| Tree       | <a href="#">next-hop-resolution</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**policy reference**

|            |  |
|------------|--|
| Synopsis   | Policy that filters routes for BGP next-hop resolution   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp next-hop-resolution</a> <a href="#">policy reference</a> |
| Tree       | <a href="#">policy</a>   |
| Reference  | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>                                       |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**use-bgp-routes** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Use BGP routes to resolve BGP next hops  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp next-hop-resolution</a> <a href="#">use-bgp-routes</a> <i>boolean</i>  |
| Tree        | <a href="#">use-bgp-routes</a>   |
| Description | <p>When configured to <b>true</b>, BGP routes resolve BGP next hops. When this command is enabled, any unlabeled IPv4 or IPv6 BGP route received from a VPRN BGP peer becomes resolvable by up to four other BGP routes in order to resolve the route to a VPRN IP interface. A VPRN BGP route is not resolvable by another VPRN BGP route or by a BGP-VPN route.</p> <p>This command also allows unlabeled IPv4 or IPv6 BGP routes leaked from the GRT with unresolved next hops (in the GRT) to be resolvable by BGP-VPN routes (of the VPRN).</p> <p>When configured to <b>false</b>, BGP next hops are not resolved.</p> |
| Default     | false  |
| Introduced  | 19.10.R1   |
| Platforms   | All  |

**path-mtu-discovery** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Enable Path MTU Discovery  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp path-mtu-discovery</a> <i>boolean</i>  |
| Tree        | <a href="#">path-mtu-discovery</a>   |
| Description | <p>When configured to <b>true</b>, Path MTU Discovery (PMTUD) is enabled for the associated TCP connections.</p> <p>When set to <b>true</b>, PMTUD is activated toward an IPv4 BGP neighbor and the Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, this device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value so that the IP MTU constraint can be accommodated.</p> |

When PMTUD is configured to **false** and there is no TCP MSS configuration that can be associated with a BGP neighbor (in either the BGP configuration or the first hop IP interface configuration), the router advertises a value of only 1024 bytes as the TCP MSS option value, limiting received TCP segments to that size.

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **peer-ip-tracking** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable BGP peer tracking  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp peer-ip-tracking</a> <i>boolean</i> |
| Tree       | <a href="#">peer-ip-tracking</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **peer-tracking-policy** *reference*

|             |  |
|-------------|--|
| Synopsis    | Policy for BGP peer tracking on router instance  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp peer-tracking-policy</a> <i>reference</i>  |
| Tree        | <a href="#">peer-tracking-policy</a>   |
| Description | <p>This command specifies the name of a policy statement to use with the BGP peer-tracking function on BGP sessions where peer tracking is enabled.</p> <p>When unconfigured, the default peer-tracking policy allows any type of route to match the neighbor IP address except aggregate routes and LDP shortcut routes.</p> <p>Peer tracking should be used with caution. The peer-tracking policy should only permit one of direct-interface or direct routes to be advertised to a BGP peer. Advertising both routes causes the best route to oscillate.</p> |
| Reference   | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **preference** *number*

|          |  |
|----------|--|
| Synopsis | Route preference for routes learned from all peers   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp preference</a> <i>number</i> |

|             |  |
|-------------|--|
| Tree        | <a href="#">preference</a>   |
| Description | This command configures the route preference for routes learned from the configured peers.<br><br>The lower the preference value, the higher the chance of the route being the active route. The router assigns BGP routes the highest default preference as compared to routes that are direct, static or learned via MPLS or OSPF. |
| Range       | 1 to 255   |
| Default     | 170  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **rapid-withdrawal** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Send BGP withdrawal UPDATE messages immediately  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp rapid-withdrawal</a> <i>boolean</i>  |
| Tree        | <a href="#">rapid-withdrawal</a>   |
| Description | When configured to <b>true</b> , UPDATE messages containing withdrawn NLRI are sent immediately to a peer without waiting for the MRAI timer to expire. UPDATE messages containing reachable NLRI continue to wait for the MRAI timer to expire, or for a rapid update trigger.<br><br>When configured to <b>false</b> , withdrawal processing continues with the normal behavior. |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **remove-private**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>remove-private</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp remove-private</a> |
| Tree       | <a href="#">remove-private</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **limited** *boolean*

|          |   |
|----------|---|
| Synopsis | Remove private ASNs up to first public ASN encountered  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp remove-private limited</a> <i>boolean</i> |

---

|            |                         |
|------------|-------------------------|
| Tree       | <a href="#">limited</a> |
| Default    | false                   |
| Introduced | 16.0.R1                 |
| Platforms  | All                     |

### **replace** *boolean*

|            |   |
|------------|---|
| Synopsis   | Replace private ASN with global ASN before advertising  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp remove-private</a> <a href="#">replace</a> <i>boolean</i> |
| Tree       | <a href="#">replace</a>   |
| Default    | false   |
| Introduced | 19.10.R1  |
| Platforms  | All   |

### **skip-peer-as** *boolean*

|            |  |
|------------|--|
| Synopsis   | Keep private ASN if AS-PATH contains eBGP peer's ASN   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp remove-private</a> <a href="#">skip-peer-as</a> <i>boolean</i> |
| Tree       | <a href="#">skip-peer-as</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **rib-management**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>rib-management</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp rib-management</a> |
| Tree       | <a href="#">rib-management</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **ipv4**

|          |   |
|----------|---|
| Synopsis | Enter the <b>ipv4</b> context   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp rib-management</a> <a href="#">ipv4</a> |

|            |                      |
|------------|----------------------|
| Tree       | <a href="#">ipv4</a> |
| Introduced | 16.0.R1              |
| Platforms  | All                  |

## leak-import

|            |  |
|------------|--|
| Synopsis   | Enter the <b>leak-import</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp rib-management ipv4 leak-import</a> |
| Tree       | <a href="#">leak-import</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## policy (*policy-expr-string* | *string*)

|                |  |
|----------------|--|
| Synopsis       | Leak import policy name  |
| Context        | <b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp rib-management ipv4 leak-import policy</a> ( <i>policy-expr-string</i>   <i>string</i> )  |
| Tree           | <a href="#">policy</a>   |
| Description    | This command specifies one or more leak import policies.<br><br>Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). |
| String Length  | 1 to 255   |
| Max. Instances | 15   |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

## route-table-import

|            |   |
|------------|---|
| Synopsis   | Enter the <b>route-table-import</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp rib-management ipv4 route-table-import</a> |
| Tree       | <a href="#">route-table-import</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**policy-name** *reference*

|             |   |
|-------------|---|
| Synopsis    | Name of policy that controls route importation into RIB   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp rib-management ipv4 route-table-import policy-name reference</a>  |
| Tree        | <a href="#">policy-name</a>   |
| Description | <p>This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs.</p> <p>When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.</p> <p>Aggregate routes are always imported into each RIB, independent of the specified policy.</p> <p>Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.</p> <p>When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.</p> |
| Reference   | <b>configure</b> <a href="#">policy-options policy-statement</a> <i>string</i>  |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**ipv6**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ipv6</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp rib-management ipv6</a> |
| Tree       | <a href="#">ipv6</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**leak-import**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>leak-import</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp rib-management ipv6 leak-import</a> |
| Tree       | <a href="#">leak-import</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |



**policy** (*policy-expr-string* | *string*)

|                |  |
|----------------|--|
| Synopsis       | Leak import policy name  |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp rib-management</a> <a href="#">ipv6</a> <a href="#">leak-import</a> <a href="#">policy</a> ( <i>policy-expr-string</i>   <i>string</i> )   |
| Tree           | <a href="#">policy</a>   |
| Description    | This command specifies one or more leak import policies.<br><br>Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). |
| String Length  | 1 to 255   |
| Max. Instances | 15   |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

**route-table-import**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>route-table-import</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp rib-management</a> <a href="#">ipv6</a> <a href="#">route-table-import</a> |
| Tree       | <a href="#">route-table-import</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**policy-name** *reference*

|             |   |
|-------------|---|
| Synopsis    | Name of policy that controls route importation into RIB   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp rib-management</a> <a href="#">ipv6</a> <a href="#">route-table-import</a> <a href="#">policy-name</a> <i>reference</i>   |
| Tree        | <a href="#">policy-name</a>   |
| Description | This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs.<br><br>When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used. |

Aggregate routes are always imported into each RIB, independent of the specified policy.

Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.

When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.

|            |  |
|------------|--|
| Reference  | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## label-ipv4

|            |   |
|------------|---|
| Synopsis   | Enter the <b>label-ipv4</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp</a> <a href="#">rib-management</a> <a href="#">label-ipv4</a> |
| Tree       | <a href="#">label-ipv4</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## leak-import

|            |   |
|------------|---|
| Synopsis   | Enter the <b>leak-import</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp</a> <a href="#">rib-management</a> <a href="#">label-ipv4</a> <a href="#">leak-import</a> |
| Tree       | <a href="#">leak-import</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## policy (*policy-expr-string* | *string*)

|               |  |
|---------------|--|
| Synopsis      | Leak import policy name  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp</a> <a href="#">rib-management</a> <a href="#">label-ipv4</a> <a href="#">leak-import</a> <a href="#">policy</a> ( <i>policy-expr-string</i>   <i>string</i> )                               |
| Tree          | <a href="#">policy</a>   |
| Description   | This command specifies one or more leak import policies.<br><br>Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). |
| String Length | 1 to 255   |

|                |                                      |
|----------------|--------------------------------------|
| Max. Instances | 15                                   |
| Notes          | This element is ordered by the user. |
| Introduced     | 16.0.R1                              |
| Platforms      | All                                  |

## route-table-import

|            |   |
|------------|---|
| Synopsis   | Enter the <b>route-table-import</b> context   |
| Context    | <b>configure service vprn string bgp rib-management label-ipv4 route-table-import</b> |
| Tree       | <a href="#">route-table-import</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## policy-name *reference*

|             |   |
|-------------|---|
| Synopsis    | Name of policy that controls route importation into RIB   |
| Context     | <b>configure service vprn string bgp rib-management label-ipv4 route-table-import policy-name <i>reference</i></b>  |
| Tree        | <a href="#">policy-name</a>   |
| Description | <p>This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs.</p> <p>When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.</p> <p>Aggregate routes are always imported into each RIB, independent of the specified policy.</p> <p>Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.</p> <p>When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.</p> |
| Reference   | <b>configure</b> <a href="#">policy-options policy-statement string</a>   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**label-ipv6**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>label-ipv6</b> context                                |
| Context    | <b>configure service vprn string bgp rib-management label-ipv6</b> |
| Tree       | <a href="#">label-ipv6</a>   |
| Introduced | 22.2.R1  |
| Platforms  | All  |

**leak-import**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>leak-import</b> context   |
| Context    | <b>configure service vprn string bgp rib-management label-ipv6 leak-import</b> |
| Tree       | <a href="#">leak-import</a>  |
| Introduced | 22.2.R1  |
| Platforms  | All  |

**policy** (*policy-expr-string* | *string*)

|                |  |
|----------------|--|
| Synopsis       | Leak import policy name  |
| Context        | <b>configure service vprn string bgp rib-management label-ipv6 leak-import policy</b> ( <i>policy-expr-string</i>   <i>string</i> )  |
| Tree           | <a href="#">policy</a>   |
| Description    | This command specifies one or more leak import policies.<br><br>Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). |
| String Length  | 1 to 255   |
| Max. Instances | 15   |
| Notes          | This element is ordered by the user.   |
| Introduced     | 22.2.R1  |
| Platforms      | All  |

**router-id** *string*

|          |   |
|----------|---|
| Synopsis | Router ID for the BGP instance in the AS                  |
| Context  | <b>configure service vprn string bgp router-id string</b> |

---

|             |   |
|-------------|---|
| Tree        | <a href="#">router-id</a>   |
| Description | <p>This command specifies the router ID to be used with the BGP instance.</p> <p>Changing the BGP router ID on an active BGP instance causes the BGP instance to restart with the new router ID.</p> <p>When an SR OS is configured with an IPv6-only BOF and no IPv4 system interface address, explicitly-defined IPv4 router IDs are required for BGP as there is no mechanism to derive the router ID from an IPv6 system interface address.</p> |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **send-communities**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>send-communities</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp send-communities</a> |
| Tree       | <a href="#">send-communities</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **extended *boolean***

|            |  |
|------------|--|
| Synopsis   | Advertise the Extended Communities attribute to peers  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp send-communities extended</a> <i>boolean</i> |
| Tree       | <a href="#">extended</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **large *boolean***

|            |   |
|------------|---|
| Synopsis   | Advertise the Large Communities attribute to peers  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp send-communities large</a> <i>boolean</i> |
| Tree       | <a href="#">large</a>   |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**standard** *boolean*

|            |  |
|------------|--|
| Synopsis   | Advertise the Communities attribute to peers   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp send-communities standard</a> <i>boolean</i> |
| Tree       | <a href="#">standard</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**send-default**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>send-default</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp send-default</a> |
| Tree       | <a href="#">send-default</a>   |
| Introduced | 19.7.R1  |
| Platforms  | All  |

**export-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | Export policy name  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp send-default export-policy</a> <i>reference</i> |
| Tree       | <a href="#">export-policy</a>   |
| Reference  | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>                              |
| Introduced | 19.7.R1   |
| Platforms  | All   |

**ipv4** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable IPv4 family type  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp send-default ipv4</a> <i>boolean</i> |
| Tree       | <a href="#">ipv4</a>   |
| Default    | false  |
| Introduced | 19.7.R1  |
| Platforms  | All  |

**ipv6 *boolean***

|            |  |
|------------|--|
| Synopsis   | Enable IPv6 family type  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp</a> <a href="#">send-default</a> <a href="#">ipv6</a> <i>boolean</i> |
| Tree       | <a href="#">ipv6</a>   |
| Default    | false  |
| Introduced | 19.7.R1  |
| Platforms  | All  |

**split-horizon *boolean***

|             |   |
|-------------|---|
| Synopsis    | Prevent routes being reflected back to best-route peer  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp</a> <a href="#">split-horizon</a> <i>boolean</i>  |
| Tree        | <a href="#">split-horizon</a>   |
| Description | <p>When configured to <b>true</b>, this command enables the use of split-horizon.</p> <p>This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGP and IBGP.</p> <p>Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary.</p> <p>When configured to <b>false</b>, the use of split-horizon is disabled.</p> |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**tcp-mss *number***

|             |  |
|-------------|--|
| Synopsis    | TCP maximum segment size override  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp</a> <a href="#">tcp-mss</a> <i>number</i>  |
| Tree        | <a href="#">tcp-mss</a>  |
| Description | <p>This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command).</p> <p>The configured value controls two properties of the TCP connection as follows:</p> <p>TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router.</p> |

TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.

|            |             |
|------------|-------------|
| Range      | 384 to 9746 |
| Introduced | 21.2.R1     |
| Platforms  | All         |

### **third-party-nexthop** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Apply third-party next-hop processing to EBGP peers   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp third-party-nexthop</a> <i>boolean</i>  |
| Tree        | <a href="#">third-party-nexthop</a>   |
| Description | <p>When configured to <b>true</b>, this command enables the router to send third-party next hop to EBGP peers in the same subnet as the source peer. The address family of the transport must match the address family of the route.</p> <p>When an IPv4 or IPv6 route is received from one EBGP peer and advertised to another EBGP peer in the same IP subnet, the BGP next hop is left unchanged.</p> <p>When configured to <b>false</b>, third-party next-hop processing is disabled and the next hop carries the IP address of the interface used to establish the TCP connection to the peer.</p> |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **bgp-evpn**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>bgp-evpn</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-evpn</a> |
| Tree       | <a href="#">bgp-evpn</a>   |
| Introduced | 20.10.R1   |
| Platforms  | All  |

### **mpls** [[bgp-instance](#)] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mpls</b> list instance   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-evpn mpls</a> <i>number</i> |
| Tree       | <a href="#">mpls</a>  |
| Introduced | 20.10.R1  |



Platforms All

### **[bgp-instance] number**

Synopsis BGP instance ID  
 Context **configure service vprn string bgp-evpn mpls number**  
 Tree [mpls](#)  
 Range 1  
 Notes This element is part of a list key.  
 Introduced 20.10.R1  
 Platforms All

### **admin-state keyword**

Synopsis Administrative state of BGP-EVPN MPLS  
 Context **configure service vprn string bgp-evpn mpls number admin-state keyword**  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 20.10.R1  
 Platforms All

### **auto-bind-tunnel**

Synopsis Enter the **auto-bind-tunnel** context  
 Context **configure service vprn string bgp-evpn mpls number auto-bind-tunnel**  
 Tree [auto-bind-tunnel](#)  
 Description Commands in this context configure the automatic binding parameters of a BGP-EVPN service using tunnels to MP-BGP peers.  
 Introduced 20.10.R1  
 Platforms All

### **allow-flex-algo-fallback boolean**

Synopsis Enable flexible algorithm fallback

|             |  |
|-------------|--|
| Context     | <b>configure service vprn</b> <i>string</i> <b>bgp-evpn mpls</b> <i>number</i> <b>auto-bind-tunnel allow-flex-algo-fallback</b> <i>boolean</i>   |
| Tree        | <a href="#">allow-flex-algo-fallback</a>   |
| Description | When configured to <b>true</b> , a BGP router with a Flex-Algorithm action configured (via the <b>configure policy-options policy-statement entry action flex-algo</b> command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available.<br>When configured to <b>false</b> , the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available. |
| Default     | false  |
| Introduced  | 20.10.R3   |
| Platforms   | All  |

### **ecmp** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum ECMP routes allowed   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp-evpn mpls</b> <i>number</i> <b>auto-bind-tunnel ecmp</b> <i>number</i> |
| Tree       | <a href="#">ecmp</a>  |
| Range      | 1 to 32   |
| Default    | 1   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

### **enforce-strict-tunnel-tagging** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow enforcement of strict tunnel tagging  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp-evpn mpls</b> <i>number</i> <b>auto-bind-tunnel enforce-strict-tunnel-tagging</b> <i>boolean</i> |
| Tree       | <a href="#">enforce-strict-tunnel-tagging</a>   |
| Default    | false   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

### **resolution** *keyword*

|          |  |
|----------|--|
| Synopsis | Resolution method for tunnel selection |
|----------|--|

|            |   |
|------------|---|
| Context    | <b>configure service vprn string bgp-evpn mpls number auto-bind-tunnel resolution keyword</b> |
| Tree       | <a href="#">resolution</a>  |
| Options    | none, filter, any   |
| Default    | none  |
| Introduced | 20.10.R1  |
| Platforms  | All   |

### resolution-filter

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>resolution-filter</b> context  |
| Context     | <b>configure service vprn string bgp-evpn mpls number auto-bind-tunnel resolution-filter</b>  |
| Tree        | <a href="#">resolution-filter</a>   |
| Description | Commands in this context configure the subset of tunnel types that can be used in the resolution of BGP-EVPN routes within the automatic binding of the BGP-EVPN MPLS service to tunnels to MP-BGP peers. |
| Introduced  | 20.10.R1  |
| Platforms   | All   |

### bgp boolean

|             |   |
|-------------|---|
| Synopsis    | Use BGP tunneling for next-hop resolution   |
| Context     | <b>configure service vprn string bgp-evpn mpls number auto-bind-tunnel resolution-filter bgp boolean</b>  |
| Tree        | <a href="#">bgp</a>   |
| Description | When configured to <b>true</b> , BGP searches the BGP LSP for the address of the BGP next hop.<br><br>When configured to <b>false</b> , BGP tunneling is not used and inter-area or inter-as prefixes are not resolved. |
| Default     | false   |
| Introduced  | 20.10.R1  |
| Platforms   | All   |

### ldp boolean

|          |   |
|----------|---|
| Synopsis | Use LDP tunneling for next-hop resolution |
|----------|---|

|             |  |
|-------------|--|
| Context     | <b>configure service vprn string bgp-evpn mpls number auto-bind-tunnel resolution-filter ldp boolean</b>   |
| Tree        | <b>ldp</b>   |
| Description | When configured to <b>true</b> , BGP searches for an LDP LSP with a FEC prefix corresponding to the address of the BGP next hop.<br>When configured to <b>false</b> , LDP tunneling is not used for next-hop resolution. |
| Default     | false  |
| Introduced  | 20.10.R1   |
| Platforms   | All  |

### **mpls-fwd-policy boolean**

|             |   |
|-------------|---|
| Synopsis    | Use MPLS forwarding policy for next-hop resolution  |
| Context     | <b>configure service vprn string bgp-evpn mpls number auto-bind-tunnel resolution-filter mpls-fwd-policy boolean</b>  |
| Tree        | <b>mpls-fwd-policy</b>  |
| Description | When configured to <b>true</b> , BGP uses the MPLS forwarding policy to determine the address of the BGP next hop.<br>When configured to <b>false</b> , the MPLS forwarding policy is not used for next-hop resolution. |
| Default     | false   |
| Introduced  | 20.10.R1  |
| Platforms   | All   |

### **rib-api boolean**

|             |   |
|-------------|---|
| Synopsis    | Use RIB API gRPC service for next-hop resolution  |
| Context     | <b>configure service vprn string bgp-evpn mpls number auto-bind-tunnel resolution-filter rib-api boolean</b>  |
| Tree        | <b>rib-api</b>  |
| Description | When configured to <b>true</b> , BGP uses tunnels programmed using the RIB API gRPC service to resolve the next hops of routes imported into the EVPN service.<br>When configured to <b>false</b> , the RIB API service tunnels are not used for next-hop resolution. |
| Default     | false   |
| Introduced  | 20.10.R1  |
| Platforms   | All   |

**rsvp boolean**

|             |  |
|-------------|--|
| Synopsis    | Use RSVP tunneling for next-hop resolution   |
| Context     | <b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">auto-bind-tunnel resolution-filter</a> <a href="#">rsvp boolean</a>  |
| Tree        | <a href="#">rsvp</a>   |
| Description | <p>When configured to <b>true</b>, BGP searches the best metric RSVP LSP to determine the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface used by the BGP instance on the remote node. The LSP metric is provided by MPLS in the tunnel table. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID.</p> <p>When configured to <b>false</b>, the RSVP LSP is not used for next-hop resolution.</p> |
| Default     | false  |
| Introduced  | 20.10.R1   |
| Platforms   | All  |

**sr-isis boolean**

|             |  |
|-------------|--|
| Synopsis    | Use IS-IS SR tunneling for next-hop resolution   |
| Context     | <b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">auto-bind-tunnel resolution-filter</a> <a href="#">sr-isis boolean</a>   |
| Tree        | <a href="#">sr-isis</a>  |
| Description | <p>When configured to <b>true</b>, BGP uses an IS-IS tunnel type to determine the address of the BGP next hop.</p> <p>The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered IS-IS instance.</p> <p>When configured to <b>false</b>, IS-IS tunneling is not used for next-hop resolution.</p> |
| Default     | false  |
| Introduced  | 20.10.R1   |
| Platforms   | All  |

**sr-ospf boolean**

|          |  |
|----------|--|
| Synopsis | Use OSPF SR tunneling for next-hop resolution  |
| Context  | <b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">auto-bind-tunnel resolution-filter</a> <a href="#">sr-ospf boolean</a> |
| Tree     | <a href="#">sr-ospf</a>  |

|             |  |
|-------------|--|
| Description | When configured to <b>true</b> , BGP uses an OSPF tunnel type to determine the address of the BGP next hop.<br>The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OSPF instance.<br>When configured to <b>false</b> , OSPF tunneling is not used for next-hop resolution. |
| Default     | false  |
| Introduced  | 20.10.R1   |
| Platforms   | All  |

### **sr-ospf3** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Use OSPFv3 SR tunneling for next-hop resolution   |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>bgp-evpn</b> <b>mpls</b> <i>number</i> <b>auto-bind-tunnel</b> <b>resolution-filter</b> <b>sr-ospf3</b> <i>boolean</i>   |
| Tree        | <b>sr-ospf3</b>   |
| Description | When configured to <b>true</b> , BGP uses an OSPF3 tunnel type to determine the address of the BGP next hop.<br>The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OSPF3 instance.<br>When configured to <b>false</b> , OSPF3 tunneling is not used for next-hop resolution. |
| Default     | false   |
| Introduced  | 20.10.R1  |
| Platforms   | All   |

### **sr-policy** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Use SR policies for next-hop resolution  |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>bgp-evpn</b> <b>mpls</b> <i>number</i> <b>auto-bind-tunnel</b> <b>resolution-filter</b> <b>sr-policy</b> <i>boolean</i>   |
| Tree        | <b>sr-policy</b>   |
| Description | When configured to <b>true</b> , this command instructs BGP to use an SR policy to determine the address of the BGP next hop. The SR policy search criteria includes a non-null endpoint and color value that matches the BGP next hop and color extended community value, respectively, of the EVPN route.<br>When configured to <b>false</b> , SR policies are not used for next-hop resolution. |
| Default     | false  |
| Introduced  | 20.10.R1   |

Platforms All

### **sr-te** *boolean*

Synopsis Use SR-TE tunneling for next-hop resolution

Context **configure** *service vprn string bgp-evpn mpls number auto-bind-tunnel resolution-filter sr-te boolean*

Tree [sr-te](#)

Description When configured to **true**, BGP uses an SR-TE tunnel type to determine the address of the BGP next hop.  
The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered tunnel ID.  
When configured to **false**, SR-TE tunneling is not used for next-hop resolution.

Default false

Introduced 20.10.R1

Platforms All

### **udp** *boolean*

Synopsis Use MPLS over UDP tunneling for next-hop resolution

Context **configure** *service vprn string bgp-evpn mpls number auto-bind-tunnel resolution-filter udp boolean*

Tree [udp](#)

Description When configured to **true**, BGP uses an MPLS over UDP tunnel type to determine the address of the BGP next hop.  
When configured to **false**, MPLS over UDP tunneling is not used for next-hop resolution.

Default false

Introduced 20.10.R1

Platforms All

### **default-route-tag** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Default route tag

|             |  |
|-------------|--|
| Context     | <b>configure service vprn string bgp-evpn mpls number default-route-tag string</b>   |
| Tree        | <b>default-route-tag</b>   |
| Description | <p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p> <p>The following are examples of the conflict priority handling:</p> <ul style="list-style-type: none"> <li>• If a service is configured with both <b>default-route-tag X</b> and <b>proxy-arp evpn-route-tag Y</b>, the EVPN uses route tag Y when sending EVPN proxy-arp routes to the BGP RIB for advertisement.</li> <li>• If a given IP-prefix route is tagged in the route-table with tag A and the R-VPLS, in which the route is advertised, uses B as the <b>default-route-tag</b>, then EVPN keeps tag A when sending the route to the BGP RIB.</li> </ul> <p>The <b>default-route-tag</b> configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.</p> |
| Introduced  | 20.10.R1   |
| Platforms   | All  |

## domain-id string



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Domain ID of received BGP route before readvertisement  |
| Context     | <b>configure service vprn string bgp-evpn mpls number domain-id string</b>  |
| Tree        | <b>domain-id</b>  |
| Description | <p>This command specifies the domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as domain-id:isf_safi_type in the D-PATH attribute, as described in <i>draft-ietf-bess-evpn-ipvpn-interworking</i>. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances).</p> <p>Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).</p> <p>In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N:</p> |



Seg Len=1 / 65000:1:128

If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows:

Seg Len=2 / 65000:2:70 / 65000:1:128

That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.

|            |          |
|------------|----------|
| Introduced | 21.10.R1 |
| Platforms  | All      |

### **dynamic-egress-label-limit** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Enables dynamic egress label limit  |
| Context     | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp-evpn mpls</b> <i>number</i> <b>dynamic-egress-label-limit</b> <i>boolean</i>  |
| Tree        | <a href="#">dynamic-egress-label-limit</a>  |
| Description | <p>When configured to <b>true</b>, this command relaxes the egress MPLS label limit check when resolving BGP next hops in the tunnel table.</p> <p>For VPRN services, the OAM label is never computed and, therefore, one more egress label is allowed.</p> <p>For EVPN (Epipe and VPLS) services, the system only computes the control word and ESI label if they are used. For the control word, the system reduces the egress label limit by one label if the control word is configured in the service. When configured, the ESI label is not counted for Epipes or VPLS services without an ES.</p> <p>When configured to <b>false</b> this command, for EVPN, Epipe, and VPLS services, always accounts for the ESI label and control word.</p> |
| Default     | false   |
| Introduced  | 22.2.R1   |
| Platforms   | All   |

### **evi** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | EVPN instance ID   |
| Context  | <b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp-evpn mpls</b> <i>number</i> <b>evi</b> <i>number</i> |
| Tree     | <a href="#">evi</a>  |

|             |   |
|-------------|---|
| Description | This command configures the EVI that identifies the BGP EVPN instance in a VPRN (for the EVPN-IFL model) that is associated with the Layer 3 Ethernet segment. This configuration is required on the PEs attached to the Ethernet segment and on the remote PEs that need to create ES destinations to the MH Layer 3 Ethernet segment. |
| Range       | 1 to 16777215   |
| Introduced  | 22.10.R1  |
| Platforms   | All   |

### evpn-link-bandwidth

|            |   |
|------------|---|
| Synopsis   | Enter the <b>evpn-link-bandwidth</b> context                                  |
| Context    | <b>configure service vprn string bgp-evpn mpls number evpn-link-bandwidth</b> |
| Tree       | <a href="#">evpn-link-bandwidth</a>   |
| Introduced | 22.7.R1   |
| Platforms  | All   |

### advertise

|            |   |
|------------|---|
| Synopsis   | Enable the <b>advertise</b> context   |
| Context    | <b>configure service vprn string bgp-evpn mpls number evpn-link-bandwidth advertise</b> |
| Tree       | <a href="#">advertise</a>   |
| Introduced | 22.7.R1   |
| Platforms  | All   |

### max-dynamic-weight *number*

|             |   |
|-------------|---|
| Synopsis    | Maximum dynamic weight of the route   |
| Context     | <b>configure service vprn string bgp-evpn mpls number evpn-link-bandwidth advertise max-dynamic-weight number</b>   |
| Tree        | <a href="#">max-dynamic-weight</a>  |
| Description | This command configures the maximum weight advertised in the EVPN link bandwidth extended community for the advertised EVPN IP-Prefix routes for the service. If weight dynamic is configured, the actual advertised weight is the minimum of the number of BGP PE-CE paths for the prefix and the configured maximum weight. |
| Range       | 1 to 128  |
| Default     | 128   |
| Introduced  | 22.7.R1   |

Platforms All

### **weight** (*number* | *keyword*)

Synopsis Weight of the route

Context **configure service vprn** *string* **bgp-evpn mpls** *number* **evpn-link-bandwidth advertise weight** (*number* | *keyword*)

Tree **weight**

Description This command configures the weight advertised in the EVPN link bandwidth extended community for the advertised EVPN IP-Prefix routes for the service.

If set to **dynamic**, the weight is dynamically set based on the number of BGP PE-CE paths for the IP-Prefix that is advertised in an EVPN IP-Prefix route.

Range 1 to 128

Options dynamic

Default dynamic

Introduced 22.7.R1

Platforms All

### **weighted-ecmp** *boolean*

Synopsis Enable weighted ECMP

Context **configure service vprn** *string* **bgp-evpn mpls** *number* **evpn-link-bandwidth weighted-ecmp** *boolean*

Tree **weighted-ecmp**

Description When configured to **true**, the router supports the processing of the EVPN link bandwidth extended community when installing an ECMP set for an EVPN IP-Prefix route in the VPRN route table.

Flows to an IP Prefix received with a weight and a zero ESI value are sprayed according to the weight. If the EVPN IP-Prefix route received with the weight has a non-zero ESI, the weight is divided into the number of PEs attached to the Ethernet Segment (and rounded up if the result is not an integer).

The command also enables the weighted ECMP functionality for BGP CEs that are configured with an **evpn-link-bandwidth add-to-received-bgp** weight.

When configured to **false**, the router disables the processing of the EVPN link bandwidth extended community.

Default false

Introduced 22.7.R1

Platforms All

**route-distinguisher** (*string* | *keyword*)

|             |   |
|-------------|---|
| Synopsis    | Route distinguisher   |
| Context     | <b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">bgp-evpn mpls</a> <i>number</i> <a href="#">route-distinguisher</a> ( <i>string</i>   <i>keyword</i> ) |
| Tree        | <a href="#">route-distinguisher</a>   |
| Description | This command specifies a unique route distinguisher (RD) to be associated with each routing instance to identify which VPN the route belongs to.                              |
| Options     | auto-rd   |
| Introduced  | 20.10.R1  |
| Platforms   | All   |

**send-tunnel-encap**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>send-tunnel-encap</b> context   |
| Context    | <b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">bgp-evpn mpls</a> <i>number</i> <a href="#">send-tunnel-encap</a> |
| Tree       | <a href="#">send-tunnel-encap</a>  |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**mpls** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enable MPLS encapsulation  |
| Context    | <b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">bgp-evpn mpls</a> <i>number</i> <a href="#">send-tunnel-encap mpls</a> <i>boolean</i> |
| Tree       | <a href="#">mpls</a>   |
| Default    | true   |
| Introduced | 20.10.R1   |
| Platforms  | All  |

## mpls-over-udp *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enable MPLS over UDP encapsulation  |
| Context    | <b>configure service vprn string bgp-evpn mpls number send-tunnel-encap mpls-over-udp boolean</b> |
| Tree       | <a href="#">mpls-over-udp</a>   |
| Default    | false   |
| Introduced | 20.10.R1  |
| Platforms  | All   |

## vrf-export

|            |  |
|------------|--|
| Synopsis   | Enable the <b>vrf-export</b> context                                 |
| Context    | <b>configure service vprn string bgp-evpn mpls number vrf-export</b> |
| Tree       | <a href="#">vrf-export</a>   |
| Introduced | 20.10.R1   |
| Platforms  | All  |

## policy (*policy-expr-string* | *string*)

|             |  |
|-------------|--|
| Synopsis    | Policy name  |
| Context     | <b>configure service vprn string bgp-evpn mpls number vrf-export policy (<i>policy-expr-string</i>   <i>string</i>)</b>  |
| Tree        | <a href="#">policy</a>   |
| Description | <p>This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).</p> <p>Each referenced object is either a policy logical expression or the name of a single policy.</p> <p>Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.</p> <p>Only the first policy can have the maximum length and the rest can be up to 64 characters.</p> <p>Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.</p> |

|                |                                      |
|----------------|--------------------------------------|
| String Length  | 1 to 255                             |
| Max. Instances | 15                                   |
| Min. Instances | 1                                    |
| Notes          | This element is ordered by the user. |
| Introduced     | 20.10.R1                             |
| Platforms      | All                                  |

## vrf-import

|            |  |
|------------|--|
| Synopsis   | Enable the <b>vrf-import</b> context                                 |
| Context    | <b>configure service vprn string bgp-evpn mpls number vrf-import</b> |
| Tree       | <a href="#">vrf-import</a>   |
| Introduced | 20.10.R1   |
| Platforms  | All  |

## policy (*policy-expr-string* | *string*)

|                |  |
|----------------|--|
| Synopsis       | Policy name  |
| Context        | <b>configure service vprn string bgp-evpn mpls number vrf-import policy (<i>policy-expr-string</i>   <i>string</i>)</b>  |
| Tree           | <a href="#">policy</a>   |
| Description    | <p>This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).</p> <p>Each referenced object is either a policy logical expression or the name of a single policy.</p> <p>Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.</p> <p>Only the first policy can have the maximum length and the rest can be up to 64 characters.</p> <p>Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.</p> |
| String Length  | 1 to 255   |
| Max. Instances | 15   |

|                |                                      |
|----------------|--------------------------------------|
| Min. Instances | 1                                    |
| Notes          | This element is ordered by the user. |
| Introduced     | 20.10.R1                             |
| Platforms      | All                                  |

## vrf-target

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>vrf-target</b> context   |
| Context     | <b>configure service vprn string bgp-evpn mpls number vrf-target</b>  |
| Tree        | <a href="#">vrf-target</a>  |
| Description | <p>Commands in this context configure the route target that is added to advertised routes or compared against received routes from other VRFs on the same or remote PE routers (via MP-BGP).</p> <p>BGP-VPN and EVPN-IFL routes imported using a VRF target configuration use the BGP preference value of 170 when imported from remote PE routers, or retain the protocol preference value of the exported route when imported from other VRFs in the same router.</p> <p>Configured VRF import or export policies override the VRF target policy.</p> |
| Introduced  | 20.10.R1  |
| Platforms   | All   |

## community *string*

|               |  |
|---------------|--|
| Synopsis      | Extended BGP community   |
| Context       | <b>configure service vprn string bgp-evpn mpls number vrf-target community string</b>  |
| Tree          | <a href="#">community</a>  |
| Description   | This command configures an extended BGP community in the form type:x:y. Type can only be target and x and y are 16-bit integers. |
| String Length | 10 to 28   |
| Notes         | The following elements are part of a choice: <b>community</b> or ( <b>export-community</b> and <b>import-community</b> ).        |
| Introduced    | 20.10.R1   |
| Platforms     | All  |

**export-community** *string*

|               |   |
|---------------|---|
| Synopsis      | Communities sent to remote PE neighbors   |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-evpn mpls</a> <i>number</i> <a href="#">vrf-target</a> <a href="#">export-community</a> <i>string</i> |
| Tree          | <a href="#">export-community</a>  |
| String Length | 10 to 28  |
| Notes         | The following elements are part of a choice: <b>community</b> or ( <b>export-community</b> and <b>import-community</b> ).   |
| Introduced    | 20.10.R1  |
| Platforms     | All   |

**import-community** *string*

|               |   |
|---------------|---|
| Synopsis      | Communities accepted from remote PE neighbors   |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-evpn mpls</a> <i>number</i> <a href="#">vrf-target</a> <a href="#">import-community</a> <i>string</i> |
| Tree          | <a href="#">import-community</a>  |
| String Length | 10 to 28  |
| Notes         | The following elements are part of a choice: <b>community</b> or ( <b>export-community</b> and <b>import-community</b> ).   |
| Introduced    | 20.10.R1  |
| Platforms     | All   |

**segment-routing-v6** [[bgp-instance](#)] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>segment-routing-v6</b> list instance   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">segment-routing-v6</a> <i>number</i> |
| Tree       | <a href="#">segment-routing-v6</a>  |
| Introduced | 22.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

**[bgp-instance]** *number*

|          |   |
|----------|---|
| Synopsis | BGP instance  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">segment-routing-v6</a> <i>number</i> |
| Tree     | <a href="#">segment-routing-v6</a>  |
| Range    | 1   |



|            |   |
|------------|---|
| Notes      | This element is part of a list key.         |
| Introduced | 22.5.R1                                     |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of segment routing over IPv6   |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>bgp-evpn</b> <b>segment-routing-v6</b> <i>number</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 22.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

### **default-route-tag** *string*

|             |  |
|-------------|--|
| Synopsis    | Default route tag  |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>bgp-evpn</b> <b>segment-routing-v6</b> <i>number</i> <b>default-route-tag</b> <i>string</i>   |
| Tree        | <b>default-route-tag</b>   |
| Description | <p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p> <p>The following are examples of the conflict priority handling:</p> <ul style="list-style-type: none"> <li>• If a service is configured with both <b>default-route-tag</b> <i>X</i> and <b>proxy-arp evpn-route-tag</b> <i>Y</i>, the EVPN uses route tag <i>Y</i> when sending EVPN proxy-arp routes to the BGP RIB for advertisement.</li> <li>• If a given IP-prefix route is tagged in the route-table with tag <i>A</i> and the R-VPLS, in which the route is advertised, uses <i>B</i> as the <b>default-route-tag</b>, then EVPN keeps tag <i>A</i> when sending the route to the BGP RIB.</li> </ul> <p>The <b>default-route-tag</b> configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.</p> |
| Introduced  | 22.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

## domain-id string

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Domain ID of received BGP route before readvertisement   |
| Context     | <b>configure service vprn string bgp-evpn segment-routing-v6 number domain-id string</b>   |
| Tree        | <b>domain-id</b>   |
| Description | <p>This command specifies the domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as domain-id:isf_safi_type in the D-PATH attribute, as described in <i>draft-ietf-bess-evpn-ipvpn-interworking</i>. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances).</p> <p>Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).</p> <p>In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N:</p> <p>Seg Len=1 / 65000:1:128</p> <p>If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows:</p> <p>Seg Len=2 / 65000:2:70 / 65000:1:128</p> <p>That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.</p> |
| Introduced  | 22.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

## evi number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | EVI information  |
| Context  | <b>configure service vprn string bgp-evpn segment-routing-v6 number evi number</b> |
| Tree     | <b>evi</b>   |

|             |   |
|-------------|---|
| Description | This command configures the EVI that identifies the BGP EVPN instance in a VPRN (for the EVPN-IFL model) or an R-VPLS (for the EVPN-IFF model) that is associated with the Layer 3 Ethernet segment. This configuration is required on the PEs attached to the Ethernet segment and on the remote PEs that need to create ES destinations to the MH Layer 3 Ethernet segment. |
| Range       | 1 to 16777215   |
| Introduced  | 22.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

### **resolution** *keyword*

|            |   |
|------------|---|
| Synopsis   | Resolution options for routes   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>bgp-evpn segment-routing-v6</b> <i>number</i> <b>resolution</b> <i>keyword</i> |
| Tree       | <b>resolution</b>   |
| Options    | route-table, tunnel-table, fallback-tunnel-to-route-table   |
| Default    | route-table   |
| Introduced | 22.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

### **route-distinguisher** (*string* | *keyword*)

|             |   |
|-------------|---|
| Synopsis    | Route distinguisher   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>bgp-evpn segment-routing-v6</b> <i>number</i> <b>route-distinguisher</b> ( <i>string</i>   <i>keyword</i> )  |
| Tree        | <b>route-distinguisher</b>  |
| Description | This command specifies a unique route distinguisher (RD) to be associated with each routing instance to identify the VPN to which the route belongs.<br><br>Alternatively, the system can automatically generate an RD based on the BGP automatic RD range configured at the <b>configure service system</b> level. |
| Options     | auto-rd   |
| Introduced  | 22.5.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

### **source-address** *string*

|          |                     |
|----------|---------------------|
| Synopsis | Source IPv6 address |
|----------|---------------------|

|             |  |
|-------------|--|
| Context     | <b>configure service vprn string</b> <i>bgp-evpn segment-routing-v6 number source-address string</i>   |
| Tree        | <a href="#">source-address</a>   |
| Description | <p>When configured, this command specifies the source IPv6 address used in the SA field of the outer IPv6 header of the SRv6 encapsulated packet.</p> <p>When not configured, the source IPv6 address is inherited from the configuration of the global default address in the <b>router "base" segment-routing segment-routing-v6 source-address</b> context.</p> <p>A source IPv6 address must be configured in this context or in the base router context. The system does not check if the address entered is a valid local address.</p> |
| Introduced  | 22.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

## srv6

|            |   |
|------------|---|
| Synopsis   | Enter the <b>srv6</b> context   |
| Context    | <b>configure service vprn string</b> <i>bgp-evpn segment-routing-v6 number srv6</i> |
| Tree       | <a href="#">srv6</a>  |
| Introduced | 22.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

## default-locator *string*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Default route locator  |
| Context    | <b>configure service vprn string</b> <i>bgp-evpn segment-routing-v6 number srv6 default-locator string</i> |
| Tree       | <a href="#">default-locator</a>  |
| Introduced | 22.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

## instance *reference*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Segment Routing IPv6 instance  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-evpn segment-routing-v6</a> <i>number</i> <a href="#">srv6</a> <i>instance reference</i> |
| Tree       | <a href="#">instance</a>   |
| Reference  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">segment-routing-v6</a> <i>number</i>   |
| Introduced | 22.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

## vrf-export

|            |  |
|------------|--|
| Synopsis   | Enable the <b>vrf-export</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-evpn segment-routing-v6</a> <i>number</i> <a href="#">vrf-export</a> |
| Tree       | <a href="#">vrf-export</a>   |
| Introduced | 22.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

## policy (*policy-expr-string* | *string*)

|             |  |
|-------------|--|
| Synopsis    | Policy name  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-evpn segment-routing-v6</a> <i>number</i> <a href="#">vrf-export</a> <i>policy (policy-expr-string   string)</i>   |
| Tree        | <a href="#">policy</a>   |
| Description | <p>This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).</p> <p>Each referenced object is either a policy logical expression or the name of a single policy.</p> <p>Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.</p> <p>Only the first policy can have the maximum length and the rest can be up to 64 characters.</p> <p>Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.</p> |

|                |   |
|----------------|---|
| String Length  | 1 to 255                                    |
| Max. Instances | 15  |
| Min. Instances | 1   |
| Notes          | This element is ordered by the user.        |
| Introduced     | 22.5.R1                                     |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

## vrf-import

|            |  |
|------------|--|
| Synopsis   | Enable the <b>vrf-import</b> context   |
| Context    | <b>configure service vprn string bgp-evpn segment-routing-v6 number vrf-import</b> |
| Tree       | <a href="#">vrf-import</a>   |
| Introduced | 22.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

## policy (*policy-expr-string* | *string*)

|                |  |
|----------------|--|
| Synopsis       | Policy name  |
| Context        | <b>configure service vprn string bgp-evpn segment-routing-v6 number vrf-import policy</b><br>( <i>policy-expr-string</i>   <i>string</i> )   |
| Tree           | <a href="#">policy</a>   |
| Description    | <p>This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).</p> <p>Each referenced object is either a policy logical expression or the name of a single policy.</p> <p>Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.</p> <p>Only the first policy can have the maximum length and the rest can be up to 64 characters.</p> <p>Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.</p> |
| String Length  | 1 to 255   |
| Max. Instances | 15   |

|                |   |
|----------------|---|
| Min. Instances | 1   |
| Notes          | This element is ordered by the user.        |
| Introduced     | 22.5.R1                                     |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

## vrf-target

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>vrf-target</b> context   |
| Context     | <b>configure service vprn string bgp-evpn segment-routing-v6 number vrf-target</b>  |
| Tree        | <b>vrf-target</b>   |
| Description | <p>Commands in this context configure the route target that is added to advertised routes or compared against received routes from other VRFs on the same or remote PE routers (via MP-BGP).</p> <p>BGP-VPN and EVPN-IFL routes imported using a VRF target configuration use the BGP preference value of 170 when imported from remote PE routers, or retain the protocol preference value of the exported route when imported from other VRFs in the same router.</p> <p>Configured VRF import or export policies override the VRF target policy.</p> |
| Introduced  | 22.5.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

## community string

|               |  |
|---------------|--|
| Synopsis      | Extended BGP community   |
| Context       | <b>configure service vprn string bgp-evpn segment-routing-v6 number vrf-target community string</b>                              |
| Tree          | <b>community</b>   |
| Description   | This command configures an extended BGP community in the form type:x:y. Type can only be target and x and y are 16-bit integers. |
| String Length | 10 to 28   |
| Notes         | The following elements are part of a choice: <b>community</b> or ( <b>export-community</b> and <b>import-community</b> ).        |
| Introduced    | 22.5.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

**export-community** *string*

|               |  |
|---------------|--|
| Synopsis      | Communities sent to remote PE neighbors  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">segment-routing-v6</a> <i>number</i> <a href="#">vrf-target</a> <b>export-community</b> <i>string</i> |
| Tree          | <a href="#">export-community</a>   |
| String Length | 10 to 28   |
| Notes         | The following elements are part of a choice: <b>community</b> or ( <b>export-community</b> and <b>import-community</b> ).  |
| Introduced    | 22.5.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

**import-community** *string*

|               |  |
|---------------|--|
| Synopsis      | Communities accepted from remote PE neighbors  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">segment-routing-v6</a> <i>number</i> <a href="#">vrf-target</a> <b>import-community</b> <i>string</i> |
| Tree          | <a href="#">import-community</a>   |
| String Length | 10 to 28   |
| Notes         | The following elements are part of a choice: <b>community</b> or ( <b>export-community</b> and <b>import-community</b> ).  |
| Introduced    | 22.5.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

**bgp-ipvpn**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>bgp-ipvpn</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <b>bgp-ipvpn</b> |
| Tree       | <a href="#">bgp-ipvpn</a>  |
| Introduced | 21.2.R1  |
| Platforms  | All  |

**mpls**

|          |  |
|----------|--|
| Synopsis | Enter the <b>mpls</b> context  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <b>bgp-ipvpn</b> <b>mpls</b> |
| Tree     | <a href="#">mpls</a>   |



|            |         |
|------------|---------|
| Introduced | 21.2.R1 |
| Platforms  | All     |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of BGP-IPVPN MPLS  |
| Context    | <b>configure service vpn</b> <i>string</i> <b>bgp-ipvpn mpls admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 21.2.R1   |
| Platforms  | All   |

### **auto-bind-tunnel**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>auto-bind-tunnel</b> context   |
| Context     | <b>configure service vpn</b> <i>string</i> <b>bgp-ipvpn mpls auto-bind-tunnel</b>   |
| Tree        | <a href="#">auto-bind-tunnel</a>  |
| Description | Commands in this context configure the automatic binding parameters of a BGP-IPVPN service using tunnels to MP-BGP peers. |
| Introduced  | 21.2.R1   |
| Platforms   | All   |

### **allow-flex-algo-fallback** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Enable flexible algorithm fallback  |
| Context     | <b>configure service vpn</b> <i>string</i> <b>bgp-ipvpn mpls auto-bind-tunnel allow-flex-algo-fallback</b> <i>boolean</i>   |
| Tree        | <a href="#">allow-flex-algo-fallback</a>  |
| Description | <p>When configured to <b>true</b>, a BGP router with a Flex-Algorithm action configured (via the <b>configure policy-options policy-statement entry action flex-algo</b> command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available.</p> <p>When configured to <b>false</b>, the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available.</p> |
| Default     | false   |
| Introduced  | 21.2.R1   |

Platforms All

### **ecmp** *number*

Synopsis Maximum ECMP routes allowed

Context **configure** [service vprn](#) *string* [bgp-ipvpn](#) [mpls](#) [auto-bind-tunnel](#) **ecmp** *number*

Tree [ecmp](#)

Description This command configures the maximum number of tunnels that can be used as ECMP next hops for the VPRN. This value overrides the ECMP value configured at the **configure service vprn** context level.

Range 1 to 32

Default 1

Introduced 21.2.R1

Platforms All

### **enforce-strict-tunnel-tagging** *boolean*

Synopsis Allow enforcement of strict tunnel tagging

Context **configure** [service vprn](#) *string* [bgp-ipvpn](#) [mpls](#) [auto-bind-tunnel](#) **enforce-strict-tunnel-tagging** *boolean*

Tree [enforce-strict-tunnel-tagging](#)

Description When configured to **true**, the system must only consider LSPs marked with an administrative tag for next-hop resolution.

When configured to **false**, tagged RSVP and SR-TE LSPs are considered first. The system then uses untagged LSPs of other types.

Default false

Introduced 21.2.R1

Platforms All

### **resolution** *keyword*

Synopsis Resolution method for tunnel selection

Context **configure** [service vprn](#) *string* [bgp-ipvpn](#) [mpls](#) [auto-bind-tunnel](#) **resolution** *keyword*

Tree [resolution](#)

Options none, filter, any

Default none

|            |         |
|------------|---------|
| Introduced | 21.2.R1 |
| Platforms  | All     |

## resolution-filter

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>resolution-filter</b> context  |
| Context     | <b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp-ipvpn mpls auto-bind-tunnel</a> <a href="#">resolution-filter</a>  |
| Tree        | <a href="#">resolution-filter</a>   |
| Description | Commands in this context configure the subset of tunnel types that can be used in the resolution of BGP-IPVPN routes within the automatic binding of the BGP-IPVPN MPLS service to tunnels to MP-BGP peers. |
| Introduced  | 21.2.R1   |
| Platforms   | All   |

## bgp boolean

|             |   |
|-------------|---|
| Synopsis    | Use BGP tunneling for next-hop resolution   |
| Context     | <b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp-ipvpn mpls auto-bind-tunnel</a> <a href="#">resolution-filter</a> <a href="#">bgp boolean</a>  |
| Tree        | <a href="#">bgp</a>   |
| Description | When configured to <b>true</b> , BGP searches the BGP LSP for the address of the BGP next hop.<br><br>When configured to <b>false</b> , BGP tunneling is not used and inter-area or inter-as prefixes are not resolved. |
| Default     | true  |
| Introduced  | 21.2.R1   |
| Platforms   | All   |

## gre boolean

|             |  |
|-------------|--|
| Synopsis    | Use GRE tunneling for next-hop resolution  |
| Context     | <b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp-ipvpn mpls auto-bind-tunnel</a> <a href="#">resolution-filter</a> <a href="#">gre boolean</a> |
| Tree        | <a href="#">gre</a>  |
| Description | When configured to <b>true</b> , this command enables setting the tunnel type for the auto bind tunnel.  |

When configured to **false**, this command disables setting the tunnel type for the auto bind tunnel.

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 21.2.R1 |
| Platforms  | All     |

### **ldp boolean**

|             |  |
|-------------|--|
| Synopsis    | Use LDP tunneling for next-hop resolution  |
| Context     | <b>configure service vpn string bgp-ipvpn mpls auto-bind-tunnel resolution-filter ldp boolean</b>  |
| Tree        | <a href="#">ldp</a>  |
| Description | When configured to <b>true</b> , BGP searches for an LDP LSP with a FEC prefix corresponding to the address of the BGP next hop.<br>When configured to <b>false</b> , LDP tunneling is not used for next-hop resolution. |
| Default     | false  |
| Introduced  | 21.2.R1  |
| Platforms   | All  |

### **mpls-fwd-policy boolean**

|             |   |
|-------------|---|
| Synopsis    | Use MPLS forwarding policy for next-hop resolution  |
| Context     | <b>configure service vpn string bgp-ipvpn mpls auto-bind-tunnel resolution-filter mpls-fwd-policy boolean</b>   |
| Tree        | <a href="#">mpls-fwd-policy</a>   |
| Description | When configured to <b>true</b> , BGP uses the MPLS forwarding policy to determine the address of the BGP next hop.<br>When configured to <b>false</b> , the MPLS forwarding policy is not used for next-hop resolution. |
| Default     | false   |
| Introduced  | 21.2.R1   |
| Platforms   | All   |

### **rib-api boolean**

|          |  |
|----------|--|
| Synopsis | Use RIB API gRPC service for next-hop resolution |
|----------|--|

|             |   |
|-------------|---|
| Context     | <b>configure service vprn</b> <i>string</i> <a href="#">bgp-ipvpn</a> <a href="#">mpls</a> <a href="#">auto-bind-tunnel</a> <a href="#">resolution-filter</a> <a href="#">rib-api</a> <i>boolean</i>  |
| Tree        | <a href="#">rib-api</a>   |
| Description | When configured to <b>true</b> , BGP uses tunnels programmed using the RIB API gRPC service to resolve the next hops of routes imported into the EVPN service.<br>When configured to <b>false</b> , the RIB API service tunnels are not used for next-hop resolution. |
| Default     | false   |
| Introduced  | 21.2.R1   |
| Platforms   | All   |

### **rsvp** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Use RSVP tunneling for next-hop resolution  |
| Context     | <b>configure service vprn</b> <i>string</i> <a href="#">bgp-ipvpn</a> <a href="#">mpls</a> <a href="#">auto-bind-tunnel</a> <a href="#">resolution-filter</a> <a href="#">rsvp</a> <i>boolean</i>   |
| Tree        | <a href="#">rsvp</a>  |
| Description | When configured to <b>true</b> , BGP searches the best metric RSVP LSP to determine the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface used by the BGP instance on the remote node. The LSP metric is provided by MPLS in the tunnel table. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID.<br>When configured to <b>false</b> , the RSVP LSP is not used for next-hop resolution. |
| Default     | false   |
| Introduced  | 21.2.R1   |
| Platforms   | All   |

### **sr-isis** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Use IS-IS SR tunneling for next-hop resolution  |
| Context     | <b>configure service vprn</b> <i>string</i> <a href="#">bgp-ipvpn</a> <a href="#">mpls</a> <a href="#">auto-bind-tunnel</a> <a href="#">resolution-filter</a> <a href="#">sr-isis</a> <i>boolean</i>  |
| Tree        | <a href="#">sr-isis</a>   |
| Description | When configured to <b>true</b> , BGP uses an IS-IS tunnel type to determine the address of the BGP next hop.<br>The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered IS-IS instance.<br>When configured to <b>false</b> , IS-IS tunneling is not used for next-hop resolution. |

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 21.2.R1 |
| Platforms  | All     |

### **sr-ospf** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Use OSPF SR tunneling for next-hop resolution   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-ipvpn</a> <a href="#">mpls</a> <a href="#">auto-bind-tunnel</a> <a href="#">resolution-filter</a> <b>sr-ospf</b> <i>boolean</i>   |
| Tree        | <a href="#">sr-ospf</a>   |
| Description | <p>When configured to <b>true</b>, BGP uses an OSPF tunnel type to determine the address of the BGP next hop.</p> <p>The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OSPF instance.</p> <p>When configured to <b>false</b>, OSPF tunneling is not used for next-hop resolution.</p> |
| Default     | false   |
| Introduced  | 21.2.R1   |
| Platforms   | All   |

### **sr-ospf3** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Use OSPFv3 SR tunneling for next-hop resolution   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-ipvpn</a> <a href="#">mpls</a> <a href="#">auto-bind-tunnel</a> <a href="#">resolution-filter</a> <b>sr-ospf3</b> <i>boolean</i>  |
| Tree        | <a href="#">sr-ospf3</a>  |
| Description | <p>When configured to <b>true</b>, BGP uses an OSPFv3 tunnel type to determine the address of the BGP next hop.</p> <p>The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OSPFv3 instance.</p> <p>When configured to <b>false</b>, OSPFv3 tunneling is not used for next-hop resolution.</p> |
| Default     | false   |
| Introduced  | 21.2.R1   |
| Platforms   | All   |

### **sr-policy** *boolean*

|          |   |
|----------|---|
| Synopsis | Use SR policies for next-hop resolution |
|----------|---|

|             |   |
|-------------|---|
| Context     | <b>configure service vprn</b> <i>string</i> <b>bgp-ipvpn mpls auto-bind-tunnel resolution-filter sr-policy</b> <i>boolean</i>   |
| Tree        | <b>sr-policy</b>  |
| Description | When configured to <b>true</b> , SR policies are used to determine the address of the BGP next hop.<br><br>The SR policy search criteria includes a non-null endpoint and color value that matches the BGP next hop and color extended community value, respectively, of the EVPN route.<br><br>When configured to <b>false</b> , SR policies are not used for next-hop resolution. |
| Default     | false   |
| Introduced  | 21.2.R1   |
| Platforms   | All   |

**sr-te** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Use SR-TE tunneling for next-hop resolution  |
| Context     | <b>configure service vprn</b> <i>string</i> <b>bgp-ipvpn mpls auto-bind-tunnel resolution-filter sr-te</b> <i>boolean</i>  |
| Tree        | <b>sr-te</b>   |
| Description | When configured to <b>true</b> , BGP uses an SR-TE tunnel type to determine the address of the BGP next hop.<br><br>The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered tunnel ID.<br><br>When configured to <b>false</b> , SR-TE tunneling is not used for next-hop resolution. |
| Default     | false  |
| Introduced  | 21.2.R1  |
| Platforms   | All  |

**udp** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Use MPLS over UDP tunneling for next-hop resolution  |
| Context     | <b>configure service vprn</b> <i>string</i> <b>bgp-ipvpn mpls auto-bind-tunnel resolution-filter udp</b> <i>boolean</i>  |
| Tree        | <b>udp</b>   |
| Description | When configured to <b>true</b> , BGP uses an MPLS over UDP tunnel type to determine the address of the BGP next hop.<br><br>When configured to <b>false</b> , MPLS over UDP tunneling is not used for next-hop resolution. |
| Default     | false  |

|            |         |
|------------|---------|
| Introduced | 21.2.R1 |
| Platforms  | All     |

### **weighted-ecmp** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Allow weighted load-balancing   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-ipvpn mpls auto-bind-tunnel</a> <a href="#">weighted-ecmp</a> <i>boolean</i>  |
| Tree        | <a href="#">weighted-ecmp</a>   |
| Description | <p>When configured to <b>true</b>, this command enables weighted ECMP for packets using tunnels that a VPRN automatically binds to. Packets are sprayed across LSPs in the ECMP according to the outcome of the hash algorithm and the configured load balancing weight of each LSP.</p> <p>When configured to <b>false</b>, this command disables weighted ECMP for next-hop tunnel selection.</p> |
| Default     | false   |
| Introduced  | 21.2.R1   |
| Platforms   | All   |

### **domain-id** *string*

|             |  |
|-------------|--|
| Synopsis    | Domain ID of received BGP route before readvertisement   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-ipvpn mpls domain-id</a> <i>string</i>   |
| Tree        | <a href="#">domain-id</a>  |
| Description | <p>This command specifies the domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as domain-id:isf_safi_type in the D-PATH attribute, as described in <i>draft-ietf-bess-evpn-ipvpn-interworking</i>. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances).</p> <p>Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).</p> <p>In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N:</p> <p>Seg Len=1 / 65000:1:128</p> <p>If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows:</p> <p>Seg Len=2 / 65000:2:70 / 65000:1:128</p> |



That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.

|            |          |
|------------|----------|
| Introduced | 21.10.R1 |
| Platforms  | All      |

### **dynamic-egress-label-limit** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Enables dynamic egress label limit  |
| Context     | <b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">bgp-ipvpn</a> <a href="#">mpls</a> <b>dynamic-egress-label-limit</b> <i>boolean</i>  |
| Tree        | <a href="#">dynamic-egress-label-limit</a>  |
| Description | <p>When configured to <b>true</b>, this command relaxes the egress MPLS label limit check when resolving BGP next hops in the tunnel table.</p> <p>For VPRN services, the OAM label is never computed and, therefore, one more egress label is allowed.</p> <p>For EVPN (Epipe and VPLS) services, the system only computes the control word and ESI label if they are used. For the control word, the system reduces the egress label limit by one label if the control word is configured in the service. When configured, the ESI label is not counted for Epipes or VPLS services without an ES.</p> <p>When configured to <b>false</b> this command, for EVPN, Epipe, and VPLS services, always accounts for the ESI label and control word.</p> |
| Default     | false   |
| Introduced  | 22.2.R1   |
| Platforms   | All   |

### **route-distinguisher** (*string | keyword*)

|             |  |
|-------------|--|
| Synopsis    | Route distinguisher  |
| Context     | <b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">bgp-ipvpn</a> <a href="#">mpls</a> <b>route-distinguisher</b> ( <i>string   keyword</i> ) |
| Tree        | <a href="#">route-distinguisher</a>  |
| Description | This command specifies a unique route distinguisher (RD) to be associated with each routing instance to identify which VPN the route belongs to.                 |
| Options     | auto-rd  |
| Introduced  | 21.2.R1  |
| Platforms   | All  |

### **vrf-export**

|          |                                      |
|----------|--------------------------------------|
| Synopsis | Enable the <b>vrf-export</b> context |
|----------|--------------------------------------|

|            |  |
|------------|--|
| Context    | <b>configure service vprn string</b> bgp-ipvpn mpls vrf-export |
| Tree       | vrf-export   |
| Introduced | 21.2.R1  |
| Platforms  | All  |

### **policy** (*policy-expr-string* | *string*)

|                |  |
|----------------|--|
| Synopsis       | Policy name  |
| Context        | <b>configure service vprn string</b> bgp-ipvpn mpls vrf-export <b>policy</b> ( <i>policy-expr-string</i>   <i>string</i> )   |
| Tree           | policy   |
| Description    | <p>This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).</p> <p>Each referenced object is either a policy logical expression or the name of a single policy.</p> <p>Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.</p> <p>Only the first policy can have the maximum length and the rest can be up to 64 characters.</p> <p>Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.</p> |
| String Length  | 1 to 255   |
| Max. Instances | 15   |
| Min. Instances | 1  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 21.2.R1  |
| Platforms      | All  |

### **vrf-import**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>vrf-import</b> context                           |
| Context    | <b>configure service vprn string</b> bgp-ipvpn mpls vrf-import |
| Tree       | vrf-import   |
| Introduced | 21.2.R1  |
| Platforms  | All  |

**policy** (*policy-expr-string* | *string*)

|                |  |
|----------------|--|
| Synopsis       | Policy name  |
| Context        | <b>configure service vpn</b> <i>string</i> <b>bgp-ipvpn mpls vrf-import policy</b> ( <i>policy-expr-string</i>   <i>string</i> )   |
| Tree           | <b>policy</b>  |
| Description    | <p>This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).</p> <p>Each referenced object is either a policy logical expression or the name of a single policy.</p> <p>Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.</p> <p>Only the first policy can have the maximum length and the rest can be up to 64 characters.</p> <p>Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.</p> |
| String Length  | 1 to 255   |
| Max. Instances | 15   |
| Min. Instances | 1  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 21.2.R1  |
| Platforms      | All  |

**vrf-target**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>vrf-target</b> context   |
| Context     | <b>configure service vpn</b> <i>string</i> <b>bgp-ipvpn mpls vrf-target</b>   |
| Tree        | <b>vrf-target</b>   |
| Description | <p>Commands in this context configure the route target that is added to advertised routes or compared against received routes from other VRFs on the same or remote PE routers (via MP-BGP).</p> <p>BGP-VPN and EVPN-IFL routes imported using a VRF target configuration use the BGP preference value of 170 when imported from remote PE routers, or retain the protocol preference value of the exported route when imported from other VRFs in the same router.</p> <p>Configured VRF import or export policies override the VRF target policy.</p> |

|            |         |
|------------|---------|
| Introduced | 21.2.R1 |
| Platforms  | All     |

### **community** *string*

|               |   |
|---------------|---|
| Synopsis      | Extended BGP community  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp-ipvpn</a> <a href="#">mpls</a> <a href="#">vrf-target</a> <a href="#">community</a> <i>string</i> |
| Tree          | <a href="#">community</a>   |
| Description   | This command configures an extended BGP community in the form type:x:y. Type can only be target and x and y are 16-bit integers.  |
| String Length | 10 to 28  |
| Notes         | The following elements are part of a choice: <b>community</b> or ( <b>export-community</b> and <b>import-community</b> ).   |
| Introduced    | 21.2.R1   |
| Platforms     | All   |

### **export-community** *string*

|               |  |
|---------------|--|
| Synopsis      | Communities sent to remote PE neighbors  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp-ipvpn</a> <a href="#">mpls</a> <a href="#">vrf-target</a> <a href="#">export-community</a> <i>string</i> |
| Tree          | <a href="#">export-community</a>   |
| String Length | 10 to 28   |
| Notes         | The following elements are part of a choice: <b>community</b> or ( <b>export-community</b> and <b>import-community</b> ).  |
| Introduced    | 21.2.R1  |
| Platforms     | All  |

### **import-community** *string*

|               |  |
|---------------|--|
| Synopsis      | Communities accepted from remote PE neighbors  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp-ipvpn</a> <a href="#">mpls</a> <a href="#">vrf-target</a> <a href="#">import-community</a> <i>string</i> |
| Tree          | <a href="#">import-community</a>   |
| String Length | 10 to 28   |
| Notes         | The following elements are part of a choice: <b>community</b> or ( <b>export-community</b> and <b>import-community</b> ).  |
| Introduced    | 21.2.R1  |

Platforms All

### **segment-routing-v6** [[bgp-instance](#)] *number*

Synopsis Enter the **segment-routing-v6** list instance

Context **configure** [service vprn](#) *string* [bgp-ipvpn](#) [segment-routing-v6](#) *number*

Tree [segment-routing-v6](#)

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **[bgp-instance]** *number*

Synopsis BGP instance

Context **configure** [service vprn](#) *string* [bgp-ipvpn](#) [segment-routing-v6](#) *number*

Tree [segment-routing-v6](#)

Range 1

Notes This element is part of a list key.

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **admin-state** *keyword*

Synopsis Administrative state of segment routing over IPv6

Context **configure** [service vprn](#) *string* [bgp-ipvpn](#) [segment-routing-v6](#) *number* [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**default-route-tag** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Default route tag  |
| Context     | <b>configure</b> <i>service vpn</i> <i>string</i> <i>bgp-ipvpn segment-routing-v6 number</i> <b>default-route-tag</b> <i>string</i>  |
| Tree        | <b>default-route-tag</b>   |
| Description | <p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p> <p>The following are examples of the conflict priority handling:</p> <ul style="list-style-type: none"> <li>• If a service is configured with both <b>default-route-tag</b> <i>X</i> and <b>proxy-arp evpn-route-tag</b> <i>Y</i>, the EVPN uses route tag <i>Y</i> when sending EVPN proxy-arp routes to the BGP RIB for advertisement.</li> <li>• If a given IP-prefix route is tagged in the route-table with tag <i>A</i> and the R-VPLS, in which the route is advertised, uses <i>B</i> as the <b>default-route-tag</b>, then EVPN keeps tag <i>A</i> when sending the route to the BGP RIB.</li> </ul> <p>The <b>default-route-tag</b> configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.</p> |
| Introduced  | 21.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

**domain-id** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Domain ID of received BGP route before readvertisement  |
| Context     | <b>configure</b> <i>service vpn</i> <i>string</i> <i>bgp-ipvpn segment-routing-v6 number</i> <b>domain-id</b> <i>string</i>   |
| Tree        | <b>domain-id</b>  |
| Description | <p>This command specifies the domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as domain-id:isf_safi_type in the D-PATH attribute, as described in <i>draft-ietf-bess-evpn-ipvpn-interworking</i>. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The</p> |

VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances).

Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).

In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N:

Seg Len=1 / 65000:1:128

If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows:

Seg Len=2 / 65000:2:70 / 65000:1:128

That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.

|            |   |
|------------|---|
| Introduced | 21.10.R1                                    |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

### **resolution** *keyword*

|            |   |
|------------|---|
| Synopsis   | Resolution options for routes   |
| Context    | <b>configure service vprn string bgp-ipvpn segment-routing-v6 number resolution keyword</b> |
| Tree       | <b>resolution</b>   |
| Options    | route-table, tunnel-table, fallback-tunnel-to-route-table                                   |
| Default    | route-table   |
| Introduced | 22.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

### **route-distinguisher** (*string | keyword*)

|             |   |
|-------------|---|
| Synopsis    | Route distinguisher   |
| Context     | <b>configure service vprn string bgp-ipvpn segment-routing-v6 number route-distinguisher (string   keyword)</b>   |
| Tree        | <b>route-distinguisher</b>  |
| Description | This command specifies a unique route distinguisher (RD) to be associated with each routing instance to identify the VPN to which the route belongs.<br><br>Alternatively, the system can automatically generate an RD based on the BGP automatic RD range configured at the <b>configure service system</b> level. |
| Options     | auto-rd   |

|            |   |
|------------|---|
| Introduced | 21.5.R1                                     |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

### **source-address** *string*

|             |  |
|-------------|--|
| Synopsis    | Source IPv6 address  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-ipvpn</a> <a href="#">segment-routing-v6</a> <i>number</i> <a href="#">source-address</a> <i>string</i>  |
| Tree        | <a href="#">source-address</a>   |
| Description | <p>When configured, this command specifies the source IPv6 address used in the SA field of the outer IPv6 header of the SRv6 encapsulated packet.</p> <p>When not configured, the source IPv6 address is inherited from the configuration of the global default address in the <b>router "base" segment-routing segment-routing-v6 source-address</b> context.</p> <p>A source IPv6 address must be configured in this context or in the base router context. The system does not check if the address entered is a valid local address.</p> |
| Introduced  | 21.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

### **srv6**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>srv6</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-ipvpn</a> <a href="#">segment-routing-v6</a> <i>number</i> <a href="#">srv6</a> |
| Tree       | <a href="#">srv6</a>  |
| Introduced | 21.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

### **default-locator** *string*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Default route locator   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-ipvpn</a> <a href="#">segment-routing-v6</a> <i>number</i> <a href="#">srv6</a> <a href="#">default-locator</a> <i>string</i> |
| Tree       | <a href="#">default-locator</a>   |
| Introduced | 21.5.R1   |



Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## instance *reference*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Segment Routing IPv6 instance

Context **configure service vprn string** [bgp-ipvpn](#) [segment-routing-v6](#) *number* [srv6](#) *instance reference*

Tree [instance](#)

Reference **configure service vprn string** [segment-routing-v6](#) *number*

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## vrf-export

Synopsis Enable the **vrf-export** context

Context **configure service vprn string** [bgp-ipvpn](#) [segment-routing-v6](#) *number* [vrf-export](#)

Tree [vrf-export](#)

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## policy (*policy-expr-string* | *string*)

Synopsis Policy name

Context **configure service vprn string** [bgp-ipvpn](#) [segment-routing-v6](#) *number* [vrf-export](#) [policy](#) (*policy-expr-string* | *string*)

Tree [policy](#)

Description This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).

Each referenced object is either a policy logical expression or the name of a single policy.

Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.

Only the first policy can have the maximum length and the rest can be up to 64 characters.

Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.

|                |   |
|----------------|---|
| String Length  | 1 to 255                                    |
| Max. Instances | 15  |
| Min. Instances | 1   |
| Notes          | This element is ordered by the user.        |
| Introduced     | 21.5.R1                                     |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

## vrf-import

|            |   |
|------------|---|
| Synopsis   | Enable the <b>vrf-import</b> context  |
| Context    | <b>configure service vprn string bgp-ipvpn segment-routing-v6 number vrf-import</b> |
| Tree       | <a href="#">vrf-import</a>  |
| Introduced | 21.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

## policy (*policy-expr-string* | *string*)

|          |   |
|----------|---|
| Synopsis | Policy name   |
| Context  | <b>configure service vprn string bgp-ipvpn segment-routing-v6 number vrf-import policy</b><br>( <i>policy-expr-string</i>   <i>string</i> ) |
| Tree     | <a href="#">policy</a>  |

Description This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).

Each referenced object is either a policy logical expression or the name of a single policy.

Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.

Only the first policy can have the maximum length and the rest can be up to 64 characters.

Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.

|                |   |
|----------------|---|
| String Length  | 1 to 255                                    |
| Max. Instances | 15  |
| Min. Instances | 1   |
| Notes          | This element is ordered by the user.        |
| Introduced     | 21.5.R1                                     |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

## vrf-target

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>vrf-target</b> context   |
| Context     | <b>configure service vprn string bgp-ipvpn segment-routing-v6 number vrf-target</b>   |
| Tree        | <b>vrf-target</b>   |
| Description | <p>Commands in this context configure the route target that is added to advertised routes or compared against received routes from other VRFs on the same or remote PE routers (via MP-BGP).</p> <p>BGP-VPN and EVPN-IFL routes imported using a VRF target configuration use the BGP preference value of 170 when imported from remote PE routers, or retain the protocol preference value of the exported route when imported from other VRFs in the same router.</p> <p>Configured VRF import or export policies override the VRF target policy.</p> |
| Introduced  | 21.5.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

## community string

|               |  |
|---------------|--|
| Synopsis      | Extended BGP community   |
| Context       | <b>configure service vprn string bgp-ipvpn segment-routing-v6 number vrf-target community string</b>                             |
| Tree          | <b>community</b>   |
| Description   | This command configures an extended BGP community in the form type:x:y. Type can only be target and x and y are 16-bit integers. |
| String Length | 10 to 28   |
| Notes         | The following elements are part of a choice: <b>community</b> or ( <b>export-community</b> and <b>import-community</b> ).        |
| Introduced    | 21.5.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

**export-community** *string*

|               |  |
|---------------|--|
| Synopsis      | Communities sent to remote PE neighbors  |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-ipvpn segment-routing-v6</a> <i>number</i> <a href="#">vrf-target</a> <a href="#">export-community</a> <i>string</i> |
| Tree          | <a href="#">export-community</a>   |
| String Length | 10 to 28   |
| Notes         | The following elements are part of a choice: <b>community</b> or ( <b>export-community</b> and <b>import-community</b> ).  |
| Introduced    | 21.5.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

**import-community** *string*

|               |  |
|---------------|--|
| Synopsis      | Communities accepted from remote PE neighbors  |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-ipvpn segment-routing-v6</a> <i>number</i> <a href="#">vrf-target</a> <a href="#">import-community</a> <i>string</i> |
| Tree          | <a href="#">import-community</a>   |
| String Length | 10 to 28   |
| Notes         | The following elements are part of a choice: <b>community</b> or ( <b>export-community</b> and <b>import-community</b> ).  |
| Introduced    | 21.5.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

**bgp-shared-queue**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>bgp-shared-queue</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-shared-queue</a> |
| Tree       | <a href="#">bgp-shared-queue</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**cir** (*number* | *keyword*)

|          |   |
|----------|---|
| Synopsis | Committed information rate for shared queue   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-shared-queue</a> <a href="#">cir</a> ( <i>number</i>   <i>keyword</i> ) |

|            |                     |
|------------|---------------------|
| Tree       | <a href="#">cir</a> |
| Range      | 0 to 100000000      |
| Units      | kilobps             |
| Options    | max                 |
| Default    | 4000                |
| Introduced | 16.0.R1             |
| Platforms  | All                 |

### **pir** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Peak information rate for shared queue   |
| Context    | <b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">bgp-shared-queue</a> <a href="#">pir</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">pir</a>  |
| Range      | 1 to 100000000   |
| Units      | kilobps  |
| Options    | max  |
| Default    | 4000   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **bgp-vpn-backup**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>bgp-vpn-backup</b> context   |
| Context    | <b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">bgp-vpn-backup</a> |
| Tree       | <a href="#">bgp-vpn-backup</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **ipv4** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow BGP-VPN to be used as backup for IPv4 prefixes  |
| Context    | <b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">bgp-vpn-backup</a> <a href="#">ipv4</a> <i>boolean</i> |
| Tree       | <a href="#">ipv4</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |

Platforms All

### **ipv6** *boolean*

Synopsis Allow BGP-VPN to be used as backup for IPv6 prefixes  
Context **configure service vprn** *string* **bgp-vpn-backup ipv6** *boolean*  
Tree [ipv6](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **carrier-carrier-vpn** *boolean*

Synopsis Allow VPRN service to support a Carrier Supporting Carrier model  
Context **configure service vprn** *string* **carrier-carrier-vpn** *boolean*  
Tree [carrier-carrier-vpn](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **class-forwarding** *boolean*

Synopsis Allow packet forwarding based on forwarding class  
Context **configure service vprn** *string* **class-forwarding** *boolean*  
Tree [class-forwarding](#)  
Default false  
Introduced 19.10.R1  
Platforms All

### **confederation**

Synopsis Enter the **confederation** context  
Context **configure service vprn** *string* **confederation**  
Tree [confederation](#)  
Introduced 16.0.R1

---

Platforms All

### **confed-as-num** *number*

Synopsis Confederation number within an autonomous system

Context **configure service vprn** *string confederation confed-as-num number*

Tree [confed-as-num](#)

Range 1 to 4294967295

Introduced 16.0.R1

Platforms All

### **members** [[as-number](#)] *number*

Synopsis Add a list entry for **members**

Context **configure service vprn** *string confederation members number*

Tree [members](#)

Max. Instances 256

Introduced 16.0.R1

Platforms All

### **[as-number]** *number*

Synopsis Confederation AS number

Context **configure service vprn** *string confederation members number*

Tree [members](#)

Range 1 to 4294967295

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

**customer** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Service customer ID  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>customer</b> <i>reference</i> |
| Tree       | <b>customer</b>  |
| Reference  | <b>configure service customer</b> <i>string</i>                              |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**d-path-length-ignore** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Enable D-PATH length ignore  |
| Context     | <b>configure service vprn</b> <i>string</i> <b>d-path-length-ignore</b> <i>boolean</i>   |
| Tree        | <b>d-path-length-ignore</b>  |
| Description | <p>When configured to <b>true</b>, this command makes the VPRN RTM ignore the D-PATH domain segment length for best path selection purposes (for routes in the VPRN). This allows the user to control whether the RTM considers the D-PATH length when comparing two VPN routes with different RDs.</p> <p>When configured to <b>false</b>, this command does not ignore the D-PATH domain segment length.</p> |
| Default     | false  |
| Introduced  | 21.10.R1   |
| Platforms   | All  |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure service vprn</b> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <b>description</b>   |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |



**dhcp-server**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>dhcp-server</b> context             |
| Context    | <b>configure service vprn string dhcp-server</b> |
| Tree       | <a href="#">dhcp-server</a>                      |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**dhcpv4 [name] string**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>dhcpv4</b> list instance                          |
| Context    | <b>configure service vprn string dhcp-server dhcpv4 string</b> |
| Tree       | <a href="#">dhcpv4</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR        |

**[name] string**

|               |  |
|---------------|--|
| Synopsis      | DHCP server name   |
| Context       | <b>configure service vprn string dhcp-server dhcpv4 string</b> |
| Tree          | <a href="#">dhcpv4</a>   |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.                            |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR        |

**admin-state keyword**

|            |  |
|------------|--|
| Synopsis   | Administrative state of the DHCP server  |
| Context    | <b>configure service vprn string dhcp-server dhcpv4 string admin-state keyword</b> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                            |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**failover**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>failover</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">failover</a> |
| Tree       | <a href="#">failover</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the failover mechanism   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">failover</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**ignore-mclt-on-takeover** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Ignore maximum client lead during takeover from partner   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">failover</a> <a href="#">ignore-mclt-on-takeover</a> <i>boolean</i>              |
| Tree        | <a href="#">ignore-mclt-on-takeover</a>   |
| Description | When configured to <b>true</b> , the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire. |

When configured to **false**, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.

|            |   |
|------------|---|
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### maximum-client-lead-time *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Maximum time that DHCP server can extend client's lease   |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>failover</b> <b>maximum-client-lead-time</b> <i>number</i>  |
| Tree        | <b>maximum-client-lead-time</b>   |
| Description | This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT. |
| Range       | 600 to 86399  |
| Units       | seconds   |
| Default     | 600   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### partner-down-delay *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Delay to prevent lease duplication during link failure   |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>failover</b> <b>partner-down-delay</b> <i>number</i>         |
| Tree        | <b>partner-down-delay</b>  |
| Description | This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease |

duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.

|            |   |
|------------|---|
| Range      | 0 to 86399  |
| Units      | seconds   |
| Default    | 86399   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **peer** [[address](#)] *reference*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>peer</b> list instance   |
| Context        | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">failover peer</a> <i>reference</i> |
| Tree           | <a href="#">peer</a>  |
| Max. Instances | 1   |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **[address]** *reference*

|            |   |
|------------|---|
| Synopsis   | IP address of the failover peer   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">failover peer</a> <i>reference</i> |
| Tree       | <a href="#">peer</a>  |
| Reference  | <b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )                                |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **sync-tag** *string*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Tag that identifies synchronizing server or pool pairs  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <i>string</i> <a href="#">failover</a> <a href="#">peer</a> <a href="#">reference</a> <a href="#">sync-tag</a> <i>string</i> |
| Tree          | <a href="#">sync-tag</a>  |
| String Length | 1 to 32   |
| Notes         | This element is mandatory.  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **startup-wait-time** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Time between initialization and assuming active role  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <i>string</i> <a href="#">failover</a> <a href="#">startup-wait-time</a> <i>number</i>   |
| Tree        | <a href="#">startup-wait-time</a>   |
| Description | This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote. |
| Range       | 60 to 3600  |
| Units       | seconds   |
| Default     | 120   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **force-renews** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Send FORCERENEW messages to force renewals of leases   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <i>string</i> <a href="#">force-renews</a> <i>boolean</i> |
| Tree        | <a href="#">force-renews</a>   |
| Description | When configured to <b>true</b> , FORCERENEW messages are enabled for DHCP.   |
| Default     | false  |
| Introduced  | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## lease-hold

Synopsis Enter the **lease-hold** context

Context **configure service vprn string dhcp-server dhcpv4 string lease-hold**

Tree [lease-hold](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## additional-scenarios

Synopsis Enter the **additional-scenarios** context

Context **configure service vprn string dhcp-server dhcpv4 string lease-hold additional-scenarios**

Tree [additional-scenarios](#)

Description Commands in this context configure additional types of leases or triggers that cause the system to hold up leases.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## internal-lease-ipsec *boolean*

Synopsis Apply the lease hold timer to local IPsec clients

Context **configure service vprn string dhcp-server dhcpv4 string lease-hold additional-scenarios internal-lease-ipsec boolean**

Tree [internal-lease-ipsec](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## solicited-release *boolean*

Synopsis Apply lease hold timer for solicited releases

Context **configure service vprn string dhcp-server dhcpv4 string lease-hold additional-scenarios solicited-release boolean**

Tree [solicited-release](#)

|             |   |
|-------------|---|
| Description | This command enables the server to hold up a lease even for a solicited release, for example, when the server receives a normal DHCP release message. |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**time number**

|            |   |
|------------|---|
| Synopsis   | Lease hold time   |
| Context    | <b>configure service vprn string dhcp-server dhcpv4 string lease-hold time number</b> |
| Tree       | <b>time</b>   |
| Range      | 1 to 631152000  |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                               |

**pool [pool-name] string**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>pool</b> list instance  |
| Context    | <b>configure service vprn string dhcp-server dhcpv4 string pool string</b> |
| Tree       | <b>pool</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                    |

**[pool-name] string**

|               |  |
|---------------|--|
| Synopsis      | DHCP server pool name  |
| Context       | <b>configure service vprn string dhcp-server dhcpv4 string pool string</b> |
| Tree          | <b>pool</b>  |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                    |

**description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**failover**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>failover</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">failover</a> |
| Tree       | <a href="#">failover</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the failover mechanism  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">failover</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**ignore-mclt-on-takeover** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Ignore maximum client lead during takeover from partner   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">failover</a> <a href="#">ignore-mclt-on-takeover</a> <i>boolean</i> |
| Tree        | <a href="#">ignore-mclt-on-takeover</a>   |
| Description | When configured to <b>true</b> , the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.                       |



When configured to **false**, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.

|            |   |
|------------|---|
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### maximum-client-lead-time *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Maximum time that DHCP server can extend client's lease   |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>failover</b> <b>maximum-client-lead-time</b> <i>number</i>  |
| Tree        | <b>maximum-client-lead-time</b>   |
| Description | This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT. |
| Range       | 600 to 86399  |
| Units       | seconds   |
| Default     | 600   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### partner-down-delay *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Delay to prevent lease duplication during link failure   |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>failover</b> <b>partner-down-delay</b> <i>number</i> |
| Tree        | <b>partner-down-delay</b>  |
| Description | This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease                   |

duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.

|            |   |
|------------|---|
| Range      | 0 to 86399  |
| Units      | seconds   |
| Default    | 86399   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **peer** [[address](#)] *reference*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>peer</b> list instance  |
| Context        | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">failover peer</a> <i>reference</i> |
| Tree           | <a href="#">peer</a>   |
| Max. Instances | 1  |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **[address]** *reference*

|            |  |
|------------|--|
| Synopsis   | IP address of the failover peer  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">failover peer</a> <i>reference</i> |
| Tree       | <a href="#">peer</a>   |
| Reference  | <b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**sync-tag** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Tag that identifies synchronizing server or pool pairs   |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">failover peer reference</a> <a href="#">sync-tag</a> <i>string</i> |
| Tree          | <a href="#">sync-tag</a>   |
| String Length | 1 to 32  |
| Notes         | This element is mandatory.   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**startup-wait-time** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Time between initialization and assuming active role  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">failover</a> <a href="#">startup-wait-time</a> <i>number</i>  |
| Tree        | <a href="#">startup-wait-time</a>   |
| Description | This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote. |
| Range       | 60 to 3600  |
| Units       | seconds   |
| Default     | 120   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**max-lease-time** *number*

|          |  |
|----------|--|
| Synopsis | Maximum lease time   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">max-lease-time</a> <i>number</i> |

|            |   |
|------------|---|
| Tree       | <a href="#">max-lease-time</a>                          |
| Range      | 10 to 315446399   |
| Units      | seconds   |
| Default    | 864000  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **min-lease-time** *number*

|            |  |
|------------|--|
| Synopsis   | Minimum lease time   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">min-lease-time</a> <i>number</i> |
| Tree       | <a href="#">min-lease-time</a>   |
| Range      | 10 to 315446399  |
| Units      | seconds  |
| Default    | 600  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **minimum-free**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>minimum-free</b> context  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">minimum-free</a> |
| Tree        | <a href="#">minimum-free</a>   |
| Description | Commands in this context specify the minimum number of free addresses in this pool.  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **absolute** *number*

|          |   |
|----------|---|
| Synopsis | Minimum number of free addresses in this pool or subnet   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">minimum-free</a> <a href="#">absolute</a> <i>number</i> |
| Tree     | <a href="#">absolute</a>  |
| Range    | 0 to 255  |

|            |  |
|------------|--|
| Default    | 1  |
| Notes      | The following elements are part of a choice: <b>absolute</b> or <b>percent</b> . |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                          |

### **event-when-depleted** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Generate notification when addresses are depleted  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">minimum-free event-when-depleted</a> <i>boolean</i>  |
| Tree        | <a href="#">event-when-depleted</a>  |
| Description | When configured to <b>true</b> , a system-generated event is generated when all available addresses in the pool or subnet of a local DHCP server are depleted.<br>When configured to <b>false</b> , no action is taken when all available addresses in the pool or subnet of a local DHCP server are depleted. |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **percent** *number*

|            |  |
|------------|--|
| Synopsis   | Minimum free addresses as a percentage   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">minimum-free percent</a> <i>number</i> |
| Tree       | <a href="#">percent</a>  |
| Range      | 0 to 100   |
| Default    | 1  |
| Notes      | The following elements are part of a choice: <b>absolute</b> or <b>percent</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **nak-non-matching-subnet** *boolean*

|          |  |
|----------|--|
| Synopsis | Send NAK if no match for request address pool range  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">nak-non-matching-subnet</a> <i>boolean</i> |

|             |   |
|-------------|---|
| Tree        | <a href="#">nak-non-matching-subnet</a>   |
| Description | When configured to <b>true</b> , a NAK response when the local DHCPv4 server receives a DHCP request with option 50 (the client is trying to request a previously allocated message). If the address-allocation algorithm uses a pool that does not contain the requested address, the system returns the DHCP NAK.<br><br>When configured to <b>false</b> or unconfigured, the system drops the DHCP packet. |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **offer-time** *number*

|            |  |
|------------|--|
| Synopsis   | Time interval during which a DHCP offer remains valid  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">offer-time</a> <i>number</i> |
| Tree       | <a href="#">offer-time</a>   |
| Range      | 10 to 600  |
| Units      | seconds  |
| Default    | 60   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **options**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>options</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">options</a> |
| Tree       | <a href="#">options</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **option** [[number](#)] (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Enter the <b>option</b> list instance   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">options</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">option</a>  |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[number]** (*number* | *keyword*)

Synopsis DHCP option to send identification strings to client

Context **configure** [service](#) [vprn](#) *string* [dhcp-server](#) [dhcpv4](#) *string* [pool](#) *string* [options](#) [option](#) (*number* | *keyword*)

Tree [option](#)

Range 1 to 254

Options subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ascii-string** *string*

Synopsis DHCP option specified as an ASCII string

Context **configure** [service](#) [vprn](#) *string* [dhcp-server](#) [dhcpv4](#) *string* [pool](#) *string* [options](#) [option](#) (*number* | *keyword*) [ascii-string](#) *string*

Tree [ascii-string](#)

String Length 1 to 127

Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **duration** *number*

Synopsis DHCP option as time duration

Context **configure** [service](#) [vprn](#) *string* [dhcp-server](#) [dhcpv4](#) *string* [pool](#) *string* [options](#) [option](#) (*number* | *keyword*) [duration](#) *number*

Tree [duration](#)

Range 10 to 315446399

Units seconds

Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## empty

|            |   |
|------------|---|
| Synopsis   | Empty DHCP option.  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <a href="#">string</a> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <a href="#">string</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">options</a> <a href="#">option</a> ( <a href="#">number</a>   <a href="#">keyword</a> ) <b>empty</b> |
| Tree       | <a href="#">empty</a>   |
| Notes      | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## hex-string *string*

|               |   |
|---------------|---|
| Synopsis      | DHCP option specified as hexadecimal string   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <a href="#">string</a> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <a href="#">string</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">options</a> <a href="#">option</a> ( <a href="#">number</a>   <a href="#">keyword</a> ) <b>hex-string</b> <a href="#">string</a> |
| Tree          | <a href="#">hex-string</a>  |
| String Length | 1 to 256  |
| Notes         | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## ipv4-address *string*

|                |   |
|----------------|---|
| Synopsis       | DHCP option as a list of IPv4 addresses   |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <a href="#">string</a> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <a href="#">string</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">options</a> <a href="#">option</a> ( <a href="#">number</a>   <a href="#">keyword</a> ) <b>ipv4-address</b> <a href="#">string</a> |
| Tree           | <a href="#">ipv4-address</a>  |
| Max. Instances | 4   |
| Notes          | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .<br>This element is ordered by the user.   |



Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **netbios-node-type** *keyword*

Synopsis DHCP option as NetBIOS node type  
 Context **configure** [service](#) [vprn](#) *string* [dhcp-server](#) [dhcpv4](#) *string* [pool](#) *string* [options](#) [option](#) (*number* | *keyword*) **netbios-node-type** *keyword*  
 Tree [netbios-node-type](#)  
 Options b-node, p-node, m-node, h-node  
 Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **subnet** [[ipv4-prefix](#)] *string*

Synopsis Enter the **subnet** list instance  
 Context **configure** [service](#) [vprn](#) *string* [dhcp-server](#) [dhcpv4](#) *string* [pool](#) *string* **subnet** *string*  
 Tree [subnet](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### [[ipv4-prefix](#)] *string*

Synopsis IPv4 prefix for the subnet  
 Context **configure** [service](#) [vprn](#) *string* [dhcp-server](#) [dhcpv4](#) *string* [pool](#) *string* **subnet** *string*  
 Tree [subnet](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **address-range** [[start](#)] *string* [end](#) *string*

Synopsis Enter the **address-range** list instance

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>dhcp-server dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>subnet</b> <i>string</i> <b>address-range</b> <i>string</i> <b>end</b> <i>string</i> |
| Tree       | <b>address-range</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**[start]** *string*

|             |   |
|-------------|---|
| Synopsis    | Lower bound of the IP address range   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>dhcp-server dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>subnet</b> <i>string</i> <b>address-range</b> <i>string</i> <b>end</b> <i>string</i> |
| Tree        | <b>address-range</b>  |
| Description | This command specifies the start of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.   |
| Notes       | This element is part of a list key.   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**end** *string*

|             |   |
|-------------|---|
| Synopsis    | Upper bound of the IP address range   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>dhcp-server dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>subnet</b> <i>string</i> <b>address-range</b> <i>string</i> <b>end</b> <i>string</i> |
| Tree        | <b>address-range</b>  |
| Description | This command specifies the end of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.   |
| Notes       | This element is part of a list key.   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**failover-control-type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |                                      |
|----------|--------------------------------------|
| Synopsis | Failover control type for this range |
|----------|--------------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>dhcp-server dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>subnet</b> <i>string</i> <b>address-range</b> <i>string</i> <b>end</b> <i>string</i> <b>failover-control-type</b> <i>keyword</i> |
| Tree       | <b>failover-control-type</b>  |
| Options    | local, remote, access-driven  |
| Default    | local   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**drain** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Prevent new lease assignment from this subnet   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>dhcp-server dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>subnet</b> <i>string</i> <b>drain</b> <i>boolean</i>   |
| Tree        | <b>drain</b>  |
| Description | When configured to <b>true</b> , new leases cannot be assigned and existing leases are kept up until they are released.<br>When configured to <b>false</b> , the subnet is active and new leases can be assigned. |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**exclude-addresses** [*start*] *string* **end** *string*

|            |   |
|------------|---|
| Synopsis   | Add a list entry for <b>exclude-addresses</b>   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>dhcp-server dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>subnet</b> <i>string</i> <b>exclude-addresses</b> <i>string</i> <b>end</b> <i>string</i> |
| Tree       | <b>exclude-addresses</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**[start]** *string*

|          |   |
|----------|---|
| Synopsis | Lower bound of the IP address range   |
| Context  | <b>configure service vprn</b> <i>string</i> <b>dhcp-server dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>subnet</b> <i>string</i> <b>exclude-addresses</b> <i>string</i> <b>end</b> <i>string</i> |
| Tree     | <b>exclude-addresses</b>  |

|             |   |
|-------------|---|
| Description | This command specifies the start of a range of IP addresses that are excluded from the pool of IP addresses in this subnet. |
| Notes       | This element is part of a list key.   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **end string**

|             |  |
|-------------|--|
| Synopsis    | Upper bound of the IP address range  |
| Context     | <b>configure service vprn string dhcp-server dhcpv4 string pool string subnet string exclude-addresses string end string</b> |
| Tree        | <a href="#">exclude-addresses</a>  |
| Description | This command specifies the end of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.    |
| Notes       | This element is part of a list key.  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **maximum-declined number**

|            |  |
|------------|--|
| Synopsis   | Maximum number of declined addresses allowed   |
| Context    | <b>configure service vprn string dhcp-server dhcpv4 string pool string subnet string maximum-declined number</b> |
| Tree       | <a href="#">maximum-declined</a>   |
| Max. Range | 0 to 4294967295  |
| Default    | 64   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **minimum-free**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>minimum-free</b> context   |
| Context     | <b>configure service vprn string dhcp-server dhcpv4 string pool string subnet string minimum-free</b> |
| Tree        | <a href="#">minimum-free</a>  |
| Description | Commands in this context specify the minimum number of free addresses in this pool.                   |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

**absolute** *number*

|            |  |
|------------|--|
| Synopsis   | Minimum number of free addresses in this pool or subnet  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>subnet</b> <i>string</i> <b>minimum-free</b> <b>absolute</b> <i>number</i> |
| Tree       | <b>absolute</b>  |
| Range      | 0 to 255   |
| Default    | 1  |
| Notes      | The following elements are part of a choice: <b>absolute</b> or <b>percent</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**event-when-depleted** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Generate notification when addresses are depleted  |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>subnet</b> <i>string</i> <b>minimum-free</b> <b>event-when-depleted</b> <i>boolean</i>   |
| Tree        | <b>event-when-depleted</b>   |
| Description | When configured to <b>true</b> , a system-generated event is generated when all available addresses in the pool or subnet of a local DHCP server are depleted.<br><br>When configured to <b>false</b> , no action is taken when all available addresses in the pool or subnet of a local DHCP server are depleted. |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**percent** *number*

|          |   |
|----------|---|
| Synopsis | Minimum free addresses as a percentage  |
| Context  | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>subnet</b> <i>string</i> <b>minimum-free</b> <b>percent</b> <i>number</i> |
| Tree     | <b>percent</b>  |
| Range    | 0 to 100  |

|            |  |
|------------|--|
| Default    | 1  |
| Notes      | The following elements are part of a choice: <b>absolute</b> or <b>percent</b> . |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                          |

## options

|            |  |
|------------|--|
| Synopsis   | Enter the <b>options</b> context   |
| Context    | <b>configure service vprn string dhcp-server dhcpv4 string pool string subnet string options</b> |
| Tree       | <b>options</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## option [number] (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Enter the <b>option</b> list instance  |
| Context    | <b>configure service vprn string dhcp-server dhcpv4 string pool string subnet string options option</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <b>option</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## [number] (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | DHCP option to send identification strings to client  |
| Context    | <b>configure service vprn string dhcp-server dhcpv4 string pool string subnet string options option</b> ( <i>number</i>   <i>keyword</i> )    |
| Tree       | <b>option</b>   |
| Range      | 1 to 254  |
| Options    | subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ascii-string** *string*

|               |   |
|---------------|---|
| Synopsis      | DHCP option specified as an ASCII string  |
| Context       | <b>configure service vprn string dhcp-server dhcpv4 string pool string subnet string options option (number   keyword) ascii-string string</b>  |
| Tree          | <b>ascii-string</b>   |
| String Length | 1 to 127  |
| Notes         | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> . |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **duration** *number*

|            |   |
|------------|---|
| Synopsis   | DHCP option as time duration  |
| Context    | <b>configure service vprn string dhcp-server dhcpv4 string pool string subnet string options option (number   keyword) duration number</b>  |
| Tree       | <b>duration</b>   |
| Range      | 10 to 315446399   |
| Units      | seconds   |
| Notes      | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> . |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **empty**

|            |   |
|------------|---|
| Synopsis   | Empty DHCP option   |
| Context    | <b>configure service vprn string dhcp-server dhcpv4 string pool string subnet string options option (number   keyword) empty</b>  |
| Tree       | <b>empty</b>  |
| Notes      | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> . |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**hex-string** *string*

|               |  |
|---------------|--|
| Synopsis      | DHCP option specified as hexadecimal string  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">subnet</a> <i>string</i> <a href="#">options</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> ) <b>hex-string</b> <i>string</i> |
| Tree          | <a href="#">hex-string</a>   |
| String Length | 1 to 256   |
| Notes         | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**ipv4-address** *string*

|                |  |
|----------------|--|
| Synopsis       | DHCP option as a list of IPv4 addresses  |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">subnet</a> <i>string</i> <a href="#">options</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> ) <b>ipv4-address</b> <i>string</i> |
| Tree           | <a href="#">ipv4-address</a>   |
| Max. Instances | 4  |
| Notes          | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .<br>This element is ordered by the user.  |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**netbios-node-type** *keyword*

|            |  |
|------------|--|
| Synopsis   | DHCP option as NetBIOS node type   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">subnet</a> <i>string</i> <a href="#">options</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> ) <b>netbios-node-type</b> <i>keyword</i> |
| Tree       | <a href="#">netbios-node-type</a>  |
| Options    | b-node, p-node, m-node, h-node   |
| Notes      | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |



## pool-selection

|            |   |
|------------|---|
| Synopsis   | Enter the <b>pool-selection</b> context                                       |
| Context    | <b>configure service vprn string dhcp-server dhcpv4 string pool-selection</b> |
| Tree       | <a href="#">pool-selection</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                       |

## use-gi-address

|             |  |
|-------------|--|
| Synopsis    | Enable the <b>use-gi-address</b> context   |
| Context     | <b>configure service vprn string dhcp-server dhcpv4 string pool-selection use-gi-address</b>   |
| Tree        | <a href="#">use-gi-address</a>   |
| Description | <p>Commands in this context configure gateway interface (GI) address matching. When configured, the pool can be used for address matching even if a subnet is not found. If the local user database name is not used, addresses are provided only by GI. If a user must be blocked from getting an address, the server maps to a local user database and configures the user with no address.</p> <p>A pool can include multiple subnets. Since the GI is shared by multiple subnets in a subscriber interface, the pool can provide IP addresses from any of the subnets included when the GI is matched to one of its subnets. This allows a pool to be created that represents a sub-net.</p> |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## scope *keyword*

|            |  |
|------------|--|
| Synopsis   | GI address-matching scope  |
| Context    | <b>configure service vprn string dhcp-server dhcpv4 string pool-selection use-gi-address scope keyword</b> |
| Tree       | <a href="#">scope</a>  |
| Options    | subnet, pool   |
| Default    | subnet   |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**use-pool-from-client**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>use-pool-from-client</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">pool-selection use-pool-from-client</a> |
| Tree       | <a href="#">use-pool-from-client</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**delimiter** *string*

|               |  |
|---------------|--|
| Synopsis      | Delimiter to combine primary and secondary pool names  |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">pool-selection use-pool-from-client delimiter</a> <i>string</i> |
| Tree          | <a href="#">delimiter</a>  |
| Description   | This command configures a single ASCII character that separates the pool names in DHCP vendor-specific option 82, which identifies the address pool to be used for this client.          |
| String Length | 1  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**user-db** *reference*

|            |  |
|------------|--|
| Synopsis   | Local user database for authentication   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">user-db reference</a> |
| Tree       | <a href="#">user-db</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**user-identification** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | User identification method for the DHCP server |
|----------|--|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>dhcp-server dhcpv4</b> <i>string</i> <b>user-identification</b> <i>keyword</i> |
| Tree       | <b>user-identification</b>  |
| Options    | mac-circuit-id, duid, interface-id, interface-id-link-local, client-id, mac, circuit-id, remote-id                            |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **dhcpv6** [*name*] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>dhcpv6</b> list instance   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>dhcp-server dhcpv6</b> <i>string</i> |
| Tree       | <b>dhcpv6</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                             |

### **[name]** *string*

|               |   |
|---------------|---|
| Synopsis      | DHCP server name  |
| Context       | <b>configure service vprn</b> <i>string</i> <b>dhcp-server dhcpv6</b> <i>string</i> |
| Tree          | <b>dhcpv6</b>   |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                             |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the DHCP server   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>dhcp-server dhcpv6</b> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**auto-provisioned** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Auto-provision the pools of this server  |
| Context    | <b>configure service vprn</b> <i>string dhcp-server dhcpv6 string auto-provisioned boolean</i> |
| Tree       | <a href="#">auto-provisioned</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**defaults**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>defaults</b> context  |
| Context    | <b>configure service vprn</b> <i>string dhcp-server dhcpv6 string defaults</i> |
| Tree       | <a href="#">defaults</a>   |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                        |

**options**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>options</b> context   |
| Context    | <b>configure service vprn</b> <i>string dhcp-server dhcpv6 string defaults options</i> |
| Tree       | <a href="#">options</a>  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                |

**option** [[number](#)] (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Enter the <b>option</b> list instance  |
| Context    | <b>configure service vprn</b> <i>string dhcp-server dhcpv6 string defaults options option (number   keyword)</i> |
| Tree       | <a href="#">option</a>   |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**[number]** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | DHCP option to send as identification string  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">defaults</a> <a href="#">options</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">option</a>  |
| Range      | 1 to 65535  |
| Options    | dns-server, domain-name   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**ascii-string** *string*

|               |  |
|---------------|--|
| Synopsis      | DHCP option specified as an ASCII string   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">defaults</a> <a href="#">options</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">ascii-string</a> <i>string</i> |
| Tree          | <a href="#">ascii-string</a>   |
| String Length | 1 to 127   |
| Notes         | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .  |
| Introduced    | 16.0.R4  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**domain-string** *string*

|               |   |
|---------------|---|
| Synopsis      | DHCP option specified as a domain name  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">defaults</a> <a href="#">options</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">domain-string</a> <i>string</i> |
| Tree          | <a href="#">domain-string</a>   |
| String Length | 1 to 127  |
| Notes         | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .   |
| Introduced    | 16.0.R4   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**duration** *number*

|            |   |
|------------|---|
| Synopsis   | DHCP option specified as time   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">defaults</a> <a href="#">options</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> ) <b>duration</b> <i>number</i> |
| Tree       | <a href="#">duration</a>  |
| Range      | 10 to 315446399   |
| Units      | seconds   |
| Notes      | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**empty**

|            |  |
|------------|--|
| Synopsis   | Empty DHCP option  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">defaults</a> <a href="#">options</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> ) <b>empty</b> |
| Tree       | <a href="#">empty</a>  |
| Notes      | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**hex-string** *string*

|               |   |
|---------------|---|
| Synopsis      | DHCP option specified as hexadecimal string   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">defaults</a> <a href="#">options</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> ) <b>hex-string</b> <i>string</i> |
| Tree          | <a href="#">hex-string</a>  |
| String Length | 1 to 256  |
| Notes         | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .   |
| Introduced    | 16.0.R4   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**ipv6-address** *string*

|                |  |
|----------------|--|
| Synopsis       | DHCP option specified as a list of IPv6 addresses  |
| Context        | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>defaults</b> <b>options</b> <b>option</b> ( <i>number</i>   <i>keyword</i> ) <b>ipv6-address</b> <i>string</i> |
| Tree           | <a href="#">ipv6-address</a>   |
| Max. Instances | 4  |
| Notes          | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .<br>This element is ordered by the user.  |
| Introduced     | 16.0.R4  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**preferred-lifetime** *number*

|             |  |
|-------------|--|
| Synopsis    | Time this lease remains preferred  |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>defaults</b> <b>preferred-lifetime</b> <i>number</i>   |
| Tree        | <a href="#">preferred-lifetime</a>   |
| Description | This command configures the preferred lifetime of the IPv6 lease address or prefix. When the preferred lifetime expires, any derived addresses are deprecated. The preferred lifetime must be less than or equal to the valid lifetime.<br><br>Each address or prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address/prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level). |
| Range       | 300 to 315446399   |
| Units       | seconds  |
| Default     | 3600   |
| Introduced  | 16.0.R4  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**rebind-time** *number*

|          |                           |
|----------|---------------------------|
| Synopsis | Rebind time for the lease |
|----------|---------------------------|

|             |  |
|-------------|--|
| Context     | <b>configure service vprn string dhcp-server dhcpv6 string defaults rebind-time number</b>   |
| Tree        | <b>rebind-time</b>   |
| Description | <p>This command configures the rebind time, known as T2, at which the client contacts the addressing authority to extend the lifetimes of its leases.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew or reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses or prefixes currently assigned to the IA in its renew message.</p> <p>Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured rebind timer value should always be less than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.</p> |
| Range       | 0 to 1209600   |
| Units       | seconds  |
| Default     | 2880   |
| Introduced  | 16.0.R4  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **renew-time number**

|             |   |
|-------------|---|
| Synopsis    | Renew time for the lease  |
| Context     | <b>configure service vprn string dhcp-server dhcpv6 string defaults renew-time number</b>   |
| Tree        | <b>renew-time</b>   |
| Description | <p>This command configures the renew time, known as T1, at which the client makes a transition to the lease-renewal state.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew/reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses/prefixes currently assigned to the IA in its renew message.</p> <p>Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured renew timer value should always be shorter than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.</p> |
| Range       | 0 to 604800   |
| Units       | seconds   |



|            |   |
|------------|---|
| Default    | 1800  |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **valid-lifetime** *number*

|             |  |
|-------------|--|
| Synopsis    | Time for the lease to remain valid   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">defaults valid-lifetime</a> <i>number</i>   |
| Tree        | <a href="#">valid-lifetime</a>   |
| Description | <p>This command configures a valid lifetime for a DHCPv6 lease address or prefix. The valid lifetime is the length of time an address and prefix remains in the valid state. The valid lifetime must be greater than or equal to the preferred lifetime. When the valid lifetime expires, the address and prefix becomes invalid and must not be used in communications. RFC 2461 recommends a default value of 30 days.</p> <p>Each address and prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address and prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).</p> |
| Range       | 300 to 315446399   |
| Units       | seconds  |
| Default     | 86400  |
| Introduced  | 16.0.R4  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**failover**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>failover</b> context                                       |
| Context    | <b>configure service vprn string dhcp-server dhcpv6 string failover</b> |
| Tree       | <b>failover</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                 |

**admin-state keyword**

|            |   |
|------------|---|
| Synopsis   | Administrative state of the failover mechanism  |
| Context    | <b>configure service vprn string dhcp-server dhcpv6 string failover admin-state keyword</b> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                     |

**ignore-mclt-on-takeover boolean**

|             |   |
|-------------|---|
| Synopsis    | Ignore maximum client lead during takeover from partner   |
| Context     | <b>configure service vprn string dhcp-server dhcpv6 string failover ignore-mclt-on-takeover boolean</b>   |
| Tree        | <b>ignore-mclt-on-takeover</b>  |
| Description | <p>When configured to <b>true</b>, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.</p> <p>When configured to <b>false</b>, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.</p> |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**maximum-client-lead-time** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Maximum time that DHCP server can extend client's lease   |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>failover</b> <b>maximum-client-lead-time</b> <i>number</i>  |
| Tree        | <b>maximum-client-lead-time</b>   |
| Description | This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT. |
| Range       | 600 to 86399  |
| Units       | seconds   |
| Default     | 600   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**partner-down-delay** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Delay to prevent lease duplication during link failure   |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>failover</b> <b>partner-down-delay</b> <i>number</i>   |
| Tree        | <b>partner-down-delay</b>  |
| Description | This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure. |
| Range       | 0 to 86399   |
| Units       | seconds  |
| Default     | 86399  |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **peer** [[address](#)] *reference*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>peer</b> list instance   |
| Context        | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">failover peer</a> <i>reference</i> |
| Tree           | <a href="#">peer</a>  |
| Max. Instances | 1   |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **[address]** *reference*

|            |   |
|------------|---|
| Synopsis   | IP address of the failover peer   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">failover peer</a> <i>reference</i> |
| Tree       | <a href="#">peer</a>  |
| Reference  | <b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )                                |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **sync-tag** *string*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Tag that identifies synchronizing server or pool pairs   |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">failover peer</a> <i>reference</i> <a href="#">sync-tag</a> <i>string</i> |
| Tree          | <a href="#">sync-tag</a>   |
| String Length | 1 to 32  |
| Notes         | This element is mandatory.   |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **startup-wait-time** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Time between initialization and assuming active role  |
| Context     | <b>configure</b> <a href="#">service vprn string dhcp-server dhcpv6 string failover startup-wait-time number</a>  |
| Tree        | <a href="#">startup-wait-time</a>   |
| Description | This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote. |
| Range       | 60 to 3600  |
| Units       | seconds   |
| Default     | 120   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ignore-rapid-commit** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Ignore Rapid Commit option  |
| Context     | <b>configure</b> <a href="#">service vprn string dhcp-server dhcpv6 string ignore-rapid-commit boolean</a>                            |
| Tree        | <a href="#">ignore-rapid-commit</a>   |
| Description | When configured to <b>true</b> , the server ignores the Rapid Commit option sent by the client and uses the regular message exchange. |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## interface-id-mapping *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Map hosts within interface-to-prefix combinations   |
| Context     | <b>configure service vpn</b> <i>string dhcp-server dhcpv6 string interface-id-mapping boolean</i>   |
| Tree        | <a href="#">interface-id-mapping</a>  |
| Description | When configured to <b>true</b> , this command specifies an interface-mapping method that uses a combination of unique /64 prefixes and interface IDs. A /64 prefix is allocated to each interface ID, and all clients with the same interface ID are assigned an address from the prefix. This method is used for bridging clients in the same local loop and SAP, so that sharing the prefix allows communication to stay local. For SLAAC-based assignment, downstream neighbor discovery is automatically enabled to resolve the assigned address. |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## lease-hold

|            |   |
|------------|---|
| Synopsis   | Enter the <b>lease-hold</b> context   |
| Context    | <b>configure service vpn</b> <i>string dhcp-server dhcpv6 string lease-hold</i> |
| Tree       | <a href="#">lease-hold</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                         |

## additional-scenarios

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>additional-scenarios</b> context  |
| Context     | <b>configure service vpn</b> <i>string dhcp-server dhcpv6 string lease-hold additional-scenarios</i>               |
| Tree        | <a href="#">additional-scenarios</a>   |
| Description | Commands in this context configure additional types of leases or triggers that cause the system to hold up leases. |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**internal-lease-ipsec** *boolean*

|            |  |
|------------|--|
| Synopsis   | Apply the lease hold timer to local IPsec clients  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">lease-hold additional-scenarios internal-lease-ipsec</a> <i>boolean</i> |
| Tree       | <a href="#">internal-lease-ipsec</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**solicited-release** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Apply lease hold timer for solicited releases   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">lease-hold additional-scenarios solicited-release</a> <i>boolean</i> |
| Tree        | <a href="#">solicited-release</a>   |
| Description | This command enables the server to hold up a lease even for a solicited release, for example, when the server receives a normal DHCP release message.   |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**time** *number*

|            |  |
|------------|--|
| Synopsis   | Lease hold time  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">lease-hold time</a> <i>number</i> |
| Tree       | <a href="#">time</a>   |
| Range      | 1 to 631152000   |
| Units      | seconds  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**lease-query** *boolean*

|          |   |
|----------|---|
| Synopsis | Handle and reply to lease query messages  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">lease-query</a> <i>boolean</i> |
| Tree     | <a href="#">lease-query</a>   |

|            |   |
|------------|---|
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **pool** [*pool-name*] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>pool</b> list instance   |
| Context    | <b>configure</b> <i>service vprn string dhcp-server dhcpv6 string pool string</i> |
| Tree       | <i>pool</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                           |

### **[pool-name]** *string*

|               |   |
|---------------|---|
| Synopsis      | DHCP server pool name   |
| Context       | <b>configure</b> <i>service vprn string dhcp-server dhcpv6 string pool string</i> |
| Tree          | <i>pool</i>   |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                           |

### **delegated-prefix**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>delegated-prefix</b> context  |
| Context    | <b>configure</b> <i>service vprn string dhcp-server dhcpv6 string pool string delegated-prefix</i> |
| Tree       | <i>delegated-prefix</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **length** *number*

|          |  |
|----------|--|
| Synopsis | Prefix length for pool if unspecified by client  |
| Context  | <b>configure</b> <i>service vprn string dhcp-server dhcpv6 string pool string delegated-prefix length number</i> |



|            |   |
|------------|---|
| Tree       | <a href="#">length</a>                                  |
| Range      | 48 to 127   |
| Default    | 64  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **maximum number**

|            |   |
|------------|---|
| Synopsis   | Maximum delegated prefix length for this pool   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">delegated-prefix</a> <a href="#">maximum number</a> |
| Tree       | <a href="#">maximum</a>   |
| Range      | 48 to 127   |
| Default    | 64  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **minimum number**

|            |   |
|------------|---|
| Synopsis   | Minimum delegated prefix length for this pool   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">delegated-prefix</a> <a href="#">minimum number</a> |
| Tree       | <a href="#">minimum</a>   |
| Range      | 48 to 127   |
| Default    | 48  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **description string**

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **exclude-prefix** [[ipv6-prefix](#)] *string*

Synopsis Add a list entry for **exclude-prefix**

Context **configure** [service vprn](#) *string* [dhcp-server dhcpv6](#) *string* [pool](#) *string* **exclude-prefix** *string*

Tree [exclude-prefix](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[ipv6-prefix]** *string*

Synopsis IPv6 prefix to be excluded from available pool prefixes

Context **configure** [service vprn](#) *string* [dhcp-server dhcpv6](#) *string* [pool](#) *string* **exclude-prefix** *string*

Tree [exclude-prefix](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **failover**

Synopsis Enter the **failover** context

Context **configure** [service vprn](#) *string* [dhcp-server dhcpv6](#) *string* [pool](#) *string* **failover**

Tree [failover](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the failover mechanism

Context **configure** [service vprn](#) *string* [dhcp-server dhcpv6](#) *string* [pool](#) *string* **failover** **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **ignore-mclt-on-takeover** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Ignore maximum client lead during takeover from partner   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">failover ignore-mclt-on-takeover</a> <i>boolean</i>   |
| Tree        | <a href="#">ignore-mclt-on-takeover</a>   |
| Description | <p>When configured to <b>true</b>, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.</p> <p>When configured to <b>false</b>, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.</p> |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **maximum-client-lead-time** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Maximum time that DHCP server can extend client's lease   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">failover maximum-client-lead-time</a> <i>number</i>   |
| Tree        | <a href="#">maximum-client-lead-time</a>  |
| Description | This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT. |
| Range       | 600 to 86399  |
| Units       | seconds   |
| Default     | 600   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**partner-down-delay** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Delay to prevent lease duplication during link failure   |
| Context     | <b>configure</b> <i>service vprn string dhcp-server dhcpv6 string pool string failover partner-down-delay number</i>   |
| Tree        | <a href="#">partner-down-delay</a>   |
| Description | This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure. |
| Range       | 0 to 86399   |
| Units       | seconds  |
| Default     | 86399  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**peer** [[address](#)] *reference*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>peer</b> list instance   |
| Context        | <b>configure</b> <i>service vprn string dhcp-server dhcpv6 string pool string failover peer reference</i> |
| Tree           | <a href="#">peer</a>  |
| Max. Instances | 1   |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**[address]** *reference*

|          |   |
|----------|---|
| Synopsis | IP address of the failover peer   |
| Context  | <b>configure</b> <i>service vprn string dhcp-server dhcpv6 string pool string failover peer reference</i> |

|            |   |
|------------|---|
| Tree       | <a href="#">peer</a>  |
| Reference  | <b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **sync-tag** *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Tag that identifies synchronizing server or pool pairs  |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">failover peer</a> <i>reference</i> <a href="#">sync-tag</a> <i>string</i> |
| Tree          | <a href="#">sync-tag</a>  |
| String Length | 1 to 32   |
| Notes         | This element is mandatory.  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **startup-wait-time** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Time between initialization and assuming active role  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">failover</a> <a href="#">startup-wait-time</a> <i>number</i>  |
| Tree        | <a href="#">startup-wait-time</a>   |
| Description | This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote. |
| Range       | 60 to 3600  |
| Units       | seconds   |
| Default     | 120   |

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## options

Synopsis Enter the **options** context  
 Context **configure service vprn string dhcp-server dhcpv6 string pool string options**  
 Tree [options](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## option [number] (*number* | *keyword*)

Synopsis Enter the **option** list instance  
 Context **configure service vprn string dhcp-server dhcpv6 string pool string options option**  
 (*number* | *keyword*)  
 Tree [option](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [number] (*number* | *keyword*)

Synopsis DHCP option to send as identification string  
 Context **configure service vprn string dhcp-server dhcpv6 string pool string options option**  
 (*number* | *keyword*)  
 Tree [option](#)  
 Range 1 to 65535  
 Options dns-server, domain-name  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ascii-string *string*

Synopsis DHCP option specified as an ASCII string

|               |   |
|---------------|---|
| Context       | <b>configure service vprn string dhcp-server dhcpv6 string pool string options option</b><br>( <i>number</i>   <i>keyword</i> ) <b>ascii-string string</b>                        |
| Tree          | <b>ascii-string</b>   |
| String Length | 1 to 127  |
| Notes         | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> . |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **domain-string** *string*

|               |   |
|---------------|---|
| Synopsis      | DHCP option specified as a domain name  |
| Context       | <b>configure service vprn string dhcp-server dhcpv6 string pool string options option</b><br>( <i>number</i>   <i>keyword</i> ) <b>domain-string string</b>                       |
| Tree          | <b>domain-string</b>  |
| String Length | 1 to 127  |
| Notes         | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> . |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **duration** *number*

|            |   |
|------------|---|
| Synopsis   | DHCP option specified as time   |
| Context    | <b>configure service vprn string dhcp-server dhcpv6 string pool string options option</b><br>( <i>number</i>   <i>keyword</i> ) <b>duration number</b>                            |
| Tree       | <b>duration</b>   |
| Range      | 10 to 315446399   |
| Units      | seconds   |
| Notes      | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> . |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **empty**

|          |                   |
|----------|-------------------|
| Synopsis | Empty DHCP option |
|----------|-------------------|

|            |   |
|------------|---|
| Context    | <b>configure service vprn string dhcp-server dhcpv6 string pool string options option</b><br>( <i>number</i>   <i>keyword</i> ) <b>empty</b>                                      |
| Tree       | <b>empty</b>  |
| Notes      | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> . |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **hex-string string**

|               |   |
|---------------|---|
| Synopsis      | DHCP option specified as hexadecimal string   |
| Context       | <b>configure service vprn string dhcp-server dhcpv6 string pool string options option</b><br>( <i>number</i>   <i>keyword</i> ) <b>hex-string string</b>                          |
| Tree          | <b>hex-string</b>   |
| String Length | 1 to 256  |
| Notes         | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> . |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ipv6-address string**

|                |   |
|----------------|---|
| Synopsis       | DHCP option specified as a list of IPv6 addresses   |
| Context        | <b>configure service vprn string dhcp-server dhcpv6 string pool string options option</b><br>( <i>number</i>   <i>keyword</i> ) <b>ipv6-address string</b>  |
| Tree           | <b>ipv6-address</b>   |
| Max. Instances | 4   |
| Notes          | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .<br>This element is ordered by the user. |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **prefix [ipv6-prefix] string**

|          |                                       |
|----------|---------------------------------------|
| Synopsis | Enter the <b>prefix</b> list instance |
|----------|---------------------------------------|



|            |  |
|------------|--|
| Context    | <b>configure service vprn string dhcp-server dhcpv6 string pool string prefix string</b> |
| Tree       | <b>prefix</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                  |

**[ipv6-prefix] string**

|            |  |
|------------|--|
| Synopsis   | IPv6 prefix to be excluded from available pool prefixes                                  |
| Context    | <b>configure service vprn string dhcp-server dhcpv6 string pool string prefix string</b> |
| Tree       | <b>prefix</b>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                  |

**drain boolean**

|            |  |
|------------|--|
| Synopsis   | No new leases can be assigned  |
| Context    | <b>configure service vprn string dhcp-server dhcpv6 string pool string prefix string drain boolean</b> |
| Tree       | <b>drain</b>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**failover-control-type keyword****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | Failover control type for this range   |
| Context  | <b>configure service vprn string dhcp-server dhcpv6 string pool string prefix string failover-control-type keyword</b> |
| Tree     | <b>failover-control-type</b>   |
| Options  | local, remote, access-driven   |
| Default  | local  |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## options

|            |  |
|------------|--|
| Synopsis   | Enter the <b>options</b> context   |
| Context    | <b>configure service vprn string dhcp-server dhcpv6 string pool string prefix string options</b> |
| Tree       | <a href="#">options</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## option [number] (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Enter the <b>option</b> list instance  |
| Context    | <b>configure service vprn string dhcp-server dhcpv6 string pool string prefix string options option (<i>number</i>   <i>keyword</i>)</b> |
| Tree       | <a href="#">option</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## [number] (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | DHCP option to send as identification string   |
| Context    | <b>configure service vprn string dhcp-server dhcpv6 string pool string prefix string options option (<i>number</i>   <i>keyword</i>)</b> |
| Tree       | <a href="#">option</a>   |
| Range      | 1 to 65535   |
| Options    | dns-server, domain-name  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## ascii-string *string*

|          |  |
|----------|--|
| Synopsis | DHCP option specified as an ASCII string |
|----------|--|

|               |   |
|---------------|---|
| Context       | <b>configure service vprn string dhcp-server dhcpv6 string pool string prefix string options option</b> ( <i>number</i>   <i>keyword</i> ) <i>ascii-string string</i>             |
| Tree          | <a href="#">ascii-string</a>  |
| String Length | 1 to 127  |
| Notes         | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> . |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **domain-string** *string*

|               |   |
|---------------|---|
| Synopsis      | DHCP option specified as a domain name  |
| Context       | <b>configure service vprn string dhcp-server dhcpv6 string pool string prefix string options option</b> ( <i>number</i>   <i>keyword</i> ) <i>domain-string string</i>            |
| Tree          | <a href="#">domain-string</a>   |
| String Length | 1 to 127  |
| Notes         | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> . |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **duration** *number*

|            |   |
|------------|---|
| Synopsis   | DHCP option specified as time   |
| Context    | <b>configure service vprn string dhcp-server dhcpv6 string pool string prefix string options option</b> ( <i>number</i>   <i>keyword</i> ) <i>duration number</i>                 |
| Tree       | <a href="#">duration</a>  |
| Range      | 10 to 315446399   |
| Units      | seconds   |
| Notes      | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> . |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **empty**

|          |                   |
|----------|-------------------|
| Synopsis | Empty DHCP option |
|----------|-------------------|

|            |   |
|------------|---|
| Context    | <b>configure service vprn string dhcp-server dhcpv6 string pool string prefix string options option</b> ( <i>number</i>   <i>keyword</i> ) <b>empty</b>                           |
| Tree       | <b>empty</b>  |
| Notes      | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> . |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **hex-string** *string*

|               |   |
|---------------|---|
| Synopsis      | DHCP option specified as hexadecimal string   |
| Context       | <b>configure service vprn string dhcp-server dhcpv6 string pool string prefix string options option</b> ( <i>number</i>   <i>keyword</i> ) <b>hex-string string</b>               |
| Tree          | <b>hex-string</b>   |
| String Length | 1 to 256  |
| Notes         | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> . |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ipv6-address** *string*

|                |   |
|----------------|---|
| Synopsis       | DHCP option specified as a list of IPv6 addresses   |
| Context        | <b>configure service vprn string dhcp-server dhcpv6 string pool string prefix string options option</b> ( <i>number</i>   <i>keyword</i> ) <b>ipv6-address string</b>   |
| Tree           | <b>ipv6-address</b>   |
| Max. Instances | 4   |
| Notes          | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .<br>This element is ordered by the user. |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **preferred-lifetime** *number*

|          |                                   |
|----------|-----------------------------------|
| Synopsis | Time this lease remains preferred |
|----------|-----------------------------------|

|             |   |
|-------------|---|
| Context     | <b>configure service vprn</b> <i>string</i> <b>dhcp-server dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>preferred-lifetime</b> <i>number</i>   |
| Tree        | <b>preferred-lifetime</b>   |
| Description | <p>This command configures the preferred lifetime of the IPv6 lease address or prefix. When the preferred lifetime expires, any derived addresses are deprecated. The preferred lifetime must be less than or equal to the valid lifetime.</p> <p>Each address or prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address/prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).</p> |
| Range       | 300 to 315446399  |
| Units       | seconds   |
| Default     | 3600  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **prefix-length-threshold** [**prefix-length**] *number*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>prefix-length-threshold</b> list instance   |
| Context        | <b>configure service vprn</b> <i>string</i> <b>dhcp-server dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>prefix-length-threshold</b> <i>number</i> |
| Tree           | <b>prefix-length-threshold</b>   |
| Max. Instances | 8  |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **[prefix-length]** *number*

|          |  |
|----------|--|
| Synopsis | Delegated prefix length for pool thresholds  |
| Context  | <b>configure service vprn</b> <i>string</i> <b>dhcp-server dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>prefix-length-threshold</b> <i>number</i> |
| Tree     | <b>prefix-length-threshold</b>   |
| Range    | 1 to 128   |
| Notes    | This element is part of a list key.  |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

**absolute** *number*

|            |   |
|------------|---|
| Synopsis   | Minimum number of free prefixes for this prefix length  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>prefix-length-threshold</b> <i>number</i> <b>absolute</b> <i>number</i> |
| Tree       | <b>absolute</b>   |
| Range      | 1 to 4294967295   |
| Notes      | The following elements are part of a choice: <b>absolute</b> or <b>percent</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**event-when-depleted** *boolean*

|            |   |
|------------|---|
| Synopsis   | Generate a notification when this pool is depleted  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>prefix-length-threshold</b> <i>number</i> <b>event-when-depleted</b> <i>boolean</i> |
| Tree       | <b>event-when-depleted</b>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**percent** *number*

|            |  |
|------------|--|
| Synopsis   | Minimum percentage of free prefixes for prefix length  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>prefix-length-threshold</b> <i>number</i> <b>percent</b> <i>number</i> |
| Tree       | <b>percent</b>   |
| Range      | 1 to 100   |
| Notes      | The following elements are part of a choice: <b>absolute</b> or <b>percent</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## prefix-type

|            |   |
|------------|---|
| Synopsis   | Enter the <b>prefix-type</b> context  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>prefix-type</b> |
| Tree       | <b>prefix-type</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## pd *boolean*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Allocate IA-PD prefixes from this prefix pool  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>prefix-type</b> <b>pd</b> <i>boolean</i> |
| Tree       | <b>pd</b>  |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## wan-host *boolean*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Allocate IA-NA or SLAAC prefixes from this prefix pool   |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>prefix-type</b> <b>wan-host</b> <i>boolean</i> |
| Tree       | <b>wan-host</b>  |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**rebind-time** *number*

|             |  |
|-------------|--|
| Synopsis    | Rebind time for the lease  |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>rebind-time</b> <i>number</i>  |
| Tree        | <b>rebind-time</b>   |
| Description | <p>This command configures the rebind time, known as T2, at which the client contacts the addressing authority to extend the lifetimes of its leases.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew or reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses or prefixes currently assigned to the IA in its renew message.</p> <p>Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured rebind timer value should always be less than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.</p> |
| Range       | 0 to 1209600   |
| Units       | seconds  |
| Default     | 2880   |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**renew-time** *number*

|             |   |
|-------------|---|
| Synopsis    | Renew time for the lease  |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>renew-time</b> <i>number</i>  |
| Tree        | <b>renew-time</b>   |
| Description | <p>This command configures the renew time, known as T1, at which the client makes a transition to the lease-renewal state.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew/reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses/prefixes currently assigned to the IA in its renew message.</p> <p>Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured renew timer value should always be shorter than or</p> |



|            |   |
|------------|---|
|            | equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA. |
| Range      | 0 to 604800   |
| Units      | seconds   |
| Default    | 1800  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **valid-lifetime** *number*

|             |  |
|-------------|--|
| Synopsis    | Time for the lease to remain valid   |
| Context     | <b>configure</b> <i>service vprn string dhcp-server dhcpv6 string pool string prefix string valid-lifetime number</i>  |
| Tree        | <i>valid-lifetime</i>  |
| Description | <p>This command configures a valid lifetime for a DHCPv6 lease address or prefix. The valid lifetime is the length of time an address and prefix remains in the valid state. The valid lifetime must be greater than or equal to the preferred lifetime. When the valid lifetime expires, the address and prefix becomes invalid and must not be used in communications. RFC 2461 recommends a default value of 30 days.</p> <p>Each address and prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address and prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).</p> |
| Range       | 300 to 315446399   |
| Units       | seconds  |
| Default     | 86400  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **prefix-length-threshold** [*prefix-length*] *number*

|          |  |
|----------|--|
| Synopsis | Enter the <b>prefix-length-threshold</b> list instance   |
| Context  | <b>configure</b> <i>service vprn string dhcp-server dhcpv6 string pool string prefix-length-threshold number</i> |
| Tree     | <i>prefix-length-threshold</i>   |

|                |   |
|----------------|---|
| Max. Instances | 8   |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

**[prefix-length] number**

|            |  |
|------------|--|
| Synopsis   | Delegated prefix length for pool thresholds  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>dhcp-server dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix-length-threshold</b> <i>number</i> |
| Tree       | <a href="#">prefix-length-threshold</a>  |
| Range      | 1 to 128   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**event-when-depleted boolean**

|            |  |
|------------|--|
| Synopsis   | Generate a notification when this pool is depleted   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>dhcp-server dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix-length-threshold</b> <i>number</i> <b>event-when-depleted</b> <i>boolean</i> |
| Tree       | <a href="#">event-when-depleted</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**minimum-free-percent number**

|            |  |
|------------|--|
| Synopsis   | Percentage of free prefixes for this prefix length   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>dhcp-server dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix-length-threshold</b> <i>number</i> <b>minimum-free-percent</b> <i>number</i> |
| Tree       | <a href="#">minimum-free-percent</a>   |
| Range      | 0 to 100   |
| Default    | 0  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## pool-selection

|            |   |
|------------|---|
| Synopsis   | Enter the <b>pool-selection</b> context                                       |
| Context    | <b>configure service vprn string dhcp-server dhcpv6 string pool-selection</b> |
| Tree       | <a href="#">pool-selection</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                       |

## use-link-address

|             |   |
|-------------|---|
| Synopsis    | Enable the <b>use-link-address</b> context  |
| Context     | <b>configure service vprn string dhcp-server dhcpv6 string pool-selection use-link-address</b>  |
| Tree        | <a href="#">use-link-address</a>  |
| Description | This command configures the local pool selection for DHCPv6 address or prefix assignment to use the link address. When configured, the selected pool contains a prefix covering the link address. |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## scope keyword

|            |  |
|------------|--|
| Synopsis   | Scope of the IP address selection  |
| Context    | <b>configure service vprn string dhcp-server dhcpv6 string pool-selection use-link-address scope keyword</b> |
| Tree       | <a href="#">scope</a>  |
| Options    | subnet, pool   |
| Default    | subnet   |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## use-pool-from-client

|          |  |
|----------|--|
| Synopsis | Enable the <b>use-pool-from-client</b> context   |
| Context  | <b>configure service vprn string dhcp-server dhcpv6 string pool-selection use-pool-from-client</b> |
| Tree     | <a href="#">use-pool-from-client</a>   |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **delimiter** *string*

|               |   |
|---------------|---|
| Synopsis      | Delimiter to combine primary and secondary pool names   |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">pool-selection use-pool-from-client</a> <b>delimiter</b> <i>string</i> |
| Tree          | <a href="#">delimiter</a>   |
| Description   | This command configures a single ASCII character that separates the pool names in DHCP vendor-specific option 82, which identifies the address pool to be used for this client.                 |
| String Length | 1   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **server-id**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>server-id</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <b>server-id</b> |
| Tree       | <a href="#">server-id</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **duid-enterprise**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>duid-enterprise</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">server-id</a> <b>duid-enterprise</b> |
| Tree       | <a href="#">duid-enterprise</a>   |
| Notes      | The following elements are part of a choice: <b>duid-enterprise</b> or <b>duid-link-local</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ascii-string** *string*

|          |  |
|----------|--|
| Synopsis | DUID enterprise server ID specified as an ASCII string |
|----------|--|

|               |  |
|---------------|--|
| Context       | <b>configure service vprn string dhcp-server dhcpv6 string server-id duid-enterprise ascii-string string</b> |
| Tree          | <a href="#">ascii-string</a>   |
| String Length | 1 to 58  |
| Notes         | The following elements are part of a choice: <b>ascii-string</b> or <b>hex-string</b> .                      |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **hex-string string**

|               |  |
|---------------|--|
| Synopsis      | DUID enterprise server ID specified as a hex string  |
| Context       | <b>configure service vprn string dhcp-server dhcpv6 string server-id duid-enterprise hex-string string</b> |
| Tree          | <a href="#">hex-string</a>   |
| String Length | 1 to 118   |
| Notes         | The following elements are part of a choice: <b>ascii-string</b> or <b>hex-string</b> .                    |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **duid-link-local**

|            |   |
|------------|---|
| Synopsis   | Derive DUID server ID from a system link-layer address  |
| Context    | <b>configure service vprn string dhcp-server dhcpv6 string server-id duid-link-local</b>        |
| Tree       | <a href="#">duid-link-local</a>   |
| Notes      | The following elements are part of a choice: <b>duid-enterprise</b> or <b>duid-link-local</b> . |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **user-identification keyword**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | User identification method for the DHCP server   |
| Context  | <b>configure service vprn string dhcp-server dhcpv6 string user-identification keyword</b> |

|            |  |
|------------|--|
| Tree       | <a href="#">user-identification</a>  |
| Options    | mac-circuit-id, duid, interface-id, interface-id-link-local, client-id, mac, circuit-id, remote-id |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## dns

|            |  |
|------------|--|
| Synopsis   | Enable the <b>dns</b> context            |
| Context    | <b>configure service vprn string dns</b> |
| Tree       | <a href="#">dns</a>                      |
| Introduced | 16.0.R1                                  |
| Platforms  | All                                      |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of DNS                                  |
| Context    | <b>configure service vprn string dns admin-state keyword</b> |
| Tree       | <a href="#">admin-state</a>                                  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## default-domain *string*

|               |   |
|---------------|---|
| Synopsis      | Domain name added in DNS retries  |
| Context       | <b>configure service vprn string dns default-domain string</b>  |
| Tree          | <a href="#">default-domain</a>  |
| Description   | This command configures the DNS domain name to be added in DNS retries when a DNS query is not replied or an empty DNS reply is received.<br><br>The name can contain only alphabetical characters (A-Z), numeric characters (0-9), the minus sign (-), and the period (.). |
| String Length | 1 to 255  |
| Introduced    | 20.2.R1   |
| Platforms     | All   |

**ipv4-source-address** (*keyword | ipv4-unicast-address*)

|            |   |
|------------|---|
| Synopsis   | Source address to contact an IPv4 DNS server  |
| Context    | <b>configure service vprn</b> <i>string dns ipv4-source-address</i> ( <i>keyword   ipv4-unicast-address</i> ) |
| Tree       | <a href="#">ipv4-source-address</a>   |
| Options    | use-interface-ip  |
| Default    | use-interface-ip  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**ipv6-source-address** (*keyword | ipv6-unicast-address*)

|            |   |
|------------|---|
| Synopsis   | Source address to contact an IPv6 DNS server  |
| Context    | <b>configure service vprn</b> <i>string dns ipv6-source-address</i> ( <i>keyword   ipv6-unicast-address</i> ) |
| Tree       | <a href="#">ipv6-source-address</a>   |
| Options    | use-interface-ip  |
| Default    | use-interface-ip  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**server** (*ipv4-address-no-zone | ipv6-address-no-zone*)

|                |   |
|----------------|---|
| Synopsis       | DNS server used for DNS name resolution   |
| Context        | <b>configure service vprn</b> <i>string dns server</i> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) |
| Tree           | <a href="#">server</a>  |
| Max. Instances | 3   |
| Notes          | This element is ordered by the user.  |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

**ecmp number**

|          |   |
|----------|---|
| Synopsis | Maximum equal-cost routes for routing table instance    |
| Context  | <b>configure service vprn</b> <i>string ecmp number</i> |

|             |  |
|-------------|--|
| Tree        | <a href="#">ecmp</a>   |
| Description | <p>This command configures ECMP and defines the number of routes for path sharing. ECMP can be used only for routes learned with the same preference and the same protocol.</p> <p>If available ECMP routes at the best preference exceed the maximum ECMP routes allowed, the system selects the route using the following criteria:</p> <ol style="list-style-type: none"> <li>1. The system selects the lowest next hop router ID.</li> <li>2. If the next hop goes to the same neighbor, the system selects the next hop with the lowest interface index.</li> </ol> |
| Range       | 1 to 64  |
| Default     | 1  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **ecmp-unequal-cost** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable ECMP unequal cost capability  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ecmp-unequal-cost</a> <i>boolean</i> |
| Tree       | <a href="#">ecmp-unequal-cost</a>  |
| Default    | false  |
| Introduced | 19.7.R1  |
| Platforms  | All  |

### **entropy-label** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Use entropy label  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">entropy-label</a> <i>boolean</i>   |
| Tree        | <a href="#">entropy-label</a>  |
| Description | <p>When configured to <b>true</b>, this command enables the use of entropy labels.</p> <p>The entropy label and indicator (EL/ELI) are inserted on relevant packets. Applicable packets are those for which at least one LSP in the stack at the far end has advertised the entropy-label capability. These LSPs are in LDP or RSVP tunnels used by an IGP or BGP shortcut. If the tunnel is of type RSVP, the entropy-label capability must also be enabled under the <b>configure router mpls</b> or <b>configure router mpls lsp</b> context.</p> <p>This command also results in other traffic that is forwarded over an LDP or RSVP LSP for which this router is the LER, and for which there is no explicit service endpoint on this router, to have the EL/ELI enabled, subject to the LSP far-end advertising entropy-label-capability. An example of such traffic includes packets arriving on a stitched LDP LSP forwarded over an RSVP LSP.</p> |



The entropy label and the hash label features are mutually exclusive. The entropy label cannot be configured on a spoke SDP or service where the hash label feature has already been configured.

When configured to **false**, this command disables the use of entropy labels.

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

## eth-cfm

|            |  |
|------------|--|
| Synopsis   | Enter the <b>eth-cfm</b> context                             |
| Context    | <b>configure service vprn string eth-cfm</b>                 |
| Tree       | <b>eth-cfm</b>   |
| Introduced | 19.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

## export-inactive-bgp *boolean*

|             |   |
|-------------|---|
| Synopsis    | Export preferred BGP route even if inactive   |
| Context     | <b>configure service vprn string export-inactive-bgp boolean</b>  |
| Tree        | <b>export-inactive-bgp</b>  |
| Description | <p>When configured to <b>true</b>, the preferred BGP route learned by a VPRN is exported as the VPN-IP route even if it is inactive in the route table because a preferred BGP VPRN route from another PE is present. This overrides the default state in which the VPRN cannot export an inactive BGP route. For the BGP route to be exported, the VRF export policy must accept it. This command applies to both MPLS VPN and SRv6 VPN routes. In SRv6 VPN routes the advertised instruction is an End.DT, while in MPLS VPN routes the advertised label is a per-next-hop label. This “best-external” type of route advertisement is useful in active/standby multi-homing scenarios because it ensures that all PEs know about the backup path provided by the standby PE.</p> <p>When configured to <b>false</b>, the preferred BGP route is not exported if it is inactive.</p> |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

## fib-priority *keyword*

|          |                                  |
|----------|----------------------------------|
| Synopsis | FIB priority for VPRN BGP routes |
|----------|----------------------------------|

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string fib-priority keyword</i> |
| Tree       | <a href="#">fib-priority</a>                                     |
| Options    | standard, high   |
| Default    | standard   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## firewall

|            |  |
|------------|--|
| Synopsis   | Enter the <b>firewall</b> context                    |
| Context    | <b>configure service vprn</b> <i>string firewall</i> |
| Tree       | <a href="#">firewall</a>                             |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR                   |

## domain [[name](#)] *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>domain</b> list instance                              |
| Context        | <b>configure service vprn</b> <i>string firewall domain string</i> |
| Tree           | <a href="#">domain</a>   |
| Max. Instances | 1024   |
| Introduced     | 16.0.R1  |
| Platforms      | 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                 |

## [\[name\]](#) *string*

|               |  |
|---------------|--|
| Synopsis      | Firewall domain name   |
| Context       | <b>configure service vprn</b> <i>string firewall domain string</i> |
| Tree          | <a href="#">domain</a>   |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.                                |
| Introduced    | 16.0.R1  |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                 |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the firewall domain   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">firewall domain</a> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**dhcpv6-server**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>dhcpv6-server</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">firewall domain</a> <i>string</i> <b>dhcpv6-server</b> |
| Tree       | <a href="#">dhcpv6-server</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**name** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | DHCPv6 server name   |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">firewall domain</a> <i>string</i> <b>dhcpv6-server</b> <i>name</i> <i>string</i> |
| Tree          | <a href="#">name</a>   |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**router-instance** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |             |
|----------|-------------|
| Synopsis | Router name |
|----------|-------------|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>firewall domain</b> <i>string</i> <b>dhcpv6-server router-instance</b> <i>string</i> |
| Tree       | <a href="#">router-instance</a>   |
| Introduced | 16.0.R4   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **nat-group** *reference*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | NAT group for this domain  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>firewall domain</b> <i>string</i> <b>nat-group</b> <i>reference</i> |
| Tree       | <a href="#">nat-group</a>  |
| Reference  | <b>configure isa nat-group</b> <i>number</i>   |
| Notes      | The following elements are part of a mandatory choice: <b>nat-group</b> or <b>wlan-gw-group</b> .                  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **prefix** [[ip-prefix](#)] *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>prefix</b> list instance  |
| Context        | <b>configure service vprn</b> <i>string</i> <b>firewall domain</b> <i>string</i> <b>prefix</b> <i>string</i> |
| Tree           | <a href="#">prefix</a>   |
| Max. Instances | 4096   |
| Introduced     | 16.0.R1  |
| Platforms      | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **[ip-prefix]** *string*

|          |  |
|----------|--|
| Synopsis | IP prefix and prefix length for the domain firewall  |
| Context  | <b>configure service vprn</b> <i>string</i> <b>firewall domain</b> <i>string</i> <b>prefix</b> <i>string</i> |
| Tree     | <a href="#">prefix</a>   |

|             |   |
|-------------|---|
| Description | This command configures a prefix for which firewall functionality applies within the domain. Prefixes cannot be shared or duplicated across multiple domains in the same routing context. A domain can contain multiple prefixes. |
| Notes       | This element is part of a list key.   |
| Introduced  | 16.0.R1   |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">firewall domain</a> <i>string</i> <a href="#">prefix</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **wlan-gw-group** *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | WLAN GW group used for NAT   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">firewall domain</a> <i>string</i> <a href="#">wlan-gw-group</a> <i>reference</i> |
| Tree       | <a href="#">wlan-gw-group</a>  |
| Reference  | <b>configure</b> <a href="#">isa wlan-gw-group</a> <i>number</i>   |
| Notes      | The following elements are part of a mandatory choice: <b>nat-group</b> or <b>wlan-gw-group</b> .  |
| Introduced | 16.0.R4  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **flowspec**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>flowspec</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">flowspec</a> |
| Tree       | <a href="#">flowspec</a>   |
| Introduced | 16.0.R1  |

Platforms All

### **filter-cam-type** *keyword*

Synopsis Filter policy type for FlowSpec embedding

Context **configure** [service](#) [vprn](#) *string* [flowspec](#) [filter-cam-type](#) *keyword*

Tree [filter-cam-type](#)

Description This command specifies the filter type that is required to embed FlowSpec entries. The filter type defines the match criteria that are available in the filter policy.

Options normal, packet-length

Default normal

Introduced 20.7.R1

Platforms All

### **ip-filter-max-size** *number*

Synopsis Maximum number of flowspec rule entries in IPv4 filter

Context **configure** [service](#) [vprn](#) *string* [flowspec](#) [ip-filter-max-size](#) *number*

Tree [ip-filter-max-size](#)

Description This command configures the maximum number of IPv4 flowspec routes, or rules, that can be entered in the auto-created embedded filter, fSpec-X. Flowspec filter entries embedded in a filter policy in this routing instance will use filter entries from the range between the embedding offset and (offset + ip-filter-max-size – 1).

The sum of the maximum-size value and the highest offset in any IPv4 filter that embeds IPv4 flowspec rules from this routing instance (excluding filters that embed at offset 262143) must not exceed 262143.

The maximum size can be adjusted up or down at any time. If the current number of IPv4 flowspec rules is greater than the new maximum, the extra rules are removed immediately but retained in the BGP RIB. If the limit is increased, new rules are programmed only as they are received in new BGP updates.

Range 0 to 262143

Default 512

Introduced 16.0.R1

Platforms All

### **ipv6-filter-max-size** *number*

Synopsis Maximum number of flowspec rule entries in IPv6 filter

|             |   |
|-------------|---|
| Context     | <b>configure service vprn</b> <i>string</i> <b>flowspec ipv6-filter-max-size</b> <i>number</i>  |
| Tree        | <a href="#">ipv6-filter-max-size</a>  |
| Description | <p>This command configures the maximum number of IPv6 flowspec routes or rules that can be embedded into an ingress IPv6 filter policy for a specified routing instance. Flowspec filter entries embedded in a filter policy in this routing instance will use filter entries from the range between the embedding offset and (offset + ip-filter-max-size – 1).</p> <p>The sum of the maximum-size value and the highest offset in any IPv6 filter that embeds IPv6 flowspec rules from this routing instance (excluding filters that embed at offset 262143) must not exceed 262143.</p> <p>The maximum size can be adjusted up or down at any time. If the current number of IPv6 flowspec rules is greater than the new maximum, the extra rules are removed immediately but retained in the BGP RIB. If the limit is increased, new rules are programmed only as they are received in new BGP updates.</p> |
| Range       | 0 to 262143   |
| Default     | 512   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

## grt-leaking

|            |  |
|------------|--|
| Synopsis   | Enter the <b>grt-leaking</b> context                           |
| Context    | <b>configure service vprn</b> <i>string</i> <b>grt-leaking</b> |
| Tree       | <a href="#">grt-leaking</a>                                    |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## allow-local-management *boolean*

|             |  |
|-------------|--|
| Synopsis    | Enable management traffic  |
| Context     | <b>configure service vprn</b> <i>string</i> <b>grt-leaking allow-local-management</b> <i>boolean</i>   |
| Tree        | <a href="#">allow-local-management</a>   |
| Description | <p>When configured to <b>true</b>, this command enables the support of specific management protocols over VPRN interfaces that terminate on Base routing context IPv4 and IPv6 interface addresses, including Base loopback and system addresses.</p> <p>This command does not control the support for management protocols terminating on VPRN interfaces directly.</p> |
| Default     | false  |
| Introduced  | 16.0.R1  |

Platforms All

## **export-grt**

Synopsis Enter the **export-grt** context  
 Context **configure service vprn string grt-leaking export-grt**  
 Tree [export-grt](#)  
 Introduced 16.0.R1  
 Platforms All

## **policy-name** (*policy-expr-string | string*)

Synopsis Route policy name or policy logical expression  
 Context **configure service vprn string grt-leaking export-grt policy-name** (*policy-expr-string | string*)  
 Tree [policy-name](#)  
 String Length 1 to 255  
 Max. Instances 5  
 Notes This element is ordered by the user.  
 Introduced 16.0.R1  
 Platforms All

## **export-limit** *number*

Synopsis Maximum number of routes exported from VRF to GRT  
 Context **configure service vprn string grt-leaking export-limit** *number*  
 Tree [export-limit](#)  
 Range 0 to 1000  
 Default 5  
 Introduced 16.0.R1  
 Platforms All

## **export-v6-limit** *number*

Synopsis Maximum number of IPv6 routes exported from VPRN to GRT



|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string</i> <b>grt-leaking export-v6-limit</b> <i>number</i> |
| Tree       | <a href="#">export-v6-limit</a>  |
| Range      | 0 to 1000  |
| Default    | 5  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **grt-lookup** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable global route table lookup   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>grt-leaking grt-lookup</b> <i>boolean</i> |
| Tree       | <a href="#">grt-lookup</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **import-grt**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>import-grt</b> context                                       |
| Context    | <b>configure service vprn</b> <i>string</i> <b>grt-leaking import-grt</b> |
| Tree       | <a href="#">import-grt</a>  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **policy-name** (*policy-expr-string* | *string*)

|                |   |
|----------------|---|
| Synopsis       | Route policy name or policy logical expression  |
| Context        | <b>configure service vprn</b> <i>string</i> <b>grt-leaking import-grt policy-name</b> ( <i>policy-expr-string</i>   <i>string</i> ) |
| Tree           | <a href="#">policy-name</a>   |
| String Length  | 1 to 255  |
| Max. Instances | 5   |
| Notes          | This element is ordered by the user.  |
| Introduced     | 16.0.R4   |

Platforms All

## gsmp

Synopsis Enter the **gsmp** context  
 Context **configure service vprn string gsmp**  
 Tree **gsmp**  
 Introduced 16.0.R1  
 Platforms All

## admin-state *keyword*

Synopsis Administrative state of GSMP  
 Context **configure service vprn string gsmp admin-state keyword**  
 Tree **admin-state**  
 Options enable, disable  
 Default disable  
 Introduced 16.0.R1  
 Platforms All

## group [*name*] *string*

Synopsis Enter the **group** list instance  
 Context **configure service vprn string gsmp group string**  
 Tree **group**  
 Max. Instances 1024  
 Introduced 16.0.R1  
 Platforms All

## [*name*] *string*

Synopsis GSMP group name  
 Context **configure service vprn string gsmp group string**  
 Tree **group**  
 String Length 1 to 32

---

|            |                                     |
|------------|-------------------------------------|
| Notes      | This element is part of a list key. |
| Introduced | 16.0.R1                             |
| Platforms  | All                                 |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the GSMP group   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">gsmp group</a> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **ancp**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ancp</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">gsmp group</a> <i>string</i> <b>ancp</b> |
| Tree       | <a href="#">ancp</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **dynamic-topology-discovery** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable the ANCP dynamic topology discovery capability   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">gsmp group</a> <i>string</i> <b>ancp</b> <b>dynamic-topology-discovery</b> <i>boolean</i> |
| Tree       | <a href="#">dynamic-topology-discovery</a>  |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **oam** *boolean*

|          |   |
|----------|---|
| Synopsis | Enable GSMP ANCP OAM capability at startup of GSMP connection |
|----------|---|

|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">gsmp</a> <a href="#">group</a> <i>string</i> <a href="#">ancp</a> <a href="#">oam</a> <i>boolean</i> |
| Tree       | <a href="#">oam</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">gsmp</a> <a href="#">group</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**hold-multiplier** *number*

|            |  |
|------------|--|
| Synopsis   | Hold-multiplier for the GSMP connections in this group   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">gsmp</a> <a href="#">group</a> <i>string</i> <a href="#">hold-multiplier</a> <i>number</i> |
| Tree       | <a href="#">hold-multiplier</a>  |
| Range      | 1 to 100   |
| Default    | 3  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**idle-filter** *boolean*

|            |   |
|------------|---|
| Synopsis   | Filter ANCP messages from IDLE DSL lines  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">gsmp</a> <a href="#">group</a> <i>string</i> <a href="#">idle-filter</a> <i>boolean</i> |
| Tree       | <a href="#">idle-filter</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**keepalive** *number*

|            |  |
|------------|--|
| Synopsis   | Keepalive value for the GSMP connections in this group                         |
| Context    | <b>configure</b> <i>service vprn string gsmp group string keepalive number</i> |
| Tree       | <i>keepalive</i>   |
| Range      | 1 to 25  |
| Units      | seconds  |
| Default    | 10   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**neighbor** [*remote-address*] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>neighbor</b> list instance                                       |
| Context    | <b>configure</b> <i>service vprn string gsmp group string neighbor string</i> |
| Tree       | <i>neighbor</i>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[remote-address]** *string*

|            |   |
|------------|---|
| Synopsis   | GSMP neighbor remote IP address   |
| Context    | <b>configure</b> <i>service vprn string gsmp group string neighbor string</i> |
| Tree       | <i>neighbor</i>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the GSMP neighbor   |
| Context    | <b>configure</b> <i>service vprn string gsmp group string neighbor string admin-state keyword</i> |
| Tree       | <i>admin-state</i>  |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |

Platforms All

### **description** *string*

Synopsis Text description

Context **configure** [service](#) [vpn](#) *string* [gsm](#) [group](#) *string* [neighbor](#) *string* [description](#) *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

### **local-address** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Restrict connections to this local address only within the service running ANCP

Context **configure** [service](#) [vpn](#) *string* [gsm](#) [group](#) *string* [neighbor](#) *string* [local-address](#) *string*

Tree [local-address](#)

Introduced 16.0.R1

Platforms All

### **priority-marking**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **priority-marking** context

Context **configure** [service](#) [vpn](#) *string* [gsm](#) [group](#) *string* [neighbor](#) *string* [priority-marking](#)

Tree [priority-marking](#)

Introduced 16.0.R1

Platforms All

**dscp** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | DSCP that is used while remarking the in profile packets  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>gsmp</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>priority-marking</b> <b>dscp</b> <i>keyword</i>   |
| Tree       | <b>dscp</b>   |
| Options    | be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63 |
| Notes      | The following elements are part of a choice: <b>dscp</b> or <b>prec</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**prec** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Precedence priority marking  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>gsmp</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>priority-marking</b> <b>prec</b> <i>number</i> |
| Tree       | <b>prec</b>  |
| Range      | 0 to 7   |
| Notes      | The following elements are part of a choice: <b>dscp</b> or <b>prec</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**persistence** *boolean*

|          |  |
|----------|--|
| Synopsis | Store DSL line information when the GSMP connection terminates   |
| Context  | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>gsmp</b> <b>group</b> <i>string</i> <b>persistence</b> <i>boolean</i> |
| Tree     | <b>persistence</b>   |

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

## gtp

|            |  |
|------------|--|
| Synopsis   | Enter the <b>gtp</b> context             |
| Context    | <b>configure service vprn string gtp</b> |
| Tree       | <b>gtp</b>                               |
| Introduced | 16.0.R1                                  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR       |

## s11

|            |  |
|------------|--|
| Synopsis   | Enter the <b>s11</b> context                 |
| Context    | <b>configure service vprn string gtp s11</b> |
| Tree       | <b>s11</b>                                   |
| Introduced | 16.0.R1                                      |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR           |

## interface [[interface-name](#)] *reference*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>interface</b> list instance                         |
| Context    | <b>configure service vprn string gtp s11 interface reference</b> |
| Tree       | <b>interface</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR                               |

## [[interface-name](#)] *reference*

|           |  |
|-----------|--|
| Synopsis  | Interface name   |
| Context   | <b>configure service vprn string gtp s11 interface reference</b> |
| Tree      | <b>interface</b>   |
| Reference | <b>configure service vprn string interface string</b>            |
| Notes     | This element is part of a list key.                              |



|            |                                    |
|------------|------------------------------------|
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **apn-policy** *reference*

|            |  |
|------------|--|
| Synopsis   | Access Point Name (APN) policy for the S11 interface   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">gtp s11 interface reference</a> <a href="#">apn-policy reference</a> |
| Tree       | <a href="#">apn-policy</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt gtp apn-policy</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **peer-profile-map**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>peer-profile-map</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">gtp s11 peer-profile-map</a> |
| Tree       | <a href="#">peer-profile-map</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **prefix** [[peer-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

|            |   |
|------------|---|
| Synopsis   | Enter the <b>prefix</b> list instance   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">gtp s11 peer-profile-map prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) |
| Tree       | <a href="#">prefix</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **[peer-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

|            |   |
|------------|---|
| Synopsis   | IP prefix and prefix length of the subnet   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">gtp s11 peer-profile-map prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) |
| Tree       | <a href="#">prefix</a>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **peer-profile** *reference*

Synopsis Peer profile used for peers in this prefix

Context **configure service vprn** *string* **gtp s11 peer-profile-map prefix** (*ipv4-prefix* | *ipv6-prefix*) **peer-profile** *reference*

Tree **peer-profile**

Reference **configure subscriber-mgmt gtp peer-profile** *string*

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **upf-data-endpoint**

Synopsis Enable the **upf-data-endpoint** context

Context **configure service vprn** *string* **gtp upf-data-endpoint**

Tree **upf-data-endpoint**

Description Commands in this context configure a GTP-U service endpoint used by BNG CUPS FWA sessions.

Introduced 21.2.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **fpe** *reference*

Synopsis FPE used to encapsulate and decapsulate GTP-U traffic

Context **configure service vprn** *string* **gtp upf-data-endpoint fpe** *reference*

Tree **fpe**

Reference **configure fwd-path-ext fpe** *number*

Notes This element is mandatory.

Introduced 21.5.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**interface reference**

|            |  |
|------------|--|
| Synopsis   | Interface on which the GTP-U packets terminate                                 |
| Context    | <b>configure service vprn string gtp upf-data-endpoint interface reference</b> |
| Tree       | <a href="#">interface</a>  |
| Reference  | <b>configure service vprn string interface string</b>                          |
| Notes      | This element is mandatory.   |
| Introduced | 21.2.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**uplink**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>uplink</b> context                |
| Context    | <b>configure service vprn string gtp uplink</b> |
| Tree       | <a href="#">uplink</a>                          |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR              |

**apn string**

|               |  |
|---------------|--|
| Synopsis      | Network Identifier part of APN                             |
| Context       | <b>configure service vprn string gtp uplink apn string</b> |
| Tree          | <a href="#">apn</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR                         |

**pdn-type keyword**

|            |  |
|------------|--|
| Synopsis   | Default 3GPP PDN in GTP  |
| Context    | <b>configure service vprn string gtp uplink pdn-type keyword</b> |
| Tree       | <a href="#">pdn-type</a>   |
| Options    | ipv4, ipv6, ipv4v6   |
| Default    | ipv4   |
| Introduced | 16.0.R1  |

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## peer-profile-map

Synopsis Enter the **peer-profile-map** context

Context **configure service vprn string gtp uplink peer-profile-map**

Tree [peer-profile-map](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## prefix [[peer-prefix](#)] ([ipv4-prefix](#) | [ipv6-prefix](#))

Synopsis Enter the **prefix** list instance

Context **configure service vprn string gtp uplink peer-profile-map prefix ([ipv4-prefix](#) | [ipv6-prefix](#))**

Tree [prefix](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## [[peer-prefix](#)] ([ipv4-prefix](#) | [ipv6-prefix](#))

Synopsis IP prefix and prefix length of the subnet

Context **configure service vprn string gtp uplink peer-profile-map prefix ([ipv4-prefix](#) | [ipv6-prefix](#))**

Tree [prefix](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## peer-profile *reference*

Synopsis Peer profile name

Context **configure service vprn string gtp uplink peer-profile-map prefix ([ipv4-prefix](#) | [ipv6-prefix](#)) [peer-profile reference](#)**

Tree [peer-profile](#)

Reference **configure subscriber-mgmt gtp peer-profile string**

Notes This element is mandatory.

|            |                                    |
|------------|------------------------------------|
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

**hash-label** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include hash label  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">hash-label</a> <i>boolean</i> |
| Tree       | <a href="#">hash-label</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**igmp**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>igmp</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp</a> |
| Tree       | <a href="#">igmp</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of IGMP  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**forwarding-group-interface** [forwarding-service](#) *string* [group-interface-name](#) *reference*

|          |  |
|----------|--|
| Synopsis | Enter the <b>forwarding-group-interface</b> list instance  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">forwarding-group-interface</a> <a href="#">forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> |
| Tree     | <a href="#">forwarding-group-interface</a>   |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **forwarding-service** *string*

|               |   |
|---------------|---|
| Synopsis      | Forwarding service for a subscriber interface in a retailer context   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">igmp</a> <a href="#">forwarding-group-interface</a> <a href="#">forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> |
| Tree          | <a href="#">forwarding-group-interface</a>  |
| String Length | 1 to 64   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **group-interface-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Group interface name  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">igmp</a> <a href="#">forwarding-group-interface</a> <a href="#">forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> |
| Tree       | <a href="#">forwarding-group-interface</a>  |
| Reference  | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of IGMP   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">igmp</a> <a href="#">forwarding-group-interface</a> <a href="#">forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**import-policy** *reference*

|             |   |
|-------------|---|
| Synopsis    | Import policy that filters IGMP packets   |
| Context     | <b>configure</b> <a href="#">service vprn string igmp forwarding-group-interface forwarding-service string group-interface-name reference import-policy reference</a>   |
| Tree        | <a href="#">import-policy</a>   |
| Description | <p>This command configures the IGMP import policy, or filter, for an interface subscriber or a group interface. An IGMP filter is also known as a black or white list, and it is defined as a router policy option.</p> <p>When redirection is applied, only the import policy from the subscriber is in effect. The import policy under the group interface is applicable only for IGMP states received directly on the SAP (AN in IGMP proxy mode).</p> |
| Reference   | <b>configure</b> <a href="#">policy-options policy-statement string</a>   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**maximum-number-group-sources** *number*

|             |   |
|-------------|---|
| Synopsis    | Maximum number of group sources for this interface  |
| Context     | <b>configure</b> <a href="#">service vprn string igmp forwarding-group-interface forwarding-service string group-interface-name reference maximum-number-group-sources number</a>   |
| Tree        | <a href="#">maximum-number-group-sources</a>  |
| Description | <p>This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.</p> |
| Range       | 1 to 32000  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**maximum-number-groups** *number*

|          |  |
|----------|--|
| Synopsis | Maximum number of groups for this interface  |
| Context  | <b>configure</b> <a href="#">service vprn string igmp forwarding-group-interface forwarding-service string group-interface-name reference maximum-number-groups number</a> |
| Tree     | <a href="#">maximum-number-groups</a>  |
| Range    | 1 to 16000   |

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-sources** *number*

Synopsis Maximum number of sources that are allowed per group  
 Context **configure** [service vprn](#) *string* [igmp forwarding-group-interface forwarding-service](#) *string* [group-interface-name](#) *reference* **maximum-number-sources** *number*  
 Tree [maximum-number-sources](#)  
 Range 1 to 1000  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mcac**

Synopsis Enter the **mcac** context  
 Context **configure** [service vprn](#) *string* [igmp forwarding-group-interface forwarding-service](#) *string* [group-interface-name](#) *reference* **mcac**  
 Tree [mcac](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **bandwidth**

Synopsis Enter the **bandwidth** context  
 Context **configure** [service vprn](#) *string* [igmp forwarding-group-interface forwarding-service](#) *string* [group-interface-name](#) *reference* **mcac** **bandwidth**  
 Tree [bandwidth](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mandatory** (*number* | *keyword*)

Synopsis Pre-reserved bandwidth for all mandatory channels  
 Context **configure** [service vprn](#) *string* [igmp forwarding-group-interface forwarding-service](#) *string* [group-interface-name](#) *reference* **mcac** **bandwidth** **mandatory** (*number* | *keyword*)  
 Tree [mandatory](#)



|            |   |
|------------|---|
| Range      | 0 to 2147483647   |
| Options    | unlimited   |
| Default    | unlimited   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **total** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Maximum allowed bandwidth  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">forwarding-group-interface</a> <a href="#">forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <a href="#">reference</a> <a href="#">mcac</a> <a href="#">bandwidth</a> <b>total</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">total</a>  |
| Range      | 0 to 2147483647  |
| Options    | unlimited  |
| Default    | unlimited  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **interface-policy** *reference*

|            |  |
|------------|--|
| Synopsis   | Name of multicast CAC interface policy   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">forwarding-group-interface</a> <a href="#">forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <a href="#">reference</a> <a href="#">mcac</a> <a href="#">interface-policy</a> <i>reference</i> |
| Tree       | <a href="#">interface-policy</a>   |
| Reference  | <b>configure</b> <a href="#">mcac</a> <a href="#">interface-policy</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **policy** *reference*

|             |  |
|-------------|--|
| Synopsis    | Multicast CAC policy name  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">forwarding-group-interface</a> <a href="#">forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <a href="#">reference</a> <a href="#">mcac</a> <a href="#">policy</a> <i>reference</i> |
| Tree        | <a href="#">policy</a>   |
| Description | This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.   |

Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.

If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.

Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:

- subscriber level and redirected interface when redirection is configured
- subscriber level and group-interface level when redirection is unconfigured

In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).

|            |   |
|------------|---|
| Reference  | <b>configure mcac policy</b> <i>string</i>              |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **query-interval** *number*

|            |  |
|------------|--|
| Synopsis   | Time between two consecutive host-query messages   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>igmp forwarding-group-interface forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>query-interval</b> <i>number</i> |
| Tree       | <b>query-interval</b>  |
| Range      | 2 to 1024  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **query-last-member-interval** *number*

|            |  |
|------------|--|
| Synopsis   | Time between group-specific query messages   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>igmp forwarding-group-interface forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>query-last-member-interval</b> <i>number</i> |
| Tree       | <b>query-last-member-interval</b>  |
| Range      | 1 to 1023  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**query-response-interval** *number*

|            |  |
|------------|--|
| Synopsis   | Time to wait for a response to the host-query messages   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp forwarding-group-interface forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <a href="#">query-response-interval</a> <i>number</i> |
| Tree       | <a href="#">query-response-interval</a>  |
| Range      | 1 to 1023  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**query-source-address** *string*

|             |   |
|-------------|---|
| Synopsis    | Source address for IGMP queries   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp forwarding-group-interface forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <a href="#">query-source-address</a> <i>string</i> |
| Tree        | <a href="#">query-source-address</a>  |
| Description | This command configures the query source IP address for the group interface. This IP address overrides the source IP address configured at the router level.  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**router-alert-check** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable router alert checking for IGMP or MLD messages  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp forwarding-group-interface forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <a href="#">router-alert-check</a> <i>boolean</i> |
| Tree       | <a href="#">router-alert-check</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**sub-hosts-only** *boolean*

|          |  |
|----------|--|
| Synopsis | Allow IGMP traffic from known hosts only   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp forwarding-group-interface forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <a href="#">sub-hosts-only</a> <i>boolean</i> |
| Tree     | <a href="#">sub-hosts-only</a>   |

|            |   |
|------------|---|
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

**subnet-check** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow subnet checking   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp forwarding-group-interface forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <b>subnet-check</b> <i>boolean</i> |
| Tree       | <a href="#">subnet-check</a>  |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**version** *keyword*

|            |  |
|------------|--|
| Synopsis   | IGMP protocol version  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp forwarding-group-interface forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <b>version</b> <i>keyword</i> |
| Tree       | <a href="#">version</a>  |
| Options    | 1, 2, 3  |
| Default    | 3  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**group-if-query-source-address** *string*

|            |  |
|------------|--|
| Synopsis   | Default query-source address for all group interfaces  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp group-if-query-source-address</a> <i>string</i> |
| Tree       | <a href="#">group-if-query-source-address</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**group-interface** [[group-interface-name](#)] *reference*

|          |  |
|----------|--|
| Synopsis | Enter the <b>group-interface</b> list instance |
|----------|--|

|            |   |
|------------|---|
| Context    | <b>configure service vprn string igmp group-interface reference</b> |
| Tree       | <a href="#">group-interface</a>                                     |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR             |

### **[group-interface-name] reference**

|            |   |
|------------|---|
| Synopsis   | Group interface name  |
| Context    | <b>configure service vprn string igmp group-interface reference</b>                     |
| Tree       | <a href="#">group-interface</a>   |
| Reference  | <b>configure service vprn string subscriber-interface string group-interface string</b> |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                 |

### **admin-state keyword**

|            |   |
|------------|---|
| Synopsis   | Administrative state of IGMP  |
| Context    | <b>configure service vprn string igmp group-interface reference admin-state keyword</b> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                 |

### **import-policy reference**

|             |   |
|-------------|---|
| Synopsis    | Import policy that filters IGMP packets   |
| Context     | <b>configure service vprn string igmp group-interface reference import-policy reference</b>   |
| Tree        | <a href="#">import-policy</a>   |
| Description | <p>This command configures the IGMP import policy, or filter, for an interface subscriber or a group interface. An IGMP filter is also known as a black or white list, and it is defined as a router policy option.</p> <p>When redirection is applied, only the import policy from the subscriber is in effect. The import policy under the group interface is applicable only for IGMP states received directly on the SAP (AN in IGMP proxy mode).</p> |

|            |  |
|------------|--|
| Reference  | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **maximum-number-group-sources** *number*

|             |  |
|-------------|--|
| Synopsis    | Maximum number of group sources for this interface   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">maximum-number-group-sources</a> <i>number</i>   |
| Tree        | <a href="#">maximum-number-group-sources</a>   |
| Description | This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed. |
| Range       | 1 to 32000   |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **maximum-number-groups** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum number of groups for this interface   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">maximum-number-groups</a> <i>number</i> |
| Tree       | <a href="#">maximum-number-groups</a>   |
| Range      | 1 to 16000  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **maximum-number-sources** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of sources that are allowed per group   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">maximum-number-sources</a> <i>number</i> |
| Tree       | <a href="#">maximum-number-sources</a>   |
| Range      | 1 to 1000  |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## mcac

Synopsis Enter the **mcac** context  
 Context **configure service vprn string igmp group-interface reference mcac**  
 Tree [mcac](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## bandwidth

Synopsis Enter the **bandwidth** context  
 Context **configure service vprn string igmp group-interface reference mcac bandwidth**  
 Tree [bandwidth](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## mandatory (*number | keyword*)

Synopsis Pre-reserved bandwidth for all mandatory channels  
 Context **configure service vprn string igmp group-interface reference mcac bandwidth mandatory (*number | keyword*)**  
 Tree [mandatory](#)  
 Range 0 to 2147483647  
 Options unlimited  
 Default unlimited  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## total (*number | keyword*)

Synopsis Maximum allowed bandwidth  
 Context **configure service vprn string igmp group-interface reference mcac bandwidth total (*number | keyword*)**  
 Tree [total](#)

|            |   |
|------------|---|
| Range      | 0 to 2147483647   |
| Options    | unlimited   |
| Default    | unlimited   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **interface-policy** *reference*

|            |  |
|------------|--|
| Synopsis   | Name of multicast CAC interface policy   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp group-interface</a> <i>reference</i> <a href="#">mcac interface-policy</a> <i>reference</i> |
| Tree       | <a href="#">interface-policy</a>   |
| Reference  | <b>configure</b> <a href="#">mcac interface-policy</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **policy** *reference*

|             |  |
|-------------|--|
| Synopsis    | Multicast CAC policy name  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp group-interface</a> <i>reference</i> <a href="#">mcac policy</a> <i>reference</i>   |
| Tree        | <a href="#">policy</a>   |
| Description | <p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> <li>• subscriber level and redirected interface when redirection is configured</li> <li>• subscriber level and group-interface level when redirection is unconfigured</li> </ul> <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p> |
| Reference   | <b>configure</b> <a href="#">mcac policy</a> <i>string</i>   |
| Introduced  | 16.0.R1  |



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-interval** *number*

Synopsis Time between two consecutive host-query messages  
Context **configure** [service vprn](#) *string* [igmp group-interface](#) *reference* [query-interval](#) *number*  
Tree [query-interval](#)  
Range 2 to 1024  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-last-member-interval** *number*

Synopsis Time between group-specific query messages  
Context **configure** [service vprn](#) *string* [igmp group-interface](#) *reference* [query-last-member-interval](#) *number*  
Tree [query-last-member-interval](#)  
Range 1 to 1023  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-response-interval** *number*

Synopsis Time to wait for a response to the host-query messages  
Context **configure** [service vprn](#) *string* [igmp group-interface](#) *reference* [query-response-interval](#) *number*  
Tree [query-response-interval](#)  
Range 1 to 1023  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-source-address** *string*

Synopsis Source address for IGMP queries  
Context **configure** [service vprn](#) *string* [igmp group-interface](#) *reference* [query-source-address](#) *string*

---

|             |  |
|-------------|--|
| Tree        | <a href="#">query-source-address</a>   |
| Description | This command configures the query source IP address for the group interface. This IP address overrides the source IP address configured at the router level. |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **router-alert-check** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable router alert checking for IGMP or MLD messages  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">router-alert-check</a> <i>boolean</i> |
| Tree       | <a href="#">router-alert-check</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **sub-hosts-only** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow IGMP traffic from known hosts only   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">sub-hosts-only</a> <i>boolean</i> |
| Tree       | <a href="#">sub-hosts-only</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **subnet-check** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow subnet checking  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">subnet-check</a> <i>boolean</i> |
| Tree       | <a href="#">subnet-check</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**version** *keyword*

|            |  |
|------------|--|
| Synopsis   | IGMP protocol version  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">version</a> <i>keyword</i> |
| Tree       | <a href="#">version</a>  |
| Options    | 1, 2, 3  |
| Default    | 3  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**interface** [[ip-interface-name](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>interface</b> list instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> |
| Tree       | <a href="#">interface</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[ip-interface-name]** *string*

|               |  |
|---------------|--|
| Synopsis      | IP interface name  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> |
| Tree          | <a href="#">interface</a>  |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R2  |
| Platforms     | All  |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of IGMP  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |

Platforms All

### **import-policy** *reference*

Synopsis Import policy that filters IGMP packets

Context **configure** [service vpn](#) *string* [igmp interface](#) *string* [import-policy](#) *reference*

Tree [import-policy](#)

Description This command configures the IGMP import policy, or filter, for an interface subscriber or a group interface. An IGMP filter is also known as a black or white list, and it is defined as a router policy option.

When redirection is applied, only the import policy from the subscriber is in effect. The import policy under the group interface is applicable only for IGMP states received directly on the SAP (AN in IGMP proxy mode).

Reference **configure** [policy-options](#) [policy-statement](#) *string*

Introduced 16.0.R1

Platforms All

### **maximum-number-group-sources** *number*

Synopsis Maximum number of group sources for this interface

Context **configure** [service vpn](#) *string* [igmp interface](#) *string* [maximum-number-group-sources](#) *number*

Tree [maximum-number-group-sources](#)

Description This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.

Range 1 to 32000

Introduced 16.0.R1

Platforms All

### **maximum-number-groups** *number*

Synopsis Maximum number of groups for this interface

Context **configure** [service vpn](#) *string* [igmp interface](#) *string* [maximum-number-groups](#) *number*

Tree [maximum-number-groups](#)

Range 1 to 16000

Introduced 16.0.R1  
 Platforms All

### **maximum-number-sources** *number*

Synopsis Maximum number of sources that are allowed per group  
 Context **configure** [service vprn string igmp interface string maximum-number-sources number](#)  
 Tree [maximum-number-sources](#)  
 Range 1 to 1000  
 Introduced 16.0.R1  
 Platforms All

### **mcac**

Synopsis Enter the **mcac** context  
 Context **configure** [service vprn string igmp interface string mcac](#)  
 Tree [mcac](#)  
 Introduced 16.0.R1  
 Platforms All

### **bandwidth**

Synopsis Enter the **bandwidth** context  
 Context **configure** [service vprn string igmp interface string mcac bandwidth](#)  
 Tree [bandwidth](#)  
 Introduced 16.0.R1  
 Platforms All

### **mandatory** (*number* | *keyword*)

Synopsis Pre-reserved bandwidth for all mandatory channels  
 Context **configure** [service vprn string igmp interface string mcac bandwidth mandatory \(number | keyword\)](#)  
 Tree [mandatory](#)  
 Range 0 to 2147483647  
 Options unlimited

|            |           |
|------------|-----------|
| Default    | unlimited |
| Introduced | 16.0.R1   |
| Platforms  | All       |

**total** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Maximum allowed bandwidth   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">bandwidth</a> <b>total</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">total</a>   |
| Range      | 0 to 2147483647   |
| Options    | unlimited   |
| Default    | unlimited   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**interface-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | Name of multicast CAC interface policy  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">interface-policy</a> <i>reference</i> |
| Tree       | <a href="#">interface-policy</a>  |
| Reference  | <b>configure</b> <a href="#">mcac</a> <a href="#">interface-policy</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**mc-constraints**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mc-constraints</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> |
| Tree       | <a href="#">mc-constraints</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**level** [*level-id*] *number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>level</b> list instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">level</a> <i>number</i> |
| Tree       | <a href="#">level</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[level-id]** *number*

|            |  |
|------------|--|
| Synopsis   | Bandwidth level ID for an MCAC constraint  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">level</a> <i>number</i> |
| Tree       | <a href="#">level</a>  |
| Range      | 1 to 8   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**bandwidth** *number*

|            |  |
|------------|--|
| Synopsis   | Bandwidth available for this level   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">level</a> <i>number</i> <a href="#">bandwidth</a> <i>number</i> |
| Tree       | <a href="#">bandwidth</a>  |
| Range      | 0 to 2147483647  |
| Units      | kilobps  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**number-down** [*number-lag-port-down*] *number*

|          |  |
|----------|--|
| Synopsis | Enter the <b>number-down</b> list instance   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">number-down</a> <i>number</i> |
| Tree     | <a href="#">number-down</a>  |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **[number-lag-port-down]** *number*

|            |  |
|------------|--|
| Synopsis   | Number of ports that are down in this LAG link   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp interface</a> <i>string</i> <a href="#">mcac mc-constraints</a> <a href="#">number-down</a> <i>number</i> |
| Tree       | <a href="#">number-down</a>  |
| Range      | 1 to 64  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **level** *number*

|             |  |
|-------------|--|
| Synopsis    | Level ID to associate with number of down LAG ports  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp interface</a> <i>string</i> <a href="#">mcac mc-constraints</a> <a href="#">number-down</a> <i>number</i> <a href="#">level</a> <i>number</i> |
| Tree        | <a href="#">level</a>  |
| Description | This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.  |
| Range       | 1 to 8   |
| Notes       | This element is mandatory.   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **use-lag-port-weight** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Use LAG port weight in calculating MCAC constraints   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp interface</a> <i>string</i> <a href="#">mcac mc-constraints</a> <a href="#">use-lag-port-weight</a> <i>boolean</i>   |
| Tree        | <a href="#">use-lag-port-weight</a>   |
| Description | When configured to <b>true</b> , port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs. |



|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **policy reference**

|             |  |
|-------------|--|
| Synopsis    | Multicast CAC policy name  |
| Context     | <b>configure</b> <a href="#">service vprn string</a> <a href="#">igmp interface string</a> <a href="#">mcac policy reference</a>   |
| Tree        | <a href="#">policy</a>   |
| Description | <p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> <li>• subscriber level and redirected interface when redirection is configured</li> <li>• subscriber level and group-interface level when redirection is unconfigured</li> </ul> <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p> |
| Reference   | <b>configure</b> <a href="#">mcac policy string</a>  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **query-interval number**

|            |  |
|------------|--|
| Synopsis   | Time between two consecutive host-query messages   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">igmp interface string</a> <a href="#">query-interval number</a> |
| Tree       | <a href="#">query-interval</a>   |
| Range      | 2 to 1024  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**query-last-member-interval** *number*

|            |   |
|------------|---|
| Synopsis   | Time between group-specific query messages  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp interface</a> <i>string</i> <a href="#">query-last-member-interval</a> <i>number</i> |
| Tree       | <a href="#">query-last-member-interval</a>  |
| Range      | 1 to 1023   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**query-response-interval** *number*

|            |  |
|------------|--|
| Synopsis   | Time to wait for a response to the host-query messages   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp interface</a> <i>string</i> <a href="#">query-response-interval</a> <i>number</i> |
| Tree       | <a href="#">query-response-interval</a>  |
| Range      | 1 to 1023  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**redundant-mcast** *boolean*

|            |   |
|------------|---|
| Synopsis   | Use interface as a redundant-pair member for multicast  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp interface</a> <i>string</i> <a href="#">redundant-mcast</a> <i>boolean</i> |
| Tree       | <a href="#">redundant-mcast</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**router-alert-check** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable router alert checking for IGMP or MLD messages  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp interface</a> <i>string</i> <a href="#">router-alert-check</a> <i>boolean</i> |
| Tree       | <a href="#">router-alert-check</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## ssm-translate

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ssm-translate</b> context                                   |
| Context    | <b>configure service vprn string igmp interface string ssm-translate</b> |
| Tree       | <b>ssm-translate</b>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## group-range *start string end string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>group-range</b> list instance   |
| Context    | <b>configure service vprn string igmp interface string ssm-translate group-range start string end string</b> |
| Tree       | <b>group-range</b>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## start *string*

|            |  |
|------------|--|
| Synopsis   | Lower bound of the IP address group range  |
| Context    | <b>configure service vprn string igmp interface string ssm-translate group-range start string end string</b> |
| Tree       | <b>group-range</b>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## end *string*

|            |  |
|------------|--|
| Synopsis   | Upper bound of the IP address group range  |
| Context    | <b>configure service vprn string igmp interface string ssm-translate group-range start string end string</b> |
| Tree       | <b>group-range</b>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**source** [[source-address](#)] *string*

|                |  |
|----------------|--|
| Synopsis       | Add a list entry for <b>source</b>   |
| Context        | <b>configure</b> <a href="#">service vprn string</a> <a href="#">igmp interface string</a> <a href="#">ssm-translate group-range start string end string</a> <a href="#">source string</a> |
| Tree           | <a href="#">source</a>   |
| Min. Instances | 1  |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

**[source-address]** *string*

|            |  |
|------------|--|
| Synopsis   | Source IP address of multicast channel sending data  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">igmp interface string</a> <a href="#">ssm-translate group-range start string end string</a> <a href="#">source string</a> |
| Tree       | <a href="#">source</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R2  |
| Platforms  | All  |

**static**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>static</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">igmp interface string</a> <a href="#">static</a> |
| Tree       | <a href="#">static</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**group** [[group-address](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>group</b> list instance   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">igmp interface string</a> <a href="#">static group string</a> |
| Tree       | <a href="#">group</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[group-address]** *string*

|             |   |
|-------------|---|
| Synopsis    | Group address of static IGMP multicast channel  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp interface</a> <i>string</i> <a href="#">static group</a> <i>string</i> |
| Tree        | <a href="#">group</a>   |
| Description | This command configures an address that receives data on an interface. The IP address must be unique for each static group.                         |
| Notes       | This element is part of a list key.   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**source** [[source-address](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Add a list entry for <b>source</b>   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp interface</a> <i>string</i> <a href="#">static group</a> <i>string</i> <a href="#">source</a> <i>string</i> |
| Tree       | <a href="#">source</a>   |
| Notes      | The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[source-address]** *string*

|            |  |
|------------|--|
| Synopsis   | Source IP address of multicast channel sending data  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp interface</a> <i>string</i> <a href="#">static group</a> <i>string</i> <a href="#">source</a> <i>string</i> |
| Tree       | <a href="#">source</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R2  |
| Platforms  | All  |

**starg**

|          |   |
|----------|---|
| Synopsis | any source address (*,G)  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp interface</a> <i>string</i> <a href="#">static group</a> <i>string</i> <a href="#">starg</a> |
| Tree     | <a href="#">starg</a>   |
| Notes    | The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .  |

|            |         |
|------------|---------|
| Introduced | 16.0.R2 |
| Platforms  | All     |

### **group-range** *start string end string step string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>group-range</b> list instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">static</a> <a href="#">group-range</a> <a href="#">start</a> <i>string</i> <a href="#">end</a> <i>string</i> <a href="#">step</a> <i>string</i> |
| Tree       | <a href="#">group-range</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **start** *string*

|            |  |
|------------|--|
| Synopsis   | IP address for the start of the static group range   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">static</a> <a href="#">group-range</a> <a href="#">start</a> <i>string</i> <a href="#">end</a> <i>string</i> <a href="#">step</a> <i>string</i> |
| Tree       | <a href="#">group-range</a>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **end** *string*

|            |  |
|------------|--|
| Synopsis   | IP address for the end of the static group range   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">static</a> <a href="#">group-range</a> <a href="#">start</a> <i>string</i> <a href="#">end</a> <i>string</i> <a href="#">step</a> <i>string</i> |
| Tree       | <a href="#">group-range</a>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **step** *string*

|          |  |
|----------|--|
| Synopsis | Step interval in the group-range address |
|----------|--|

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string</i> <b>igmp interface</b> <i>string</i> <b>static group-range start</b> <i>string</i> <b>end</b> <i>string</i> <b>step</b> <i>string</i> |
| Tree       | <a href="#">group-range</a>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **source** [[source-address](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Add a list entry for <b>source</b>   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>igmp interface</b> <i>string</i> <b>static group-range start</b> <i>string</i> <b>end</b> <i>string</i> <b>step</b> <i>string</i> <b>source</b> <i>string</i> |
| Tree       | <a href="#">source</a>   |
| Notes      | The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **[source-address]** *string*

|            |  |
|------------|--|
| Synopsis   | Source IP address of multicast channel sending data  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>igmp interface</b> <i>string</i> <b>static group-range start</b> <i>string</i> <b>end</b> <i>string</i> <b>step</b> <i>string</i> <b>source</b> <i>string</i> |
| Tree       | <a href="#">source</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R2  |
| Platforms  | All  |

### **starg**

|            |   |
|------------|---|
| Synopsis   | any source address (*,G)  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>igmp interface</b> <i>string</i> <b>static group-range start</b> <i>string</i> <b>end</b> <i>string</i> <b>step</b> <i>string</i> <b>starg</b> |
| Tree       | <a href="#">starg</a>   |
| Notes      | The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .  |
| Introduced | 16.0.R2   |
| Platforms  | All   |

**subnet-check** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow subnet checking   |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>igmp interface</b> <i>string</i> <b>subnet-check</b> <i>boolean</i> |
| Tree       | <b>subnet-check</b>   |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**version** *keyword*

|            |  |
|------------|--|
| Synopsis   | IGMP protocol version  |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>igmp interface</b> <i>string</i> <b>version</b> <i>keyword</i> |
| Tree       | <b>version</b>   |
| Options    | 1, 2, 3  |
| Default    | 3  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**query-interval** *number*

|             |   |
|-------------|---|
| Synopsis    | Time between two consecutive host-query messages  |
| Context     | <b>configure</b> <b>service vprn</b> <i>string</i> <b>igmp query-interval</b> <i>number</i>   |
| Tree        | <b>query-interval</b>   |
| Description | This command configures the timing of the host-query messages that solicit group membership information. The messages are sent to the all-systems multicast group address, 224.0.0.1. |
| Range       | 2 to 1024   |
| Units       | seconds   |
| Default     | 125   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**query-last-member-interval** *number*

|          |  |
|----------|--|
| Synopsis | Time between group-specific query messages |
|----------|--|



|             |   |
|-------------|---|
| Context     | <b>configure service vprn string igmp query-last-member-interval number</b>   |
| Tree        | <a href="#">query-last-member-interval</a>  |
| Description | This command configures the timing of the query-message interval, defining the interval for leave-group messages among others. The lower the interval that is configured, the faster the detection of the loss of the last member of a group. |
| Range       | 1 to 1023   |
| Units       | seconds   |
| Default     | 1   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **query-response-interval number**

|            |  |
|------------|--|
| Synopsis   | Time to wait for a response to the host-query messages                   |
| Context    | <b>configure service vprn string igmp query-response-interval number</b> |
| Tree       | <a href="#">query-response-interval</a>                                  |
| Range      | 1 to 1023  |
| Units      | seconds  |
| Default    | 10   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **robust-count number**

|             |   |
|-------------|---|
| Synopsis    | Number of retries after expected message loss   |
| Context     | <b>configure service vprn string igmp robust-count number</b>   |
| Tree        | <a href="#">robust-count</a>  |
| Description | This command configures the level of expected packet loss on a subnet. If a subnet anticipates losses, the robust-count can be increased. |
| Range       | 2 to 10   |
| Default     | 2   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

## ssm-translate

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ssm-translate</b> context                  |
| Context    | <b>configure service vprn string igmp ssm-translate</b> |
| Tree       | <a href="#">ssm-translate</a>                           |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## group-range [start string end string](#)

|            |   |
|------------|---|
| Synopsis   | Enter the <b>group-range</b> list instance  |
| Context    | <b>configure service vprn string igmp ssm-translate group-range start string end string</b> |
| Tree       | <a href="#">group-range</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## start [string](#)

|            |   |
|------------|---|
| Synopsis   | Lower bound of the IP address group range   |
| Context    | <b>configure service vprn string igmp ssm-translate group-range start string end string</b> |
| Tree       | <a href="#">group-range</a>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## end [string](#)

|            |   |
|------------|---|
| Synopsis   | Upper bound of the IP address group range   |
| Context    | <b>configure service vprn string igmp ssm-translate group-range start string end string</b> |
| Tree       | <a href="#">group-range</a>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**source** [[source-address](#)] *string*

|                |   |
|----------------|---|
| Synopsis       | Add a list entry for <b>source</b>  |
| Context        | <b>configure service vprn</b> <i>string</i> <a href="#">igmp ssm-translate group-range start string end string</a><br><a href="#">source string</a> |
| Tree           | <a href="#">source</a>  |
| Min. Instances | 1   |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

**[source-address]** *string*

|            |   |
|------------|---|
| Synopsis   | Source IP address of multicast channel sending data   |
| Context    | <b>configure service vprn</b> <i>string</i> <a href="#">igmp ssm-translate group-range start string end string</a><br><a href="#">source string</a> |
| Tree       | <a href="#">source</a>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R2   |
| Platforms  | All   |

**igmp-host-tracking**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>igmp-host-tracking</b> context                                    |
| Context    | <b>configure service vprn</b> <i>string</i> <a href="#">igmp-host-tracking</a> |
| Tree       | <a href="#">igmp-host-tracking</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                        |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of IGMP host tracking  |
| Context    | <b>configure service vprn</b> <i>string</i> <a href="#">igmp-host-tracking admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **expiry-time** *number*

Synopsis Time that the system continues to track inactive hosts

Context **configure** *service vprn string igmp-host-tracking expiry-time number*

Tree [expiry-time](#)

Range 1 to 65535

Units seconds

Default 260

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ignore-nh-metric** *boolean*

Synopsis Ignore next hop metric

Context **configure** *service vprn string ignore-nh-metric boolean*

Tree [ignore-nh-metric](#)

Default false

Introduced 16.0.R1

Platforms All

### **interface** [[interface-name](#)] *string*

Synopsis Enter the **interface** list instance

Context **configure** *service vprn string interface string*

Tree [interface](#)

Introduced 16.0.R1

Platforms All

### **[interface-name]** *string*

Synopsis Interface name

Context **configure** *service vprn string interface string*

Tree [interface](#)

|               |                                     |
|---------------|-------------------------------------|
| String Length | 1 to 32                             |
| Notes         | This element is part of a list key. |
| Introduced    | 16.0.R1                             |
| Platforms     | All                                 |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the interface   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **cflowd-parameters**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>cflowd-parameters</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>cflowd-parameters</b> |
| Tree       | <a href="#">cflowd-parameters</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **sampling** [[sampling-type](#)] *keyword*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>sampling</b> list instance  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">cflowd-parameters</a> <b>sampling</b> <i>keyword</i> |
| Tree       | <a href="#">sampling</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### [[sampling-type](#)] *keyword*

|          |  |
|----------|--|
| Synopsis | Traffic sampling type  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">cflowd-parameters</a> <b>sampling</b> <i>keyword</i> |

|             |   |
|-------------|---|
| Tree        | <a href="#">sampling</a>  |
| Description | This command configures the type of traffic to be sampled on the associated IP interface. |
| Options     | unicast, multicast, both  |
| Notes       | This element is part of a list key.   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **direction** *keyword*

|             |  |
|-------------|--|
| Synopsis    | Direction of traffic for cflowd sampling   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">cflowd-parameters</a> <a href="#">sampling</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i> |
| Tree        | <a href="#">direction</a>  |
| Description | This command configures the direction in which sampling occurs on the associated IP interfaces.  |
| Options     | ingress-only, egress-only, both  |
| Default     | ingress-only   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **sample-profile** (*keyword* | *number*)

|             |   |
|-------------|---|
| Synopsis    | Sample profile ID   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">cflowd-parameters</a> <a href="#">sampling</a> <i>keyword</i> <a href="#">sample-profile</a> ( <i>keyword</i>   <i>number</i> ) |
| Tree        | <a href="#">sample-profile</a>  |
| Description | This command defines the sampling rate profile associated with this interface.  |
| Max. Range  | 0 to 4294967295   |
| Options     | 1   |
| Introduced  | 19.5.R1   |
| Platforms   | All   |

### **type** *keyword*

|          |                         |
|----------|-------------------------|
| Synopsis | Type of cflowd analysis |
|----------|-------------------------|

|             |  |
|-------------|--|
| Context     | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>cflowd-parameters sampling</b> <i>keyword</i> <b>type</b> <i>keyword</i> |
| Tree        | <b>type</b>  |
| Description | This command configures the cflowd sampling type on the associated IP interface.   |
| Options     | acl, interface   |
| Notes       | This element is mandatory.   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **cpu-protection** *reference*

|            |   |
|------------|---|
| Synopsis   | CPU protection policy   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>cpu-protection</b> <i>reference</i> |
| Tree       | <b>cpu-protection</b>   |
| Reference  | <b>configure system security</b> <b>cpu-protection</b> <i>policy</i> <i>number</i>                                |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS   |

### **description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <b>description</b>  |
| String Length | 1 to 255  |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

### **dynamic-tunnel-redundant-nexthop** *string*

|             |  |
|-------------|--|
| Synopsis    | Redundant next-hop address for the dynamic IPsec tunnel  |
| Context     | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>dynamic-tunnel-redundant-nexthop</b> <i>string</i>   |
| Tree        | <b>dynamic-tunnel-redundant-nexthop</b>  |
| Description | This command specifies the redundant next-hop address on a public or private IPsec interface (with public or private tunnel SAP) for a dynamic IPsec tunnel. The next-hop address is used by a standby node to shunt traffic to a master if it receives the address. The next-hop address is resolved in the routing table of a corresponding service. |

|            |   |
|------------|---|
| Notes      | The following elements are part of a choice: <b>multi-chassis-shunting-profile</b> or ( <b>dynamic-tunnel-redundant-nexthop</b> and <b>static-tunnel-redundant-nexthop</b> ). |
| Introduced | 19.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## hold-time

|            |  |
|------------|--|
| Synopsis   | Enter the <b>hold-time</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>hold-time</b> |
| Tree       | <a href="#">hold-time</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## ipv4

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv4</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>hold-time</b> <b>ipv4</b> |
| Tree       | <a href="#">ipv4</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## down

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>down</b> context  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>hold-time</b> <b>ipv4</b> <b>down</b>   |
| Tree        | <a href="#">down</a>   |
| Description | Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the <b>init-only</b> command. |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

## init-only *boolean*

|          |   |
|----------|---|
| Synopsis | Apply delay only at interface configuration or reboot |
|----------|---|



|             |  |
|-------------|--|
| Context     | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>hold-time ipv4 down init-only</b> <i>boolean</i> |
| Tree        | <b>init-only</b>   |
| Description | This command applies a delay only when the IP interface is first configured or after a system reboot.                          |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **seconds** *number*

|            |   |
|------------|---|
| Synopsis   | Down hold time for the IP interface   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>hold-time ipv4 down seconds</b> <i>number</i> |
| Tree       | <b>seconds</b>  |
| Range      | 1 to 1200   |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **up**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>up</b> context   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>hold-time ipv4 up</b>   |
| Tree        | <b>up</b>   |
| Description | Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down. |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **seconds** *number*

|          |   |
|----------|---|
| Synopsis | Up hold time for the IP interface   |
| Context  | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>hold-time ipv4 up seconds</b> <i>number</i> |
| Tree     | <b>seconds</b>  |
| Range    | 1 to 1200   |
| Units    | seconds   |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

## ipv6

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv6</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">hold-time ipv6</a> |
| Tree       | <a href="#">ipv6</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## down

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>down</b> context   |
| Context     | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">hold-time ipv6 down</a>   |
| Tree        | <a href="#">down</a>  |
| Description | Commands in this context configure the down hold timer, which specifies the delay before activation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the <b>init-only</b> command. |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

## init-only *boolean*

|             |   |
|-------------|---|
| Synopsis    | Apply delay only at interface configuration or reboot   |
| Context     | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">hold-time ipv6 down</a> <a href="#">init-only boolean</a> |
| Tree        | <a href="#">init-only</a>   |
| Description | This command applies the delay only when when the IP interface is first configured or after a system reboot.  |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**seconds** *number*

|            |   |
|------------|---|
| Synopsis   | Down hold time for the IP interface   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time ipv6 down</a> <a href="#">seconds</a> <i>number</i> |
| Tree       | <a href="#">seconds</a>   |
| Range      | 1 to 1200   |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**up**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>up</b> context   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time ipv6 up</a>   |
| Tree        | <a href="#">up</a>  |
| Description | Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down. |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**seconds** *number*

|            |   |
|------------|---|
| Synopsis   | Up hold time for the IP interface   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time ipv6 up</a> <a href="#">seconds</a> <i>number</i> |
| Tree       | <a href="#">seconds</a>   |
| Range      | 1 to 1200   |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**if-attribute**

|          |  |
|----------|--|
| Synopsis | Enter the <b>if-attribute</b> context  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">if-attribute</a> |
| Tree     | <a href="#">if-attribute</a>   |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **admin-group** *reference*

|                |   |
|----------------|---|
| Synopsis       | Administrative group name for the interface   |
| Context        | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">if-attribute</a> <a href="#">admin-group</a> <i>reference</i> |
| Tree           | <a href="#">admin-group</a>   |
| Reference      | <b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute</a> <a href="#">admin-group</a> <i>string</i>   |
| Max. Instances | 32  |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

### **srlg-group** [[name](#)] *reference*

|            |  |
|------------|--|
| Synopsis   | Add a list entry for <b>srlg-group</b>   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">if-attribute</a> <a href="#">srlg-group</a> <i>reference</i> |
| Tree       | <a href="#">srlg-group</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### [[name](#)] *reference*

|            |  |
|------------|--|
| Synopsis   | SRLG name  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">if-attribute</a> <a href="#">srlg-group</a> <i>reference</i> |
| Tree       | <a href="#">srlg-group</a>   |
| Reference  | <b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute</a> <a href="#">srlg-group</a> <i>string</i>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **ingress**

|          |                                  |
|----------|----------------------------------|
| Synopsis | Enter the <b>ingress</b> context |
|----------|----------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ingress</b> |
| Tree       | <b>ingress</b>  |
| Introduced | 19.7.R1   |
| Platforms  | All   |

### **destination-class-lookup** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Enable BGP destination class lookup   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ingress destination-class-lookup</b> <i>boolean</i>   |
| Tree        | <b>destination-class-lookup</b>   |
| Description | When configured to <b>true</b> , the router performs a destination class lookup. This command is supported on FP3-based cards and later and is used in combination with the <b>destination-class</b> match criterion for an IP filter policy to filter egress traffic based on BGP destination classes.<br><br>When configured to <b>false</b> , destination class lookup is not enabled. |
| Default     | false   |
| Introduced  | 20.7.R1   |
| Platforms   | All   |

### **policy-accounting** *reference*

|            |  |
|------------|--|
| Synopsis   | Ingress policy accounting template name  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ingress policy-accounting</b> <i>reference</i> |
| Tree       | <b>policy-accounting</b>   |
| Reference  | <b>configure routing-options policy-accounting policy-acct-template</b> <i>string</i>  |
| Introduced | 19.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS   |

### **ingress-stats** *boolean*

|            |  |
|------------|--|
| Synopsis   | Collect ingress statistics   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ingress-stats</b> <i>boolean</i> |
| Tree       | <b>ingress-stats</b>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **ip-mtu** *number*

|            |  |
|------------|--|
| Synopsis   | IP MTU applied to outgoing packets   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ip-mtu</a> <i>number</i> |
| Tree       | <a href="#">ip-mtu</a>   |
| Range      | 512 to 9786  |
| Units      | bytes  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **ipsec**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>ipsec</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec</a> |
| Tree       | <a href="#">ipsec</a>   |
| Introduced | 22.7.R1   |
| Platforms  | VSR   |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of IPsec secured interface  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 22.7.R1  |
| Platforms  | VSR  |

### **ip-exception** *reference*

|             |   |
|-------------|---|
| Synopsis    | IP exception filter   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec</a> <a href="#">ip-exception</a> <i>reference</i> |
| Tree        | <a href="#">ip-exception</a>  |
| Description | This command configures the IP exception filter for the secured interface. All ingress traffic matching the specified filter bypasses IPsec processing.                                 |

|            |  |
|------------|--|
| Reference  | <b>configure</b> <a href="#">filter ip-exception</a> <i>string</i> |
| Introduced | 22.7.R1  |
| Platforms  | VSR  |

### **ipsec-tunnel** [[name](#)] *string*

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>ipsec-tunnel</b> list instance  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> |
| Tree        | <a href="#">ipsec-tunnel</a>   |
| Description | Commands in this context configure IPsec tunnels used to secure traffic forwarded over the interface.  |
| Introduced  | 22.7.R1  |
| Platforms   | VSR  |

### **[name]** *string*

|               |  |
|---------------|--|
| Synopsis      | IPsec tunnel name  |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> |
| Tree          | <a href="#">ipsec-tunnel</a>   |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 22.7.R1  |
| Platforms     | VSR  |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the IPsec tunnel  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 22.7.R1   |
| Platforms  | VSR   |

## bfd

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enter the <b>bfd</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">bfd</a> |
| Tree       | <a href="#">bfd</a>  |
| Introduced | 22.7.R1  |
| Platforms  | VSR  |

## bfd-designate *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Designate IPsec tunnel to carry BFD traffic   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">bfd</a> <a href="#">bfd-designate</a> <i>boolean</i> |
| Tree       | <a href="#">bfd-designate</a>   |
| Default    | false   |
| Introduced | 22.7.R1   |
| Platforms  | VSR   |

## bfd-liveness

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Enable the <b>bfd-liveness</b> context   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">bfd</a> <a href="#">bfd-liveness</a>  |
| Tree        | <a href="#">bfd-liveness</a>   |
| Description | Commands in this context configure a BFD session to provide a heart-beat mechanism for a specified IPsec tunnel. There can be only one BFD session assigned to any given IPsec tunnel, but there can be multiple IPsec tunnels using the same BFD session. |



BFD controls the state of the association tunnel. If the BFD session goes down, the system brings down the associated non-designated IPsec tunnel.

Introduced 22.7.R1  
Platforms VSR

### **dest-ip** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Destination address used for the BFD session  
Context **configure** [service vprn](#) *string* [interface](#) *string* [ipsec ipsec-tunnel](#) *string* [bfd bfd-liveness](#) [dest-ip](#) *string*  
Tree [dest-ip](#)  
Notes This element is mandatory.  
Introduced 22.7.R1  
Platforms VSR

### **interface** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Name of the interface used by the BFD session  
Context **configure** [service vprn](#) *string* [interface](#) *string* [ipsec ipsec-tunnel](#) *string* [bfd bfd-liveness](#) [interface](#) *string*  
Tree [interface](#)  
String Length 1 to 32  
Notes This element is mandatory.  
Introduced 22.7.R1  
Platforms VSR

**service-name** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Administrative service name   |
| Context       | <b>configure</b> <i>service vprn string interface string ipsec ipsec-tunnel string bfd bfd-liveness service-name string</i> |
| Tree          | <i>service-name</i>   |
| Description   | This command configures the name of the service where BFD traffic is forwarded to.  |
| String Length | 1 to 64   |
| Notes         | This element is mandatory.  |
| Introduced    | 22.7.R1   |
| Platforms     | VSR   |

**clear-df-bit** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Reset the DF bit to 0 in all payload IP packets  |
| Context     | <b>configure</b> <i>service vprn string interface string ipsec ipsec-tunnel string clear-df-bit boolean</i>  |
| Tree        | <i>clear-df-bit</i>  |
| Description | When configured to <b>true</b> , the DF bit is set to 0 in all payload IP packets associated with the IPsec tunnel, before any potential fragmentation occurs. |
| Default     | false  |
| Introduced  | 22.7.R1  |
| Platforms   | VSR  |

**copy-traffic-class-upon-decapsulation** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | Enable traffic class copy upon decapsulation |
|----------|--|

|             |   |
|-------------|---|
| Context     | <b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>copy-traffic-class-upon-decapsulation</b> <i>boolean</i>                   |
| Tree        | <b>copy-traffic-class-upon-decapsulation</b>  |
| Description | When configured to <b>true</b> , the system copies the traffic class from the outer tunnel IP packet header to the payload IP packet header in the decapsulating direction (public to private). |
| Default     | false   |
| Introduced  | 22.7.R1   |
| Platforms   | VSR   |

### **description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <b>description</b>   |
| String Length | 1 to 80  |
| Introduced    | 22.7.R1  |
| Platforms     | VSR  |

### **encapsulated-ip-mtu** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Maximum size of the encapsulated tunnel packet  |
| Context     | <b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>encapsulated-ip-mtu</b> <i>number</i>  |
| Tree        | <b>encapsulated-ip-mtu</b>  |
| Description | This command specifies the maximum size of the encapsulated tunnel packet to the IPsec tunnel, the IP tunnel, or the dynamic tunnels terminated on the IPsec Gateway. If the encapsulated IPv4 or IPv6 tunnel packet exceeds this value, the system fragments the packet. |
| Range       | 512 to 9000   |
| Units       | bytes   |
| Introduced  | 22.7.R1   |
| Platforms   | VSR   |

## icmp-generation



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>icmp-generation</b> context  |
| Context     | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ipsec ipsec-tunnel string</a> <a href="#">icmp-generation</a> |
| Tree        | <a href="#">icmp-generation</a>   |
| Description | Commands in this context configure settings for ICMPv4 message generation.  |
| Introduced  | 22.7.R1   |
| Platforms   | VSR   |

## frag-required



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>frag-required</b> context   |
| Context     | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ipsec ipsec-tunnel string</a> <a href="#">icmp-generation</a> <a href="#">frag-required</a>  |
| Tree        | <a href="#">frag-required</a>  |
| Description | Commands in this context configure the attributes for sending generated ICMP Destination Unreachable "fragmentation needed and DF set" messages (type 3, code 4) back to the source, if the received size of the IPv4 packet on the private side exceeds the private MTU size. |
| Introduced  | 22.7.R1  |
| Platforms   | VSR  |

## admin-state *keyword*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | Administrative state of sending ICMP messages  |
| Context  | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ipsec ipsec-tunnel string</a> <a href="#">icmp-generation</a> <a href="#">frag-required</a> <a href="#">admin-state</a> <i>keyword</i> |

|             |  |
|-------------|--|
| Tree        | <a href="#">admin-state</a>  |
| Description | This command configures the administrative state of sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) messages to the source if the received size of the IPv4 packet on the private side exceeds the private MTU size. |
| Options     | enable, disable  |
| Default     | enable   |
| Introduced  | 22.7.R1  |
| Platforms   | VSR  |

### **interval** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Interval for sending ICMP messages  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">icmp-generation frag-required</a> <a href="#">interval</a> <i>number</i> |
| Tree        | <a href="#">interval</a>  |
| Description | This command configures the interval for sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4).   |
| Range       | 1 to 60   |
| Units       | seconds   |
| Default     | 10  |
| Introduced  | 22.7.R1   |
| Platforms   | VSR   |

### **message-count** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | Maximum number of ICMP messages that can be sent   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">icmp-generation frag-required</a> <a href="#">message-count</a> <i>number</i> |
| Tree     | <a href="#">message-count</a>  |

|             |  |
|-------------|--|
| Description | This command configures the maximum number of ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) that can be sent during the configured interval. |
| Range       | 10 to 1000   |
| Default     | 100  |
| Introduced  | 22.7.R1  |
| Platforms   | VSR  |

## icmp6-generation



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>icmp6-generation</b> context  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <b>icmp6-generation</b> |
| Tree        | <a href="#">icmp6-generation</a>   |
| Description | Commands in this context configure settings for ICMPv6 message generation.   |
| Introduced  | 22.7.R1  |
| Platforms   | VSR  |

## packet-too-big



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>packet-too-big</b> context   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">icmp6-generation</a> <b>packet-too-big</b>   |
| Tree        | <a href="#">packet-too-big</a>  |
| Description | <p>Commands in this context configure the parameters to send ICMPv6 PTB (Packet Too Big) messages on the private side.</p> <p>The system sends PTB messages if a received IPv6 packet on the private side is greater than 1280 bytes and it exceeds the private MTU of the tunnel.</p> <p>The private MTU for the tunnel is configured via the <b>configure router interface ipsec ipsec-tunnel ip-mtu</b> command for the interface.</p> |
| Introduced  | 22.7.R1   |

Platforms VSR

### **admin-state** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Administrative state of Packet Too Big message sends  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>icmp6-generation</b> <b>packet-too-big</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 22.7.R1   |
| Platforms  | VSR   |

### **interval** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Interval for sending Packet Too Big messages  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>icmp6-generation</b> <b>packet-too-big</b> <b>interval</b> <i>number</i> |
| Tree       | <b>interval</b>   |
| Range      | 1 to 60   |
| Units      | seconds   |
| Default    | 10  |
| Introduced | 22.7.R1   |
| Platforms  | VSR   |

## message-count *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Maximum number of ICMPv6 PTB messages that can be sent   |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>icmp6-generation</b> <b>packet-too-big</b> <b>message-count</b> <i>number</i> |
| Tree        | <b>message-count</b>   |
| Description | This command configures the maximum number of PTB messages that can be sent during the configured interval.  |
| Range       | 10 to 1000   |
| Default     | 100  |
| Introduced  | 22.7.R1  |
| Platforms   | VSR  |

## ip-mtu *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Private MTU of the IPsec tunnel   |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>ip-mtu</b> <i>number</i>     |
| Tree        | <b>ip-mtu</b>   |
| Description | This command specifies the private MTU of the IPsec tunnel. The private MTU is used to determine the need for fragmentation before encapsulation of the payload packet. |
| Range       | 512 to 9000   |
| Units       | bytes   |
| Introduced  | 22.7.R1   |
| Platforms   | VSR   |

## key-exchange

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



|            |  |
|------------|--|
| Synopsis   | Enter the <b>key-exchange</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string ipsec ipsec-tunnel string</a> <a href="#">key-exchange</a> |
| Tree       | <a href="#">key-exchange</a>   |
| Introduced | 22.7.R1  |
| Platforms  | VSR  |

## dynamic



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enable the <b>dynamic</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string ipsec ipsec-tunnel string</a> <a href="#">key-exchange</a> <a href="#">dynamic</a> |
| Tree       | <a href="#">dynamic</a>  |
| Notes      | The following elements are part of a choice: <b>dynamic</b> or <b>manual</b> .   |
| Introduced | 22.7.R1  |
| Platforms  | VSR  |

## auto-establish *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Attempt to establish a phase 1 exchange automatically  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string ipsec ipsec-tunnel string</a> <a href="#">key-exchange</a> <a href="#">dynamic auto-establish</a> <i>boolean</i> |
| Tree       | <a href="#">auto-establish</a>   |
| Default    | false  |
| Introduced | 22.7.R1  |
| Platforms  | VSR  |

## cert

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>cert</b> context  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic cert</a> |
| Tree        | <a href="#">cert</a>   |
| Description | Commands in this context configure the attributes of the dynamic keying certificate.   |
| Introduced  | 22.7.R1  |
| Platforms   | VSR  |

## cert-profile *reference*

|            |  |
|------------|--|
| Synopsis   | Certificate profile name   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic cert</a> <a href="#">cert-profile</a> <i>reference</i> |
| Tree       | <a href="#">cert-profile</a>   |
| Reference  | <b>configure</b> <a href="#">ipsec</a> <a href="#">cert-profile</a> <i>string</i>  |
| Introduced | 22.7.R1  |
| Platforms  | VSR  |

## status-verify

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>status-verify</b> context   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic cert</a> <a href="#">status-verify</a> |
| Tree        | <a href="#">status-verify</a>  |
| Description | Commands in this context configure attributes of Certificate Status Verification (CSV).  |
| Introduced  | 22.7.R1  |
| Platforms   | VSR  |

**default-result** *keyword*

|             |  |
|-------------|--|
| Synopsis    | Default result for Certificate Status Verification   |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>key-exchange</b> <b>dynamic</b> <b>cert</b> <b>status-verify</b> <b>default-result</b> <i>keyword</i> |
| Tree        | <b>default-result</b>  |
| Description | This command specifies the default certificate revocation status result to use when all configured CSV methods fail to return a result.  |
| Options     | revoked, good  |
| Default     | revoked  |
| Introduced  | 22.7.R1  |
| Platforms   | VSR  |

**primary** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Primary method of CSV to verify the revocation status   |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>key-exchange</b> <b>dynamic</b> <b>cert</b> <b>status-verify</b> <b>primary</b> <i>keyword</i> |
| Tree        | <b>primary</b>  |
| Description | This command configures the primary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the certificate of the peer.  |
| Options     | crl, ojsp   |
| Default     | crl   |
| Introduced  | 22.7.R1   |
| Platforms   | VSR   |

**secondary** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Secondary method used to verify certificate revocation  |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>key-exchange</b> <b>dynamic</b> <b>cert</b> <b>status-verify</b> <b>secondary</b> <i>keyword</i> |
| Tree        | <b>secondary</b>  |
| Description | This command specifies the secondary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the peer certificate.  |
| Options     | none, crl, ojsp   |
| Default     | none  |

Introduced 22.7.R1  
 Platforms VSR

### **trust-anchor-profile** *reference*

Synopsis Trust anchor profile name  
 Context **configure** [service vprn string](#) [interface string](#) [ipsec ipsec-tunnel string](#) [key-exchange dynamic cert trust-anchor-profile reference](#)  
 Tree [trust-anchor-profile](#)  
 Reference **configure** [ipsec trust-anchor-profile string](#)  
 Introduced 22.7.R1  
 Platforms VSR

### **id**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **id** context  
 Context **configure** [service vprn string](#) [interface string](#) [ipsec ipsec-tunnel string](#) [key-exchange dynamic id](#)  
 Tree [id](#)  
 Description Commands in this context specify the local ID used for IDi or IDr for IKEv2 negotiation. The default behavior depends on the local authentication method as follows:
 

- Psk: local tunnel IP address
- Cert-auth: subject of the local certificate

 Introduced 22.7.R1  
 Platforms VSR

### **fqdn** *string*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis FQDN used as the local ID IKE type

|               |  |
|---------------|--|
| Context       | <b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>key-exchange</b> <b>dynamic id fqdn</b> <i>string</i> |
| Tree          | <b>fqdn</b>  |
| String Length | 1 to 255   |
| Notes         | The following elements are part of a choice: <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .  |
| Introduced    | 22.7.R1  |
| Platforms     | VSR  |

### **ipv4** *string*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | IPv4 as the local ID type  |
| Context    | <b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>key-exchange</b> <b>dynamic id ipv4</b> <i>string</i> |
| Tree       | <b>ipv4</b>  |
| Notes      | The following elements are part of a choice: <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .  |
| Introduced | 22.7.R1  |
| Platforms  | VSR  |

### **ipv6** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | IPv6 used as the local IKE ID type   |
| Context    | <b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>key-exchange</b> <b>dynamic id ipv6</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <b>ipv6</b>  |
| Notes      | The following elements are part of a choice: <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .  |
| Introduced | 22.7.R1  |
| Platforms  | VSR  |

## ike-policy *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | IKE policy ID   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange dynamic ike-policy</a> <i>reference</i> |
| Tree        | <a href="#">ike-policy</a>  |
| Description | This command specifies the ID of the IKE policy used for IKE negotiation.<br>The <b>ipsec-transport-mode-profile</b> configuration only supports IKEv2.   |
| Reference   | <b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i>   |
| Introduced  | 22.7.R1   |
| Platforms   | VSR   |

## ipsec-transform *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|                |  |
|----------------|--|
| Synopsis       | IPsec transform IDs used by the dynamic key  |
| Context        | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange dynamic ipsec-transform</a> <i>reference</i> |
| Tree           | <a href="#">ipsec-transform</a>  |
| Description    | This command specifies IPsec transform IDs used for CHILD_SA negotiation.  |
| Reference      | <b>configure</b> <a href="#">ipsec ipsec-transform</a> <i>number</i>   |
| Max. Instances | 4  |
| Introduced     | 22.7.R1  |
| Platforms      | VSR  |

## pre-shared-key *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Pre-shared key for authentication   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec</a> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic</a> <a href="#">pre-shared-key</a> <i>string</i> |
| Tree          | <a href="#">pre-shared-key</a>  |
| String Length | 1 to 115  |
| Introduced    | 22.7.R1   |
| Platforms     | VSR   |

## manual



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Enable the <b>manual</b> context  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec</a> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">manual</a> |
| Tree        | <a href="#">manual</a>  |
| Description | Commands in this context configure settings for manually configured security associations for the IPsec tunnel.   |
| Notes       | The following elements are part of a choice: <b>dynamic</b> or <b>manual</b> .  |
| Introduced  | 22.7.R1   |
| Platforms   | VSR   |

## keys [[security-association](#)] *number direction keyword*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>keys</b> list instance  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec</a> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">manual</a> <a href="#">keys</a> <i>number direction keyword</i> |
| Tree        | <a href="#">keys</a>   |
| Description | Commands in this context configure the security association list for the tunnel.   |
| Introduced  | 22.7.R1  |
| Platforms   | VSR  |

**[security-association] number**

|            |  |
|------------|--|
| Synopsis   | SA entry ID  |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>key-exchange</b> <b>manual keys</b> <i>number</i> <b>direction</b> <i>keyword</i> |
| Tree       | <b>keys</b>  |
| Range      | 1 to 16  |
| Notes      | This element is part of a list key.  |
| Introduced | 22.7.R1  |
| Platforms  | VSR  |

**direction keyword**

|            |  |
|------------|--|
| Synopsis   | Direction of the IPsec tunnel  |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>key-exchange</b> <b>manual keys</b> <i>number</i> <b>direction</b> <i>keyword</i> |
| Tree       | <b>keys</b>  |
| Options    | inbound, outbound  |
| Notes      | This element is part of a list key.  |
| Introduced | 22.7.R1  |
| Platforms  | VSR  |

**authentication-key string****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Key used for the authentication algorithm  |
| Context       | <b>configure</b> <b>service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>key-exchange</b> <b>manual keys</b> <i>number</i> <b>direction</b> <i>keyword</i> <b>authentication-key</b> <i>string</i> |
| Tree          | <b>authentication-key</b>  |
| String Length | 1 to 130   |



Introduced 22.7.R1  
 Platforms VSR

### encryption-key *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Key used for the encryption algorithm  
 Context **configure** [service vprn string](#) [interface string](#) [ipsec ipsec-tunnel string](#) [key-exchange manual keys number direction keyword](#) [encryption-key string](#)  
 Tree [encryption-key](#)  
 String Length 1 to 66  
 Introduced 22.7.R1  
 Platforms VSR

### ipsec-transform *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Transform entry used by manual SAs  
 Context **configure** [service vprn string](#) [interface string](#) [ipsec ipsec-tunnel string](#) [key-exchange manual keys number direction keyword](#) [ipsec-transform reference](#)  
 Tree [ipsec-transform](#)  
 Reference **configure** [ipsec ipsec-transform number](#)  
 Notes This element is mandatory.  
 Introduced 22.7.R1  
 Platforms VSR

**spi number****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | SPI of inbound and outbound packets  |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>key-exchange</b> <b>manual</b> <b>keys</b> <i>number</i> <b>direction</b> <i>keyword</i> <b>spi</b> <i>number</i>   |
| Tree        | <b>spi</b>   |
| Description | This command specifies the Security Parameter Index (SPI) used to look up the instruction to verify and decrypt the incoming IPsec packets when the direction is inbound. When the direction is outbound, the SPI is used in the encoding of the outgoing packets.<br><br>The remote node can use the SPI to look up the instruction to verify and decrypt the packet. |
| Range       | 256 to 16383   |
| Notes       | This element is mandatory.   |
| Introduced  | 22.7.R1  |
| Platforms   | VSR  |

**local-gateway-address-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Local IPsec tunnel endpoint address   |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>local-gateway-address-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree        | <b>local-gateway-address-override</b>   |
| Description | This command configures the local IPsec tunnel endpoint address. This overrides the default endpoint address, which is the interface address.   |
| Introduced  | 22.7.R1   |
| Platforms   | VSR   |

## max-history-key-records



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>max-history-key-records</b> context  |
| Context     | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ipsec ipsec-tunnel string</a> <a href="#">max-history-key-records</a> |
| Tree        | <a href="#">max-history-key-records</a>   |
| Description | Commands in this context configure the settings for recording historical IPsec keys.  |
| Introduced  | 22.7.R1   |
| Platforms   | VSR   |

## esp number



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Maximum number of recent records   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ipsec ipsec-tunnel string</a> <a href="#">max-history-key-records</a> <a href="#">esp number</a> |
| Tree       | <a href="#">esp</a>  |
| Range      | 1 to 48  |
| Introduced | 22.7.R1  |
| Platforms  | VSR  |

## ike number



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | Maximum number of historical IKE key records   |
| Context  | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ipsec ipsec-tunnel string</a> <a href="#">max-history-key-records</a> <a href="#">ike number</a> |
| Tree     | <a href="#">ike</a>  |

|            |         |
|------------|---------|
| Range      | 1 to 3  |
| Introduced | 22.7.R1 |
| Platforms  | VSR     |

### **pmtu-discovery-aging** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Aging out time of the learned path MTU   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <b>pmtu-discovery-aging</b> <i>number</i> |
| Tree        | <a href="#">pmtu-discovery-aging</a>   |
| Description | This command configures the temporary public and private MTU expiration time. The temporary MTU is used for MTU propagation.   |
| Range       | 900 to 3600  |
| Units       | seconds  |
| Default     | 900  |
| Introduced  | 22.7.R1  |
| Platforms   | VSR  |

### **private-sap** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Private SAP ID  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <b>private-sap</b> <i>number</i> |
| Tree     | <a href="#">private-sap</a>   |
| Range    | 0 to 4094   |
| Notes    | This element is mandatory.  |

Introduced 22.7.R1  
 Platforms VSR

### private-service *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Private service name  
 Context **configure** [service vpn](#) *string* [interface](#) *string* [ipsec ipsec-tunnel](#) *string* [private-service](#) *string*  
 Tree [private-service](#)  
 Description This command configures the private service name.  
 If unconfigured, the private service is the service where the secured interface resides.  
 String Length 1 to 64  
 Introduced 22.7.R1  
 Platforms VSR

### private-tcp-mss-adjust *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis TCP maximum segment size (MSS) adjustment  
 Context **configure** [service vpn](#) *string* [interface](#) *string* [ipsec ipsec-tunnel](#) *string* [private-tcp-mss-adjust](#) *number*  
 Tree [private-tcp-mss-adjust](#)  
 Description This command specifies the TCP MSS to adjust for the tunnel on the private side.  
 When configured, the system may use the value to update the MSS option in the received TCP SYN packet on the private side.  
 Range 512 to 9000  
 Units bytes

Introduced 22.7.R1  
 Platforms VSR

### **propagate-pmtu-v4** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable propagation of the path MTU to IPv4 hosts

Context **configure** *service vprn string interface string ipsec ipsec-tunnel string propagate-pmtu-v4 boolean*

Tree [propagate-pmtu-v4](#)

Description When configured to **true**, the system propagates the path MTU learned from the public side to the private side (IPv4 hosts).

Default true

Introduced 22.7.R1

Platforms VSR

### **propagate-pmtu-v6** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable propagation of the path MTU to IPv6 hosts

Context **configure** *service vprn string interface string ipsec ipsec-tunnel string propagate-pmtu-v6 boolean*

Tree [propagate-pmtu-v6](#)

Description When configured to **true**, the system propagates the path MTU learned from the public side to the private side (IPv6 hosts).

Default true

Introduced 22.7.R1

Platforms VSR

**public-tcp-mss-adjust** (*number | keyword*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | TCP maximum segment size (MSS) on the public network  |
| Context     | <b>configure</b> <b>service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>public-tcp-mss-adjust</b> ( <i>number   keyword</i> )  |
| Tree        | <b>public-tcp-mss-adjust</b>  |
| Description | This command configures the MSS for the TCP traffic in an IPsec tunnel that is sent from the public network to the private network. The system may use this value to adjust or insert the MSS option in the TCP SYN packet. |
| Range       | 512 to 9000   |
| Units       | bytes   |
| Options     | auto  |
| Introduced  | 22.7.R1   |
| Platforms   | VSR   |

**remote-gateway-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Remote IPsec tunnel endpoint address   |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>remote-gateway-address</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) |
| Tree       | <b>remote-gateway-address</b>  |
| Introduced | 22.7.R1  |
| Platforms  | VSR  |

**replay-window** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |                         |
|----------|-------------------------|
| Synopsis | Anti-replay window size |
|----------|-------------------------|

|             |  |
|-------------|--|
| Context     | <b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>replay-window</b> <i>number</i> |
| Tree        | <a href="#">replay-window</a>  |
| Description | This command specifies the size of an IPsec anti-replay window. If unconfigured, IPsec anti-replay is disabled.                                      |
| Range       | 32   64   128   256   512  |
| Units       | packets  |
| Introduced  | 22.7.R1  |
| Platforms   | VSR  |

## security-policy



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>security-policy</b> context   |
| Context     | <b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>security-policy</b> |
| Tree        | <a href="#">security-policy</a>  |
| Description | Commands in this context specify a security policy used by the tunnel.   |
| Introduced  | 22.7.R1  |
| Platforms   | VSR  |

## id number



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Security policy ID for use by the tunnel  |
| Context    | <b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>security-policy id</b> <i>number</i> |
| Tree       | <a href="#">id</a>  |
| Max. Range | 0 to 4294967295   |
| Introduced | 22.7.R1   |
| Platforms  | VSR   |



**strict-match** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Enable strict match of the security policy entry  |
| Context     | <b>configure</b> <i>service vpn</i> <i>string</i> <i>interface</i> <i>string</i> <i>ipsec ipsec-tunnel</i> <i>string</i> <i>security-policy</i> <b>strict-match</b> <i>boolean</i>  |
| Tree        | <b>strict-match</b>   |
| Description | <p>When configured to <b>true</b>, this command enables strict match of the security policy entry.</p> <p>When a CREATE_CHILD exchange request is received for a static IPsec tunnel, and this request is not a rekey request, ISA matches the received TSi and TSr with the configured security policy. This can be a match only when a received TS (in TSi or TSr) address range matches exactly with the subnet in a security policy entry.</p> <p>If there is no match, the setup fails, and TS_UNACCEPTABLE is sent.</p> <p>If there is a match, but there is an existing CHILD_SA for the matched security policy, the setup fails, and NO_PROPOSAL_CHOSEN is sent.</p> <p>If there is a match, and there is not a CHILD_SA for the matched entry, the subnet is sent in the matched security policy entry as TSi and TSr, and the CHILD_SA is created.</p> |
| Default     | false   |
| Introduced  | 22.7.R1   |
| Platforms   | VSR   |

**ipv6-exception** *reference*

|             |  |
|-------------|--|
| Synopsis    | IPv6 filter exception used to bypass encryption  |
| Context     | <b>configure</b> <i>service vpn</i> <i>string</i> <i>interface</i> <i>string</i> <i>ipsec</i> <b>ipv6-exception</b> <i>reference</i>   |
| Tree        | <b>ipv6-exception</b>  |
| Description | <p>This command specifies the IPv6 filter exception for an IPsec-secured IPv6 interface. When an IPv6 filter exception is added, clear text packets that match the exception criteria in the IPv6 filter exception can ingress the interface, even when IPsec is enabled on the interface.</p> |
| Reference   | <b>configure</b> <i>filter</i> <b>ipv6-exception</b> <i>string</i>   |
| Introduced  | 22.7.R1  |
| Platforms   | VSR  |

## public-sap *number*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Public SAP ID  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec public-sap</a> <i>number</i> |
| Tree       | <a href="#">public-sap</a>   |
| Range      | 0 to 4094  |
| Notes      | This element is mandatory.   |
| Introduced | 22.7.R1  |
| Platforms  | VSR  |

## tunnel-group *reference*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Tunnel group ID   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec tunnel-group</a> <i>reference</i> |
| Tree       | <a href="#">tunnel-group</a>  |
| Reference  | <b>configure isa tunnel-group</b> <i>number</i>   |
| Notes      | This element is mandatory.  |
| Introduced | 22.7.R1   |
| Platforms  | VSR   |

## ipv4

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv4</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> |
| Tree       | <a href="#">ipv4</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**addresses**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>addresses</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ipv4 addresses</a> |
| Tree       | <a href="#">addresses</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**address** [[ipv4-address](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>address</b> list instance  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ipv4 addresses</a> <a href="#">address string</a> |
| Tree       | <a href="#">address</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[ipv4-address]** *string*

|            |   |
|------------|---|
| Synopsis   | IPv4 address for the interface  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ipv4 addresses</a> <a href="#">address string</a> |
| Tree       | <a href="#">address</a>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**prefix-length** *number*

|            |  |
|------------|--|
| Synopsis   | IPv4 address prefix length   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ipv4 addresses</a> <a href="#">address string</a> <a href="#">prefix-length number</a> |
| Tree       | <a href="#">prefix-length</a>  |
| Range      | 0 to 32  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**allow-directed-broadcasts** *boolean*

|            |  |
|------------|--|
| Synopsis   | Forward directed broadcasts  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <b>allow-directed-broadcasts</b> <i>boolean</i> |
| Tree       | <a href="#">allow-directed-broadcasts</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**bfd**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>bfd</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <b>bfd</b> |
| Tree       | <a href="#">bfd</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of BFD sessions  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <b>bfd</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**echo-receive** *number*

|            |   |
|------------|---|
| Synopsis   | Minimum echo interval over this interface   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <b>bfd</b> <b>echo-receive</b> <i>number</i> |
| Tree       | <a href="#">echo-receive</a>  |
| Range      | 100 to 100000   |
| Units      | milliseconds  |
| Introduced | 16.0.R1   |

Platforms All

### **multiplier** *number*

Synopsis Number of consecutive BFD messages missed from the peer

Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv4 bfd multiplier](#) *number*

Tree [multiplier](#)

Description This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.

Range 1 to 20

Default 3

Introduced 16.0.R1

Platforms All

### **receive** *number*

Synopsis BFD receive interval over this interface

Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv4 bfd receive](#) *number*

Tree [receive](#)

Description This command specifies the receive interval for the BFD session.  
On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.

Range 10 to 100000

Units milliseconds

Default 100

Introduced 16.0.R1

Platforms All

### **transmit-interval** *number*

Synopsis BFD transmit interval over this interface

Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv4 bfd transmit-interval](#) *number*

Tree [transmit-interval](#)

Description This command configures the transmit intervals.

On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.

|            |              |
|------------|--------------|
| Range      | 10 to 100000 |
| Units      | milliseconds |
| Default    | 100          |
| Introduced | 16.0.R1      |
| Platforms  | All          |

### **type** keyword

|             |   |
|-------------|---|
| Synopsis    | Local termination point for the BFD session   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">bfd</a> <b>type</b> <i>keyword</i>   |
| Tree        | <a href="#">type</a>  |
| Description | This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity.<br>The options to specify where the BFD session runs are: <ul style="list-style-type: none"> <li>• <b>auto</b> (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the <b>cpm-np</b>.</li> <li>• <b>cpm-np</b> – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems.</li> <li>• <b>fp</b> – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.</li> </ul> |
| Options     | cpm-np, auto, fp  |
| Default     | auto  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **dhcp**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>dhcp</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <b>dhcp</b> |
| Tree       | <a href="#">dhcp</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of DHCP  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**gi-address** *string*

|             |   |
|-------------|---|
| Synopsis    | GI address for the DHCP relay   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <b>gi-address</b> <i>string</i>   |
| Tree        | <a href="#">gi-address</a>  |
| Description | <p>This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay.</p> <p>By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.</p> |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**lease-populate**

|          |   |
|----------|---|
| Synopsis | Enter the <b>lease-populate</b> context   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <b>lease-populate</b> |

|            |                                |
|------------|--------------------------------|
| Tree       | <a href="#">lease-populate</a> |
| Introduced | 16.0.R1                        |
| Platforms  | All                            |

### **max-leases** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum number of DHCPv4 leases allowed   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp lease-populate max-leases</a> <i>number</i> |
| Tree       | <a href="#">max-leases</a>  |
| Range      | 0 to 511999   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **option-82**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>option-82</b> context  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82</a>               |
| Tree        | <a href="#">option-82</a>   |
| Description | Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet. |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **action** *keyword*

|            |   |
|------------|---|
| Synopsis   | Action to take with received DHCP Option 82   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82 action</a> <i>keyword</i> |
| Tree       | <a href="#">action</a>  |
| Options    | replace, drop, keep   |
| Default    | keep  |
| Introduced | 16.0.R1   |
| Platforms  | All   |



## circuit-id

|            |  |
|------------|--|
| Synopsis   | Enter the <b>circuit-id</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 dhcp option-82 circuit-id</b> |
| Tree       | <a href="#">circuit-id</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## ascii-tuple

|            |   |
|------------|---|
| Synopsis   | Use the ASCII-encoded tuple for the circuit ID  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 dhcp option-82 circuit-id ascii-tuple</b>                  |
| Tree       | <a href="#">ascii-tuple</a>   |
| Notes      | The following elements are part of a choice: <b>ascii-tuple</b> , <b>ifindex</b> , <b>none</b> , <b>sap-id</b> , or <b>vlan-ascii-tuple</b> . |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## ifindex

|            |   |
|------------|---|
| Synopsis   | Use the interface index for the circuit ID  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 dhcp option-82 circuit-id ifindex</b>                      |
| Tree       | <a href="#">ifindex</a>   |
| Notes      | The following elements are part of a choice: <b>ascii-tuple</b> , <b>ifindex</b> , <b>none</b> , <b>sap-id</b> , or <b>vlan-ascii-tuple</b> . |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## none

|            |   |
|------------|---|
| Synopsis   | Do not include the circuit ID   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 dhcp option-82 circuit-id none</b>                         |
| Tree       | <a href="#">none</a>  |
| Notes      | The following elements are part of a choice: <b>ascii-tuple</b> , <b>ifindex</b> , <b>none</b> , <b>sap-id</b> , or <b>vlan-ascii-tuple</b> . |
| Introduced | 16.0.R1   |

Platforms All

## sap-id

Synopsis Use the SAP ID

Context **configure** [service vprn string](#) [interface string](#) [ipv4 dhcp option-82 circuit-id](#) [sap-id](#)

Tree [sap-id](#)

Notes The following elements are part of a choice: **ascii-tuple**, **ifindex**, **none**, **sap-id**, or **vlan-ascii-tuple**.

Introduced 16.0.R1

Platforms All

## vlan-ascii-tuple

Synopsis Include the VLAN ID and dot1p bits in the ASCII tuple

Context **configure** [service vprn string](#) [interface string](#) [ipv4 dhcp option-82 circuit-id](#) [vlan-ascii-tuple](#)

Tree [vlan-ascii-tuple](#)

Description When configured, the router includes the VLAN ID and dot1p bits with the ASCII-tuple information. This only occurs on dot1q and QinQ-encapsulated ports. When the Option 82 bits are stripped, dot1p bits are copied to the Ethernet header of the outgoing packet.  
When unconfigured, the router leaves the circuit ID sub-option of the DHCP packet empty.

Notes The following elements are part of a choice: **ascii-tuple**, **ifindex**, **none**, **sap-id**, or **vlan-ascii-tuple**.

Introduced 16.0.R1

Platforms All

## remote-id

Synopsis Enter the **remote-id** context

Context **configure** [service vprn string](#) [interface string](#) [ipv4 dhcp option-82](#) [remote-id](#)

Tree [remote-id](#)

Description Commands in this context configure the remote IP sub-option of the DHCP packet with the identity of the remote host end (typically the DHCP client).

Introduced 16.0.R1

Platforms All

### **ascii-string** *string*

|               |  |
|---------------|--|
| Synopsis      | User-defined ASCII string for the remote ID  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">remote-id</a> <a href="#">ascii-string</a> <i>string</i> |
| Tree          | <a href="#">ascii-string</a>   |
| String Length | 1 to 32  |
| Notes         | The following elements are part of a choice: <b>ascii-string</b> , <b>mac</b> , or <b>none</b> .   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

### **mac**

|            |   |
|------------|---|
| Synopsis   | Use the MAC address for the remote ID   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">remote-id</a> <a href="#">mac</a> |
| Tree       | <a href="#">mac</a>   |
| Notes      | The following elements are part of a choice: <b>ascii-string</b> , <b>mac</b> , or <b>none</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **none**

|            |  |
|------------|--|
| Synopsis   | Do not include the remote ID   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">remote-id</a> <a href="#">none</a> |
| Tree       | <a href="#">none</a>   |
| Notes      | The following elements are part of a choice: <b>ascii-string</b> , <b>mac</b> , or <b>none</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **vendor-specific-option**

|          |  |
|----------|--|
| Synopsis | Enter the <b>vendor-specific-option</b> context  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">vendor-specific-option</a> |
| Tree     | <a href="#">vendor-specific-option</a>   |

---

|             |   |
|-------------|---|
| Description | Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet. |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**client-mac-address** *boolean*

|            |  |
|------------|--|
| Synopsis   | Send the MAC address in the VSO  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82 vendor-specific-option client-mac-address</a> <i>boolean</i> |
| Tree       | <a href="#">client-mac-address</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**pool-name** *boolean*

|            |   |
|------------|---|
| Synopsis   | Send the pool name in the VSO   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82 vendor-specific-option pool-name</a> <i>boolean</i> |
| Tree       | <a href="#">pool-name</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**sap-id** *boolean*

|            |  |
|------------|--|
| Synopsis   | Send SAP ID in the sub-option of the DHCP relay packet   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82 vendor-specific-option sap-id</a> <i>boolean</i> |
| Tree       | <a href="#">sap-id</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**service-id** *boolean*

|            |   |
|------------|---|
| Synopsis   | Send the service ID in the Vendor Specific Option   |
| Context    | <b>configure</b> <a href="#">service vprn string interface string ipv4 dhcp option-82 vendor-specific-option service-id boolean</a> |
| Tree       | <a href="#">service-id</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**string** *string*

|               |  |
|---------------|--|
| Synopsis      | User-defined ASCII string for the VSO  |
| Context       | <b>configure</b> <a href="#">service vprn string interface string ipv4 dhcp option-82 vendor-specific-option string string</a> |
| Tree          | <a href="#">string</a>   |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**system-id** *boolean*

|            |  |
|------------|--|
| Synopsis   | Send the system ID in the VSO  |
| Context    | <b>configure</b> <a href="#">service vprn string interface string ipv4 dhcp option-82 vendor-specific-option system-id boolean</a> |
| Tree       | <a href="#">system-id</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**proxy-server**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>proxy-server</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn string interface string ipv4 dhcp proxy-server</a> |
| Tree       | <a href="#">proxy-server</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the DHCP proxy server  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ipv4 dhcp proxy-server admin-state keyword</a> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**emulated-server** *string*

|             |  |
|-------------|--|
| Synopsis    | IP address used as the DHCP server address for the SAP   |
| Context     | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ipv4 dhcp proxy-server emulated-server string</a>  |
| Tree        | <a href="#">emulated-server</a>  |
| Description | This command configures the IP address which will be used as the DHCP server address in the context of the SAP. Typically, the configured address should be in the context of the subnet represented by the service. |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**lease-time**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>lease-time</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ipv4 dhcp proxy-server lease-time</a> |
| Tree       | <a href="#">lease-time</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**radius-override** *boolean*

|          |   |
|----------|---|
| Synopsis | Use lease time information provided by RADIUS server  |
| Context  | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ipv4 dhcp proxy-server lease-time radius-override boolean</a> |
| Tree     | <a href="#">radius-override</a>   |

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

**value** *number*

|            |   |
|------------|---|
| Synopsis   | DHCP lease time   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp proxy-server lease-time</a> <i>value number</i> |
| Tree       | <a href="#">value</a>   |
| Range      | 300 to 315446399  |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**python-policy** *reference*

|            |  |
|------------|--|
| Synopsis   | Python policy  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp python-policy</a> <i>reference</i> |
| Tree       | <a href="#">python-policy</a>  |
| Reference  | <b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**relay-plain-bootp** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable relaying of plain BOOTP packets   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp relay-plain-bootp</a> <i>boolean</i> |
| Tree       | <a href="#">relay-plain-bootp</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## relay-proxy

|            |   |
|------------|---|
| Synopsis   | Enable the <b>relay-proxy</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">relay-proxy</a> |
| Tree       | <a href="#">relay-proxy</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## release-update-src-ip *boolean*

|            |  |
|------------|--|
| Synopsis   | Update the source IP address of a DHCP RELEASE message   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">relay-proxy</a> <a href="#">release-update-src-ip</a> <i>boolean</i> |
| Tree       | <a href="#">release-update-src-ip</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## siaddr-override *string*

|            |   |
|------------|---|
| Synopsis   | DHCP server IP address for address hiding function  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">relay-proxy</a> <a href="#">siaddr-override</a> <i>string</i> |
| Tree       | <a href="#">siaddr-override</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## release-include-gi-address *boolean*

|            |   |
|------------|---|
| Synopsis   | Include gateway IP address in DHCP Release messages   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">release-include-gi-address</a> <i>boolean</i> |
| Tree       | <a href="#">release-include-gi-address</a>  |
| Default    | false   |
| Introduced | 21.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |



**server string**

|                |  |
|----------------|--|
| Synopsis       | IP addresses for DHCP server requests  |
| Context        | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ipv4 dhcp server string</a>  |
| Tree           | <a href="#">server</a>   |
| Description    | This command configures a list of servers that this interface forwards requests to.<br><br>The operator can enter the list of servers as either IP addresses or fully qualified domain names. The operator must specify at least one server specified for DHCP relay to work. If there are multiple servers, the system forwards the request to all the servers in the list. |
| Max. Instances | 8  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

**src-ip-addr keyword**

|            |   |
|------------|---|
| Synopsis   | Type of source address to use for DHCP relay  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ipv4 dhcp src-ip-addr keyword</a> |
| Tree       | <a href="#">src-ip-addr</a>   |
| Options    | auto, gi-address  |
| Default    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**trusted boolean**

|             |   |
|-------------|---|
| Synopsis    | Relay untrusted packets   |
| Context     | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ipv4 dhcp trusted boolean</a>   |
| Tree        | <a href="#">trusted</a>   |
| Description | When configured to <b>true</b> , the router enables the trusted mode on the interface. When enabled, the relay agent changes the existing GI address (of the request) to the ingress interface, and forwards the request.<br><br>A DHCP request that contains a GI address of 0.0.0.0 and an Option 82 field in the packet is discarded unless it arrives on a trusted circuit. |

This behavior only applies if the Relay Agent Information Option action is to keep the existing information. When the Option 82 field is replaced by the relay agent, the original Option 82 information is lost, and there is no reason to enable the trusted option.

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **use-arp** *boolean*

|            |   |
|------------|---|
| Synopsis   | Use ARP to determine the destination hardware address   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <b>use-arp</b> <i>boolean</i> |
| Tree       | <a href="#">use-arp</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **icmp**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>icmp</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <b>icmp</b> |
| Tree       | <a href="#">icmp</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **mask-reply** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow responses to ICMP mask requests on the interface   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 icmp</a> <b>mask-reply</b> <i>boolean</i> |
| Tree       | <a href="#">mask-reply</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **param-problem**

|          |  |
|----------|--|
| Synopsis | Enter the <b>param-problem</b> context |
|----------|--|

|             |   |
|-------------|---|
| Context     | <b>configure service vprn string interface string ipv4 icmp param-problem</b>                                 |
| Tree        | <b>param-problem</b>  |
| Description | Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface. |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of sent Parameter Problem messages   |
| Context    | <b>configure service vprn string interface string ipv4 icmp param-problem admin-state keyword</b> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **number** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum number of Parameter Problem messages to send  |
| Context    | <b>configure service vprn string interface string ipv4 icmp param-problem number number</b> |
| Tree       | <b>number</b>   |
| Range      | 10 to 1000  |
| Default    | 100   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **seconds** *number*

|          |  |
|----------|--|
| Synopsis | Time used to limit number of Parameter Problem messages                                      |
| Context  | <b>configure service vprn string interface string ipv4 icmp param-problem seconds number</b> |
| Tree     | <b>seconds</b>   |
| Range    | 1 to 60  |
| Units    | seconds  |

|            |         |
|------------|---------|
| Default    | 10      |
| Introduced | 16.0.R1 |
| Platforms  | All     |

## redirects

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>redirects</b> context  |
| Context     | <b>configure service vprn string interface string ipv4 icmp redirects</b>   |
| Tree        | <b>redirects</b>  |
| Description | <p>Commands in this context configure the settings for ICMP redirect messages generated by the interface.</p> <p>The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.</p> |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

## admin-state *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of sending ICMP redirect messages  |
| Context    | <b>configure service vprn string interface string ipv4 icmp redirects admin-state keyword</b> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## number *number*

|            |   |
|------------|---|
| Synopsis   | Maximum number of ICMP redirect messages to send  |
| Context    | <b>configure service vprn string interface string ipv4 icmp redirects number number</b> |
| Tree       | <b>number</b>   |
| Range      | 10 to 1000  |
| Default    | 100   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**seconds** *number*

|            |  |
|------------|--|
| Synopsis   | Time used to limit the number of ICMP redirect messages  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 icmp redirects</a> <b>seconds</b> <i>number</i> |
| Tree       | <a href="#">seconds</a>  |
| Range      | 1 to 60  |
| Units      | seconds  |
| Default    | 10   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**ttl-expired**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>ttl-expired</b> context  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 icmp ttl-expired</a> |
| Tree        | <a href="#">ttl-expired</a>   |
| Description | Commands in this context configure the settings for ICMP TTL expired messages generated by the interface.                                 |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of sending TTL expired messages   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 icmp ttl-expired admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**number** *number*

|          |  |
|----------|--|
| Synopsis | Maximum number of TTL expired messages to send   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 icmp ttl-expired number</a> <i>number</i> |

|            |                        |
|------------|------------------------|
| Tree       | <a href="#">number</a> |
| Range      | 10 to 2000             |
| Default    | 100                    |
| Introduced | 16.0.R1                |
| Platforms  | All                    |

### **seconds** *number*

|            |   |
|------------|---|
| Synopsis   | Time used to limit the number of TTL expired messages   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 icmp ttl-expired</a> <a href="#">seconds</a> <i>number</i> |
| Tree       | <a href="#">seconds</a>   |
| Range      | 1 to 60   |
| Units      | seconds   |
| Default    | 10  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **unreachables**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>unreachables</b> context  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 icmp unreachables</a> |
| Tree        | <a href="#">unreachables</a>   |
| Description | Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface.       |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **admin-state** *keyword*

|          |   |
|----------|---|
| Synopsis | Administrative state of sending unreachable messages  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 icmp unreachables</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree     | <a href="#">admin-state</a>   |
| Options  | enable, disable   |
| Default  | enable  |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

**number** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum number of unreachable messages to send  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 icmp unreachable</a> <b>number</b> <i>number</i> |
| Tree       | <a href="#">number</a>  |
| Range      | 10 to 2000  |
| Default    | 100   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**seconds** *number*

|            |  |
|------------|--|
| Synopsis   | Time to limit the number of ICMP unreachable messages  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 icmp unreachable</a> <b>seconds</b> <i>number</i> |
| Tree       | <a href="#">seconds</a>  |
| Range      | 1 to 60  |
| Units      | seconds  |
| Default    | 10   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**ip-helper-address** *string*

|            |  |
|------------|--|
| Synopsis   | Gateway address  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 ip-helper-address</a> <i>string</i> |
| Tree       | <a href="#">ip-helper-address</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**local-dhcp-server** *reference*

|          |                               |
|----------|-------------------------------|
| Synopsis | DHCP server for the interface |
|----------|-------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 local-dhcp-server</b> <i>reference</i> |
| Tree       | <a href="#">local-dhcp-server</a>   |
| Reference  | <b>configure service vprn</b> <i>string</i> <b>dhcp-server dhcpv4</b> <i>string</i>                                       |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## neighbor-discovery

|            |   |
|------------|---|
| Synopsis   | Enter the <b>neighbor-discovery</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 neighbor-discovery</b> |
| Tree       | <a href="#">neighbor-discovery</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## host-route

|            |  |
|------------|--|
| Synopsis   | Enter the <b>host-route</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 neighbor-discovery host-route</b> |
| Tree       | <a href="#">host-route</a>   |
| Introduced | 19.10.R1   |
| Platforms  | All  |

## populate [[route-type](#)] *keyword*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>populate</b> list instance   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 neighbor-discovery host-route</b><br><a href="#">populate</a> <i>keyword</i> |
| Tree       | <a href="#">populate</a>  |
| Introduced | 19.10.R1  |
| Platforms  | All   |

## [\[route-type\]](#) *keyword*

|          |   |
|----------|---|
| Synopsis | Type of ARP or ND entries that generate host routes   |
| Context  | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 neighbor-discovery host-route</b><br><a href="#">populate</a> <i>keyword</i> |



|            |                                     |
|------------|-------------------------------------|
| Tree       | <a href="#">populate</a>            |
| Options    | static, dynamic, evpn               |
| Notes      | This element is part of a list key. |
| Introduced | 19.10.R1                            |
| Platforms  | All                                 |

### **route-tag** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Tag value used with the host route from an ARP/ND entry   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">host-route</a> <a href="#">populate</a> <i>keyword</i> <b>route-tag</b> <i>number</i> |
| Tree        | <a href="#">route-tag</a>   |
| Description | This command specifies the route tag that is added in the route table for ARP or ND host routes. This tag can be matched on BGP VRF export and BGP peer export policies.  |
| Range       | 1 to 255  |
| Introduced  | 19.10.R1  |
| Platforms   | All   |

### **learn-unsolicited** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Learn new entries from any received NA message   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">learn-unsolicited</a> <i>boolean</i>   |
| Tree        | <a href="#">learn-unsolicited</a>  |
| Description | <p>When configured to <b>true</b>, the router can learn neighbor entries from received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited (S) flag set. The command can be enabled for global addresses, link-local addresses, or for both.</p> <p>When configured to <b>false</b>, the router follows standard behavior for learning neighbor entries.</p> <ul style="list-style-type: none"> <li>• If an unsolicited NA (regardless of the S flag) is received from a neighbor that is not yet in the Neighbor Discovery (ND) cache, the NA is ignored.</li> <li>• If an NS, RS, RA, or Redirect message with a Link Layer Address (MAC) is received from a neighbor that is not yet in the ND cache, a new neighbor entry is created in the cache to store the received Link Layer MAC. The neighbor is put in the STALE state.</li> </ul> |

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

**limit**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>limit</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery</a> <b>limit</b> |
| Tree       | <a href="#">limit</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**log-only** *boolean*

|            |  |
|------------|--|
| Synopsis   | Generate log entries only if limit is reached  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery</a> <b>limit</b> <a href="#">log-only</a> <i>boolean</i> |
| Tree       | <a href="#">log-only</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**max-entries** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of entries learned on an IP interface   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery</a> <b>limit</b> <a href="#">max-entries</a> <i>number</i> |
| Tree       | <a href="#">max-entries</a>  |
| Range      | 0 to 524288  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**threshold** *number*

|          |   |
|----------|---|
| Synopsis | Threshold value that triggers a warning message |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 neighbor-discovery limit threshold</b> <i>number</i> |
| Tree       | <a href="#">threshold</a>   |
| Range      | 1 to 100  |
| Units      | percent   |
| Default    | 90  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **local-proxy-arp** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Enable local proxy ARP on interface  |
| Context     | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 neighbor-discovery local-proxy-arp</b> <i>boolean</i>   |
| Tree        | <a href="#">local-proxy-arp</a>  |
| Description | When configured to <b>true</b> , the router enables local proxy ARP on the interface.<br>When configured to <b>false</b> , the router does not respond to ARP requests for addresses on the same subnet. |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **populate** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow static and dynamic hosts to be populated in system ARP cache  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 neighbor-discovery populate</b> <i>boolean</i> |
| Tree       | <a href="#">populate</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **proactive-refresh** *boolean*

|          |  |
|----------|--|
| Synopsis | Send a single refresh message before entry timeout   |
| Context  | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 neighbor-discovery proactive-refresh</b> <i>boolean</i> |
| Tree     | <a href="#">proactive-refresh</a>  |

|             |   |
|-------------|---|
| Description | <p>When configured to <b>true</b>, the router always sends a refresh message 30 seconds before the timeout of the entry (a single refresh message with no retries).</p> <p>When configured to <b>false</b>, the router marks an entry as stale 30 seconds before age-out, and the router only sends an ARP request to refresh the entry if the IOM receives traffic that uses it. Then, the IOM asks the ARP application to send a refresh message. With ARP proactive refresh enabled, the ARP module sends a refresh message regardless of the IOM receiving traffic.</p> |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **proxy-arp-policy** *reference*

|                |   |
|----------------|---|
| Synopsis       | Proxy ARP policy name   |
| Context        | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery proxy-arp-policy</a> <i>reference</i> |
| Tree           | <a href="#">proxy-arp-policy</a>  |
| Reference      | <b>configure</b> <a href="#">policy-options policy-statement</a> <i>string</i>  |
| Max. Instances | 5   |
| Notes          | This element is ordered by the user.  |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

### **remote-proxy-arp** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable remote proxy ARP on the interface  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery remote-proxy-arp</a> <i>boolean</i> |
| Tree       | <a href="#">remote-proxy-arp</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **retry-timer** *number*

|          |                    |
|----------|--------------------|
| Synopsis | ARP retry interval |
|----------|--------------------|

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 neighbor-discovery</b> <b>retry-timer</b> <i>number</i> |
| Tree       | <b>retry-timer</b>   |
| Range      | 1 to 300   |
| Units      | deciseconds  |
| Default    | 50   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **static-neighbor** [**ipv4-address**] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>static-neighbor</b> list instance   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 neighbor-discovery</b> <b>static-neighbor</b> <i>string</i> |
| Tree       | <b>static-neighbor</b>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **[ipv4-address]** *string*

|            |  |
|------------|--|
| Synopsis   | IPv4 address that corresponds to the physical address  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 neighbor-discovery</b> <b>static-neighbor</b> <i>string</i> |
| Tree       | <b>static-neighbor</b>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **mac-address** *string*

|            |   |
|------------|---|
| Synopsis   | MAC address for the static neighbor   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 neighbor-discovery</b> <b>static-neighbor</b> <i>string</i> <b>mac-address</b> <i>string</i> |
| Tree       | <b>mac-address</b>  |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## static-neighbor-unnumbered

|            |  |
|------------|--|
| Synopsis   | Enable the <b>static-neighbor-unnumbered</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 neighbor-discovery static-neighbor-unnumbered</b> |
| Tree       | <b>static-neighbor-unnumbered</b>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## mac-address *string*

|            |  |
|------------|--|
| Synopsis   | MAC address for the static neighbor  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 neighbor-discovery static-neighbor-unnumbered mac-address</b> <i>string</i> |
| Tree       | <b>mac-address</b>   |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## timeout *number*

|             |   |
|-------------|---|
| Synopsis    | Timeout for an ARP entry learned on the interface   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 neighbor-discovery timeout</b> <i>number</i>   |
| Tree        | <b>timeout</b>  |
| Description | This command configures the minimum time an ARP entry learned on the IP interface is stored in the ARP table. ARP entries are automatically refreshed when an ARP request or gratuitous ARP is seen by an IP host. Otherwise, the ARP entry is aged from the ARP table. |
| Range       | 0 to 65535  |
| Units       | seconds   |
| Default     | 14400   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

## primary

|            |  |
|------------|--|
| Synopsis   | Enable the <b>primary</b> context                                  |
| Context    | <b>configure service vprn string interface string ipv4 primary</b> |
| Tree       | <a href="#">primary</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## address *string*

|            |   |
|------------|---|
| Synopsis   | Primary IPv4 address assigned to the interface                                    |
| Context    | <b>configure service vprn string interface string ipv4 primary address string</b> |
| Tree       | <a href="#">address</a>   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## broadcast *keyword*

|            |  |
|------------|--|
| Synopsis   | Broadcast address format   |
| Context    | <b>configure service vprn string interface string ipv4 primary broadcast keyword</b> |
| Tree       | <a href="#">broadcast</a>  |
| Options    | all-ones, host-ones  |
| Default    | host-ones  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## prefix-length *number*

|            |   |
|------------|---|
| Synopsis   | IPv4 address prefix length  |
| Context    | <b>configure service vprn string interface string ipv4 primary prefix-length number</b> |
| Tree       | <a href="#">prefix-length</a>   |
| Range      | 0 to 32   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |

Platforms All

### **track-srrp** *number*

Synopsis SRRP instance whose state is tracked on this IP address  
 Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv4](#) **primary** [track-srrp](#) *number*  
 Tree [track-srrp](#)  
 Range 1 to 4294967295  
 Introduced 16.0.R1  
 Platforms All

### **qos-route-lookup** *keyword*

Synopsis QoS Route lookup  
 Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv4](#) **qos-route-lookup** *keyword*  
 Tree [qos-route-lookup](#)  
 Options destination, source  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **secondary** [[address](#)] *string*

Synopsis Enter the **secondary** list instance  
 Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv4](#) **secondary** *string*  
 Tree [secondary](#)  
 Introduced 16.0.R1  
 Platforms All

### [[address](#)] *string*

Synopsis Secondary IPv4 address assigned to the interface  
 Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv4](#) **secondary** *string*  
 Tree [secondary](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R1



Platforms All

### **broadcast** *keyword*

Synopsis Broadcast address format

Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv4 secondary](#) *string* **broadcast** *keyword*

Tree [broadcast](#)

Options all-ones, host-ones

Default host-ones

Introduced 16.0.R1

Platforms All

### **igp-inhibit** *boolean*

Synopsis Disable the running IGP from recognizing secondary IP

Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv4 secondary](#) *string* **igp-inhibit** *boolean*

Tree [igp-inhibit](#)

Description When configured to **true**, the running IGP does not recognize the secondary IP address as a local interface.

Default false

Introduced 16.0.R1

Platforms All

### **prefix-length** *number*

Synopsis IPv4 address prefix length

Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv4 secondary](#) *string* **prefix-length** *number*

Tree [prefix-length](#)

Range 0 to 32

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

### **track-srrp** *number*

|            |  |
|------------|--|
| Synopsis   | SRRP instance whose state is tracked on this IP address  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">secondary</a> <i>string</i> <b>track-srrp</b> <i>number</i> |
| Tree       | <a href="#">track-srrp</a>   |
| Range      | 1 to 4294967295  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **tcp-mss** *number*

|            |   |
|------------|---|
| Synopsis   | TCP maximum segment size for the interface  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <b>tcp-mss</b> <i>number</i> |
| Tree       | <a href="#">tcp-mss</a>   |
| Range      | 384 to 9746   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **unnumbered**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>unnumbered</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <b>unnumbered</b> |
| Tree       | <a href="#">unnumbered</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **ip-address** *string*

|            |   |
|------------|---|
| Synopsis   | IP address for the interface  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">unnumbered</a> <b>ip-address</b> <i>string</i> |
| Tree       | <a href="#">ip-address</a>  |
| Notes      | The following elements are part of a choice: <b>ip-address</b> or <b>ip-int-name</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**ip-int-name** *string*

|               |  |
|---------------|--|
| Synopsis      | IP interface name  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">unnumbered</a> <b>ip-int-name</b> <i>string</i> |
| Tree          | <a href="#">ip-int-name</a>  |
| String Length | 1 to 32  |
| Notes         | The following elements are part of a choice: <b>ip-address</b> or <b>ip-int-name</b> .   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**urpf-check**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>urpf-check</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <b>urpf-check</b> |
| Tree       | <a href="#">urpf-check</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**ignore-default** *boolean*

|            |  |
|------------|--|
| Synopsis   | Ignore default route when performing a uRPF check  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">urpf-check</a> <b>ignore-default</b> <i>boolean</i> |
| Tree       | <a href="#">ignore-default</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**mode** *keyword*

|            |  |
|------------|--|
| Synopsis   | Unicast RPF check mode   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">urpf-check</a> <b>mode</b> <i>keyword</i> |
| Tree       | <a href="#">mode</a>   |
| Options    | strict, loose, strict-no-ecmp  |
| Default    | strict   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**vrrp** [*virtual-router-id*] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>vrrp</b> list instance   |
| Context    | <b>configure</b> <i>service vprn string interface string ipv4 vrrp number</i> |
| Tree       | <b>vrrp</b>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[virtual-router-id]** *number*

|            |   |
|------------|---|
| Synopsis   | Virtual Router Identifier (VRID) for the IP interface                         |
| Context    | <b>configure</b> <i>service vprn string interface string ipv4 vrrp number</i> |
| Tree       | <b>vrrp</b>   |
| Range      | 1 to 255  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**admin-state** *keyword*

|             |  |
|-------------|--|
| Synopsis    | Administrative state of VRRP   |
| Context     | <b>configure</b> <i>service vprn string interface string ipv4 vrrp number admin-state keyword</i>  |
| Tree        | <b>admin-state</b>   |
| Description | <p>The command determines the administrative state of non-owner virtual router instances.</p> <p>Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes.</p> <p>When <b>disabled</b>, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing.</p> <p>Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated.</p> <p>An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the <b>admin-state</b> command within the parent IP interface node which administratively disables the IP interface.</p> |
| Options     | enable, disable  |

|            |         |
|------------|---------|
| Default    | enable  |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### authentication-key *string*

|               |  |
|---------------|--|
| Synopsis      | Password for simple text authentication  |
| Context       | <b>configure</b> <b>service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 vrrp</b> <i>number</i> <b>authentication-key</b> <i>string</i>   |
| Tree          | <b>authentication-key</b>  |
| Description   | This command optionally assigns a simple text password authentication key to generate master VRRP advertisement messages and validate received VRRP advertisement messages.<br><br>If this command is re-executed with a different password key defined, the new key immediately replaces the old key. This command may be executed at any time. |
| String Length | 1 to 38  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

### backup *string*

|             |   |
|-------------|---|
| Synopsis    | Virtual router IP addresses for the interface   |
| Context     | <b>configure</b> <b>service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 vrrp</b> <i>number</i> <b>backup</b> <i>string</i>  |
| Tree        | <b>backup</b>   |
| Description | This command associates virtual router IP addresses with those of the parental IP interface.<br><br>This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance.<br><br>Non-owner virtual router instances create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup). This command, when executed on an owner virtual router instance, does not create a routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance.<br><br>For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is advertising to backup virtual routers receiving the messages. The specified <i>unicast-ipv4-address</i> must be equal to one of the existing IP addresses in the parental IP interface (primary or secondary) or this command fails.<br><br>See "Owner and non-owner VRRP" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide</i> for more information about owner and non-owner virtual router instances. |

|                |         |
|----------------|---------|
| Max. Instances | 16      |
| Introduced     | 16.0.R1 |
| Platforms      | All     |

## bfd-liveness

|            |   |
|------------|---|
| Synopsis   | Enable the <b>bfd-liveness</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ipv4 vrrp number</a> <a href="#">bfd-liveness</a> |
| Tree       | <a href="#">bfd-liveness</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## dest-ip *string*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Destination IP address to use for BFD session  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ipv4 vrrp number</a> <a href="#">bfd-liveness</a> <a href="#">dest-ip string</a> |
| Tree       | <a href="#">dest-ip</a>  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## interface-name *string*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Name of the interface running BFD   |
| Context       | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ipv4 vrrp number</a> <a href="#">bfd-liveness</a> <a href="#">interface-name string</a> |
| Tree          | <a href="#">interface-name</a>  |
| String Length | 1 to 32   |

|            |                            |
|------------|----------------------------|
| Notes      | This element is mandatory. |
| Introduced | 16.0.R1                    |
| Platforms  | All                        |

### **service-name** *string*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Administrative service name   |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 vrrp</a> <i>number</i> <a href="#">bfd-liveness</a> <a href="#">service-name</a> <i>string</i> |
| Tree          | <a href="#">service-name</a>  |
| String Length | 1 to 64   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

### **init-delay** *number*

|            |  |
|------------|--|
| Synopsis   | VRRP initialization delay timer  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 vrrp</a> <i>number</i> <a href="#">init-delay</a> <i>number</i> |
| Tree       | <a href="#">init-delay</a>   |
| Range      | 1 to 65535   |
| Units      | seconds  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **mac** *string*

|             |   |
|-------------|---|
| Synopsis    | Virtual MAC address to use in ARP responses   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 vrrp</a> <i>number</i> <a href="#">mac</a> <i>string</i>   |
| Tree        | <a href="#">mac</a>   |
| Description | This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID.<br><br>Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many |

hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address.

Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with *unicast-mac-address* as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts results. All VRRP advertisement messages are transmitted with *unicast-mac-address* as the source MAC.

An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **master-int-inherit** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Allow master instance to dictate the master down timer  |
| Context     | <b>configure</b> <i>service vprn string interface string ipv4 vrrp number master-int-inherit boolean</i>  |
| Tree        | <a href="#">master-int-inherit</a>  |
| Description | <p>When configured to <b>true</b>, the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer.</p> <p>When configured to <b>false</b>, the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded.</p> |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **message-interval** *number*

|             |  |
|-------------|--|
| Synopsis    | Interval for sending VRRP advertisement messages   |
| Context     | <b>configure</b> <i>service vprn string interface string ipv4 vrrp number message-interval number</i>  |
| Tree        | <a href="#">message-interval</a>   |
| Description | This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command. |



The usage of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the **master-int-inherit** command:

- When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar to an owner virtual router instance. The **master-int-inherit** command has no effect when operating as master.
- When a non-owner is in the backup state with **master-int-inherit** disabled, the system uses the configured value of this command to match the incoming advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement.
- When a non-owner is in the backup state with **master-int-inherit** enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message.

|            |             |
|------------|-------------|
| Range      | 1 to 2559   |
| Units      | deciseconds |
| Default    | 10          |
| Introduced | 16.0.R1     |
| Platforms  | All         |

## monitor-oper-group *reference*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | VRRP instance to follow a specified operational group   |
| Context     | <b>configure</b> <i>service vprn string interface string ipv4 vrrp number monitor-oper-group reference</i>  |
| Tree        | <i>monitor-oper-group</i>   |
| Description | This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states. |
| Reference   | <b>configure</b> <i>service oper-group string</i>   |
| Introduced  | 22.2.R1   |
| Platforms   | All   |

**ntp-reply** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Allow processing of NTP requests   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">vrrp</a> <i>number</i> <b>ntp-reply</b> <i>boolean</i>  |
| Tree        | <a href="#">ntp-reply</a>  |
| Description | When configured to <b>true</b> , the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router.<br>When configured to <b>false</b> , the router does not process NTP requests. |
| Default     | false  |
| Introduced  | 20.2.R1  |
| Platforms   | All  |

**oper-group** *reference*

|             |   |
|-------------|---|
| Synopsis    | Operational group name associated with the VRRP   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">vrrp</a> <i>number</i> <b>oper-group</b> <i>reference</i>  |
| Tree        | <a href="#">oper-group</a>  |
| Description | This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router (MR), the operational group is up. The operational group is down for all other VRRP states. |
| Reference   | <b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <i>string</i>   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**owner** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Designate the virtual router instance as owner  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">vrrp</a> <i>number</i> <b>owner</b> <i>boolean</i> |
| Tree        | <a href="#">owner</a>   |
| Description | When configured to <b>true</b> , the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for             |

forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router.

When configured to **false**, this virtual router instance is designated as a non-owner.

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **passive** *boolean*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Suppress the processing of VRRP advertisement messages  |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>vrrp</b> <i>number</i> <b>passive</b> <i>boolean</i>  |
| Tree        | <b>passive</b>  |
| Description | <p>When configured to <b>true</b>, the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down).</p> <p>When configured to <b>false</b>, this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages.</p> |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **ping-reply** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Allow non-owner master to reply to ICMP echo requests   |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>vrrp</b> <i>number</i> <b>ping-reply</b> <i>boolean</i>   |
| Tree        | <b>ping-reply</b>   |
| Description | <p>When configured to <b>true</b>, the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address).</p> <p>When configured to <b>false</b>, ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded.</p> |

Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **policy reference**

|             |  |
|-------------|--|
| Synopsis    | VRRP priority control policy   |
| Context     | <b>configure service vprn string interface string ipv4 vrrp number policy reference</b>  |
| Tree        | <a href="#">policy</a>   |
| Description | <p>This command configures a VRRP priority control policy to associate with the virtual router instance.</p> <p>VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis.</p> <p>An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with the <b>priority</b> command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value.</p> <p>For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.</p> |
| Reference   | <b>configure vrrp policy number</b>  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **preempt boolean**

|             |  |
|-------------|--|
| Synopsis    | Allow the VRRP to override an existing non-owner master  |
| Context     | <b>configure service vprn string interface string ipv4 vrrp number preempt boolean</b>   |
| Tree        | <a href="#">preempt</a>  |
| Description | <p>When configured to <b>true</b>, this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router.</p> <p>When configured to <b>false</b>, this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router.</p> |
| Default     | true   |
| Introduced  | 16.0.R1  |

Platforms All

### **priority number**

Synopsis Base priority for the VRRP

Context **configure service vprn string interface string ipv4 vrrp number priority number**

Tree [priority](#)

Description This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process.

The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis.

Range 1 to 255

Introduced 16.0.R1

Platforms All

### **ssh-reply boolean**

Synopsis Allow the non-owner master to reply to SSH requests

Context **configure service vprn string interface string ipv4 vrrp number ssh-reply boolean**

Tree [ssh-reply](#)

Description When configured to **true**, the router allows the non-owner master to reply to SSH requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the SSH request. SSH cannot be disabled at the management security level (either on the parental IP interface or on the SSH source host address).

When configure to **false**, SSH requests to non-owner master virtual IP addresses are silently discarded.

Default false

Introduced 16.0.R1

Platforms All

### **standby-forwarding boolean**

Synopsis Allow standby router to forward traffic

Context **configure service vprn string interface string ipv4 vrrp number standby-forwarding boolean**

Tree [standby-forwarding](#)

|             |   |
|-------------|---|
| Description | When configured to <b>true</b> , the standby router forwards all traffic.<br>When configured to <b>false</b> , the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address. |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### telnet-reply *boolean*

|             |  |
|-------------|--|
| Synopsis    | Allow non-owner master to reply to Telnet requests   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 vrrp</a> <i>number</i> <a href="#">telnet-reply</a> <i>boolean</i>  |
| Tree        | <a href="#">telnet-reply</a>   |
| Description | When configured to <b>true</b> , the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address).<br>When configured to <b>false</b> , the router silently discards Telnet requests sent to non-owner master virtual IP addresses. |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### traceroute-reply *boolean*

|             |  |
|-------------|--|
| Synopsis    | Allow non-owner master to reply to traceroute requests   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 vrrp</a> <i>number</i> <a href="#">traceroute-reply</a> <i>boolean</i>  |
| Tree        | <a href="#">traceroute-reply</a>   |
| Description | When configured to <b>true</b> , the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance.<br>When configured to <b>false</b> , the router silently discards traceroute requests sent to non-owner master virtual IP addresses.<br>Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address). |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**ipv6**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>ipv6</b> context                             |
| Context    | <b>configure service vprn string interface string ipv6</b> |
| Tree       | <b>ipv6</b>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**address [ipv6-address] string**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>address</b> list instance                                    |
| Context    | <b>configure service vprn string interface string ipv6 address string</b> |
| Tree       | <b>address</b>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[ipv6-address] string**

|            |   |
|------------|---|
| Synopsis   | IPv6 address assigned to the interface                                    |
| Context    | <b>configure service vprn string interface string ipv6 address string</b> |
| Tree       | <b>address</b>  |
| Notes      | This element is part of a list key.                                       |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**duplicate-address-detection boolean****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Enable Duplicate Address Detection  |
| Context     | <b>configure service vprn string interface string ipv6 address string duplicate-address-detection boolean</b> |
| Tree        | <b>duplicate-address-detection</b>  |
| Description | When configured to <b>true</b> , the router enables Duplicate Address Detection (DAD).                        |

When configured to **false**, the router disables DAD and sets the address to preferred, even if there is a duplicated address.

|            |         |
|------------|---------|
| Default    | true    |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **eui-64** *boolean*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Form IPv6 address from prefix and 64-bit interface ID  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">address</a> <i>string</i> <b>eui-64</b> <i>boolean</i>  |
| Tree        | <a href="#">eui-64</a>   |
| Description | When configured to <b>true</b> , the router forms a complete IPv6 address from the supplied prefix and 64-bit interface identifier. The 64-bit interface identifier is derived from the MAC address on Ethernet interfaces. For interfaces without a MAC address, for example POS interfaces, use the base MAC address of the chassis. |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **prefix-length** *number*

|            |   |
|------------|---|
| Synopsis   | IPv6 address prefix length  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">address</a> <i>string</i> <b>prefix-length</b> <i>number</i> |
| Tree       | <a href="#">prefix-length</a>   |
| Range      | 4 to 128  |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **primary-preference** *number*

|          |   |
|----------|---|
| Synopsis | Index assigned to the IPv6 address of the interface |
|----------|---|



|             |   |
|-------------|---|
| Context     | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 address</b> <i>string</i> <b>primary-preference</b> <i>number</i>  |
| Tree        | <b>primary-preference</b>   |
| Description | <p>This command assigns a primary preference index to an IPv6 address of the interface to enforce the order in which the address is used by control plane protocols and applications that require a fixed address of the interface, such as LDP and Segment Routing. In cases where a fixed address is required when originating packets from the interface, the IPv6 address with the lowest primary preference index is selected. If the selected address is removed, the next IPv6 address with the next lowest primary preference index is selected.</p> <p>If this index is not specified for the IPv6 address, the system assigns the next available index value to the address. The address index space is unique across all addresses of a given interface.</p> |
| Range       | 1 to 4294967295   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **track-srrp** *number*

|            |  |
|------------|--|
| Synopsis   | SRRP ID whose state is tracked on this IP address  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 address</b> <i>string</i> <b>track-srrp</b> <i>number</i> |
| Tree       | <b>track-srrp</b>  |
| Range      | 1 to 4294967295  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **bfd**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>bfd</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 bfd</b> |
| Tree       | <b>bfd</b>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **admin-state** *keyword*

|          |   |
|----------|---|
| Synopsis | Administrative state of BFD sessions  |
| Context  | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 bfd admin-state</b> <i>keyword</i> |

|            |                             |
|------------|-----------------------------|
| Tree       | <a href="#">admin-state</a> |
| Options    | enable, disable             |
| Default    | disable                     |
| Introduced | 16.0.R1                     |
| Platforms  | All                         |

### **echo-receive** *number*

|            |   |
|------------|---|
| Synopsis   | Minimum echo interval over this interface   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 bfd echo-receive</a> <i>number</i> |
| Tree       | <a href="#">echo-receive</a>  |
| Range      | 100 to 100000   |
| Units      | milliseconds  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **multiplier** *number*

|             |   |
|-------------|---|
| Synopsis    | Number of consecutive BFD messages missed from the peer   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 bfd multiplier</a> <i>number</i>   |
| Tree        | <a href="#">multiplier</a>  |
| Description | This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments. |
| Range       | 1 to 20   |
| Default     | 3   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **receive** *number*

|             |  |
|-------------|--|
| Synopsis    | BFD receive interval over this interface   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 bfd receive</a> <i>number</i> |
| Tree        | <a href="#">receive</a>  |
| Description | This command specifies the receive interval for the BFD session.   |

On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.

|            |              |
|------------|--------------|
| Range      | 10 to 100000 |
| Units      | milliseconds |
| Default    | 100          |
| Introduced | 16.0.R1      |
| Platforms  | All          |

### **transmit-interval** *number*

|             |   |
|-------------|---|
| Synopsis    | BFD transmit interval over this interface   |
| Context     | <b>configure service vprn string interface string ipv6 bfd transmit-interval number</b>   |
| Tree        | <a href="#">transmit-interval</a>   |
| Description | This command configures the transmit intervals.<br><br>On the 7750 SR, this command can only be configured to a value less than 100 when the <b>type</b> command is configured to <b>cpm-np</b> . |
| Range       | 10 to 100000  |
| Units       | milliseconds  |
| Default     | 100   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **type** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Local termination point for the BFD session   |
| Context     | <b>configure service vprn string interface string ipv6 bfd type keyword</b>   |
| Tree        | <a href="#">type</a>  |
| Description | This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity.<br><br>The options to specify where the BFD session runs are: <ul style="list-style-type: none"> <li>• <b>auto</b> (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the <b>cpm-np</b>.</li> <li>• <b>cpm-np</b> – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems.</li> <li>• <b>fp</b> – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.</li> </ul> |

|            |  |
|------------|--|
| Options    | cpm-np, auto, fp   |
| Default    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

## dhcp6

|            |  |
|------------|--|
| Synopsis   | Enter the <b>dhcp6</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> |
| Tree       | <a href="#">dhcp6</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## relay

|            |  |
|------------|--|
| Synopsis   | Enter the <b>relay</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> |
| Tree       | <a href="#">relay</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## admin-state *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of DHCPv6 Relay  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## description *string*

|          |  |
|----------|--|
| Synopsis | Text description   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <a href="#">description</a> <i>string</i> |

|               |                             |
|---------------|-----------------------------|
| Tree          | <a href="#">description</a> |
| String Length | 1 to 80                     |
| Introduced    | 16.0.R1                     |
| Platforms     | All                         |

## lease-populate

|            |   |
|------------|---|
| Synopsis   | Enter the <b>lease-populate</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <a href="#">lease-populate</a> |
| Tree       | <a href="#">lease-populate</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## max-nbr-of-leases *number*

|            |   |
|------------|---|
| Synopsis   | Maximum lease state entries allowed for the interface   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <a href="#">lease-populate</a> <a href="#">max-nbr-of-leases</a> <i>number</i> |
| Tree       | <a href="#">max-nbr-of-leases</a>   |
| Range      | 0 to 32767  |
| Default    | 0   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## route-populate

|            |  |
|------------|--|
| Synopsis   | Enter the <b>route-populate</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <a href="#">lease-populate</a> <a href="#">route-populate</a> |
| Tree       | <a href="#">route-populate</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## na *boolean*

|          |  |
|----------|--|
| Synopsis | Create route based on IA_NA prefix option in relay-reply message |
|----------|--|

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 relay lease-populate route-populate na</b> <i>boolean</i> |
| Tree       | <b>na</b>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## pd

|            |   |
|------------|---|
| Synopsis   | Enable the <b>pd</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 relay lease-populate route-populate pd</b> |
| Tree       | <b>pd</b>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## exclude *boolean*

|            |  |
|------------|--|
| Synopsis   | Create back hole route based on prefix exclude option in relay-reply message   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 relay lease-populate route-populate pd exclude</b> <i>boolean</i> |
| Tree       | <b>exclude</b>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## ta *boolean*

|            |  |
|------------|--|
| Synopsis   | Create route based on IA_TA prefix option in relay-reply message   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 relay lease-populate route-populate ta</b> <i>boolean</i> |
| Tree       | <b>ta</b>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **link-address** *string*

|            |   |
|------------|---|
| Synopsis   | Link address of the DHCPv6 relay messages   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay</a> <a href="#">link-address</a> <i>string</i> |
| Tree       | <a href="#">link-address</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **neighbor-resolution** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable neighbor resolution via DHCPv6 relay   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay</a> <a href="#">neighbor-resolution</a> <i>boolean</i> |
| Tree       | <a href="#">neighbor-resolution</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **option**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>option</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay</a> <a href="#">option</a> |
| Tree       | <a href="#">option</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **interface-id**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>interface-id</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay</a> <a href="#">option</a> <a href="#">interface-id</a> |
| Tree       | <a href="#">interface-id</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## ascii-tuple

|            |  |
|------------|--|
| Synopsis   | Use ASCII-encoded concatenated tuple   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <a href="#">option</a> <a href="#">interface-id</a> <a href="#">ascii-tuple</a> |
| Tree       | <a href="#">ascii-tuple</a>  |
| Notes      | The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-index</b> , <b>sap-id</b> , or <b>string</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## if-index

|            |   |
|------------|---|
| Synopsis   | Use interface index in the DHCPv6 relay packet  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <a href="#">option</a> <a href="#">interface-id</a> <a href="#">if-index</a> |
| Tree       | <a href="#">if-index</a>  |
| Notes      | The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-index</b> , <b>sap-id</b> , or <b>string</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## sap-id

|            |   |
|------------|---|
| Synopsis   | Use SAP ID in interface ID option in relay packet   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <a href="#">option</a> <a href="#">interface-id</a> <a href="#">sap-id</a> |
| Tree       | <a href="#">sap-id</a>  |
| Notes      | The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-index</b> , <b>sap-id</b> , or <b>string</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## string *string*

|               |   |
|---------------|---|
| Synopsis      | String for interface ID option in DHCPv6 relay packet   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <a href="#">option</a> <a href="#">interface-id</a> <a href="#">string</a> <i>string</i> |
| Tree          | <a href="#">string</a>  |
| String Length | 1 to 80   |
| Notes         | The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-index</b> , <b>sap-id</b> , or <b>string</b> .  |



Introduced 16.0.R1  
 Platforms All

### **remote-id** *boolean*

Synopsis Send remote ID option in the DHCPv6 relay packet  
 Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv6 dhcp6 relay option remote-id](#) *boolean*  
 Tree [remote-id](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **python-policy** *reference*

Synopsis Python policy name  
 Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv6 dhcp6 relay python-policy](#) *reference*  
 Tree [python-policy](#)  
 Reference **configure** [python](#) [python-policy](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### **server** *string*

Synopsis DHCPv6 server to which the DHCPv6 requests are forwarded  
 Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv6 dhcp6 relay server](#) *string*  
 Tree [server](#)  
 Max. Instances 8  
 Notes This element is ordered by the user.  
 Introduced 16.0.R1  
 Platforms All

### **source-address** *string*

Synopsis Source IPv6 address of the DHCPv6 relay messages

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 relay source-address</b> <i>string</i> |
| Tree       | <a href="#">source-address</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **user-db** *reference*

|            |   |
|------------|---|
| Synopsis   | Local user database for authentication  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 relay user-db</b> <i>reference</i> |
| Tree       | <a href="#">user-db</a>   |
| Reference  | <b>configure subscriber-mgmt local-user-db</b> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **server**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>server</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 server</b> |
| Tree       | <a href="#">server</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **max-nbr-of-leases** *number*

|            |   |
|------------|---|
| Synopsis   | DHCPv6 leases allowed   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 server max-nbr-of-leases</b> <i>number</i> |
| Tree       | <a href="#">max-nbr-of-leases</a>   |
| Range      | 0 to 8000   |
| Default    | 8000  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## prefix-delegation

|            |   |
|------------|---|
| Synopsis   | Enter the <b>prefix-delegation</b> context  |
| Context    | <b>configure service vprn string interface string ipv6 dhcp6 server prefix-delegation</b> |
| Tree       | <a href="#">prefix-delegation</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## admin-state keyword

|            |   |
|------------|---|
| Synopsis   | Administrative state of the prefix delegation   |
| Context    | <b>configure service vprn string interface string ipv6 dhcp6 server prefix-delegation admin-state keyword</b> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## prefix [ipv6-prefix] string

|            |   |
|------------|---|
| Synopsis   | Enter the <b>prefix</b> list instance   |
| Context    | <b>configure service vprn string interface string ipv6 dhcp6 server prefix-delegation prefix string</b> |
| Tree       | <a href="#">prefix</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## [ipv6-prefix] string

|            |   |
|------------|---|
| Synopsis   | IPv6 address and prefix   |
| Context    | <b>configure service vprn string interface string ipv6 dhcp6 server prefix-delegation prefix string</b> |
| Tree       | <a href="#">prefix</a>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**client-id**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>client-id</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">server</a> <a href="#">prefix-delegation</a> <a href="#">prefix</a> <i>string</i> <b>client-id</b> |
| Tree       | <a href="#">client-id</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**duid string**

|               |  |
|---------------|--|
| Synopsis      | Requesting router ID   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">server</a> <a href="#">prefix-delegation</a> <a href="#">prefix</a> <i>string</i> <a href="#">client-id</a> <b>duid</b> <i>string</i> |
| Tree          | <a href="#">duid</a>   |
| String Length | 1 to 130   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**iaid number**

|             |  |
|-------------|--|
| Synopsis    | IAID from the requesting router to match   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">server</a> <a href="#">prefix-delegation</a> <a href="#">prefix</a> <i>string</i> <a href="#">client-id</a> <b>iaid</b> <i>number</i> |
| Tree        | <a href="#">iaid</a>   |
| Description | This command configures the Identity Association ID (IAID) associated with a prefix delegation entry and must match the IAID sent by the requesting router for the prefix delegation to succeed.   |
| Range       | 1 to 4294967295  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**preferred-lifetime (number | keyword)**

|          |   |
|----------|---|
| Synopsis | Preferred lifetime of the prefix  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">server</a> <a href="#">prefix-delegation</a> <a href="#">prefix</a> <i>string</i> <b>preferred-lifetime</b> ( <i>number</i>   <i>keyword</i> ) |

|             |  |
|-------------|--|
| Tree        | <a href="#">preferred-lifetime</a>   |
| Description | This command configures the preferred lifetime of the prefix. The value cannot be greater than the valid lifetime value. |
| Range       | 1 to 4294967294  |
| Units       | seconds  |
| Options     | infinite   |
| Default     | 604800   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **valid-lifetime** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Valid lifetime of the prefix  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 dhcp6 server prefix-delegation</a> <a href="#">prefix</a> <i>string</i> <b>valid-lifetime</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">valid-lifetime</a>  |
| Range      | 1 to 4294967294   |
| Units      | seconds   |
| Options    | infinite  |
| Default    | 2592000   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **duplicate-address-detection** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable Duplicate Address Detection per interface  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 duplicate-address-detection</a> <i>boolean</i> |
| Tree       | <a href="#">duplicate-address-detection</a>   |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **forward-ipv4-packets** *boolean*

|          |                                     |
|----------|-------------------------------------|
| Synopsis | Forward unencapsulated IPv4 packets |
|----------|-------------------------------------|

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 forward-ipv4-packets</b> <i>boolean</i> |
| Tree       | <a href="#">forward-ipv4-packets</a>   |
| Default    | false  |
| Introduced | 19.5.R1  |
| Platforms  | All  |

## icmp6

|            |  |
|------------|--|
| Synopsis   | Enter the <b>icmp6</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 icmp6</b> |
| Tree       | <a href="#">icmp6</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## packet-too-big

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>packet-too-big</b> context   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 icmp6 packet-too-big</b> |
| Tree        | <a href="#">packet-too-big</a>  |
| Description | Commands in this context configure limiting the number of ICMPv6 Packet Too Big messages.                   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of Packet Too Big message sends   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 icmp6 packet-too-big admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**number** *number*

|            |   |
|------------|---|
| Synopsis   | Number of Packet Too big Messages issued per time frame   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">icmp6</a> <a href="#">packet-too-big</a> <b>number</b> <i>number</i> |
| Tree       | <a href="#">number</a>  |
| Range      | 10 to 1000  |
| Default    | 100   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**seconds** *number*

|            |  |
|------------|--|
| Synopsis   | Time used to limit Packet Too Big messages   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">icmp6</a> <a href="#">packet-too-big</a> <b>seconds</b> <i>number</i> |
| Tree       | <a href="#">seconds</a>  |
| Range      | 1 to 60  |
| Default    | 10   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**param-problem**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>param-problem</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">icmp6</a> <a href="#">param-problem</a> |
| Tree       | <a href="#">param-problem</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**admin-state** *keyword*

|          |  |
|----------|--|
| Synopsis | Administrative state of Parameter Problem message sends  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">icmp6</a> <a href="#">param-problem</a> <b>admin-state</b> <i>keyword</i> |
| Tree     | <a href="#">admin-state</a>  |
| Options  | enable, disable  |
| Default  | enable   |

Introduced 16.0.R1  
Platforms All

### **number** *number*

Synopsis Number used to limit ICMPv6 Parameter Problem messages  
Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv6 icmp6 param-problem](#) [number](#) *number*  
Tree [number](#)  
Range 10 to 1000  
Default 100  
Introduced 16.0.R1  
Platforms All

### **seconds** *number*

Synopsis Time used to limit ICMPv6 Parameter Problem messages  
Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv6 icmp6 param-problem](#) [seconds](#) *number*  
Tree [seconds](#)  
Range 1 to 60  
Default 10  
Introduced 16.0.R1  
Platforms All

### **redirects**

Synopsis Enter the **redirects** context  
Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv6 icmp6](#) [redirects](#)  
Tree [redirects](#)  
Introduced 16.0.R1  
Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of Redirect message sends



|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 icmp6 redirects admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **number** *number*

|            |   |
|------------|---|
| Synopsis   | Number to limit ICMPv6 Redirect messages per time frame   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 icmp6 redirects number</b> <i>number</i> |
| Tree       | <b>number</b>   |
| Range      | 10 to 1000  |
| Default    | 100   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **seconds** *number*

|            |  |
|------------|--|
| Synopsis   | Time used to limit ICMPv6 Redirect messages  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 icmp6 redirects seconds</b> <i>number</i> |
| Tree       | <b>seconds</b>   |
| Range      | 1 to 60  |
| Default    | 10   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **time-exceeded**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>time-exceeded</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 icmp6 time-exceeded</b> |
| Tree       | <b>time-exceeded</b>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of Time Exceeded message sends   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">icmp6</a> <a href="#">time-exceeded</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**number** *number*

|            |   |
|------------|---|
| Synopsis   | Number to limit Time Exceeded messages per time frame   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">icmp6</a> <a href="#">time-exceeded</a> <a href="#">number</a> <i>number</i> |
| Tree       | <a href="#">number</a>  |
| Range      | 10 to 2000  |
| Default    | 100   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**seconds** *number*

|            |  |
|------------|--|
| Synopsis   | Time used to limit ICMPv6 Time Exceeded messages   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">icmp6</a> <a href="#">time-exceeded</a> <a href="#">seconds</a> <i>number</i> |
| Tree       | <a href="#">seconds</a>  |
| Range      | 1 to 60  |
| Default    | 10   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**unreachables**

|          |   |
|----------|---|
| Synopsis | Enter the <b>unreachables</b> context   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">icmp6</a> <a href="#">unreachables</a> |

|            |                              |
|------------|------------------------------|
| Tree       | <a href="#">unreachables</a> |
| Introduced | 16.0.R1                      |
| Platforms  | All                          |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of Unreachable message sends   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 icmp6 unreachables</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**number** *number*

|            |   |
|------------|---|
| Synopsis   | Number to limit Unreachable messages per time frame   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 icmp6 unreachables</a> <b>number</b> <i>number</i> |
| Tree       | <a href="#">number</a>  |
| Range      | 10 to 2000  |
| Default    | 100   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**seconds** *number*

|            |  |
|------------|--|
| Synopsis   | Time used to limit ICMPv6 Unreachable messages   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 icmp6 unreachables</a> <b>seconds</b> <i>number</i> |
| Tree       | <a href="#">seconds</a>  |
| Range      | 1 to 60  |
| Default    | 10   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## link-local-address

|            |   |
|------------|---|
| Synopsis   | Enter the <b>link-local-address</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">link-local-address</a> |
| Tree       | <a href="#">link-local-address</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## address *string*

|            |   |
|------------|---|
| Synopsis   | IPv6 link-local address   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">link-local-address</a> <a href="#">address</a> <i>string</i> |
| Tree       | <a href="#">address</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## duplicate-address-detection *boolean*

|             |  |
|-------------|--|
| Synopsis    | Enable Duplicate Address Detection   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">link-local-address</a> <a href="#">duplicate-address-detection</a> <i>boolean</i>             |
| Tree        | <a href="#">duplicate-address-detection</a>  |
| Description | When configured to <b>true</b> , the router enables Duplicate Address Detection (DAD) on the interface.<br><br>When configured to <b>false</b> , the router disables DAD and sets the address to preferred, even if there is a duplicated address. |
| Default     | true   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

## local-dhcp-server *reference*

|            |   |
|------------|---|
| Synopsis   | DHCP server for the interface   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">local-dhcp-server</a> <i>reference</i> |
| Tree       | <a href="#">local-dhcp-server</a>   |
| Reference  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i>  |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## neighbor-discovery

Synopsis Enter the **neighbor-discovery** context

Context **configure service vprn** *string* **interface** *string* **ipv6 neighbor-discovery**

Tree [neighbor-discovery](#)

Introduced 16.0.R1

Platforms All

## host-route

Synopsis Enter the **host-route** context

Context **configure service vprn** *string* **interface** *string* **ipv6 neighbor-discovery host-route**

Tree [host-route](#)

Introduced 20.2.R1

Platforms All

## populate [*route-type*] *keyword*

Synopsis Enter the **populate** list instance

Context **configure service vprn** *string* **interface** *string* **ipv6 neighbor-discovery host-route**  
[populate](#) *keyword*

Tree [populate](#)

Introduced 20.2.R1

Platforms All

## [*route-type*] *keyword*

Synopsis Type of ARP or ND entries that generate host routes

Context **configure service vprn** *string* **interface** *string* **ipv6 neighbor-discovery host-route**  
[populate](#) *keyword*

Tree [populate](#)

Options static, dynamic, evpn

Notes This element is part of a list key.

Introduced 20.2.R1

Platforms All

## route-tag *number*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Tag value used with the host route from an ARP/ND entry  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 neighbor-discovery host-route populate</a> <i>keyword</i> <a href="#">route-tag</a> <i>number</i> |
| Tree        | <a href="#">route-tag</a>  |
| Description | This command specifies the route tag that is added in the route table for ARP or ND host routes. This tag can be matched on BGP VRF export and BGP peer export policies.   |
| Range       | 1 to 255   |
| Introduced  | 20.2.R1  |
| Platforms   | All  |

## learn-unsolicited *keyword*

|             |   |
|-------------|---|
| Synopsis    | Type of entries learned from unsolicited NA messages  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 neighbor-discovery learn-unsolicited</a> <i>keyword</i>  |
| Tree        | <a href="#">learn-unsolicited</a>   |
| Description | This command enables the ability to learn neighbor entries out of received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited flag set.<br><br>When unconfigured, the router follows standard RFC 4861 behavior for learning of neighbor entries. The neighbor is put in the stale state. This is the standard RFC behavior. |
| Options     | global, link-local, both  |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

## limit

|          |   |
|----------|---|
| Synopsis | Enter the <b>limit</b> context  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 neighbor-discovery limit</a> |
| Tree     | <a href="#">limit</a>   |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **log-only** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Generate log entries when limit is reached   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 neighbor-discovery limit</a> <a href="#">log-only</a> <i>boolean</i>  |
| Tree        | <a href="#">log-only</a>   |
| Description | When configured to <b>true</b> , the router sends the warning message at the specified threshold percentage or upon exceeding the specified limit. Entries that exceed the limit are learned.<br><br>When configured to <b>false</b> , the router does not send the warning message. |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **max-entries** *number*

|             |   |
|-------------|---|
| Synopsis    | Maximum number of entries learned on an IP interface  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 neighbor-discovery limit</a> <a href="#">max-entries</a> <i>number</i> |
| Tree        | <a href="#">max-entries</a>   |
| Description | This command configures the maximum number of entries that can be learned on an IP interface.<br><br>When unconfigured, no maximum limit is imposed.  |
| Range       | 0 to 102400   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **threshold** *number*

|          |   |
|----------|---|
| Synopsis | Threshold percentage that triggers a warning message  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 neighbor-discovery limit</a> <a href="#">threshold</a> <i>number</i> |
| Tree     | <a href="#">threshold</a>   |
| Range    | 1 to 100  |

|            |         |
|------------|---------|
| Units      | percent |
| Default    | 90      |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **local-proxy-nd** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Enable local proxy neighbor discovery on the interface  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 neighbor-discovery</a> <a href="#">local-proxy-nd</a> <i>boolean</i>   |
| Tree        | <a href="#">local-proxy-nd</a>  |
| Description | <p>When configured to <b>true</b>, the router enables local proxy neighbor discovery on the interface and replies to neighbor solicitation requests when both the hosts are on the same subnet. In this case, ICMP redirects are disabled.</p> <p>When configured to <b>false</b>, the router disables local proxy neighbor discovery on the interface and does not reply to neighbor solicitation requests if both the hosts are on the same subnet.</p> |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **proactive-refresh** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Proactive refresh of neighbor entries   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 neighbor-discovery</a> <a href="#">proactive-refresh</a> <i>keyword</i>  |
| Tree        | <a href="#">proactive-refresh</a>   |
| Description | This command enables a proactive refresh of the neighbor entries. After the stale timer expires, the router sends an NUD message to the host (regardless of the existence of traffic to the IP address on the IOM), so the entry can be refreshed or removed. |
| Options     | global, link-local, both  |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **proxy-nd-policy** *reference*

|          |  |
|----------|--|
| Synopsis | Proxy Neighbor Discovery policy name for the interface |
|----------|--|



|                |  |
|----------------|--|
| Context        | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 neighbor-discovery proxy-nd-policy</b> <i>reference</i> |
| Tree           | <a href="#">proxy-nd-policy</a>  |
| Reference      | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>   |
| Max. Instances | 5  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

### **reachable-time** *number*

|            |  |
|------------|--|
| Synopsis   | Neighbor reachability detection timer  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 neighbor-discovery reachable-time</b> <i>number</i> |
| Tree       | <a href="#">reachable-time</a>   |
| Range      | 30 to 3600   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **secure-nd**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>secure-nd</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 neighbor-discovery secure-nd</b> |
| Tree       | <a href="#">secure-nd</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **admin-state** *keyword*

|          |  |
|----------|--|
| Synopsis | Administrative state of Secure Neighbor Discovery  |
| Context  | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 neighbor-discovery secure-nd admin-state</b> <i>keyword</i> |
| Tree     | <a href="#">admin-state</a>  |
| Options  | enable, disable  |
| Default  | disable  |

Introduced 16.0.R1  
 Platforms All

### **allow-unsecured-msgs** *boolean*

Synopsis Accept unsecured messages  
 Context **configure** [service vprn string](#) [interface string ipv6 neighbor-discovery secure-nd allow-unsecured-msgs](#) *boolean*  
 Tree [allow-unsecured-msgs](#)  
 Description When configured to **true**, the router accepts unsecured messages. When Secure Neighbor Discovery (SeND) is enabled, only secure messages are accepted.  
 When configured to **false**, the router disables the acceptance of unsecured messages.  
 Default true  
 Introduced 16.0.R1  
 Platforms All

### **public-key-min-bits** *number*

Synopsis Minimum acceptable key length for public keys in CGA  
 Context **configure** [service vprn string](#) [interface string ipv6 neighbor-discovery secure-nd public-key-min-bits](#) *number*  
 Tree [public-key-min-bits](#)  
 Range 512 to 1024  
 Default 1024  
 Introduced 16.0.R1  
 Platforms All

### **security-parameter** *number*

Synopsis Security parameter used in the generation of a CGA  
 Context **configure** [service vprn string](#) [interface string ipv6 neighbor-discovery secure-nd security-parameter](#) *number*  
 Tree [security-parameter](#)  
 Range 0 to 1  
 Default 1  
 Introduced 16.0.R1

Platforms All

### **stale-time** *number*

Synopsis Time a Neighbor Discovery cache entry remains stale  
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [ipv6](#) [neighbor-discovery](#) **stale-time** *number*  
 Tree [stale-time](#)  
 Range 60 to 65535  
 Introduced 16.0.R1  
 Platforms All

### **static-neighbor** [[ipv6-address](#)] *string*

Synopsis Enter the **static-neighbor** list instance  
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [ipv6](#) [neighbor-discovery](#) **static-neighbor** *string*  
 Tree [static-neighbor](#)  
 Introduced 16.0.R1  
 Platforms All

### [\[ipv6-address\]](#) *string*

Synopsis IPv6 address corresponding to the physical address  
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [ipv6](#) [neighbor-discovery](#) **static-neighbor** *string*  
 Tree [static-neighbor](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **mac-address** *string*

Synopsis MAC address for the static neighbor  
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [ipv6](#) [neighbor-discovery](#) **static-neighbor** *string* **mac-address** *string*  
 Tree [mac-address](#)

|            |                            |
|------------|----------------------------|
| Notes      | This element is mandatory. |
| Introduced | 16.0.R1                    |
| Platforms  | All                        |

### **qos-route-lookup** *keyword*

|            |   |
|------------|---|
| Synopsis   | QoS Route lookup  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <b>qos-route-lookup</b> <i>keyword</i> |
| Tree       | <a href="#">qos-route-lookup</a>  |
| Options    | destination, source   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **tcp-mss** *number*

|            |   |
|------------|---|
| Synopsis   | TCP maximum segment size for the interface  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <b>tcp-mss</b> <i>number</i> |
| Tree       | <a href="#">tcp-mss</a>   |
| Range      | 1220 to 9726  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **urpf-check**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>urpf-check</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <b>urpf-check</b> |
| Tree       | <a href="#">urpf-check</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **ignore-default** *boolean*

|          |   |
|----------|---|
| Synopsis | Ignore default route when performing a uRPF check   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <b>urpf-check</b> <b>ignore-default</b> <i>boolean</i> |
| Tree     | <a href="#">ignore-default</a>  |

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

**mode** *keyword*

|            |  |
|------------|--|
| Synopsis   | Unicast RPF check mode   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 urpf-check</a> <i>mode</i> <i>keyword</i> |
| Tree       | <a href="#">mode</a>   |
| Options    | strict, loose, strict-no-ecmp  |
| Default    | strict   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**vrrp** [[virtual-router-id](#)] *number*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>vrrp</b> list instance   |
| Context        | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrrp</a> <i>number</i> |
| Tree           | <a href="#">vrrp</a>  |
| Max. Instances | 4   |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

**[virtual-router-id]** *number*

|            |   |
|------------|---|
| Synopsis   | Virtual Router Identifier (VRID) for the IP interface   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrrp</a> <i>number</i> |
| Tree       | <a href="#">vrrp</a>  |
| Range      | 1 to 255  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**admin-state** *keyword*

|             |  |
|-------------|--|
| Synopsis    | Administrative state of VRRP   |
| Context     | <b>configure</b> <b>service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 vrrp</b> <i>number</i> <b>admin-state</b> <i>keyword</i>   |
| Tree        | <b>admin-state</b>   |
| Description | <p>The command determines the administrative state of non-owner virtual router instances.</p> <p>Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes.</p> <p>When <b>disabled</b>, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing.</p> <p>Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated.</p> <p>An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the <b>admin-state</b> command within the parent IP interface node which administratively disables the IP interface.</p> |
| Options     | enable, disable  |
| Default     | enable   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**backup** *string*

|             |   |
|-------------|---|
| Synopsis    | Virtual router IP addresses for the interface   |
| Context     | <b>configure</b> <b>service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 vrrp</b> <i>number</i> <b>backup</b> <i>string</i>  |
| Tree        | <b>backup</b>   |
| Description | <p>This command associates router IPv6 virtual router IP addresses with those of the parental IP interface.</p> <p>This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance.</p> <p>Non-owner virtual router instance create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup). This command, when executed on an owner virtual router instance, does not create a routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance.</p> <p>For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is representing to backup virtual routers receiving the messages. The specified IPv6 address must be equal to one of the existing parental IP addresses in the parental IP interface (primary or secondary) or this command fails.</p> |

See "Owner and non-owner VRRP" in the *7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide* for more information about owner and non-owner virtual router instances.

|                |         |
|----------------|---------|
| Max. Instances | 4       |
| Introduced     | 16.0.R1 |
| Platforms      | All     |

## bfd-liveness

|            |   |
|------------|---|
| Synopsis   | Enable the <b>bfd-liveness</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string ipv6 vrrp number</a> <a href="#">bfd-liveness</a> |
| Tree       | <a href="#">bfd-liveness</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## dest-ip (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Destination address for the BFD session   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string ipv6 vrrp number</a> <a href="#">bfd-liveness</a> <a href="#">dest-ip (<i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>)</a> |
| Tree       | <a href="#">dest-ip</a>   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## interface-name *string*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |                                   |
|----------|-----------------------------------|
| Synopsis | Name of the interface running BFD |
|----------|-----------------------------------|

|               |   |
|---------------|---|
| Context       | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 vrrp</b> <i>number</i> <b>bfd-liveness</b> <b>interface-name</b> <i>string</i> |
| Tree          | <b>interface-name</b>   |
| String Length | 1 to 32   |
| Notes         | This element is mandatory.  |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

### **service-name** *string*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Administrative service name   |
| Context       | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 vrrp</b> <i>number</i> <b>bfd-liveness</b> <b>service-name</b> <i>string</i> |
| Tree          | <b>service-name</b>   |
| String Length | 1 to 64   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

### **init-delay** *number*

|            |   |
|------------|---|
| Synopsis   | VRRP initialization delay timer   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 vrrp</b> <i>number</i> <b>init-delay</b> <i>number</i> |
| Tree       | <b>init-delay</b>   |
| Range      | 1 to 65535  |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **mac** *string*

|          |  |
|----------|--|
| Synopsis | Virtual MAC address to use in ARP responses  |
| Context  | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 vrrp</b> <i>number</i> <b>mac</b> <i>string</i> |



|             |  |
|-------------|--|
| Tree        | <a href="#">mac</a>  |
| Description | <p>This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID.</p> <p>Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address.</p> <p>Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with <i>unicast-mac-address</i> as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts results. All VRRP advertisement messages are transmitted with <i>unicast-mac-address</i> as the source MAC.</p> <p>An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.</p> |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **master-int-inherit** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Allow master instance to dictate the master down timer  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrrp</a> <i>number</i> <b>master-int-inherit</b> <i>boolean</i>  |
| Tree        | <a href="#">master-int-inherit</a>  |
| Description | <p>When configured to <b>true</b>, the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer.</p> <p>When configured to <b>false</b>, the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded.</p> |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **message-interval** *number*

|          |   |
|----------|---|
| Synopsis | Interval for sending VRRP advertisement messages  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrrp</a> <i>number</i> <b>message-interval</b> <i>number</i> |
| Tree     | <a href="#">message-interval</a>  |

|             |  |
|-------------|--|
| Description | <p>This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command.</p> <p>The use of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the <b>master-int-inherit</b> command:</p> <ul style="list-style-type: none"> <li>• When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar to an owner virtual router instance. The <b>master-int-inherit</b> command has no effect when operating as the master.</li> <li>• When a non-owner is in the backup state with <b>master-int-inherit</b> disabled, the system uses the configured value of this command to match the incoming advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement.</li> <li>• When a non-owner is in the backup state with <b>master-int-inherit</b> enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message.</li> </ul> |
| Range       | 10 to 4095   |
| Units       | centiseconds   |
| Default     | 100  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

## monitor-oper-group *reference*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | VRRP instance to follow a specified operational group   |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>vrrp</b> <i>number</i> <b>monitor-oper-group</b> <i>reference</i>   |
| Tree        | <a href="#">monitor-oper-group</a>  |
| Description | This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states. |
| Reference   | <b>configure</b> <b>service</b> <b>oper-group</b> <i>string</i>   |

Introduced 22.2.R1  
 Platforms All

### **ntp-reply** *boolean*

Synopsis Allow processing of NTP requests  
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [ipv6](#) [vrrp](#) *number* **ntp-reply** *boolean*  
 Tree [ntp-reply](#)  
 Description When configured to **true**, the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router.  
 When configured to **false**, the router does not process NTP requests.  
 Default false  
 Introduced 20.2.R1  
 Platforms All

### **oper-group** *reference*

Synopsis Operational group name associated with the VRRP  
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [ipv6](#) [vrrp](#) *number* **oper-group** *reference*  
 Tree [oper-group](#)  
 Description This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router (MR), the operational group is up. The operational group is down for all other VRRP states.  
 Reference **configure** [service](#) **oper-group** *string*  
 Introduced 16.0.R1  
 Platforms All

### **owner** *boolean*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Designate the virtual router instance as owner  
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [ipv6](#) [vrrp](#) *number* **owner** *boolean*

|             |   |
|-------------|---|
| Tree        | <a href="#">owner</a>   |
| Description | When configured to <b>true</b> , the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router.<br><br>When configured to <b>false</b> , this virtual router instance is designated as a non-owner. |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **passive** *boolean*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Suppress the processing of VRRP advertisement messages   |
| Context     | <b>configure</b> <a href="#">service vprn string interface string ipv6 vrrp number passive</a> <i>boolean</i>  |
| Tree        | <a href="#">passive</a>  |
| Description | When configured to <b>true</b> , the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down).<br><br>When configured to <b>false</b> , this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages. |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **ping-reply** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Allow non-owner master to reply to ICMP echo requests  |
| Context     | <b>configure</b> <a href="#">service vprn string interface string ipv6 vrrp number ping-reply</a> <i>boolean</i>   |
| Tree        | <a href="#">ping-reply</a>   |
| Description | When configured to <b>true</b> , the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address). |

When configured to **false**, ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded.

Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### policy reference

|             |  |
|-------------|--|
| Synopsis    | VRRP priority control policy   |
| Context     | <b>configure service vprn string interface string ipv6 vrrp number policy reference</b>  |
| Tree        | <a href="#">policy</a>   |
| Description | <p>This command configures a VRRP priority control policy to associate with the virtual router instance.</p> <p>VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis.</p> <p>An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with the <b>priority</b> command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value.</p> <p>For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.</p> |
| Reference   | <b>configure vrrp policy number</b>  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### preempt boolean

|             |  |
|-------------|--|
| Synopsis    | Allow the VRRP to override an existing non-owner master  |
| Context     | <b>configure service vprn string interface string ipv6 vrrp number preempt boolean</b>   |
| Tree        | <a href="#">preempt</a>  |
| Description | <p>When configured to <b>true</b>, this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router.</p> <p>When configured to <b>false</b>, this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router.</p> |
| Default     | true   |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **priority** *number*

|             |  |
|-------------|--|
| Synopsis    | Base priority for the VRRP   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrrp</a> <i>number</i> <a href="#">priority</a> <i>number</i>   |
| Tree        | <a href="#">priority</a>   |
| Description | This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process.<br><br>The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis. |
| Range       | 1 to 255   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **standby-forwarding** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Allow standby router to forward traffic   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrrp</a> <i>number</i> <a href="#">standby-forwarding</a> <i>boolean</i>   |
| Tree        | <a href="#">standby-forwarding</a>  |
| Description | When configured to <b>true</b> , the standby router forwards all traffic.<br><br>When configured to <b>false</b> , the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address. |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **telnet-reply** *boolean*

|          |   |
|----------|---|
| Synopsis | Allow non-owner master to reply to Telnet requests  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrrp</a> <i>number</i> <a href="#">telnet-reply</a> <i>boolean</i> |
| Tree     | <a href="#">telnet-reply</a>  |

|             |  |
|-------------|--|
| Description | When configured to <b>true</b> , the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address).<br>When configured to <b>false</b> , the router silently discards Telnet requests sent to non-owner master virtual IP addresses. |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **traceroute-reply** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Allow non-owner master to reply to traceroute requests   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrrp</a> <i>number</i> <b>traceroute-reply</b> <i>boolean</i>   |
| Tree        | <a href="#">traceroute-reply</a>   |
| Description | When configured to <b>true</b> , the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance.<br>When configured to <b>false</b> , the router silently discards traceroute requests sent to non-owner master virtual IP addresses.<br>Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address). |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **load-balancing**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>load-balancing</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>load-balancing</b> |
| Tree       | <a href="#">load-balancing</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **flow-label-load-balancing** *boolean*

|          |  |
|----------|--|
| Synopsis | Enable flow label load balancing   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">load-balancing</a> <b>flow-label-load-balancing</b> <i>boolean</i> |

|             |  |
|-------------|--|
| Tree        | <a href="#">flow-label-load-balancing</a>  |
| Description | When configured to <b>true</b> , the router enables load balancing in ECMP and LAG based on the output of a hash performed on the triplet (SA, DA, flow label) in the header of an IPv6 packet received on an IES, VPRN, R-VPLS, CSC, or network interface.<br>When configured to <b>false</b> , the router disables load balancing in ECMP and LAG. |
| Default     | false  |
| Introduced  | 21.5.R1  |
| Platforms   | All  |

### **ip-load-balancing** *keyword*

|             |  |
|-------------|--|
| Synopsis    | IP load-balancing algorithm  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">load-balancing</a> <a href="#">ip-load-balancing</a> <i>keyword</i>  |
| Tree        | <a href="#">ip-load-balancing</a>  |
| Description | This command specifies whether to include the source address, destination address, or both in LAG or ECMP hash on IP interfaces. Additionally, when the <b>l4-load-balancing</b> command is enabled, this command also includes the source or destination port in the hash inputs. |
| Options     | both, destination, source, inner-ip  |
| Default     | both   |
| Introduced  | 16.0.R3  |
| Platforms   | All  |

### **spi-load-balancing** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Enable SPI use in hashing  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">load-balancing</a> <a href="#">spi-load-balancing</a> <i>boolean</i> |
| Tree        | <a href="#">spi-load-balancing</a>   |
| Description | When configured to <b>true</b> , the router uses the Security Parameter Index (SPI) in hashing for ESP and AH encrypted IPv4 and IPv6 traffic. This is a per-interface setting.                      |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **teid-load-balancing** *boolean*

|          |                               |
|----------|-------------------------------|
| Synopsis | Enable use of TEID in hashing |
|----------|-------------------------------|



---

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string interface string load-balancing teid-load-balancing boolean</i> |
| Tree       | <a href="#">teid-load-balancing</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **loopback** *boolean*

|            |   |
|------------|---|
| Synopsis   | Use interface as a loopback interface   |
| Context    | <b>configure service vprn</b> <i>string interface string loopback boolean</i> |
| Tree       | <a href="#">loopback</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **mac** *string*

|            |   |
|------------|---|
| Synopsis   | MAC address for the interface   |
| Context    | <b>configure service vprn</b> <i>string interface string mac string</i> |
| Tree       | <a href="#">mac</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **mac-accounting** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable MAC accounting functionality   |
| Context    | <b>configure service vprn</b> <i>string interface string mac-accounting boolean</i> |
| Tree       | <a href="#">mac-accounting</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **monitor-oper-group** *reference*

|          |                              |
|----------|------------------------------|
| Synopsis | Operational group to monitor |
|----------|------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>monitor-oper-group</b> <i>reference</i> |
| Tree       | <a href="#">monitor-oper-group</a>  |
| Reference  | <b>configure service oper-group</b> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **multi-chassis-shunting-profile** *reference*

|             |   |
|-------------|---|
| Synopsis    | Multi-chassis shunting profile name   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>multi-chassis-shunting-profile</b> <i>reference</i>   |
| Tree        | <a href="#">multi-chassis-shunting-profile</a>  |
| Description | This command configures the name of a multi-chassis shunting profile to use on public or private tunnel interfaces.   |
| Reference   | <b>configure service vprn</b> <i>string</i> <b>ipsec multi-chassis-shunting-profile</b> <i>string</i>   |
| Notes       | The following elements are part of a choice: <b>multi-chassis-shunting-profile</b> or ( <b>dynamic-tunnel-redundant-nexthop</b> and <b>static-tunnel-redundant-nexthop</b> ). |
| Introduced  | 22.5.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **ping-template**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>ping-template</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ping-template</b> |
| Tree       | <a href="#">ping-template</a>   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                                    |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the ping template   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ping-template</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 20.10.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## destination-address *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Ping template destination address

Context **configure** *service vprn string interface string ping-template destination-address string*

Tree *destination-address*

Description This command configures the address to where the ICMP echo requests are directed to test connectivity. The source of the ICMP echo request is the primary IPv4 address of the interface under which the ping-template is configured. The destination address must be on the same subnet as the source IP address. A configuration warning message displays if the primary IPv4 address and the destination are not on the same subnet, INFO: PIP #2092 Ping template misconfiguration - destination-address and primary IP address should fall in the same subnet.

Unnumbered interfaces and loopback addresses are not supported.

The config service ies|vprn interface ping-template must be administratively disabled to remove or change the destination-address ip-address.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## name *reference*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Ping template name

Context **configure** *service vprn string interface string ping-template name reference*

Tree *name*

Description This command configures the name of the ping template to be assigned to the IP interface.

Reference **configure** *test-oam icmp ping-template string*

Notes This element is mandatory.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ptp-hw-assist**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ptp-hw-assist</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ptp-hw-assist</a> |
| Tree       | <a href="#">ptp-hw-assist</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**admin-state** *keyword*

|             |  |
|-------------|--|
| Synopsis    | Administrative state of the PTP time stamping assist   |
| Context     | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ptp-hw-assist</a> <a href="#">admin-state</a> <i>keyword</i>   |
| Tree        | <a href="#">admin-state</a>  |
| Description | This command controls the administrative state of port-based time stamping assist of PTP packets at the physical interface. This capability is supported on specific hardware. The command may be blocked if not all hardware has the required level of support.<br><br>Only one interface per physical port can have ptp-hw-assist enabled. This feature cannot be enabled if the physical port supporting the interface is configured as a PTP port. |
| Options     | enable, disable  |
| Default     | disable  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**radius-auth-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | Authentication policy   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">radius-auth-policy</a> <i>reference</i> |
| Tree       | <a href="#">radius-auth-policy</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i>                               |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**sap** [[sap-id](#)] *string*

|          |                                    |
|----------|------------------------------------|
| Synopsis | Enter the <b>sap</b> list instance |
|----------|------------------------------------|

|                |   |
|----------------|---|
| Context        | <b>configure service vprn</b> <i>string interface string sap string</i> |
| Tree           | <b>sap</b>  |
| Max. Instances | 1   |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

**[sap-id] string**

|               |   |
|---------------|---|
| Synopsis      | SAP ID  |
| Context       | <b>configure service vprn</b> <i>string interface string sap string</i> |
| Tree          | <b>sap</b>  |
| String Length | 1 to 45   |
| Notes         | This element is part of a list key.                                     |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**aarp**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>aarp</b> context   |
| Context    | <b>configure service vprn</b> <i>string interface string sap string aarp</i> |
| Tree       | <b>aarp</b>  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                 |

**id reference**

|            |   |
|------------|---|
| Synopsis   | AARP instance ID  |
| Context    | <b>configure service vprn</b> <i>string interface string sap string aarp id reference</i> |
| Tree       | <b>id</b>   |
| Reference  | <b>configure application-assurance aarp</b> <i>number</i>                                 |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**type keyword**

|            |  |
|------------|--|
| Synopsis   | Role referenced by the AARP  |
| Context    | <b>configure</b> <a href="#">service vprn string interface string sap string aarp type keyword</a> |
| Tree       | <a href="#">type</a>   |
| Options    | dual-homed, dual-homed-secondary   |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**accounting-policy reference**

|            |  |
|------------|--|
| Synopsis   | Accounting policy  |
| Context    | <b>configure</b> <a href="#">service vprn string interface string sap string accounting-policy reference</a> |
| Tree       | <a href="#">accounting-policy</a>  |
| Reference  | <b>configure</b> <a href="#">log accounting-policy number</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**admin-state keyword**

|            |  |
|------------|--|
| Synopsis   | Administrative state of the SAP  |
| Context    | <b>configure</b> <a href="#">service vprn string interface string sap string admin-state keyword</a> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**anti-spoof keyword**

|            |   |
|------------|---|
| Synopsis   | Anti-spoof filtering  |
| Context    | <b>configure</b> <a href="#">service vprn string interface string sap string anti-spoof keyword</a> |
| Tree       | <a href="#">anti-spoof</a>  |
| Options    | source-ip-addr, source-mac-addr, source-ip-and-mac-addr, next-hop-ip-and-mac-addr                   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**app-profile** *reference*

|            |   |
|------------|---|
| Synopsis   | Application profile name  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">app-profile</a> <i>reference</i>  |
| Tree       | <a href="#">app-profile</a>   |
| Reference  | <b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i> |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**bandwidth** *number*

|            |   |
|------------|---|
| Synopsis   | SAP bandwidth   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">bandwidth</a> <i>number</i> |
| Tree       | <a href="#">bandwidth</a>   |
| Range      | 1 to 6400000000   |
| Units      | kilobps   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**calling-station-id** *string*

|               |  |
|---------------|--|
| Synopsis      | Calling station ID   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">calling-station-id</a> <i>string</i> |
| Tree          | <a href="#">calling-station-id</a>   |
| String Length | 1 to 64  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**collect-stats** *boolean*

|            |  |
|------------|--|
| Synopsis   | Collect accounting statistics  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">collect-stats</a> <i>boolean</i> |
| Tree       | <a href="#">collect-stats</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |

Platforms All

## cpu-protection

Synopsis Enter the **cpu-protection** context

Context **configure** [service vprn string](#) [interface string](#) [sap string](#) [cpu-protection](#)

Tree [cpu-protection](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## eth-cfm-monitoring

Synopsis Enable the **eth-cfm-monitoring** context

Context **configure** [service vprn string](#) [interface string](#) [sap string](#) [cpu-protection](#) [eth-cfm-monitoring](#)

Tree [eth-cfm-monitoring](#)

Notes The following elements are part of a choice: **eth-cfm-monitoring**, **ip-src-monitoring**, or **mac-monitoring**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## aggregate

Synopsis Apply rate limit to the sum of the per peer packet rates

Context **configure** [service vprn string](#) [interface string](#) [sap string](#) [cpu-protection](#) [eth-cfm-monitoring](#) [aggregate](#)

Tree [aggregate](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## car

Synopsis Ignore Ethernet CFM packets when enforcing overall rate

Context **configure** [service vprn string](#) [interface string](#) [sap string](#) [cpu-protection](#) [eth-cfm-monitoring](#) [car](#)

Tree [car](#)



|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

## ip-src-monitoring

|            |  |
|------------|--|
| Synopsis   | Enable IP source monitoring for CPU protection   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">ip-src-monitoring</a> |
| Tree       | <a href="#">ip-src-monitoring</a>  |
| Notes      | The following elements are part of a choice: <b>eth-cfm-monitoring</b> , <b>ip-src-monitoring</b> , or <b>mac-monitoring</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS  |

## mac-monitoring

|            |   |
|------------|---|
| Synopsis   | Monitor MAC for CPU protection  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">mac-monitoring</a> |
| Tree       | <a href="#">mac-monitoring</a>  |
| Notes      | The following elements are part of a choice: <b>eth-cfm-monitoring</b> , <b>ip-src-monitoring</b> , or <b>mac-monitoring</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS   |

## policy-id *reference*

|            |   |
|------------|---|
| Synopsis   | CPM protection policy   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">policy-id</a> <i>reference</i> |
| Tree       | <a href="#">policy-id</a>   |
| Reference  | <b>configure</b> <a href="#">system security</a> <a href="#">cpu-protection</a> <a href="#">policy</a> <i>number</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS   |

## description *string*

|          |                  |
|----------|------------------|
| Synopsis | Text description |
|----------|------------------|

|               |  |
|---------------|--|
| Context       | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <b>description</b>   |
| String Length | 1 to 160   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

### **dist-cpu-protection** *reference*

|            |   |
|------------|---|
| Synopsis   | Distributed CPU protection policy for SAP   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>dist-cpu-protection</b> <i>reference</i> |
| Tree       | <b>dist-cpu-protection</b>  |
| Reference  | <b>configure system security dist-cpu-protection</b> <i>policy string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **egress**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>egress</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress</b> |
| Tree       | <b>egress</b>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **agg-rate**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>agg-rate</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress</b> <b>agg-rate</b> |
| Tree       | <b>agg-rate</b>   |
| Notes      | The following elements are part of a choice: <b>agg-rate</b> or <b>percent-agg-rate</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **adaptation-rule** *keyword*

|          |   |
|----------|---|
| Synopsis | Adaptation rule to compute the operational PIR value when an aggregate shaper is used |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress</b> <b>agg-rate</b> <b>adaptation-rule</b> <i>keyword</i> |
| Tree       | <b>adaptation-rule</b>  |
| Options    | max, min, closest   |
| Default    | closest   |
| Introduced | 22.10.R1  |
| Platforms  | 7750 SR-1, 7750 SR-s  |

### **burst-limit** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Shaping burst size when an aggregate shaper is used   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress</b> <b>agg-rate</b> <b>burst-limit</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <b>burst-limit</b>  |
| Range      | 1 to 14000000   |
| Units      | bytes   |
| Options    | auto  |
| Default    | auto  |
| Introduced | 22.10.R1  |
| Platforms  | 7750 SR-1, 7750 SR-s  |

### **limit-unused-bandwidth** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable aggregate rate overrun protection   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress</b> <b>agg-rate</b> <b>limit-unused-bandwidth</b> <i>boolean</i> |
| Tree       | <b>limit-unused-bandwidth</b>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **queue-frame-based-accounting** *boolean*

|          |  |
|----------|--|
| Synopsis | Enable frame based accounting on policers and queues   |
| Context  | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress</b> <b>agg-rate</b> <b>queue-frame-based-accounting</b> <i>boolean</i> |

|            |  |
|------------|--|
| Tree       | <a href="#">queue-frame-based-accounting</a> |
| Default    | false  |
| Introduced | 16.0.R1                                      |
| Platforms  | All  |

**rate number**

|            |  |
|------------|--|
| Synopsis   | Enforced aggregate rate for all queues   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string egress agg-rate rate number</a> |
| Tree       | <a href="#">rate</a>   |
| Range      | 1 to 6400000000  |
| Units      | kilobps  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**filter**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>filter</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string egress filter</a> |
| Tree       | <a href="#">filter</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**ip reference**

|            |   |
|------------|---|
| Synopsis   | IPv4 filter policy name   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string egress filter ip reference</a> |
| Tree       | <a href="#">ip</a>  |
| Reference  | <b>configure filter ip-filter string</b>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**ipv6 reference**

|          |                         |
|----------|-------------------------|
| Synopsis | IPv6 filter policy name |
|----------|-------------------------|

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress filter ipv6</b> <i>reference</i> |
| Tree       | <a href="#">ipv6</a>   |
| Reference  | <b>configure filter ipv6-filter</b> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## qos

|            |   |
|------------|---|
| Synopsis   | Enter the <b>qos</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos</b> |
| Tree       | <a href="#">qos</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## policer-control-policy

|            |  |
|------------|--|
| Synopsis   | Enter the <b>policer-control-policy</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos policer-control-policy</b> |
| Tree       | <a href="#">policer-control-policy</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

## overrides

|            |  |
|------------|--|
| Synopsis   | Enable the <b>overrides</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos policer-control-policy overrides</b> |
| Tree       | <a href="#">overrides</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

## root

|          |   |
|----------|---|
| Synopsis | Enter the <b>root</b> context   |
| Context  | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos policer-control-policy overrides root</b> |

|            |  |
|------------|--|
| Tree       | <a href="#">root</a>                                   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

### **max-rate** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Maximum frame-based bandwidth limit  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos policer-control-policy</a> <a href="#">overrides root max-rate</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">max-rate</a>   |
| Range      | 1 to 6400000000  |
| Options    | max  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

### **priority-mbs-thresholds**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>priority-mbs-thresholds</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos policer-control-policy</a> <a href="#">overrides root priority-mbs-thresholds</a> |
| Tree       | <a href="#">priority-mbs-thresholds</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

### **min-thresh-separation** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Minimum amount of separation buffer space   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos policer-control-policy</a> <a href="#">overrides root priority-mbs-thresholds min-thresh-separation</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">min-thresh-separation</a>   |
| Range      | 0 to 16777216   |
| Units      | bytes   |
| Options    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**priority** [[priority-level](#)] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>priority</b> list instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i> |
| Tree       | <a href="#">priority</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**[priority-level]** *number*

|            |   |
|------------|---|
| Synopsis   | Priority level  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i> |
| Tree       | <a href="#">priority</a>  |
| Range      | 1 to 8  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**mbs-contribution** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Minimum amount of cumulative buffer space allowed   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i> <a href="#">mbs-contribution</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">mbs-contribution</a>  |
| Range      | 0 to 16777216   |
| Units      | bytes   |
| Options    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**policy-name** *reference*

|          |                             |
|----------|-----------------------------|
| Synopsis | Policer control policy name |
|----------|-----------------------------|

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos policer-control-policy</b> <i>policy-name</i> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>  |
| Reference  | <b>configure qos policer-control-policy</b> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

### **qinq-mark-top-only** *boolean*

|            |   |
|------------|---|
| Synopsis   | Mark top Q-tags   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos qinq-mark-top-only</b> <i>boolean</i> |
| Tree       | <a href="#">qinq-mark-top-only</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **sap-egress**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>sap-egress</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress</b> |
| Tree       | <a href="#">sap-egress</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **overrides**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>overrides</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress</b> <b>overrides</b> |
| Tree       | <a href="#">overrides</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |



**hs-secondary-shaper** *string*

|               |  |
|---------------|--|
| Synopsis      | HS Secondary Shaper  |
| Context       | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string egress qos sap-egress</a><br><a href="#">overrides hs-secondary-shaper string</a> |
| Tree          | <a href="#">hs-secondary-shaper</a>  |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7750 SR-7/12/12e   |

**hs-wrr-group** [[group-id](#)] *reference*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>hs-wrr-group</b> list instance  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string egress qos sap-egress</a><br><a href="#">overrides hs-wrr-group reference</a> |
| Tree       | <a href="#">hs-wrr-group</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR-7/12/12e   |

**[group-id]** *reference*

|            |  |
|------------|--|
| Synopsis   | HS WRR group identifier  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string egress qos sap-egress</a><br><a href="#">overrides hs-wrr-group reference</a> |
| Tree       | <a href="#">hs-wrr-group</a>   |
| Reference  | <b>configure</b> <a href="#">qos sap-egress string</a> <a href="#">hs-wrr-group number</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR-7/12/12e   |

**hs-class-weight** *number*

|          |   |
|----------|---|
| Synopsis | Class weight override of the WRR group  |
| Context  | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string egress qos sap-egress</a><br><a href="#">overrides hs-wrr-group reference</a> <a href="#">hs-class-weight number</a> |
| Tree     | <a href="#">hs-class-weight</a>   |
| Range    | 1   2   4   8   |

Introduced 16.0.R1  
 Platforms 7750 SR-7/12/12e

### **percent-rate** *decimal-number*

Synopsis Percent rate override applied to the HS WRR group  
 Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [egress qos sap-egress](#)  
[overrides hs-wrr-group](#) *reference* [percent-rate](#) *decimal-number*  
 Tree [percent-rate](#)  
 Range 0.01 to 100.00  
 Notes The following elements are part of a choice: **percent-rate** or **rate**.  
 Introduced 16.0.R1  
 Platforms 7750 SR-7/12/12e

### **rate** (*number* | *keyword*)

Synopsis Scheduling rate override applied to the HS WRR group  
 Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [egress qos sap-egress](#)  
[overrides hs-wrr-group](#) *reference* [rate](#) (*number* | *keyword*)  
 Tree [rate](#)  
 Range 1 to 2000000000  
 Units kilobps  
 Options max  
 Notes The following elements are part of a choice: **percent-rate** or **rate**.  
 Introduced 16.0.R1  
 Platforms 7750 SR-7/12/12e

### **policer** [[policer-id](#)] *reference*

Synopsis Enter the **policer** list instance  
 Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [egress qos sap-egress](#)  
[overrides policer](#) *reference*  
 Tree [policer](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**[policer-id] reference**

|            |  |
|------------|--|
| Synopsis   | Policer unique ID  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">egress qos sap-egress overrides policer reference</a> |
| Tree       | <a href="#">policer</a>  |
| Reference  | <b>configure</b> <a href="#">qos sap-egress string</a> <a href="#">policer number</a>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**cbs (number | keyword)**

|            |   |
|------------|---|
| Synopsis   | CBS   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">egress qos sap-egress overrides policer reference</a> <a href="#">cbs (number   keyword)</a> |
| Tree       | <a href="#">cbs</a>   |
| Range      | 0 to 268435456  |
| Units      | bytes   |
| Options    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**mbs (number | keyword)**

|            |   |
|------------|---|
| Synopsis   | MBS   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">egress qos sap-egress overrides policer reference</a> <a href="#">mbs (number   keyword)</a> |
| Tree       | <a href="#">mbs</a>   |
| Range      | 0 to 268435456  |
| Units      | bytes   |
| Options    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**packet-byte-offset** *number*

|            |   |
|------------|---|
| Synopsis   | Packet size modification for policing information   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos sap-egress overrides policer</a> <i>reference</i> <a href="#">packet-byte-offset</a> <i>number</i> |
| Tree       | <a href="#">packet-byte-offset</a>  |
| Range      | -64 to 31   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**percent-rate**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>percent-rate</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos sap-egress overrides policer</a> <i>reference</i> <a href="#">percent-rate</a> |
| Tree       | <a href="#">percent-rate</a>  |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**cir** *decimal-number*

|            |   |
|------------|---|
| Synopsis   | CIR percent rate  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos sap-egress overrides policer</a> <i>reference</i> <a href="#">percent-rate cir</a> <i>decimal-number</i> |
| Tree       | <a href="#">cir</a>   |
| Range      | 0.00 to 100.00  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**pir** *decimal-number*

|          |   |
|----------|---|
| Synopsis | PIR percent rate  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos sap-egress overrides policer</a> <i>reference</i> <a href="#">percent-rate pir</a> <i>decimal-number</i> |
| Tree     | <a href="#">pir</a>   |
| Range    | 0.01 to 100.00  |

|            |  |
|------------|--|
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

**rate**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>rate</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> <b>rate</b> |
| Tree       | <a href="#">rate</a>   |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**cir** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | CIR rate   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> <b>rate</b> <b>cir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cir</a>  |
| Range      | 0 to 6400000000  |
| Units      | kilobps  |
| Options    | max  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**pir** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | PIR rate   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> <b>rate</b> <b>pir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">pir</a>  |
| Range      | 1 to 6400000000  |
| Units      | kilobps  |
| Options    | max  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**stat-mode** *keyword*

|            |  |
|------------|--|
| Synopsis   | Mode of statistics collected by the policer  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> <b>stat-mode</b> <i>keyword</i> |
| Tree       | <a href="#">stat-mode</a>  |
| Options    | no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**queue** [[queue-id](#)] *reference*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>queue</b> list instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> |
| Tree       | <a href="#">queue</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[queue-id]** *reference*

|            |  |
|------------|--|
| Synopsis   | Policer unique ID  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> |
| Tree       | <a href="#">queue</a>  |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">sap-egress</a> <i>string</i> <a href="#">queue</a> <i>number</i>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**adaptation-rule**

|          |   |
|----------|---|
| Synopsis | Enter the <b>adaptation-rule</b> context  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> <b>adaptation-rule</b> |

|            |                                 |
|------------|---------------------------------|
| Tree       | <a href="#">adaptation-rule</a> |
| Introduced | 16.0.R1                         |
| Platforms  | All                             |

**cir keyword**

|            |   |
|------------|---|
| Synopsis   | Constraint used when deriving the operational CIR value   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos sap-egress overrides queue</a> <i>reference</i> <a href="#">adaptation-rule</a> <a href="#">cir</a> <i>keyword</i> |
| Tree       | <a href="#">cir</a>   |
| Options    | max, min, closest   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**pir keyword**

|            |   |
|------------|---|
| Synopsis   | Constraint used when deriving the operational PIR value   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos sap-egress overrides queue</a> <i>reference</i> <a href="#">adaptation-rule</a> <a href="#">pir</a> <i>keyword</i> |
| Tree       | <a href="#">pir</a>   |
| Options    | max, min, closest   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**avg-frame-overhead decimal-number**

|            |   |
|------------|---|
| Synopsis   | Average packet-to-frame encapsulation overhead  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos sap-egress overrides queue</a> <i>reference</i> <a href="#">avg-frame-overhead</a> <i>decimal-number</i> |
| Tree       | <a href="#">avg-frame-overhead</a>  |
| Range      | 0.00 to 100.00  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**burst-limit** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Explicit shaping burst size for the queue  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">egress qos sap-egress overrides queue reference</a> <b>burst-limit</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">burst-limit</a>  |
| Range      | 1 to 14000000  |
| Units      | bytes  |
| Options    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**cbs** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | CBS  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">egress qos sap-egress overrides queue reference</a> <b>cbs</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cbs</a>  |
| Range      | 0 to 1048576   |
| Units      | kilobytes  |
| Options    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**drop-tail**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>drop-tail</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">egress qos sap-egress overrides queue reference</a> <b>drop-tail</b> |
| Tree       | <a href="#">drop-tail</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**low**

|          |                              |
|----------|------------------------------|
| Synopsis | Enter the <b>low</b> context |
|----------|------------------------------|



|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides queue</b> <i>reference</i> <b>drop-tail low</b> |
| Tree       | <a href="#">low</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **percent-reduction-from-mbs** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Percentage reduction from the MBS for a queue drop tail  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides queue</b> <i>reference</i> <b>drop-tail low percent-reduction-from-mbs</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">percent-reduction-from-mbs</a>   |
| Range      | 0 to 100   |
| Options    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **hs-class-weight** *number*

|            |  |
|------------|--|
| Synopsis   | Class weight override for the queue  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides queue</b> <i>reference</i> <b>hs-class-weight</b> <i>number</i> |
| Tree       | <a href="#">hs-class-weight</a>  |
| Range      | 1   2   4   8  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR-7/12/12e   |

### **hs-wred-queue**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>hs-wred-queue</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides queue</b> <i>reference</i> <b>hs-wred-queue</b> |
| Tree       | <a href="#">hs-wred-queue</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR-7/12/12e   |

**policy reference**

|            |   |
|------------|---|
| Synopsis   | Slope policy applied to the HSQ queue group queue   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">egress qos sap-egress overrides queue reference</a> <a href="#">hs-wred-queue policy reference</a> |
| Tree       | <a href="#">policy</a>  |
| Reference  | <b>configure</b> <a href="#">qos slope-policy string</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR-7/12/12e  |

**hs-wrr-weight number**

|            |   |
|------------|---|
| Synopsis   | WRR weight to parent with the queue into the scheduler  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">egress qos sap-egress overrides queue reference</a> <a href="#">hs-wrr-weight number</a> |
| Tree       | <a href="#">hs-wrr-weight</a>   |
| Range      | 1 to 127  |
| Default    | 1   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR-7/12/12e  |

**mbs (number | keyword)**

|            |   |
|------------|---|
| Synopsis   | MBS   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">egress qos sap-egress overrides queue reference</a> <a href="#">mbs (number   keyword)</a> |
| Tree       | <a href="#">mbs</a>   |
| Range      | 0 to 1073741824   |
| Units      | bytes   |
| Options    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**monitor-queue-depth**

|          |   |
|----------|---|
| Synopsis | Enable the <b>monitor-queue-depth</b> context |
|----------|---|

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides queue</b> <i>reference</i> <b>monitor-queue-depth</b> |
| Tree       | <b>monitor-queue-depth</b>   |
| Introduced | 20.10.R1   |
| Platforms  | All  |

### **fast-polling** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Enable fast polling of the queue depth   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides queue</b> <i>reference</i> <b>monitor-queue-depth fast-polling</b> <i>boolean</i>       |
| Tree        | <b>fast-polling</b>  |
| Description | When configured to <b>true</b> , this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth.<br>When configured to <b>false</b> , fast queue polling is not enabled. |
| Default     | false  |
| Introduced  | 20.10.R1   |
| Platforms   | All  |

### **violation-threshold** *decimal-number*

|             |  |
|-------------|--|
| Synopsis    | Threshold for queue depth before violation is raised   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides queue</b> <i>reference</i> <b>monitor-queue-depth violation-threshold</b> <i>decimal-number</i> |
| Tree        | <b>violation-threshold</b>   |
| Description | This command specifies the threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.   |
| Range       | 0.01 to 99.99  |
| Introduced  | 20.10.R1   |
| Platforms   | All  |

### **parent**

|          |   |
|----------|---|
| Synopsis | Enter the <b>parent</b> context   |
| Context  | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides queue</b> <i>reference</i> <b>parent</b> |
| Tree     | <b>parent</b>   |

Introduced 16.0.R1  
 Platforms All

### **cir-weight** *number*

Synopsis CIR parameter that overrides parent for queue group  
 Context **configure** [service vprn string](#) [interface string sap string egress qos sap-egress](#)  
[overrides queue reference parent cir-weight number](#)  
 Tree [cir-weight](#)  
 Range 0 to 100  
 Introduced 16.0.R1  
 Platforms All

### **weight** *number*

Synopsis PIR parameter that overrides parent for queue group  
 Context **configure** [service vprn string](#) [interface string sap string egress qos sap-egress](#)  
[overrides queue reference parent weight number](#)  
 Tree [weight](#)  
 Range 0 to 100  
 Introduced 16.0.R1  
 Platforms All

### **percent-rate**

Synopsis Enter the **percent-rate** context  
 Context **configure** [service vprn string](#) [interface string sap string egress qos sap-egress](#)  
[overrides queue reference percent-rate](#)  
 Tree [percent-rate](#)  
 Notes The following elements are part of a choice: **percent-rate** or **rate**.  
 Introduced 16.0.R1  
 Platforms All

### **cir decimal-number**

Synopsis CIR percent rate

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides queue reference percent-rate cir</b> <i>decimal-number</i> |
| Tree       | <b>cir</b>  |
| Range      | 0.00 to 100.00  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **pir** *decimal-number*

|            |   |
|------------|---|
| Synopsis   | PIR percent rate  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides queue reference percent-rate pir</b> <i>decimal-number</i> |
| Tree       | <b>pir</b>  |
| Range      | 0.01 to 100.00  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **rate**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>rate</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides queue reference rate</b> |
| Tree       | <b>rate</b>   |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **cir** (*number* | *keyword*)

|          |  |
|----------|--|
| Synopsis | CIR rate   |
| Context  | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides queue reference rate cir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <b>cir</b>   |
| Range    | 0 to 6400000000  |
| Units    | kilobps  |
| Options  | max  |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

**pir** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | PIR rate   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">rate</a> <b>pir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">pir</a>  |
| Range      | 1 to 6400000000  |
| Units      | kilobps  |
| Options    | max  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**policy-name** *reference*

|            |  |
|------------|--|
| Synopsis   | Policy ID to associate with SAP for mirrored service   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">sap-egress</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**port-redirect-group**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>port-redirect-group</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">port-redirect-group</a> |
| Tree       | <a href="#">port-redirect-group</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**group-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Name of the queue group redirect list policy  |
| Context    | <b>configure</b> <a href="#">service vprn string interface string sap string egress qos sap-egress port-redirect-group group-name reference</a> |
| Tree       | <a href="#">group-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos queue-group-templates egress queue-group string</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**instance** *number*

|            |  |
|------------|--|
| Synopsis   | Instance of port queue group   |
| Context    | <b>configure</b> <a href="#">service vprn string interface string sap string egress qos sap-egress port-redirect-group instance number</a> |
| Tree       | <a href="#">instance</a>   |
| Range      | 1 to 65535   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**scheduler-policy**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>scheduler-policy</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn string interface string sap string egress qos scheduler-policy</a> |
| Tree       | <a href="#">scheduler-policy</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**overrides**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>overrides</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn string interface string sap string egress qos scheduler-policy overrides</a> |
| Tree       | <a href="#">overrides</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**scheduler** [*scheduler-name*] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>scheduler</b> list instance   |
| Context    | <b>configure</b> <i>service vprn string interface string sap string egress qos scheduler-policy overrides scheduler string</i> |
| Tree       | <i>scheduler</i>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[scheduler-name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Scheduler name   |
| Context       | <b>configure</b> <i>service vprn string interface string sap string egress qos scheduler-policy overrides scheduler string</i>   |
| Tree          | <i>scheduler</i>   |
| Description   | <p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.</p> |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**parent**

|          |   |
|----------|---|
| Synopsis | Enter the <b>parent</b> context   |
| Context  | <b>configure</b> <i>service vprn string interface string sap string egress qos scheduler-policy overrides scheduler string parent</i> |
| Tree     | <i>parent</i>   |



Introduced 16.0.R1  
 Platforms All

### **cir-weight** *number*

Synopsis Weight used at the within-CIR port priority level  
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [egress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string* [parent](#) [cir-weight](#) *number*  
 Tree [cir-weight](#)  
 Range 0 to 100  
 Introduced 16.0.R1  
 Platforms All

### **weight** *number*

Synopsis Relative weight of the scheduler to feed the queue  
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [egress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string* [parent](#) [weight](#) *number*  
 Tree [weight](#)  
 Range 0 to 100  
 Introduced 16.0.R1  
 Platforms All

### **rate**

Synopsis Enter the **rate** context  
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [egress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string* [rate](#)  
 Tree [rate](#)  
 Introduced 16.0.R1  
 Platforms All

### **cir** (*number* | *keyword*)

Synopsis CIR at which the queue it to operate  
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [egress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string* [rate](#) [cir](#) (*number* | *keyword*)

|            |                     |
|------------|---------------------|
| Tree       | <a href="#">cir</a> |
| Range      | 0 to 6400000000     |
| Units      | kilobps             |
| Options    | sum, max            |
| Introduced | 16.0.R1             |
| Platforms  | All                 |

### **pir** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | PIR at which the queue is to operate  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <b>rate</b> <b>pir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">pir</a>   |
| Range      | 1 to 6400000000   |
| Units      | kilobps   |
| Options    | max   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **policy-name** *reference*

|            |  |
|------------|--|
| Synopsis   | Scheduler policy name  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">scheduler-policy</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **queue-group-redirect-list** *reference*

|           |   |
|-----------|---|
| Synopsis  | Assign queue-group redirect list  |
| Context   | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">queue-group-redirect-list</a> <i>reference</i> |
| Tree      | <a href="#">queue-group-redirect-list</a>   |
| Reference | <b>configure</b> <a href="#">qos</a> <a href="#">queue-group-redirect-list</a> <i>string</i>  |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

## eth-cfm

|            |  |
|------------|--|
| Synopsis   | Enter the <b>eth-cfm</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>eth-cfm</b> |
| Tree       | <a href="#">eth-cfm</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## collect-lmm-fc-stats

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>collect-lmm-fc-stats</b> context  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <b>collect-lmm-fc-stats</b>  |
| Tree        | <a href="#">collect-lmm-fc-stats</a>   |
| Description | <p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands <b>fc-in-profile</b> and <b>fc</b> in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the <b>collect-lmm-stats</b> command are mutually exclusive when there is entity resource contention.</p> |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## fc keyword

|             |   |
|-------------|---|
| Synopsis    | Forwarding class name for profile-unaware counter   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">collect-lmm-fc-stats</a> <b>fc</b> <i>keyword</i>   |
| Tree        | <a href="#">fc</a>  |
| Description | <p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the <b>fc-in-profile</b> command under the <b>collect-lmm-fc-stats</b> context.</p> |

When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.

|                |  |
|----------------|--|
| Options        | be, l2, af, l1, h2, ef, h1, nc                               |
| Max. Instances | 8  |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **fc-in-profile** *keyword*

|                |   |
|----------------|---|
| Synopsis       | Forwarding class name for profile-aware counter   |
| Context        | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm collect-lmm-fc-stats</b> <b>fc-in-profile</b> <i>keyword</i>   |
| Tree           | <b>fc-in-profile</b>  |
| Description    | <p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the <b>fc</b> command under the <b>collect-lmm-fc-stats</b> context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p> |
| Options        | be, l2, af, l1, h2, ef, h1, nc  |
| Max. Instances | 8   |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **collect-lmm-stats** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Collect statistics for loss measurement message tests  |
| Context     | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm collect-lmm-stats</b> <i>boolean</i>  |
| Tree        | <b>collect-lmm-stats</b>   |
| Description | <p>When configured to <b>true</b>, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.</p> <p>The <b>show eth-cfm collect-lmm-stats</b> command displays entities that have been enabled to collect transit and receive counters.</p> |

When configured to **false**, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.

|            |  |
|------------|--|
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **mep** *md-admin-name reference ma-admin-name reference mep-id number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mep</b> list instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> |
| Tree       | <a href="#">mep</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **md-admin-name** *reference*

|            |  |
|------------|--|
| Synopsis   | Maintenance Domain (MD) name   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> |
| Tree       | <a href="#">mep</a>  |
| Reference  | <b>configure</b> <a href="#">eth-cfm</a> <a href="#">domain</a> <i>string</i>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **ma-admin-name** *reference*

|            |  |
|------------|--|
| Synopsis   | Maintenance Association (MA) name  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> |
| Tree       | <a href="#">mep</a>  |
| Reference  | <b>configure</b> <a href="#">eth-cfm</a> <a href="#">domain</a> <i>string</i> <a href="#">association</a> <i>string</i>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**mep-id** *number*

|            |  |
|------------|--|
| Synopsis   | Maintenance Endpoint (MEP) ID  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <i>number</i> |
| Tree       | <a href="#">mep</a>  |
| Range      | 1 to 8191  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the MEP   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**ais** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable the generation and the reception of AIS messages   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <i>number</i> <a href="#">ais</a> <i>boolean</i> |
| Tree       | <a href="#">ais</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**alarm-notification**

|          |   |
|----------|---|
| Synopsis | Enter the <b>alarm-notification</b> context |
|----------|---|

|             |  |
|-------------|--|
| Context     | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">eth-cfm mep md-admin-name reference</a> <a href="#">ma-admin-name reference</a> <a href="#">mep-id number</a> <a href="#">alarm-notification</a>  |
| Tree        | <a href="#">alarm-notification</a>   |
| Description | <p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p> |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **fng-alarm-time** *number*

|            |   |
|------------|---|
| Synopsis   | Time that must expire before an FNG alarm is raised   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">eth-cfm mep md-admin-name reference</a> <a href="#">ma-admin-name reference</a> <a href="#">mep-id number</a> <a href="#">alarm-notification</a> <a href="#">fng-alarm-time number</a> |
| Tree       | <a href="#">fng-alarm-time</a>  |
| Range      | 250   500   1000  |
| Units      | centiseconds  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **fng-reset-time** *number*

|            |   |
|------------|---|
| Synopsis   | Time that must expire before an FNG alarm is reset  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">eth-cfm mep md-admin-name reference</a> <a href="#">ma-admin-name reference</a> <a href="#">mep-id number</a> <a href="#">alarm-notification</a> <a href="#">fng-reset-time number</a> |
| Tree       | <a href="#">fng-reset-time</a>  |
| Range      | 250   500   1000  |
| Units      | centiseconds  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **ccm** *boolean*

|          |                       |
|----------|-----------------------|
| Synopsis | Generate CCM messages |
|----------|-----------------------|

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>ccm</b> <i>boolean</i> |
| Tree       | <b>ccm</b>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **ccm-ltm-priority** *number*

|            |  |
|------------|--|
| Synopsis   | Priority of CCM and LTM messages transmitted by the MEP  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>ccm-ltm-priority</b> <i>number</i> |
| Tree       | <b>ccm-ltm-priority</b>  |
| Range      | 0 to 7   |
| Default    | 7  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **ccm-padding-size** *number*

|             |   |
|-------------|---|
| Synopsis    | Number of octets of padding to insert in CCM packets  |
| Context     | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>ccm-padding-size</b> <i>number</i>  |
| Tree        | <b>ccm-padding-size</b>   |
| Description | This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.<br><br>This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through <b>configure eth-cfm domain association ccm-interval</b> ) is less than 1 second. |
| Range       | 3 to 1500   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **csf**

|          |                               |
|----------|-------------------------------|
| Synopsis | Enable the <b>csf</b> context |
|----------|-------------------------------|



|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>csf</b> |
| Tree       | <b>csf</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **multiplier** *decimal-number*

|            |  |
|------------|--|
| Synopsis   | Multiplication factor used to clear the CSF condition  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>csf multiplier</b> <i>decimal-number</i> |
| Tree       | <b>multiplier</b>  |
| Range      | 0.0   2.0 to 30.0  |
| Default    | 3.5  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>description</b> <i>string</i> |
| Tree          | <b>description</b>  |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **eth-test**

|             |  |
|-------------|--|
| Synopsis    | Enable the <b>eth-test</b> context   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>eth-test</b> |
| Tree        | <b>eth-test</b>  |
| Description | Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the <b>oam eth-cfm eth-test</b> command.  |
| Introduced  | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **bit-error-threshold** *number*

Synopsis Lowest priority defect allowed to generate fault alarm

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [eth-cfm mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [eth-test bit-error-threshold](#) *number*

Tree [bit-error-threshold](#)

Range 0 to 11840

Units bit errors

Default 1

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **test-pattern**

Synopsis Enter the **test-pattern** context

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [eth-cfm mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [eth-test test-pattern](#)

Tree [test-pattern](#)

Description Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **crc-tlv** *boolean*

Synopsis Generate a CRC checksum

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [eth-cfm mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [eth-test test-pattern](#) [crc-tlv](#) *boolean*

Tree [crc-tlv](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**pattern keyword**

|             |  |
|-------------|--|
| Synopsis    | Test pattern for Ethernet Test frames  |
| Context     | <b>configure</b> <a href="#">service vprn string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern pattern keyword</a> |
| Tree        | <a href="#">pattern</a>  |
| Description | This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.                                      |
| Options     | all-zeros, all-ones  |
| Default     | all-zeros  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**fault-propagation keyword**

|            |  |
|------------|--|
| Synopsis   | Fault propagation for the MEP  |
| Context    | <b>configure</b> <a href="#">service vprn string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number fault-propagation keyword</a> |
| Tree       | <a href="#">fault-propagation</a>  |
| Options    | use-if-status-tlv, suspend-ccm   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**grace**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>grace</b> context   |
| Context     | <b>configure</b> <a href="#">service vprn string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace</a> |
| Tree        | <a href="#">grace</a>  |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.                            |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**eth-ed**

|          |                                 |
|----------|---------------------------------|
| Synopsis | Enter the <b>eth-ed</b> context |
|----------|---------------------------------|

|             |  |
|-------------|--|
| Context     | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>grace eth-ed</b> |
| Tree        | <b>eth-ed</b>  |
| Description | Commands in this context configure the ITU-T Y.1731 ETH-ED function.   |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **max-rx-defect-window** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum received ETH-ED expected defect window duration   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>grace eth-ed max-rx-defect-window</b> <i>number</i> |
| Tree       | <b>max-rx-defect-window</b>   |
| Range      | 1 to 86400  |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **priority** *number*

|            |   |
|------------|---|
| Synopsis   | Transmission priority for ETH-ED PDUs   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>grace eth-ed priority</b> <i>number</i> |
| Tree       | <b>priority</b>   |
| Range      | 0 to 7  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **rx-eth-ed** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>grace eth-ed rx-eth-ed</b> <i>boolean</i> |
| Tree        | <b>rx-eth-ed</b>  |
| Description | This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.  |

|            |  |
|------------|--|
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **tx-eth-ed** *boolean*

|            |  |
|------------|--|
| Synopsis   | Transmit ETH-ED PDUs from the MEP  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <a href="#">reference ma-admin-name</a> <a href="#">reference mep-id</a> <i>number</i> <a href="#">grace eth-ed tx-eth-ed</a> <i>boolean</i> |
| Tree       | <a href="#">tx-eth-ed</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **eth-vsm-grace**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>eth-vsm-grace</b> context   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <a href="#">reference ma-admin-name</a> <a href="#">reference mep-id</a> <i>number</i> <a href="#">grace eth-vsm-grace</a> |
| Tree        | <a href="#">eth-vsm-grace</a>  |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function.   |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **rx-eth-vsm-grace** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Receive and process Nokia ETH-CFM Grace PDU on the MEP   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <a href="#">reference ma-admin-name</a> <a href="#">reference mep-id</a> <i>number</i> <a href="#">grace eth-vsm-grace rx-eth-vsm-grace</a> <i>boolean</i> |
| Tree        | <a href="#">rx-eth-vsm-grace</a>   |
| Description | When configured to <b>true</b> , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.<br><br>When configured to <b>false</b> , the router disables the Nokia Grace function.  |
| Default     | true   |
| Introduced  | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **tx-eth-vsm-grace** *boolean*

Synopsis Transmit ETH-ED PDUs from the MEP

Context **configure** [service vprn string](#) [interface string](#) [sap string](#) [eth-cfm mep md-admin-name reference](#) [ma-admin-name reference](#) [mep-id number](#) [grace eth-vsm-grace tx-eth-vsm-grace](#) *boolean*

Tree [tx-eth-vsm-grace](#)

Description When configured to **true**, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.

The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

The operator must configure the **configure system eth-cfm grace** command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).

When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.

Default true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **low-priority-defect** *keyword*

Synopsis Lowest priority defect allowed to generate fault alarm

Context **configure** [service vprn string](#) [interface string](#) [sap string](#) [eth-cfm mep md-admin-name reference](#) [ma-admin-name reference](#) [mep-id number](#) [low-priority-defect](#) *keyword*

Tree [low-priority-defect](#)

Options all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon

Default mac-rem-err-xcon

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **one-way-delay-threshold** *number*

Synopsis Threshold time limit for the one-way delay test

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>one-way-delay-threshold</b> <i>number</i> |
| Tree       | <a href="#">one-way-delay-threshold</a>   |
| Range      | 0 to 600  |
| Units      | seconds   |
| Default    | 3   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **squelch-ingress-levels** *number*

|             |  |
|-------------|--|
| Synopsis    | Levels for which ETH-CFM packets are silently discarded  |
| Context     | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm squelch-ingress-levels</b> <i>number</i>  |
| Tree        | <a href="#">squelch-ingress-levels</a>   |
| Description | <p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.</p> |
| Range       | 0 to 7   |
| Max.        | 8  |
| Instances   |  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **fwd-wholesale**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>fwd-wholesale</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>fwd-wholesale</b> |
| Tree       | <a href="#">fwd-wholesale</a>  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**pppoe-service** *reference*

|            |  |
|------------|--|
| Synopsis   | PPPoE service name   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">fwd-wholesale</a> <a href="#">pppoe-service</a> <i>reference</i> |
| Tree       | <a href="#">pppoe-service</a>  |
| Reference  | <b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i>   |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**host-admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the hosts   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">host-admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">host-admin-state</a>  |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**host-lockout-policy** *reference*

|            |  |
|------------|--|
| Synopsis   | Host lockout policy  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">host-lockout-policy</a> <i>reference</i> |
| Tree       | <a href="#">host-lockout-policy</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">host-lockout-policy</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**ingress**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ingress</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> |
| Tree       | <a href="#">ingress</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |



## filter

|            |  |
|------------|--|
| Synopsis   | Enter the <b>filter</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">filter</a> |
| Tree       | <a href="#">filter</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## ip reference

|            |   |
|------------|---|
| Synopsis   | IPv4 filter policy name   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">filter</a> <a href="#">ip</a> <a href="#">reference</a> |
| Tree       | <a href="#">ip</a>  |
| Reference  | <b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## ipv6 reference

|            |   |
|------------|---|
| Synopsis   | IPv6 filter policy name   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">filter</a> <a href="#">ipv6</a> <a href="#">reference</a> |
| Tree       | <a href="#">ipv6</a>  |
| Reference  | <b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## qos

|            |   |
|------------|---|
| Synopsis   | Enter the <b>qos</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> |
| Tree       | <a href="#">qos</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**match-qinq-dot1p** *keyword*

|            |   |
|------------|---|
| Synopsis   | Ingress match QinQ Dot1p  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos</a> <a href="#">match-qinq-dot1p</a> <i>keyword</i> |
| Tree       | <a href="#">match-qinq-dot1p</a>  |
| Options    | top, bottom   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**policer-control-policy**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>policer-control-policy</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos</a> <a href="#">policer-control-policy</a> |
| Tree       | <a href="#">policer-control-policy</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**overrides**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>overrides</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> |
| Tree       | <a href="#">overrides</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**root**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>root</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> |
| Tree       | <a href="#">root</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**max-rate** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Maximum frame-based bandwidth limit   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos</a> <a href="#">policer-control-policy overrides</a> <a href="#">root max-rate</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">max-rate</a>  |
| Range      | 1 to 6400000000   |
| Options    | max   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**priority-mbs-thresholds**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>priority-mbs-thresholds</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos</a> <a href="#">policer-control-policy overrides</a> <a href="#">root priority-mbs-thresholds</a> |
| Tree       | <a href="#">priority-mbs-thresholds</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**min-thresh-separation** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Minimum amount of separation buffer space  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos</a> <a href="#">policer-control-policy overrides</a> <a href="#">root priority-mbs-thresholds min-thresh-separation</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">min-thresh-separation</a>  |
| Range      | 0 to 16777216  |
| Units      | bytes  |
| Options    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**priority** [[priority-level](#)] *number*

|          |  |
|----------|--|
| Synopsis | Enter the <b>priority</b> list instance  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos</a> <a href="#">policer-control-policy overrides</a> <a href="#">root priority-mbs-thresholds priority</a> <i>number</i> |

|            |  |
|------------|--|
| Tree       | <a href="#">priority</a>                               |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

**[priority-level]** *number*

|            |  |
|------------|--|
| Synopsis   | Priority level   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos policer-control-policy overrides</a> <a href="#">root priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i> |
| Tree       | <a href="#">priority</a>   |
| Range      | 1 to 8   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**mbs-contribution** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Minimum amount of cumulative buffer space allowed  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos policer-control-policy overrides</a> <a href="#">root priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i> <a href="#">mbs-contribution</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">mbs-contribution</a>   |
| Range      | 0 to 16777216  |
| Units      | bytes  |
| Options    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**policy-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Policer control policy name   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos policer-control-policy</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos policer-control-policy</a> <i>string</i>   |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## sap-ingress

Synopsis Enter the **sap-ingress** context

Context **configure** [service](#) [vpn](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#)

Tree [sap-ingress](#)

Introduced 16.0.R1

Platforms All

## fp-redirect-group

Synopsis Enter the **fp-redirect-group** context

Context **configure** [service](#) [vpn](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [fp-redirect-group](#)

Tree [fp-redirect-group](#)

Introduced 16.0.R1

Platforms All

## group-name *reference*

Synopsis Queue group template name created on forwarding plane

Context **configure** [service](#) [vpn](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [fp-redirect-group](#) [group-name](#) *reference*

Tree [group-name](#)

Reference **configure** [qos](#) [queue-group-templates](#) [ingress](#) [queue-group](#) *string*

Introduced 16.0.R1

Platforms All

## instance *number*

Synopsis Queue group instance

Context **configure** [service](#) [vpn](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [fp-redirect-group](#) [instance](#) *number*

Tree [instance](#)

Range 1 to 65535

Introduced 16.0.R1  
 Platforms All

## overrides

Synopsis Enter the **overrides** context  
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#)  
 Tree [overrides](#)  
 Introduced 16.0.R1  
 Platforms All

## ip-criteria

Synopsis Enter the **ip-criteria** context  
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [ip-criteria](#)  
 Tree [ip-criteria](#)  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## activate-entry-tag *number*

Synopsis Tag ID activated for IPv4 criteria  
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [ip-criteria](#) [activate-entry-tag](#) *number*  
 Tree [activate-entry-tag](#)  
 Range 1 to 255  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ipv6-criteria

Synopsis Enter the **ipv6-criteria** context  
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [ipv6-criteria](#)  
 Tree [ipv6-criteria](#)

|            |  |
|------------|--|
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **activate-entry-tag** *number*

|            |   |
|------------|---|
| Synopsis   | Tag ID activated for IPv6 criteria  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos sap-ingress</a> <a href="#">overrides ipv6-criteria</a> <b>activate-entry-tag</b> <i>number</i> |
| Tree       | <a href="#">activate-entry-tag</a>  |
| Range      | 1 to 255  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **policer** [[policer-id](#)] *reference*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>policer</b> list instance   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos sap-ingress</a> <a href="#">overrides policer</a> <i>reference</i> |
| Tree       | <a href="#">policer</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

### [[policer-id](#)] *reference*

|            |  |
|------------|--|
| Synopsis   | Policer unique ID  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos sap-ingress</a> <a href="#">overrides policer</a> <i>reference</i> |
| Tree       | <a href="#">policer</a>  |
| Reference  | <b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">policer</a> <i>number</i>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

### **cbs** (*number* | *keyword*)

|          |     |
|----------|-----|
| Synopsis | CBS |
|----------|-----|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides policer</b> <i>reference</i> <b>cbs</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <b>cbs</b>  |
| Range      | 0 to 268435456  |
| Units      | bytes   |
| Options    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

### **mbs** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | MBS   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides policer</b> <i>reference</i> <b>mbs</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <b>mbs</b>  |
| Range      | 0 to 268435456  |
| Units      | bytes   |
| Options    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

### **packet-byte-offset** *number*

|            |   |
|------------|---|
| Synopsis   | Packet size modification for policing information   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides policer</b> <i>reference</i> <b>packet-byte-offset</b> <i>number</i> |
| Tree       | <b>packet-byte-offset</b>   |
| Range      | -32 to 31   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

### **percent-rate**

|          |   |
|----------|---|
| Synopsis | Enter the <b>percent-rate</b> context   |
| Context  | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides policer</b> <i>reference</i> <b>percent-rate</b> |



|            |   |
|------------|---|
| Tree       | <a href="#">percent-rate</a>  |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> . |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR                            |

### **cir** *decimal-number*

|            |   |
|------------|---|
| Synopsis   | CIR percent rate  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> <a href="#">percent-rate</a> <b>cir</b> <i>decimal-number</i> |
| Tree       | <a href="#">cir</a>   |
| Range      | 0.00 to 100.00  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

### **pir** *decimal-number*

|            |   |
|------------|---|
| Synopsis   | PIR percent rate  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> <a href="#">percent-rate</a> <b>pir</b> <i>decimal-number</i> |
| Tree       | <a href="#">pir</a>   |
| Range      | 0.01 to 100.00  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

### **rate**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>rate</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> <b>rate</b> |
| Tree       | <a href="#">rate</a>  |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**cir** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | CIR rate   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos sap-ingress</a> <a href="#">overrides policer</a> <i>reference</i> <a href="#">rate cir</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cir</a>  |
| Range      | 0 to 6400000000  |
| Units      | kilobps  |
| Options    | max  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**pir** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | PIR rate   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos sap-ingress</a> <a href="#">overrides policer</a> <i>reference</i> <a href="#">rate pir</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">pir</a>  |
| Range      | 1 to 6400000000  |
| Units      | kilobps  |
| Options    | max  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR   |

**stat-mode** *keyword*

|            |   |
|------------|---|
| Synopsis   | Mode of statistics collected by the policer   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos sap-ingress</a> <a href="#">overrides policer</a> <i>reference</i> <a href="#">stat-mode</a> <i>keyword</i> |
| Tree       | <a href="#">stat-mode</a>   |
| Options    | no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

**queue** [[queue-id](#)] *reference*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>queue</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a><br><a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> |
| Tree       | <a href="#">queue</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[queue-id]** *reference*

|            |   |
|------------|---|
| Synopsis   | Policer unique ID   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a><br><a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> |
| Tree       | <a href="#">queue</a>   |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">sap-ingress</a> <i>string</i> <a href="#">queue</a> <i>number</i>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**adaptation-rule**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>adaptation-rule</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a><br><a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">adaptation-rule</a> |
| Tree       | <a href="#">adaptation-rule</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**cir** *keyword*

|            |  |
|------------|--|
| Synopsis   | Constraint used when deriving the operational CIR value  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a><br><a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">adaptation-rule</a> <a href="#">cir</a> <i>keyword</i> |
| Tree       | <a href="#">cir</a>  |
| Options    | max, min, closest  |
| Introduced | 16.0.R1  |

Platforms All

### **pir** *keyword*

Synopsis Constraint used when deriving the operational PIR value

Context **configure** [service vprn string](#) [interface string sap string](#) [ingress qos sap-ingress overrides queue reference](#) [adaptation-rule pir keyword](#)

Tree [pir](#)

Options max, min, closest

Introduced 16.0.R1

Platforms All

### **cbs** (*number* | *keyword*)

Synopsis CBS

Context **configure** [service vprn string](#) [interface string sap string](#) [ingress qos sap-ingress overrides queue reference](#) [cbs \(number | keyword\)](#)

Tree [cbs](#)

Range 0 to 1048576

Units kilobytes

Options auto

Introduced 16.0.R1

Platforms All

### **drop-tail**

Synopsis Enter the **drop-tail** context

Context **configure** [service vprn string](#) [interface string sap string](#) [ingress qos sap-ingress overrides queue reference](#) [drop-tail](#)

Tree [drop-tail](#)

Introduced 16.0.R1

Platforms All

### **low**

Synopsis Enter the **low** context

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides queue</b> <i>reference</i> <b>drop-tail low</b> |
| Tree       | <b>low</b>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **percent-reduction-from-mbs** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Percentage reduction from the MBS for a queue drop tail  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides queue</b> <i>reference</i> <b>drop-tail low percent-reduction-from-mbs</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <b>percent-reduction-from-mbs</b>  |
| Range      | 0 to 100   |
| Options    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **mbs** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | MBS   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides queue</b> <i>reference</i> <b>mbs</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <b>mbs</b>  |
| Range      | 0 to 1073741824   |
| Units      | bytes   |
| Options    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **monitor-queue-depth**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>monitor-queue-depth</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides queue</b> <i>reference</i> <b>monitor-queue-depth</b> |
| Tree       | <b>monitor-queue-depth</b>   |
| Introduced | 21.7.R1  |

Platforms All

### **fast-polling** *boolean*

Synopsis Enable fast polling of the queue depth

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos sap-ingress overrides queue](#) [reference monitor-queue-depth fast-polling](#) *boolean*

Tree [fast-polling](#)

Default false

Introduced 21.7.R1

Platforms All

### **parent**

Synopsis Enter the **parent** context

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos sap-ingress overrides queue](#) [reference parent](#)

Tree [parent](#)

Introduced 16.0.R1

Platforms All

### **cir-weight** *number*

Synopsis CIR parameter that overrides parent for queue group

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos sap-ingress overrides queue](#) [reference parent cir-weight](#) *number*

Tree [cir-weight](#)

Range 0 to 100

Introduced 16.0.R1

Platforms All

### **weight** *number*

Synopsis PIR parameter that overrides parent for queue group

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos sap-ingress overrides queue](#) [reference parent weight](#) *number*

Tree [weight](#)

|            |          |
|------------|----------|
| Range      | 0 to 100 |
| Introduced | 16.0.R1  |
| Platforms  | All      |

### **percent-rate**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>percent-rate</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string ingress qos sap-ingress overrides queue reference percent-rate</a> |
| Tree       | <a href="#">percent-rate</a>  |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **cir decimal-number**

|            |  |
|------------|--|
| Synopsis   | CIR percent rate   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string ingress qos sap-ingress overrides queue reference percent-rate cir decimal-number</a> |
| Tree       | <a href="#">cir</a>  |
| Range      | 0.00 to 100.00   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **pir decimal-number**

|            |  |
|------------|--|
| Synopsis   | PIR percent rate   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string ingress qos sap-ingress overrides queue reference percent-rate pir decimal-number</a> |
| Tree       | <a href="#">pir</a>  |
| Range      | 0.01 to 100.00   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**rate**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>rate</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>rate</b> |
| Tree       | <a href="#">rate</a>  |
| Notes      | The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**cir** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | CIR rate  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>rate</b> <b>cir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cir</a>   |
| Range      | 0 to 6400000000   |
| Units      | kilobps   |
| Options    | max   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**pir** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | PIR rate  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>rate</b> <b>pir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">pir</a>   |
| Range      | 1 to 6400000000   |
| Units      | kilobps   |
| Options    | max   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**policy-name** *reference*

|          |           |
|----------|-----------|
| Synopsis | Policy ID |
|----------|-----------|



|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress</b> <b>policy-name</b> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>  |
| Reference  | <b>configure qos sap-ingress</b> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **queuing-type** *keyword*

|            |   |
|------------|---|
| Synopsis   | Queuing type  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress</b> <b>queuing-type</b> <i>keyword</i> |
| Tree       | <a href="#">queuing-type</a>  |
| Options    | shared, multipoint-shared   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR   |

### **scheduler-policy**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>scheduler-policy</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos scheduler-policy</b> |
| Tree       | <a href="#">scheduler-policy</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **overrides**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>overrides</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos scheduler-policy</b> <b>overrides</b> |
| Tree       | <a href="#">overrides</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**scheduler** [[scheduler-name](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>scheduler</b> list instance   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos scheduler-policy</a> <a href="#">overrides scheduler</a> <i>string</i> |
| Tree       | <a href="#">scheduler</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[scheduler-name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Scheduler name   |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos scheduler-policy</a> <a href="#">overrides scheduler</a> <i>string</i>   |
| Tree          | <a href="#">scheduler</a>  |
| Description   | <p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.</p> |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**parent**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>parent</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos scheduler-policy</a> <a href="#">overrides scheduler</a> <i>string</i> <a href="#">parent</a> |
| Tree       | <a href="#">parent</a>  |
| Introduced | 16.0.R1   |

Platforms All

### **cir-weight** *number*

Synopsis Weight used at the within-CIR port priority level

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos scheduler-policy overrides scheduler](#) *string* [parent cir-weight](#) *number*

Tree [cir-weight](#)

Range 0 to 100

Introduced 16.0.R1

Platforms All

### **weight** *number*

Synopsis Relative weight of the scheduler to feed the queue

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos scheduler-policy overrides scheduler](#) *string* [parent weight](#) *number*

Tree [weight](#)

Range 0 to 100

Introduced 16.0.R1

Platforms All

### **rate**

Synopsis Enter the **rate** context

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos scheduler-policy overrides scheduler](#) *string* [rate](#)

Tree [rate](#)

Introduced 16.0.R1

Platforms All

### **cir** (*number* | *keyword*)

Synopsis CIR at which the queue it to operate

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos scheduler-policy overrides scheduler](#) *string* [rate cir](#) (*number* | *keyword*)

Tree [cir](#)

|            |                 |
|------------|-----------------|
| Range      | 0 to 6400000000 |
| Units      | kilobps         |
| Options    | sum, max        |
| Introduced | 16.0.R1         |
| Platforms  | All             |

### **pir** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | PIR at which the queue is to operate   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <b>rate</b> <b>pir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">pir</a>  |
| Range      | 1 to 6400000000  |
| Units      | kilobps  |
| Options    | max  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **policy-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Scheduler policy name   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">scheduler-policy</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **queue-group-redirect-list** *reference*

|            |  |
|------------|--|
| Synopsis   | Queue group redirect list  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">queue-group-redirect-list</a> <i>reference</i> |
| Tree       | <a href="#">queue-group-redirect-list</a>  |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">queue-group-redirect-list</a> <i>string</i>   |
| Introduced | 16.0.R1  |

Platforms All

### **ip-tunnel** [tunnel-name] *string*

Synopsis Enter the **ip-tunnel** list instance

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ip-tunnel](#) *string*

Tree [ip-tunnel](#)

Max. Instances 1

Introduced 16.0.R1

Platforms All

### [tunnel-name] *string*

Synopsis IP tunnel name

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ip-tunnel](#) *string*

Tree [ip-tunnel](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the IP tunnel

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ip-tunnel](#) *string* [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms All

**backup-remote-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Backup remote IP address that is applied to this tunnel  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>backup-remote-ip-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <b>backup-remote-ip-address</b>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**clear-df-bit** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Clear the Do-not-Fragment bit  |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>clear-df-bit</b> <i>boolean</i>  |
| Tree        | <b>clear-df-bit</b>  |
| Description | When configured to <b>true</b> , the DF bit is cleared (set to 0) in all payload IP packets associated with the GRE or IPsec tunnel, before any potential fragmentation resulting from the ip-mtu command. This requires a modification of the header checksum.<br>When configured to <b>false</b> , clearing of the DF bit is disabled. |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**delivery-service** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | Service to originate and terminate GRE packets   |
| Context  | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>delivery-service</b> <i>string</i> |

|               |   |
|---------------|---|
| Tree          | <a href="#">delivery-service</a>  |
| Description   | This command specifies the service used to originate and terminate the GRE encapsulated packets belonging to the GRE tunnel. The delivery service may be the same service that owns the private tunnel SAP associated with the GRE tunnel.<br>The GRE tunnel does not come up until a valid delivery service is configured. |
| String Length | 1 to 64   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**description string****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**dest-ip [dest-ip-address] (ipv4-address-no-zone | ipv6-address-no-zone)****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Add a list entry for <b>dest-ip</b>   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <a href="#">dest-ip</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <a href="#">dest-ip</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**[dest-ip-address] (ipv4-address-no-zone | ipv6-address-no-zone)**

|          |   |
|----------|---|
| Synopsis | IP address of the remote IP tunnel endpoint |
|----------|---|

|             |  |
|-------------|--|
| Context     | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>dest-ip</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) |
| Tree        | <b>dest-ip</b>   |
| Description | This command configures the IP address of the remote IP tunnel endpoint. If the remote IP address is not within the subnet of the IP interface associated with the tunnel, the tunnel fails to come up.  |
| Notes       | This element is part of a list key.  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **dscp** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Differentiated Services Code Point (DSCP) name  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>dscp</b> <i>keyword</i>   |
| Tree       | <b>dscp</b>   |
| Options    | be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63 |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **encapsulated-ip-mtu** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Maximum size of the encapsulated tunnel packet  |
| Context     | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>encapsulated-ip-mtu</b> <i>number</i> |
| Tree        | <b>encapsulated-ip-mtu</b>  |
| Description | This command specifies the maximum size of the encapsulated tunnel packet for the IP tunnel. If the packet exceeds this value, the system fragments the packet.             |



|            |  |
|------------|--|
| Range      | 512 to 9000                                  |
| Units      | bytes  |
| Introduced | 16.0.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

## gre-header



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enter the <b>gre-header</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string ip-tunnel string gre-header</a> |
| Tree       | <a href="#">gre-header</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## admin-state *keyword*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Administrative state of the GRE header in the tunnel   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string ip-tunnel string gre-header admin-state keyword</a> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## key



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |                              |
|----------|------------------------------|
| Synopsis | Enter the <b>key</b> context |
|----------|------------------------------|

|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">service vprn string interface string sap string ip-tunnel string gre-header key</a> |
| Tree       | <a href="#">key</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **admin-state** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Administrative state of the keys in the GRE header   |
| Context    | <b>configure</b> <a href="#">service vprn string interface string sap string ip-tunnel string gre-header key admin-state keyword</a> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **receive number**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Receive key of the GRE header   |
| Context    | <b>configure</b> <a href="#">service vprn string interface string sap string ip-tunnel string gre-header key receive number</a> |
| Tree       | <a href="#">receive</a>   |
| Max. Range | 0 to 4294967295   |
| Default    | 0   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## send number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Send key of the GRE header   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <a href="#">gre-header</a> <i>key</i> <a href="#">send</a> <i>number</i> |
| Tree       | <a href="#">send</a>   |
| Max. Range | 0 to 4294967295  |
| Default    | 0  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## icmp-generation

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enter the <b>icmp-generation</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <a href="#">icmp-generation</a> |
| Tree       | <a href="#">icmp-generation</a>   |
| Introduced | 21.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## frag-required

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enter the <b>frag-required</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <a href="#">icmp-generation</a> <a href="#">frag-required</a> |
| Tree       | <a href="#">frag-required</a>   |
| Introduced | 21.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Send fragmentation required messages   |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>icmp-generation</b> <b>frag-required</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>   |
| Options    | enable, disable  |
| Introduced | 21.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**interval** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Maximum interval that the ICMP messages can be sent  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>icmp-generation</b> <b>frag-required</b> <b>interval</b> <i>number</i> |
| Tree       | <b>interval</b>  |
| Range      | 1 to 60  |
| Units      | seconds  |
| Default    | 10   |
| Introduced | 21.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**message-count** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |                                      |
|----------|--------------------------------------|
| Synopsis | Maximum number of ICMP messages sent |
|----------|--------------------------------------|

|             |  |
|-------------|--|
| Context     | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>icmp-generation</b> <b>frag-required message-count</b> <i>number</i> |
| Tree        | <b>message-count</b>   |
| Description | This command configures the maximum number of ICMP messages that can be sent during the period specified by the <b>interval</b> command.   |
| Range       | 10 to 1000   |
| Default     | 100  |
| Introduced  | 21.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## icmp6-generation



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enter the <b>icmp6-generation</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>icmp6-generation</b> |
| Tree       | <b>icmp6-generation</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## packet-too-big



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enter the <b>packet-too-big</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>icmp6-generation packet-too-big</b> |
| Tree       | <b>packet-too-big</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Administrative state of sending Packet Too Big messages  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>icmp6-generation</b> <b>packet-too-big</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>   |
| Options    | enable, disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**number** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Maximum number of PTB ICMPv6 messages that can be sent   |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>icmp6-generation</b> <b>packet-too-big</b> <b>number</b> <i>number</i> |
| Tree        | <b>number</b>  |
| Description | This command configures the maximum number of ICMPv6 messages that can be sent during the configured interval.   |
| Range       | 10 to 1000   |
| Default     | 100  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**seconds** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | Maximum interval when PTB messages can be sent |
|----------|--|

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <a href="#">icmp6-generation</a> <a href="#">packet-too-big</a> <a href="#">seconds</a> <i>number</i> |
| Tree       | <a href="#">seconds</a>   |
| Range      | 1 to 60   |
| Units      | seconds   |
| Default    | 10  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **ip-mtu** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | IP MTU for the interface  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <a href="#">ip-mtu</a> <i>number</i>  |
| Tree        | <a href="#">ip-mtu</a>  |
| Description | <p>This command specifies the IP MTU for the interface. If the DF bit is not set in the packet, IP packet fragmentation is performed, if necessary, based on this configured value.</p> <p>When unconfigured, all IP packets, regardless of the packet size or DF bit setting, are allowed into the tunnel without fragmentation.</p> |
| Range       | 512 to 9000   |
| Units       | bytes   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **ipsec-transport-mode-profile** *reference*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | IPsec transport mode profile name   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <a href="#">ipsec-transport-mode-profile</a> <i>reference</i> |
| Tree     | <a href="#">ipsec-transport-mode-profile</a>  |

|            |   |
|------------|---|
| Reference  | <b>configure</b> <a href="#">ipsec ipsec-transport-mode-profile</a> <i>string</i> |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                      |

## local-ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Local IP address of this tunnel  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <a href="#">local-ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )   |
| Tree        | <a href="#">local-ip-address</a>   |
| Description | This command specifies the local IP address to use for the IP tunnel. This configuration applies to the outer IP header of the encapsulated packets. The address must belong to one of the IP subnets associated with the public SAP interface of the tunnel group. The source IP address, the remote IP address, and the backup remote IP address of a tunnel must all belong to the same address family (IPv4 or IPv6).<br><br>When this command specifies an IPv6 address, it must be a global unicast address. |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

## pmtu-discovery-aging *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Time to age out the learned path MTU   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <a href="#">pmtu-discovery-aging</a> <i>number</i> |
| Tree        | <a href="#">pmtu-discovery-aging</a>   |
| Description | This command configures the temporary public MTU expiration time. The temporary public MTU is used for MTU propagation.  |
| Range       | 900 to 3600  |
| Units       | seconds  |
| Default     | 900  |



|            |  |
|------------|--|
| Introduced | 21.5.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **private-tcp-mss-adjust** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | TCP Maximum Segment Size (MSS) on the private side  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <b>private-tcp-mss-adjust</b> <i>number</i> |
| Tree        | <a href="#">private-tcp-mss-adjust</a>  |
| Description | This command specifies the TCP MSS to adjust for tunnels on the private side. The value is used to adjust the TCP MSS option in the TCP SYN packet.   |
| Range       | 512 to 9000   |
| Units       | bytes   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **propagate-pmtu-v4** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enable propagation of the path MTU to IPv4 hosts  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <b>propagate-pmtu-v4</b> <i>boolean</i> |
| Tree       | <a href="#">propagate-pmtu-v4</a>   |
| Introduced | 21.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**propagate-pmtu-v6** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enable propagation of path MTU to IPv6 hosts   |
| Context    | <b>configure</b> <i>service</i> <i>vprn</i> <i>string</i> <i>interface</i> <i>string</i> <i>sap</i> <i>string</i> <i>ip-tunnel</i> <i>string</i> <b>propagate-pmtu-v6</b> <i>boolean</i> |
| Tree       | <a href="#">propagate-pmtu-v6</a>  |
| Introduced | 21.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**public-tcp-mss-adjust** (*number* | *keyword*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | TCP Maximum Segment Size (MSS) on the public side  |
| Context     | <b>configure</b> <i>service</i> <i>vprn</i> <i>string</i> <i>interface</i> <i>string</i> <i>sap</i> <i>string</i> <i>ip-tunnel</i> <i>string</i> <b>public-tcp-mss-adjust</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree        | <a href="#">public-tcp-mss-adjust</a>  |
| Description | This command specifies the TCP MSS for TCP traffic sent from the public network to the private network. The value is used to adjust the TCP MSS option in the TCP SYN packet.                                    |
| Range       | 512 to 9000  |
| Units       | bytes  |
| Options     | auto   |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**reassemble** (*number* | *keyword*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |                              |
|----------|------------------------------|
| Synopsis | Maximum reassembly wait time |
|----------|------------------------------|

|             |  |
|-------------|--|
| Context     | <b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>reassemble</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree        | <b>reassemble</b>  |
| Description | This command configures the maximum time to wait to receive all fragments of a particular IPsec or GRE packet for reassembly.  |
| Range       | 1 to 5000  |
| Units       | milliseconds   |
| Options     | use-tunnel-group-setting, none   |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **remote-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Remote IP address of the tunnel  |
| Context    | <b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>remote-ip-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <b>remote-ip-address</b>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **ipsec-gateway** [**name**] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>ipsec-gateway</b> list instance  |
| Context        | <b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> |
| Tree           | <b>ipsec-gateway</b>  |
| Max. Instances | 1   |
| Introduced     | 16.0.R4   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **[name]** *string*

|          |                    |
|----------|--------------------|
| Synopsis | IPsec gateway name |
|----------|--------------------|

|               |   |
|---------------|---|
| Context       | <b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> |
| Tree          | <b>ipsec-gateway</b>  |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R4   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the IPsec gateway   |
| Context    | <b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **cert**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>cert</b> context   |
| Context    | <b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>cert</b> |
| Tree       | <b>cert</b>   |
| Introduced | 19.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **cert-profile** *reference*

|            |  |
|------------|--|
| Synopsis   | Certificate profile name   |
| Context    | <b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>cert</b> <b>cert-profile</b> <i>reference</i> |
| Tree       | <b>cert-profile</b>  |
| Reference  | <b>configure ipsec</b> <b>cert-profile</b> <i>string</i>   |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## status-verify

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>status-verify</b> context  |
| Context     | <b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>cert status-verify</b> |
| Tree        | <b>status-verify</b>  |
| Description | Commands in this context configure certificate revocation status verification.  |
| Introduced  | 19.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## default-result *keyword*

|             |   |
|-------------|---|
| Synopsis    | Default result of Certificate Status Verification (CSV)   |
| Context     | <b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>cert status-verify default-result</b> <i>keyword</i> |
| Tree        | <b>default-result</b>   |
| Description | This command specifies the default result when both the primary and secondary methods fail to provide an answer.  |
| Options     | revoked, good   |
| Default     | revoked   |
| Introduced  | 19.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## primary *keyword*

|            |  |
|------------|--|
| Synopsis   | Primary method of CSV to verify the revocation status  |
| Context    | <b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>cert status-verify primary</b> <i>keyword</i> |
| Tree       | <b>primary</b>   |
| Options    | crl, ocsp  |
| Default    | crl  |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**secondary** *keyword*

|            |  |
|------------|--|
| Synopsis   | Secondary method of CSV to verify the revocation status  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">cert status-verify</a> <b>secondary</b> <i>keyword</i> |
| Tree       | <a href="#">secondary</a>  |
| Options    | none, crl, ocsp  |
| Default    | none   |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**trust-anchor-profile** *reference*

|            |  |
|------------|--|
| Synopsis   | Trust anchor profile name  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">cert trust-anchor-profile</a> <i>reference</i> |
| Tree       | <a href="#">trust-anchor-profile</a>   |
| Reference  | <b>configure</b> <a href="#">ipsec trust-anchor-profile</a> <i>string</i>  |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**client-db**

|             |  |
|-------------|--|
| Synopsis    | Enable the <b>client-db</b> context  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <b>client-db</b> |
| Tree        | <a href="#">client-db</a>  |
| Description | Commands in this context configure the IPsec client database. The client database is used to authenticate the IKEv2 dynamic LAN-to-LAN tunnel.   |
| Introduced  | 19.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**fallback** *boolean*

|          |  |
|----------|--|
| Synopsis | Fall back to the default authentication policy   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">client-db</a> <b>fallback</b> <i>boolean</i> |
| Tree     | <a href="#">fallback</a>   |

|             |  |
|-------------|--|
| Description | When configured to <b>true</b> , this command specifies whether the IPsec gateway can fall back to the default authentication policy when the IPsec tunnel authentication request fails to match any clients in the IPsec database.<br><br>When configured to <b>false</b> and the client database lookup fails to return a matched result, the system fails the tunnel setup. |
| Default     | true   |
| Introduced  | 19.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### name reference

|            |  |
|------------|--|
| Synopsis   | Client database name   |
| Context    | <b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>client-db</b> <i>name reference</i> |
| Tree       | <b>name</b>  |
| Reference  | <b>configure ipsec client-db</b> <i>string</i>   |
| Notes      | This element is mandatory.   |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### default-secure-service

|            |   |
|------------|---|
| Synopsis   | Enable the <b>default-secure-service</b> context  |
| Context    | <b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>default-secure-service</b> |
| Tree       | <b>default-secure-service</b>   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### interface string



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Private IPsec tunnel interface name   |
| Context  | <b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>default-secure-service interface</b> <i>string</i> |

|               |  |
|---------------|--|
| Tree          | <a href="#">interface</a>                    |
| String Length | 1 to 32                                      |
| Introduced    | 16.0.R4                                      |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **service-name** *string*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Default security service name  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">default-secure-service</a> <a href="#">service-name</a> <i>string</i> |
| Tree          | <a href="#">service-name</a>   |
| String Length | 1 to 64  |
| Introduced    | 16.0.R4  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **default-tunnel-template** *reference*

|            |   |
|------------|---|
| Synopsis   | Default tunnel policy template for the gateway  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">default-tunnel-template</a> <i>reference</i> |
| Tree       | <a href="#">default-tunnel-template</a>   |
| Reference  | <b>configure</b> <a href="#">ipsec</a> <a href="#">tunnel-template</a> <i>number</i>  |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **dhcp-address-assignment**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>dhcp-address-assignment</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">dhcp-address-assignment</a> |
| Tree       | <a href="#">dhcp-address-assignment</a>  |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |



## dhcpv4

|            |  |
|------------|--|
| Synopsis   | Enable the <b>dhcpv4</b> context   |
| Context    | <b>configure</b> <b>service</b> <b>vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>dhcp-address-assignment</b> <b>dhcpv4</b> |
| Tree       | <b>dhcpv4</b>  |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the IPsec DHCPv4 server  |
| Context    | <b>configure</b> <b>service</b> <b>vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>dhcp-address-assignment</b> <b>dhcpv4</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>   |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## gi-address *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Gateway IP address of DHCPv4 packets sent by the system  |
| Context    | <b>configure</b> <b>service</b> <b>vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>dhcp-address-assignment</b> <b>dhcpv4</b> <b>gi-address</b> <i>string</i> |
| Tree       | <b>gi-address</b>  |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**send-release** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Send DHCPv4 release message when IPsec tunnel removed  |
| Context    | <b>configure</b> <i>service vprn string interface string sap string ipsec-gateway string dhcp-address-assignment dhcpv4 send-release boolean</i> |
| Tree       | <i>send-release</i>  |
| Default    | true   |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**server****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enter the <b>server</b> context  |
| Context    | <b>configure</b> <i>service vprn string interface string sap string ipsec-gateway string dhcp-address-assignment dhcpv4 server</i> |
| Tree       | <i>server</i>  |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**address** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | DHCPv4 server addresses   |
| Context     | <b>configure</b> <i>service vprn string interface string sap string ipsec-gateway string dhcp-address-assignment dhcpv4 server address string</i>   |
| Tree        | <i>address</i>  |
| Description | This command specifies DHCPv4 server addresses for the DHCPv4-based address assignment. If multiple server addresses are specified, the first advertised DHCPv4 address received is chosen. |

|                |  |
|----------------|--|
| Max. Instances | 8  |
| Introduced     | 19.7.R1                                      |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### router-instance *string*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Router instance used to reach the DHCPv4 server   |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">dhcp-address-assignment dhcpv4 server router-instance</a> <i>string</i> |
| Tree          | <a href="#">router-instance</a>   |
| String Length | 1 to 64   |
| Introduced    | 19.7.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### dhcpv6

|            |  |
|------------|--|
| Synopsis   | Enable the <b>dhcpv6</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">dhcp-address-assignment dhcpv6</a> |
| Tree       | <a href="#">dhcpv6</a>   |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### admin-state *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the DHCPv6 server   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">dhcp-address-assignment dhcpv6 admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 19.7.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## link-address *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Link address of the relayed DHCPv6 packets

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ipsec-gateway](#) *string* [dhcp-address-assignment dhcpv6 link-address](#) *string*

Tree [link-address](#)

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## send-release *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Send DHCPv6 release message when IPsec tunnel removed

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ipsec-gateway](#) *string* [dhcp-address-assignment dhcpv6 send-release](#) *boolean*

Tree [send-release](#)

Default true

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## server



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **server** context

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ipsec-gateway](#) *string* [dhcp-address-assignment dhcpv6 server](#)

Tree [server](#)

|            |  |
|------------|--|
| Introduced | 19.7.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### address *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|                |   |
|----------------|---|
| Synopsis       | DHCPv6 server addresses   |
| Context        | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">dhcp-address-assignment dhcpv6</a> <a href="#">server address</a> <i>string</i> |
| Tree           | <a href="#">address</a>   |
| Description    | This command specifies DHCPv6 server addresses for the DHCPv6-based address assignment. If multiple server addresses are specified, the first advertised DHCPv6 address received is chosen.   |
| Max. Instances | 8   |
| Introduced     | 19.7.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### router-instance *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Router instance to reach the DHCPv6 server  |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">dhcp-address-assignment dhcpv6</a> <a href="#">server router-instance</a> <i>string</i> |
| Tree          | <a href="#">router-instance</a>   |
| String Length | 1 to 64   |
| Introduced    | 19.7.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### ike-policy *reference*

|          |               |
|----------|---------------|
| Synopsis | IKE policy ID |
|----------|---------------|

|            |  |
|------------|--|
| Context    | <b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>ike-policy</b> <i>reference</i> |
| Tree       | <a href="#">ike-policy</a>   |
| Reference  | <b>configure ipsec</b> <a href="#">ike-policy</a> <i>number</i>  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## local

|            |  |
|------------|--|
| Synopsis   | Enter the <b>local</b> context   |
| Context    | <b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>local</b> |
| Tree       | <a href="#">local</a>  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## address-assignment

|            |  |
|------------|--|
| Synopsis   | Enable the <b>address-assignment</b> context   |
| Context    | <b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>local</b> <b>address-assignment</b> |
| Tree       | <a href="#">address-assignment</a>   |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of local address assignments  |
| Context    | <b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>local</b> <b>address-assignment</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## ipv4

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enable the <b>ipv4</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local</a> <a href="#">address-assignment</a> <a href="#">ipv4</a> |
| Tree       | <a href="#">ipv4</a>   |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## dhcp-server *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Local DHCPv4 server name   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local</a> <a href="#">address-assignment</a> <a href="#">ipv4</a> <a href="#">dhcp-server</a> <i>string</i> |
| Tree          | <a href="#">dhcp-server</a>  |
| String Length | 1 to 32  |
| Notes         | This element is mandatory.   |
| Introduced    | 19.7.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## pool *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Name of the pool defined in the specified DHCPv4 server   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local</a> <a href="#">address-assignment</a> <a href="#">ipv4</a> <a href="#">pool</a> <i>string</i> |
| Tree          | <a href="#">pool</a>  |
| String Length | 1 to 32   |

|            |  |
|------------|--|
| Notes      | This element is mandatory.                   |
| Introduced | 19.7.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### router-instance *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Router instance ID for the local DHCPv4 server  |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local address-assignment ipv4</a> <a href="#">router-instance</a> <i>string</i> |
| Tree          | <a href="#">router-instance</a>   |
| String Length | 1 to 64   |
| Notes         | This element is mandatory.  |
| Introduced    | 19.7.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### secondary-pool *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Name of the secondary pool defined in the DHCPv4 server  |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local address-assignment ipv4</a> <a href="#">secondary-pool</a> <i>string</i> |
| Tree          | <a href="#">secondary-pool</a>   |
| String Length | 1 to 32  |
| Introduced    | 19.7.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |



## ipv6

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enable the <b>ipv6</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local address-assignment ipv6</a> |
| Tree       | <a href="#">ipv6</a>  |
| Introduced | 19.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## dhcp-server *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Local DHCPv6 server name  |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local address-assignment ipv6 dhcp-server</a> <i>string</i> |
| Tree          | <a href="#">dhcp-server</a>   |
| String Length | 1 to 32   |
| Notes         | This element is mandatory.  |
| Introduced    | 19.7.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## pool *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Secondary pool name defined in the DHCPv6 server   |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local address-assignment ipv6 pool</a> <i>string</i> |
| Tree          | <a href="#">pool</a>   |
| String Length | 1 to 32  |

|            |  |
|------------|--|
| Notes      | This element is mandatory.                   |
| Introduced | 19.7.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### router-instance *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Router instance ID hosting the DHCPv6 connection  |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local address-assignment ipv6 router-instance</a> <i>string</i> |
| Tree          | <a href="#">router-instance</a>   |
| String Length | 1 to 64   |
| Notes         | This element is mandatory.  |
| Introduced    | 19.7.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### gateway-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Local gateway address of the IPsec gateway  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local gateway-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <a href="#">gateway-address</a>   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### id

|          |  |
|----------|--|
| Synopsis | Enter the <b>id</b> context  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local id</a> |
| Tree     | <a href="#">id</a>   |

|             |  |
|-------------|--|
| Description | Commands in this context specify the local ID used for the Identification Indicator (IDi) or Identification Responder (IDr) in the IKEv2 tunnel. |
| Introduced  | 16.0.R4  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## auto



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Select ID based on authentication method in IKE policy   |
| Context    | <b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local id</a> <a href="#">auto</a> |
| Tree       | <a href="#">auto</a>   |
| Notes      | The following elements are part of a choice: <b>auto</b> , <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## fqdn string



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | FQDN as the local ID type  |
| Context       | <b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local id</a> <a href="#">fqdn</a> <i>string</i> |
| Tree          | <a href="#">fqdn</a>   |
| String Length | 1 to 255   |
| Notes         | The following elements are part of a choice: <b>auto</b> , <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .  |
| Introduced    | 16.0.R4  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## ipv4 string

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | IPv4 address as the local ID type  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">ipsec-gateway string</a> <a href="#">local id ipv4 string</a> |
| Tree       | <a href="#">ipv4</a>   |
| Notes      | The following elements are part of a choice: <b>auto</b> , <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## ipv6 (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | IPv6 address as the local ID type   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">ipsec-gateway string</a> <a href="#">local id ipv6 (<i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>)</a> |
| Tree       | <a href="#">ipv6</a>  |
| Notes      | The following elements are part of a choice: <b>auto</b> , <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## max-history-key-records

|            |   |
|------------|---|
| Synopsis   | Enter the <b>max-history-key-records</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">ipsec-gateway string</a> <a href="#">max-history-key-records</a> |
| Tree       | <a href="#">max-history-key-records</a>   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**esp number**

|            |  |
|------------|--|
| Synopsis   | Maximum number of recent records   |
| Context    | <b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>max-history-key-records esp</b> <i>number</i> |
| Tree       | <b>esp</b>   |
| Range      | 1 to 48  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**ike number**

|            |  |
|------------|--|
| Synopsis   | Maximum number of historical IKE keys recorded   |
| Context    | <b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>max-history-key-records ike</b> <i>number</i> |
| Tree       | <b>ike</b>   |
| Range      | 1 to 3   |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**pre-shared-key string**

|               |   |
|---------------|---|
| Synopsis      | Pre-shared key for the IPsec gateway  |
| Context       | <b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>pre-shared-key</b> <i>string</i> |
| Tree          | <b>pre-shared-key</b>   |
| String Length | 1 to 115  |
| Introduced    | 16.0.R4   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**radius**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>radius</b> context   |
| Context    | <b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>radius</b> |
| Tree       | <b>radius</b>   |
| Introduced | 19.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### accounting-policy *reference*

|            |   |
|------------|---|
| Synopsis   | RADIUS accounting policy  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">radius accounting-policy</a> <i>reference</i> |
| Tree       | <a href="#">accounting-policy</a>   |
| Reference  | <b>configure</b> <a href="#">ipsec radius accounting-policy</a> <i>string</i>   |
| Introduced | 19.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### authentication-policy *reference*

|            |   |
|------------|---|
| Synopsis   | RADIUS authentication policy  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">radius authentication-policy</a> <i>reference</i> |
| Tree       | <a href="#">authentication-policy</a>   |
| Reference  | <b>configure</b> <a href="#">ipsec radius authentication-policy</a> <i>string</i>   |
| Introduced | 19.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### ts-list *reference*

|            |  |
|------------|--|
| Synopsis   | TS list used for IKEv2 TS negotiation  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">ts-list</a> <i>reference</i> |
| Tree       | <a href="#">ts-list</a>  |
| Reference  | <b>configure</b> <a href="#">ipsec ts-list</a> <i>string</i>   |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### ipsec-tunnel [[name](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipsec-tunnel</b> list instance  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-tunnel</a> <i>string</i> |
| Tree       | <a href="#">ipsec-tunnel</a>   |
| Introduced | 19.7.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### [name] *string*

Synopsis IPsec tunnel name

Context **configure** [service](#) [vpn](#) *string* [interface](#) *string* [sap](#) *string* [ipsec-tunnel](#) *string*

Tree [ipsec-tunnel](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### admin-state *keyword*

Synopsis Administrative state of the IPsec tunnel

Context **configure** [service](#) [vpn](#) *string* [interface](#) *string* [sap](#) *string* [ipsec-tunnel](#) *string* [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### bfd



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **bfd** context

Context **configure** [service](#) [vpn](#) *string* [interface](#) *string* [sap](#) *string* [ipsec-tunnel](#) *string* [bfd](#)

Tree [bfd](#)

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**bfd-designate** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Designate IPsec tunnel to carry BFD traffic   |
| Context    | <b>configure</b> <i>service vprn string interface string sap string ipsec-tunnel string bfd bfd-designate boolean</i> |
| Tree       | <i>bfd-designate</i>  |
| Default    | false   |
| Introduced | 19.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**bfd-liveness****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Enable the <b>bfd-liveness</b> context  |
| Context     | <b>configure</b> <i>service vprn string interface string sap string ipsec-tunnel string bfd bfd-liveness</i>  |
| Tree        | <i>bfd-liveness</i>   |
| Description | <p>Commands in this context configure a BFD session to provide a heart-beat mechanism for a specified IPsec tunnel. There can be only one BFD session assigned to any given IPsec tunnel, but there can be multiple IPsec tunnels using the same BFD session.</p> <p>BFD controls the state of the association tunnel. If the BFD session goes down, the system brings down the associated non-designated IPsec tunnel.</p> |
| Introduced  | 19.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**dest-ip** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | Destination address used for the BFD session |
|----------|--|



|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>bfd bfd-liveness dest-ip</b> <i>string</i> |
| Tree       | <b>dest-ip</b>  |
| Notes      | This element is mandatory.  |
| Introduced | 19.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **interface** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Name of the interface used by the BFD session   |
| Context       | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>bfd bfd-liveness interface</b> <i>string</i> |
| Tree          | <b>interface</b>  |
| String Length | 1 to 32   |
| Notes         | This element is mandatory.  |
| Introduced    | 19.7.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **service-name** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Administrative service name  |
| Context       | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>bfd bfd-liveness service-name</b> <i>string</i> |
| Tree          | <b>service-name</b>  |
| Description   | This command configures the name of the service where BFD traffic is forwarded to.   |
| String Length | 1 to 64  |
| Notes         | This element is mandatory.   |
| Introduced    | 19.7.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**clear-df-bit** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Reset the DF bit to 0 in all payload IP packets  |
| Context     | <b>configure</b> <b>service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>clear-df-bit</b> <i>boolean</i> |
| Tree        | <b>clear-df-bit</b>  |
| Description | When configured to <b>true</b> , the DF bit is set to 0 in all payload IP packets associated with the IPsec tunnel, before any potential fragmentation occurs.                 |
| Default     | false  |
| Introduced  | 19.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**copy-traffic-class-upon-decapsulation** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Enable traffic class copy upon decapsulation  |
| Context     | <b>configure</b> <b>service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>copy-traffic-class-upon-decapsulation</b> <i>boolean</i> |
| Tree        | <b>copy-traffic-class-upon-decapsulation</b>  |
| Description | When configured to <b>true</b> , the system copies the traffic class from the outer tunnel IP packet header to the payload IP packet header in the decapsulating direction (public to private).         |
| Default     | false   |
| Introduced  | 21.5.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**description** *string*

|          |  |
|----------|--|
| Synopsis | Text description   |
| Context  | <b>configure</b> <b>service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>description</b> <i>string</i> |

|               |  |
|---------------|--|
| Tree          | <a href="#">description</a>                  |
| String Length | 1 to 80                                      |
| Introduced    | 19.7.R1                                      |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **dest-ip** [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|                |  |
|----------------|--|
| Synopsis       | Add a list entry for <b>dest-ip</b>  |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-tunnel</a> <i>string</i> <b>dest-ip</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree           | <a href="#">dest-ip</a>  |
| Max. Instances | 16   |
| Introduced     | 19.7.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **[address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

|            |  |
|------------|--|
| Synopsis   | Private IP address of the remote IP tunnel endpoint  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-tunnel</a> <i>string</i> <b>dest-ip</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <a href="#">dest-ip</a>  |
| Notes      | This element is part of a list key.  |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **encapsulated-ip-mtu** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | Maximum size of the encapsulated tunnel packet |
|----------|--|

|             |   |
|-------------|---|
| Context     | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>encapsulated-ip-mtu</b> <i>number</i>  |
| Tree        | <b>encapsulated-ip-mtu</b>  |
| Description | This command specifies the maximum size of the encapsulated tunnel packet to the IPsec tunnel, the IP tunnel, or the dynamic tunnels terminated on the IPsec Gateway. If the encapsulated IPv4 or IPv6 tunnel packet exceeds this value, the system fragments the packet. |
| Range       | 512 to 9000   |
| Units       | bytes   |
| Introduced  | 19.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## icmp-generation



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>icmp-generation</b> context   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>icmp-generation</b> |
| Tree        | <b>icmp-generation</b>   |
| Description | Commands in this context configure settings for ICMPv4 message generation.   |
| Introduced  | 21.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## frag-required



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>frag-required</b> context   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>icmp-generation frag-required</b> |
| Tree        | <b>frag-required</b>   |
| Description | Commands in this context configure the attributes for sending generated ICMP Destination Unreachable "fragmentation needed and DF set" messages (type 3, code 4)           |

back to the source, if the received size of the IPv4 packet on the private side exceeds the private MTU size.

|            |  |
|------------|--|
| Introduced | 21.5.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **admin-state** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Administrative state of sending ICMP messages  |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>icmp-generation</b> <b>frag-required</b> <b>admin-state</b> <i>keyword</i>                                  |
| Tree        | <b>admin-state</b>   |
| Description | This command configures the administrative state of sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) messages to the source if the received size of the IPv4 packet on the private side exceeds the private MTU size. |
| Options     | enable, disable  |
| Default     | enable   |
| Introduced  | 21.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **interval** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Interval for sending ICMP messages  |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>icmp-generation</b> <b>frag-required</b> <b>interval</b> <i>number</i> |
| Tree        | <b>interval</b>   |
| Description | This command configures the interval for sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4).   |
| Range       | 1 to 60   |
| Units       | seconds   |
| Default     | 10  |

|            |  |
|------------|--|
| Introduced | 21.5.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

## message-count *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Maximum number of ICMP messages that can be sent   |
| Context     | <b>configure</b> <b>service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>icmp-generation frag-required</b> <b>message-count</b> <i>number</i> |
| Tree        | <b>message-count</b>   |
| Description | This command configures the maximum number of ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) that can be sent during the configured interval.                                 |
| Range       | 10 to 1000   |
| Default     | 100  |
| Introduced  | 21.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## icmp6-generation



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>icmp6-generation</b> context  |
| Context     | <b>configure</b> <b>service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>icmp6-generation</b> |
| Tree        | <b>icmp6-generation</b>  |
| Description | Commands in this context configure settings for ICMPv6 message generation.   |
| Introduced  | 19.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## packet-too-big



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>packet-too-big</b> context   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>icmp6-generation</b> <b>packet-too-big</b>   |
| Tree        | <b>packet-too-big</b>   |
| Description | <p>Commands in this context configure the parameters to send ICMPv6 PTB (Packet Too Big) messages on the private side.</p> <p>The system sends PTB messages if a received IPv6 packet on the private side is greater than 1280 bytes and it exceeds the private MTU of the tunnel.</p> <p>The private MTU for the tunnel is configured via the <b>configure router interface ipsec ipsec-tunnel ip-mtu</b> command for the interface.</p> |
| Introduced  | 19.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## admin-state *keyword*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Administrative state of Packet Too Big message sends  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>icmp6-generation</b> <b>packet-too-big</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 19.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## interval *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Interval for sending Packet Too Big messages  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>icmp6-generation</b> <b>packet-too-big</b> <b>interval</b> <i>number</i> |
| Tree       | <b>interval</b>   |
| Range      | 1 to 60   |
| Units      | seconds   |
| Default    | 10  |
| Introduced | 19.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **message-count** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Maximum number of ICMPv6 PTB messages that can be sent   |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>icmp6-generation</b> <b>packet-too-big</b> <b>message-count</b> <i>number</i> |
| Tree        | <b>message-count</b>   |
| Description | This command configures the maximum number of PTB messages that can be sent during the configured interval.  |
| Range       | 10 to 1000   |
| Default     | 100  |
| Introduced  | 19.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **ip-mtu** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Private MTU of the IPsec tunnel   |
| Context  | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>ip-mtu</b> <i>number</i> |
| Tree     | <b>ip-mtu</b>   |



|             |   |
|-------------|---|
| Description | This command specifies the private MTU of the IPsec tunnel. The private MTU is used to determine the need for fragmentation before encapsulation of the payload packet. |
| Range       | 512 to 9000   |
| Units       | bytes   |
| Introduced  | 19.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## key-exchange



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enter the <b>key-exchange</b> context  |
| Context    | <b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>key-exchange</b> |
| Tree       | <b>key-exchange</b>  |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## dynamic



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enable the <b>dynamic</b> context  |
| Context    | <b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>key-exchange dynamic</b> |
| Tree       | <b>dynamic</b>   |
| Notes      | The following elements are part of a choice: <b>dynamic</b> or <b>manual</b> .   |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**auto-establish** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Attempt to establish a phase 1 exchange automatically   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic auto-establish</a> <i>boolean</i> |
| Tree       | <a href="#">auto-establish</a>  |
| Default    | false   |
| Introduced | 19.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**cert****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>cert</b> context  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic cert</a> |
| Tree        | <a href="#">cert</a>   |
| Description | Commands in this context configure the attributes of the dynamic keying certificate.   |
| Introduced  | 19.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**cert-profile** *reference*

|            |  |
|------------|--|
| Synopsis   | Certificate profile name   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic cert cert-profile</a> <i>reference</i> |
| Tree       | <a href="#">cert-profile</a>   |
| Reference  | <b>configure</b> <a href="#">ipsec cert-profile</a> <i>string</i>  |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## status-verify

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>status-verify</b> context   |
| Context     | <b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic cert</a> <b>status-verify</b> |
| Tree        | <a href="#">status-verify</a>  |
| Description | Commands in this context configure attributes of Certificate Status Verification (CSV).  |
| Introduced  | 19.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## default-result *keyword*

|             |   |
|-------------|---|
| Synopsis    | Default result for Certificate Status Verification  |
| Context     | <b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic cert</a> <b>status-verify</b> <b>default-result</b> <i>keyword</i> |
| Tree        | <a href="#">default-result</a>  |
| Description | This command specifies the default certificate revocation status result to use when all configured CSV methods fail to return a result.   |
| Options     | revoked, good   |
| Default     | revoked   |
| Introduced  | 19.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## primary *keyword*

|             |  |
|-------------|--|
| Synopsis    | Primary method of CSV to verify the revocation status  |
| Context     | <b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic cert</a> <b>status-verify</b> <b>primary</b> <i>keyword</i> |
| Tree        | <a href="#">primary</a>  |
| Description | This command configures the primary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the certificate of the peer.   |
| Options     | crl, ocsp  |
| Default     | crl  |

|            |  |
|------------|--|
| Introduced | 19.7.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **secondary** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Secondary method used to verify certificate revocation  |
| Context     | <b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic cert status-verify</a> <b>secondary</b> <i>keyword</i> |
| Tree        | <a href="#">secondary</a>   |
| Description | This command specifies the secondary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the peer certificate.  |
| Options     | none, <a href="#">crl</a> , <a href="#">ocsp</a>  |
| Default     | none  |
| Introduced  | 19.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **trust-anchor-profile** *reference*

|            |  |
|------------|--|
| Synopsis   | Trust anchor profile name  |
| Context    | <b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic cert</a> <b>trust-anchor-profile</b> <i>reference</i> |
| Tree       | <a href="#">trust-anchor-profile</a>   |
| Reference  | <b>configure</b> <a href="#">ipsec</a> <b>trust-anchor-profile</b> <i>string</i>   |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **id**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>id</b> context  |
| Context     | <b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <b>dynamic id</b> |
| Tree        | <a href="#">id</a>   |
| Description | Commands in this context specify the local ID used for IDi or IDr for IKEv2 negotiation.   |

The default behavior depends on the local authentication method as follows:

- Psk: local tunnel IP address
- Cert-auth: subject of the local certificate

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## fqdn string



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis FQDN used as the local ID IKE type

Context **configure** service vpn string interface string sap string ipsec-tunnel string key-exchange dynamic id fqdn string

Tree fqdn

String Length 1 to 255

Notes The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ipv4 string



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis IPv4 as the local ID type

Context **configure** service vpn string interface string sap string ipsec-tunnel string key-exchange dynamic id ipv4 string

Tree ipv4

Notes The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ipv6** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | IPv6 used as the local IKE ID type   |
| Context    | <b>configure</b> <i>service vprn string interface string sap string ipsec-tunnel string key-exchange dynamic id ipv6 (ipv4-address-no-zone   ipv6-address-no-zone)</i> |
| Tree       | <a href="#">ipv6</a>   |
| Notes      | The following elements are part of a choice: <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .  |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**ike-policy** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | IKE policy ID   |
| Context     | <b>configure</b> <i>service vprn string interface string sap string ipsec-tunnel string key-exchange dynamic ike-policy reference</i>                   |
| Tree        | <a href="#">ike-policy</a>  |
| Description | This command specifies the ID of the IKE policy used for IKE negotiation.<br>The <b>ipsec-transport-mode-profile</b> configuration only supports IKEv2. |
| Reference   | <b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i>   |
| Introduced  | 19.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**ipsec-transform** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | IPsec transform IDs used by the dynamic key  |
| Context  | <b>configure</b> <i>service vprn string interface string sap string ipsec-tunnel string key-exchange dynamic ipsec-transform reference</i> |

|                |   |
|----------------|---|
| Tree           | <a href="#">ipsec-transform</a>   |
| Description    | This command specifies IPsec transform IDs used for CHILD_SA negotiation. |
| Reference      | <b>configure</b> <a href="#">ipsec ipsec-transform</a> <i>number</i>      |
| Max. Instances | 4   |
| Introduced     | 19.7.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                              |

### pre-shared-key *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Pre-shared key for authentication   |
| Context       | <b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange dynamic pre-shared-key</a> <i>string</i> |
| Tree          | <a href="#">pre-shared-key</a>  |
| String Length | 1 to 115  |
| Introduced    | 19.7.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### manual



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enable the <b>manual</b> context  |
| Context    | <b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange manual</a> |
| Tree       | <a href="#">manual</a>  |
| Notes      | The following elements are part of a choice: <b>dynamic</b> or <b>manual</b> .  |
| Introduced | 19.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**keys** [[security-association](#)] *number direction keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>keys</b> list instance   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">manual</a> <a href="#">keys</a> <i>number</i> <a href="#">direction</a> <i>keyword</i> |
| Tree        | <a href="#">keys</a>  |
| Description | Commands in this context configure the security association list for the tunnel.  |
| Introduced  | 19.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**[security-association]** *number*

|            |   |
|------------|---|
| Synopsis   | SA entry ID   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">manual</a> <a href="#">keys</a> <i>number</i> <a href="#">direction</a> <i>keyword</i> |
| Tree       | <a href="#">keys</a>  |
| Range      | 1 to 16   |
| Notes      | This element is part of a list key.   |
| Introduced | 19.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**direction** *keyword*

|            |   |
|------------|---|
| Synopsis   | Direction of the IPsec tunnel   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">manual</a> <a href="#">keys</a> <i>number</i> <a href="#">direction</a> <i>keyword</i> |
| Tree       | <a href="#">keys</a>  |
| Options    | inbound, outbound   |
| Notes      | This element is part of a list key.   |
| Introduced | 19.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |



## authentication-key *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Key used for the authentication algorithm  |
| Context       | <b>configure</b> <b>service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>key-exchange</b> <b>manual</b> <b>keys</b> <i>number</i> <b>direction</b> <i>keyword</i> <b>authentication-key</b> <i>string</i> |
| Tree          | <b>authentication-key</b>  |
| String Length | 1 to 130   |
| Introduced    | 19.7.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## encryption-key *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Key used for the encryption algorithm  |
| Context       | <b>configure</b> <b>service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>key-exchange</b> <b>manual</b> <b>keys</b> <i>number</i> <b>direction</b> <i>keyword</i> <b>encryption-key</b> <i>string</i> |
| Tree          | <b>encryption-key</b>  |
| String Length | 1 to 66  |
| Introduced    | 19.7.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**ipsec-transform** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Transform entry used by manual SAs  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">manual</a> <a href="#">keys</a> <i>number</i> <a href="#">direction</a> <i>keyword</i> <a href="#">ipsec-transform</a> <i>reference</i> |
| Tree       | <a href="#">ipsec-transform</a>   |
| Reference  | <b>configure</b> <a href="#">ipsec</a> <a href="#">ipsec-transform</a> <i>number</i>  |
| Notes      | This element is mandatory.  |
| Introduced | 19.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**spi** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | SPI of inbound and outbound packets   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">manual</a> <a href="#">keys</a> <i>number</i> <a href="#">direction</a> <i>keyword</i> <a href="#">spi</a> <i>number</i>            |
| Tree        | <a href="#">spi</a>   |
| Description | <p>This command specifies the Security Parameter Index (SPI) used to look up the instruction to verify and decrypt the incoming IPsec packets when the direction is inbound. When the direction is outbound, the SPI is used in the encoding of the outgoing packets.</p> <p>The remote node can use the SPI to look up the instruction to verify and decrypt the packet.</p> |
| Range       | 256 to 16383  |

|            |  |
|------------|--|
| Notes      | This element is mandatory.                   |
| Introduced | 19.7.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

## max-history-key-records



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>max-history-key-records</b> context  |
| Context     | <b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">max-history-key-records</a> |
| Tree        | <a href="#">max-history-key-records</a>   |
| Description | Commands in this context configure the settings for recording historical IPsec keys.  |
| Introduced  | 19.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## esp number



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Maximum number of recent records  |
| Context    | <b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">max-history-key-records</a> <a href="#">esp</a> <i>number</i> |
| Tree       | <a href="#">esp</a>   |
| Range      | 1 to 48   |
| Introduced | 19.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## ike number



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Maximum number of historical IKE key records  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>max-history-key-records</b> <b>ike</b> <i>number</i> |
| Tree       | <b>ike</b>  |
| Range      | 1 to 3  |
| Introduced | 19.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **pmtu-discovery-aging** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Aging out time of the learned path MTU  |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>pmtu-discovery-aging</b> <i>number</i> |
| Tree        | <b>pmtu-discovery-aging</b>   |
| Description | This command configures the temporary public and private MTU expiration time. The temporary MTU is used for MTU propagation.  |
| Range       | 900 to 3600   |
| Units       | seconds   |
| Default     | 900   |
| Introduced  | 21.5.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **private-tcp-mss-adjust** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | TCP maximum segment size (MSS) adjustment   |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>private-tcp-mss-adjust</b> <i>number</i> |
| Tree        | <b>private-tcp-mss-adjust</b>   |
| Description | This command specifies the TCP MSS to adjust for the tunnel on the private side.  |

When configured, the system may use the value to update the MSS option in the received TCP SYN packet on the private side.

|            |  |
|------------|--|
| Range      | 512 to 9000                                  |
| Units      | bytes  |
| Introduced | 19.7.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **propagate-pmtu-v4** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Enable propagation of the path MTU to IPv4 hosts  |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>propagate-pmtu-v4</b> <i>boolean</i> |
| Tree        | <b>propagate-pmtu-v4</b>  |
| Description | When configured to <b>true</b> , the system propagates the path MTU learned from the public side to the private side (IPv4 hosts).  |
| Default     | true  |
| Introduced  | 21.5.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **propagate-pmtu-v6** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Enable propagation of the path MTU to IPv6 hosts  |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>propagate-pmtu-v6</b> <i>boolean</i> |
| Tree        | <b>propagate-pmtu-v6</b>  |
| Description | When configured to <b>true</b> , the system propagates the path MTU learned from the public side to the private side (IPv6 hosts).  |
| Default     | true  |
| Introduced  | 21.5.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**public-tcp-mss-adjust** (*number* | *keyword*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | TCP maximum segment size (MSS) on the public network  |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>public-tcp-mss-adjust</b> ( <i>number</i>   <i>keyword</i> )         |
| Tree        | <b>public-tcp-mss-adjust</b>  |
| Description | This command configures the MSS for the TCP traffic in an IPsec tunnel that is sent from the public network to the private network. The system may use this value to adjust or insert the MSS option in the TCP SYN packet. |
| Range       | 512 to 9000   |
| Units       | bytes   |
| Options     | auto  |
| Introduced  | 19.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**replay-window** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Anti-replay window size  |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>replay-window</b> <i>number</i> |
| Tree        | <b>replay-window</b>   |
| Description | This command specifies the size of an IPsec anti-replay window. If unconfigured, IPsec anti-replay is disabled.  |
| Range       | 32   64   128   256   512  |
| Units       | packets  |
| Introduced  | 19.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## security-policy



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enter the <b>security-policy</b> context  |
| Context    | <b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>security-policy</b> |
| Tree       | <b>security-policy</b>  |
| Introduced | 19.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## id reference



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | IPsec security policy ID   |
| Context    | <b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>security-policy id reference</b> |
| Tree       | <b>id</b>  |
| Reference  | <b>configure service vpn</b> <i>string</i> <b>ipsec security-policy</b> <i>number</i>  |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## strict-match *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Enable strict match of the security policy entry   |
| Context     | <b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>security-policy strict-match</b> <i>boolean</i>  |
| Tree        | <b>strict-match</b>  |
| Description | When configured to <b>true</b> , this command enables strict match of the security policy entry.<br>When a CREATE_CHILD exchange request is received for a static IPsec tunnel, and this request is not a rekey request, ISA matches the received TSi and TSr with the |

configured security policy. This can be a match only when a received TS (in TSi or TSr) address range matches exactly with the subnet in a security policy entry.

If there is no match, the setup fails, and TS\_UNACCEPTABLE is sent.

If there is a match, but there is an existing CHILD\_SA for the matched security policy, the setup fails, and NO\_PROPOSAL\_CHOSEN is sent.

If there is a match, and there is not a CHILD\_SA for the matched entry, the subnet is sent in the matched security policy entry as TSi and TSr, and the CHILD\_SA is created.

|            |  |
|------------|--|
| Default    | false  |
| Introduced | 19.7.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

## tunnel-endpoint



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enable the <b>tunnel-endpoint</b> context  |
| Context    | <b>configure</b> <b>service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>tunnel-endpoint</b> |
| Tree       | <b>tunnel-endpoint</b>   |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## delivery-service *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Delivery service name  |
| Context       | <b>configure</b> <b>service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>tunnel-endpoint</b> <b>delivery-service</b> <i>string</i> |
| Tree          | <b>delivery-service</b>  |
| String Length | 1 to 64  |
| Notes         | This element is mandatory.   |
| Introduced    | 19.7.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |



**local-gateway-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Address used for tunnel of the remote security gateway  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>tunnel-endpoint</b> <b>local-gateway-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <b>local-gateway-address</b>  |
| Notes      | This element is mandatory.  |
| Introduced | 19.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**remote-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Remote IP address of this tunnel.   |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>tunnel-endpoint</b> <b>remote-ip-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <b>remote-ip-address</b>  |
| Notes      | This element is mandatory.  |
| Introduced | 19.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**lag**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>lag</b> context   |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>lag</b> |
| Tree       | <b>lag</b>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**link-map-profile** *number*

|             |  |
|-------------|--|
| Synopsis    | LAG link map profile for a SAP or network interface  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">lag</a> <a href="#">link-map-profile</a> <i>number</i>   |
| Tree        | <a href="#">link-map-profile</a>   |
| Description | This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration.<br><br>If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing. |
| Range       | 1 to 64  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**per-link-hash**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>per-link-hash</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">lag</a> <a href="#">per-link-hash</a> |
| Tree       | <a href="#">per-link-hash</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**class** *number*

|            |   |
|------------|---|
| Synopsis   | Class used on LAG egress using weighted per-link-hash   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">lag</a> <a href="#">per-link-hash</a> <a href="#">class</a> <i>number</i> |
| Tree       | <a href="#">class</a>   |
| Range      | 1 to 3  |
| Default    | 1   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**weight** *number*

|          |  |
|----------|--|
| Synopsis | Weight used on LAG egress using weighted per-link-hash   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">lag</a> <a href="#">per-link-hash</a> <a href="#">weight</a> <i>number</i> |

|            |                        |
|------------|------------------------|
| Tree       | <a href="#">weight</a> |
| Range      | 1 to 1024              |
| Default    | 1                      |
| Introduced | 16.0.R1                |
| Platforms  | All                    |

### **multi-service-site** *reference*

|            |   |
|------------|---|
| Synopsis   | Multi service site name   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">multi-service-site</a> <i>reference</i> |
| Tree       | <a href="#">multi-service-site</a>  |
| Reference  | <b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **static-host**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>static-host</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> |
| Tree       | <a href="#">static-host</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ipv4** [[ip](#)] *string* [mac](#) *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv4</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> |
| Tree       | <a href="#">ipv4</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **[ip]** *string*

|          |  |
|----------|--|
| Synopsis | IP address   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> |

|            |   |
|------------|---|
| Tree       | <a href="#">ipv4</a>                                    |
| Notes      | This element is part of a list key.                     |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

**mac string**

|            |  |
|------------|--|
| Synopsis   | MAC address  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> |
| Tree       | <a href="#">ipv4</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state keyword**

|            |   |
|------------|---|
| Synopsis   | Administrative state of the static host   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**ancp-string string**

|               |  |
|---------------|--|
| Synopsis      | ANCP string  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">ancp-string</a> <i>string</i> |
| Tree          | <a href="#">ancp-string</a>  |
| String Length | 1 to 63  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## app-profile

|            |  |
|------------|--|
| Synopsis   | Enter the <b>app-profile</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">app-profile</a> |
| Tree       | <a href="#">app-profile</a>  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## profile reference

|            |  |
|------------|--|
| Synopsis   | Application profile used by the static host  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">app-profile</a> <a href="#">profile reference</a> |
| Tree       | <a href="#">profile</a>  |
| Reference  | <b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i>  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## int-dest-id *string*

|               |  |
|---------------|--|
| Synopsis      | Intermediate destination ID  |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">int-dest-id</a> <i>string</i> |
| Tree          | <a href="#">int-dest-id</a>  |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## sla-profile reference

|            |   |
|------------|---|
| Synopsis   | SLA profile name  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">sla-profile</a> <i>reference</i> |
| Tree       | <a href="#">sla-profile</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i>  |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### sub-profile *reference*

Synopsis Sub-profile name

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [static-host ipv4](#) *string* [mac](#) *string* [sub-profile](#) *reference*

Tree [sub-profile](#)

Reference **configure** [subscriber-mgmt sub-profile](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### subscriber-id

Synopsis Enter the **subscriber-id** context

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [static-host ipv4](#) *string* [mac](#) *string* [subscriber-id](#)

Tree [subscriber-id](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### string *string*

Synopsis Subscriber identification

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [static-host ipv4](#) *string* [mac](#) *string* [subscriber-id](#) *string* *string*

Tree [string](#)

String Length 1 to 64

Notes The following elements are part of a choice: **string** or **use-sap-id**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### use-sap-id

Synopsis Use the SAP id as subscriber ID

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>subscriber-id use-sap-id</b> |
| Tree       | <b>use-sap-id</b>  |
| Notes      | The following elements are part of a choice: <b>string</b> or <b>use-sap-id</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## transit-policy

|            |   |
|------------|---|
| Synopsis   | Enable the <b>transit-policy</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>transit-policy</b> |
| Tree       | <b>transit-policy</b>   |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## ip reference



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | IP transit policy ID   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>transit-policy ip reference</b> |
| Tree       | <b>ip</b>  |
| Reference  | <b>configure application-assurance group</b> <i>number</i> <b>partition</b> <i>number</i> <b>transit-ip-policy</b> <i>number</i>       |
| Notes      | The following elements are part of a mandatory choice: <b>ip</b> or <b>prefix</b> .  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## prefix reference



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |                     |
|----------|---------------------|
| Synopsis | IP prefix policy ID |
|----------|---------------------|

|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">transit-policy</a> <a href="#">prefix</a> <i>reference</i> |
| Tree       | <a href="#">prefix</a>   |
| Reference  | <b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-prefix-policy</a> <i>number</i>                                       |
| Notes      | The following elements are part of a mandatory choice: <b>ip</b> or <b>prefix</b> .  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **shcv-policy-ipv4** *reference*

|            |   |
|------------|---|
| Synopsis   | Host connectivity IPv4 policy   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">shcv-policy-ipv4</a> <i>reference</i> |
| Tree       | <a href="#">shcv-policy-ipv4</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">shcv-policy</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **spoke-sdp** [[sdp-bind-id](#)] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>spoke-sdp</b> list instance  |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> |
| Tree           | <a href="#">spoke-sdp</a>   |
| Max. Instances | 1   |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

### [[sdp-bind-id](#)] *string*

|               |   |
|---------------|---|
| Synopsis      | SDP binding ID  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> |
| Tree          | <a href="#">spoke-sdp</a>   |
| String Length | 3 to 16   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |



Platforms All

## aarp

Synopsis Enable the **aarp** context

Context **configure** [service vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* **aarp**

Tree [aarp](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## id reference

Synopsis AARP instance ID

Context **configure** [service vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [aarp id reference](#)

Tree [id](#)

Reference **configure** [application-assurance aarp](#) *number*

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## type keyword

Synopsis Role referenced by the AARP

Context **configure** [service vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [aarp type keyword](#)

Tree [type](#)

Options dual-homed, dual-homed-secondary

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## accounting-policy reference

Synopsis Policy to collect accounting statistics

Context **configure** [service vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [accounting-policy reference](#)

Tree [accounting-policy](#)

Reference **configure** [log accounting-policy](#) *number*

Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the SDP binding to the service  
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [admin-state](#) *keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 16.0.R1  
 Platforms All

### **app-profile** *reference*

Synopsis Application profile name for this SDP  
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [app-profile](#) *reference*  
 Tree [app-profile](#)  
 Reference **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-profile](#) *string*  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **bfd**

Synopsis Enter the **bfd** context  
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [bfd](#)  
 Tree [bfd](#)  
 Introduced 21.2.R1  
 Platforms All

### **bfd-liveness**

Synopsis Enable the **bfd-liveness** context  
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [bfd](#) [bfd-liveness](#)  
 Tree [bfd-liveness](#)

|            |         |
|------------|---------|
| Introduced | 21.2.R1 |
| Platforms  | All     |

### **encap** *keyword*

|            |  |
|------------|--|
| Synopsis   | BFD encapsulation used on the SDP binding  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">bfd bfd-liveness</a> <b>encap</b> <i>keyword</i> |
| Tree       | <a href="#">encap</a>  |
| Options    | ipv4   |
| Default    | ipv4   |
| Introduced | 21.2.R1  |
| Platforms  | All  |

### **bfd-template** *reference*

|             |   |
|-------------|---|
| Synopsis    | BFD template associated with the SDP binding  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">bfd bfd-template</a> <i>reference</i>   |
| Tree        | <a href="#">bfd-template</a>  |
| Description | This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the <b>configure router bfd</b> context. |
| Reference   | <b>configure</b> <a href="#">bfd bfd-template</a> <i>string</i>   |
| Introduced  | 21.2.R1   |
| Platforms   | All   |

### **failure-action** *keyword*

|             |   |
|-------------|---|
| Synopsis    | VCCV BFD action taken on the SDP binding  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">bfd failure-action</a> <i>keyword</i>   |
| Tree        | <a href="#">failure-action</a>  |
| Description | This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the <b>configure router bfd</b> context. |

|            |            |
|------------|------------|
| Options    | none, down |
| Default    | none       |
| Introduced | 21.2.R1    |
| Platforms  | All        |

### **wait-for-up-timer** *number*

|             |  |
|-------------|--|
| Synopsis    | Time waited for BFD up status  |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>bfd</b> <b>wait-for-up-timer</b> <i>number</i>  |
| Tree        | <b>wait-for-up-timer</b>   |
| Description | This command configures the time interval that is used to wait for a BFD session to come up.<br><br>This command is triggered when a spoke-SDP is first administratively enabled and a VCCV BFD session transitions from up to down. The command is required to allow time for BFD sessions to come up, and for BFD to settle before selecting the active spoke-SDP for use in a redundant set. In the case where a VCCV BFD session is bouncing, the timer prevents excessive flapping of the operational state of a spoke-SDP. |
| Range       | 1 to 60  |
| Units       | seconds  |
| Introduced  | 21.2.R1  |
| Platforms   | All  |

### **collect-stats** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow agent to collect accounting statistics  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>collect-stats</b> <i>boolean</i> |
| Tree       | <b>collect-stats</b>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **control-word** *boolean*

|          |  |
|----------|--|
| Synopsis | Use the control word as preferred  |
| Context  | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>control-word</b> <i>boolean</i> |
| Tree     | <b>control-word</b>  |

|            |  |
|------------|--|
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

## cpu-protection

|            |   |
|------------|---|
| Synopsis   | Enter the <b>cpu-protection</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">spoke-sdp string</a> <a href="#">cpu-protection</a> |
| Tree       | <a href="#">cpu-protection</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS   |

## eth-cfm-monitoring

|            |  |
|------------|--|
| Synopsis   | Enable the <b>eth-cfm-monitoring</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">spoke-sdp string</a> <a href="#">cpu-protection</a> <a href="#">eth-cfm-monitoring</a> |
| Tree       | <a href="#">eth-cfm-monitoring</a>   |
| Notes      | The following elements are part of a choice: <b>eth-cfm-monitoring</b> , <b>ip-src-monitoring</b> , or <b>mac-monitoring</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS  |

## aggregate

|            |  |
|------------|--|
| Synopsis   | Apply rate limit to the sum of the per peer packet rates   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">spoke-sdp string</a> <a href="#">cpu-protection</a> <a href="#">eth-cfm-monitoring</a> <a href="#">aggregate</a> |
| Tree       | <a href="#">aggregate</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS  |

## car

|          |   |
|----------|---|
| Synopsis | Ignore Ethernet CFM packets when enforcing overall rate |
|----------|---|

|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">cpu-protection eth-cfm-monitoring</a> <i>car</i> |
| Tree       | <a href="#">car</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS  |

## ip-src-monitoring

|            |  |
|------------|--|
| Synopsis   | Enable IP source monitoring for CPU protection   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">cpu-protection ip-src-monitoring</a> |
| Tree       | <a href="#">ip-src-monitoring</a>  |
| Notes      | The following elements are part of a choice: <b>eth-cfm-monitoring</b> , <b>ip-src-monitoring</b> , or <b>mac-monitoring</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS  |

## mac-monitoring

|            |   |
|------------|---|
| Synopsis   | Monitor MAC for CPU protection  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">cpu-protection mac-monitoring</a> |
| Tree       | <a href="#">mac-monitoring</a>  |
| Notes      | The following elements are part of a choice: <b>eth-cfm-monitoring</b> , <b>ip-src-monitoring</b> , or <b>mac-monitoring</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS   |

## policy-id *reference*

|            |   |
|------------|---|
| Synopsis   | CPM protection policy   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">cpu-protection policy-id</a> <i>reference</i> |
| Tree       | <a href="#">policy-id</a>   |
| Reference  | <b>configure</b> <a href="#">system security</a> <a href="#">cpu-protection</a> <a href="#">policy</a> <i>number</i>  |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **description** *string*

Synopsis Text description  
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* **description** *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **egress**

Synopsis Enter the **egress** context  
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* **egress**  
 Tree [egress](#)  
 Introduced 16.0.R1  
 Platforms All

### **filter**

Synopsis Enter the **filter** context  
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* **egress** **filter**  
 Tree [filter](#)  
 Introduced 16.0.R1  
 Platforms All

### **ip reference**

Synopsis IPv4 filter policy name  
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* **egress** **filter** **ip** *reference*  
 Tree [ip](#)  
 Reference **configure** **filter** [ip-filter](#) *string*  
 Introduced 16.0.R1  
 Platforms All

## ipv6 *reference*

|            |   |
|------------|---|
| Synopsis   | IPv6 filter policy name   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress filter ipv6</a> <i>reference</i> |
| Tree       | <a href="#">ipv6</a>  |
| Reference  | <b>configure</b> <a href="#">filter ipv6-filter</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## qos

|            |  |
|------------|--|
| Synopsis   | Enter the <b>qos</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress qos</a> |
| Tree       | <a href="#">qos</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## network

|            |  |
|------------|--|
| Synopsis   | Enter the <b>network</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress qos network</a> |
| Tree       | <a href="#">network</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## policy-name *reference*

|            |   |
|------------|---|
| Synopsis   | Network policy ID   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress qos network</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos network</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |



**port-redirect-group**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>port-redirect-group</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">network</a> <a href="#">port-redirect-group</a> |
| Tree       | <a href="#">port-redirect-group</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**group-name** *reference*

|            |  |
|------------|--|
| Synopsis   | Name of the egress port queue group  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">network</a> <a href="#">port-redirect-group</a> <a href="#">group-name</a> <i>reference</i> |
| Tree       | <a href="#">group-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**instance** *number*

|            |   |
|------------|---|
| Synopsis   | Queue-group instance ID   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">network</a> <a href="#">port-redirect-group</a> <a href="#">instance</a> <i>number</i> |
| Tree       | <a href="#">instance</a>  |
| Range      | 1 to 65535  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**vc-label** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Egress MPLS VC label to send packets to the far end   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">vc-label</a> <i>number</i> |

|            |                          |
|------------|--------------------------|
| Tree       | <a href="#">vc-label</a> |
| Range      | 16 to 1048575            |
| Introduced | 16.0.R1                  |
| Platforms  | All                      |

## entropy-label

|            |   |
|------------|---|
| Synopsis   | Enable the use of entropy labels for spoke SDPs   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">entropy-label</a> |
| Tree       | <a href="#">entropy-label</a>   |
| Notes      | The following elements are part of a choice: <b>entropy-label</b> or <b>hash-label</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## eth-cfm

|            |   |
|------------|---|
| Synopsis   | Enter the <b>eth-cfm</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> |
| Tree       | <a href="#">eth-cfm</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## collect-lmm-fc-stats

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>collect-lmm-fc-stats</b> context  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">collect-lmm-fc-stats</a>   |
| Tree        | <a href="#">collect-lmm-fc-stats</a>   |
| Description | <p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands <b>fc-in-profile</b> and <b>fc</b> in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the <b>collect-lmm-stats</b> command are mutually exclusive when there is entity resource contention.</p> |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**fc keyword**

|                |   |
|----------------|---|
| Synopsis       | Forwarding class name for profile-unaware counter   |
| Context        | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm collect-lmm-fc-stats</b> <b>fc</b> <i>keyword</i>  |
| Tree           | <b>fc</b>   |
| Description    | <p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the <b>fc-in-profile</b> command under the <b>collect-lmm-fc-stats</b> context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p> |
| Options        | be, l2, af, l1, h2, ef, h1, nc  |
| Max. Instances | 8   |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**fc-in-profile keyword**

|                |   |
|----------------|---|
| Synopsis       | Forwarding class name for profile-aware counter   |
| Context        | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm collect-lmm-fc-stats</b> <b>fc-in-profile</b> <i>keyword</i>   |
| Tree           | <b>fc-in-profile</b>  |
| Description    | <p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the <b>fc</b> command under the <b>collect-lmm-fc-stats</b> context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p> |
| Options        | be, l2, af, l1, h2, ef, h1, nc  |
| Max. Instances | 8   |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**collect-lmm-stats** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Collect statistics for loss measurement message tests  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">collect-lmm-stats</a> <i>boolean</i>   |
| Tree        | <a href="#">collect-lmm-stats</a>  |
| Description | <p>When configured to <b>true</b>, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.</p> <p>The <b>show eth-cfm collect-lmm-stats</b> command displays entities that have been enabled to collect transit and receive counters.</p> <p>When configured to <b>false</b>, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.</p> |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**mep** [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mep</b> list instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> |
| Tree       | <a href="#">mep</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**md-admin-name** *reference*

|            |  |
|------------|--|
| Synopsis   | Maintenance Domain (MD) name   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> |
| Tree       | <a href="#">mep</a>  |
| Reference  | <b>configure</b> <a href="#">eth-cfm</a> <a href="#">domain</a> <i>string</i>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**ma-admin-name** *reference*

|            |  |
|------------|--|
| Synopsis   | Maintenance Association (MA) name  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">spoke-sdp string</a> <a href="#">eth-cfm mep md-admin-name reference</a> <a href="#">ma-admin-name reference</a> <a href="#">mep-id number</a> |
| Tree       | <a href="#">mep</a>  |
| Reference  | <b>configure</b> <a href="#">eth-cfm domain string</a> <a href="#">association string</a>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**mep-id** *number*

|            |  |
|------------|--|
| Synopsis   | Maintenance Endpoint (MEP) ID  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">spoke-sdp string</a> <a href="#">eth-cfm mep md-admin-name reference</a> <a href="#">ma-admin-name reference</a> <a href="#">mep-id number</a> |
| Tree       | <a href="#">mep</a>  |
| Range      | 1 to 8191  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the MEP  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">spoke-sdp string</a> <a href="#">eth-cfm mep md-admin-name reference</a> <a href="#">ma-admin-name reference</a> <a href="#">mep-id number</a> <a href="#">admin-state keyword</a> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**ais** *boolean*

|          |   |
|----------|---|
| Synopsis | Enable the generation and the reception of AIS messages |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ais</a> <i>boolean</i> |
| Tree       | <a href="#">ais</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## alarm-notification

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>alarm-notification</b> context   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">alarm-notification</a> |
| Tree        | <a href="#">alarm-notification</a>  |
| Description | <p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>          |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## fng-alarm-time *number*

|            |  |
|------------|--|
| Synopsis   | Time that must expire before an FNG alarm is raised  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">alarm-notification</a> <a href="#">fng-alarm-time</a> <i>number</i> |
| Tree       | <a href="#">fng-alarm-time</a>   |
| Range      | 250   500   1000   |
| Units      | centiseconds   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## fng-reset-time *number*

|          |  |
|----------|--|
| Synopsis | Time that must expire before an FNG alarm is reset |
|----------|--|

|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">alarm-notification fng-reset-time</a> <i>number</i> |
| Tree       | <a href="#">fng-reset-time</a>   |
| Range      | 250   500   1000   |
| Units      | centiseconds   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**ccm boolean**

|            |   |
|------------|---|
| Synopsis   | Generate CCM messages   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ccm</a> <i>boolean</i> |
| Tree       | <a href="#">ccm</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**ccm-ltm-priority number**

|            |   |
|------------|---|
| Synopsis   | Priority of CCM and LTM messages transmitted by the MEP   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ccm-ltm-priority</a> <i>number</i> |
| Tree       | <a href="#">ccm-ltm-priority</a>  |
| Range      | 0 to 7  |
| Default    | 7   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**ccm-padding-size number**

|          |   |
|----------|---|
| Synopsis | Number of octets of padding to insert in CCM packets  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ccm-padding-size</a> <i>number</i> |
| Tree     | <a href="#">ccm-padding-size</a>  |

|             |   |
|-------------|---|
| Description | This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.<br><br>This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through <b>configure eth-cfm domain association ccm-interval</b> ) is less than 1 second. |
| Range       | 3 to 1500   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**csf**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>csf</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>csf</b> |
| Tree       | <b>csf</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**multiplier** *decimal-number*

|            |   |
|------------|---|
| Synopsis   | Multiplication factor used to clear the CSF condition   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>csf multiplier</b> <i>decimal-number</i> |
| Tree       | <b>multiplier</b>   |
| Range      | 0.0   2.0 to 30.0   |
| Default    | 3.5   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**description** *string*

|          |  |
|----------|--|
| Synopsis | Text description   |
| Context  | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>description</b> <i>string</i> |
| Tree     | <b>description</b>   |



|               |  |
|---------------|--|
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

## eth-test

|             |  |
|-------------|--|
| Synopsis    | Enable the <b>eth-test</b> context   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>eth-test</b> |
| Tree        | <a href="#">eth-test</a>   |
| Description | Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the <b>oam eth-cfm eth-test</b> command.  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## bit-error-threshold *number*

|            |  |
|------------|--|
| Synopsis   | Lowest priority defect allowed to generate fault alarm   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test</a> <b>bit-error-threshold</b> <i>number</i> |
| Tree       | <a href="#">bit-error-threshold</a>  |
| Range      | 0 to 11840   |
| Units      | bit errors   |
| Default    | 1  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## test-pattern

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>test-pattern</b> context   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test</a> <b>test-pattern</b> |
| Tree        | <a href="#">test-pattern</a>  |
| Description | Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.  |

|            |  |
|------------|--|
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

**crc-tlv** *boolean*

|            |  |
|------------|--|
| Synopsis   | Generate a CRC checksum  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test test-pattern</a> <b>crc-tlv</b> <i>boolean</i> |
| Tree       | <a href="#">crc-tlv</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**pattern** *keyword*

|             |  |
|-------------|--|
| Synopsis    | Test pattern for Ethernet Test frames  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test test-pattern</a> <b>pattern</b> <i>keyword</i> |
| Tree        | <a href="#">pattern</a>  |
| Description | This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.  |
| Options     | all-zeros, all-ones  |
| Default     | all-zeros  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**fault-propagation** *keyword*

|            |  |
|------------|--|
| Synopsis   | Fault propagation for the MEP  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>fault-propagation</b> <i>keyword</i> |
| Tree       | <a href="#">fault-propagation</a>  |
| Options    | use-if-status-tlv, suspend-ccm   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## grace

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>grace</b> context   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> |
| Tree        | <a href="#">grace</a>  |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## eth-ed

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>eth-ed</b> context   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-ed</a> |
| Tree        | <a href="#">eth-ed</a>  |
| Description | Commands in this context configure the ITU-T Y.1731 ETH-ED function.  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## max-rx-defect-window *number*

|            |  |
|------------|--|
| Synopsis   | Maximum received ETH-ED expected defect window duration  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-ed</a> <a href="#">max-rx-defect-window</a> <i>number</i> |
| Tree       | <a href="#">max-rx-defect-window</a>   |
| Range      | 1 to 86400   |
| Units      | seconds  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## priority *number*

|          |                                       |
|----------|---------------------------------------|
| Synopsis | Transmission priority for ETH-ED PDUs |
|----------|---------------------------------------|

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>grace eth-ed priority</b> <i>number</i> |
| Tree       | <a href="#">priority</a>   |
| Range      | 0 to 7   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **rx-eth-ed** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP  |
| Context     | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>grace eth-ed rx-eth-ed</b> <i>boolean</i> |
| Tree        | <a href="#">rx-eth-ed</a>  |
| Description | This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.   |
| Default     | true   |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **tx-eth-ed** *boolean*

|            |  |
|------------|--|
| Synopsis   | Transmit ETH-ED PDUs from the MEP  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>grace eth-ed tx-eth-ed</b> <i>boolean</i> |
| Tree       | <a href="#">tx-eth-ed</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **eth-vsm-grace**

|          |  |
|----------|--|
| Synopsis | Enter the <b>eth-vsm-grace</b> context   |
| Context  | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>grace eth-vsm-grace</b> |
| Tree     | <a href="#">eth-vsm-grace</a>  |

|             |  |
|-------------|--|
| Description | Commands in this context configure the Nokia ETH-CFM Grace function. |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS         |

### **rx-eth-vsm-grace** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Receive and process Nokia ETH-CFM Grace PDU on the MEP   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-vsm-grace</a> <a href="#">rx-eth-vsm-grace</a> <i>boolean</i> |
| Tree        | <a href="#">rx-eth-vsm-grace</a>   |
| Description | When configured to <b>true</b> , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.<br><br>When configured to <b>false</b> , the router disables the Nokia Grace function.  |
| Default     | true   |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **tx-eth-vsm-grace** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Transmit ETH-ED PDUs from the MEP  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-vsm-grace</a> <a href="#">tx-eth-vsm-grace</a> <i>boolean</i>   |
| Tree        | <a href="#">tx-eth-vsm-grace</a>   |
| Description | When configured to <b>true</b> , the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.<br><br>The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.<br><br>The operator must configure the <b>configure system eth-cfm grace</b> command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).<br><br>When configured to <b>false</b> , the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP. |
| Default     | true   |
| Introduced  | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **low-priority-defect** *keyword*

Synopsis Lowest priority defect allowed to generate fault alarm

Context **configure** [service vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [eth-cfm mep md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* **low-priority-defect** *keyword*

Tree [low-priority-defect](#)

Options all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon

Default mac-rem-err-xcon

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **one-way-delay-threshold** *number*

Synopsis Threshold time limit for the one-way delay test

Context **configure** [service vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [eth-cfm mep md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* **one-way-delay-threshold** *number*

Tree [one-way-delay-threshold](#)

Range 0 to 600

Units seconds

Default 3

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **squelch-ingress-levels** *number*

Synopsis Levels for which ETH-CFM packets are silently discarded

Context **configure** [service vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [eth-cfm squelch-ingress-levels](#) *number*

Tree [squelch-ingress-levels](#)

Description This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.

The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.

|                |  |
|----------------|--|
| Range          | 0 to 7   |
| Max. Instances | 8  |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

## hash-label

|            |   |
|------------|---|
| Synopsis   | Enable the <b>hash-label</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>hash-label</b> |
| Tree       | <a href="#">hash-label</a>  |
| Notes      | The following elements are part of a choice: <b>entropy-label</b> or <b>hash-label</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## signal-capability

|            |   |
|------------|---|
| Synopsis   | Enable the signaling of the hash label between PE nodes   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">hash-label</a> <b>signal-capability</b> |
| Tree       | <a href="#">signal-capability</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## ingress

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ingress</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>ingress</b> |
| Tree       | <a href="#">ingress</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## filter

|            |   |
|------------|---|
| Synopsis   | Enter the <b>filter</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>ingress filter</b> |
| Tree       | <b>filter</b>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## ip reference

|            |  |
|------------|--|
| Synopsis   | IPv4 filter policy name  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>ingress filter ip reference</b> |
| Tree       | <b>ip</b>  |
| Reference  | <b>configure filter ip-filter</b> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## ipv6 reference

|            |  |
|------------|--|
| Synopsis   | IPv6 filter policy name  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>ingress filter ipv6 reference</b> |
| Tree       | <b>ipv6</b>  |
| Reference  | <b>configure filter ipv6-filter</b> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## qos

|            |  |
|------------|--|
| Synopsis   | Enter the <b>qos</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>ingress qos</b> |
| Tree       | <b>qos</b>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |



## network

|            |  |
|------------|--|
| Synopsis   | Enter the <b>network</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">spoke-sdp string</a> <a href="#">ingress qos</a> <a href="#">network</a> |
| Tree       | <a href="#">network</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## fp-redirect-group

|            |  |
|------------|--|
| Synopsis   | Enter the <b>fp-redirect-group</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">spoke-sdp string</a> <a href="#">ingress qos</a> <a href="#">network fp-redirect-group</a> |
| Tree       | <a href="#">fp-redirect-group</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## group-name *reference*

|            |   |
|------------|---|
| Synopsis   | Name of the forwarding plane queue group template   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">spoke-sdp string</a> <a href="#">ingress qos</a> <a href="#">network fp-redirect-group</a> <a href="#">group-name reference</a> |
| Tree       | <a href="#">group-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos queue-group-templates</a> <a href="#">ingress queue-group string</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## instance *number*

|            |  |
|------------|--|
| Synopsis   | Instance of FP ingress queue group for the SDP binding   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">spoke-sdp string</a> <a href="#">ingress qos</a> <a href="#">network fp-redirect-group</a> <a href="#">instance number</a> |
| Tree       | <a href="#">instance</a>   |
| Range      | 1 to 65535   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**policy-name** *reference*

|            |  |
|------------|--|
| Synopsis   | Network policy ID  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress qos network</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos network</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**vc-label** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Ingress MPLS VC label to send packets to the far end   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress vc-label</a> <i>number</i> |
| Tree       | <a href="#">vc-label</a>   |
| Range      | 1 to 1048575   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**transit-policy**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>transit-policy</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">transit-policy</a> |
| Tree       | <a href="#">transit-policy</a>   |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**ip** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | IP transit policy ID   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">transit-policy</a> <a href="#">ip</a> <i>reference</i> |
| Tree       | <a href="#">ip</a>   |
| Reference  | <b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-ip-policy</a> <i>number</i>   |
| Notes      | The following elements are part of a mandatory choice: <b>ip</b> or <b>prefix</b> .  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **prefix** *reference*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | IP prefix policy ID  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">transit-policy</a> <a href="#">prefix</a> <i>reference</i> |
| Tree       | <a href="#">prefix</a>   |
| Reference  | <b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-prefix-policy</a> <i>number</i>   |
| Notes      | The following elements are part of a mandatory choice: <b>ip</b> or <b>prefix</b> .  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **vc-type** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Type of virtual circuit (VC) associated with the SDP binding   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">vc-type</a> <i>keyword</i> |
| Tree       | <a href="#">vc-type</a>  |
| Options    | ether, ipipe   |
| Default    | ether  |
| Introduced | 16.0.R1  |

Platforms All

### **static-tunnel-redundant-nexthop** *string*

Synopsis Address for the static ISA tunnel redundant next-hop

Context **configure** *service vprn string interface string static-tunnel-redundant-nexthop string*

Tree [static-tunnel-redundant-nexthop](#)

Description This command specifies the redundant next-hop address on public or private IPsec interfaces (with a public or private tunnel SAP) for the static IPsec tunnel.  
The next-hop address is resolved in the routing table of the corresponding service.

Notes The following elements are part of a choice: **multi-chassis-shunting-profile** or **(dynamic-tunnel-redundant-nexthop and static-tunnel-redundant-nexthop)**.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tos-marking-state** *keyword*

Synopsis TOS marking state

Context **configure** *service vprn string interface string tos-marking-state keyword*

Tree [tos-marking-state](#)

Options trusted, untrusted

Default trusted

Introduced 16.0.R1

Platforms All

### **tunnel** *boolean*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Enable/disable tunnel interface

Context **configure** *service vprn string interface string tunnel boolean*

Tree [tunnel](#)

Default false

Introduced 16.0.R1

Platforms All

### **vas-if-type** *keyword*

Synopsis VAS interface type  
 Context **configure service vprn** *string interface string vas-if-type keyword*  
 Tree [vas-if-type](#)  
 Options to-from-access, to-from-network, to-from-both  
 Introduced 16.0.R1  
 Platforms All

### **vpls** [[vpls-name](#)] *string*

Synopsis Enter the **vpls** list instance  
 Context **configure service vprn** *string interface string vpls string*  
 Tree [vpls](#)  
 Max. Instances 1  
 Introduced 16.0.R1  
 Platforms All

### [[vpls-name](#)] *string*

Synopsis VPLS service  
 Context **configure service vprn** *string interface string vpls string*  
 Tree [vpls](#)  
 String Length 1 to 64  
 Notes This element is part of a list key.  
 Introduced 16.0.R4  
 Platforms All

### **egress**

Synopsis Enter the **egress** context  
 Context **configure service vprn** *string interface string vpls string egress*

|            |                        |
|------------|------------------------|
| Tree       | <a href="#">egress</a> |
| Introduced | 16.0.R1                |
| Platforms  | All                    |

### **reclassify-using-qos** *reference*

|            |   |
|------------|---|
| Synopsis   | Egress QoS policy   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">vpls</a> <i>string</i> <a href="#">egress</a> <a href="#">reclassify-using-qos</a> <i>reference</i> |
| Tree       | <a href="#">reclassify-using-qos</a>  |
| Reference  | <b>configure</b> <a href="#">qos sap-egress</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **routed-override-filter**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>routed-override-filter</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">vpls</a> <i>string</i> <a href="#">egress</a> <a href="#">routed-override-filter</a> |
| Tree       | <a href="#">routed-override-filter</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **ip** *reference*

|            |  |
|------------|--|
| Synopsis   | IPv4 filter policy name  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">vpls</a> <i>string</i> <a href="#">egress</a> <a href="#">routed-override-filter</a> <a href="#">ip</a> <i>reference</i> |
| Tree       | <a href="#">ip</a>   |
| Reference  | <b>configure</b> <a href="#">filter ip-filter</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **ipv6** *reference*

|          |                         |
|----------|-------------------------|
| Synopsis | IPv6 filter policy name |
|----------|-------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>vpls</b> <i>string</i> <b>egress</b> <b>routed-override-filter</b> <b>ipv6</b> <i>reference</i> |
| Tree       | <a href="#">ipv6</a>  |
| Reference  | <b>configure filter</b> <a href="#">ipv6-filter</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## evpn

|            |  |
|------------|--|
| Synopsis   | Enter the <b>evpn</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>vpls</b> <i>string</i> <b>evpn</b> |
| Tree       | <a href="#">evpn</a>   |
| Introduced | 19.10.R1   |
| Platforms  | All  |

## arp

|            |   |
|------------|---|
| Synopsis   | Enter the <b>arp</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>vpls</b> <i>string</i> <b>evpn</b> <b>arp</b> |
| Tree       | <a href="#">arp</a>   |
| Introduced | 19.10.R1  |
| Platforms  | All   |

## advertise [[route-type](#)] *keyword*

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>advertise</b> list instance   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>vpls</b> <i>string</i> <b>evpn</b> <b>arp</b> <b>advertise</b> <i>keyword</i>  |
| Tree        | <a href="#">advertise</a>  |
| Description | Commands in this context specify the configuration to allow ARP or ND entries that are installed in the ARP or ND cache to be advertised in EVPN MAC/IP routes.<br><br>The <b>learn-dynamic</b> command must be set to <b>false</b> when using this functionality. |
| Introduced  | 19.10.R1   |
| Platforms   | All  |

**[route-type] keyword**

|             |  |
|-------------|--|
| Synopsis    | Type of ARP or ND entries that generate host routes  |
| Context     | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">vpls string</a> <a href="#">evpn arp advertise keyword</a> |
| Tree        | <a href="#">advertise</a>  |
| Description | This command specifies the type of ARP or ND entries that are installed in the ARP or ND cache into EVPN MAC/IP routes.                                      |
| Options     | static, dynamic  |
| Notes       | This element is part of a list key.  |
| Introduced  | 19.10.R1   |
| Platforms   | All  |

**route-tag number****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Tag value used with the host route from an ARP/ND entry   |
| Context     | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">vpls string</a> <a href="#">evpn arp advertise keyword</a><br><a href="#">route-tag number</a>  |
| Tree        | <a href="#">route-tag</a>   |
| Description | This command specifies the route tag that is added separately to dynamic or static ARP or ND entries that are advertised in EVPN MAC/IP routes. This tag can be matched on BGP vsi-export (in the R-VPLS) and BGP peer export policies. |
| Range       | 0 to 255  |
| Introduced  | 19.10.R1  |
| Platforms   | All   |

**flood-garp-and-unknown-req boolean**

|             |   |
|-------------|---|
| Synopsis    | Allow CPM originated ARP frames to flood R-VPLS service   |
| Context     | <b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">vpls string</a> <a href="#">evpn arp flood-garp-and-unknown-req boolean</a>   |
| Tree        | <a href="#">flood-garp-and-unknown-req</a>  |
| Description | When configured to <b>true</b> , the system allows CPM-originated ARP frames to be flooded in the R-VPLS service. Any frames that are data path flooded such as the ARP messages received on a SAP, are flooded irrespective of this command. |



When configured to **false**, CPM-originated ARP flooding is suppressed.

|            |          |
|------------|----------|
| Default    | true     |
| Introduced | 19.10.R1 |
| Platforms  | All      |

### **learn-dynamic** *boolean*

|            |   |
|------------|---|
| Synopsis   | Process ARP or ND messages on EVPN tunnels  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">vpls</a> <i>string</i> <a href="#">evpn arp</a> <b>learn-dynamic</b> <i>boolean</i> |
| Tree       | <a href="#">learn-dynamic</a>   |
| Default    | true  |
| Introduced | 19.10.R1  |
| Platforms  | All   |

### **nd**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>nd</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">vpls</a> <i>string</i> <a href="#">evpn</a> <b>nd</b> |
| Tree       | <a href="#">nd</a>  |
| Introduced | 20.5.R1   |
| Platforms  | All   |

### **advertise** [[route-type](#)] *keyword*

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>advertise</b> list instance   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">vpls</a> <i>string</i> <a href="#">evpn</a> <b>nd</b> <b>advertise</b> <i>keyword</i>  |
| Tree        | <a href="#">advertise</a>  |
| Description | Commands in this context specify the configuration to allow ARP or ND entries that are installed in the ARP or ND cache to be advertised in EVPN MAC/IP routes.<br>The <b>learn-dynamic</b> command must be set to <b>false</b> when using this functionality. |
| Introduced  | 20.5.R1  |
| Platforms   | All  |

### [[route-type](#)] *keyword*

|          |   |
|----------|---|
| Synopsis | Type of ARP or ND entries that generate host routes |
|----------|---|

|             |  |
|-------------|--|
| Context     | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>vpls</b> <i>string</i> <b>evpn nd advertise</b> <i>keyword</i> |
| Tree        | <b>advertise</b>   |
| Description | This command specifies the type of ARP or ND entries that are installed in the ARP or ND cache into EVPN MAC/IP routes.                      |
| Options     | static, dynamic  |
| Notes       | This element is part of a list key.  |
| Introduced  | 20.5.R1  |
| Platforms   | All  |

### **route-tag** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Tag value used with the host route from an ARP/ND entry   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>vpls</b> <i>string</i> <b>evpn nd advertise</b> <i>keyword</i> <b>route-tag</b> <i>number</i>   |
| Tree        | <b>route-tag</b>  |
| Description | This command specifies the route tag that is added separately to dynamic or static ARP or ND entries that are advertised in EVPN MAC/IP routes. This tag can be matched on BGP vsi-export (in the R-VPLS) and BGP peer export policies. |
| Range       | 0 to 255  |
| Introduced  | 20.5.R1   |
| Platforms   | All   |

### **learn-dynamic** *boolean*

|            |  |
|------------|--|
| Synopsis   | Process ARP or ND messages on EVPN tunnels   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>vpls</b> <i>string</i> <b>evpn nd learn-dynamic</b> <i>boolean</i> |
| Tree       | <b>learn-dynamic</b>   |
| Default    | true   |
| Introduced | 20.5.R1  |
| Platforms  | All  |

## evpn-tunnel

|            |  |
|------------|--|
| Synopsis   | Enable the <b>evpn-tunnel</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">vpls</a> <i>string</i> <a href="#">evpn-tunnel</a> |
| Tree       | <a href="#">evpn-tunnel</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## allow-bfd *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow BFD on the EVPN tunnel  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">vpls</a> <i>string</i> <a href="#">evpn-tunnel</a> <a href="#">allow-bfd</a> <i>boolean</i> |
| Tree       | <a href="#">allow-bfd</a>   |
| Default    | false   |
| Introduced | 22.5.R1   |
| Platforms  | All   |

## ipv6-gateway-address *keyword*

|            |  |
|------------|--|
| Synopsis   | Type of IPv6 gateway address   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">vpls</a> <i>string</i> <a href="#">evpn-tunnel</a> <a href="#">ipv6-gateway-address</a> <i>keyword</i> |
| Tree       | <a href="#">ipv6-gateway-address</a>   |
| Options    | ip, mac  |
| Default    | ip   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

## supplementary-broadcast-domain *boolean*

|             |   |
|-------------|---|
| Synopsis    | Use the EVPN tunnel as a Supplementary Broadcast Domain   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">vpls</a> <i>string</i> <a href="#">evpn-tunnel</a> <a href="#">supplementary-broadcast-domain</a> <i>boolean</i>  |
| Tree        | <a href="#">supplementary-broadcast-domain</a>  |
| Description | When configured to <b>true</b> , this command allows the EVPN tunnel to be used as a Supplementary Broadcast Domain (SBD). The SBD is used in EVPN OISM to advertise the SMET routes and to receive the multicast traffic on egress PEs that are not attached to the source R-VPLS service. |

When configured to **false**, this command disables EVPN tunnel use as an SBD.

|            |          |
|------------|----------|
| Default    | false    |
| Introduced | 19.10.R1 |
| Platforms  | All      |

## ingress

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ingress</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">vpls</a> <i>string</i> <a href="#">ingress</a> |
| Tree       | <a href="#">ingress</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## routed-override-filter

|            |   |
|------------|---|
| Synopsis   | Enter the <b>routed-override-filter</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">vpls</a> <i>string</i> <a href="#">ingress</a> <a href="#">routed-override-filter</a> |
| Tree       | <a href="#">routed-override-filter</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## ip reference

|            |  |
|------------|--|
| Synopsis   | IPv4 filter policy name  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">vpls</a> <i>string</i> <a href="#">ingress</a> <a href="#">routed-override-filter</a> <a href="#">ip</a> <a href="#">reference</a> |
| Tree       | <a href="#">ip</a>   |
| Reference  | <b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## ipv6 reference

|          |  |
|----------|--|
| Synopsis | IPv6 filter policy name  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">vpls</a> <i>string</i> <a href="#">ingress</a> <a href="#">routed-override-filter</a> <a href="#">ipv6</a> <a href="#">reference</a> |

|            |   |
|------------|---|
| Tree       | <a href="#">ipv6</a>  |
| Reference  | <b>configure filter</b> <a href="#">ipv6-filter</a> <i>string</i> |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **ip-mirror-interface** [\[interface-name\]](#) *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ip-mirror-interface</b> list instance  |
| Context    | <b>configure service vprn</b> <i>string</i> <a href="#">ip-mirror-interface</a> <i>string</i> |
| Tree       | <a href="#">ip-mirror-interface</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **[interface-name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Interface name  |
| Context       | <b>configure service vprn</b> <i>string</i> <a href="#">ip-mirror-interface</a> <i>string</i> |
| Tree          | <a href="#">ip-mirror-interface</a>   |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the interface  |
| Context    | <b>configure service vprn</b> <i>string</i> <a href="#">ip-mirror-interface</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ip-mirror-interface</a> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 255   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**spoke-sdp** [[sdp-bind-id](#)] *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>spoke-sdp</b> list instance   |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ip-mirror-interface</a> <i>string</i> <b>spoke-sdp</b> <i>string</i> |
| Tree           | <a href="#">spoke-sdp</a>  |
| Max. Instances | 1  |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

**[sdp-bind-id]** *string*

|               |  |
|---------------|--|
| Synopsis      | SDP binding ID   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ip-mirror-interface</a> <i>string</i> <b>spoke-sdp</b> <i>string</i> |
| Tree          | <a href="#">spoke-sdp</a>  |
| String Length | 3 to 16  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**admin-state** *keyword*

|          |  |
|----------|--|
| Synopsis | Administrative state of the SDP binding to the service   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ip-mirror-interface</a> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree     | <a href="#">admin-state</a>  |
| Options  | enable, disable  |

|            |         |
|------------|---------|
| Default    | enable  |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ip-mirror-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

### **ingress**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ingress</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ip-mirror-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>ingress</b> |
| Tree       | <a href="#">ingress</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **filter**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>filter</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ip-mirror-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress</a> <b>filter</b> |
| Tree       | <a href="#">filter</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **ip reference**

|          |   |
|----------|---|
| Synopsis | IPv4 filter policy name   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ip-mirror-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress</a> <b>filter</b> <b>ip reference</b> |
| Tree     | <a href="#">ip</a>  |

|            |  |
|------------|--|
| Reference  | <b>configure filter ip-filter string</b> |
| Introduced | 16.0.R1                                  |
| Platforms  | All                                      |

### **vc-label number**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Spoke SDP ingress VC label   |
| Context    | <b>configure service vprn string ip-mirror-interface string spoke-sdp string ingress vc-label number</b> |
| Tree       | <a href="#">vc-label</a>   |
| Range      | 1 to 1048575   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **ipsec**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipsec</b> context               |
| Context    | <b>configure service vprn string ipsec</b>   |
| Tree       | <a href="#">ipsec</a>                        |
| Introduced | 19.7.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **allow-reverse-route-override-type keyword**

|             |  |
|-------------|--|
| Synopsis    | System behavior for new reverse route  |
| Context     | <b>configure service vprn string ipsec allow-reverse-route-override-type keyword</b>   |
| Tree        | <a href="#">allow-reverse-route-override-type</a>  |
| Description | <p>This command specifies the system behavior when a new reverse route overlaps with an existing reverse route.</p> <p>When unconfigured, the system does not allow a new dynamic LAN-to-LAN tunnel that terminates in the private VPRN service to be created with an overlapping reverse route.</p> |
| Options     | same-idi, any-idi  |
| Introduced  | 20.2.R1  |



Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **multi-chassis-shunt-interface** *[name] reference*

Synopsis Enter the **multi-chassis-shunt-interface** list instance

Context **configure service vprn string ipsec multi-chassis-shunt-interface reference**

Tree [multi-chassis-shunt-interface](#)

Introduced 22.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[name] reference**

Synopsis Multi-chassis shunt interface name

Context **configure service vprn string ipsec multi-chassis-shunt-interface reference**

Tree [multi-chassis-shunt-interface](#)

Reference **configure service vprn string interface string**

Notes This element is part of a list key.

Introduced 22.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **next-hop**

Synopsis Enter the **next-hop** context

Context **configure service vprn string ipsec multi-chassis-shunt-interface reference next-hop**

Tree [next-hop](#)

Description Commands in this context configure the next hop for shunting over the interface.

Introduced 22.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **address** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis Next hop address

Context **configure service vprn string ipsec multi-chassis-shunt-interface reference next-hop address (*ipv4-address-no-zone | ipv6-address-no-zone*)**

Tree [address](#)

|             |  |
|-------------|--|
| Description | This command configures the next-hop address for the shunting interface. |
| Introduced  | 22.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                             |

### **multi-chassis-shunting-profile** [[name](#)] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>multi-chassis-shunting-profile</b> list instance   |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ipsec</a> <a href="#">multi-chassis-shunting-profile</a> <i>string</i> |
| Tree           | <a href="#">multi-chassis-shunting-profile</a>  |
| Max. Instances | 64  |
| Introduced     | 22.5.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **[name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Multi-chassis shunting profile name   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ipsec</a> <a href="#">multi-chassis-shunting-profile</a> <i>string</i> |
| Tree          | <a href="#">multi-chassis-shunting-profile</a>  |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 22.5.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **peer** [[ip-address](#)] *reference*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>peer</b> list instance   |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ipsec</a> <a href="#">multi-chassis-shunting-profile</a> <i>string</i> <a href="#">peer</a> <i>reference</i> |
| Tree           | <a href="#">peer</a>  |
| Max. Instances | 3   |
| Introduced     | 22.5.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**[ip-address] reference**

|            |   |
|------------|---|
| Synopsis   | Peer address  |
| Context    | <b>configure service vpn</b> <i>string</i> <b>ipsec multi-chassis-shunting-profile</b> <i>string</i> <b>peer</b> <i>reference</i> |
| Tree       | <b>peer</b>   |
| Reference  | <b>configure redundancy multi-chassis peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )                      |
| Notes      | This element is part of a list key.   |
| Introduced | 22.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**multi-chassis-shunt-interface reference**

|            |  |
|------------|--|
| Synopsis   | Multi-chassis shunt interface  |
| Context    | <b>configure service vpn</b> <i>string</i> <b>ipsec multi-chassis-shunting-profile</b> <i>string</i> <b>peer</b> <i>reference</i><br><b>multi-chassis-shunt-interface</b> <i>reference</i> |
| Tree       | <b>multi-chassis-shunt-interface</b>   |
| Reference  | <b>configure service vpn</b> <i>string</i> <b>ipsec multi-chassis-shunt-interface</b> <i>reference</i>   |
| Introduced | 22.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**security-policy [id] number**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>security-policy</b> list instance  |
| Context    | <b>configure service vpn</b> <i>string</i> <b>ipsec security-policy</b> <i>number</i> |
| Tree       | <b>security-policy</b>  |
| Introduced | 19.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**[id] number**

|          |   |
|----------|---|
| Synopsis | IPsec security policy ID  |
| Context  | <b>configure service vpn</b> <i>string</i> <b>ipsec security-policy</b> <i>number</i> |
| Tree     | <b>security-policy</b>  |
| Range    | 1 to 32768  |
| Notes    | This element is part of a list key.   |

|            |  |
|------------|--|
| Introduced | 19.7.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **entry** [**entry-id**] *number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>entry</b> list instance   |
| Context    | <b>configure service vpn</b> <i>string ipsec security-policy number entry number</i> |
| Tree       | <b>entry</b>   |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **[entry-id]** *number*

|            |  |
|------------|--|
| Synopsis   | IPsec security policy entry ID   |
| Context    | <b>configure service vpn</b> <i>string ipsec security-policy number entry number</i> |
| Tree       | <b>entry</b>   |
| Range      | 1 to 16  |
| Notes      | This element is part of a list key.  |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **local-ip**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>local-ip</b> context  |
| Context     | <b>configure service vpn</b> <i>string ipsec security-policy number entry number local-ip</i>  |
| Tree        | <b>local-ip</b>  |
| Description | <p>Commands in this context configure the local (from the VPN) IPv4 prefix/mask for the policy entry.</p> <p>The system evaluates the local IP as the source IP when traffic is examined in the direction of the flows from private to public and as the destination IP when traffic flows from public to private.</p> |
| Introduced  | 19.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**address string**

|            |   |
|------------|---|
| Synopsis   | Destination IPv4 address of the aggregate route   |
| Context    | <b>configure service vpn string ipsec security-policy number entry number local-ip address string</b> |
| Tree       | <b>address</b>  |
| Notes      | The following elements are part of a choice: <b>address</b> or <b>any</b> .                           |
| Introduced | 19.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**any boolean**

|            |  |
|------------|--|
| Synopsis   | Use any IP address   |
| Context    | <b>configure service vpn string ipsec security-policy number entry number local-ip any boolean</b> |
| Tree       | <b>any</b>   |
| Default    | false  |
| Notes      | The following elements are part of a choice: <b>address</b> or <b>any</b> .                        |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**local-ipv6**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>local-ipv6</b> context  |
| Context     | <b>configure service vpn string ipsec security-policy number entry number local-ipv6</b>   |
| Tree        | <b>local-ipv6</b>  |
| Description | <p>Commands in this context configure the local (from the VPN) IPv6 prefix/mask for the policy entry.</p> <p>The system evaluates the local IP as the source IP when traffic is examined in the direction of the flows from private to public and as the destination IP when traffic flows from public to private.</p> |
| Introduced  | 19.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**address string**

|          |   |
|----------|---|
| Synopsis | Destination IPv6 address of the aggregate route |
|----------|---|

|            |  |
|------------|--|
| Context    | <b>configure service vpn</b> <i>string</i> <b>ipsec security-policy</b> <i>number</i> <b>entry</b> <i>number</i> <b>local-ipv6 address</b> <i>string</i> |
| Tree       | <b>address</b>   |
| Notes      | The following elements are part of a choice: <b>address</b> or <b>any</b> .  |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **any** *boolean*

|            |   |
|------------|---|
| Synopsis   | Use any IP address  |
| Context    | <b>configure service vpn</b> <i>string</i> <b>ipsec security-policy</b> <i>number</i> <b>entry</b> <i>number</i> <b>local-ipv6 any</b> <i>boolean</i> |
| Tree       | <b>any</b>  |
| Default    | false   |
| Notes      | The following elements are part of a choice: <b>address</b> or <b>any</b> .   |
| Introduced | 19.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **remote-ip**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>remote-ip</b> context   |
| Context     | <b>configure service vpn</b> <i>string</i> <b>ipsec security-policy</b> <i>number</i> <b>entry</b> <i>number</i> <b>remote-ip</b>  |
| Tree        | <b>remote-ip</b>   |
| Description | <p>Commands in this context configure the remote (from the tunnel) IP prefix/mask for the policy entry.</p> <p>The system evaluates the remote IP as the source IP when traffic flows public to private and as the destination IP when traffic flows from private to public.</p> |
| Introduced  | 19.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **address** *string*

|          |   |
|----------|---|
| Synopsis | Destination IPv4 address of the aggregate route   |
| Context  | <b>configure service vpn</b> <i>string</i> <b>ipsec security-policy</b> <i>number</i> <b>entry</b> <i>number</i> <b>remote-ip address</b> <i>string</i> |
| Tree     | <b>address</b>  |

|            |   |
|------------|---|
| Notes      | The following elements are part of a choice: <b>address</b> or <b>any</b> . |
| Introduced | 19.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                |

### **any** *boolean*

|            |   |
|------------|---|
| Synopsis   | Use any IP address  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>ipsec</b> <b>security-policy</b> <i>number</i> <b>entry</b> <i>number</i> <b>remote-ip</b> <b>any</b> <i>boolean</i> |
| Tree       | <b>any</b>  |
| Default    | false   |
| Notes      | The following elements are part of a choice: <b>address</b> or <b>any</b> .   |
| Introduced | 19.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **remote-ipv6**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>remote-ipv6</b> context   |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>ipsec</b> <b>security-policy</b> <i>number</i> <b>entry</b> <i>number</i> <b>remote-ipv6</b>  |
| Tree        | <b>remote-ipv6</b>   |
| Description | Commands in this context configure the remote (from the tunnel) IPv6 prefix/mask for the policy entry.<br><br>The system evaluates the remote IP as the source IP when traffic flows from public to private and as the destination IP when traffic flows from private to public. |
| Introduced  | 19.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **address** *string*

|            |  |
|------------|--|
| Synopsis   | Destination IPv6 address of the aggregate route  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>ipsec</b> <b>security-policy</b> <i>number</i> <b>entry</b> <i>number</i> <b>remote-ipv6</b> <b>address</b> <i>string</i> |
| Tree       | <b>address</b>   |
| Notes      | The following elements are part of a choice: <b>address</b> or <b>any</b> .  |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**any** *boolean*

|            |  |
|------------|--|
| Synopsis   | Use any IP address   |
| Context    | <b>configure</b> <a href="#">service vprn string ipsec security-policy number entry number remote-ipv6 any boolean</a> |
| Tree       | <a href="#">any</a>  |
| Default    | false  |
| Notes      | The following elements are part of a choice: <b>address</b> or <b>any</b> .  |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**ipv6**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ipv6</b> context                             |
| Context    | <b>configure</b> <a href="#">service vprn string ipv6</a> |
| Tree       | <a href="#">ipv6</a>                                      |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**neighbor-discovery**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>neighbor-discovery</b> context                                  |
| Context    | <b>configure</b> <a href="#">service vprn string ipv6 neighbor-discovery</a> |
| Tree       | <a href="#">neighbor-discovery</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**reachable-time** *number*

|            |  |
|------------|--|
| Synopsis   | Neighbor reachability detection timer  |
| Context    | <b>configure</b> <a href="#">service vprn string ipv6 neighbor-discovery reachable-time number</a> |
| Tree       | <a href="#">reachable-time</a>   |
| Range      | 30 to 3600   |
| Default    | 30   |
| Introduced | 16.0.R1  |



Platforms All

### **stale-time** *number*

Synopsis Neighbor discovery cache entry stale time

Context **configure** [service vprn](#) *string* [ipv6 neighbor-discovery](#) **stale-time** *number*

Tree [stale-time](#)

Range 60 to 65535

Default 14400

Introduced 16.0.R1

Platforms All

### **router-advertisement**

Synopsis Enter the **router-advertisement** context

Context **configure** [service vprn](#) *string* [ipv6 router-advertisement](#)

Tree [router-advertisement](#)

Introduced 16.0.R1

Platforms All

### **dns-options**

Synopsis Enable the **dns-options** context

Context **configure** [service vprn](#) *string* [ipv6 router-advertisement dns-options](#)

Tree [dns-options](#)

Introduced 16.0.R1

Platforms All

### **rdnss-lifetime** (*keyword* | *number*)

Synopsis Maximum time over which the RDNSS address is valid

Context **configure** [service vprn](#) *string* [ipv6 router-advertisement dns-options](#) **rdnss-lifetime** (*keyword* | *number*)

Tree [rdnss-lifetime](#)

Description This command specifies the maximum time that the RDNSS address is used for name resolution by the client.

|            |               |
|------------|---------------|
| Range      | 0   4 to 3600 |
| Units      | seconds       |
| Options    | infinite      |
| Default    | infinite      |
| Introduced | 16.0.R1       |
| Platforms  | All           |

### **server** *string*

|                |  |
|----------------|--|
| Synopsis       | RAs that are forwarded to IPv6 DNS servers   |
| Context        | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ipv6 router-advertisement dns-options server</a> <i>string</i> |
| Tree           | <a href="#">server</a>   |
| Max. Instances | 4  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

### **interface** [[ip-int-name](#)] *reference*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>interface</b> list instance   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ipv6 router-advertisement interface</a> <i>reference</i> |
| Tree       | <a href="#">interface</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **[ip-int-name]** *reference*

|            |  |
|------------|--|
| Synopsis   | VPRN interface name  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ipv6 router-advertisement interface</a> <i>reference</i> |
| Tree       | <a href="#">interface</a>  |
| Reference  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i>                              |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of router advertisement  |
| Context    | <b>configure</b> <a href="#">service vprn string ipv6 router-advertisement interface reference</a> <b>admin-state keyword</b> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**current-hop-limit** *number*

|            |  |
|------------|--|
| Synopsis   | Hop limit advertised in RA messages  |
| Context    | <b>configure</b> <a href="#">service vprn string ipv6 router-advertisement interface reference</a> <b>current-hop-limit number</b> |
| Tree       | <a href="#">current-hop-limit</a>  |
| Range      | 0 to 255   |
| Default    | 64   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**dns-options**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>dns-options</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn string ipv6 router-advertisement interface reference</a> <b>dns-options</b> |
| Tree       | <a href="#">dns-options</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**include-rdnss** *boolean*

|          |   |
|----------|---|
| Synopsis | Include the RDNSS option in the RA  |
| Context  | <b>configure</b> <a href="#">service vprn string ipv6 router-advertisement interface reference</a> <b>dns-options include-rdnss boolean</b> |
| Tree     | <a href="#">include-rdnss</a>   |

|            |         |
|------------|---------|
| Default    | true    |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **rdnss-lifetime** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Maximum time over which the RDNSS address 25 is valid  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>ipv6 router-advertisement interface</b> <i>reference</i> <b>dns-options rdnss-lifetime</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">rdnss-lifetime</a>   |
| Range      | 0   4 to 3600  |
| Units      | seconds  |
| Options    | infinite   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **server** *string*

|                |   |
|----------------|---|
| Synopsis       | RAs that are forwarded to IPv6 DNS servers  |
| Context        | <b>configure service vprn</b> <i>string</i> <b>ipv6 router-advertisement interface</b> <i>reference</i> <b>dns-options server</b> <i>string</i> |
| Tree           | <a href="#">server</a>  |
| Max. Instances | 4   |
| Notes          | This element is ordered by the user.  |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

### **managed-configuration** *boolean*

|            |   |
|------------|---|
| Synopsis   | Set the managed address configuration flag  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>ipv6 router-advertisement interface</b> <i>reference</i> <b>managed-configuration</b> <i>boolean</i> |
| Tree       | <a href="#">managed-configuration</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |

---

Platforms All

### **max-advertisement-interval** *number*

Synopsis Maximum time between sending advertisement messages

Context **configure service vprn** *string* **ipv6 router-advertisement interface** *reference* **max-advertisement-interval** *number*

Tree [max-advertisement-interval](#)

Range 4 to 1800

Units seconds

Default 600

Introduced 16.0.R1

Platforms All

### **min-advertisement-interval** *number*

Synopsis Minimum interval between router advertisement messages

Context **configure service vprn** *string* **ipv6 router-advertisement interface** *reference* **min-advertisement-interval** *number*

Tree [min-advertisement-interval](#)

Range 3 to 1350

Units seconds

Default 200

Introduced 16.0.R1

Platforms All

### **mtu** *number*

Synopsis MTU for sending packets to the router

Context **configure service vprn** *string* **ipv6 router-advertisement interface** *reference* **mtu** *number*

Tree [mtu](#)

Range 1280 to 9800

Introduced 16.0.R1

Platforms All

**other-stateful-configuration** *boolean*

|            |  |
|------------|--|
| Synopsis   | Set the other configuration flag   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ipv6 router-advertisement interface</a> <i>reference</i> <a href="#">other-stateful-configuration</a> <i>boolean</i> |
| Tree       | <a href="#">other-stateful-configuration</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**prefix** [[ipv6-prefix](#)] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>prefix</b> list instance   |
| Context        | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ipv6 router-advertisement interface</a> <i>reference</i> <a href="#">prefix</a> <i>string</i> |
| Tree           | <a href="#">prefix</a>  |
| Max. Instances | 254   |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

**[ipv6-prefix]** *string*

|            |   |
|------------|---|
| Synopsis   | IPv6 address prefix   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ipv6 router-advertisement interface</a> <i>reference</i> <a href="#">prefix</a> <i>string</i> |
| Tree       | <a href="#">prefix</a>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**autonomous** *boolean*

|            |   |
|------------|---|
| Synopsis   | Set the autonomous flag value   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ipv6 router-advertisement interface</a> <i>reference</i> <a href="#">prefix</a> <i>string</i> <a href="#">autonomous</a> <i>boolean</i> |
| Tree       | <a href="#">autonomous</a>  |
| Default    | true  |
| Introduced | 16.0.R1   |

Platforms All

### **on-link** *boolean*

Synopsis Use prefix for on-link determination

Context **configure service vprn** *string* **ipv6 router-advertisement interface reference prefix** *string*  
**on-link** *boolean*

Tree **on-link**

Default true

Introduced 16.0.R1

Platforms All

### **preferred-lifetime** (*keyword | number*)

Synopsis Remaining time that the prefix remains preferred

Context **configure service vprn** *string* **ipv6 router-advertisement interface reference prefix** *string*  
**preferred-lifetime** (*keyword | number*)

Tree **preferred-lifetime**

Range 0 to 4294967294

Units seconds

Options infinite

Default 604800

Introduced 16.0.R1

Platforms All

### **valid-lifetime** (*keyword | number*)

Synopsis Remaining time in which the prefix is still valid

Context **configure service vprn** *string* **ipv6 router-advertisement interface reference prefix** *string*  
**valid-lifetime** (*keyword | number*)

Tree **valid-lifetime**

Range 0 to 4294967294

Units seconds

Options infinite

Default 2592000

Introduced 16.0.R1

---

Platforms All

### **reachable-time** *number*

Synopsis Time the router is reachable by other hosts or nodes

Context **configure service vprn** *string* **ipv6 router-advertisement interface** *reference* **reachable-time** *number*

Tree [reachable-time](#)

Range 0 to 3600000

Units milliseconds

Default 0

Introduced 16.0.R1

Platforms All

### **retransmit-time** *number*

Synopsis Time to advertise neighbor advertisement messages

Context **configure service vprn** *string* **ipv6 router-advertisement interface** *reference* **retransmit-time** *number*

Tree [retransmit-time](#)

Range 0 to 1800000

Units milliseconds

Default 0

Introduced 16.0.R1

Platforms All

### **router-lifetime** *number*

Synopsis Lifetime value in neighbor advertisement messages

Context **configure service vprn** *string* **ipv6 router-advertisement interface** *reference* **router-lifetime** *number*

Tree [router-lifetime](#)

Range 0 | 4 to 9000

Units seconds

Default 1800

Introduced 16.0.R1



Platforms All

### **use-virtual-mac** *boolean*

Synopsis Use VRRP virtual MAC address for advertisement message

Context **configure** [service vprn](#) *string* [ipv6 router-advertisement interface reference](#) **use-virtual-mac** *boolean*

Tree [use-virtual-mac](#)

Default false

Introduced 16.0.R1

Platforms All

### **isis** [[isis-instance](#)] *number*

Synopsis Enter the **isis** list instance

Context **configure** [service vprn](#) *string* [isis](#) *number*

Tree [isis](#)

Introduced 16.0.R1

Platforms All

### **[isis-instance]** *number*

Synopsis Instance ID for the IS-IS instance

Context **configure** [service vprn](#) *string* [isis](#) *number*

Tree [isis](#)

Range 0 to 127

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the IS-IS instance

Context **configure** [service vprn](#) *string* [isis](#) *number* **admin-state** *keyword*

Tree [admin-state](#)

|            |                 |
|------------|-----------------|
| Options    | enable, disable |
| Default    | disable         |
| Introduced | 16.0.R1         |
| Platforms  | All             |

### **advertise-passive-only** *boolean*

|            |  |
|------------|--|
| Synopsis   | Advertise prefixes that belong to passive interfaces   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis number</a> <b>advertise-passive-only</b> <i>boolean</i> |
| Tree       | <a href="#">advertise-passive-only</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **advertise-router-capability** *keyword*

|            |   |
|------------|---|
| Synopsis   | Router capabilities advertisement to neighbors  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis number</a> <b>advertise-router-capability</b> <i>keyword</i> |
| Tree       | <a href="#">advertise-router-capability</a>   |
| Options    | area, as  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **all-l1isis** *string*

|            |   |
|------------|---|
| Synopsis   | Destination MAC address for all L1 IS-IS routers  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis number</a> <b>all-l1isis</b> <i>string</i> |
| Tree       | <a href="#">all-l1isis</a>  |
| Default    | 01:80:C2:00:00:14   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **all-l2isis** *string*

|          |  |
|----------|--|
| Synopsis | Destination MAC address for all L2 IS-IS routers |
|----------|--|

|            |  |
|------------|--|
| Context    | <b>configure service vprn string isis number all-l2isis string</b> |
| Tree       | <a href="#">all-l2isis</a>   |
| Default    | 01:80:C2:00:00:15  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **area-address** *string*

|                |  |
|----------------|--|
| Synopsis       | Area address portion of the NSAP address                             |
| Context        | <b>configure service vprn string isis number area-address string</b> |
| Tree           | <a href="#">area-address</a>   |
| String Length  | 2 to 38  |
| Max. Instances | 3  |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

### **authentication-check** *boolean*

|            |   |
|------------|---|
| Synopsis   | Perform authentication check to reject mismatch PDUs                          |
| Context    | <b>configure service vprn string isis number authentication-check boolean</b> |
| Tree       | <a href="#">authentication-check</a>  |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **authentication-key** *string*

|               |  |
|---------------|--|
| Synopsis      | Authentication key to verify PDUs sent from neighbors                      |
| Context       | <b>configure service vprn string isis number authentication-key string</b> |
| Tree          | <a href="#">authentication-key</a>   |
| String Length | 1 to 366   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**authentication-keychain** *reference*

|            |  |
|------------|--|
| Synopsis   | Keychain used to sign and authenticate   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis number</a> <a href="#">authentication-keychain</a> <i>reference</i> |
| Tree       | <a href="#">authentication-keychain</a>  |
| Reference  | <b>configure</b> <a href="#">system security keychains</a> <a href="#">keychain</a> <i>string</i>  |
| Introduced | 16.0.R3  |
| Platforms  | All  |

**authentication-type** *keyword*

|            |  |
|------------|--|
| Synopsis   | Authentication type  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis number</a> <a href="#">authentication-type</a> <i>keyword</i> |
| Tree       | <a href="#">authentication-type</a>  |
| Options    | password, message-digest   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**csnp-authentication** *boolean*

|            |  |
|------------|--|
| Synopsis   | Authenticate individual IS-IS packets of the CSNP type   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis number</a> <a href="#">csnp-authentication</a> <i>boolean</i> |
| Tree       | <a href="#">csnp-authentication</a>  |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**default-route-tag** *number*

|            |   |
|------------|---|
| Synopsis   | Route tag for the default route   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis number</a> <a href="#">default-route-tag</a> <i>number</i> |
| Tree       | <a href="#">default-route-tag</a>   |
| Range      | 1 to 4294967295   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**export-limit**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>export-limit</b> context                        |
| Context    | <b>configure service vprn string isis number export-limit</b> |
| Tree       | <a href="#">export-limit</a>                                  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**log-percent number**

|            |  |
|------------|--|
| Synopsis   | Export limit before warning and SNMP notification sent                           |
| Context    | <b>configure service vprn string isis number export-limit log-percent number</b> |
| Tree       | <a href="#">log-percent</a>  |
| Range      | 1 to 100   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**number number**

|            |   |
|------------|---|
| Synopsis   | Maximum routes or prefixes exported from route table                        |
| Context    | <b>configure service vprn string isis number export-limit number number</b> |
| Tree       | <a href="#">number</a>  |
| Range      | 1 to 4294967295   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**export-policy reference**

|             |  |
|-------------|--|
| Synopsis    | Export policies that determine exported routes   |
| Context     | <b>configure service vprn string isis number export-policy reference</b>   |
| Tree        | <a href="#">export-policy</a>  |
| Description | <p>This command configures export routing policies for the routes exported from the routing table to IS-IS.</p> <p>If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS.</p> |

If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.

If the **aggregate** command is also configured in the **configure router** context, the aggregation is applied before the export policy is applied.

Routing policies are created in the **configure router policy-options** context.

|                |  |
|----------------|--|
| Reference      | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> |
| Max. Instances | 5  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

## graceful-restart

|            |   |
|------------|---|
| Synopsis   | Enable the <b>graceful-restart</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">graceful-restart</a> |
| Tree       | <a href="#">graceful-restart</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## helper-mode *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable the Graceful Restart helper for IS-IS   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">graceful-restart</a> <a href="#">helper-mode</a> <i>boolean</i> |
| Tree       | <a href="#">helper-mode</a>  |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## hello-authentication *boolean*

|            |  |
|------------|--|
| Synopsis   | Authenticate Hello type IS-IS protocol packets   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">hello-authentication</a> <i>boolean</i> |
| Tree       | <a href="#">hello-authentication</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |

Platforms All

### **hello-padding** *keyword*

Synopsis IS-IS Hello message padding  
Context **configure service vprn** *string isis number hello-padding keyword*  
Tree [hello-padding](#)  
Options adaptive, loose, strict, none  
Introduced 16.0.R1  
Platforms All

### **ignore-attached-bit** *boolean*

Synopsis Ignore attached bit on received Layer 1 LSPs  
Context **configure service vprn** *string isis number ignore-attached-bit boolean*  
Tree [ignore-attached-bit](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **ignore-lsp-errors** *boolean*

Synopsis Ignore LSP packets with errors  
Context **configure service vprn** *string isis number ignore-lsp-errors boolean*  
Tree [ignore-lsp-errors](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **ignore-narrow-metric** *boolean*

Synopsis Ignore links with narrow metrics  
Context **configure service vprn** *string isis number ignore-narrow-metric boolean*  
Tree [ignore-narrow-metric](#)  
Default false

Introduced 16.0.R1  
 Platforms All

### **iid-tlv** *boolean*

Synopsis Use IID TLVs with IS-IS multi-instance  
 Context **configure** [service](#) [vpn](#) *string* [isis](#) *number* **iid-tlv** *boolean*  
 Tree [iid-tlv](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **import-policy** *reference*

Synopsis Import policy names for routes from IGP to route table  
 Context **configure** [service](#) [vpn](#) *string* [isis](#) *number* **import-policy** *reference*  
 Tree [import-policy](#)  
 Reference **configure** [policy-options](#) [policy-statement](#) *string*  
 Max. Instances 5  
 Notes This element is ordered by the user.  
 Introduced 16.0.R1  
 Platforms All

### **interface** [[interface-name](#)] *string*

Synopsis Enter the **interface** list instance  
 Context **configure** [service](#) [vpn](#) *string* [isis](#) *number* **interface** *string*  
 Tree [interface](#)  
 Introduced 16.0.R1  
 Platforms All

### **[interface-name]** *string*

Synopsis IP interface name



|               |   |
|---------------|---|
| Context       | <b>configure service vprn string isis number interface string</b> |
| Tree          | <b>interface</b>  |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.                               |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

### **admin-state keyword**

|            |   |
|------------|---|
| Synopsis   | Administrative state of the IS-IS interface   |
| Context    | <b>configure service vprn string isis number interface string admin-state keyword</b> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **bfd-liveness**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>bfd-liveness</b> context   |
| Context     | <b>configure service vprn string isis number interface string bfd-liveness</b>  |
| Tree        | <b>bfd-liveness</b>   |
| Description | Commands in this context enable the use of bidirectional forwarding (BFD) to control IPv4 and IPv6 adjacencies. Enabling BFD on an IPv4 or IPv6 protocol interface ties the protocol interface state to the BFD session state between the local and remote nodes. BFD must be enabled on the applicable IP interface. |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **ipv4**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>ipv4</b> context  |
| Context    | <b>configure service vprn string isis number interface string bfd-liveness ipv4</b> |
| Tree       | <b>ipv4</b>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**include-bfd-tlv** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable IS-IS BFD TLVs on the interface   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">bfd-liveness</a> <a href="#">ipv4</a> <b>include-bfd-tlv</b> <i>boolean</i> |
| Tree       | <a href="#">include-bfd-tlv</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**ipv6**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>ipv6</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">bfd-liveness</a> <a href="#">ipv6</a> |
| Tree       | <a href="#">ipv6</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**include-bfd-tlv** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable IS-IS BFD TLVs on the interface   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">bfd-liveness</a> <a href="#">ipv6</a> <b>include-bfd-tlv</b> <i>boolean</i> |
| Tree       | <a href="#">include-bfd-tlv</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**csnp-interval** *number*

|          |  |
|----------|--|
| Synopsis | Time interval between successive CSN PDUs sent   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">csnp-interval</a> <i>number</i> |
| Tree     | <a href="#">csnp-interval</a>  |
| Range    | 1 to 65535   |
| Units    | seconds  |
| Default  | 10   |

Introduced 16.0.R1  
 Platforms All

### **default-instance** *boolean*

Synopsis Allow non-MI capable router to establish an adjacency  
 Context **configure** [service](#) [vprn](#) *string* [isis](#) *number* [interface](#) *string* **default-instance** *boolean*  
 Tree [default-instance](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **hello-authentication** *boolean*

Synopsis Authenticate Hello type IS-IS protocol packets  
 Context **configure** [service](#) [vprn](#) *string* [isis](#) *number* [interface](#) *string* **hello-authentication** *boolean*  
 Tree [hello-authentication](#)  
 Default true  
 Introduced 16.0.R1  
 Platforms All

### **hello-authentication-key** *string*

Synopsis Authentication key or hash string for Hello PDUs  
 Context **configure** [service](#) [vprn](#) *string* [isis](#) *number* [interface](#) *string* **hello-authentication-key** *string*  
 Tree [hello-authentication-key](#)  
 String Length 1 to 366  
 Introduced 16.0.R1  
 Platforms All

### **hello-authentication-keychain** *reference*

Synopsis Authentication keychain to use for the session  
 Context **configure** [service](#) [vprn](#) *string* [isis](#) *number* [interface](#) *string* **hello-authentication-keychain** *reference*  
 Tree [hello-authentication-keychain](#)

|            |   |
|------------|---|
| Reference  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> |
| Introduced | 16.0.R3   |
| Platforms  | All   |

### **hello-authentication-type** *keyword*

|            |   |
|------------|---|
| Synopsis   | Hello authentication type   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <b>hello-authentication-type</b> <i>keyword</i> |
| Tree       | <a href="#">hello-authentication-type</a>   |
| Options    | password, message-digest  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **hello-padding** *keyword*

|            |   |
|------------|---|
| Synopsis   | Padding on IS-IS Hello packets  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <b>hello-padding</b> <i>keyword</i> |
| Tree       | <a href="#">hello-padding</a>   |
| Options    | adaptive, loose, strict, none   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **interface-type** *keyword*

|            |  |
|------------|--|
| Synopsis   | Interface type to broadcast, point-to-point, or to be default  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <b>interface-type</b> <i>keyword</i> |
| Tree       | <a href="#">interface-type</a>   |
| Options    | point-to-point, broadcast  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **ipv4-multicast** *boolean*

|          |   |
|----------|---|
| Synopsis | Enable IPv4 multicast routing for the interface |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string isis number interface string ipv4-multicast boolean</i> |
| Tree       | <a href="#">ipv4-multicast</a>  |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **ipv6-unicast** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable IPv6 unicast routing for the interface   |
| Context    | <b>configure service vprn</b> <i>string isis number interface string ipv6-unicast boolean</i> |
| Tree       | <a href="#">ipv6-unicast</a>  |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **level** [[level-number](#)] *keyword*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>level</b> list instance   |
| Context        | <b>configure service vprn</b> <i>string isis number interface string level keyword</i> |
| Tree           | <a href="#">level</a>  |
| Max. Instances | 2  |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

### **[level-number]** *keyword*

|            |  |
|------------|--|
| Synopsis   | ISIS protocol level number   |
| Context    | <b>configure service vprn</b> <i>string isis number interface string level keyword</i> |
| Tree       | <a href="#">level</a>  |
| Options    | 1, 2   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**hello-authentication-key *string***

|               |   |
|---------------|---|
| Synopsis      | Authentication key for Hello PDUs   |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis number</a> <a href="#">interface</a> <i>string</i> <a href="#">level</a> <i>keyword</i> <a href="#">hello-authentication-key</a> <i>string</i>   |
| Tree          | <a href="#">hello-authentication-key</a>  |
| Description   | This command configures the authentication key (password) for Hello PDUs. Both the Hello authentication key and the Hello authentication type on a segment must match.<br><br>If both IS-IS and Hello authentication are configured, Hello messages are validated using Hello authentication. If only IS-IS authentication is configured, it is used to authenticate all IS-IS (including Hello) protocol PDUs. |
| String Length | 1 to 366  |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**hello-authentication-keychain *reference***

|            |   |
|------------|---|
| Synopsis   | Authentication keychain to use for the session  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis number</a> <a href="#">interface</a> <i>string</i> <a href="#">level</a> <i>keyword</i> <a href="#">hello-authentication-keychain</a> <i>reference</i> |
| Tree       | <a href="#">hello-authentication-keychain</a>   |
| Reference  | <b>configure</b> <a href="#">system security keychains</a> <a href="#">keychain</a> <i>string</i>   |
| Introduced | 16.0.R3   |
| Platforms  | All   |

**hello-authentication-type *keyword***

|             |   |
|-------------|---|
| Synopsis    | Hello authentication enabled on the context   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis number</a> <a href="#">interface</a> <i>string</i> <a href="#">level</a> <i>keyword</i> <a href="#">hello-authentication-type</a> <i>keyword</i>     |
| Tree        | <a href="#">hello-authentication-type</a>   |
| Description | This command enables Hello authentication at the level context. Both the Hello authentication key and the Hello authentication type on a segment must match. The Hello <b>authentication-key</b> statement must also be included. |
| Options     | password, message-digest  |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**hello-interval** *number*

|            |  |
|------------|--|
| Synopsis   | Interval between Hello messages sent on this level   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">level</a> <i>keyword</i> <a href="#">hello-interval</a> <i>number</i> |
| Tree       | <a href="#">hello-interval</a>   |
| Range      | 1 to 20000   |
| Units      | seconds  |
| Default    | 9  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**hello-multiplier** *number*

|            |  |
|------------|--|
| Synopsis   | Hello messages missed from neighbor before router declares adjacency down  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">level</a> <i>keyword</i> <a href="#">hello-multiplier</a> <i>number</i> |
| Tree       | <a href="#">hello-multiplier</a>   |
| Range      | 2 to 100   |
| Default    | 3  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**hello-padding** *keyword*

|            |  |
|------------|--|
| Synopsis   | Padding on IS-IS Hello packets   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">level</a> <i>keyword</i> <a href="#">hello-padding</a> <i>keyword</i> |
| Tree       | <a href="#">hello-padding</a>  |
| Options    | adaptive, loose, strict, none  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**ipv4-multicast-metric** *number*

|          |   |
|----------|---|
| Synopsis | IS-IS interface metric applied for IPv4 multicast |
|----------|---|

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string isis number interface string level</i> keyword <b>ipv4-multicast-metric number</b> |
| Tree       | <b>ipv4-multicast-metric</b>   |
| Range      | 1 to 16777215  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **ipv6-unicast-metric** *number*

|            |  |
|------------|--|
| Synopsis   | IS-IS interface metric applied for IPv6 unicast  |
| Context    | <b>configure service vprn</b> <i>string isis number interface string level</i> keyword <b>ipv6-unicast-metric number</b> |
| Tree       | <b>ipv6-unicast-metric</b>   |
| Range      | 1 to 16777215  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **metric** *number*

|            |   |
|------------|---|
| Synopsis   | IS-IS interface metric applied for IPv4 unicast   |
| Context    | <b>configure service vprn</b> <i>string isis number interface string level</i> keyword <b>metric number</b> |
| Tree       | <b>metric</b>   |
| Range      | 1 to 16777215   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **passive** *boolean*

|            |   |
|------------|---|
| Synopsis   | Passive interface   |
| Context    | <b>configure service vprn</b> <i>string isis number interface string level</i> keyword <b>passive boolean</b> |
| Tree       | <b>passive</b>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |



**priority number**

|            |   |
|------------|---|
| Synopsis   | Router to become the designated router on a multi-access network  |
| Context    | <b>configure</b> <a href="#">service vprn string isis number interface string level keyword priority number</a> |
| Tree       | <a href="#">priority</a>  |
| Range      | 0 to 127  |
| Default    | 64  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**sd-offset number**

|            |  |
|------------|--|
| Synopsis   | Value of the signal degrade offset   |
| Context    | <b>configure</b> <a href="#">service vprn string isis number interface string level keyword sd-offset number</a> |
| Tree       | <a href="#">sd-offset</a>  |
| Range      | 1 to 16777215  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**sf-offset number**

|            |  |
|------------|--|
| Synopsis   | Value of the signal fail offset  |
| Context    | <b>configure</b> <a href="#">service vprn string isis number interface string level keyword sf-offset number</a> |
| Tree       | <a href="#">sf-offset</a>  |
| Range      | 1 to 16777215  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**level-capability keyword**

|          |  |
|----------|--|
| Synopsis | IS-IS levels for this interface  |
| Context  | <b>configure</b> <a href="#">service vprn string isis number interface string level-capability keyword</a> |
| Tree     | <a href="#">level-capability</a>   |
| Options  | 1, 2, 1/2  |
| Default  | 1/2  |

Introduced 16.0.R1  
 Platforms All

### **load-balancing-weight** *number*

Synopsis Load balancing weight  
 Context **configure** [service vprn](#) *string* [isis number](#) [interface](#) *string* [load-balancing-weight](#) *number*  
 Tree [load-balancing-weight](#)  
 Max. Range 0 to 4294967295  
 Introduced 16.0.R1  
 Platforms All

### **loopfree-alternate**

Synopsis Enter the **loopfree-alternate** context  
 Context **configure** [service vprn](#) *string* [isis number](#) [interface](#) *string* [loopfree-alternate](#)  
 Tree [loopfree-alternate](#)  
 Introduced 16.0.R3  
 Platforms All

### **exclude** *boolean*

Synopsis Enable/disable Loopfree Alternative at interface level.  
 Context **configure** [service vprn](#) *string* [isis number](#) [interface](#) *string* [loopfree-alternate](#) [exclude](#) *boolean*  
 Tree [exclude](#)  
 Default false  
 Introduced 16.0.R3  
 Platforms All

### **policy-map**

Synopsis Enable the **policy-map** context  
 Context **configure** [service vprn](#) *string* [isis number](#) [interface](#) *string* [loopfree-alternate](#) [policy-map](#)  
 Tree [policy-map](#)  
 Introduced 16.0.R3

Platforms All

### **route-nh-template** *reference*

Synopsis Route next hop policy template name

Context **configure** [service vprn](#) *string* [isis](#) *number* [interface](#) *string* [loopfree-alternate](#) [policy-map](#) [route-nh-template](#) *reference*

Tree [route-nh-template](#)

Reference **configure** [routing-options](#) [route-next-hop-policy](#) [template](#) *string*

Notes This element is mandatory.

Introduced 16.0.R3

Platforms All

### **lsp-pacing-interval** *number*

Synopsis Interval for sending LSPs from interface

Context **configure** [service vprn](#) *string* [isis](#) *number* [interface](#) *string* [lsp-pacing-interval](#) *number*

Tree [lsp-pacing-interval](#)

Range 0 to 65535

Units milliseconds

Default 100

Introduced 16.0.R1

Platforms All

### **mesh-group**

Synopsis Enable the **mesh-group** context

Context **configure** [service vprn](#) *string* [isis](#) *number* [interface](#) *string* [mesh-group](#)

Tree [mesh-group](#)

Introduced 16.0.R1

Platforms All

### **blocked**

Synopsis Prevent the interface from flooding LSPs

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string isis number interface string mesh-group blocked</i> |
| Tree       | <b>blocked</b>  |
| Notes      | The following elements are part of a choice: <b>blocked</b> or <b>value</b> .               |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **value** *number*

|            |  |
|------------|--|
| Synopsis   | Mesh group for the interface   |
| Context    | <b>configure service vprn</b> <i>string isis number interface string mesh-group value number</i> |
| Tree       | <b>value</b>   |
| Range      | 1 to 2000000000  |
| Notes      | The following elements are part of a choice: <b>blocked</b> or <b>value</b> .                    |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **passive** *boolean*

|            |  |
|------------|--|
| Synopsis   | Passive interface  |
| Context    | <b>configure service vprn</b> <i>string isis number interface string passive boolean</i> |
| Tree       | <b>passive</b>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **retransmit-interval** *number*

|            |   |
|------------|---|
| Synopsis   | Minimum time between LSP PDU retransmissions on point-to-point interface                            |
| Context    | <b>configure service vprn</b> <i>string isis number interface string retransmit-interval number</i> |
| Tree       | <b>retransmit-interval</b>  |
| Range      | 1 to 65535  |
| Units      | seconds   |
| Default    | 5   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**tag number**

|            |  |
|------------|--|
| Synopsis   | Route tag for IP address of interface  |
| Context    | <b>configure service vprn string isis number interface string tag number</b> |
| Tree       | <a href="#">tag</a>  |
| Range      | 1 to 4294967295  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**ipv4-multicast-routing keyword**

|            |   |
|------------|---|
| Synopsis   | IS-IS topology for IPv4 multicast routing                                       |
| Context    | <b>configure service vprn string isis number ipv4-multicast-routing keyword</b> |
| Tree       | <a href="#">ipv4-multicast-routing</a>  |
| Options    | false, native, mt   |
| Default    | native  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**ipv4-routing boolean**

|            |   |
|------------|---|
| Synopsis   | Support IPv4 routing for IS-IS instance                               |
| Context    | <b>configure service vprn string isis number ipv4-routing boolean</b> |
| Tree       | <a href="#">ipv4-routing</a>  |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**ipv6-routing keyword**

|          |   |
|----------|---|
| Synopsis | Routing topology for IPv6   |
| Context  | <b>configure service vprn string isis number ipv6-routing keyword</b> |
| Tree     | <a href="#">ipv6-routing</a>  |
| Options  | false, native, mt   |
| Default  | false   |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **level** [[level-number](#)] *keyword*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>level</b> list instance  |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">level</a> <i>keyword</i> |
| Tree           | <a href="#">level</a>   |
| Max. Instances | 2   |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

### **[level-number]** *keyword*

|            |   |
|------------|---|
| Synopsis   | ISIS protocol level number  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">level</a> <i>keyword</i> |
| Tree       | <a href="#">level</a>   |
| Options    | 1, 2  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **advertise-router-capability** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow router advertisement capabilities  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">level</a> <i>keyword</i> <a href="#">advertise-router-capability</a> <i>boolean</i> |
| Tree       | <a href="#">advertise-router-capability</a>  |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **authentication-key** *string*

|          |   |
|----------|---|
| Synopsis | Authentication key to verify PDUs sent on the interface |
|----------|---|

|               |   |
|---------------|---|
| Context       | <b>configure service vprn</b> <i>string isis number level</i> keyword <b>authentication-key</b> <i>string</i>   |
| Tree          | <a href="#">authentication-key</a>  |
| Description   | This command sets the authentication key used to verify PDUs sent by neighboring routers on the interface.<br><br>Neighboring routers use passwords to authenticate PDUs sent from an interface. For authentication to work, both the authentication key and the authentication type on a segment must match. The <b>authentication-type</b> command must also be included. |
| String Length | 1 to 366  |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

### **authentication-keychain** *reference*

|            |   |
|------------|---|
| Synopsis   | Keychain used to sign and authenticate  |
| Context    | <b>configure service vprn</b> <i>string isis number level</i> keyword <b>authentication-keychain</b> <i>reference</i> |
| Tree       | <a href="#">authentication-keychain</a>   |
| Reference  | <b>configure system security keychains</b> <b>keychain</b> <i>string</i>  |
| Introduced | 16.0.R3   |
| Platforms  | All   |

### **authentication-type** *keyword*

|            |   |
|------------|---|
| Synopsis   | Authentication type to be used  |
| Context    | <b>configure service vprn</b> <i>string isis number level</i> keyword <b>authentication-type</b> <i>keyword</i> |
| Tree       | <a href="#">authentication-type</a>   |
| Options    | password, message-digest  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **csnp-authentication** *boolean*

|          |   |
|----------|---|
| Synopsis | Enable authentication of CSNP IS-IS protocol packets  |
| Context  | <b>configure service vprn</b> <i>string isis number level</i> keyword <b>csnp-authentication</b> <i>boolean</i> |
| Tree     | <a href="#">csnp-authentication</a>   |
| Default  | true  |

Introduced 16.0.R1  
Platforms All

### **default-ipv4-multicast-metric** *number*

Synopsis Default metric for IPv4 unicast  
Context **configure** [service](#) [vprn](#) *string* [isis](#) *number* [level](#) *keyword* [default-ipv4-multicast-metric](#) *number*  
Tree [default-ipv4-multicast-metric](#)  
Range 1 to 16777215  
Default 10  
Introduced 16.0.R1  
Platforms All

### **default-ipv6-unicast-metric** *number*

Synopsis Default metric for IPv6 unicast  
Context **configure** [service](#) [vprn](#) *string* [isis](#) *number* [level](#) *keyword* [default-ipv6-unicast-metric](#) *number*  
Tree [default-ipv6-unicast-metric](#)  
Range 1 to 16777215  
Default 10  
Introduced 16.0.R1  
Platforms All

### **default-metric** *number*

Synopsis Default metric  
Context **configure** [service](#) [vprn](#) *string* [isis](#) *number* [level](#) *keyword* [default-metric](#) *number*  
Tree [default-metric](#)  
Range 1 to 16777215  
Default 10  
Introduced 16.0.R1  
Platforms All



**external-preference** *number*

|            |  |
|------------|--|
| Synopsis   | External route preference for IS-IS level  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string isis number level</i> <b>keyword</b> <a href="#">external-preference</a> <i>number</i> |
| Tree       | <a href="#">external-preference</a>  |
| Range      | 1 to 255   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**hello-authentication** *boolean*

|            |  |
|------------|--|
| Synopsis   | Authenticate Hello type IS-IS protocol packets   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string isis number level</i> <b>keyword</b> <a href="#">hello-authentication</a> <i>boolean</i> |
| Tree       | <a href="#">hello-authentication</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**hello-padding** *keyword*

|            |   |
|------------|---|
| Synopsis   | Padding on IS-IS Hello packets  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string isis number level</i> <b>keyword</b> <a href="#">hello-padding</a> <i>keyword</i> |
| Tree       | <a href="#">hello-padding</a>   |
| Options    | adaptive, loose, strict, none   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**loopfree-alternate-exclude** *boolean*

|            |  |
|------------|--|
| Synopsis   | Exclude interface participating in specific IS-IS level in SPF LFA computation   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string isis number level</i> <b>keyword</b> <a href="#">loopfree-alternate-exclude</a> <i>boolean</i> |
| Tree       | <a href="#">loopfree-alternate-exclude</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**lsp-mtu-size** *number***WARNING:**

Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | LSP MTU size   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">level</a> <i>keyword</i> <a href="#">lsp-mtu-size</a> <i>number</i> |
| Tree       | <a href="#">lsp-mtu-size</a>   |
| Range      | 490 to 9778  |
| Units      | bytes  |
| Default    | 1492   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**preference** *number*

|            |  |
|------------|--|
| Synopsis   | External route preference at level   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">level</a> <i>keyword</i> <a href="#">preference</a> <i>number</i> |
| Tree       | <a href="#">preference</a>   |
| Range      | 1 to 255   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**psnp-authentication** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable authentication on PSNP IS-IS protocol packets   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">level</a> <i>keyword</i> <a href="#">psnp-authentication</a> <i>boolean</i> |
| Tree       | <a href="#">psnp-authentication</a>  |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**wide-metrics-only** *boolean*

|          |   |
|----------|---|
| Synopsis | Use wide metrics advertisements in the LSPs |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string isis number level keyword wide-metrics-only boolean</i> |
| Tree       | <a href="#">wide-metrics-only</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **level-capability** *keyword*

|            |  |
|------------|--|
| Synopsis   | Routing level for instance   |
| Context    | <b>configure service vprn</b> <i>string isis number level-capability keyword</i> |
| Tree       | <a href="#">level-capability</a>   |
| Options    | 1, 2, 1/2  |
| Default    | 1/2  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **link-group** [[link-group-name](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>link-group</b> list instance                                 |
| Context    | <b>configure service vprn</b> <i>string isis number link-group string</i> |
| Tree       | <a href="#">link-group</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **[link-group-name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Link group name for the IS-IS protocol                                    |
| Context       | <b>configure service vprn</b> <i>string isis number link-group string</i> |
| Tree          | <a href="#">link-group</a>  |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.                                       |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">link-group</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 255  |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**level** [[level-number](#)] *keyword*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>level</b> list instance   |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">link-group</a> <i>string</i> <a href="#">level</a> <i>keyword</i> |
| Tree           | <a href="#">level</a>  |
| Max. Instances | 2  |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

**[level-number]** *keyword*

|            |  |
|------------|--|
| Synopsis   | ISIS protocol level number   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">link-group</a> <i>string</i> <a href="#">level</a> <i>keyword</i> |
| Tree       | <a href="#">level</a>  |
| Options    | 1, 2   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**ipv4-multicast-metric-offset** *number*

|          |   |
|----------|---|
| Synopsis | Offset value for the IPv4 multicast address family  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">link-group</a> <i>string</i> <a href="#">level</a> <i>keyword</i> <a href="#">ipv4-multicast-metric-offset</a> <i>number</i> |
| Tree     | <a href="#">ipv4-multicast-metric-offset</a>  |
| Range    | 1 to 16777215   |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **ipv4-unicast-metric-offset** *number*

|            |   |
|------------|---|
| Synopsis   | Offset value for the IPv4 unicast address family  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">link-group</a> <i>string</i> <a href="#">level</a> <i>keyword</i> <a href="#">ipv4-unicast-metric-offset</a> <i>number</i> |
| Tree       | <a href="#">ipv4-unicast-metric-offset</a>  |
| Range      | 1 to 16777215   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **ipv6-unicast-metric-offset** *number*

|            |   |
|------------|---|
| Synopsis   | Offset value for the IPv6 unicast address family  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">link-group</a> <i>string</i> <a href="#">level</a> <i>keyword</i> <a href="#">ipv6-unicast-metric-offset</a> <i>number</i> |
| Tree       | <a href="#">ipv6-unicast-metric-offset</a>  |
| Range      | 1 to 16777215   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **member** [[interface-name](#)] *reference*

|                |  |
|----------------|--|
| Synopsis       | Add a list entry for <b>member</b>   |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">link-group</a> <i>string</i> <a href="#">level</a> <i>keyword</i> <a href="#">member</a> <i>reference</i> |
| Tree           | <a href="#">member</a>   |
| Max. Instances | 8  |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

### **[interface-name]** *reference*

|          |  |
|----------|--|
| Synopsis | Interface name for the associated link group |
|----------|--|

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string isis number link-group string level keyword member reference</i> |
| Tree       | <a href="#">member</a>   |
| Reference  | <b>configure service vprn</b> <i>string isis number interface string</i>                                 |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **oper-members** *number*

|            |   |
|------------|---|
| Synopsis   | Minimum number of operational links   |
| Context    | <b>configure service vprn</b> <i>string isis number link-group string level keyword oper-members number</i> |
| Tree       | <a href="#">oper-members</a>  |
| Range      | 1 to 8  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **revert-members** *number*

|            |   |
|------------|---|
| Synopsis   | Minimum number of operational links to return link group to normal state and remove offsets                   |
| Context    | <b>configure service vprn</b> <i>string isis number link-group string level keyword revert-members number</i> |
| Tree       | <a href="#">revert-members</a>  |
| Range      | 1 to 8  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **loopfree-alternate**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>loopfree-alternate</b> context                               |
| Context    | <b>configure service vprn</b> <i>string isis number loopfree-alternate</i> |
| Tree       | <a href="#">loopfree-alternate</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**exclude**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>exclude</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn string isis number loopfree-alternate exclude</a> |
| Tree       | <a href="#">exclude</a>   |
| Introduced | 16.0.R3   |
| Platforms  | All   |

**prefix-policy** *reference*

|                |  |
|----------------|--|
| Synopsis       | Policy to exclude prefixes from LFA SPF calculation  |
| Context        | <b>configure</b> <a href="#">service vprn string isis number loopfree-alternate exclude prefix-policy reference</a>  |
| Tree           | <a href="#">prefix-policy</a>  |
| Description    | This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation.<br><br>An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF. |
| Reference      | <b>configure</b> <a href="#">policy-options policy-statement string</a>  |
| Max. Instances | 5  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R3  |
| Platforms      | All  |

**lsp-lifetime** *number***WARNING:**

Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | Amount of time during which an LSP is considered valid                               |
| Context  | <b>configure</b> <a href="#">service vprn string isis number lsp-lifetime number</a> |
| Tree     | <a href="#">lsp-lifetime</a>   |
| Range    | 350 to 65535   |
| Units    | seconds  |
| Default  | 1200   |

Introduced 16.0.R1  
 Platforms All

### **lsp-minimum-remaining-lifetime** *number*

Synopsis Minimum value for the Remaining Lifetime of an LSP  
 Context **configure** [service vprn string isis number](#) [lsp-minimum-remaining-lifetime number](#)  
 Tree [lsp-minimum-remaining-lifetime](#)  
 Range 350 to 65535  
 Units seconds  
 Introduced 19.7.R1  
 Platforms All

### **lsp-mtu-size** *number*



**WARNING:**

Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

Synopsis LSP MTU size  
 Context **configure** [service vprn string isis number](#) [lsp-mtu-size number](#)  
 Tree [lsp-mtu-size](#)  
 Range 490 to 9778  
 Units bytes  
 Default 1492  
 Introduced 16.0.R1  
 Platforms All

### **lsp-refresh**

Synopsis Enter the **lsp-refresh** context  
 Context **configure** [service vprn string isis number](#) [lsp-refresh](#)  
 Tree [lsp-refresh](#)  
 Introduced 16.0.R1  
 Platforms All



**half-lifetime** *boolean*

|            |   |
|------------|---|
| Synopsis   | Set the refresh interval to always be half the LSP lifetime                               |
| Context    | <b>configure service vprn</b> <i>string isis number lsp-refresh half-lifetime boolean</i> |
| Tree       | <a href="#">half-lifetime</a>   |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**interval** *number*

|            |   |
|------------|---|
| Synopsis   | Refresh timer interval  |
| Context    | <b>configure service vprn</b> <i>string isis number lsp-refresh interval number</i> |
| Tree       | <a href="#">interval</a>  |
| Range      | 150 to 65535  |
| Units      | seconds   |
| Default    | 600   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**mru-mismatch-detection** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Enable detection of MRU mismatch   |
| Context     | <b>configure service vprn</b> <i>string isis number mru-mismatch-detection boolean</i>   |
| Tree        | <a href="#">mru-mismatch-detection</a>   |
| Description | <p>When configured to <b>true</b>, this command verifies that the received IS-IS Hello (IIH) packet size does not exceed the configured maximum port MTU size. The received IIH packet is dropped when its size exceeds the maximum port MTU size.</p> <p>When configured to <b>false</b>, the IS-IS router instance will not drop oversized IIH packets.</p> <p>By default, FP-based hardware can receive oversized packets but it will not originate them.</p> |
| Default     | false  |
| Introduced  | 21.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## multi-topology

|            |   |
|------------|---|
| Synopsis   | Enable the <b>multi-topology</b> context                        |
| Context    | <b>configure service vprn string isis number multi-topology</b> |
| Tree       | <a href="#">multi-topology</a>                                  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## ipv4-multicast *boolean*

|            |  |
|------------|--|
| Synopsis   | Support IPv4 topology (MT3)  |
| Context    | <b>configure service vprn string isis number multi-topology ipv4-multicast boolean</b> |
| Tree       | <a href="#">ipv4-multicast</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## ipv6-unicast *boolean*

|            |  |
|------------|--|
| Synopsis   | Support multi-topology TLVs  |
| Context    | <b>configure service vprn string isis number multi-topology ipv6-unicast boolean</b> |
| Tree       | <a href="#">ipv6-unicast</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## multicast-import

|            |   |
|------------|---|
| Synopsis   | Enter the <b>multicast-import</b> context                         |
| Context    | <b>configure service vprn string isis number multicast-import</b> |
| Tree       | <a href="#">multicast-import</a>                                  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **ipv4 *boolean***

|            |   |
|------------|---|
| Synopsis   | Submit IPv4 routes into the multicast RPF of the RTM                                  |
| Context    | <b>configure service vprn string isis number multicast-import ipv4 <i>boolean</i></b> |
| Tree       | <a href="#">ipv4</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **overload**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>overload</b> context                        |
| Context    | <b>configure service vprn string isis number overload</b> |
| Tree       | <a href="#">overload</a>                                  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **max-metric *boolean***

|            |   |
|------------|---|
| Synopsis   | Advertise transit links with maximum metric instead of setting overload bit         |
| Context    | <b>configure service vprn string isis number overload max-metric <i>boolean</i></b> |
| Tree       | <a href="#">max-metric</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **overload-export-external *boolean***

|            |  |
|------------|--|
| Synopsis   | Advertise the external routes when router is in overloaded                               |
| Context    | <b>configure service vprn string isis number overload-export-external <i>boolean</i></b> |
| Tree       | <a href="#">overload-export-external</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **overload-export-interlevel** *boolean*

|            |  |
|------------|--|
| Synopsis   | Advertise the inter-level routes when router is overloaded   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string isis number</i> <b>overload-export-interlevel</b> <i>boolean</i> |
| Tree       | <a href="#">overload-export-interlevel</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **overload-on-boot**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>overload-on-boot</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string isis number</i> <b>overload-on-boot</b> |
| Tree       | <a href="#">overload-on-boot</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **max-metric** *boolean*

|            |  |
|------------|--|
| Synopsis   | Advertise transit links with maximum metric instead of setting overload bit  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string isis number</i> <b>overload-on-boot</b> <b>max-metric</b> <i>boolean</i> |
| Tree       | <a href="#">max-metric</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **timeout** *number*

|            |  |
|------------|--|
| Synopsis   | Time during which the router operates in overload state after reboot   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string isis number</i> <b>overload-on-boot</b> <b>timeout</b> <i>number</i> |
| Tree       | <a href="#">timeout</a>  |
| Range      | 60 to 1800   |
| Units      | seconds  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**poi-tlv** *boolean*

|            |   |
|------------|---|
| Synopsis   | Purge Originator Identification TLV   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">poi-tlv</a> <i>boolean</i> |
| Tree       | <a href="#">poi-tlv</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**prefix-attributes-tlv** *boolean*

|            |   |
|------------|---|
| Synopsis   | Use IS-IS Prefix Attributes TLV to exchange extended IPv4 and IPv6 reachability information   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">prefix-attributes-tlv</a> <i>boolean</i> |
| Tree       | <a href="#">prefix-attributes-tlv</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**prefix-limit**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>prefix-limit</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">prefix-limit</a> |
| Tree       | <a href="#">prefix-limit</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**limit** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum number of prefixes for IS-IS instance   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">prefix-limit</a> <a href="#">limit</a> <i>number</i> |
| Tree       | <a href="#">limit</a>   |
| Range      | 1 to 4294967295   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |

Platforms All

### **log-only** *boolean*

Synopsis Send warning message when the prefix limit is reached  
 Context **configure** *service vprn string isis number prefix-limit log-only boolean*  
 Tree [log-only](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **overload-timeout** (*number | keyword*)

Synopsis Time in overload state when prefix limit is reached  
 Context **configure** *service vprn string isis number prefix-limit overload-timeout (number | keyword)*  
 Tree [overload-timeout](#)  
 Range 1 to 1800  
 Units seconds  
 Options forever  
 Default forever  
 Introduced 16.0.R1  
 Platforms All

### **warning-threshold** *number*

Synopsis Threshold value to trigger a warning message to be sent  
 Context **configure** *service vprn string isis number prefix-limit warning-threshold number*  
 Tree [warning-threshold](#)  
 Range 0 to 100  
 Units percent  
 Default 0  
 Introduced 16.0.R1  
 Platforms All

**psnp-authentication** *boolean*

|            |   |
|------------|---|
| Synopsis   | Authenticate individual IS-IS protocol packets of partial sequence number PDU (PSNP) type   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">psnp-authentication</a> <i>boolean</i> |
| Tree       | <a href="#">psnp-authentication</a>   |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**reference-bandwidth** *number*

|            |  |
|------------|--|
| Synopsis   | Reference bandwidth for bandwidth relative costing   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">reference-bandwidth</a> <i>number</i> |
| Tree       | <a href="#">reference-bandwidth</a>  |
| Range      | 1 to 18446744073709551615  |
| Units      | kilobps  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**rib-priority**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>rib-priority</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">rib-priority</a> |
| Tree       | <a href="#">rib-priority</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**high**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>high</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">rib-priority</a> <a href="#">high</a> |
| Tree       | <a href="#">high</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**prefix-list** *reference*

|            |  |
|------------|--|
| Synopsis   | List used to select routes processed at higher priority through OSPF route calculation process   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis number</a> <a href="#">rib-priority high</a> <a href="#">prefix-list</a> <i>reference</i> |
| Tree       | <a href="#">prefix-list</a>  |
| Reference  | <b>configure</b> <a href="#">policy-options</a> <a href="#">prefix-list</a> <i>string</i>  |
| Notes      | The following elements are part of a choice: <b>prefix-list</b> or <b>tag</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**tag** *number*

|            |   |
|------------|---|
| Synopsis   | Tag value that is used to match IS-IS routes  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis number</a> <a href="#">rib-priority high</a> <a href="#">tag</a> <i>number</i> |
| Tree       | <a href="#">tag</a>   |
| Range      | 1 to 4294967295   |
| Notes      | The following elements are part of a choice: <b>prefix-list</b> or <b>tag</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**router-id** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Unique router ID for the ISIS instance  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis number</a> <a href="#">router-id</a> <i>string</i> |
| Tree       | <a href="#">router-id</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**standard-multi-instance** *boolean*

|          |  |
|----------|--|
| Synopsis | Enable RFC standards compliant multi-instance behavior   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis number</a> <a href="#">standard-multi-instance</a> <i>boolean</i> |



|            |   |
|------------|---|
| Tree       | <a href="#">standard-multi-instance</a> |
| Default    | false                                   |
| Introduced | 16.0.R1                                 |
| Platforms  | All                                     |

### **strict-adjacency-check** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable strict checking of address families for IS-IS adjacencies  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <b>strict-adjacency-check</b> <i>boolean</i> |
| Tree       | <a href="#">strict-adjacency-check</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **summary-address** [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

|            |   |
|------------|---|
| Synopsis   | Enter the <b>summary-address</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <b>summary-address</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) |
| Tree       | <a href="#">summary-address</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

|            |   |
|------------|---|
| Synopsis   | IP prefix for the summary address   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <b>summary-address</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) |
| Tree       | <a href="#">summary-address</a>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **level-capability** *keyword*

|          |                                     |
|----------|-------------------------------------|
| Synopsis | IS-IS level for the summary address |
|----------|-------------------------------------|

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string isis number summary-address (ipv4-prefix   ipv6-prefix) level-capability keyword</i> |
| Tree       | <b>level-capability</b>  |
| Options    | 1, 2, 1/2  |
| Default    | 1/2  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **route-tag** *number*

|            |  |
|------------|--|
| Synopsis   | Route tag assigned to the summary address  |
| Context    | <b>configure service vprn</b> <i>string isis number summary-address (ipv4-prefix   ipv6-prefix) route-tag number</i> |
| Tree       | <b>route-tag</b>   |
| Range      | 1 to 4294967295  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **suppress-attached-bit** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow IS-IS to suppress setting attached bit on LSPs                                  |
| Context    | <b>configure service vprn</b> <i>string isis number suppress-attached-bit boolean</i> |
| Tree       | <b>suppress-attached-bit</b>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **system-id** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | System ID  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">system-id</a> <i>string</i> |
| Tree          | <a href="#">system-id</a>  |
| String Length | 14   |
| Default       | 0000.0000.0000   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

## timers

|            |   |
|------------|---|
| Synopsis   | Enter the <b>timers</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">timers</a> |
| Tree       | <a href="#">timers</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## lsp-wait

|            |  |
|------------|--|
| Synopsis   | Enter the <b>lsp-wait</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">timers</a> <a href="#">lsp-wait</a> |
| Tree       | <a href="#">lsp-wait</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## lsp-initial-wait *number*

|            |   |
|------------|---|
| Synopsis   | Initial LSP generation delay  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">timers</a> <a href="#">lsp-wait</a> <a href="#">lsp-initial-wait</a> <i>number</i> |
| Tree       | <a href="#">lsp-initial-wait</a>  |
| Range      | 10 to 100000  |
| Units      | milliseconds  |
| Default    | 10  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **lsp-max-wait** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum time between two consecutive LSP occurrences   |
| Context    | <b>configure</b> <a href="#">service vprn string isis number timers lsp-wait lsp-max-wait number</a> |
| Tree       | <a href="#">lsp-max-wait</a>   |
| Range      | 10 to 120000   |
| Units      | milliseconds   |
| Default    | 5000   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **lsp-second-wait** *number*

|            |   |
|------------|---|
| Synopsis   | Delay between first and second LSP generation   |
| Context    | <b>configure</b> <a href="#">service vprn string isis number timers lsp-wait lsp-second-wait number</a> |
| Tree       | <a href="#">lsp-second-wait</a>   |
| Range      | 10 to 100000  |
| Units      | milliseconds  |
| Default    | 1000  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **spf-wait**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>spf-wait</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn string isis number timers spf-wait</a> |
| Tree       | <a href="#">spf-wait</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **spf-initial-wait** *number*

|          |  |
|----------|--|
| Synopsis | Initial SPF calculation delay after topology change  |
| Context  | <b>configure</b> <a href="#">service vprn string isis number timers spf-wait spf-initial-wait number</a> |
| Tree     | <a href="#">spf-initial-wait</a>   |

|            |              |
|------------|--------------|
| Range      | 10 to 100000 |
| Units      | milliseconds |
| Default    | 1000         |
| Introduced | 16.0.R1      |
| Platforms  | All          |

### **spf-max-wait** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum interval amid two consecutive SPF calculations  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">timers</a> <a href="#">spf-wait</a> <a href="#">spf-max-wait</a> <i>number</i> |
| Tree       | <a href="#">spf-max-wait</a>  |
| Range      | 10 to 120000  |
| Units      | milliseconds  |
| Default    | 10000   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **spf-second-wait** *number*

|            |  |
|------------|--|
| Synopsis   | Hold time between first and second SPF calculations  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">timers</a> <a href="#">spf-wait</a> <a href="#">spf-second-wait</a> <i>number</i> |
| Tree       | <a href="#">spf-second-wait</a>  |
| Range      | 10 to 100000   |
| Units      | milliseconds   |
| Default    | 1000   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **unicast-import**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>unicast-import</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">unicast-import</a> |
| Tree       | <a href="#">unicast-import</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **ipv4** *boolean*

|            |   |
|------------|---|
| Synopsis   | Submit IPv4 routes into unicast RTM   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">unicast-import ipv4</a> <i>boolean</i> |
| Tree       | <a href="#">ipv4</a>  |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **ipv6** *boolean*

|            |   |
|------------|---|
| Synopsis   | Submit IPv6 routes into unicast RTM   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">unicast-import ipv6</a> <i>boolean</i> |
| Tree       | <a href="#">ipv6</a>  |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **l2tp**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>l2tp</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp</a> |
| Tree       | <a href="#">l2tp</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                          |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of L2TP   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**avp-hiding** *keyword*

|            |  |
|------------|--|
| Synopsis   | Attribute of the Value Pair (AVP) hiding algorithm                           |
| Context    | <b>configure</b> <a href="#">service vprn string l2tp avp-hiding keyword</a> |
| Tree       | <a href="#">avp-hiding</a>   |
| Options    | sensitive, always  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                      |

**challenge** *boolean*

|            |   |
|------------|---|
| Synopsis   | Use challenge-response authentication                                       |
| Context    | <b>configure</b> <a href="#">service vprn string l2tp challenge boolean</a> |
| Tree       | <a href="#">challenge</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                     |

**destruct-timeout** *number*

|            |   |
|------------|---|
| Synopsis   | Destruction timeout   |
| Context    | <b>configure</b> <a href="#">service vprn string l2tp destruct-timeout number</a> |
| Tree       | <a href="#">destruct-timeout</a>  |
| Range      | 60 to 86400   |
| Units      | seconds   |
| Default    | 60  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                           |

**ethernet-tunnel**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ethernet-tunnel</b> context                                  |
| Context    | <b>configure</b> <a href="#">service vprn string l2tp ethernet-tunnel</a> |
| Tree       | <a href="#">ethernet-tunnel</a>   |
| Introduced | 16.0.R4   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **reconnect-timeout** (*number* | *keyword*)

Synopsis Timeout for a session setup retry

Context **configure service vprn** *string* **l2tp ethernet-tunnel reconnect-timeout** (*number* | *keyword*)

Tree **reconnect-timeout**

Range 10 to 3600

Units seconds

Options infinite

Default infinite

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **exclude-avps**

Synopsis Enter the **exclude-avps** context

Context **configure service vprn** *string* **l2tp exclude-avps**

Tree **exclude-avps**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **calling-number** *boolean*

Synopsis Calling Number AVP to exclude

Context **configure service vprn** *string* **l2tp exclude-avps calling-number** *boolean*

Tree **calling-number**

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **initial-rx-lcp-conf-req** *boolean*

Synopsis Exclude the Initial Received LCP CONFREQ AVP

Context **configure service vprn** *string* **l2tp exclude-avps initial-rx-lcp-conf-req** *boolean*



|            |   |
|------------|---|
| Tree       | <a href="#">initial-rx-lcp-conf-req</a>                 |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## failover

|            |  |
|------------|--|
| Synopsis   | Enter the <b>failover</b> context                                  |
| Context    | <b>configure</b> <a href="#">service vprn string l2tp failover</a> |
| Tree       | <a href="#">failover</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR            |

## recovery-max-session-lifetime *number*

|            |   |
|------------|---|
| Synopsis   | Subset of sessions that this system attempts to synchronize in the Session State Synchronization phase  |
| Context    | <b>configure</b> <a href="#">service vprn string l2tp failover recovery-max-session-lifetime number</a> |
| Tree       | <a href="#">recovery-max-session-lifetime</a>   |
| Range      | 2 to 4294967295   |
| Units      | centiseconds  |
| Default    | 2   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## recovery-method *keyword*

|            |  |
|------------|--|
| Synopsis   | Recovery method of the sequence numbers after failover                                     |
| Context    | <b>configure</b> <a href="#">service vprn string l2tp failover recovery-method keyword</a> |
| Tree       | <a href="#">recovery-method</a>  |
| Options    | mcs, recovery-tunnel   |
| Default    | mcs  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                    |

**recovery-time** *number*

|            |  |
|------------|--|
| Synopsis   | Time requested from the L2TP peer before assuming failover as failed   |
| Context    | <b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">l2tp failover recovery-time</a> <i>number</i> |
| Tree       | <a href="#">recovery-time</a>  |
| Range      | 0 to 900   |
| Units      | seconds  |
| Default    | 0  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**track-srrp** [*id*] *reference*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>track-srrp</b> list instance  |
| Context    | <b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">l2tp failover track-srrp</a> <i>reference</i> |
| Tree       | <a href="#">track-srrp</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**[id]** *reference*

|            |  |
|------------|--|
| Synopsis   | SRRP instance ID for multi-chassis redundancy failover   |
| Context    | <b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">l2tp failover track-srrp</a> <i>reference</i>   |
| Tree       | <a href="#">track-srrp</a>   |
| Reference  | <b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">sync track-srrp</a> <i>number</i> |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**peer** *reference*

|          |  |
|----------|--|
| Synopsis | Multi-chassis peer address   |
| Context  | <b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">l2tp failover track-srrp</a> <i>reference</i> <a href="#">peer</a> <i>reference</i> |
| Tree     | <a href="#">peer</a>   |

|            |  |
|------------|--|
| Reference  | <b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **sync-tag** *string*

|               |   |
|---------------|---|
| Synopsis      | Synchronization tag on the multi-chassis peer   |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp failover track-srrp</a> <a href="#">reference sync-tag</a> <i>string</i> |
| Tree          | <a href="#">sync-tag</a>  |
| String Length | 1 to 32   |
| Notes         | This element is mandatory.  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **group** [[tunnel-group-name](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>group</b> list instance   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> |
| Tree       | <a href="#">group</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### [[tunnel-group-name](#)] *string*

|               |  |
|---------------|--|
| Synopsis      | Tunnel group name  |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> |
| Tree          | <a href="#">group</a>  |
| String Length | 1 to 63  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the L2TP tunnel group   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**avp-hiding** *keyword*

|            |  |
|------------|--|
| Synopsis   | The AVP hiding algorithm   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <b>avp-hiding</b> <i>keyword</i> |
| Tree       | <a href="#">avp-hiding</a>   |
| Options    | never, sensitive, always   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**challenge** *keyword*

|            |   |
|------------|---|
| Synopsis   | Enable use of challenge-response authentication   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <b>challenge</b> <i>keyword</i> |
| Tree       | <a href="#">challenge</a>   |
| Options    | false, true   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## **destruct-timeout** *number*

|            |  |
|------------|--|
| Synopsis   | Destruction timeout  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <b>destruct-timeout</b> <i>number</i> |
| Tree       | <a href="#">destruct-timeout</a>   |
| Range      | 60 to 86400  |
| Units      | seconds  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## **ethernet-tunnel**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ethernet-tunnel</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <b>ethernet-tunnel</b> |
| Tree       | <a href="#">ethernet-tunnel</a>   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## **reconnect-timeout** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Timeout for a session setup retry at group level  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <b>ethernet-tunnel</b> <b>reconnect-timeout</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">reconnect-timeout</a>   |
| Range      | 10 to 3600  |
| Units      | seconds   |
| Options    | infinite  |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## **failover**

|          |  |
|----------|--|
| Synopsis | Enter the <b>failover</b> context  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <b>failover</b> |
| Tree     | <a href="#">failover</a>   |

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **recovery-method** *keyword*

Synopsis Recovery method of the sequence numbers after failover  
Context **configure** [service vprn](#) *string* [l2tp group](#) *string* [failover recovery-method](#) *keyword*  
Tree [recovery-method](#)  
Options mcs, recovery-tunnel  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **recovery-time** *number*

Synopsis Time requested from the L2TP peer before assuming failover as failed  
Context **configure** [service vprn](#) *string* [l2tp group](#) *string* [failover recovery-time](#) *number*  
Tree [recovery-time](#)  
Range 0 to 900  
Units seconds  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **hello-interval** (*number* | *keyword*)

Synopsis Hello interval  
Context **configure** [service vprn](#) *string* [l2tp group](#) *string* [hello-interval](#) (*number* | *keyword*)  
Tree [hello-interval](#)  
Range 10 to 3600  
Units seconds  
Options infinite  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**idle-timeout** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Idle timeout   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>idle-timeout</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <b>idle-timeout</b>  |
| Range      | 0 to 3600  |
| Units      | seconds  |
| Options    | infinite   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**l2tpv3**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>l2tpv3</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>l2tpv3</b> |
| Tree       | <b>l2tpv3</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                   |

**cookie-length** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Cookie field length   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>l2tpv3</b> <b>cookie-length</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <b>cookie-length</b>  |
| Range      | 4   8   |
| Options    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**digest-type** *keyword*

|            |   |
|------------|---|
| Synopsis   | Hashing algorithm that calculates the message digest  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>l2tpv3</b> <b>digest-type</b> <i>keyword</i> |
| Tree       | <b>digest-type</b>  |
| Options    | none, md5, sha1   |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **nonce-length** *number*

Synopsis Length for the local L2TPv3 nonce (random number)  
 Context **configure service vpn** *string* **l2tp group** *string* **l2tpv3 nonce-length** *number*  
 Tree [nonce-length](#)  
 Range 0 | 16 to 64  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **password** *string*

Synopsis L2TPv3 password  
 Context **configure service vpn** *string* **l2tp group** *string* **l2tpv3 password** *string*  
 Tree [password](#)  
 String Length 1 to 115  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **private-tcp-mss-adjust** (*number* | *keyword*)

Synopsis TCP maximum segment size (MSS) on private network  
 Context **configure service vpn** *string* **l2tp group** *string* **l2tpv3 private-tcp-mss-adjust** (*number* | *keyword*)  
 Tree [private-tcp-mss-adjust](#)  
 Range 512 to 9000  
 Units octets  
 Options disable  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **public-tcp-mss-adjust** (*number* | *keyword*)

Synopsis TCP Maximum Segment Size (MSS) on public network



|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>l2tpv3 public-tcp-mss-adjust</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">public-tcp-mss-adjust</a>  |
| Range      | 512 to 9000  |
| Units      | octets   |
| Options    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **pw-cap-list**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>pw-cap-list</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>l2tpv3 pw-cap-list</b> |
| Tree       | <a href="#">pw-cap-list</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ethernet** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Advertise Ethernet pseudowire type  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>l2tpv3 pw-cap-list ethernet</b> <i>boolean</i> |
| Tree       | <a href="#">ethernet</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ethernet-vlan** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Advertise Ethernet VLAN pseudowire type |
|----------|---|

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>l2tpv3 pw-cap-list ethernet-vlan</b> <i>boolean</i> |
| Tree       | <b>ethernet-vlan</b>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **rem-router-id** *string*

|            |   |
|------------|---|
| Synopsis   | Filter on remote router ID  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>l2tpv3 rem-router-id</b> <i>string</i> |
| Tree       | <b>rem-router-id</b>  |
| Default    | 0.0.0.0   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **track-password-change** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable tracking of password changes  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>l2tpv3 track-password-change</b> <i>boolean</i> |
| Tree       | <b>track-password-change</b>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **lac**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>lac</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>lac</b> |
| Tree       | <b>lac</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                |

### **df-bit** *keyword*

|          |   |
|----------|---|
| Synopsis | DF (do not fragment) bit in data traffic transmitted as LAC |
|----------|---|

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string l2tp group string lac df-bit keyword</i> |
| Tree       | <a href="#">df-bit</a>   |
| Options    | false, true  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                          |

## Ins

|            |   |
|------------|---|
| Synopsis   | Enter the <b>Ins</b> context                                      |
| Context    | <b>configure service vprn</b> <i>string l2tp group string Ins</i> |
| Tree       | <a href="#">Ins</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                      |

## Ins-group *reference*

|            |   |
|------------|---|
| Synopsis   | ISA LNS group   |
| Context    | <b>configure service vprn</b> <i>string l2tp group string Ins Ins-group reference</i> |
| Tree       | <a href="#">Ins-group</a>   |
| Reference  | <b>configure isa</b> <i>Ins-group number</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## load-balance-method *keyword*

|            |   |
|------------|---|
| Synopsis   | New sessions for L2TP ISA MDA   |
| Context    | <b>configure service vprn</b> <i>string l2tp group string Ins load-balance-method keyword</i> |
| Tree       | <a href="#">load-balance-method</a>   |
| Options    | per-session, per-tunnel   |
| Default    | per-session   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## mlppp

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mlppp</b> context                                   |
| Context    | <b>configure service vprn string l2tp group string lns mlppp</b> |
| Tree       | <b>mlppp</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s                          |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of MLPPP in the L2TP tunnel group                               |
| Context    | <b>configure service vprn string l2tp group string lns mlppp admin-state keyword</b> |
| Tree       | <b>admin-state</b>   |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s  |

## endpoint

|            |   |
|------------|---|
| Synopsis   | Enter the <b>endpoint</b> context   |
| Context    | <b>configure service vprn string l2tp group string lns mlppp endpoint</b> |
| Tree       | <b>endpoint</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s                                   |

## ip (*ipv4-address* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Endpoint ID as an IP address  |
| Context    | <b>configure service vprn string l2tp group string lns mlppp endpoint ip (ipv4-address   keyword)</b> |
| Tree       | <b>ip</b>   |
| Options    | system  |
| Notes      | The following elements are part of a choice: <b>ip</b> or <b>mac</b> .                                |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s   |

**mac** (*mac-address* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Endpoint ID as a MAC address  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">lns</a> <a href="#">mlppp</a> <a href="#">endpoint</a> <a href="#">mac</a> ( <i>mac-address</i>   <i>keyword</i> ) |
| Tree       | <a href="#">mac</a>   |
| Options    | system  |
| Notes      | The following elements are part of a choice: <b>ip</b> or <b>mac</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s   |

**interleave** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable link fragmentation and interleaving   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">lns</a> <a href="#">mlppp</a> <a href="#">interleave</a> <i>boolean</i> |
| Tree       | <a href="#">interleave</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s  |

**max-fragment-delay** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Maximum fragment delay caused by transmission on a link  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">lns</a> <a href="#">mlppp</a> <a href="#">max-fragment-delay</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">max-fragment-delay</a>   |
| Range      | 5 to 1000  |
| Units      | milliseconds   |
| Options    | no-fragmentation   |
| Default    | no-fragmentation   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s  |

**max-links** *number*

|          |                     |
|----------|---------------------|
| Synopsis | Maximum MLPPP links |
|----------|---------------------|

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>lns mlppp max-links</b> <i>number</i> |
| Tree       | <a href="#">max-links</a>  |
| Range      | 1 to 8   |
| Default    | 1  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s  |

### **reassemble-timeout** *number*

|            |   |
|------------|---|
| Synopsis   | Reassembly timeout  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>lns mlppp reassemble-timeout</b> <i>number</i> |
| Tree       | <a href="#">reassemble-timeout</a>  |
| Range      | 100   1000  |
| Units      | milliseconds  |
| Default    | 1000  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s   |

### **short-sequence-numbers** *boolean*

|            |  |
|------------|--|
| Synopsis   | Request a peer to send short sequence numbers  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>lns mlppp short-sequence-numbers</b> <i>boolean</i> |
| Tree       | <a href="#">short-sequence-numbers</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s  |

### **ppp**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ppp</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>lns ppp</b> |
| Tree       | <a href="#">ppp</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **authentication** *keyword*

|            |   |
|------------|---|
| Synopsis   | PPP authentication protocol to negotiate  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">ins</a> <a href="#">ppp</a> <a href="#">authentication</a> <i>keyword</i> |
| Tree       | <a href="#">authentication</a>  |
| Options    | pap, chap, pref-chap, pref-pap  |
| Default    | pref-chap   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **authentication-policy** *string*

|               |   |
|---------------|---|
| Synopsis      | Authentication policy when a DHCP message is received   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">ins</a> <a href="#">ppp</a> <a href="#">authentication-policy</a> <i>string</i> |
| Tree          | <a href="#">authentication-policy</a>   |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **chap-challenge-length**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>chap-challenge-length</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">ins</a> <a href="#">ppp</a> <a href="#">chap-challenge-length</a> |
| Tree       | <a href="#">chap-challenge-length</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **end** *number*

|          |  |
|----------|--|
| Synopsis | Upper bound of the PPP CHAP challenge length   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">ins</a> <a href="#">ppp</a> <a href="#">chap-challenge-length</a> <i>end</i> <i>number</i> |
| Tree     | <a href="#">end</a>  |
| Range    | 8 to 64  |
| Units    | octets   |

|            |  |
|------------|--|
| Default    | 64   |
| Introduced | 16.0.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

**start number**

|            |   |
|------------|---|
| Synopsis   | Lower bound of the PPP CHAP challenge length  |
| Context    | <b>configure</b> <a href="#">service vprn string l2tp group string lns ppp chap-challenge-length start number</a> |
| Tree       | <a href="#">start</a>   |
| Range      | 8 to 64   |
| Units      | octets  |
| Default    | 32  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**default-group-interface**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>default-group-interface</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn string l2tp group string lns ppp default-group-interface</a> |
| Tree       | <a href="#">default-group-interface</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**interface string**

|               |   |
|---------------|---|
| Synopsis      | Group interface   |
| Context       | <b>configure</b> <a href="#">service vprn string l2tp group string lns ppp default-group-interface interface string</a> |
| Tree          | <a href="#">interface</a>   |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |



**service-name** *string*

|               |  |
|---------------|--|
| Synopsis      | Administrative service name  |
| Context       | <b>configure</b> <a href="#">service vprn string</a> <a href="#">l2tp group string</a> <a href="#">lns ppp default-group-interface service-name string</a> |
| Tree          | <a href="#">service-name</a>   |
| String Length | 1 to 64  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**ipcp-subnet-negotiation** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow IPCP subnet negotiation for PPPoE hosts  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">l2tp group string</a> <a href="#">lns ppp ipcp-subnet-negotiation boolean</a> |
| Tree       | <a href="#">ipcp-subnet-negotiation</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**keepalive**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>keepalive</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">l2tp group string</a> <a href="#">lns ppp keepalive</a> |
| Tree       | <a href="#">keepalive</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**interval** *number*

|            |  |
|------------|--|
| Synopsis   | PPP keepalive interval   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">l2tp group string</a> <a href="#">lns ppp keepalive interval number</a> |
| Tree       | <a href="#">interval</a>   |
| Range      | 10 to 300  |
| Units      | seconds  |
| Default    | 30   |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **multiplier** *number*

Synopsis PPP keepalive multiplier

Context **configure** [service vprn string l2tp group string lns ppp keepalive multiplier number](#)

Tree [multiplier](#)

Range 1 to 5

Default 3

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **lcp-force-ack-accm** *boolean*

Synopsis Force acknowledgement of the LCP Asynchronous Control Character Map (ACCM) option

Context **configure** [service vprn string l2tp group string lns ppp lcp-force-ack-accm boolean](#)

Tree [lcp-force-ack-accm](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **lcp-ignore-magic-numbers** *boolean*

Synopsis Check magic number in echo request and reply messages

Context **configure** [service vprn string l2tp group string lns ppp lcp-ignore-magic-numbers boolean](#)

Tree [lcp-ignore-magic-numbers](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mtu** *number*

Synopsis Maximum PPP MTU size

Context **configure** [service vprn string l2tp group string lns ppp mtu number](#)

|            |  |
|------------|--|
| Tree       | <a href="#">mtu</a>                          |
| Range      | 512 to 9212                                  |
| Units      | octets                                       |
| Default    | 1500   |
| Introduced | 16.0.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **proxy-authentication** *boolean*

|            |  |
|------------|--|
| Synopsis   | Use authentication AVPs that are received from LAC   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <a href="#">string l2tp group</a> <a href="#">string lns ppp</a> <a href="#">proxy-authentication</a> <i>boolean</i> |
| Tree       | <a href="#">proxy-authentication</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **proxy-lcp** *boolean*

|            |   |
|------------|---|
| Synopsis   | Proxy LCP AVPs that are received from LAC   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <a href="#">string l2tp group</a> <a href="#">string lns ppp</a> <a href="#">proxy-lcp</a> <i>boolean</i> |
| Tree       | <a href="#">proxy-lcp</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **reject-disabled-ncp** *boolean*

|            |   |
|------------|---|
| Synopsis   | Force LCP Protocol Reject for IPv6CP Configure Request  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <a href="#">string l2tp group</a> <a href="#">string lns ppp</a> <a href="#">reject-disabled-ncp</a> <i>boolean</i> |
| Tree       | <a href="#">reject-disabled-ncp</a>   |
| Default    | false   |
| Introduced | 16.0.R6   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**user-db string**

|               |   |
|---------------|---|
| Synopsis      | Local user database for PPP PAP and CHAP authentication                       |
| Context       | <b>configure service vprn string l2tp group string lns ppp user-db string</b> |
| Tree          | <b>user-db</b>  |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                  |

**local-address string**

|            |   |
|------------|---|
| Synopsis   | Local address   |
| Context    | <b>configure service vprn string l2tp group string local-address string</b> |
| Tree       | <b>local-address</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                     |

**local-name string**

|               |  |
|---------------|--|
| Synopsis      | Local host name used to distinguish tunnels                              |
| Context       | <b>configure service vprn string l2tp group string local-name string</b> |
| Tree          | <b>local-name</b>  |
| String Length | 1 to 64  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                  |

**max-retries-estab number**

|            |   |
|------------|---|
| Synopsis   | Maximum retries for established tunnels   |
| Context    | <b>configure service vprn string l2tp group string max-retries-estab number</b> |
| Tree       | <b>max-retries-estab</b>  |
| Range      | 2 to 7  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                         |

**max-retries-not-estab** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum retries for unestablished tunnels  |
| Context    | <b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <b>max-retries-not-estab</b> <i>number</i> |
| Tree       | <a href="#">max-retries-not-estab</a>  |
| Range      | 2 to 7   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**password** *string*

|               |   |
|---------------|---|
| Synopsis      | Password between L2TP LAC and LNS   |
| Context       | <b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <b>password</b> <i>string</i> |
| Tree          | <a href="#">password</a>  |
| String Length | 1 to 115  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**protocol** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Protocol version   |
| Context    | <b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <b>protocol</b> <i>keyword</i> |
| Tree       | <a href="#">protocol</a>   |
| Options    | v2, v3, v3draft  |
| Default    | v2   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**radius-accounting-policy** *reference*

|          |  |
|----------|--|
| Synopsis | RADIUS accounting policy   |
| Context  | <b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <b>radius-accounting-policy</b> <i>reference</i> |
| Tree     | <a href="#">radius-accounting-policy</a>   |

Reference **configure** [aaa radius l2tp-accounting-policy](#) *string*  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **receive-window-size** *number*

Synopsis L2TP receive window size  
 Context **configure** [service vprn](#) *string* [l2tp group](#) *string* [receive-window-size](#) *number*  
 Tree [receive-window-size](#)  
 Range 4 to 1024  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **session-assign-method** *keyword*

Synopsis Session assignment method  
 Context **configure** [service vprn](#) *string* [l2tp group](#) *string* [session-assign-method](#) *keyword*  
 Tree [session-assign-method](#)  
 Options existing-first, weighted, weighted-random  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **session-limit** (*number* | *keyword*)

Synopsis Session limit  
 Context **configure** [service vprn](#) *string* [l2tp group](#) *string* [session-limit](#) (*number* | *keyword*)  
 Tree [session-limit](#)  
 Range 1 to 250000  
 Options unlimited  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **tunnel** [[tunnel-name](#)] *string*

Synopsis Enter the **tunnel** list instance

|                |  |
|----------------|--|
| Context        | <b>configure service vpn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>tunnel</b> <i>string</i> |
| Tree           | <b>tunnel</b>  |
| Max. Instances | 31   |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**[tunnel-name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Tunnel name  |
| Context       | <b>configure service vpn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>tunnel</b> <i>string</i> |
| Tree          | <b>tunnel</b>  |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the L2TP tunnel  |
| Context    | <b>configure service vpn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>   |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**auto-establish** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow the tunnel to be automatically set up by the system   |
| Context    | <b>configure service vpn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>auto-establish</b> <i>boolean</i> |
| Tree       | <b>auto-establish</b>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**avp-hiding** *keyword*

|            |   |
|------------|---|
| Synopsis   | The AVP hiding algorithm  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <b>avp-hiding</b> <i>keyword</i> |
| Tree       | <a href="#">avp-hiding</a>  |
| Options    | never, sensitive, always  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**challenge** *keyword*

|            |  |
|------------|--|
| Synopsis   | Enable use of challenge-response authentication  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <b>challenge</b> <i>keyword</i> |
| Tree       | <a href="#">challenge</a>  |
| Options    | false, true  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**destruct-timeout** *number*

|            |  |
|------------|--|
| Synopsis   | Destruction timeout  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <b>destruct-timeout</b> <i>number</i> |
| Tree       | <a href="#">destruct-timeout</a>   |
| Range      | 60 to 86400  |
| Units      | seconds  |
| Introduced | 16.0.R1  |



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## failover

Synopsis Enter the **failover** context

Context **configure service vpn** *string* **l2tp group** *string* **tunnel** *string* **failover**

Tree **failover**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## recovery-method *keyword*

Synopsis Recovery method of the sequence numbers after failover

Context **configure service vpn** *string* **l2tp group** *string* **tunnel** *string* **failover recovery-method** *keyword*

Tree **recovery-method**

Options mcs, recovery-tunnel

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## recovery-time *number*

Synopsis Time requested from the L2TP peer before assuming failover as failed

Context **configure service vpn** *string* **l2tp group** *string* **tunnel** *string* **failover recovery-time** *number*

Tree **recovery-time**

Range 0 to 900

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## hello-interval (*number* | *keyword*)

Synopsis Hello interval

Context **configure service vpn** *string* **l2tp group** *string* **tunnel** *string* **hello-interval** (*number* | *keyword*)

|            |   |
|------------|---|
| Tree       | <a href="#">hello-interval</a>                          |
| Range      | 10 to 3600  |
| Units      | seconds   |
| Options    | infinite  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **idle-timeout** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Idle timeout   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <b>idle-timeout</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">idle-timeout</a>   |
| Range      | 0 to 3600  |
| Units      | seconds  |
| Options    | infinite   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **l2tpv3**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>l2tpv3</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <b>l2tpv3</b> |
| Tree       | <a href="#">l2tpv3</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **private-tcp-mss-adjust** (*number* | *keyword*)

|          |   |
|----------|---|
| Synopsis | TCP maximum segment size (MSS) on private network   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">l2tpv3</a> <b>private-tcp-mss-adjust</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <a href="#">private-tcp-mss-adjust</a>  |
| Range    | 512 to 9000   |
| Units    | octets  |
| Options  | disable   |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **public-tcp-mss-adjust** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | TCP maximum segment size (MSS) on public network   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">l2tpv3</a> <b>public-tcp-mss-adjust</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">public-tcp-mss-adjust</a>  |
| Range      | 512 to 9000  |
| Units      | octets   |
| Options    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **lac**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>lac</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <b>lac</b> |
| Tree       | <a href="#">lac</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **df-bit** *keyword*

|            |   |
|------------|---|
| Synopsis   | DF (do not fragment) bit in data traffic transmitted as LAC   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <b>lac</b> <b>df-bit</b> <i>keyword</i> |
| Tree       | <a href="#">df-bit</a>  |
| Options    | false, true   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **Ins**

|          |  |
|----------|--|
| Synopsis | Enter the <b>Ins</b> context   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <b>Ins</b> |

|            |  |
|------------|--|
| Tree       | <a href="#">Ins</a>                          |
| Introduced | 16.0.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **Ins-group** *reference*

|            |  |
|------------|--|
| Synopsis   | ISA LNS group  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">Ins</a> <a href="#">Ins-group</a> <i>reference</i> |
| Tree       | <a href="#">Ins-group</a>  |
| Reference  | <b>configure</b> <a href="#">isa</a> <a href="#">Ins-group</a> <i>number</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **load-balance-method** *keyword*

|            |  |
|------------|--|
| Synopsis   | New sessions for L2TP ISA MDA  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">Ins</a> <a href="#">load-balance-method</a> <i>keyword</i> |
| Tree       | <a href="#">load-balance-method</a>  |
| Options    | per-session, per-tunnel  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **mlppp**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mlppp</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">Ins</a> <a href="#">mlppp</a> |
| Tree       | <a href="#">mlppp</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s   |

### **admin-state** *keyword*

|          |  |
|----------|--|
| Synopsis | Administrative state of MLPPP in the L2TP tunnel   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">Ins</a> <a href="#">mlppp</a> <a href="#">admin-state</a> <i>keyword</i> |

|            |   |
|------------|---|
| Tree       | <a href="#">admin-state</a>             |
| Options    | enable, disable                         |
| Introduced | 16.0.R1                                 |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s |

## endpoint

|            |   |
|------------|---|
| Synopsis   | Enter the <b>endpoint</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lns</a> <a href="#">mlppp</a> <b>endpoint</b> |
| Tree       | <a href="#">endpoint</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s   |

## ip (*ipv4-address* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Endpoint ID as an IP address   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lns</a> <a href="#">mlppp</a> <b>endpoint</b> <b>ip</b> ( <i>ipv4-address</i>   <i>keyword</i> ) |
| Tree       | <a href="#">ip</a>   |
| Options    | system   |
| Notes      | The following elements are part of a choice: <b>ip</b> or <b>mac</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s  |

## mac (*mac-address* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Endpoint ID as a MAC address   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lns</a> <a href="#">mlppp</a> <b>endpoint</b> <b>mac</b> ( <i>mac-address</i>   <i>keyword</i> ) |
| Tree       | <a href="#">mac</a>  |
| Options    | system   |
| Notes      | The following elements are part of a choice: <b>ip</b> or <b>mac</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s  |

**interleave** *keyword*

|            |  |
|------------|--|
| Synopsis   | Use of Link fragmentation and interleaving   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lns</a> <a href="#">mlppp</a> <b>interleave</b> <i>keyword</i> |
| Tree       | <a href="#">interleave</a>   |
| Options    | false, true  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s  |

**max-fragment-delay** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum fragment delay caused by transmission on a link   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lns</a> <a href="#">mlppp</a> <b>max-fragment-delay</b> <i>number</i> |
| Tree       | <a href="#">max-fragment-delay</a>  |
| Range      | 5 to 1000   |
| Units      | milliseconds  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s   |

**max-links** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum MLPPP links  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lns</a> <a href="#">mlppp</a> <b>max-links</b> <i>number</i> |
| Tree       | <a href="#">max-links</a>  |
| Range      | 1 to 8   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s  |

**reassemble-timeout** *number*

|          |   |
|----------|---|
| Synopsis | Reassembly timeout  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lns</a> <a href="#">mlppp</a> <b>reassemble-timeout</b> <i>number</i> |
| Tree     | <a href="#">reassemble-timeout</a>  |
| Range    | 100   1000  |

|            |   |
|------------|---|
| Units      | milliseconds                            |
| Introduced | 16.0.R1                                 |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s |

### **short-sequence-numbers** *keyword*

|            |  |
|------------|--|
| Synopsis   | Request a peer to send short sequence numbers  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lns</a> <a href="#">mlppp</a> <b>short-sequence-numbers</b> <i>keyword</i> |
| Tree       | <a href="#">short-sequence-numbers</a>   |
| Options    | false, true  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s  |

### **ppp**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ppp</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lns</a> <b>ppp</b> |
| Tree       | <a href="#">ppp</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **authentication** *keyword*

|            |   |
|------------|---|
| Synopsis   | PPP authentication protocol to negotiate  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lns</a> <b>ppp</b> <b>authentication</b> <i>keyword</i> |
| Tree       | <a href="#">authentication</a>  |
| Options    | pap, chap, pref-chap, pref-pap  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **authentication-policy** *string*

|          |   |
|----------|---|
| Synopsis | Authentication policy when a DHCP message is received |
|----------|---|

|               |  |
|---------------|--|
| Context       | <b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns ppp authentication-policy</b> <i>string</i> |
| Tree          | <a href="#">authentication-policy</a>  |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### chap-challenge-length

|            |  |
|------------|--|
| Synopsis   | Enter the <b>chap-challenge-length</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns ppp chap-challenge-length</b> |
| Tree       | <a href="#">chap-challenge-length</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### end number

|            |  |
|------------|--|
| Synopsis   | Upper bound of the PPP CHAP challenge length   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns ppp chap-challenge-length end</b> <i>number</i> |
| Tree       | <a href="#">end</a>  |
| Range      | 8 to 64  |
| Units      | octets   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### start number

|            |  |
|------------|--|
| Synopsis   | Lower bound of the PPP CHAP challenge length   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns ppp chap-challenge-length start</b> <i>number</i> |
| Tree       | <a href="#">start</a>  |
| Range      | 8 to 64  |
| Units      | octets   |
| Introduced | 16.0.R1  |



Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## default-group-interface

Synopsis Enter the **default-group-interface** context

Context **configure service vprn** *string* **l2tp group** *string* **tunnel** *string* **lns ppp default-group-interface**

Tree [default-group-interface](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## interface *string*

Synopsis Group interface

Context **configure service vprn** *string* **l2tp group** *string* **tunnel** *string* **lns ppp default-group-interface interface** *string*

Tree [interface](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## service-name *string*

Synopsis Administrative service name

Context **configure service vprn** *string* **l2tp group** *string* **tunnel** *string* **lns ppp default-group-interface service-name** *string*

Tree [service-name](#)

String Length 1 to 64

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ipcp-subnet-negotiation *keyword*

Synopsis Use of IPCP subnet negotiation for PPPoE hosts

Context **configure service vprn** *string* **l2tp group** *string* **tunnel** *string* **lns ppp ipcp-subnet-negotiation** *keyword*

Tree [ipcp-subnet-negotiation](#)

|            |  |
|------------|--|
| Options    | false, true                                  |
| Introduced | 16.0.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

## keepalive

|            |  |
|------------|--|
| Synopsis   | Enter the <b>keepalive</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn string l2tp group string tunnel string lns ppp keepalive</a> |
| Tree       | <a href="#">keepalive</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## interval *number*

|            |  |
|------------|--|
| Synopsis   | PPP keepalive interval   |
| Context    | <b>configure</b> <a href="#">service vprn string l2tp group string tunnel string lns ppp keepalive interval number</a> |
| Tree       | <a href="#">interval</a>   |
| Range      | 10 to 300  |
| Units      | seconds  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## multiplier *number*

|            |  |
|------------|--|
| Synopsis   | PPP keepalive multiplier   |
| Context    | <b>configure</b> <a href="#">service vprn string l2tp group string tunnel string lns ppp keepalive multiplier number</a> |
| Tree       | <a href="#">multiplier</a>   |
| Range      | 1 to 5   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**lcp-force-ack-accm** *keyword*

|            |  |
|------------|--|
| Synopsis   | Forced acknowledgement of the LCP Asynchronous Control Character Map (ACCM) option   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lns</a> <a href="#">ppp</a> <b>lcp-force-ack-accm</b> <i>keyword</i> |
| Tree       | <a href="#">lcp-force-ack-accm</a>   |
| Options    | false, true  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**lcp-ignore-magic-numbers** *keyword*

|            |  |
|------------|--|
| Synopsis   | Magic-Number field in LCP Echo-Request and LCP Echo-Reply messages that are checked  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lns</a> <a href="#">ppp</a> <b>lcp-ignore-magic-numbers</b> <i>keyword</i> |
| Tree       | <a href="#">lcp-ignore-magic-numbers</a>   |
| Options    | false, true  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**mtu** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum PPP MTU size   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lns</a> <a href="#">ppp</a> <b>mtu</b> <i>number</i> |
| Tree       | <a href="#">mtu</a>  |
| Range      | 512 to 9212  |
| Units      | octets   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**proxy-authentication** *keyword*

|          |  |
|----------|--|
| Synopsis | Authentication AVPs that are received from LAC   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lns</a> <a href="#">ppp</a> <b>proxy-authentication</b> <i>keyword</i> |

|            |  |
|------------|--|
| Tree       | <a href="#">proxy-authentication</a>         |
| Options    | false, true                                  |
| Introduced | 16.0.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **proxy-lcp** *keyword*

|            |   |
|------------|---|
| Synopsis   | Use the Proxy LCP AVPs that are received from the LAC   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lns</a> <a href="#">ppp</a> <a href="#">proxy-lcp</a> <i>keyword</i> |
| Tree       | <a href="#">proxy-lcp</a>   |
| Options    | false, true   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **reject-disabled-ncp** *keyword*

|            |   |
|------------|---|
| Synopsis   | Force LCP Project Reject for IPv6CP Configure Request   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lns</a> <a href="#">ppp</a> <a href="#">reject-disabled-ncp</a> <i>keyword</i> |
| Tree       | <a href="#">reject-disabled-ncp</a>   |
| Options    | false, true   |
| Introduced | 16.0.R6   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **user-db** *string*

|               |  |
|---------------|--|
| Synopsis      | Local user database for PPP PAP and CHAP authentication  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lns</a> <a href="#">ppp</a> <a href="#">user-db</a> <i>string</i> |
| Tree          | <a href="#">user-db</a>  |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **local-address** *string*

|          |               |
|----------|---------------|
| Synopsis | Local address |
|----------|---------------|

Context        **configure service vpn** *string l2tp group string tunnel string local-address string*  
 Tree            [local-address](#)  
 Introduced     16.0.R1  
 Platforms     7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **local-name** *string*

Synopsis        Local host name used to distinguish tunnels  
 Context        **configure service vpn** *string l2tp group string tunnel string local-name string*  
 Tree            [local-name](#)  
 String Length 1 to 64  
 Introduced     16.0.R1  
 Platforms     7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max-retries-estab** *number*

Synopsis        Maximum retries for established tunnels  
 Context        **configure service vpn** *string l2tp group string tunnel string max-retries-estab number*  
 Tree            [max-retries-estab](#)  
 Range          2 to 7  
 Introduced     16.0.R1  
 Platforms     7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max-retries-not-estab** *number*

Synopsis        Maximum retries for unestablished tunnels  
 Context        **configure service vpn** *string l2tp group string tunnel string max-retries-not-estab number*  
 Tree            [max-retries-not-estab](#)  
 Range          2 to 7  
 Introduced     16.0.R1  
 Platforms     7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **password** *string*

Synopsis        Password between L2TP LAC and LNS

|               |  |
|---------------|--|
| Context       | <b>configure service vpn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>password</b> <i>string</i> |
| Tree          | <b>password</b>  |
| String Length | 1 to 115   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**peer string**

|            |  |
|------------|--|
| Synopsis   | Peer address   |
| Context    | <b>configure service vpn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>peer</b> <i>string</i> |
| Tree       | <b>peer</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**preference number**

|            |  |
|------------|--|
| Synopsis   | Tunnel preference number with its group  |
| Context    | <b>configure service vpn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>preference</b> <i>number</i> |
| Tree       | <b>preference</b>  |
| Range      | 0 to 16777215  |
| Default    | 50   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**radius-accounting-policy reference**

|            |   |
|------------|---|
| Synopsis   | RADIUS accounting policy  |
| Context    | <b>configure service vpn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>radius-accounting-policy</b> <i>reference</i> |
| Tree       | <b>radius-accounting-policy</b>   |
| Reference  | <b>configure aaa radius</b> <b>l2tp-accounting-policy</b> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**receive-window-size** *number*

|            |   |
|------------|---|
| Synopsis   | L2TP receive window size  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">receive-window-size</a> <i>number</i> |
| Tree       | <a href="#">receive-window-size</a>   |
| Range      | 4 to 1024   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**remote-name** *string*

|               |   |
|---------------|---|
| Synopsis      | Remote tunnel host name   |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">remote-name</a> <i>string</i> |
| Tree          | <a href="#">remote-name</a>   |
| String Length | 1 to 64   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**session-limit** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | L2TP session limit for each tunnel of this router  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">session-limit</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">session-limit</a>  |
| Range      | 1 to 65534   |
| Options    | unlimited  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**group-session-limit** *number*

|            |  |
|------------|--|
| Synopsis   | L2TP session limit for each group of this router   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group-session-limit</a> <i>number</i> |
| Tree       | <a href="#">group-session-limit</a>  |
| Range      | 1 to 250000  |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **hello-interval** (*number* | *keyword*)

Synopsis Hello interval

Context **configure service vprn** *string* **l2tp hello-interval** (*number* | *keyword*)

Tree [hello-interval](#)

Range 10 to 3600

Units seconds

Options infinite

Default 300

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **idle-timeout** (*number* | *keyword*)

Synopsis Idle timeout

Context **configure service vprn** *string* **l2tp idle-timeout** (*number* | *keyword*)

Tree [idle-timeout](#)

Range 0 to 3600

Units seconds

Options infinite

Default infinite

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ignore-avps**

Synopsis Enter the **ignore-avps** context

Context **configure service vprn** *string* **l2tp ignore-avps**

Tree [ignore-avps](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**sequencing-required** *boolean*

|            |   |
|------------|---|
| Synopsis   | Ignore Sequencing Required AVP  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">ignore-avps</a> <a href="#">sequencing-required</a> <i>boolean</i> |
| Tree       | <a href="#">sequencing-required</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**l2tpv3**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>l2tpv3</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">l2tpv3</a> |
| Tree       | <a href="#">l2tpv3</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**cookie-length** *number*

|            |   |
|------------|---|
| Synopsis   | Cookie field length   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">l2tpv3</a> <a href="#">cookie-length</a> <i>number</i> |
| Tree       | <a href="#">cookie-length</a>   |
| Range      | 4   8   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**digest-type** *keyword*

|            |  |
|------------|--|
| Synopsis   | Hashing algorithm that calculates the message digest   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">l2tpv3</a> <a href="#">digest-type</a> <i>keyword</i> |
| Tree       | <a href="#">digest-type</a>  |
| Options    | md5, sha1  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**nonce-length** *number*

|            |   |
|------------|---|
| Synopsis   | Length of the local L2TPv3 nonce (random number)  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>l2tp l2tpv3 nonce-length</b> <i>number</i> |
| Tree       | <b>nonce-length</b>   |
| Range      | 0   16 to 64  |
| Default    | 0   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                   |

**password** *string*

|               |   |
|---------------|---|
| Synopsis      | L2TPv3 password   |
| Context       | <b>configure service vprn</b> <i>string</i> <b>l2tp l2tpv3 password</b> <i>string</i> |
| Tree          | <b>password</b>   |
| String Length | 1 to 115  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                               |

**private-tcp-mss-adjust** *number*

|            |   |
|------------|---|
| Synopsis   | TCP maximum segment size (MSS) on private network   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>l2tp l2tpv3 private-tcp-mss-adjust</b> <i>number</i> |
| Tree       | <b>private-tcp-mss-adjust</b>   |
| Range      | 512 to 9000   |
| Units      | octets  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**public-tcp-mss-adjust** *number*

|          |  |
|----------|--|
| Synopsis | TCP maximum segment size (MSS) on public network   |
| Context  | <b>configure service vprn</b> <i>string</i> <b>l2tp l2tpv3 public-tcp-mss-adjust</b> <i>number</i> |
| Tree     | <b>public-tcp-mss-adjust</b>   |
| Range    | 512 to 9000  |
| Units    | octets   |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **transport-type**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>transport-type</b> context                         |
| Context    | <b>configure service vprn string l2tp l2tpv3 transport-type</b> |
| Tree       | <a href="#">transport-type</a>                                  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR         |

### **ip boolean**

|            |  |
|------------|--|
| Synopsis   | Use IP as the transport type for the L2TPv3 tunnel                         |
| Context    | <b>configure service vprn string l2tp l2tpv3 transport-type ip boolean</b> |
| Tree       | <a href="#">ip</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                    |

### **lac**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>lac</b> context                            |
| Context    | <b>configure service vprn string l2tp lac</b>           |
| Tree       | <a href="#">lac</a>                                     |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **calling-number-format string**

|               |  |
|---------------|--|
| Synopsis      | Calling Number AVP for L2TP control messages                               |
| Context       | <b>configure service vprn string l2tp lac calling-number-format string</b> |
| Tree          | <a href="#">calling-number-format</a>                                      |
| String Length | 1 to 255   |
| Default       | %S %s  |

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cisco-nas-port**

Synopsis Enter the **cisco-nas-port** context  
Context **configure service vprn string l2tp lac cisco-nas-port**  
Tree [cisco-nas-port](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ethernet string**

Synopsis L2TP Cisco NAS port AVP with binary patterns for Ethernet  
Context **configure service vprn string l2tp lac cisco-nas-port ethernet string**  
Tree [ethernet](#)  
String Length 1 to 255  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **df-bit boolean**

Synopsis Send all L2TP packets with DF bit set to 1  
Context **configure service vprn string l2tp lac df-bit boolean**  
Tree [df-bit](#)  
Default true  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **local-address string**

Synopsis Local address  
Context **configure service vprn string l2tp local-address string**  
Tree [local-address](#)  
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **local-name** *string*

Synopsis Local host name  
Context **configure service vprn** *string* **l2tp local-name** *string*  
Tree **local-name**  
String Length 1 to 64  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max-retries-estab** *number*

Synopsis Maximum retries for established tunnels  
Context **configure service vprn** *string* **l2tp max-retries-estab** *number*  
Tree **max-retries-estab**  
Range 2 to 7  
Default 5  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max-retries-not-estab** *number*

Synopsis Maximum retries for unestablished tunnels  
Context **configure service vprn** *string* **l2tp max-retries-not-estab** *number*  
Tree **max-retries-not-estab**  
Range 2 to 7  
Default 5  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **next-attempt** *keyword*

Synopsis Tunnel that is selected when previous session setup failed  
Context **configure service vprn** *string* **l2tp next-attempt** *keyword*

---

|            |   |
|------------|---|
| Tree       | <a href="#">next-attempt</a>                            |
| Options    | same-preference-level, next-preference-level            |
| Default    | next-preference-level                                   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **password** *string*

|               |  |
|---------------|--|
| Synopsis      | L2TP password  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">password</a> <i>string</i> |
| Tree          | <a href="#">password</a>   |
| String Length | 1 to 115   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **peer-address-change-policy** *keyword*

|            |   |
|------------|---|
| Synopsis   | Reaction for L2TP response from a different address   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">peer-address-change-policy</a> <i>keyword</i> |
| Tree       | <a href="#">peer-address-change-policy</a>  |
| Options    | accept, ignore, reject  |
| Default    | reject  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **radius-accounting-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | RADIUS accounting policy  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">radius-accounting-policy</a> <i>reference</i> |
| Tree       | <a href="#">radius-accounting-policy</a>  |
| Reference  | <b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">l2tp-accounting-policy</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**receive-window-size** *number*

|            |  |
|------------|--|
| Synopsis   | L2TP receive window size   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp receive-window-size</a> <i>number</i> |
| Tree       | <a href="#">receive-window-size</a>  |
| Range      | 4 to 1024  |
| Default    | 64   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**replace-result-code**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>replace-result-code</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp replace-result-code</a> |
| Tree       | <a href="#">replace-result-code</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**cdn-invalid-dst** *boolean*

|            |   |
|------------|---|
| Synopsis   | Replace result code with general error code   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp replace-result-code</a> <a href="#">cdn-invalid-dst</a> <i>boolean</i> |
| Tree       | <a href="#">cdn-invalid-dst</a>   |
| Default    | false   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**cdn-permanent-no-facilities** *boolean*

|            |   |
|------------|---|
| Synopsis   | Replace result code with general error  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp replace-result-code</a> <a href="#">cdn-permanent-no-facilities</a> <i>boolean</i> |
| Tree       | <a href="#">cdn-permanent-no-facilities</a>   |
| Default    | false   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**cdn-temporary-no-facilities** *boolean*

|            |   |
|------------|---|
| Synopsis   | Replace result code with general error  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">replace-result-code</a> <a href="#">cdn-temporary-no-facilities</a> <i>boolean</i> |
| Tree       | <a href="#">cdn-temporary-no-facilities</a>   |
| Default    | false   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**rtm-debounce-time** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Debounce timer that declares L2TP action for route table management events  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">rtm-debounce-time</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">rtm-debounce-time</a>   |
| Range      | 0 to 5000   |
| Units      | milliseconds  |
| Options    | infinite  |
| Default    | infinite  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**session-assign-method** *keyword*

|            |   |
|------------|---|
| Synopsis   | Session assignment method   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">session-assign-method</a> <i>keyword</i> |
| Tree       | <a href="#">session-assign-method</a>   |
| Options    | existing-first, weighted, weighted-random   |
| Default    | existing-first  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**session-limit** *number*

|          |                                   |
|----------|-----------------------------------|
| Synopsis | L2TP session limit of this router |
|----------|-----------------------------------|



|            |  |
|------------|--|
| Context    | <b>configure service vpn</b> <i>string</i> <b>l2tp session-limit</b> <i>number</i> |
| Tree       | <a href="#">session-limit</a>  |
| Range      | 1 to 250000  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                            |

### tunnel-selection-blacklist

|            |   |
|------------|---|
| Synopsis   | Enter the <b>tunnel-selection-blacklist</b> context                               |
| Context    | <b>configure service vpn</b> <i>string</i> <b>l2tp tunnel-selection-blacklist</b> |
| Tree       | <a href="#">tunnel-selection-blacklist</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                           |

### add-tunnel-on

|            |   |
|------------|---|
| Synopsis   | Enter the <b>add-tunnel-on</b> context  |
| Context    | <b>configure service vpn</b> <i>string</i> <b>l2tp tunnel-selection-blacklist add-tunnel-on</b> |
| Tree       | <a href="#">add-tunnel-on</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### address-change-timeout *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable a timed-out tunnel to be forced to the denylist  |
| Context    | <b>configure service vpn</b> <i>string</i> <b>l2tp tunnel-selection-blacklist add-tunnel-on address-change-timeout</b> <i>boolean</i> |
| Tree       | <a href="#">address-change-timeout</a>  |
| Default    | false   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### cdn-err-code *boolean*

|          |   |
|----------|---|
| Synopsis | Add to deny if CDN is received with code: General error |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure service vprn string l2tp tunnel-selection-blacklist add-tunnel-on cdn-err-code boolean</b> |
| Tree       | <a href="#">cdn-err-code</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **cdn-invalid-dst boolean**

|            |  |
|------------|--|
| Synopsis   | Force tunnel to the denylist in case of Result Codes 6   |
| Context    | <b>configure service vprn string l2tp tunnel-selection-blacklist add-tunnel-on cdn-invalid-dst boolean</b> |
| Tree       | <a href="#">cdn-invalid-dst</a>  |
| Default    | false  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **cdn-permanent-no-facilities boolean**

|            |  |
|------------|--|
| Synopsis   | Force tunnel to the denylist in case of Result Codes 5   |
| Context    | <b>configure service vprn string l2tp tunnel-selection-blacklist add-tunnel-on cdn-permanent-no-facilities boolean</b> |
| Tree       | <a href="#">cdn-permanent-no-facilities</a>  |
| Default    | false  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **cdn-temporary-no-facilities boolean**

|            |  |
|------------|--|
| Synopsis   | Force tunnel to the denylist in case of Result Codes 4   |
| Context    | <b>configure service vprn string l2tp tunnel-selection-blacklist add-tunnel-on cdn-temporary-no-facilities boolean</b> |
| Tree       | <a href="#">cdn-temporary-no-facilities</a>  |
| Default    | false  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**stop-ccn-err-code** *boolean*

|            |  |
|------------|--|
| Synopsis   | Add to denylist if received with general error code  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp tunnel-selection-blacklist add-tunnel-on stop-ccn-err-code</a> <i>boolean</i> |
| Tree       | <a href="#">stop-ccn-err-code</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**stop-ccn-other** *boolean*

|            |   |
|------------|---|
| Synopsis   | Add to denylist if StopCCN received with general error  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp tunnel-selection-blacklist add-tunnel-on stop-ccn-other</a> <i>boolean</i> |
| Tree       | <a href="#">stop-ccn-other</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**tx-cdn-not-established-in-time** *boolean*

|            |   |
|------------|---|
| Synopsis   | Add to denylist if CDN transmitted with result code   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp tunnel-selection-blacklist add-tunnel-on tx-cdn-not-established-in-time</a> <i>boolean</i> |
| Tree       | <a href="#">tx-cdn-not-established-in-time</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**max-list-length** (*number* | *keyword*)

|          |  |
|----------|--|
| Synopsis | Number of tunnels or peers in the denylist   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp tunnel-selection-blacklist max-list-length</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <a href="#">max-list-length</a>  |

|            |   |
|------------|---|
| Range      | 1 to 65535  |
| Options    | infinite  |
| Default    | infinite  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **max-time** *number*

|            |   |
|------------|---|
| Synopsis   | Time that a tunnel or peer can remain in the denylist   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">tunnel-selection-blacklist</a> <b>max-time</b> <i>number</i> |
| Tree       | <a href="#">max-time</a>  |
| Range      | 1 to 60   |
| Units      | minutes   |
| Default    | 5   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **timeout-action** *keyword*

|            |  |
|------------|--|
| Synopsis   | Action when a tunnel or peer exceeds time in denylist  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">tunnel-selection-blacklist</a> <b>timeout-action</b> <i>keyword</i> |
| Tree       | <a href="#">timeout-action</a>   |
| Options    | remove-from-blacklist, try-one-session   |
| Default    | remove-from-blacklist  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **tunnel-session-limit** *number*

|            |   |
|------------|---|
| Synopsis   | L2TP session limit for each tunnel of this router   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">tunnel-session-limit</a> <i>number</i> |
| Tree       | <a href="#">tunnel-session-limit</a>  |
| Range      | 1 to 65534  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**label-mode** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Allocation mode for VPRN service labels   |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>label-mode</b> <i>keyword</i> |
| Tree       | <a href="#">label-mode</a>  |
| Options    | vrf, next-hop   |
| Default    | vrf   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**local-routes-domain-id** *string*

|             |  |
|-------------|--|
| Synopsis    | Local routes domain ID   |
| Context     | <b>configure</b> <b>service vprn</b> <i>string</i> <b>local-routes-domain-id</b> <i>string</i>   |
| Tree        | <a href="#">local-routes-domain-id</a>   |
| Description | <p>This command specifies the domain ID that is used in the D-PATH attribute for local routes before those routes are exported to a BGP neighbor using BGP-IPVPN, EVPN-IFF, EVPN-IFL, or PE-CE BGP. A local route is a non-BGP route installed in the VPRN route table and learned using static route or an IGP.</p> <p>The domain IDs are used in the D-PATH attribute, in accordance with draft-ietf-bess-evpn-ipvpn-interworking. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN IFL and BGP IPVPN).</p> <p>Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).</p> |
| Introduced  | 21.10.R1   |
| Platforms   | All  |

**log**

|          |   |
|----------|---|
| Synopsis | Enter the <b>log</b> context                                  |
| Context  | <b>configure</b> <b>service vprn</b> <i>string</i> <b>log</b> |
| Tree     | <a href="#">log</a>   |

Introduced 16.0.R1  
 Platforms All

### **filter** [*filter-name*] *string*

Synopsis Enter the **filter** list instance  
 Context **configure service vprn string log filter string**  
 Tree **filter**  
 Max. Instances 1500  
 Introduced 16.0.R1  
 Platforms All

### **[filter-name]** *string*

Synopsis Filter ID  
 Context **configure service vprn string log filter string**  
 Tree **filter**  
 String Length 1 to 64  
 Notes This element is part of a list key.  
 Introduced 21.2.R1  
 Platforms All

### **default-action** *keyword*

Synopsis Default action for the event filter  
 Context **configure service vprn string log filter string default-action keyword**  
 Tree **default-action**  
 Options drop, forward  
 Default forward  
 Introduced 16.0.R1  
 Platforms All

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log filter</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**named-entry** [[entry-name](#)] *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>named-entry</b> list instance   |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log filter</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> |
| Tree           | <a href="#">named-entry</a>  |
| Description    | Commands in this context create or edit an event filter entry.   |
| Max. Instances | 999  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 21.2.R1  |
| Platforms      | All  |

**[entry-name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Entry name   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log filter</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> |
| Tree          | <a href="#">named-entry</a>  |
| String Length | 1 to 64  |
| Notes         | This element is part of a list key.  |
| Introduced    | 21.2.R1  |
| Platforms     | All  |

**action** *keyword*

|          |  |
|----------|--|
| Synopsis | Action for this event filter entry   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log filter</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <i>keyword</i> |
| Tree     | <a href="#">action</a>   |

|            |               |
|------------|---------------|
| Options    | drop, forward |
| Introduced | 21.2.R1       |
| Platforms  | All           |

### **description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log filter</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 21.2.R1  |
| Platforms     | All  |

### **match**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>match</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log filter</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">match</a> |
| Tree       | <a href="#">match</a>  |
| Introduced | 21.2.R1  |
| Platforms  | All  |

### **application**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>application</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log filter</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">match</a> <a href="#">application</a> |
| Tree       | <a href="#">application</a>  |
| Introduced | 21.2.R1  |
| Platforms  | All  |

### **eq** *keyword*

|          |  |
|----------|--|
| Synopsis | Application to match   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log filter</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">match</a> <a href="#">application</a> <a href="#">eq</a> <i>keyword</i> |
| Tree     | <a href="#">eq</a>   |



|            |  |
|------------|--|
| Options    | application-assurance, aps, atm, bgp, cflowd, chassis, debug, dhcp, dhcps, diameter, dot1x, efm-oam, elmi, ering, eth-cfm, etun, filter, gsmp, igh, igmp, igmp-snooping, ip, ipsec, isis, l2tp, lag, ldp, li, lldp, logger, mcpath, mc-redundancy, mirror, mld, mld-snooping, mpls, msdp, nat, ntp, oam, ospf, pim, pim-snooping, port, ppp, pppoe, ptp, rip, route-policy, rsvp, security, snmp, stp, svcmgr, system, user, video, vrrp, vrtr, radius, wpp, wlan-gw, dynsvc, mpls-tp, bfd, python, ripng, openflow, sflow, rpki, gmpls, lmp, pcep, calltrace, satellite, ldap, pppoe-clnt, tls, adp, mgmt-core, macsec, pcap, auto-prov, bier, pfc, tree-sid, srv6, sr-mpls |
| Notes      | The following elements are part of a choice: <b>eq</b> or <b>neq</b> .   |
| Introduced | 21.2.R1  |
| Platforms  | All  |

### neq keyword

|            |  |
|------------|--|
| Synopsis   | Application to be filtered out   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log filter</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">match</a> <a href="#">application</a> <b>neq</b> <i>keyword</i>   |
| Tree       | <a href="#">neq</a>  |
| Options    | application-assurance, aps, atm, bgp, cflowd, chassis, debug, dhcp, dhcps, diameter, dot1x, efm-oam, elmi, ering, eth-cfm, etun, filter, gsmp, igh, igmp, igmp-snooping, ip, ipsec, isis, l2tp, lag, ldp, li, lldp, logger, mcpath, mc-redundancy, mirror, mld, mld-snooping, mpls, msdp, nat, ntp, oam, ospf, pim, pim-snooping, port, ppp, pppoe, ptp, rip, route-policy, rsvp, security, snmp, stp, svcmgr, system, user, video, vrrp, vrtr, radius, wpp, wlan-gw, dynsvc, mpls-tp, bfd, python, ripng, openflow, sflow, rpki, gmpls, lmp, pcep, calltrace, satellite, ldap, pppoe-clnt, tls, adp, mgmt-core, macsec, pcap, auto-prov, bier, pfc, tree-sid, srv6, sr-mpls |
| Notes      | The following elements are part of a choice: <b>eq</b> or <b>neq</b> .   |
| Introduced | 21.2.R1  |
| Platforms  | All  |

### event

|            |  |
|------------|--|
| Synopsis   | Enter the <b>event</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log filter</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">match</a> <a href="#">event</a> |
| Tree       | <a href="#">event</a>  |
| Introduced | 21.2.R1  |
| Platforms  | All  |

### **eq number**

|            |   |
|------------|---|
| Synopsis   | Log event message to match  |
| Context    | <b>configure service vprn string log filter string named-entry string match event eq number</b> |
| Tree       | <a href="#">eq</a>  |
| Range      | 1 to 4294967295   |
| Notes      | The following elements are part of a choice: <b>eq, gt, gte, lt, lte</b> , or <b>neq</b> .      |
| Introduced | 21.2.R1   |
| Platforms  | All   |

### **gt number**

|            |   |
|------------|---|
| Synopsis   | Number of the log event to match  |
| Context    | <b>configure service vprn string log filter string named-entry string match event gt number</b> |
| Tree       | <a href="#">gt</a>  |
| Range      | 1 to 4294967295   |
| Notes      | The following elements are part of a choice: <b>eq, gt, gte, lt, lte</b> , or <b>neq</b> .      |
| Introduced | 21.2.R1   |
| Platforms  | All   |

### **gte number**

|            |  |
|------------|--|
| Synopsis   | Number of the log event to match   |
| Context    | <b>configure service vprn string log filter string named-entry string match event gte number</b> |
| Tree       | <a href="#">gte</a>  |
| Range      | 1 to 4294967295  |
| Notes      | The following elements are part of a choice: <b>eq, gt, gte, lt, lte</b> , or <b>neq</b> .       |
| Introduced | 21.2.R1  |
| Platforms  | All  |

### **lt number**

|          |   |
|----------|---|
| Synopsis | Number of the log event to match  |
| Context  | <b>configure service vprn string log filter string named-entry string match event lt number</b> |
| Tree     | <a href="#">lt</a>  |

---

|            |  |
|------------|--|
| Range      | 1 to 4294967295  |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>gte</b> , <b>lt</b> , <b>lte</b> , or <b>neq</b> . |
| Introduced | 21.2.R1  |
| Platforms  | All  |

### **lte number**

|            |  |
|------------|--|
| Synopsis   | Number of the log event to match   |
| Context    | <b>configure service vprn string log filter string named-entry string match event lte number</b>                           |
| Tree       | <a href="#">lte</a>  |
| Range      | 1 to 4294967295  |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>gte</b> , <b>lt</b> , <b>lte</b> , or <b>neq</b> . |
| Introduced | 21.2.R1  |
| Platforms  | All  |

### **neq number**

|            |  |
|------------|--|
| Synopsis   | Log event message to filter out  |
| Context    | <b>configure service vprn string log filter string named-entry string match event neq number</b>                           |
| Tree       | <a href="#">neq</a>  |
| Range      | 1 to 4294967295  |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>gte</b> , <b>lt</b> , <b>lte</b> , or <b>neq</b> . |
| Introduced | 21.2.R1  |
| Platforms  | All  |

### **message**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>message</b> context  |
| Context    | <b>configure service vprn string log filter string named-entry string match message</b> |
| Tree       | <a href="#">message</a>   |
| Introduced | 21.2.R1   |
| Platforms  | All   |

**eq string**

|               |   |
|---------------|---|
| Synopsis      | Log event message to match  |
| Context       | <b>configure service vprn string log filter string named-entry string match message eq string</b> |
| Tree          | <a href="#">eq</a>  |
| String Length | 1 to 400  |
| Notes         | The following elements are part of a choice: <b>eq</b> or <b>neq</b> .                            |
| Introduced    | 21.2.R1   |
| Platforms     | All   |

**neq string**

|               |  |
|---------------|--|
| Synopsis      | Log event message to be filtered out   |
| Context       | <b>configure service vprn string log filter string named-entry string match message neq string</b> |
| Tree          | <a href="#">neq</a>  |
| String Length | 1 to 400   |
| Notes         | The following elements are part of a choice: <b>eq</b> or <b>neq</b> .                             |
| Introduced    | 21.2.R1  |
| Platforms     | All  |

**regexp boolean**

|            |  |
|------------|--|
| Synopsis   | String comparison to determine if the log event matches the value of pattern                           |
| Context    | <b>configure service vprn string log filter string named-entry string match message regexp boolean</b> |
| Tree       | <a href="#">regexp</a>   |
| Default    | false  |
| Introduced | 21.2.R1  |
| Platforms  | All  |

**severity**

|          |  |
|----------|--|
| Synopsis | Enter the <b>severity</b> context  |
| Context  | <b>configure service vprn string log filter string named-entry string match severity</b> |
| Tree     | <a href="#">severity</a>   |

Introduced 21.2.R1  
Platforms All

### **eq** keyword

Synopsis Log event severity level to match  
Context **configure service vprn string log filter string named-entry string match severity eq keyword**  
Tree **eq**  
Options cleared, indeterminate, critical, major, minor, warning  
Notes The following elements are part of a choice: **eq, gt, gte, lt, lte, or neq.**  
Introduced 21.2.R1  
Platforms All

### **gt** keyword

Synopsis Log event severity level  
Context **configure service vprn string log filter string named-entry string match severity gt keyword**  
Tree **gt**  
Options cleared, indeterminate, critical, major, minor, warning  
Notes The following elements are part of a choice: **eq, gt, gte, lt, lte, or neq.**  
Introduced 21.2.R1  
Platforms All

### **gte** keyword

Synopsis Log event severity level  
Context **configure service vprn string log filter string named-entry string match severity gte keyword**  
Tree **gte**  
Options cleared, indeterminate, critical, major, minor, warning  
Notes The following elements are part of a choice: **eq, gt, gte, lt, lte, or neq.**  
Introduced 21.2.R1  
Platforms All

### **lt** keyword

|            |   |
|------------|---|
| Synopsis   | Log event severity level  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>log filter</b> <i>string</i> <b>named-entry</b> <i>string</i> <b>match severity</b> <b>lt</b> <i>keyword</i> |
| Tree       | <b>lt</b>   |
| Options    | cleared, indeterminate, critical, major, minor, warning   |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>gte</b> , <b>lt</b> , <b>lte</b> , or <b>neq</b> .                                  |
| Introduced | 21.2.R1   |
| Platforms  | All   |

### **lte** keyword

|            |  |
|------------|--|
| Synopsis   | Log event severity level   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>log filter</b> <i>string</i> <b>named-entry</b> <i>string</i> <b>match severity</b> <b>lte</b> <i>keyword</i> |
| Tree       | <b>lte</b>   |
| Options    | cleared, indeterminate, critical, major, minor, warning  |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>gte</b> , <b>lt</b> , <b>lte</b> , or <b>neq</b> .                                   |
| Introduced | 21.2.R1  |
| Platforms  | All  |

### **neq** keyword

|            |  |
|------------|--|
| Synopsis   | Log event severity level to filter out   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>log filter</b> <i>string</i> <b>named-entry</b> <i>string</i> <b>match severity</b> <b>neq</b> <i>keyword</i> |
| Tree       | <b>neq</b>   |
| Options    | cleared, indeterminate, critical, major, minor, warning  |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>gte</b> , <b>lt</b> , <b>lte</b> , or <b>neq</b> .                                   |
| Introduced | 21.2.R1  |
| Platforms  | All  |

### **subject**

|          |                                  |
|----------|----------------------------------|
| Synopsis | Enter the <b>subject</b> context |
|----------|----------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service vprn string log filter string named-entry string match subject</b> |
| Tree       | <b>subject</b>  |
| Introduced | 21.2.R1   |
| Platforms  | All   |

**eq string**

|               |   |
|---------------|---|
| Synopsis      | Log event subject string to match   |
| Context       | <b>configure service vprn string log filter string named-entry string match subject eq string</b> |
| Tree          | <b>eq</b>   |
| String Length | 1 to 32   |
| Notes         | The following elements are part of a choice: <b>eq</b> or <b>neq</b> .                            |
| Introduced    | 21.2.R1   |
| Platforms     | All   |

**neq string**

|               |  |
|---------------|--|
| Synopsis      | Log event subject string to filter out   |
| Context       | <b>configure service vprn string log filter string named-entry string match subject neq string</b> |
| Tree          | <b>neq</b>   |
| String Length | 1 to 32  |
| Notes         | The following elements are part of a choice: <b>eq</b> or <b>neq</b> .                             |
| Introduced    | 21.2.R1  |
| Platforms     | All  |

**regexp boolean**

|            |  |
|------------|--|
| Synopsis   | String comparison to determine if the log event matches the value of subject                           |
| Context    | <b>configure service vprn string log filter string named-entry string match subject regexp boolean</b> |
| Tree       | <b>regexp</b>  |
| Default    | false  |
| Introduced | 21.2.R1  |
| Platforms  | All  |

**log-id** [*name*] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>log-id</b> list instance                         |
| Context        | <b>configure</b> <i>service vprn string log log-id string</i> |
| Tree           | <i>log-id</i>   |
| Max. Instances | 30  |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

**[name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Log ID  |
| Context       | <b>configure</b> <i>service vprn string log log-id string</i> |
| Tree          | <i>log-id</i>   |
| String Length | 1 to 64   |
| Notes         | This element is part of a list key.                           |
| Introduced    | 21.2.R1   |
| Platforms     | All   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the log   |
| Context    | <b>configure</b> <i>service vprn string log log-id string admin-state keyword</i> |
| Tree       | <i>admin-state</i>  |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**description** *string*

|          |  |
|----------|--|
| Synopsis | Text description   |
| Context  | <b>configure</b> <i>service vprn string log log-id string description string</i> |
| Tree     | <i>description</i>   |



|               |         |
|---------------|---------|
| String Length | 1 to 80 |
| Introduced    | 16.0.R1 |
| Platforms     | All     |

## destination

|            |  |
|------------|--|
| Synopsis   | Enter the <b>destination</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">log log-id</a> <i>string</i> <a href="#">destination</a> |
| Tree       | <a href="#">destination</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## netconf

|            |  |
|------------|--|
| Synopsis   | Enable the <b>netconf</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">log log-id</a> <i>string</i> <a href="#">destination</a> <a href="#">netconf</a> |
| Tree       | <a href="#">netconf</a>  |
| Notes      | The following elements are part of a choice: <b>netconf</b> , <b>snmp</b> , or <b>syslog</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## max-entries *number*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Number of events stored in the NETCONF log   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">log log-id</a> <i>string</i> <a href="#">destination</a> <a href="#">netconf</a> <a href="#">max-entries</a> <i>number</i> |
| Tree       | <a href="#">max-entries</a>  |
| Range      | 50 to 3000   |
| Default    | 100  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## snmp

|            |  |
|------------|--|
| Synopsis   | Enable the <b>snmp</b> context   |
| Context    | <b>configure service vprn string log log-id string destination snmp</b>                        |
| Tree       | <b>snmp</b>  |
| Notes      | The following elements are part of a choice: <b>netconf</b> , <b>snmp</b> , or <b>syslog</b> . |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## max-entries *number*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Number of events stored in the memory log  |
| Context    | <b>configure service vprn string log log-id string destination snmp max-entries number</b> |
| Tree       | <b>max-entries</b>   |
| Range      | 50 to 3000   |
| Default    | 100  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## syslog *reference*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Index with the information to format event messages sent to a specific SYSLOG collector        |
| Context    | <b>configure service vprn string log log-id string destination syslog reference</b>            |
| Tree       | <b>syslog</b>  |
| Reference  | <b>configure service vprn string log syslog string</b>   |
| Notes      | The following elements are part of a choice: <b>netconf</b> , <b>snmp</b> , or <b>syslog</b> . |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **filter** *reference*

|            |  |
|------------|--|
| Synopsis   | Event filter policy with the log destination   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log</a> <a href="#">log-id</a> <i>string</i> <a href="#">filter</a> <i>reference</i> |
| Tree       | <a href="#">filter</a>   |
| Reference  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log</a> <a href="#">filter</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **netconf-stream** *string*

|               |   |
|---------------|---|
| Synopsis      | Destination NETCONF stream name   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log</a> <a href="#">log-id</a> <i>string</i> <a href="#">netconf-stream</a> <i>string</i> |
| Tree          | <a href="#">netconf-stream</a>  |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

### **python-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | Python policy name  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log</a> <a href="#">log-id</a> <i>string</i> <a href="#">python-policy</a> <i>reference</i> |
| Tree       | <a href="#">python-policy</a>   |
| Reference  | <b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **source**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>source</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log</a> <a href="#">log-id</a> <i>string</i> <a href="#">source</a> |
| Tree       | <a href="#">source</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **change** *boolean*

|            |   |
|------------|---|
| Synopsis   | Collect log events from the change event stream   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log</a> <a href="#">log-id</a> <i>string</i> <a href="#">source</a> <a href="#">change</a> <i>boolean</i> |
| Tree       | <a href="#">change</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **debug** *boolean*

|            |  |
|------------|--|
| Synopsis   | Collect log events from the debug event stream   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log</a> <a href="#">log-id</a> <i>string</i> <a href="#">source</a> <a href="#">debug</a> <i>boolean</i> |
| Tree       | <a href="#">debug</a>  |
| Default    | false  |
| Introduced | 19.10.R1   |
| Platforms  | All  |

### **main** *boolean*

|            |   |
|------------|---|
| Synopsis   | Collect log events from the main event stream   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log</a> <a href="#">log-id</a> <i>string</i> <a href="#">source</a> <a href="#">main</a> <i>boolean</i> |
| Tree       | <a href="#">main</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **security** *boolean*

|            |   |
|------------|---|
| Synopsis   | Collect log events from the security event stream   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log</a> <a href="#">log-id</a> <i>string</i> <a href="#">source</a> <a href="#">security</a> <i>boolean</i> |
| Tree       | <a href="#">security</a>  |
| Default    | false   |
| Introduced | 19.10.R1  |
| Platforms  | All   |

**time-format** *keyword*

|            |  |
|------------|--|
| Synopsis   | Time zone output for file log contents and syslog  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">log log-id</a> <i>string</i> <b>time-format</b> <i>keyword</i> |
| Tree       | <a href="#">time-format</a>  |
| Options    | utc, local   |
| Default    | utc  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**snmp-trap-group** [[log-name](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>snmp-trap-group</b> list instance  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">log snmp-trap-group</a> <i>string</i> |
| Tree       | <a href="#">snmp-trap-group</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[log-name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Log ID  |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">log snmp-trap-group</a> <i>string</i> |
| Tree          | <a href="#">snmp-trap-group</a>   |
| String Length | 1 to 17   |
| Notes         | This element is part of a list key.   |
| Introduced    | 21.2.R1   |
| Platforms     | All   |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">log snmp-trap-group</a> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |

Platforms All

### **trap-target** [*name*] *string*

Synopsis Enter the **trap-target** list instance

Context **configure service vprn** *string* **log snmp-trap-group** *string* **trap-target** *string*

Tree **trap-target**

Max. Instances 25

Introduced 16.0.R1

Platforms All

### **[name]** *string*

Synopsis Trap target name

Context **configure service vprn** *string* **log snmp-trap-group** *string* **trap-target** *string*

Tree **trap-target**

String Length 1 to 28

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP address of the trap receiver

Context **configure service vprn** *string* **log snmp-trap-group** *string* **trap-target** *string* **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree **address**

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

### **description** *string*

Synopsis Text description

|               |   |
|---------------|---|
| Context       | <b>configure service vprn string log snmp-trap-group string trap-target string description string</b> |
| Tree          | <b>description</b>  |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

### **notify-community string**

|               |  |
|---------------|--|
| Synopsis      | SNMPv1 or SNMPv2c community name string, or SNMPv3 security name, for sending a notification               |
| Context       | <b>configure service vprn string log snmp-trap-group string trap-target string notify-community string</b> |
| Tree          | <b>notify-community</b>  |
| String Length | 1 to 31  |
| Notes         | This element is mandatory.   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

### **port number**

|            |  |
|------------|--|
| Synopsis   | UDP port number to send messages to this remote SNMP notification collector                    |
| Context    | <b>configure service vprn string log snmp-trap-group string trap-target string port number</b> |
| Tree       | <b>port</b>  |
| Range      | 0   1 to 65535   |
| Default    | 162  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **replay boolean**

|          |   |
|----------|---|
| Synopsis | Retransmit missed notifications   |
| Context  | <b>configure service vprn string log snmp-trap-group string trap-target string replay boolean</b> |
| Tree     | <b>replay</b>   |
| Default  | false   |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **security-level** *keyword*

|            |  |
|------------|--|
| Synopsis   | Security level at which SNMP notification messages are sent to SNMP notification collector   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log</a> <a href="#">snmp-trap-group</a> <i>string</i> <a href="#">trap-target</a> <i>string</i> <b>security-level</b> <i>keyword</i> |
| Tree       | <a href="#">security-level</a>   |
| Options    | no-auth-no-privacy, auth-no-privacy, privacy   |
| Default    | no-auth-no-privacy   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **version** *keyword*

|            |   |
|------------|---|
| Synopsis   | SNMP version to format notification messages sent to this SNMP notification collector   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log</a> <a href="#">snmp-trap-group</a> <i>string</i> <a href="#">trap-target</a> <i>string</i> <b>version</b> <i>keyword</i> |
| Tree       | <a href="#">version</a>   |
| Options    | snmpv1, snmpv2c, snmpv3   |
| Default    | snmpv3  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **syslog** [[syslog-name](#)] *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>syslog</b> list instance  |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log</a> <a href="#">syslog</a> <i>string</i> |
| Tree           | <a href="#">syslog</a>   |
| Max. Instances | 30   |
| Introduced     | 16.0.R1  |
| Platforms      | All  |



**[syslog-name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Syslog name  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log</a> <a href="#">syslog</a> <i>string</i> |
| Tree          | <a href="#">syslog</a>   |
| String Length | 1 to 64  |
| Notes         | This element is part of a list key.  |
| Introduced    | 21.2.R1  |
| Platforms     | All  |

**address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

|            |   |
|------------|---|
| Synopsis   | IP address of the Syslog target host  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log</a> <a href="#">syslog</a> <i>string</i> <b>address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <a href="#">address</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log</a> <a href="#">syslog</a> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**facility** *keyword*

|          |   |
|----------|---|
| Synopsis | Facility code for messages  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log</a> <a href="#">syslog</a> <i>string</i> <b>facility</b> <i>keyword</i>                     |
| Tree     | <a href="#">facility</a>  |
| Options  | kernel, user, mail, systemd, auth, syslogd, printer, netnews, uucp, cron, authpriv, ftp, ntp, logaudit, logalert, cron2, local0, local1, local2, local3, local4, local5, local6, local7 |
| Default  | local7  |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **log-prefix** (*keyword* | *string*)

|               |  |
|---------------|--|
| Synopsis      | String that is prepended to every log message sent to this target syslog host  |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">log syslog</a> <i>string</i> <a href="#">log-prefix</a> ( <i>keyword</i>   <i>string</i> ) |
| Tree          | <a href="#">log-prefix</a>   |
| String Length | 1 to 32  |
| Options       | no-prefix  |
| Default       | TMNX   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

### **port number**

|            |  |
|------------|--|
| Synopsis   | Destination port when sending syslog over UDP  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">log syslog</a> <i>string</i> <a href="#">port number</a> |
| Tree       | <a href="#">port</a>   |
| Range      | 0   1 to 65535   |
| Default    | 514  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **severity keyword**

|            |  |
|------------|--|
| Synopsis   | Severity level threshold for the syslog message  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">log syslog</a> <i>string</i> <a href="#">severity</a> <i>keyword</i> |
| Tree       | <a href="#">severity</a>   |
| Options    | emergency, alert, critical, error, warning, notice, info, debug  |
| Default    | info   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**tls-client-profile** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | TLS client profile used to encrypt syslog communication  |
| Context     | <b>configure service vprn</b> <i>string</i> <b>log syslog</b> <i>string</i> <b>tls-client-profile</b> <i>reference</i>   |
| Tree        | <a href="#">tls-client-profile</a>   |
| Description | This command specifies the Transport Layer Security (TLS) client profile used to encrypt syslog communications. When configured, syslog messages are sent using TLS.<br><br>Any change to this command results in a brief interruption of the event log, which may cause the loss of a few syslog messages.<br><br>When this command is unconfigured, the syslog messages are sent over UDP. |
| Reference   | <b>configure system security tls client-tls-profile</b> <i>string</i>  |
| Introduced  | 21.10.R1   |
| Platforms   | All  |

**management**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>management</b> context                          |
| Context    | <b>configure service vprn</b> <i>string</i> <b>management</b> |
| Tree       | <a href="#">management</a>                                    |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**allow-ftp** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Allow access to the FTP server  |
| Context     | <b>configure service vprn</b> <i>string</i> <b>management allow-ftp</b> <i>boolean</i>  |
| Tree        | <a href="#">allow-ftp</a>   |
| Description | When configured to <b>true</b> , this command allows FTP access to the SR OS router via the VPRN router instance.<br><br>When configured to <b>false</b> , this command disallows access to the SR OS FTP server. |
| Default     | false   |
| Introduced  | 16.0.R6   |
| Platforms   | All   |

### **allow-grpc** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Allow access to the gRPC server  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">management</a> <b>allow-grpc</b> <i>boolean</i>  |
| Tree        | <a href="#">allow-grpc</a>   |
| Description | When configured to <b>true</b> , this command allows access to the gRPC server via the VPRN router instance.<br>When configured to <b>false</b> , this command disallows gRPC server access. |
| Default     | false  |
| Introduced  | 19.5.R1  |
| Platforms   | All  |

### **allow-netconf** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Allow access to the NETCONF server   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">management</a> <b>allow-netconf</b> <i>boolean</i>   |
| Tree        | <a href="#">allow-netconf</a>  |
| Description | When configured to <b>true</b> , this command allows NETCONF server access to the SR OS router via the VPRN router instance.<br>When configured to <b>false</b> , this command disallows access to the NETCONF server. |
| Default     | false  |
| Introduced  | 19.5.R1  |
| Platforms   | All  |

### **allow-ssh** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Allow access to the SSH server  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">management</a> <b>allow-ssh</b> <i>boolean</i>  |
| Tree        | <a href="#">allow-ssh</a>   |
| Description | When configured to <b>true</b> , this command allows SSH server access to the SR OS router via the VPRN router instance.<br>When configured to <b>false</b> , this command disallows SSH server access. |
| Default     | false   |
| Introduced  | 16.0.R5   |
| Platforms   | All   |

### **allow-telnet** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Allow access to the IPv4 Telnet server   |
| Context     | <b>configure service vprn string management allow-telnet boolean</b>   |
| Tree        | <a href="#">allow-telnet</a>   |
| Description | When configured to <b>true</b> , this command allows IPv4 Telnet server access to the SR OS router via the VPRN router instance.<br>When configured to <b>false</b> , this command disallows access to the IPv4 Telnet server. |
| Default     | false  |
| Introduced  | 16.0.R5  |
| Platforms   | All  |

### **allow-telnet6** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Allow access to the Telnet IPv6 server   |
| Context     | <b>configure service vprn string management allow-telnet6 boolean</b>  |
| Tree        | <a href="#">allow-telnet6</a>  |
| Description | When configured to <b>true</b> , this command allows IPv6 Telnet server access to the SR OS router via the VPRN router instance.<br>When configured to <b>false</b> , this command removes access to the IPv6 Telnet server. |
| Default     | false  |
| Introduced  | 16.0.R5  |
| Platforms   | All  |

### **maximum-ipv4-routes**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>maximum-ipv4-routes</b> context             |
| Context    | <b>configure service vprn string maximum-ipv4-routes</b> |
| Tree       | <a href="#">maximum-ipv4-routes</a>                      |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **log-only** *boolean*

|          |   |
|----------|---|
| Synopsis | Action when the maximum number of routes, held within a VRF context, is reached |
| Context  | <b>configure service vprn string maximum-ipv4-routes log-only boolean</b>       |

|            |                          |
|------------|--------------------------|
| Tree       | <a href="#">log-only</a> |
| Default    | false                    |
| Introduced | 16.0.R1                  |
| Platforms  | All                      |

### **threshold** *number*

|            |   |
|------------|---|
| Synopsis   | Mid-level water marker for the number of routes which this VRF holds  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">maximum-ipv4-routes</a> <a href="#">threshold</a> <i>number</i> |
| Tree       | <a href="#">threshold</a>   |
| Range      | 1 to 100  |
| Units      | percent   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **value** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Maximum number of routes that are configured on this virtual router   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">maximum-ipv4-routes</a> <a href="#">value</a> <i>number</i> |
| Tree       | <a href="#">value</a>   |
| Range      | 1 to 2147483647   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **maximum-ipv6-routes**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>maximum-ipv6-routes</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">maximum-ipv6-routes</a> |
| Tree       | <a href="#">maximum-ipv6-routes</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**log-only** *boolean*

|            |   |
|------------|---|
| Synopsis   | Action when the maximum number of routes, held within a VRF context, is reached                       |
| Context    | <b>configure service vprn</b> <i>string</i> <b>maximum-ipv6-routes</b> <b>log-only</b> <i>boolean</i> |
| Tree       | <b>log-only</b>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**threshold** *number*

|            |   |
|------------|---|
| Synopsis   | Mid-level water marker for the number of routes which this VRF holds                                  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>maximum-ipv6-routes</b> <b>threshold</b> <i>number</i> |
| Tree       | <b>threshold</b>  |
| Range      | 1 to 100  |
| Units      | percent   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**value** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Maximum number of routes that are configured on this virtual router                               |
| Context    | <b>configure service vprn</b> <i>string</i> <b>maximum-ipv6-routes</b> <b>value</b> <i>number</i> |
| Tree       | <b>value</b>  |
| Range      | 1 to 2147483647   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**mc-maximum-routes**

|          |  |
|----------|--|
| Synopsis | Enter the <b>mc-maximum-routes</b> context                           |
| Context  | <b>configure service vprn</b> <i>string</i> <b>mc-maximum-routes</b> |

|            |                                   |
|------------|-----------------------------------|
| Tree       | <a href="#">mc-maximum-routes</a> |
| Introduced | 16.0.R1                           |
| Platforms  | All                               |

**log-only** *boolean*

|            |  |
|------------|--|
| Synopsis   | Log and allow learning of new multicast routes   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mc-maximum-routes</a> <b>log-only</b> <i>boolean</i> |
| Tree       | <a href="#">log-only</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**threshold** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum multicast routes which the VRF holds   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mc-maximum-routes</a> <b>threshold</b> <i>number</i> |
| Tree       | <a href="#">threshold</a>  |
| Range      | 1 to 100   |
| Units      | percent  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**value** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum multicast routes configured on virtual router  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mc-maximum-routes</a> <b>value</b> <i>number</i> |
| Tree       | <a href="#">value</a>  |
| Range      | 1 to 2147483647  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**mld**

|          |                               |
|----------|-------------------------------|
| Synopsis | Enable the <b>mld</b> context |
|----------|-------------------------------|



|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <a href="#">string</a> <a href="#">mld</a> |
| Tree       | <a href="#">mld</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of MLD   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <a href="#">string</a> <a href="#">mld</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **forwarding-group-interface** [forwarding-service](#) [string](#) [group-interface-name](#) *reference*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>forwarding-group-interface</b> list instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <a href="#">string</a> <a href="#">mld</a> <a href="#">forwarding-group-interface</a> <a href="#">forwarding-service</a> <a href="#">string</a> <a href="#">group-interface-name</a> <i>reference</i> |
| Tree       | <a href="#">forwarding-group-interface</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **forwarding-service** *string*

|               |   |
|---------------|---|
| Synopsis      | Forwarding service for a subscriber interface in a retailer context   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <a href="#">string</a> <a href="#">mld</a> <a href="#">forwarding-group-interface</a> <a href="#">forwarding-service</a> <a href="#">string</a> <a href="#">group-interface-name</a> <i>reference</i> |
| Tree          | <a href="#">forwarding-group-interface</a>  |
| String Length | 1 to 64   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**group-interface-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Group interface name  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld forwarding-group-interface forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> |
| Tree       | <a href="#">forwarding-group-interface</a>  |
| Reference  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i>                                      |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the MLD interface  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld forwarding-group-interface forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**import-policy** *reference*

|            |  |
|------------|--|
| Synopsis   | Import policy to filter MLD packets  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld forwarding-group-interface forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <a href="#">import-policy</a> <i>reference</i> |
| Tree       | <a href="#">import-policy</a>  |
| Reference  | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**maximum-number-group-sources** *number*

|          |  |
|----------|--|
| Synopsis | Maximum number of group sources for this interface   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld forwarding-group-interface forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <a href="#">maximum-number-group-sources</a> <i>number</i> |

|             |  |
|-------------|--|
| Tree        | <a href="#">maximum-number-group-sources</a>   |
| Description | This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed. |
| Range       | 1 to 32000   |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **maximum-number-groups** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of groups for this interface  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mld</a> <a href="#">forwarding-group-interface</a> <a href="#">forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <a href="#">maximum-number-groups</a> <i>number</i> |
| Tree       | <a href="#">maximum-number-groups</a>  |
| Range      | 1 to 16000   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **maximum-number-sources** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum number of sources that are allowed per group  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mld</a> <a href="#">forwarding-group-interface</a> <a href="#">forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <a href="#">maximum-number-sources</a> <i>number</i> |
| Tree       | <a href="#">maximum-number-sources</a>  |
| Range      | 1 to 1000   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **mcac**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mcac</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mld</a> <a href="#">forwarding-group-interface</a> <a href="#">forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <b>mcac</b> |
| Tree       | <a href="#">mcac</a>   |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## bandwidth

Synopsis Enter the **bandwidth** context

Context **configure service vprn string mld forwarding-group-interface forwarding-service string group-interface-name reference mcac bandwidth**

Tree [bandwidth](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## mandatory (*number* | *keyword*)

Synopsis Pre-reserved bandwidth for all mandatory channels

Context **configure service vprn string mld forwarding-group-interface forwarding-service string group-interface-name reference mcac bandwidth mandatory (*number* | *keyword*)**

Tree [mandatory](#)

Range 0 to 2147483647

Options unlimited

Default unlimited

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## total (*number* | *keyword*)

Synopsis Maximum allowed bandwidth

Context **configure service vprn string mld forwarding-group-interface forwarding-service string group-interface-name reference mcac bandwidth total (*number* | *keyword*)**

Tree [total](#)

Range 0 to 2147483647

Options unlimited

Default unlimited

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**interface-policy** *reference*

|            |  |
|------------|--|
| Synopsis   | Name of multicast CAC interface policy   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">mld forwarding-group-interface forwarding-service string</a> <a href="#">group-interface-name reference</a> <a href="#">mcac interface-policy reference</a> |
| Tree       | <a href="#">interface-policy</a>   |
| Reference  | <b>configure</b> <a href="#">mcac interface-policy string</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**policy** *reference*

|             |   |
|-------------|---|
| Synopsis    | Multicast CAC policy name   |
| Context     | <b>configure</b> <a href="#">service vprn string</a> <a href="#">mld forwarding-group-interface forwarding-service string</a> <a href="#">group-interface-name reference</a> <a href="#">mcac policy reference</a>  |
| Tree        | <a href="#">policy</a>  |
| Description | <p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> <li>• subscriber level and redirected interface when redirection is configured</li> <li>• subscriber level and group-interface level when redirection is unconfigured</li> </ul> <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p> |
| Reference   | <b>configure</b> <a href="#">mcac policy string</a>   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**query-interval** *number*

|          |  |
|----------|--|
| Synopsis | Time between two consecutive host-query messages   |
| Context  | <b>configure</b> <a href="#">service vprn string</a> <a href="#">mld forwarding-group-interface forwarding-service string</a> <a href="#">group-interface-name reference</a> <a href="#">query-interval number</a> |

---

|            |   |
|------------|---|
| Tree       | <a href="#">query-interval</a>                          |
| Range      | 2 to 1024   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **query-last-member-interval** *number*

|            |  |
|------------|--|
| Synopsis   | Time between group-specific query messages   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld forwarding-group-interface forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <a href="#">query-last-member-interval</a> <i>number</i> |
| Tree       | <a href="#">query-last-member-interval</a>   |
| Range      | 1 to 1023  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **query-response-interval** *number*

|            |   |
|------------|---|
| Synopsis   | Time to wait for a response to the host-query messages  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld forwarding-group-interface forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <a href="#">query-response-interval</a> <i>number</i> |
| Tree       | <a href="#">query-response-interval</a>   |
| Range      | 1 to 1023   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **query-source-address** *string*

|            |  |
|------------|--|
| Synopsis   | Source address for MLD queries   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld forwarding-group-interface forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <a href="#">query-source-address</a> <i>string</i> |
| Tree       | <a href="#">query-source-address</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**router-alert-check** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable router alert checking for IGMP or MLD messages   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld forwarding-group-interface forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <a href="#">router-alert-check</a> <i>boolean</i> |
| Tree       | <a href="#">router-alert-check</a>  |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**sub-hosts-only** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow MLD traffic from known hosts only   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld forwarding-group-interface forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <a href="#">sub-hosts-only</a> <i>boolean</i> |
| Tree       | <a href="#">sub-hosts-only</a>  |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**subnet-check** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable subnet checking  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld forwarding-group-interface forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <a href="#">subnet-check</a> <i>boolean</i> |
| Tree       | <a href="#">subnet-check</a>  |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**version** *keyword*

|          |  |
|----------|--|
| Synopsis | MLD protocol version   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld forwarding-group-interface forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <a href="#">version</a> <i>keyword</i> |
| Tree     | <a href="#">version</a>  |
| Options  | 1, 2   |

|            |   |
|------------|---|
| Default    | 2   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **group-if-query-source-address** *string*

|            |  |
|------------|--|
| Synopsis   | Source address in queries for group interfaces when not configured at group interface level  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <b>mld</b> <a href="#">group-if-query-source-address</a> <i>string</i> |
| Tree       | <a href="#">group-if-query-source-address</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **group-interface** [[group-interface-name](#)] *reference*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>group-interface</b> list instance  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <b>mld</b> <a href="#">group-interface</a> <i>reference</i> |
| Tree       | <a href="#">group-interface</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### [[group-interface-name](#)] *reference*

|            |  |
|------------|--|
| Synopsis   | Group interface name   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <b>mld</b> <a href="#">group-interface</a> <i>reference</i>                                      |
| Tree       | <a href="#">group-interface</a>  |
| Reference  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **admin-state** *keyword*

|          |  |
|----------|--|
| Synopsis | Administrative state of the MLD interface  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <b>mld</b> <a href="#">group-interface</a> <i>reference</i> <a href="#">admin-state</a> <i>keyword</i> |



|            |   |
|------------|---|
| Tree       | <a href="#">admin-state</a>                             |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **import-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | Import policy to filter MLD packets   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld group-interface</a> <i>reference</i> <a href="#">import-policy</a> <i>reference</i> |
| Tree       | <a href="#">import-policy</a>   |
| Reference  | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **maximum-number-group-sources** *number*

|             |  |
|-------------|--|
| Synopsis    | Maximum number of group sources for this interface   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld group-interface</a> <i>reference</i> <a href="#">maximum-number-group-sources</a> <i>number</i>  |
| Tree        | <a href="#">maximum-number-group-sources</a>   |
| Description | This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed. |
| Range       | 1 to 32000   |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **maximum-number-groups** *number*

|          |  |
|----------|--|
| Synopsis | Maximum number of groups for this interface  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld group-interface</a> <i>reference</i> <a href="#">maximum-number-groups</a> <i>number</i> |
| Tree     | <a href="#">maximum-number-groups</a>  |
| Range    | 1 to 16000   |

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-sources** *number*

Synopsis Maximum number of sources that are allowed per group  
 Context **configure** [service](#) [vprn](#) *string* [mld](#) [group-interface](#) *reference* [maximum-number-sources](#) *number*  
 Tree [maximum-number-sources](#)  
 Range 1 to 1000  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mcac**

Synopsis Enter the **mcac** context  
 Context **configure** [service](#) [vprn](#) *string* [mld](#) [group-interface](#) *reference* [mcac](#)  
 Tree [mcac](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **bandwidth**

Synopsis Enter the **bandwidth** context  
 Context **configure** [service](#) [vprn](#) *string* [mld](#) [group-interface](#) *reference* [mcac](#) [bandwidth](#)  
 Tree [bandwidth](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mandatory** (*number* | *keyword*)

Synopsis Pre-reserved bandwidth for all mandatory channels  
 Context **configure** [service](#) [vprn](#) *string* [mld](#) [group-interface](#) *reference* [mcac](#) [bandwidth](#) [mandatory](#) (*number* | *keyword*)  
 Tree [mandatory](#)  
 Range 0 to 2147483647

|            |   |
|------------|---|
| Options    | unlimited   |
| Default    | unlimited   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **total** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Maximum allowed bandwidth   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">mcac</a> <a href="#">bandwidth</a> <b>total</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">total</a>   |
| Range      | 0 to 2147483647   |
| Options    | unlimited   |
| Default    | unlimited   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **interface-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | Name of multicast CAC interface policy  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">mcac</a> <a href="#">interface-policy</a> <i>reference</i> |
| Tree       | <a href="#">interface-policy</a>  |
| Reference  | <b>configure</b> <a href="#">mcac</a> <a href="#">interface-policy</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **policy** *reference*

|             |   |
|-------------|---|
| Synopsis    | Multicast CAC policy name   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">mcac</a> <a href="#">policy</a> <i>reference</i>   |
| Tree        | <a href="#">policy</a>  |
| Description | <p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> |

If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.

Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:

- subscriber level and redirected interface when redirection is configured
- subscriber level and group-interface level when redirection is unconfigured

In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).

|            |   |
|------------|---|
| Reference  | <b>configure mcac policy string</b>                     |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **query-interval number**

|            |   |
|------------|---|
| Synopsis   | Time between two consecutive host-query messages  |
| Context    | <b>configure service vpn string mld group-interface reference query-interval number</b> |
| Tree       | <a href="#">query-interval</a>  |
| Range      | 2 to 1024   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                 |

### **query-last-member-interval number**

|            |   |
|------------|---|
| Synopsis   | Time between group-specific query messages  |
| Context    | <b>configure service vpn string mld group-interface reference query-last-member-interval number</b> |
| Tree       | <a href="#">query-last-member-interval</a>  |
| Range      | 1 to 1023   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **query-response-interval number**

|          |  |
|----------|--|
| Synopsis | Time to wait for a response to the host-query messages   |
| Context  | <b>configure service vpn string mld group-interface reference query-response-interval number</b> |

---

|            |   |
|------------|---|
| Tree       | <a href="#">query-response-interval</a>                 |
| Range      | 1 to 1023   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **query-source-address** *string*

|            |   |
|------------|---|
| Synopsis   | Source address for MLD queries  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld group-interface</a> <i>reference</i> <a href="#">query-source-address</a> <i>string</i> |
| Tree       | <a href="#">query-source-address</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **router-alert-check** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable router alert checking for IGMP or MLD messages  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld group-interface</a> <i>reference</i> <a href="#">router-alert-check</a> <i>boolean</i> |
| Tree       | <a href="#">router-alert-check</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **sub-hosts-only** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow MLD traffic from known hosts only  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld group-interface</a> <i>reference</i> <a href="#">sub-hosts-only</a> <i>boolean</i> |
| Tree       | <a href="#">sub-hosts-only</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **subnet-check** *boolean*

|          |  |
|----------|--|
| Synopsis | Enable subnet checking   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld group-interface</a> <i>reference</i> <a href="#">subnet-check</a> <i>boolean</i> |

|            |   |
|------------|---|
| Tree       | <a href="#">subnet-check</a>                            |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **version** *keyword*

|            |   |
|------------|---|
| Synopsis   | MLD protocol version  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">version</a> <i>keyword</i> |
| Tree       | <a href="#">version</a>   |
| Options    | 1, 2  |
| Default    | 2   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **interface** [[ip-interface-name](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>interface</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> |
| Tree       | <a href="#">interface</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **[ip-interface-name]** *string*

|               |   |
|---------------|---|
| Synopsis      | IP interface name   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> |
| Tree          | <a href="#">interface</a>   |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R2   |
| Platforms     | All   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the MLD interface   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**import-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | Import policy to filter MLD packets   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <b>import-policy</b> <i>reference</i> |
| Tree       | <a href="#">import-policy</a>   |
| Reference  | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**maximum-number-group-sources** *number*

|             |  |
|-------------|--|
| Synopsis    | Maximum number of group sources for this interface   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <b>maximum-number-group-sources</b> <i>number</i>  |
| Tree        | <a href="#">maximum-number-group-sources</a>   |
| Description | This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed. |
| Range       | 1 to 32000   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**maximum-number-groups** *number*

|          |   |
|----------|---|
| Synopsis | Maximum number of groups for this interface |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>mld interface</b> <i>string</i> <b>maximum-number-groups</b> <i>number</i> |
| Tree       | <b>maximum-number-groups</b>  |
| Range      | 1 to 16000  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **maximum-number-sources** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of sources that are allowed per group   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>mld interface</b> <i>string</i> <b>maximum-number-sources</b> <i>number</i> |
| Tree       | <b>maximum-number-sources</b>  |
| Range      | 1 to 1000  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **mcac**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mcac</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>mld interface</b> <i>string</i> <b>mcac</b> |
| Tree       | <b>mcac</b>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **bandwidth**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>bandwidth</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>mld interface</b> <i>string</i> <b>mcac bandwidth</b> |
| Tree       | <b>bandwidth</b>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **mandatory** (*number* | *keyword*)

|          |   |
|----------|---|
| Synopsis | Pre-reserved bandwidth for all mandatory channels   |
| Context  | <b>configure service vprn</b> <i>string</i> <b>mld interface</b> <i>string</i> <b>mcac bandwidth mandatory</b> ( <i>number</i>   <i>keyword</i> ) |



|            |                           |
|------------|---------------------------|
| Tree       | <a href="#">mandatory</a> |
| Range      | 0 to 2147483647           |
| Options    | unlimited                 |
| Default    | unlimited                 |
| Introduced | 16.0.R1                   |
| Platforms  | All                       |

### **total** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Maximum allowed bandwidth  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">bandwidth</a> <b>total</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">total</a>  |
| Range      | 0 to 2147483647  |
| Options    | unlimited  |
| Default    | unlimited  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **interface-policy** *reference*

|            |  |
|------------|--|
| Synopsis   | Name of multicast CAC interface policy   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">interface-policy</a> <i>reference</i> |
| Tree       | <a href="#">interface-policy</a>   |
| Reference  | <b>configure</b> <a href="#">mcac</a> <a href="#">interface-policy</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **mc-constraints**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mc-constraints</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> |
| Tree       | <a href="#">mc-constraints</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**level** [[level-id](#)] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>level</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">level</a> <i>number</i> |
| Tree       | <a href="#">level</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[level-id]** *number*

|            |   |
|------------|---|
| Synopsis   | Bandwidth level ID for an MCAC constraint   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">level</a> <i>number</i> |
| Tree       | <a href="#">level</a>   |
| Range      | 1 to 8  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**bandwidth** *number*

|            |   |
|------------|---|
| Synopsis   | Bandwidth available for this level  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">level</a> <i>number</i> <a href="#">bandwidth</a> <i>number</i> |
| Tree       | <a href="#">bandwidth</a>   |
| Range      | 0 to 2147483647   |
| Units      | kilobps   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**number-down** [[number-lag-port-down](#)] *number*

|          |   |
|----------|---|
| Synopsis | Enter the <b>number-down</b> list instance  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">number-down</a> <i>number</i> |

|            |                             |
|------------|-----------------------------|
| Tree       | <a href="#">number-down</a> |
| Introduced | 16.0.R1                     |
| Platforms  | All                         |

### **[number-lag-port-down] number**

|            |   |
|------------|---|
| Synopsis   | Number of ports that are down in this LAG link  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">number-down</a> <i>number</i> |
| Tree       | <a href="#">number-down</a>   |
| Range      | 1 to 64   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **level number**

|             |   |
|-------------|---|
| Synopsis    | Level ID to associate with number of down LAG ports   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">number-down</a> <i>number</i> <a href="#">level</a> <i>number</i> |
| Tree        | <a href="#">level</a>   |
| Description | This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.   |
| Range       | 1 to 8  |
| Notes       | This element is mandatory.  |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **use-lag-port-weight boolean**

|             |  |
|-------------|--|
| Synopsis    | Use LAG port weight in calculating MCAC constraints  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">use-lag-port-weight</a> <i>boolean</i> |
| Tree        | <a href="#">use-lag-port-weight</a>  |
| Description | When configured to <b>true</b> , port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper   |

operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs.

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **policy reference**

|             |   |
|-------------|---|
| Synopsis    | Multicast CAC policy name   |
| Context     | <b>configure service vprn string mld interface string mcac policy reference</b>   |
| Tree        | <a href="#">policy</a>  |
| Description | <p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> <li>• subscriber level and redirected interface when redirection is configured</li> <li>• subscriber level and group-interface level when redirection is unconfigured</li> </ul> <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p> |
| Reference   | <b>configure mcac policy string</b>   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **query-interval number**

|            |   |
|------------|---|
| Synopsis   | Time between two consecutive host-query messages                                |
| Context    | <b>configure service vprn string mld interface string query-interval number</b> |
| Tree       | <a href="#">query-interval</a>  |
| Range      | 2 to 1024   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**query-last-member-interval** *number*

|            |   |
|------------|---|
| Synopsis   | Time between group-specific query messages  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <b>query-last-member-interval</b> <i>number</i> |
| Tree       | <a href="#">query-last-member-interval</a>  |
| Range      | 1 to 1023   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**query-response-interval** *number*

|            |  |
|------------|--|
| Synopsis   | Time to wait for a response to the host-query messages   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <b>query-response-interval</b> <i>number</i> |
| Tree       | <a href="#">query-response-interval</a>  |
| Range      | 1 to 1023  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**router-alert-check** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable router alert checking for IGMP or MLD messages  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <b>router-alert-check</b> <i>boolean</i> |
| Tree       | <a href="#">router-alert-check</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**ssm-translate**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ssm-translate</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <b>ssm-translate</b> |
| Tree       | <a href="#">ssm-translate</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**group-range** *start string end string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>group-range</b> list instance   |
| Context    | <b>configure</b> <i>service vprn string mld interface string ssm-translate group-range start string end string</i> |
| Tree       | <i>group-range</i>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**start string**

|            |  |
|------------|--|
| Synopsis   | Lower bound of the group range   |
| Context    | <b>configure</b> <i>service vprn string mld interface string ssm-translate group-range start string end string</i> |
| Tree       | <i>group-range</i>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**end string**

|            |  |
|------------|--|
| Synopsis   | Upper bound of the group range   |
| Context    | <b>configure</b> <i>service vprn string mld interface string ssm-translate group-range start string end string</i> |
| Tree       | <i>group-range</i>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**source** [*source-address*] *string*

|          |  |
|----------|--|
| Synopsis | Add a list entry for <b>source</b>   |
| Context  | <b>configure</b> <i>service vprn string mld interface string ssm-translate group-range start string end string source string</i> |
| Tree     | <i>source</i>  |

|                |         |
|----------------|---------|
| Min. Instances | 1       |
| Introduced     | 16.0.R1 |
| Platforms      | All     |

**[source-address] string**

|            |   |
|------------|---|
| Synopsis   | Source IP address   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">mld interface string</a> <a href="#">ssm-translate group-range start string</a> <a href="#">end string</a> <a href="#">source string</a> |
| Tree       | <a href="#">source</a>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R2   |
| Platforms  | All   |

**static**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>static</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">mld interface string</a> <a href="#">static</a> |
| Tree       | <a href="#">static</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**group [group-address] string**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>group</b> list instance  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">mld interface string</a> <a href="#">static group string</a> |
| Tree       | <a href="#">group</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[group-address] string**

|          |   |
|----------|---|
| Synopsis | Group address of multicast channel  |
| Context  | <b>configure</b> <a href="#">service vprn string</a> <a href="#">mld interface string</a> <a href="#">static group string</a> |
| Tree     | <a href="#">group</a>   |

|            |                                     |
|------------|-------------------------------------|
| Notes      | This element is part of a list key. |
| Introduced | 16.0.R1                             |
| Platforms  | All                                 |

### **source** [[source-address](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Add a list entry for <b>source</b>  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld interface</a> <i>string</i> <a href="#">static group</a> <i>string</i> <a href="#">source</a> <i>string</i> |
| Tree       | <a href="#">source</a>  |
| Notes      | The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **[source-address]** *string*

|            |   |
|------------|---|
| Synopsis   | Source IP address   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld interface</a> <i>string</i> <a href="#">static group</a> <i>string</i> <a href="#">source</a> <i>string</i> |
| Tree       | <a href="#">source</a>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R2   |
| Platforms  | All   |

### **starg**

|            |  |
|------------|--|
| Synopsis   | any source address (*,G)   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld interface</a> <i>string</i> <a href="#">static group</a> <i>string</i> <a href="#">starg</a> |
| Tree       | <a href="#">starg</a>  |
| Notes      | The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .   |
| Introduced | 16.0.R2  |
| Platforms  | All  |

### **group-range** [start](#) *string* [end](#) *string* [step](#) *string*

|          |  |
|----------|--|
| Synopsis | Enter the <b>group-range</b> list instance |
|----------|--|



|            |   |
|------------|---|
| Context    | <b>configure</b> service vprn <i>string</i> mld interface <i>string</i> static group-range start <i>string</i> end <i>string</i> step <i>string</i> |
| Tree       | group-range   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**start string**

|            |   |
|------------|---|
| Synopsis   | Lower bound of the static multicast group   |
| Context    | <b>configure</b> service vprn <i>string</i> mld interface <i>string</i> static group-range start <i>string</i> end <i>string</i> step <i>string</i> |
| Tree       | group-range   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**end string**

|            |   |
|------------|---|
| Synopsis   | Upper bound of the static multicast group   |
| Context    | <b>configure</b> service vprn <i>string</i> mld interface <i>string</i> static group-range start <i>string</i> end <i>string</i> step <i>string</i> |
| Tree       | group-range   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**step string**

|            |   |
|------------|---|
| Synopsis   | Step interval for the group-range addresses   |
| Context    | <b>configure</b> service vprn <i>string</i> mld interface <i>string</i> static group-range start <i>string</i> end <i>string</i> step <i>string</i> |
| Tree       | group-range   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**source** [[source-address](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Add a list entry for <b>source</b>   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <a href="#">static</a> <a href="#">group-range</a> <a href="#">start</a> <i>string</i> <a href="#">end</a> <i>string</i> <a href="#">step</a> <i>string</i> <a href="#">source</a> <i>string</i> |
| Tree       | <a href="#">source</a>   |
| Notes      | The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[source-address]** *string*

|            |  |
|------------|--|
| Synopsis   | Source IP address  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <a href="#">static</a> <a href="#">group-range</a> <a href="#">start</a> <i>string</i> <a href="#">end</a> <i>string</i> <a href="#">step</a> <i>string</i> <a href="#">source</a> <i>string</i> |
| Tree       | <a href="#">source</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R2  |
| Platforms  | All  |

**starg**

|            |   |
|------------|---|
| Synopsis   | any source address (*,G)  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <a href="#">static</a> <a href="#">group-range</a> <a href="#">start</a> <i>string</i> <a href="#">end</a> <i>string</i> <a href="#">step</a> <i>string</i> <a href="#">starg</a> |
| Tree       | <a href="#">starg</a>   |
| Notes      | The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .  |
| Introduced | 16.0.R2   |
| Platforms  | All   |

**version** *keyword*

|          |  |
|----------|--|
| Synopsis | MLD protocol version   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <a href="#">version</a> <i>keyword</i> |
| Tree     | <a href="#">version</a>  |
| Options  | 1, 2   |

---

|            |         |
|------------|---------|
| Default    | 2       |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **query-interval** *number*

|            |  |
|------------|--|
| Synopsis   | Time between two consecutive host-query messages   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld query-interval</a> <i>number</i> |
| Tree       | <a href="#">query-interval</a>   |
| Range      | 2 to 1024  |
| Units      | seconds  |
| Default    | 125  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **query-last-member-interval** *number*

|            |  |
|------------|--|
| Synopsis   | Time between group-specific query messages   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld query-last-member-interval</a> <i>number</i> |
| Tree       | <a href="#">query-last-member-interval</a>   |
| Range      | 1 to 1023  |
| Units      | seconds  |
| Default    | 1  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **query-response-interval** *number*

|            |   |
|------------|---|
| Synopsis   | Time to wait for a response to the host-query messages  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld query-response-interval</a> <i>number</i> |
| Tree       | <a href="#">query-response-interval</a>   |
| Range      | 1 to 1023   |
| Units      | seconds   |
| Default    | 10  |
| Introduced | 16.0.R1   |

Platforms All

### **robust-count** *number*

Synopsis Number of retries after expected message loss  
 Context **configure** [service vprn](#) *string* **mld** **robust-count** *number*  
 Tree [robust-count](#)  
 Range 2 to 10  
 Default 2  
 Introduced 16.0.R1  
 Platforms All

### **ssm-translate**

Synopsis Enter the **ssm-translate** context  
 Context **configure** [service vprn](#) *string* **mld** **ssm-translate**  
 Tree [ssm-translate](#)  
 Introduced 16.0.R1  
 Platforms All

### **group-range** [start](#) *string* [end](#) *string*

Synopsis Enter the **group-range** list instance  
 Context **configure** [service vprn](#) *string* **mld** [ssm-translate](#) [group-range](#) [start](#) *string* [end](#) *string*  
 Tree [group-range](#)  
 Introduced 16.0.R1  
 Platforms All

### **start** *string*

Synopsis Lower bound of the group range  
 Context **configure** [service vprn](#) *string* **mld** [ssm-translate](#) [group-range](#) [start](#) *string* [end](#) *string*  
 Tree [group-range](#)  
 Notes This element is part of a list keys.  
 Introduced 16.0.R1

Platforms All

### **end string**

Synopsis Upper bound of the group range  
 Context **configure service vpn string mld ssm-translate group-range start string end string**  
 Tree [group-range](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **source [source-address] string**

Synopsis Add a list entry for **source**  
 Context **configure service vpn string mld ssm-translate group-range start string end string source string**  
 Tree [source](#)  
 Min. Instances 1  
 Introduced 16.0.R1  
 Platforms All

### **[source-address] string**

Synopsis Source IP address  
 Context **configure service vpn string mld ssm-translate group-range start string end string source string**  
 Tree [source](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R2  
 Platforms All

### **msdp**

Synopsis Enable the **msdp** context  
 Context **configure service vpn string msdp**

---

|            |                      |
|------------|----------------------|
| Tree       | <a href="#">msdp</a> |
| Introduced | 19.10.R1             |
| Platforms  | All                  |

**active-source-limit** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of active messages accepted by MSDP   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">msdp active-source-limit</a> <i>number</i> |
| Tree       | <a href="#">active-source-limit</a>  |
| Range      | 0 to 1000000   |
| Introduced | 19.10.R1   |
| Platforms  | All  |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of MSDP  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">msdp admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 19.10.R1  |
| Platforms  | All   |

**data-encapsulation** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable encapsulation of multicast data used by MSDP  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">msdp data-encapsulation</a> <i>boolean</i> |
| Tree       | <a href="#">data-encapsulation</a>   |
| Default    | true   |
| Introduced | 19.10.R1   |
| Platforms  | All  |

**export-policy** *reference*

|          |  |
|----------|--|
| Synopsis | Policies to export source active state into MSDP |
|----------|--|

|                |   |
|----------------|---|
| Context        | <b>configure service vprn string msdp export-policy reference</b> |
| Tree           | <a href="#">export-policy</a>                                     |
| Reference      | <b>configure policy-options policy-statement string</b>           |
| Max. Instances | 5   |
| Notes          | This element is ordered by the user.                              |
| Introduced     | 19.10.R1  |
| Platforms      | All   |

### **group [name] string**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>group</b> list instance                   |
| Context    | <b>configure service vprn string msdp group string</b> |
| Tree       | <a href="#">group</a>                                  |
| Introduced | 19.10.R1   |
| Platforms  | All  |

### **[name] string**

|               |  |
|---------------|--|
| Synopsis      | MSDP group name  |
| Context       | <b>configure service vprn string msdp group string</b> |
| Tree          | <a href="#">group</a>                                  |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.                    |
| Introduced    | 19.10.R1   |
| Platforms     | All  |

### **active-source-limit number**

|            |   |
|------------|---|
| Synopsis   | Maximum number of active messages accepted by MSDP                                |
| Context    | <b>configure service vprn string msdp group string active-source-limit number</b> |
| Tree       | <a href="#">active-source-limit</a>   |
| Range      | 0 to 1000000  |
| Introduced | 19.10.R1  |
| Platforms  | All   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of MSDP  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">msdp</a> <a href="#">group</a> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 19.10.R1  |
| Platforms  | All   |

**export-policy** *reference*

|                |   |
|----------------|---|
| Synopsis       | Policies to export source active state into MSDP  |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">msdp</a> <a href="#">group</a> <i>string</i> <b>export-policy</b> <i>reference</i> |
| Tree           | <a href="#">export-policy</a>   |
| Reference      | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>  |
| Max. Instances | 5   |
| Notes          | This element is ordered by the user.  |
| Introduced     | 19.10.R1  |
| Platforms      | All   |

**import-policy** *reference*

|                |   |
|----------------|---|
| Synopsis       | Policy to import source active state from MSDP  |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">msdp</a> <a href="#">group</a> <i>string</i> <b>import-policy</b> <i>reference</i> |
| Tree           | <a href="#">import-policy</a>   |
| Reference      | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>  |
| Max. Instances | 5   |
| Notes          | This element is ordered by the user.  |
| Introduced     | 19.10.R1  |
| Platforms      | All   |



**local-address** *string*

|            |  |
|------------|--|
| Synopsis   | Local end of an MSDP session   |
| Context    | <b>configure</b> <i>service vprn string msdp group string local-address string</i> |
| Tree       | <i>local-address</i>   |
| Introduced | 19.10.R1   |
| Platforms  | All  |

**mode** *keyword*

|            |  |
|------------|--|
| Synopsis   | Topology of groups of peers  |
| Context    | <b>configure</b> <i>service vprn string msdp group string mode keyword</i> |
| Tree       | <i>mode</i>  |
| Options    | standard, mesh-group   |
| Default    | standard   |
| Introduced | 19.10.R1   |
| Platforms  | All  |

**peer** [*ip-address*] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>peer</b> list instance                                       |
| Context    | <b>configure</b> <i>service vprn string msdp group string peer string</i> |
| Tree       | <i>peer</i>   |
| Introduced | 19.10.R1  |
| Platforms  | All   |

**[ip-address]** *string*

|            |   |
|------------|---|
| Synopsis   | IP address of the remote MSDP router for peering                          |
| Context    | <b>configure</b> <i>service vprn string msdp group string peer string</i> |
| Tree       | <i>peer</i>   |
| Notes      | This element is part of a list key.                                       |
| Introduced | 19.10.R1  |
| Platforms  | All   |

**active-source-limit** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of active messages accepted by MSDP   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">msdp</a> <a href="#">group</a> <i>string</i> <a href="#">peer</a> <i>string</i> <b>active-source-limit</b> <i>number</i> |
| Tree       | <a href="#">active-source-limit</a>  |
| Range      | 0 to 1000000   |
| Introduced | 19.10.R1   |
| Platforms  | All  |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of MSDP  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">msdp</a> <a href="#">group</a> <i>string</i> <a href="#">peer</a> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 19.10.R1  |
| Platforms  | All   |

**authentication-key** *string*

|               |   |
|---------------|---|
| Synopsis      | MD5 authentication key for the MSDP peering session   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">msdp</a> <a href="#">group</a> <i>string</i> <a href="#">peer</a> <i>string</i> <b>authentication-key</b> <i>string</i> |
| Tree          | <a href="#">authentication-key</a>  |
| String Length | 1 to 370  |
| Introduced    | 19.10.R1  |
| Platforms     | All   |

**default-peer** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable/Disable default peer as MSDP peer   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">msdp</a> <a href="#">group</a> <i>string</i> <a href="#">peer</a> <i>string</i> <b>default-peer</b> <i>boolean</i> |
| Tree       | <a href="#">default-peer</a>   |
| Default    | false  |
| Introduced | 19.10.R1   |
| Platforms  | All  |

**export-policy** *reference*

|                |  |
|----------------|--|
| Synopsis       | Policies to export source active state into MSDP   |
| Context        | <b>configure</b> <a href="#">service vprn string msdp group string peer string export-policy reference</a> |
| Tree           | <a href="#">export-policy</a>  |
| Reference      | <b>configure</b> <a href="#">policy-options policy-statement string</a>                                    |
| Max. Instances | 5  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 19.10.R1   |
| Platforms      | All  |

**import-policy** *reference*

|                |  |
|----------------|--|
| Synopsis       | Policy to import source active state from MSDP   |
| Context        | <b>configure</b> <a href="#">service vprn string msdp group string peer string import-policy reference</a> |
| Tree           | <a href="#">import-policy</a>  |
| Reference      | <b>configure</b> <a href="#">policy-options policy-statement string</a>                                    |
| Max. Instances | 5  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 19.10.R1   |
| Platforms      | All  |

**local-address** *string*

|            |   |
|------------|---|
| Synopsis   | Local end of an MSDP session  |
| Context    | <b>configure</b> <a href="#">service vprn string msdp group string peer string local-address string</a> |
| Tree       | <a href="#">local-address</a>   |
| Introduced | 19.10.R1  |
| Platforms  | All   |

**receive-message-rate**

|          |   |
|----------|---|
| Synopsis | Enter the <b>receive-message-rate</b> context |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>msdp group</b> <i>string</i> <b>peer</b> <i>string</i> <b>receive-message-rate</b> |
| Tree       | <b>receive-message-rate</b>   |
| Introduced | 19.10.R1  |
| Platforms  | All   |

**rate number**

|            |   |
|------------|---|
| Synopsis   | Number of MSDP messages read from the TCP session   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>msdp group</b> <i>string</i> <b>peer</b> <i>string</i> <b>receive-message-rate</b> <b>rate</b> <i>number</i> |
| Tree       | <b>rate</b>   |
| Range      | 10 to 10000   |
| Introduced | 19.10.R1  |
| Platforms  | All   |

**threshold number**

|            |  |
|------------|--|
| Synopsis   | Limit for MSDP messages read from the TCP session  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>msdp group</b> <i>string</i> <b>peer</b> <i>string</i> <b>receive-message-rate</b> <b>threshold</b> <i>number</i> |
| Tree       | <b>threshold</b>   |
| Range      | 1 to 1000000   |
| Introduced | 19.10.R1   |
| Platforms  | All  |

**time number**

|            |   |
|------------|---|
| Synopsis   | Limit of MSDP messages read from the TCP session  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>msdp group</b> <i>string</i> <b>peer</b> <i>string</i> <b>receive-message-rate</b> <b>time</b> <i>number</i> |
| Tree       | <b>time</b>   |
| Range      | 1 to 600  |
| Units      | seconds   |
| Introduced | 19.10.R1  |
| Platforms  | All   |

## receive-message-rate

|            |   |
|------------|---|
| Synopsis   | Enter the <b>receive-message-rate</b> context                               |
| Context    | <b>configure service vprn string msdp group string receive-message-rate</b> |
| Tree       | <b>receive-message-rate</b>   |
| Introduced | 19.10.R1  |
| Platforms  | All   |

## rate number

|            |   |
|------------|---|
| Synopsis   | Number of MSDP messages read from the TCP session                                       |
| Context    | <b>configure service vprn string msdp group string receive-message-rate rate number</b> |
| Tree       | <b>rate</b>   |
| Range      | 10 to 10000   |
| Introduced | 19.10.R1  |
| Platforms  | All   |

## threshold number

|            |  |
|------------|--|
| Synopsis   | Limit for MSDP messages read from the TCP session  |
| Context    | <b>configure service vprn string msdp group string receive-message-rate threshold number</b> |
| Tree       | <b>threshold</b>   |
| Range      | 1 to 1000000   |
| Introduced | 19.10.R1   |
| Platforms  | All  |

## time number

|            |   |
|------------|---|
| Synopsis   | Limit of MSDP messages read from the TCP session  |
| Context    | <b>configure service vprn string msdp group string receive-message-rate time number</b> |
| Tree       | <b>time</b>   |
| Range      | 1 to 600  |
| Units      | seconds   |
| Introduced | 19.10.R1  |

Platforms All

### **import-policy** *reference*

Synopsis Policy to import source active state from MSDP

Context **configure** [service vprn](#) *string* [msdp import-policy](#) *reference*

Tree [import-policy](#)

Reference **configure** [policy-options policy-statement](#) *string*

Max. Instances 5

Notes This element is ordered by the user.

Introduced 19.10.R1

Platforms All

### **local-address** *string*

Synopsis Local end of an MSDP session

Context **configure** [service vprn](#) *string* [msdp local-address](#) *string*

Tree [local-address](#)

Introduced 19.10.R1

Platforms All

### **peer** [[ip-address](#)] *string*

Synopsis Enter the **peer** list instance

Context **configure** [service vprn](#) *string* [msdp peer](#) *string*

Tree [peer](#)

Introduced 19.10.R1

Platforms All

### **[ip-address]** *string*

Synopsis IP address of the remote MSDP router for peering

Context **configure** [service vprn](#) *string* [msdp peer](#) *string*

Tree [peer](#)

---

|            |                                     |
|------------|-------------------------------------|
| Notes      | This element is part of a list key. |
| Introduced | 19.10.R1                            |
| Platforms  | All                                 |

### **active-source-limit** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of active messages accepted by MSDP                               |
| Context    | <b>configure service vprn string msdp peer string active-source-limit number</b> |
| Tree       | <a href="#">active-source-limit</a>  |
| Range      | 0 to 1000000   |
| Introduced | 19.10.R1   |
| Platforms  | All  |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of MSDP  |
| Context    | <b>configure service vprn string msdp peer string admin-state keyword</b> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 19.10.R1  |
| Platforms  | All   |

### **authentication-key** *string*

|               |   |
|---------------|---|
| Synopsis      | MD5 authentication key for the MSDP peering session                             |
| Context       | <b>configure service vprn string msdp peer string authentication-key string</b> |
| Tree          | <a href="#">authentication-key</a>  |
| String Length | 1 to 370  |
| Introduced    | 19.10.R1  |
| Platforms     | All   |

### **default-peer** *boolean*

|          |  |
|----------|--|
| Synopsis | Enable/Disable default peer as MSDP peer |
|----------|--|

|            |  |
|------------|--|
| Context    | <b>configure service vprn string msdp peer string default-peer boolean</b> |
| Tree       | <b>default-peer</b>  |
| Default    | false  |
| Introduced | 19.10.R1   |
| Platforms  | All  |

### **export-policy** *reference*

|                |   |
|----------------|---|
| Synopsis       | Policies to export source active state into MSDP                              |
| Context        | <b>configure service vprn string msdp peer string export-policy reference</b> |
| Tree           | <b>export-policy</b>  |
| Reference      | <b>configure policy-options policy-statement string</b>                       |
| Max. Instances | 5   |
| Notes          | This element is ordered by the user.  |
| Introduced     | 19.10.R1  |
| Platforms      | All   |

### **import-policy** *reference*

|                |   |
|----------------|---|
| Synopsis       | Policy to import source active state from MSDP                                |
| Context        | <b>configure service vprn string msdp peer string import-policy reference</b> |
| Tree           | <b>import-policy</b>  |
| Reference      | <b>configure policy-options policy-statement string</b>                       |
| Max. Instances | 5   |
| Notes          | This element is ordered by the user.  |
| Introduced     | 19.10.R1  |
| Platforms      | All   |

### **local-address** *string*

|          |  |
|----------|--|
| Synopsis | Local end of an MSDP session   |
| Context  | <b>configure service vprn string msdp peer string local-address string</b> |
| Tree     | <b>local-address</b>   |



Introduced 19.10.R1  
Platforms All

### **receive-message-rate**

Synopsis Enter the **receive-message-rate** context  
Context **configure service vprn string msdp peer string receive-message-rate**  
Tree [receive-message-rate](#)  
Introduced 19.10.R1  
Platforms All

### **rate number**

Synopsis Number of MSDP messages read from the TCP session  
Context **configure service vprn string msdp peer string receive-message-rate rate number**  
Tree [rate](#)  
Range 10 to 10000  
Introduced 19.10.R1  
Platforms All

### **threshold number**

Synopsis Limit for MSDP messages read from the TCP session  
Context **configure service vprn string msdp peer string receive-message-rate threshold number**  
Tree [threshold](#)  
Range 1 to 1000000  
Introduced 19.10.R1  
Platforms All

### **time number**

Synopsis Limit of MSDP messages read from the TCP session  
Context **configure service vprn string msdp peer string receive-message-rate time number**  
Tree [time](#)  
Range 1 to 600

|            |          |
|------------|----------|
| Units      | seconds  |
| Introduced | 19.10.R1 |
| Platforms  | All      |

### **receive-message-rate**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>receive-message-rate</b> context                  |
| Context    | <b>configure service vprn string msdp receive-message-rate</b> |
| Tree       | <a href="#">receive-message-rate</a>                           |
| Introduced | 19.10.R1   |
| Platforms  | All  |

### **rate number**

|            |  |
|------------|--|
| Synopsis   | Number of MSDP messages read from the TCP session                          |
| Context    | <b>configure service vprn string msdp receive-message-rate rate number</b> |
| Tree       | <a href="#">rate</a>   |
| Range      | 10 to 10000  |
| Introduced | 19.10.R1   |
| Platforms  | All  |

### **threshold number**

|            |   |
|------------|---|
| Synopsis   | Limit for MSDP messages read from the TCP session                               |
| Context    | <b>configure service vprn string msdp receive-message-rate threshold number</b> |
| Tree       | <a href="#">threshold</a>   |
| Range      | 1 to 1000000  |
| Introduced | 19.10.R1  |
| Platforms  | All   |

### **time number**

|          |  |
|----------|--|
| Synopsis | Limit of MSDP messages read from the TCP session                           |
| Context  | <b>configure service vprn string msdp receive-message-rate time number</b> |
| Tree     | <a href="#">time</a>   |

|            |          |
|------------|----------|
| Range      | 1 to 600 |
| Units      | seconds  |
| Introduced | 19.10.R1 |
| Platforms  | All      |

### **rpf-table** *keyword*

|            |   |
|------------|---|
| Synopsis   | Route tables for RPF lookup   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">msdp</a> <a href="#">rpf-table</a> <i>keyword</i> |
| Tree       | <a href="#">rpf-table</a>   |
| Options    | rtable-m, rtable-u, both  |
| Default    | rtable-u  |
| Introduced | 19.10.R1  |
| Platforms  | All   |

### **source** [[ip-prefix](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>source</b> list instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">msdp</a> <a href="#">source</a> <i>string</i> |
| Tree       | <a href="#">source</a>  |
| Introduced | 19.10.R1  |
| Platforms  | All   |

### [[ip-prefix](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Source IP address for accepted active source messages   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">msdp</a> <a href="#">source</a> <i>string</i> |
| Tree       | <a href="#">source</a>  |
| Notes      | This element is part of a list key.   |
| Introduced | 19.10.R1  |
| Platforms  | All   |

### **active-source-limit** *number*

|          |   |
|----------|---|
| Synopsis | Number of active source messages accepted by MSDP |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>msdp source</b> <i>string</i> <b>active-source-limit</b> <i>number</i> |
| Tree       | <a href="#">active-source-limit</a>   |
| Range      | 0 to 1000000  |
| Introduced | 19.10.R1  |
| Platforms  | All   |

### **source-active-cache-lifetime** *number*

|            |  |
|------------|--|
| Synopsis   | Lifetime of SA entries in the cache  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>msdp source-active-cache-lifetime</b> <i>number</i> |
| Tree       | <a href="#">source-active-cache-lifetime</a>   |
| Range      | 90 to 600  |
| Units      | seconds  |
| Default    | 90   |
| Introduced | 19.10.R1   |
| Platforms  | All  |

### **mss-adjust**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>mss-adjust</b> context                          |
| Context    | <b>configure service vprn</b> <i>string</i> <b>mss-adjust</b> |
| Tree       | <a href="#">mss-adjust</a>                                    |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                  |

### **nat-group** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | NAT group used for TCP-MSS adjustment   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>mss-adjust nat-group</b> <i>number</i> |
| Tree       | <a href="#">nat-group</a>   |
| Max. Range | 0 to 4294967295   |
| Notes      | This element is mandatory.  |

---

|            |  |
|------------|--|
| Introduced | 16.0.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **segment-size** *number*

|            |   |
|------------|---|
| Synopsis   | TCP-MSS option value in transmitted TCP SYN requests  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mss-adjust</a> <a href="#">segment-size</a> <i>number</i> |
| Tree       | <a href="#">segment-size</a>  |
| Range      | 160 to 10240  |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **mtrace2**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mtrace2</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mtrace2</a> |
| Tree       | <a href="#">mtrace2</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of multicast path tracing   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mtrace2</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **udp-port** *number*

|          |  |
|----------|--|
| Synopsis | Destination and listening port for the mtrace2 command   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mtrace2</a> <a href="#">udp-port</a> <i>number</i> |

|            |                          |
|------------|--------------------------|
| Tree       | <a href="#">udp-port</a> |
| Range      | 1024 to 49151            |
| Default    | 5000                     |
| Introduced | 16.0.R1                  |
| Platforms  | All                      |

### **multicast-info-policy** *reference*

|            |  |
|------------|--|
| Synopsis   | Multicast policy name for virtual router   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">multicast-info-policy</a> <i>reference</i> |
| Tree       | <a href="#">multicast-info-policy</a>  |
| Reference  | <b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i>          |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **mvpn**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>mvpn</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn</a> |
| Tree       | <a href="#">mvpn</a>   |
| Introduced | 19.5.R1  |
| Platforms  | All  |

### **auto-discovery**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>auto-discovery</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">auto-discovery</a> |
| Tree       | <a href="#">auto-discovery</a>  |
| Introduced | 19.5.R1   |
| Platforms  | All   |

### **source-address** *string*

|          |  |
|----------|--|
| Synopsis | IPv4 source address  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">auto-discovery</a> <a href="#">source-address</a> <i>string</i> |

---

|            |                                |
|------------|--------------------------------|
| Tree       | <a href="#">source-address</a> |
| Default    | 0.0.0.0                        |
| Introduced | 19.5.R1                        |
| Platforms  | All                            |

### **type** *keyword*

|            |   |
|------------|---|
| Synopsis   | Status of multicast VPN membership auto-discovery   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">auto-discovery</a> <b>type</b> <i>keyword</i> |
| Tree       | <a href="#">type</a>  |
| Options    | bgp, mdt-safi   |
| Introduced | 19.5.R1   |
| Platforms  | All   |

### **c-mcast-signaling** *keyword*

|            |  |
|------------|--|
| Synopsis   | Protocol for PE-to-PE signaling of CE multicast states   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">c-mcast-signaling</a> <i>keyword</i> |
| Tree       | <a href="#">c-mcast-signaling</a>  |
| Options    | bgp, pim   |
| Default    | pim  |
| Introduced | 19.5.R1  |
| Platforms  | All  |

### **intersite-shared**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>intersite-shared</b> context   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">intersite-shared</a>  |
| Tree        | <a href="#">intersite-shared</a>  |
| Description | Commands in this context configure whether to use inter-site shared C-trees. Optional parameters allow enabling additional intersite shared functionality. Not specifying an optional parameter when executing the command disables that parameter. |
| Introduced  | 19.5.R1   |
| Platforms   | All   |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of inter-site shared C-trees use  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">intersite-shared</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 19.5.R1  |
| Platforms  | All  |

**kat-type5-advertisement-withdraw** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Enable KATs on source PEs for ng-MVPN deployments   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">intersite-shared</a> <b>kat-type5-advertisement-withdraw</b> <i>boolean</i> |
| Tree        | <a href="#">kat-type5-advertisement-withdraw</a>  |
| Description | When configured to <b>true</b> , this command specifies that the MVPN Type-5 “Source Active AD routes” are not removed even if all receivers are removed from the tree.                 |
| Default     | false   |
| Introduced  | 19.5.R1   |
| Platforms   | All   |

**persistent-type5-advertisement** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Ensure Type-5 S-A routes are generated for MCAST source  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">intersite-shared</a> <b>persistent-type5-advertisement</b> <i>boolean</i>            |
| Tree        | <a href="#">persistent-type5-advertisement</a>   |
| Description | When configured to <b>true</b> , this command removes the MVPN Type-5 “Source Active AD routes” even if receivers are present but the keepalive timer (KAT) has timed out because of no traffic. |
| Default     | false  |
| Introduced  | 19.5.R1  |
| Platforms   | All  |



### **mdt-type** *keyword*

|            |   |
|------------|---|
| Synopsis   | MVPN instance type per PE node                                    |
| Context    | <b>configure service vprn</b> <i>string mvpn mdt-type keyword</i> |
| Tree       | <a href="#">mdt-type</a>  |
| Options    | sender-only, receiver-only, sender-receiver                       |
| Default    | sender-receiver   |
| Introduced | 19.5.R1   |
| Platforms  | All   |

### **provider-tunnel**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>provider-tunnel</b> context                         |
| Context    | <b>configure service vprn</b> <i>string mvpn provider-tunnel</i> |
| Tree       | <a href="#">provider-tunnel</a>                                  |
| Introduced | 19.5.R1  |
| Platforms  | All  |

### **inclusive**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>inclusive</b> context   |
| Context    | <b>configure service vprn</b> <i>string mvpn provider-tunnel inclusive</i> |
| Tree       | <a href="#">inclusive</a>  |
| Introduced | 19.5.R1  |
| Platforms  | All  |

### **bier**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>bier</b> context  |
| Context    | <b>configure service vprn</b> <i>string mvpn provider-tunnel inclusive bier</i>   |
| Tree       | <a href="#">bier</a>  |
| Notes      | The following elements are part of a choice: <b>bier</b> , <b>mldp</b> , <b>p2mp-sr</b> , <b>pim</b> , or <b>rsvp</b> . |
| Introduced | 19.5.R1   |
| Platforms  | All   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of BIER  |
| Context    | <b>configure service vprn</b> <i>string mvpn provider-tunnel inclusive bier admin-state keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 19.5.R1   |
| Platforms  | All   |

**sub-domain** *number*

|            |   |
|------------|---|
| Synopsis   | Sub-domain used to attach the BIER provider tunnel  |
| Context    | <b>configure service vprn</b> <i>string mvpn provider-tunnel inclusive bier sub-domain number</i> |
| Tree       | <a href="#">sub-domain</a>  |
| Range      | 0 to 255  |
| Introduced | 19.5.R1   |
| Platforms  | All   |

**bsr** *keyword*

|            |  |
|------------|--|
| Synopsis   | BSR signaling type   |
| Context    | <b>configure service vprn</b> <i>string mvpn provider-tunnel inclusive bsr keyword</i> |
| Tree       | <a href="#">bsr</a>  |
| Options    | unicast, spmsi   |
| Introduced | 19.5.R1  |
| Platforms  | All  |

**mldp**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>mldp</b> context  |
| Context    | <b>configure service vprn</b> <i>string mvpn provider-tunnel inclusive mldp</i>   |
| Tree       | <a href="#">mldp</a>  |
| Notes      | The following elements are part of a choice: <b>bier</b> , <b>mldp</b> , <b>p2mp-sr</b> , <b>pim</b> , or <b>rsvp</b> . |
| Introduced | 19.5.R1   |
| Platforms  | All   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of MLDP LSP use for tunnels  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">inclusive</a> <a href="#">mldp</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 19.5.R1   |
| Platforms  | All   |

**p2mp-sr**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>p2mp-sr</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">inclusive</a> <b>p2mp-sr</b> |
| Tree       | <a href="#">p2mp-sr</a>   |
| Notes      | The following elements are part of a choice: <b>bier</b> , <b>mldp</b> , <b>p2mp-sr</b> , <b>pim</b> , or <b>rsvp</b> .   |
| Introduced | 21.5.R1   |
| Platforms  | All   |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state for P2MP SR   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">inclusive</a> <a href="#">p2mp-sr</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 21.5.R1  |
| Platforms  | All  |

**bfd-leaf** *boolean*

|          |   |
|----------|---|
| Synopsis | Enable unidirectional multipoint BFD on the leaf PE   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">inclusive</a> <a href="#">p2mp-sr</a> <b>bfd-leaf</b> <i>boolean</i> |
| Tree     | <a href="#">bfd-leaf</a>  |

|             |  |
|-------------|--|
| Description | When configured to <b>true</b> , this command enables unidirectional multipoint BFD sessions on a receiver (leaf) PE node for upstream fast failure detection over P2MP SR tree LSP. |
| Default     | false  |
| Introduced  | 21.10.R1   |
| Platforms   | All  |

### **bfd-root**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>bfd-root</b> context  |
| Context    | <b>configure service vpn string mvpn provider-tunnel inclusive p2mp-sr bfd-root</b> |
| Tree       | <a href="#">bfd-root</a>  |
| Introduced | 21.10.R1  |
| Platforms  | All   |

### **multiplier number**

|             |  |
|-------------|--|
| Synopsis    | Multiplier for the transmit interval of the BFD session  |
| Context     | <b>configure service vpn string mvpn provider-tunnel inclusive p2mp-sr bfd-root multiplier number</b>  |
| Tree        | <a href="#">multiplier</a>   |
| Description | This command configures the multiplier for the transmit interval. The interval and the multiplier are used to calculate the detection time, which is the period of time without receiving BFD packets after which the session failure is determined. |
| Range       | 1 to 20  |
| Default     | 3  |
| Introduced  | 21.10.R1   |
| Platforms   | All  |

### **transmit-interval number**

|             |   |
|-------------|---|
| Synopsis    | Transmit interval of the BFD session  |
| Context     | <b>configure service vpn string mvpn provider-tunnel inclusive p2mp-sr bfd-root transmit-interval number</b>  |
| Tree        | <a href="#">transmit-interval</a>   |
| Description | This command configures the transmit interval. The interval and the multiplier are used to calculate the detection time, which is the period of time without receiving BFD packets after which the session failure is determined. |

|            |                            |
|------------|----------------------------|
| Range      | 10 to 100000               |
| Notes      | This element is mandatory. |
| Introduced | 21.10.R1                   |
| Platforms  | All                        |

### **p2mp-policy** *boolean*

|            |   |
|------------|---|
| Synopsis   | Use P2MP policy for inclusive MVPN provider tunnel  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn provider-tunnel inclusive p2mp-sr</a> <a href="#">p2mp-policy</a> <i>boolean</i> |
| Tree       | <a href="#">p2mp-policy</a>   |
| Default    | false   |
| Introduced | 21.5.R1   |
| Platforms  | All   |

### **static-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | Static policy for inclusive MVPN provider tunnel  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn provider-tunnel inclusive p2mp-sr</a> <a href="#">static-policy</a> <i>reference</i> |
| Tree       | <a href="#">static-policy</a>   |
| Reference  | <b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">p2mp-sr-tree</a> <a href="#">p2mp-policy</a> <i>string</i>                                      |
| Introduced | 21.5.R1   |
| Platforms  | All   |

### **pim**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>pim</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn provider-tunnel inclusive</a> <a href="#">pim</a> |
| Tree       | <a href="#">pim</a>  |
| Notes      | The following elements are part of a choice: <b>bier</b> , <b>mldp</b> , <b>p2mp-sr</b> , <b>pim</b> , or <b>rsvp</b> .        |
| Introduced | 19.5.R1  |
| Platforms  | All  |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of PIM use for provider tunnels   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">inclusive</a> <a href="#">pim</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 19.5.R1  |
| Platforms  | All  |

**group-address** *string*

|            |   |
|------------|---|
| Synopsis   | Multicast group address   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">inclusive</a> <a href="#">pim</a> <b>group-address</b> <i>string</i> |
| Tree       | <a href="#">group-address</a>   |
| Notes      | This element is mandatory.  |
| Introduced | 19.5.R1   |
| Platforms  | All   |

**hello-interval** *number*

|            |  |
|------------|--|
| Synopsis   | Frequency at which PIM Hello messages are transmitted  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">inclusive</a> <a href="#">pim</a> <b>hello-interval</b> <i>number</i> |
| Tree       | <a href="#">hello-interval</a>   |
| Range      | 0 to 255   |
| Default    | 30   |
| Introduced | 19.5.R1  |
| Platforms  | All  |

**hello-multiplier** *number*

|          |  |
|----------|--|
| Synopsis | Multiplier to determine the holdtime for a PIM neighbor  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">inclusive</a> <a href="#">pim</a> <b>hello-multiplier</b> <i>number</i> |
| Tree     | <a href="#">hello-multiplier</a>   |
| Range    | 20 to 100  |
| Default  | 35   |

Introduced 19.5.R1  
Platforms All

### **improved-assert** *boolean*

Synopsis Enable the improved assert procedure  
Context **configure** [service](#) [vprn](#) *string* [mvpn](#) [provider-tunnel](#) [inclusive](#) [pim](#) [improved-assert](#) *boolean*  
Tree [improved-assert](#)  
Default true  
Introduced 19.5.R1  
Platforms All

### **mode** *keyword*

Synopsis PIM mode for the inclusive provider tunnel  
Context **configure** [service](#) [vprn](#) *string* [mvpn](#) [provider-tunnel](#) [inclusive](#) [pim](#) [mode](#) *keyword*  
Tree [mode](#)  
Options asm, ssm  
Notes This element is mandatory.  
Introduced 19.5.R1  
Platforms All

### **three-way-hello** *boolean*

Synopsis Enable PIM three-way hello  
Context **configure** [service](#) [vprn](#) *string* [mvpn](#) [provider-tunnel](#) [inclusive](#) [pim](#) [three-way-hello](#) *boolean*  
Tree [three-way-hello](#)  
Default false  
Introduced 19.5.R1  
Platforms All

### **tracking-support** *boolean*

Synopsis Enable the T bit in the LAN Prune Delay option

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>mvpn provider-tunnel inclusive pim tracking-support</b> <i>boolean</i> |
| Tree       | <a href="#">tracking-support</a>  |
| Default    | false   |
| Introduced | 19.5.R1   |
| Platforms  | All   |

## rsvp

|            |   |
|------------|---|
| Synopsis   | Enable the <b>rsvp</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>mvpn provider-tunnel inclusive rsvp</b>                                  |
| Tree       | <a href="#">rsvp</a>  |
| Notes      | The following elements are part of a choice: <b>bier</b> , <b>mldp</b> , <b>p2mp-sr</b> , <b>pim</b> , or <b>rsvp</b> . |
| Introduced | 19.5.R1   |
| Platforms  | All   |

## admin-state *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of RSVP use for provider tunnels   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>mvpn provider-tunnel inclusive rsvp admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 19.5.R1   |
| Platforms  | All   |

## bfd-leaf *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable unidirectional multi-point BFD on a receiver  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>mvpn provider-tunnel inclusive rsvp bfd-leaf</b> <i>boolean</i> |
| Tree       | <a href="#">bfd-leaf</a>   |
| Default    | false  |
| Introduced | 19.5.R1  |
| Platforms  | All  |



**bfd-root**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>bfd-root</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn provider-tunnel inclusive rsvp</a> <a href="#">bfd-root</a> |
| Tree       | <a href="#">bfd-root</a>   |
| Introduced | 19.5.R1  |
| Platforms  | All  |

**multiplier number**

|            |  |
|------------|--|
| Synopsis   | Enable unidirectional multi-point BFD on a sender  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn provider-tunnel inclusive rsvp</a> <a href="#">bfd-root multiplier number</a> |
| Tree       | <a href="#">multiplier</a>   |
| Range      | 1 to 20  |
| Default    | 3  |
| Introduced | 19.5.R1  |
| Platforms  | All  |

**transmit-interval number**

|            |   |
|------------|---|
| Synopsis   | Transmit interval for the BFD session   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn provider-tunnel inclusive rsvp</a> <a href="#">bfd-root transmit-interval number</a> |
| Tree       | <a href="#">transmit-interval</a>   |
| Range      | 10 to 100000  |
| Notes      | This element is mandatory.  |
| Introduced | 19.5.R1   |
| Platforms  | All   |

**Isp-template reference**

|           |  |
|-----------|--|
| Synopsis  | P2MP LSP created as the provider tunnel  |
| Context   | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn provider-tunnel inclusive rsvp</a> <a href="#">Isp-template reference</a> |
| Tree      | <a href="#">Isp-template</a>   |
| Reference | <b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">Isp-template</a> <i>string</i>                                  |

Introduced 19.5.R1  
 Platforms All

### **umh-rate-monitoring**

Synopsis Enter the **umh-rate-monitoring** context  
 Context **configure service vprn string mvpn provider-tunnel inclusive umh-rate-monitoring**  
 Tree [umh-rate-monitoring](#)  
 Introduced 21.5.R1  
 Platforms All

### **revertive-timer number**

Synopsis Time until switch to primary PMSI after recovering rate  
 Context **configure service vprn string mvpn provider-tunnel inclusive umh-rate-monitoring revertive-timer number**  
 Tree [revertive-timer](#)  
 Range 0 to 3600  
 Introduced 21.5.R1  
 Platforms All

### **traffic-rate-delta number**

Synopsis Rate delta between PMSIs under which traffic switches  
 Context **configure service vprn string mvpn provider-tunnel inclusive umh-rate-monitoring traffic-rate-delta number**  
 Tree [traffic-rate-delta](#)  
 Range 0 to 4294967294  
 Introduced 21.5.R1  
 Platforms All

### **wildcard-spmsi boolean**

Synopsis Enable RFC 6625 S-PMSI functionality for NG-MVPN  
 Context **configure service vprn string mvpn provider-tunnel inclusive wildcard-spmsi boolean**  
 Tree [wildcard-spmsi](#)

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 19.5.R1 |
| Platforms  | All     |

### **selective**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>selective</b> context                                  |
| Context    | <b>configure service vprn string mvpn provider-tunnel selective</b> |
| Tree       | <a href="#">selective</a>   |
| Introduced | 19.5.R1   |
| Platforms  | All   |

### **asm-mdt *boolean***

|            |  |
|------------|--|
| Synopsis   | Enable Data MDT with PIM-ASM mode on receiver PE node                                      |
| Context    | <b>configure service vprn string mvpn provider-tunnel selective asm-mdt <i>boolean</i></b> |
| Tree       | <a href="#">asm-mdt</a>  |
| Default    | false  |
| Introduced | 19.5.R1  |
| Platforms  | All  |

### **auto-discovery *boolean***

|            |   |
|------------|---|
| Synopsis   | Enable C-trees to P-tunnel binding auto-discovery   |
| Context    | <b>configure service vprn string mvpn provider-tunnel selective auto-discovery <i>boolean</i></b> |
| Tree       | <a href="#">auto-discovery</a>  |
| Default    | false   |
| Introduced | 19.5.R1   |
| Platforms  | All   |

### **bier**

|          |  |
|----------|--|
| Synopsis | Enable the <b>bier</b> context   |
| Context  | <b>configure service vprn string mvpn provider-tunnel selective bier</b> |
| Tree     | <a href="#">bier</a>   |

|            |   |
|------------|---|
| Notes      | The following elements are part of a choice: <b>bier</b> , <b>mldp</b> , <b>p2mp-sr</b> , <b>pim</b> , or <b>rsvp</b> . |
| Introduced | 19.5.R1   |
| Platforms  | All   |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of BIER   |
| Context    | <b>configure service vprn string mvpn provider-tunnel selective bier admin-state keyword</b> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 19.5.R1  |
| Platforms  | All  |

### **sub-domain** *number*

|            |  |
|------------|--|
| Synopsis   | Sub-domain used to attach the BIER provider tunnel   |
| Context    | <b>configure service vprn string mvpn provider-tunnel selective bier sub-domain number</b> |
| Tree       | <a href="#">sub-domain</a>   |
| Range      | 0 to 255   |
| Introduced | 19.5.R1  |
| Platforms  | All  |

### **data-delay-interval** *number*

|            |  |
|------------|--|
| Synopsis   | Interval a PE switches from inclusive to selective   |
| Context    | <b>configure service vprn string mvpn provider-tunnel selective data-delay-interval number</b> |
| Tree       | <a href="#">data-delay-interval</a>  |
| Range      | 3 to 180   |
| Default    | 3  |
| Introduced | 19.5.R1  |
| Platforms  | All  |

**data-threshold**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>data-threshold</b> context  |
| Context    | <b>configure service vprn string mvpn provider-tunnel selective data-threshold</b> |
| Tree       | <a href="#">data-threshold</a>   |
| Introduced | 19.5.R1  |
| Platforms  | All  |

**group-prefix [ip-group-prefix] (ipv4-prefix | ipv6-prefix)**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>group-prefix</b> list instance   |
| Context    | <b>configure service vprn string mvpn provider-tunnel selective data-threshold group-prefix (ipv4-prefix   ipv6-prefix)</b> |
| Tree       | <a href="#">group-prefix</a>  |
| Introduced | 19.5.R1   |
| Platforms  | All   |

**[ip-group-prefix] (ipv4-prefix | ipv6-prefix)**

|            |   |
|------------|---|
| Synopsis   | IPv4 or IPv6 multicast group address and prefix   |
| Context    | <b>configure service vprn string mvpn provider-tunnel selective data-threshold group-prefix (ipv4-prefix   ipv6-prefix)</b> |
| Tree       | <a href="#">group-prefix</a>  |
| Notes      | This element is part of a list key.   |
| Introduced | 19.5.R1   |
| Platforms  | All   |

**pe-threshold-add number**

|            |   |
|------------|---|
| Synopsis   | PE add threshold  |
| Context    | <b>configure service vprn string mvpn provider-tunnel selective data-threshold group-prefix (ipv4-prefix   ipv6-prefix) pe-threshold-add number</b> |
| Tree       | <a href="#">pe-threshold-add</a>  |
| Range      | 1 to 65535  |
| Default    | 65535   |
| Introduced | 19.5.R1   |
| Platforms  | All   |

**pe-threshold-delete** *number*

|            |  |
|------------|--|
| Synopsis   | PE delete threshold  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">data-threshold</a> <a href="#">group-prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">pe-threshold-delete</a> <i>number</i> |
| Tree       | <a href="#">pe-threshold-delete</a>  |
| Range      | 2 to 65535   |
| Default    | 65535  |
| Introduced | 19.5.R1  |
| Platforms  | All  |

**threshold** *number*

|            |  |
|------------|--|
| Synopsis   | S-PMSI threshold   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">data-threshold</a> <a href="#">group-prefix</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">threshold</a> <i>number</i> |
| Tree       | <a href="#">threshold</a>  |
| Range      | 0 to 4294967294  |
| Units      | kilobps  |
| Notes      | This element is mandatory.   |
| Introduced | 19.5.R1  |
| Platforms  | All  |

**join-tlv-packing** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable packing of MDT join TLVs into a single PDU  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">join-tlv-packing</a> <i>boolean</i> |
| Tree       | <a href="#">join-tlv-packing</a>   |
| Default    | true   |
| Introduced | 19.5.R1  |
| Platforms  | All  |

**mldp**

|          |  |
|----------|--|
| Synopsis | Enable the <b>mldp</b> context   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <b>mldp</b> |

|            |   |
|------------|---|
| Tree       | <a href="#">mldp</a>  |
| Notes      | The following elements are part of a choice: <b>bier</b> , <b>mldp</b> , <b>p2mp-sr</b> , <b>pim</b> , or <b>rsvp</b> . |
| Introduced | 19.5.R1   |
| Platforms  | All   |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of MLDP LSP use for tunnels  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">mldp</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 19.5.R1   |
| Platforms  | All   |

### **maximum-p2mp-spmsi** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum number of RSVP P2MP or LDP P2MP S-PMSI tunnels  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">mldp</a> <b>maximum-p2mp-spmsi</b> <i>number</i> |
| Tree       | <a href="#">maximum-p2mp-spmsi</a>  |
| Range      | 1 to 4000   |
| Default    | 10  |
| Introduced | 19.5.R1   |
| Platforms  | All   |

### **multistream-spmsi** [[multistream-id](#)] *number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>multistream-spmsi</b> list instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">multistream-spmsi</a> <i>number</i> |
| Tree       | <a href="#">multistream-spmsi</a>  |
| Introduced | 19.5.R1  |
| Platforms  | All  |

**[multistream-id]** *number*

|            |  |
|------------|--|
| Synopsis   | Multistream spmsi id   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">multistream-spmsi</a> <i>number</i> |
| Tree       | <a href="#">multistream-spmsi</a>  |
| Range      | 1 to 1024  |
| Notes      | This element is part of a list key.  |
| Introduced | 19.5.R1  |
| Platforms  | All  |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of multi-stream S-PMSI   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">multistream-spmsi</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 19.5.R1   |
| Platforms  | All   |

**group-prefix** [[ip-group-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*) [source-prefix](#) (*ipv4-prefix* | *ipv6-prefix*)

|            |   |
|------------|---|
| Synopsis   | Add a list entry for <b>group-prefix</b>  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">multistream-spmsi</a> <i>number</i> <a href="#">group-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">source-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) |
| Tree       | <a href="#">group-prefix</a>  |
| Introduced | 19.5.R1   |
| Platforms  | All   |

**[ip-group-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

|          |   |
|----------|---|
| Synopsis | IPv4 or IPv6 multicast group address and prefix   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">multistream-spmsi</a> <i>number</i> <a href="#">group-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">source-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) |
| Tree     | <a href="#">group-prefix</a>  |



|            |                                     |
|------------|-------------------------------------|
| Notes      | This element is part of a list key. |
| Introduced | 19.5.R1                             |
| Platforms  | All                                 |

### **source-prefix** (*ipv4-prefix* | *ipv6-prefix*)

|            |   |
|------------|---|
| Synopsis   | IPv4 or IPv6 unicast source address and prefix  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">multistream-spmsi</a> <i>number</i> <a href="#">group-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>source-prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) |
| Tree       | <a href="#">group-prefix</a>  |
| Notes      | This element is part of a list key.   |
| Introduced | 19.5.R1   |
| Platforms  | All   |

### **lsp-template** *reference*

|            |   |
|------------|---|
| Synopsis   | RSVP-TE LSP template for S-PMSI   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">multistream-spmsi</a> <i>number</i> <a href="#">lsp-template</a> <i>reference</i> |
| Tree       | <a href="#">lsp-template</a>  |
| Reference  | <b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">lsp-template</a> <i>string</i>   |
| Notes      | The following elements are part of a choice: <b>lsp-template</b> , <b>p2mp-sr</b> , or <b>pim</b> .   |
| Introduced | 19.5.R1   |
| Platforms  | All   |

### **p2mp-sr**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>p2mp-sr</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">multistream-spmsi</a> <i>number</i> <a href="#">p2mp-sr</a> |
| Tree       | <a href="#">p2mp-sr</a>   |
| Notes      | The following elements are part of a choice: <b>lsp-template</b> , <b>p2mp-sr</b> , or <b>pim</b> .   |
| Introduced | 21.5.R1   |
| Platforms  | All   |

**p2mp-policy** *boolean*

|            |  |
|------------|--|
| Synopsis   | Use P2MP policy for selective MVPN provider tunnel   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn provider-tunnel selective multistream-spmsi</a> <i>number</i><br><a href="#">p2mp-sr p2mp-policy</a> <i>boolean</i> |
| Tree       | <a href="#">p2mp-policy</a>  |
| Default    | false  |
| Introduced | 21.5.R1  |
| Platforms  | All  |

**static-policy** *reference*

|            |  |
|------------|--|
| Synopsis   | P2MP static policy for inclusive MVPN provider tunnel  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn provider-tunnel selective multistream-spmsi</a> <i>number</i><br><a href="#">p2mp-sr static-policy</a> <i>reference</i> |
| Tree       | <a href="#">static-policy</a>  |
| Reference  | <b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">p2mp-sr-tree p2mp-policy</a> <i>string</i>   |
| Introduced | 21.5.R1  |
| Platforms  | All  |

**pim**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>pim</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn provider-tunnel selective multistream-spmsi</a> <i>number</i><br><a href="#">pim</a> |
| Tree       | <a href="#">pim</a>   |
| Notes      | The following elements are part of a choice: <b>isp-template</b> , <b>p2mp-sr</b> , or <b>pim</b> .   |
| Introduced | 19.5.R1   |
| Platforms  | All   |

**group-address** *string*

|            |   |
|------------|---|
| Synopsis   | Group address of the data MDT   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn provider-tunnel selective multistream-spmsi</a> <i>number</i><br><a href="#">pim group-address</a> <i>string</i> |
| Tree       | <a href="#">group-address</a>   |
| Introduced | 19.5.R1   |

Platforms All

### **mode** *keyword*

Synopsis PIM mode for the selective provider tunnel

Context **configure service vprn** *string mvpn provider-tunnel selective multistream-spm* *number pim mode keyword*

Tree **mode**

Options asm, ssm

Introduced 19.5.R1

Platforms All

### **p2mp-sr**

Synopsis Enable the **p2mp-sr** context

Context **configure service vprn** *string mvpn provider-tunnel selective p2mp-sr*

Tree **p2mp-sr**

Notes The following elements are part of a choice: **bier**, **mldp**, **p2mp-sr**, **pim**, or **rsvp**.

Introduced 21.5.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of P2MP SR

Context **configure service vprn** *string mvpn provider-tunnel selective p2mp-sr admin-state keyword*

Tree **admin-state**

Options enable, disable

Default disable

Introduced 21.5.R1

Platforms All

### **p2mp-policy** *boolean*

Synopsis Use P2MP policy for selective MVPN provider tunnel

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>mvpn provider-tunnel selective p2mp-sr p2mp-policy</b><br><i>boolean</i> |
| Tree       | <a href="#">p2mp-policy</a>   |
| Default    | false   |
| Introduced | 21.5.R1   |
| Platforms  | All   |

### **static-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | Static policy for selective MVPN provider tunnel  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>mvpn provider-tunnel selective p2mp-sr static-policy</b><br><i>reference</i> |
| Tree       | <a href="#">static-policy</a>   |
| Reference  | <b>configure router</b> <i>string</i> <a href="#">p2mp-sr-tree</a> <a href="#">p2mp-policy</a> <i>string</i>                |
| Introduced | 21.5.R1   |
| Platforms  | All   |

### **pim**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>pim</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>mvpn provider-tunnel selective pim</b>                                   |
| Tree       | <a href="#">pim</a>   |
| Notes      | The following elements are part of a choice: <b>bier</b> , <b>mldp</b> , <b>p2mp-sr</b> , <b>pim</b> , or <b>rsvp</b> . |
| Introduced | 19.5.R1   |
| Platforms  | All   |

### **group-prefix** *string*

|            |  |
|------------|--|
| Synopsis   | Multicast group address and netmask length   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>mvpn provider-tunnel selective pim group-prefix</b> <i>string</i> |
| Tree       | <a href="#">group-prefix</a>   |
| Notes      | This element is mandatory.   |
| Introduced | 19.5.R1  |
| Platforms  | All  |

**mode** *keyword*

|            |  |
|------------|--|
| Synopsis   | PIM mode.  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">pim</a> <a href="#">mode</a> <i>keyword</i> |
| Tree       | <a href="#">mode</a>   |
| Options    | asm, ssm   |
| Notes      | This element is mandatory.   |
| Introduced | 19.5.R1  |
| Platforms  | All  |

**rsvp**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>rsvp</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">rsvp</a> |
| Tree       | <a href="#">rsvp</a>  |
| Notes      | The following elements are part of a choice: <b>bier</b> , <b>mldp</b> , <b>p2mp-sr</b> , <b>pim</b> , or <b>rsvp</b> .   |
| Introduced | 19.5.R1   |
| Platforms  | All   |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of RSVP use for provider tunnels  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">rsvp</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 19.5.R1  |
| Platforms  | All  |

**lsp-template** *reference*

|           |   |
|-----------|---|
| Synopsis  | P2MP LSP created as the selective provider tunnel   |
| Context   | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">rsvp</a> <a href="#">lsp-template</a> <i>reference</i> |
| Tree      | <a href="#">lsp-template</a>  |
| Reference | <b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">lsp-template</a> <i>string</i>   |

|            |         |
|------------|---------|
| Introduced | 19.5.R1 |
| Platforms  | All     |

### **maximum-p2mp-spmsi** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of RSVP P2MP or LDP P2MP S-PMSI tunnels   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn provider-tunnel selective rsvp maximum-p2mp-spmsi</a> <i>number</i> |
| Tree       | <a href="#">maximum-p2mp-spmsi</a>   |
| Range      | 1 to 4000  |
| Default    | 10   |
| Introduced | 19.5.R1  |
| Platforms  | All  |

### **umh-rate-monitoring**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>umh-rate-monitoring</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn provider-tunnel selective umh-rate-monitoring</a> |
| Tree       | <a href="#">umh-rate-monitoring</a>  |
| Introduced | 21.5.R1  |
| Platforms  | All  |

### **group** [[group-ip-address](#)] (*ipv4-prefix* | *ipv6-prefix*) [source](#) (*ipv4-prefix* | *ipv6-prefix*)

|            |   |
|------------|---|
| Synopsis   | Enter the <b>group</b> list instance  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn provider-tunnel selective umh-rate-monitoring group</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">source</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) |
| Tree       | <a href="#">group</a>   |
| Introduced | 21.5.R1   |
| Platforms  | All   |

### **[group-ip-address]** (*ipv4-prefix* | *ipv6-prefix*)

|          |   |
|----------|---|
| Synopsis | Group IP address  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn provider-tunnel selective umh-rate-monitoring group</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">source</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) |

|            |                                     |
|------------|-------------------------------------|
| Tree       | <a href="#">group</a>               |
| Notes      | This element is part of a list key. |
| Introduced | 21.5.R1                             |
| Platforms  | All                                 |

### **source** (*ipv4-prefix* | *ipv6-prefix*)

|            |   |
|------------|---|
| Synopsis   | Source IP address   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">umh-rate-monitoring</a> <a href="#">group</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>source</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) |
| Tree       | <a href="#">group</a>   |
| Notes      | This element is part of a list key.   |
| Introduced | 21.5.R1   |
| Platforms  | All   |

### **revertive-timer** *number*

|            |  |
|------------|--|
| Synopsis   | Time until switch to primary PMSI after recovering rate  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">umh-rate-monitoring</a> <a href="#">group</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>source</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>revertive-timer</b> <i>number</i> |
| Tree       | <a href="#">revertive-timer</a>  |
| Range      | 0 to 3600  |
| Introduced | 21.5.R1  |
| Platforms  | All  |

### **traffic-rate-delta** *number*

|            |   |
|------------|---|
| Synopsis   | Rate delta between PMSIs under which traffic switches   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">umh-rate-monitoring</a> <a href="#">group</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>source</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>traffic-rate-delta</b> <i>number</i> |
| Tree       | <a href="#">traffic-rate-delta</a>  |
| Range      | 0 to 4294967294   |
| Introduced | 21.5.R1   |
| Platforms  | All   |

## redundant-source-list

|            |  |
|------------|--|
| Synopsis   | Enter the <b>redundant-source-list</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvprn</a> <b>redundant-source-list</b> |
| Tree       | <a href="#">redundant-source-list</a>  |
| Introduced | 19.5.R1  |
| Platforms  | All  |

## source-prefix [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

|                |   |
|----------------|---|
| Synopsis       | Add a list entry for <b>source-prefix</b>   |
| Context        | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvprn</a> <b>redundant-source-list</b> <b>source-prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) |
| Tree           | <a href="#">source-prefix</a>   |
| Max. Instances | 16  |
| Introduced     | 19.5.R1   |
| Platforms      | All   |

## [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

|            |   |
|------------|---|
| Synopsis   | Unicast address prefix and mask   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvprn</a> <b>redundant-source-list</b> <b>source-prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) |
| Tree       | <a href="#">source-prefix</a>   |
| Notes      | This element is part of a list key.   |
| Introduced | 19.5.R1   |
| Platforms  | All   |

## rpf-select

|            |   |
|------------|---|
| Synopsis   | Enter the <b>rpf-select</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvprn</a> <b>rpf-select</b> |
| Tree       | <a href="#">rpf-select</a>  |
| Introduced | 19.5.R1   |
| Platforms  | All   |



**core-mvpn** [[core-mvpn-service-name](#)] *reference*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>core-mvpn</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">rpf-select</a> <a href="#">core-mvpn</a> <i>reference</i> |
| Tree       | <a href="#">core-mvpn</a>   |
| Introduced | 19.5.R1   |
| Platforms  | All   |

**[core-mvpn-service-name]** *reference*

|            |   |
|------------|---|
| Synopsis   | Core MVPN service name  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">rpf-select</a> <a href="#">core-mvpn</a> <i>reference</i> |
| Tree       | <a href="#">core-mvpn</a>   |
| Reference  | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i>  |
| Notes      | This element is part of a list key.   |
| Introduced | 19.5.R1   |
| Platforms  | All   |

**group-prefix** [[ip-group-prefix](#)] *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>group-prefix</b> list instance  |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">rpf-select</a> <a href="#">core-mvpn</a> <i>reference</i> <a href="#">group-prefix</a> <i>string</i> |
| Tree           | <a href="#">group-prefix</a>   |
| Min. Instances | 1  |
| Introduced     | 19.5.R1  |
| Platforms      | All  |

**[ip-group-prefix]** *string*

|            |  |
|------------|--|
| Synopsis   | IPv4 multicast address prefix and mask   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">rpf-select</a> <a href="#">core-mvpn</a> <i>reference</i> <a href="#">group-prefix</a> <i>string</i> |
| Tree       | <a href="#">group-prefix</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 19.5.R1  |

Platforms All

## starg *boolean*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Starg flag.

Context **configure** [service vprn](#) *string* [mvprn](#) [rpf-select core-mvprn](#) *reference* [group-prefix](#) *string*  
[starg](#) *boolean*

Tree [starg](#)

Default false

Introduced 19.5.R1

Platforms All

## umh-pe-backup

Synopsis Enter the **umh-pe-backup** context

Context **configure** [service vprn](#) *string* [mvprn](#) [umh-pe-backup](#)

Tree [umh-pe-backup](#)

Introduced 19.5.R1

Platforms All

## umh-pe [[ip-address](#)] *string*

Synopsis Enter the **umh-pe** list instance

Context **configure** [service vprn](#) *string* [mvprn](#) [umh-pe-backup](#) [umh-pe](#) *string*

Tree [umh-pe](#)

Introduced 19.5.R1

Platforms All

## [\[ip-address\]](#) *string*

Synopsis IP address for the standby PE

Context **configure** [service vprn](#) *string* [mvprn](#) [umh-pe-backup](#) [umh-pe](#) *string*

---

|            |                                     |
|------------|-------------------------------------|
| Tree       | <a href="#">umh-pe</a>              |
| Notes      | This element is part of a list key. |
| Introduced | 19.5.R1                             |
| Platforms  | All                                 |

### **standby string**

|            |   |
|------------|---|
| Synopsis   | ip-address.   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <a href="#">string</a> <a href="#">mvpn</a> <a href="#">umh-pe-backup</a> <a href="#">umh-pe</a> <a href="#">string</a> <b>standby</b> <a href="#">string</a> |
| Tree       | <a href="#">standby</a>   |
| Notes      | This element is mandatory.  |
| Introduced | 19.5.R1   |
| Platforms  | All   |

### **umh-selection keyword**

|            |  |
|------------|--|
| Synopsis   | UMH selection mechanism  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <a href="#">string</a> <a href="#">mvpn</a> <b>umh-selection</b> <a href="#">keyword</a> |
| Tree       | <a href="#">umh-selection</a>  |
| Options    | highest-ip, hash-based, tunnel-status, unicast-rt-pref   |
| Default    | highest-ip   |
| Introduced | 19.5.R1  |
| Platforms  | All  |

### **vrf-export**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>vrf-export</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <a href="#">string</a> <a href="#">mvpn</a> <b>vrf-export</b> |
| Tree       | <a href="#">vrf-export</a>  |
| Introduced | 19.5.R1   |
| Platforms  | All   |

### **policy (policy-expr-string | string)**

|          |                   |
|----------|-------------------|
| Synopsis | Route policy name |
|----------|-------------------|

|                |   |
|----------------|---|
| Context        | <b>configure service vprn</b> <i>string</i> <b>mvpn vrf-export policy</b> ( <i>policy-expr-string</i>   <i>string</i> )   |
| Tree           | <b>policy</b>   |
| Description    | This command specifies the route policy name. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed between double quotes. |
| String Length  | 1 to 255  |
| Max. Instances | 15  |
| Min. Instances | 1   |
| Notes          | The following elements are part of a choice: <b>policy</b> or <b>unicast</b> .<br>This element is ordered by the user.  |
| Introduced     | 19.5.R1   |
| Platforms      | All   |

### **unicast** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable the unicast VRF export policy for the MVPN   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>mvpn vrf-export unicast</b> <i>boolean</i> |
| Tree       | <b>unicast</b>  |
| Default    | false   |
| Notes      | The following elements are part of a choice: <b>policy</b> or <b>unicast</b> .            |
| Introduced | 19.5.R1   |
| Platforms  | All   |

### **vrf-import**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>vrf-import</b> context                                |
| Context    | <b>configure service vprn</b> <i>string</i> <b>mvpn vrf-import</b> |
| Tree       | <b>vrf-import</b>  |
| Introduced | 19.5.R1  |
| Platforms  | All  |

### **policy** (*policy-expr-string* | *string*)

|          |   |
|----------|---|
| Synopsis | Route policy name   |
| Context  | <b>configure service vprn</b> <i>string</i> <b>mvpn vrf-import policy</b> ( <i>policy-expr-string</i>   <i>string</i> ) |

|                |   |
|----------------|---|
| Tree           | <a href="#">policy</a>  |
| Description    | This command specifies the route policy name. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed between double quotes. |
| String Length  | 1 to 255  |
| Max. Instances | 15  |
| Min. Instances | 1   |
| Notes          | The following elements are part of a choice: <b>policy</b> or <b>unicast</b> .<br>This element is ordered by the user.  |
| Introduced     | 19.5.R1   |
| Platforms      | All   |

### **unicast** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable the unicast VRF import policy for the MVPN  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn vrf-import unicast</a> <i>boolean</i> |
| Tree       | <a href="#">unicast</a>  |
| Default    | false  |
| Notes      | The following elements are part of a choice: <b>policy</b> or <b>unicast</b> .                                     |
| Introduced | 19.5.R1  |
| Platforms  | All  |

### **vrf-target**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>vrf-target</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn vrf-target</a> |
| Tree       | <a href="#">vrf-target</a>  |
| Introduced | 19.5.R1   |
| Platforms  | All   |

### **community** *string*

|          |   |
|----------|---|
| Synopsis | Extended community name for the MVPN  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn vrf-target community</a> <i>string</i> |
| Tree     | <a href="#">community</a>   |

String Length 10 to 28  
Introduced 19.5.R1  
Platforms All

## export

Synopsis Enter the **export** context  
Context **configure service vprn string mvpn vrf-target export**  
Tree **export**  
Introduced 19.5.R1  
Platforms All

## community *string*

Synopsis Extended community name for the MVPN  
Context **configure service vprn string mvpn vrf-target export community string**  
Tree **community**  
String Length 10 to 28  
Introduced 19.5.R1  
Platforms All

## unicast *boolean*

Synopsis Enable the unicast vrf-target for the MVPN  
Context **configure service vprn string mvpn vrf-target export unicast boolean**  
Tree **unicast**  
Default false  
Introduced 19.5.R1  
Platforms All

## import

Synopsis Enter the **import** context  
Context **configure service vprn string mvpn vrf-target import**  
Tree **import**

Introduced 19.5.R1  
 Platforms All

### **community** *string*

Synopsis Extended community name for the MVPN  
 Context **configure service vprn string mvpn vrf-target import community string**  
 Tree [community](#)  
 String Length 10 to 28  
 Introduced 19.5.R1  
 Platforms All

### **unicast** *boolean*

Synopsis Enable the unicast vrf-target for the MVPN  
 Context **configure service vprn string mvpn vrf-target import unicast boolean**  
 Tree [unicast](#)  
 Default false  
 Introduced 19.5.R1  
 Platforms All

### **unicast** *boolean*

Synopsis Enable unicast vrf-target for the MVPN  
 Context **configure service vprn string mvpn vrf-target unicast boolean**  
 Tree [unicast](#)  
 Default false  
 Introduced 19.5.R1  
 Platforms All

### **nat**

Synopsis Enable the **nat** context  
 Context **configure service vprn string nat**  
 Tree [nat](#)

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## inside

Synopsis Enter the **inside** context  
 Context **configure service vpn string nat inside**  
 Tree [inside](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## I2-aware

Synopsis Enter the **I2-aware** context  
 Context **configure service vpn string nat inside I2-aware**  
 Tree [I2-aware](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## subscribers [[prefix](#)] *string*

Synopsis Add a list entry for **subscribers**  
 Context **configure service vpn string nat inside I2-aware subscribers string**  
 Tree [subscribers](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## [\[prefix\]](#) *string*

Synopsis Layer-2 Aware NAT subscriber prefix  
 Context **configure service vpn string nat inside I2-aware subscribers string**  
 Tree [subscribers](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



## large-scale

|            |   |
|------------|---|
| Synopsis   | Enter the <b>large-scale</b> context                        |
| Context    | <b>configure service vprn string nat inside large-scale</b> |
| Tree       | <a href="#">large-scale</a>                                 |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                |

## dnat-only

|            |   |
|------------|---|
| Synopsis   | Enter the <b>dnat-only</b> context                                    |
| Context    | <b>configure service vprn string nat inside large-scale dnat-only</b> |
| Tree       | <a href="#">dnat-only</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                          |

## source-prefix-list *reference*

|            |  |
|------------|--|
| Synopsis   | NAT prefix list that contains source IP addresses  |
| Context    | <b>configure service vprn string nat inside large-scale dnat-only source-prefix-list reference</b> |
| Tree       | <a href="#">source-prefix-list</a>   |
| Reference  | <b>configure service nat prefix-list string</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## dual-stack-lite

|            |   |
|------------|---|
| Synopsis   | Enter the <b>dual-stack-lite</b> context                                    |
| Context    | <b>configure service vprn string nat inside large-scale dual-stack-lite</b> |
| Tree       | <a href="#">dual-stack-lite</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of Dual Stack Lite  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dual-stack-lite</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**deterministic**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>deterministic</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dual-stack-lite</a> <b>deterministic</b> |
| Tree       | <a href="#">deterministic</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**policy-map** [[source-prefix](#)] *string***WARNING:**

This element is deprecated and will be removed in a future release.

|            |  |
|------------|--|
| Synopsis   | Enter the <b>policy-map</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dual-stack-lite</a> <a href="#">deterministic</a> <b>policy-map</b> <i>string</i> |
| Tree       | <a href="#">policy-map</a>   |
| Introduced | 16.0.R1  |
| Deprecated | 22.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**[source-prefix]** *string***WARNING:**

This element is deprecated and will be removed in a future release.

|          |   |
|----------|---|
| Synopsis | Source prefix that adds traffic to NAT pool |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure service vprn string nat inside large-scale dual-stack-lite deterministic policy-map string</b> |
| Tree       | <a href="#">policy-map</a>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Deprecated | 22.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **admin-state** *keyword*



#### **WARNING:**

This element is deprecated and will be removed in a future release.

|            |   |
|------------|---|
| Synopsis   | Administrative state of the prefix  |
| Context    | <b>configure service vprn string nat inside large-scale dual-stack-lite deterministic policy-map string admin-state keyword</b> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Deprecated | 22.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **map** [[from](#)] *string to string*



#### **WARNING:**

This element is deprecated and will be removed in a future release.



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enter the <b>map</b> list instance   |
| Context    | <b>configure service vprn string nat inside large-scale dual-stack-lite deterministic policy-map string map string to string</b> |
| Tree       | <a href="#">map</a>  |
| Introduced | 16.0.R1  |
| Deprecated | 22.7.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### [from] *string*



**WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis Beginning of the range for IPv6 addresses

Context **configure** [service vprn](#) *string* [nat inside large-scale dual-stack-lite deterministic policy-map](#) *string* [map](#) *string* [to](#) *string*

Tree [map](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Deprecated 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### to *string*



**WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis Inside end IPv6 address to map to outside IP addresses

Context **configure** [service vprn](#) *string* [nat inside large-scale dual-stack-lite deterministic policy-map](#) *string* [map](#) *string* [to](#) *string*

Tree [map](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Deprecated 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### first-outside-address *string*



**WARNING:**

This element is deprecated and will be removed in a future release.

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Outside IP address mapped to inside IP address range  |
| Context    | <b>configure service vpn</b> <i>string nat inside large-scale dual-stack-lite deterministic policy-map string map string to string first-outside-address string</i> |
| Tree       | <a href="#">first-outside-address</a>   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Deprecated | 22.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**nat-policy** *reference***WARNING:**

This element is deprecated and will be removed in a future release.

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|           |  |
|-----------|--|
| Synopsis  | NAT policy   |
| Context   | <b>configure service vpn</b> <i>string nat inside large-scale dual-stack-lite deterministic policy-map string nat-policy reference</i> |
| Tree      | <a href="#">nat-policy</a>   |
| Reference | <b>configure service nat nat-policy</b> <i>string</i>  |
| Notes     | This element is mandatory.   |

|            |  |
|------------|--|
| Introduced | 16.0.R1                                      |
| Deprecated | 22.7.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **prefix-map** [[source-prefix](#)] *string nat-policy reference*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>prefix-map</b> list instance   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string nat inside large-scale dual-stack-lite deterministic prefix-map string nat-policy reference</i> |
| Tree       | <a href="#">prefix-map</a>  |
| Introduced | 21.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **[source-prefix]** *string*

|            |   |
|------------|---|
| Synopsis   | List containing source IP addresses on the private side   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string nat inside large-scale dual-stack-lite deterministic prefix-map string nat-policy reference</i> |
| Tree       | <a href="#">prefix-map</a>  |
| Notes      | This element is part of a list key.   |
| Introduced | 21.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **nat-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | NAT policy  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string nat inside large-scale dual-stack-lite deterministic prefix-map string nat-policy reference</i> |
| Tree       | <a href="#">prefix-map</a>  |
| Reference  | <b>configure</b> <a href="#">service nat</a> <i>nat-policy string</i>   |
| Notes      | This element is part of a list key.   |
| Introduced | 21.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the prefix   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dual-stack-lite</a> <a href="#">deterministic</a> <a href="#">prefix-map</a> <i>string</i> <a href="#">nat-policy</a> <i>reference</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 21.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**map** [*from*] *string to string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enter the <b>map</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dual-stack-lite</a> <a href="#">deterministic</a> <a href="#">prefix-map</a> <i>string</i> <a href="#">nat-policy</a> <i>reference</i> <b>map</b> <i>string to string</i> |
| Tree       | <a href="#">map</a>   |
| Introduced | 21.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**[from]** *string*

|            |   |
|------------|---|
| Synopsis   | Beginning of the range for IPv6 addresses   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dual-stack-lite</a> <a href="#">deterministic</a> <a href="#">prefix-map</a> <i>string</i> <a href="#">nat-policy</a> <i>reference</i> <b>map</b> <i>string to string</i> |
| Tree       | <a href="#">map</a>   |
| Notes      | This element is part of a list key.   |
| Introduced | 21.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**to** *string*

|          |                                     |
|----------|-------------------------------------|
| Synopsis | End of the range for IPv6 addresses |
|----------|-------------------------------------|

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string nat inside large-scale dual-stack-lite deterministic prefix-map string nat-policy reference map string to string</i> |
| Tree       | <a href="#">map</a>  |
| Notes      | This element is part of a list key.  |
| Introduced | 21.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **first-outside-address** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Outside IP address mapped to inside IP address range  |
| Context    | <b>configure service vprn</b> <i>string nat inside large-scale dual-stack-lite deterministic prefix-map string nat-policy reference map string to string first-outside-address string</i> |
| Tree       | <a href="#">first-outside-address</a>   |
| Notes      | This element is mandatory.  |
| Introduced | 21.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **endpoint** [[address](#)] *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>endpoint</b> list instance  |
| Context        | <b>configure service vprn</b> <i>string nat inside large-scale dual-stack-lite endpoint string</i> |
| Tree           | <a href="#">endpoint</a>   |
| Max. Instances | 128  |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |



**[address] string**

|            |   |
|------------|---|
| Synopsis   | Dual Stack Lite IPv6 address  |
| Context    | <b>configure service vprn string nat inside large-scale dual-stack-lite endpoint string</b> |
| Tree       | <a href="#">endpoint</a>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**ip-fragmentation keyword**

|            |  |
|------------|--|
| Synopsis   | Fragmentation control of the AFTR originated downstream IPv6 traffic   |
| Context    | <b>configure service vprn string nat inside large-scale dual-stack-lite endpoint string ip-fragmentation keyword</b> |
| Tree       | <a href="#">ip-fragmentation</a>   |
| Options    | fragment-ipv6, fragment-ipv6-unless-ipv4-df-set  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**min-first-fragment-size-rx number**

|             |   |
|-------------|---|
| Synopsis    | Minimum MTU size for upstream packets   |
| Context     | <b>configure service vprn string nat inside large-scale dual-stack-lite endpoint string min-first-fragment-size-rx number</b>   |
| Tree        | <a href="#">min-first-fragment-size-rx</a>  |
| Description | This command configures the minimum MTU size for the first fragment in the upstream direction. This command can be used to enable processing of first IPv6 fragments smaller than 1280 bytes. RFC 8200 recommends the minimum MTU in IPv6 be 1280 bytes which allows fragmentation only for packets that are larger than 1280 bytes. If a first fragment is smaller than 1280 bytes, DS-lite implementation in the SR OS, by default, drops the first fragment. |
| Range       | 512 to 1280   |
| Default     | 1280  |
| Introduced  | 21.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**reassemble** *boolean*

|            |   |
|------------|---|
| Synopsis   | Reassembly of IPv6 payload datagrams  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat inside large-scale dual-stack-lite endpoint</a> <i>string</i> <a href="#">reassemble</a> <i>boolean</i> |
| Tree       | <a href="#">reassemble</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**tunnel-mtu** *number*

|             |  |
|-------------|--|
| Synopsis    | DS-Lite tunnel MTU for this address  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat inside large-scale dual-stack-lite endpoint</a> <i>string</i> <a href="#">tunnel-mtu</a> <i>number</i> |
| Tree        | <a href="#">tunnel-mtu</a>   |
| Description | This command configures the Dual Stack Lite (DS-Lite) tunnel MTU for this address.   |
| Range       | 464 to 9212  |
| Default     | 1500   |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**max-subscriber-limit** *number***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Largest value for all subscriber limits in each deterministic pool  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat inside large-scale dual-stack-lite max-subscriber-limit</a> <i>number</i> |
| Tree       | <a href="#">max-subscriber-limit</a>  |
| Range      | 1   2   4   8   16   32   64   128   256   512   1024   2048   4096   8192   16384   32768  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**subscriber-prefix-length** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | IPv6 prefix length of the Dual Stack Lite subscribers  |
| Context    | <b>configure</b> <a href="#">service vprn string nat inside large-scale dual-stack-lite subscriber-prefix-length</a> <i>number</i> |
| Tree       | <a href="#">subscriber-prefix-length</a>   |
| Range      | 32 to 64   128   |
| Default    | 128  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**filters**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>filters</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn string nat inside large-scale filters</a> |
| Tree       | <a href="#">filters</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**downstream**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>downstream</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn string nat inside large-scale filters downstream</a> |
| Tree       | <a href="#">downstream</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**ipv4 reference**

|          |   |
|----------|---|
| Synopsis | IPv4 filter policy name   |
| Context  | <b>configure</b> <a href="#">service vprn string nat inside large-scale filters downstream ipv4 reference</a> |

|            |   |
|------------|---|
| Tree       | <a href="#">ipv4</a>                            |
| Reference  | <b>configure filter ip-filter</b> <i>string</i> |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR    |

## nat-policy *reference*



### WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | NAT policy for LSN  |
| Context    | <b>configure service vprn</b> <i>string nat inside large-scale nat-policy reference</i> |
| Tree       | <a href="#">nat-policy</a>  |
| Reference  | <b>configure service nat nat-policy</b> <i>string</i>                                   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## nat44

|            |  |
|------------|--|
| Synopsis   | Enter the <b>nat44</b> context   |
| Context    | <b>configure service vprn</b> <i>string nat inside large-scale nat44</i> |
| Tree       | <a href="#">nat44</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                             |

## destination-prefix [[ip-prefix-length](#)] *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>destination-prefix</b> list instance  |
| Context        | <b>configure service vprn</b> <i>string nat inside large-scale nat44 destination-prefix string</i> |
| Tree           | <a href="#">destination-prefix</a>   |
| Max. Instances | 6144   |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**[ip-prefix-length]** *string*

|            |   |
|------------|---|
| Synopsis   | Traffic sent to destinations within this prefix will be NATed   |
| Context    | <b>configure service vprn</b> <i>string nat inside large-scale nat44 destination-prefix</i> <i>string</i> |
| Tree       | <a href="#">destination-prefix</a>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**nat-policy** *reference***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | NAT policy   |
| Context    | <b>configure service vprn</b> <i>string nat inside large-scale nat44 destination-prefix</i> <i>string nat-policy reference</i> |
| Tree       | <a href="#">nat-policy</a>   |
| Reference  | <b>configure service nat nat-policy</b> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**deterministic**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>deterministic</b> context   |
| Context    | <b>configure service vprn</b> <i>string nat inside large-scale nat44 deterministic</i> |
| Tree       | <a href="#">deterministic</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**policy-map** [[source-prefix](#)] *string***WARNING:**

This element is deprecated and will be removed in a future release.

|          |   |
|----------|---|
| Synopsis | Enter the <b>policy-map</b> list instance |
|----------|---|

|             |   |
|-------------|---|
| Context     | <b>configure service vprn string nat inside large-scale nat44 deterministic policy-map string</b>   |
| Tree        | <a href="#">policy-map</a>  |
| Description | Commands in this context configure the attributes of the policy map. The operator must fully specify the map statement, however the <b>tools perform nat deterministic calculate-maps</b> command is available to produce system generated maps, if desired. The <b>calculate-maps</b> command outputs a set of system-generated map statements and the operator can copy the map parameters into the MD-CLI candidate configuration. |
| Introduced  | 16.0.R1   |
| Deprecated  | 22.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### [source-prefix] string



#### WARNING:

This element is deprecated and will be removed in a future release.

|            |   |
|------------|---|
| Synopsis   | Source prefix that adds traffic to NAT pool   |
| Context    | <b>configure service vprn string nat inside large-scale nat44 deterministic policy-map string</b> |
| Tree       | <a href="#">policy-map</a>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Deprecated | 22.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### admin-state keyword



#### WARNING:

This element is deprecated and will be removed in a future release.

|            |   |
|------------|---|
| Synopsis   | Administrative state of the prefix  |
| Context    | <b>configure service vprn string nat inside large-scale nat44 deterministic policy-map string admin-state keyword</b> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |

Deprecated 22.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **map** [**from**] *string to string*



### **WARNING:**

This element is deprecated and will be removed in a future release.



### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **map** list instance  
 Context **configure service vprn string nat inside large-scale nat44 deterministic policy-map string map string to string**  
 Tree **map**  
 Introduced 16.0.R1  
 Deprecated 22.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **[from]** *string*



### **WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis Beginning of the range for IPv4 addresses  
 Context **configure service vprn string nat inside large-scale nat44 deterministic policy-map string map string to string**  
 Tree **map**  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Deprecated 22.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**to string****WARNING:**

This element is deprecated and will be removed in a future release.

|            |  |
|------------|--|
| Synopsis   | End of the range for IPv4 addresses  |
| Context    | <b>configure service vprn string nat inside large-scale nat44 deterministic policy-map string map string to string</b> |
| Tree       | <a href="#">map</a>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Deprecated | 22.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**first-outside-address string****WARNING:**

This element is deprecated and will be removed in a future release.

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Outside IP address mapped to inside IP address range  |
| Context    | <b>configure service vprn string nat inside large-scale nat44 deterministic policy-map string map string to string first-outside-address string</b> |
| Tree       | <a href="#">first-outside-address</a>   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Deprecated | 22.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |



**nat-policy** *reference***WARNING:**

This element is deprecated and will be removed in a future release.

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | NAT policy   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat</a> <a href="#">inside large-scale nat44 deterministic policy-map</a> <i>string</i> <a href="#">nat-policy reference</a> |
| Tree       | <a href="#">nat-policy</a>   |
| Reference  | <b>configure</b> <a href="#">service nat</a> <a href="#">nat-policy</a> <i>string</i>  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Deprecated | 22.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**prefix-map** [[source-prefix](#)] *string nat-policy reference*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>prefix-map</b> list instance  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat</a> <a href="#">inside large-scale nat44 deterministic prefix-map</a> <i>string</i> <a href="#">nat-policy reference</a> |
| Tree       | <a href="#">prefix-map</a>   |
| Introduced | 21.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**[source-prefix]** *string*

|          |  |
|----------|--|
| Synopsis | Traffic sent from sources within this prefix will be NATed |
|----------|--|

|            |  |
|------------|--|
| Context    | <b>configure service vpn</b> <i>string nat inside large-scale nat44 deterministic prefix-map string nat-policy reference</i> |
| Tree       | <a href="#">prefix-map</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 21.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **nat-policy** *reference*

|            |  |
|------------|--|
| Synopsis   | NAT policy   |
| Context    | <b>configure service vpn</b> <i>string nat inside large-scale nat44 deterministic prefix-map string nat-policy reference</i> |
| Tree       | <a href="#">prefix-map</a>   |
| Reference  | <b>configure service nat nat-policy</b> <i>string</i>  |
| Notes      | This element is part of a list key.  |
| Introduced | 21.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the prefix   |
| Context    | <b>configure service vpn</b> <i>string nat inside large-scale nat44 deterministic prefix-map string nat-policy reference admin-state keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 21.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **map** [*from*] *string to string*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |                                    |
|----------|------------------------------------|
| Synopsis | Enter the <b>map</b> list instance |
|----------|------------------------------------|

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string nat inside large-scale nat44 deterministic prefix-map string nat-policy reference map string to string</i> |
| Tree       | <a href="#">map</a>  |
| Introduced | 21.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**[from]** *string*

|            |  |
|------------|--|
| Synopsis   | Beginning of the range for IPv4 addresses  |
| Context    | <b>configure service vprn</b> <i>string nat inside large-scale nat44 deterministic prefix-map string nat-policy reference map string to string</i> |
| Tree       | <a href="#">map</a>  |
| Notes      | This element is part of a list key.  |
| Introduced | 21.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**to** *string*

|            |  |
|------------|--|
| Synopsis   | End of the range for IPv4 addresses  |
| Context    | <b>configure service vprn</b> <i>string nat inside large-scale nat44 deterministic prefix-map string nat-policy reference map string to string</i> |
| Tree       | <a href="#">map</a>  |
| Notes      | This element is part of a list key.  |
| Introduced | 21.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**first-outside-address** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | Outside IP address mapped to inside IP address range |
|----------|--|

|            |  |
|------------|--|
| Context    | <b>configure service vpn</b> <i>string nat inside large-scale nat44 deterministic prefix-map string nat-policy reference map string to string first-outside-address string</i> |
| Tree       | <a href="#">first-outside-address</a>  |
| Notes      | This element is mandatory.   |
| Introduced | 21.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **max-subscriber-limit** *number*



#### **WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Largest value for all subscriber limits in each deterministic pool                                  |
| Context    | <b>configure service vpn</b> <i>string nat inside large-scale nat44 max-subscriber-limit number</i> |
| Tree       | <a href="#">max-subscriber-limit</a>  |
| Range      | 1   2   4   8   16   32   64   128   256   512   1024   2048   4096   8192   16384   32768          |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **nat-import** *reference*

|                |   |
|----------------|---|
| Synopsis       | Import BGP-VPN routes in NAT inside routing context   |
| Context        | <b>configure service vpn</b> <i>string nat inside large-scale nat44 nat-import reference</i>  |
| Tree           | <a href="#">nat-import</a>  |
| Description    | <p>This command references an import policy to determine the routes that should be installed in the routing table as NAT routes, which are used to steer traffic to NAT.</p> <p>A dynamic route obtained by BGP-VPN can be imported into an inside (private side) routing context in NAT environment. This route is associated with a NAT policy that maps traffic destined into a NAT pool and outside routing context. If the NAT policy is not explicitly configured in the import route-policy, the imported NAT route is, by default, associated with the default NAT policy defined in the NAT inside routing context.</p> <p>All BGP-VPN routes that are destined to be imported into NAT inside routing context must be configured with action-type accept in the route policy.</p> |
| Reference      | <b>configure</b> <a href="#">policy-options policy-statement</a> <i>string</i>  |
| Max. Instances | 5   |
| Notes          | This element is ordered by the user.  |
| Introduced     | 21.5.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## nat64

Synopsis Enable the **nat64** context

Context **configure service vprn string nat inside large-scale nat64**

Tree [nat64](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis Administrative state of NAT64

Context **configure service vprn string nat inside large-scale nat64 admin-state keyword**

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## drop-zero-ipv4-checksum *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Drop UDP datagrams with zero IPv4 checksum

Context **configure service vprn string nat inside large-scale nat64 drop-zero-ipv4-checksum boolean**

Tree [drop-zero-ipv4-checksum](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## insert-ipv6-fragment-header *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Include IPv6 fragment header to indicate that the sender allows fragmentation   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat inside large-scale nat64</a> <a href="#">insert-ipv6-fragment-header</a> <i>boolean</i> |
| Tree       | <a href="#">insert-ipv6-fragment-header</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## ip-fragmentation *keyword*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Control fragmentation of originated downstream IPv6 traffic  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat inside large-scale nat64</a> <a href="#">ip-fragmentation</a> <i>keyword</i> |
| Tree       | <a href="#">ip-fragmentation</a>   |
| Options    | fragment-ipv6, fragment-ipv6-unless-ipv4-df-set  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## ipv6-mtu *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Size of the IPv6 downstream packet in NAT64   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat inside large-scale nat64</a> <a href="#">ipv6-mtu</a> <i>number</i> |
| Tree     | <a href="#">ipv6-mtu</a>  |
| Range    | 1280 to 9212  |
| Default  | 1520  |

|            |  |
|------------|--|
| Introduced | 16.0.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **prefix string**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | IPv6 prefix to derive the IPv6 address from the IPv4 address                    |
| Context    | <b>configure service vprn string nat inside large-scale nat64 prefix string</b> |
| Tree       | <a href="#">prefix</a>  |
| Default    | 64:ff9b::/96  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                    |

### **subscriber-prefix-length number**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | IPv6 prefix length for the NAT64 subscribers  |
| Context    | <b>configure service vprn string nat inside large-scale nat64 subscriber-prefix-length number</b> |
| Tree       | <a href="#">subscriber-prefix-length</a>  |
| Range      | 32 to 64   128  |
| Default    | 128   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## tos

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enter the <b>tos</b> context  |
| Context    | <b>configure service vprn string nat inside large-scale nat64 tos</b> |
| Tree       | <b>tos</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                          |

## downstream

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enter the <b>downstream</b> context  |
| Context    | <b>configure service vprn string nat inside large-scale nat64 tos downstream</b> |
| Tree       | <b>downstream</b>  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                     |

## use-ipv4 *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Copy TOS/DSCP bits from the incoming IPv4 frame to the outgoing IPv6 frame                        |
| Context    | <b>configure service vprn string nat inside large-scale nat64 tos downstream use-ipv4 boolean</b> |
| Tree       | <b>use-ipv4</b>   |
| Default    | false   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |



## upstream



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enter the <b>upstream</b> context   |
| Context    | <b>configure service vpn string nat inside large-scale nat64 tos upstream</b> |
| Tree       | <a href="#">upstream</a>  |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                  |

## set-tos (*keyword* | *number*)



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | TOS/DSCP bits in IPv4 frame in the upstream direction  |
| Context    | <b>configure service vpn string nat inside large-scale nat64 tos upstream set-tos (<i>keyword</i>   <i>number</i>)</b> |
| Tree       | <a href="#">set-tos</a>  |
| Range      | 0 to 255   |
| Options    | use-ipv6   |
| Default    | use-ipv6   |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## redundancy

|            |   |
|------------|---|
| Synopsis   | Enter the <b>redundancy</b> context                                   |
| Context    | <b>configure service vpn string nat inside large-scale redundancy</b> |
| Tree       | <a href="#">redundancy</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                          |

**peer string**

|            |  |
|------------|--|
| Synopsis   | IP address of the NAT redundancy peer for this virtual router instance             |
| Context    | <b>configure service vprn string nat inside large-scale redundancy peer string</b> |
| Tree       | <a href="#">peer</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                       |

**peer6 string**

|            |   |
|------------|---|
| Synopsis   | IPv6 address of the NAT redundancy peer for this virtual router instance            |
| Context    | <b>configure service vprn string nat inside large-scale redundancy peer6 string</b> |
| Tree       | <a href="#">peer6</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**steering-route string**

|            |  |
|------------|--|
| Synopsis   | IP address and prefix length of the steering route   |
| Context    | <b>configure service vprn string nat inside large-scale redundancy steering-route string</b> |
| Tree       | <a href="#">steering-route</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**subscriber-identification**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>subscriber-identification</b> context                                    |
| Context    | <b>configure service vprn string nat inside large-scale subscriber-identification</b> |
| Tree       | <a href="#">subscriber-identification</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state keyword**

|          |   |
|----------|---|
| Synopsis | Administrative state of subscriber identification |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure service vprn string nat inside large-scale subscriber-identification admin-state keyword</b> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## attribute

|            |   |
|------------|---|
| Synopsis   | Enter the <b>attribute</b> context  |
| Context    | <b>configure service vprn string nat inside large-scale subscriber-identification attribute</b> |
| Tree       | <a href="#">attribute</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## type keyword



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | RADIUS attribute used as subscriber identifier   |
| Context    | <b>configure service vprn string nat inside large-scale subscriber-identification attribute type keyword</b> |
| Tree       | <a href="#">type</a>   |
| Options    | alc-sub-string, user-name, class, station-id, imsi, imei   |
| Default    | alc-sub-string   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## vendor keyword



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | The RADIUS Vendor  |
| Context    | <b>configure service vprn string nat inside large-scale subscriber-identification attribute vendor keyword</b> |
| Tree       | <a href="#">vendor</a>   |
| Options    | standard, nokia, 3gpp  |
| Default    | nokia  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **description string**

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure service vprn string nat inside large-scale subscriber-identification description string</b> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **drop-unidentified-traffic boolean**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Drop traffic from unidentified flows  |
| Context    | <b>configure service vprn string nat inside large-scale subscriber-identification drop-unidentified-traffic boolean</b> |
| Tree       | <a href="#">drop-unidentified-traffic</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **radius-proxy-server**

|          |   |
|----------|---|
| Synopsis | Enable the <b>radius-proxy-server</b> context |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure service vprn string nat inside large-scale subscriber-identification radius-proxy-server</b> |
| Tree       | <a href="#">radius-proxy-server</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### router-instance *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Router instance  |
| Context    | <b>configure service vprn string nat inside large-scale subscriber-identification radius-proxy-server router-instance string</b> |
| Tree       | <a href="#">router-instance</a>  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### server *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Server name   |
| Context       | <b>configure service vprn string nat inside large-scale subscriber-identification radius-proxy-server server string</b> |
| Tree          | <a href="#">server</a>  |
| String Length | 1 to 32   |
| Notes         | This element is mandatory.  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## map

|            |  |
|------------|--|
| Synopsis   | Enter the <b>map</b> context                 |
| Context    | <b>configure service vprn string nat map</b> |
| Tree       | <a href="#">map</a>                          |
| Introduced | 16.0.R1                                      |
| Platforms  | VSR  |

## map-domain [[domain-name](#)] *reference*

|            |   |
|------------|---|
| Synopsis   | Add a list entry for <b>map-domain</b>                            |
| Context    | <b>configure service vprn string nat map map-domain reference</b> |
| Tree       | <a href="#">map-domain</a>  |
| Introduced | 16.0.R1   |
| Platforms  | VSR   |

## [[domain-name](#)] *reference*

|            |   |
|------------|---|
| Synopsis   | MAP domain template name  |
| Context    | <b>configure service vprn string nat map map-domain reference</b> |
| Tree       | <a href="#">map-domain</a>  |
| Reference  | <b>configure service nat map-t domain string</b>                  |
| Notes      | This element is part of a list key.                               |
| Introduced | 16.0.R1   |
| Platforms  | VSR   |

## outside

|            |  |
|------------|--|
| Synopsis   | Enter the <b>outside</b> context                 |
| Context    | <b>configure service vprn string nat outside</b> |
| Tree       | <a href="#">outside</a>                          |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR     |

## dnat-only

|            |  |
|------------|--|
| Synopsis   | Enter the <b>dnat-only</b> context                         |
| Context    | <b>configure service vprn string nat outside dnat-only</b> |
| Tree       | <a href="#">dnat-only</a>                                  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR               |

## route-limit *number*

|            |   |
|------------|---|
| Synopsis   | Limit for internal routes for downstream traffic                              |
| Context    | <b>configure service vprn string nat outside dnat-only route-limit number</b> |
| Tree       | <a href="#">route-limit</a>   |
| Range      | 1 to 131072   |
| Default    | 32768   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                  |

## filters

|            |  |
|------------|--|
| Synopsis   | Enter the <b>filters</b> context                         |
| Context    | <b>configure service vprn string nat outside filters</b> |
| Tree       | <a href="#">filters</a>                                  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR             |

## downstream

|            |   |
|------------|---|
| Synopsis   | Enter the <b>downstream</b> context                                 |
| Context    | <b>configure service vprn string nat outside filters downstream</b> |
| Tree       | <a href="#">downstream</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                        |

### ipv4 reference

|            |  |
|------------|--|
| Synopsis   | IPv4 filter policy name  |
| Context    | <b>configure</b> <a href="#">service vprn string nat outside filters downstream ipv4 reference</a> |
| Tree       | <a href="#">ipv4</a>   |
| Reference  | <b>configure</b> <a href="#">filter ip-filter string</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### ipv6 reference

|            |  |
|------------|--|
| Synopsis   | IPv6 filter policy name  |
| Context    | <b>configure</b> <a href="#">service vprn string nat outside filters downstream ipv6 reference</a> |
| Tree       | <a href="#">ipv6</a>   |
| Reference  | <b>configure</b> <a href="#">filter ipv6-filter string</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### upstream

|            |   |
|------------|---|
| Synopsis   | Enter the <b>upstream</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn string nat outside filters upstream</a> |
| Tree       | <a href="#">upstream</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                      |

### ipv4 reference

|            |  |
|------------|--|
| Synopsis   | IPv4 filter policy name  |
| Context    | <b>configure</b> <a href="#">service vprn string nat outside filters upstream ipv4 reference</a> |
| Tree       | <a href="#">ipv4</a>   |
| Reference  | <b>configure</b> <a href="#">filter ip-filter string</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |



**ipv6 reference**

|            |  |
|------------|--|
| Synopsis   | IPv6 filter policy name  |
| Context    | <b>configure service vprn string nat outside filters upstream ipv6 reference</b> |
| Tree       | <a href="#">ipv6</a>   |
| Reference  | <b>configure filter ipv6-filter string</b>                                       |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**mtu number**

|            |   |
|------------|---|
| Synopsis   | MTU for downstream traffic                                  |
| Context    | <b>configure service vprn string nat outside mtu number</b> |
| Tree       | <a href="#">mtu</a>   |
| Range      | 512 to 9000   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                |

**pool [name] string**

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>pool</b> list instance                          |
| Context        | <b>configure service vprn string nat outside pool string</b> |
| Tree           | <a href="#">pool</a>   |
| Max. Instances | 4096   |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                 |

**[name] string**

|               |  |
|---------------|--|
| Synopsis      | NAT pool name  |
| Context       | <b>configure service vprn string nat outside pool string</b> |
| Tree          | <a href="#">pool</a>   |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.                          |
| Introduced    | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **address-range** *[start] string end string*

Synopsis Enter the **address-range** list instance

Context **configure service vpn string nat outside pool string address-range string end string**

Tree [address-range](#)

Max. Instances 4096

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[start] string**

Synopsis Lower bound of the NAT address range

Context **configure service vpn string nat outside pool string address-range string end string**

Tree [address-range](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **end string**

Synopsis Upper bound of the NAT address range

Context **configure service vpn string nat outside pool string address-range string end string**

Tree [address-range](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description string**

Synopsis Text description

Context **configure service vpn string nat outside pool string address-range string end string description string**

Tree [description](#)

String Length 1 to 80  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **drain** *boolean*

Synopsis Start or stop draining this NAT address range  
Context **configure** [service vprn](#) *string* [nat outside pool](#) *string* [address-range](#) *string* [end](#) *string* [drain](#) *boolean*  
Tree [drain](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the outside routing NAT pool  
Context **configure** [service vprn](#) *string* [nat outside pool](#) *string* [admin-state](#) *keyword*  
Tree [admin-state](#)  
Options enable, disable  
Default disable  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **applications**

Synopsis Enter the **applications** context  
Context **configure** [service vprn](#) *string* [nat outside pool](#) *string* [applications](#)  
Tree [applications](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**agnostic** *boolean***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | NAT pool to create in the outside routing context  |
| Context    | <b>configure</b> <a href="#">service vprn string nat outside pool string applications</a> <b>agnostic</b> <i>boolean</i> |
| Tree       | <a href="#">agnostic</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service vprn string nat outside pool string description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**icmp-echo-reply** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Allow NAT pool IP addresses to respond to ICMP PINGS  |
| Context     | <b>configure</b> <a href="#">service vprn string nat outside pool string icmp-echo-reply</a> <i>boolean</i>   |
| Tree        | <a href="#">icmp-echo-reply</a>   |
| Description | <p>This command allows IP addresses in the NAT pool to respond to ICMP Echo requests (PINGs). The configuration can be toggled while the pool is in use.</p> <p>In L2-aware NAT when port-block-extensions is disabled, the reply from an outside IP address is generated only when this IP address has at least one host (binding) behind it.</p> <p>In L2-aware NAT when port-block-extensions is enabled, the reply from an outside IP address is generated regardless if a binding is present.</p> <p>In LSN, the reply from an outside IP address is generated regardless if a binding is present.</p> |

|            |  |
|------------|--|
| Default    | false  |
| Introduced | 21.10.R1                                     |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

## I2-aware

|            |   |
|------------|---|
| Synopsis   | Enter the <b>I2-aware</b> context                                     |
| Context    | <b>configure service vprn string nat outside pool string I2-aware</b> |
| Tree       | <b>I2-aware</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                          |

## default-host

|             |  |
|-------------|--|
| Synopsis    | Enable the <b>default-host</b> context   |
| Context     | <b>configure service vprn string nat outside pool string I2-aware default-host</b>   |
| Tree        | <b>default-host</b>  |
| Description | <p>Commands in this context configure the default DMZ host options. A default DMZ host is a node on the inside to which all unknown traffic is redirected by changing the destination IPv4 address in the traffic header. During this operation, the checksums in the Layer 3 and Layer 4 header (UDP and TCP) are recalculated.</p> <p>Unknown traffic in NAT represent all unmatched traffic arriving from the outside (where there is no pinhole or a matching flow record created by traffic initiated from the inside). The purpose of the default DMZ host is to capture and analyze the unknown traffic as part of threat analysis.</p> <p>The rate of redirected unknown traffic can be restricted by configuration.</p> |
| Introduced  | 22.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## inside-router-instance *string*

|             |  |
|-------------|--|
| Synopsis    | Router instance of the DMZ   |
| Context     | <b>configure service vprn string nat outside pool string I2-aware default-host inside-router-instance string</b> |
| Tree        | <b>inside-router-instance</b>  |
| Description | This command configures the router instance on the inside where the default DMZ host resides.                    |

|            |  |
|------------|--|
| Introduced | 22.10.R1                                     |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **ip-address** *string*

|             |   |
|-------------|---|
| Synopsis    | IP address of the default DMZ host  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat outside pool</a> <i>string</i> <a href="#">l2-aware default-host ip-address</a> <i>string</i>   |
| Tree        | <a href="#">ip-address</a>  |
| Description | This command configures the IP address of the default DMZ host. Redirection to the default DMZ host is achieved by replacing the destination IP address in the traffic header in the unknown traffic initiated from the outside with the one of the default DMZ host. |
| Introduced  | 22.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **rate-limit** *number*

|             |  |
|-------------|--|
| Synopsis    | Rate limit for unknown traffic sent to default DMZ host  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat outside pool</a> <i>string</i> <a href="#">l2-aware default-host rate-limit</a> <i>number</i>  |
| Tree        | <a href="#">rate-limit</a>   |
| Description | This command configures the rate limit of the unknown traffic sent to the default DMZ host.<br><br>Unknown traffic sent to the default DMZ host is rate limited by a configurable value expressed in mbps. The rate limit is configurable per NAT pool per ISA, vISA, or ESA-VM. |
| Range       | 1 to 10000   |
| Default     | 10   |
| Introduced  | 22.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **external-assignment** *boolean*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | External IP address for Layer-2-aware  |
| Context    | <b>configure service vprn</b> <i>string nat outside pool string l2-aware external-assignment boolean</i> |
| Tree       | <a href="#">external-assignment</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**port-block-extension****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enable the <b>port-block-extension</b> context  |
| Context    | <b>configure service vprn</b> <i>string nat outside pool string l2-aware port-block-extension</i> |
| Tree       | <a href="#">port-block-extension</a>  |
| Introduced | 21.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**ports** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Number of ports per dynamic port-block   |
| Context    | <b>configure service vprn</b> <i>string nat outside pool string l2-aware port-block-extension ports number</i> |
| Tree       | <a href="#">ports</a>  |
| Range      | 10 to 5000   |
| Notes      | This element is mandatory.   |
| Introduced | 21.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## subscriber

|            |   |
|------------|---|
| Synopsis   | Enter the <b>subscriber</b> context   |
| Context    | <b>configure service vprn string nat outside pool string l2-aware port-block-extension subscriber</b> |
| Tree       | <b>subscriber</b>   |
| Introduced | 22.2.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## watermarks

|             |  |
|-------------|--|
| Synopsis    | Enable the <b>watermarks</b> context   |
| Context     | <b>configure service vprn string nat outside pool string l2-aware port-block-extension subscriber watermarks</b> |
| Tree        | <b>watermarks</b>  |
| Description | This command configures watermarks for NAT resources.  |
| Introduced  | 22.2.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## high number

|             |  |
|-------------|--|
| Synopsis    | High watermark percentage  |
| Context     | <b>configure service vprn string nat outside pool string l2-aware port-block-extension subscriber watermarks high number</b> |
| Tree        | <b>high</b>  |
| Description | This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.                |
| Range       | 0 to 100   |
| Units       | percent  |
| Notes       | This element is mandatory.   |
| Introduced  | 22.2.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## low number

|          |                          |
|----------|--------------------------|
| Synopsis | Low watermark percentage |
|----------|--------------------------|



|             |  |
|-------------|--|
| Context     | <b>configure service vprn</b> <i>string</i> <b>nat outside pool</b> <i>string</i> <b>l2-aware port-block-extension subscriber watermarks low</b> <i>number</i> |
| Tree        | <b>low</b>   |
| Description | This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.   |
| Range       | 0 to 100   |
| Units       | percent  |
| Notes       | This element is mandatory.   |
| Introduced  | 22.2.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **subscriber-limit** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Number of L2-Aware NAT subscribers per outside address  |
| Context     | <b>configure service vprn</b> <i>string</i> <b>nat outside pool</b> <i>string</i> <b>l2-aware port-block-extension subscriber-limit</b> <i>number</i>   |
| Tree        | <b>subscriber-limit</b>   |
| Description | <p>When port-block extensions for the L2-Aware subscribers are enabled, the port space for an outside IP address is divided into the following:</p> <ul style="list-style-type: none"> <li>• well-known port (this is a fixed and permanently allocated block of ports for all NAT types)</li> <li>• static port-forwarding range (if enabled by configuration)</li> <li>• port range allocated for initial port blocks of each L2-Aware subscriber</li> <li>• port range allocated for extended port blocks for the remainder after the three previous port ranges</li> </ul> <p>The number of L2-Aware NAT subscribers per an outside IP address multiplied by the size of the initial port-block size determines the size of the port range reserved for initial port-blocks of each subscriber.</p> <p>The lower boundary of the extended port range is determined by adding the upper boundary of the configured port forwarding range and the size of the port range allocated for initial port blocks.</p> |
| Range       | 2 to 2000   |
| Notes       | This element is mandatory.  |
| Introduced  | 21.7.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## watermarks

Synopsis Enable the **watermarks** context

Context **configure service vprn string nat outside pool string l2-aware port-block-extension watermarks**

Tree [watermarks](#)

Introduced 22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## high number

Synopsis High watermark percentage

Context **configure service vprn string nat outside pool string l2-aware port-block-extension watermarks high number**

Tree [high](#)

Description This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.

Range 0 to 100

Units percent

Notes This element is mandatory.

Introduced 22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## low number

Synopsis Low watermark percentage

Context **configure service vprn string nat outside pool string l2-aware port-block-extension watermarks low number**

Tree [low](#)

Description This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.

Range 0 to 100

Units percent

Notes This element is mandatory.

|            |  |
|------------|--|
| Introduced | 22.2.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

## large-scale

|            |  |
|------------|--|
| Synopsis   | Enter the <b>large-scale</b> context                                     |
| Context    | <b>configure service vprn string nat outside pool string large-scale</b> |
| Tree       | <a href="#">large-scale</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                             |

## default-host

|             |  |
|-------------|--|
| Synopsis    | Enable the <b>default-host</b> context   |
| Context     | <b>configure service vprn string nat outside pool string large-scale default-host</b>  |
| Tree        | <a href="#">default-host</a>   |
| Description | <p>Commands in this context configure the default DMZ host options. A default DMZ host is a node on the inside to which all unknown traffic is redirected by changing the destination IPv4 address in the traffic header. During this operation, the checksums in the Layer 3 and Layer 4 header (UDP and TCP) are recalculated.</p> <p>Unknown traffic in NAT represent all unmatched traffic arriving from the outside (where there is no pinhole or a matching flow record created by traffic initiated from the inside). The purpose of the default DMZ host is to capture and analyze the unknown traffic as part of threat analysis.</p> <p>The rate of redirected unknown traffic can be restricted by configuration.</p> |
| Introduced  | 22.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## inside-router-instance *string*

|             |   |
|-------------|---|
| Synopsis    | Router instance of the DMZ  |
| Context     | <b>configure service vprn string nat outside pool string large-scale default-host inside-router-instance string</b> |
| Tree        | <a href="#">inside-router-instance</a>  |
| Description | This command configures the router instance on the inside where the default DMZ host resides.                       |
| Introduced  | 22.10.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-address** *string*

Synopsis IP address of the default DMZ host

Context **configure** [service vprn](#) *string* [nat outside pool](#) *string* [large-scale default-host ip-address](#) *string*

Tree [ip-address](#)

Description This command configures the IP address of the default DMZ host. Redirection to the default DMZ host is achieved by replacing the destination IP address in the traffic header in the unknown traffic initiated from the outside with the one of the default DMZ host.

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rate-limit** *number*

Synopsis Rate limit for unknown traffic sent to default DMZ host

Context **configure** [service vprn](#) *string* [nat outside pool](#) *string* [large-scale default-host rate-limit](#) *number*

Tree [rate-limit](#)

Description This command configures the rate limit of the unknown traffic sent to the default DMZ host.

Unknown traffic sent to the default DMZ host is rate limited by a configurable value expressed in mbps. The rate limit is configurable per NAT pool per ISA, vISA, or ESA-VM.

Range 1 to 10000

Default 10

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **deterministic**

Synopsis Enter the **deterministic** context

Context **configure** [service vprn](#) *string* [nat outside pool](#) *string* [large-scale deterministic](#)

Tree [deterministic](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### port-reservation *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis Number of ports per deterministic port-block

Context **configure service vprn** *string nat outside pool string large-scale deterministic port-reservation number*

Tree [port-reservation](#)

Range 1 to 65536

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### watermarks

Synopsis Enable the **watermarks** context

Context **configure service vprn** *string nat outside pool string large-scale deterministic watermarks*

Tree [watermarks](#)

Description Commands in this context monitor extended (dynamic) port-block utilization per outside IP in a NAT pool in deterministic LSN.

High and low thresholds are configured in percentages of total available extended port-blocks per outside IP in a pool. Both values represent extended port-block utilization or occupancy per outside IP in a pool.

For the system to generate those events, the NAT event-id 2045 must be enabled through configuration in the log event-control.

Introduced 22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### high *number*

Synopsis High watermark percentage

|             |  |
|-------------|--|
| Context     | <b>configure service vprn</b> <i>string</i> <b>nat outside pool</b> <i>string</i> <b>large-scale deterministic watermarks high</b> <i>number</i> |
| Tree        | <b>high</b>  |
| Description | This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.                                    |
| Range       | 0 to 100   |
| Units       | percent  |
| Notes       | This element is mandatory.   |
| Introduced  | 22.2.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **low** *number*

|             |   |
|-------------|---|
| Synopsis    | Low watermark percentage  |
| Context     | <b>configure service vprn</b> <i>string</i> <b>nat outside pool</b> <i>string</i> <b>large-scale deterministic watermarks low</b> <i>number</i> |
| Tree        | <b>low</b>  |
| Description | This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.                                    |
| Range       | 0 to 100  |
| Units       | percent   |
| Notes       | This element is mandatory.  |
| Introduced  | 22.2.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **redundancy**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>redundancy</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>nat outside pool</b> <i>string</i> <b>large-scale redundancy</b> |
| Tree       | <b>redundancy</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **admin-state** *keyword*

|          |   |
|----------|---|
| Synopsis | Administrative state of NAT pool redundancy |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure service vprn string nat outside pool string large-scale redundancy admin-state keyword</b>                                 |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Default    | disable   |
| Notes      | The following elements are part of a choice: ( <b>admin-state</b> , <b>export-route</b> , and <b>monitor-route</b> ) or <b>follow</b> . |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **export-route string**

|            |   |
|------------|---|
| Synopsis   | Route to export to the peer   |
| Context    | <b>configure service vprn string nat outside pool string large-scale redundancy export-route string</b>                                 |
| Tree       | <b>export-route</b>   |
| Notes      | The following elements are part of a choice: ( <b>admin-state</b> , <b>export-route</b> , and <b>monitor-route</b> ) or <b>follow</b> . |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **follow**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>follow</b> context   |
| Context    | <b>configure service vprn string nat outside pool string large-scale redundancy follow</b>  |
| Tree       | <b>follow</b>   |
| Notes      | The following elements are part of a choice: ( <b>admin-state</b> , <b>export-route</b> , and <b>monitor-route</b> ) or <b>follow</b> . |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **name string**

|          |  |
|----------|--|
| Synopsis | Name of the pool where activity is shared  |
| Context  | <b>configure service vprn string nat outside pool string large-scale redundancy follow name string</b> |
| Tree     | <b>name</b>  |

String Length 1 to 32  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **router-instance** *string*

Synopsis Router instance where the lead pool resides  
 Context **configure** [service vprn](#) *string* [nat outside pool](#) *string* [large-scale redundancy follow](#)  
[router-instance](#) *string*  
 Tree [router-instance](#)  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **monitor-route** *string*

Synopsis Monitor the peer route  
 Context **configure** [service vprn](#) *string* [nat outside pool](#) *string* [large-scale redundancy monitor-](#)  
[route](#) *string*  
 Tree [monitor-route](#)  
 Notes The following elements are part of a choice: (**admin-state**, **export-route**, and **monitor-**  
**route**) or **follow**.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **subscriber-limit** *number*



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis Maximum number of subscribers per IP address  
 Context **configure** [service vprn](#) *string* [nat outside pool](#) *string* [large-scale subscriber-limit](#) *number*  
 Tree [subscriber-limit](#)  
 Range 1 to 65535  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**mode** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Mode of operation of this NAT address pool  |
| Context    | <b>configure</b> <a href="#">service vprn string nat outside pool string mode keyword</a> |
| Tree       | <a href="#">mode</a>  |
| Options    | auto, napt, one-to-one  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**nat-group** *reference***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Create a NAT group  |
| Context    | <b>configure</b> <a href="#">service vprn string nat outside pool string nat-group reference</a>  |
| Tree       | <a href="#">nat-group</a>   |
| Reference  | <b>configure</b> <a href="#">isa nat-group number</a>   |
| Notes      | The following elements are part of a mandatory choice: <b>nat-group</b> or <b>wlan-gw-group</b> . |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**port-forwarding**

|          |  |
|----------|--|
| Synopsis | Enter the <b>port-forwarding</b> context   |
| Context  | <b>configure</b> <a href="#">service vprn string nat outside pool string port-forwarding</a> |
| Tree     | <a href="#">port-forwarding</a>  |

|            |  |
|------------|--|
| Introduced | 16.0.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **dynamic-block-reservation** *boolean*



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Reserve dynamic block for subscriber  |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>nat</b> <b>outside</b> <b>pool</b> <i>string</i> <b>port-forwarding</b> <b>dynamic-block-reservation</b> <i>boolean</i>  |
| Tree        | <b>dynamic-block-reservation</b>  |
| Description | <p>When configured to <b>true</b>, the system reserves dynamic port block when the first port forward for the subscriber is created. The dynamic port block allocation is logged only if the block is being used and mappings are created. Dynamic port block reservation due to the port forward creation but without any dynamic mapping, is not logged.</p> <p>The reserved port block is released only when the last mapping in the block expires and there are no port forwards associated with the subscriber. The de-allocation log (syslog or RADIUS) is generated when the dynamic port block is completely released.</p> <p>Dynamic port block reservations can be enabled only if the configured maximum number of subscribers per outside IP addresses are less than or equal to the maximum number of configured port blocks per outside IP address.</p> <p>When configured to <b>false</b>, dynamic port blocks are not reserved when the first port forward for the subscriber is created.</p> |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **range-end** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | End of the wildcard range for port forwards   |
| Context  | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>nat</b> <b>outside</b> <b>pool</b> <i>string</i> <b>port-forwarding</b> <b>range-end</b> <i>number</i> |
| Tree     | <b>range-end</b>  |

|             |   |
|-------------|---|
| Description | <p>This command configures the upper boundary of the wildcard port range dedicated to port forwarding in a NAT pool, whereas the <b>range-start</b> command configures the lower boundary (the starting port) of the wildcard port range dedicated to port forwarding in a NAT pool.</p> <p>If left unconfigured, the <b>range-end</b> implicit value is set to 1023, that represents the end of the well-known port range that is always enabled.</p> <p>Port forwards are supported only in pools in NAPT mode. Pools in 1:1 mode do not support port-forwards.</p> |
| Range       | 0   1023 to 65535   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **range-start** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Start of the wildcard range for port forwards   |
| Context     | <b>configure</b> <b>service vprn</b> <i>string</i> <b>nat outside pool</b> <i>string</i> <b>port-forwarding</b> <b>range-start</b> <i>number</i>  |
| Tree        | <b>range-start</b>  |
| Description | <p>This command configures the lower boundary (the starting port) of the wildcard port range dedicated to port forwarding in a NAT pool, whereas the <b>range-end</b> command configures the upper boundary of the wildcard port range dedicated to port forwarding in a NAT pool.</p> <p>If left unconfigured, the <b>range-start</b> implicit value is set to 1. Port 0 is always excluded from the port forwarding range.</p> <p>Port forwards are supported only in pools in Network Address and Port Translation (NAPT) mode. Pools in 1:1 mode do not support configured port forwards.</p> |
| Range       | 0   1   1025 to 65535   |
| Introduced  | 22.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **port-reservation**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>port-reservation</b> context  |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>nat outside pool</b> <i>string</i> <b>port-reservation</b> |
| Tree       | <b>port-reservation</b>  |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### port-blocks *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Port block size for NAT subscribers   |
| Context     | <b>configure</b> <a href="#">service vprn string nat outside pool string port-reservation port-blocks number</a>  |
| Tree        | <a href="#">port-blocks</a>   |
| Description | <p>In CGN, this specifies the number of port-blocks per outside IP address in the NAT pool. The available ports per outside IP address (the end port minus the upper bound value of the static port-forwarding range) are divided into the number of port blocks specified in this command. This implicitly determines the size of each port block.</p> <p>For L2-aware NAT, this command can be configured only if the port block extensions (extended port blocks) are disabled. You must disable the <b>l2-aware port-block-extension</b> hierarchy in the NAT pool.</p> |
| Range       | 1 to 64512  |
| Notes       | The following elements are part of a choice: <b>port-blocks</b> or <b>ports</b> .   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### ports *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Size of the port block for NAT subscribers   |
| Context     | <b>configure</b> <a href="#">service vprn string nat outside pool string port-reservation ports number</a>       |
| Tree        | <a href="#">ports</a>  |
| Description | For carrier-grade NAT (CGN), this command specifies the size of port blocks for NAT subscribers in the NAT pool. |

For L2-aware NAT, this command specifies the size of the initial port-block of a subscriber in the pool. Additional port blocks (extended port blocks) for the L2-aware subscriber must be explicitly enabled under the **I2-aware port-block-extension** hierarchy in the NAT pool.

This command does not affect the size of extended port blocks.

|            |   |
|------------|---|
| Range      | 1 to 64512  |
| Notes      | The following elements are part of a choice: <b>port-blocks</b> or <b>ports</b> . |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                      |

### **type** keyword



#### **WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | NAT pool type  |
| Context    | <b>configure service vpn string nat outside pool string type keyword</b> |
| Tree       | <a href="#">type</a>   |
| Options    | large-scale, I2-aware, wlan-gw-anchor                                    |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                             |

### **watermarks**

|             |  |
|-------------|--|
| Synopsis    | Enable the <b>watermarks</b> context                                   |
| Context     | <b>configure service vpn string nat outside pool string watermarks</b> |
| Tree        | <a href="#">watermarks</a>   |
| Description | This command configures watermarks for NAT resources.                  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                           |

**high number**

|             |   |
|-------------|---|
| Synopsis    | High watermark percentage   |
| Context     | <b>configure service vpn string nat outside pool string watermarks high number</b>                            |
| Tree        | <b>high</b>   |
| Description | This command configures the high threshold value as a percentage of the total port-block space in a NAT pool. |
| Range       | 0 to 100  |
| Units       | percent   |
| Notes       | This element is mandatory.  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**low number**

|             |  |
|-------------|--|
| Synopsis    | Low watermark percentage   |
| Context     | <b>configure service vpn string nat outside pool string watermarks low number</b>                            |
| Tree        | <b>low</b>   |
| Description | This command configures the low threshold value as a percentage of the total port-block space in a NAT pool. |
| Range       | 0 to 100   |
| Units       | percent  |
| Notes       | This element is mandatory.   |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**wlan-gw-group reference****WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Create a WLAN GW group for NAT  |
| Context  | <b>configure service vpn string nat outside pool string wlan-gw-group reference</b> |

---

|            |   |
|------------|---|
| Tree       | <a href="#">wlan-gw-group</a>   |
| Reference  | <b>configure</b> <a href="#">isa</a> <a href="#">wlan-gw-group</a> <i>number</i>                  |
| Notes      | The following elements are part of a mandatory choice: <b>nat-group</b> or <b>wlan-gw-group</b> . |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## network

|            |  |
|------------|--|
| Synopsis   | Enter the <b>network</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">network</a> |
| Tree       | <a href="#">network</a>  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

## ingress

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ingress</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">network</a> <a href="#">ingress</a> |
| Tree       | <a href="#">ingress</a>  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

## filter

|            |   |
|------------|---|
| Synopsis   | Enter the <b>filter</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">network</a> <a href="#">ingress</a> <a href="#">filter</a> |
| Tree       | <a href="#">filter</a>  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

## ip reference

|          |   |
|----------|---|
| Synopsis | IPv4 filter policy name   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">network</a> <a href="#">ingress</a> <a href="#">filter</a> <a href="#">ip</a> <i>reference</i> |
| Tree     | <a href="#">ip</a>  |

|            |   |
|------------|---|
| Reference  | <b>configure filter ip-filter</b> <i>string</i> |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### ipv6 reference

|            |   |
|------------|---|
| Synopsis   | IPv6 filter policy name   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>network ingress filter ipv6</b> <i>reference</i> |
| Tree       | <a href="#">ipv6</a>  |
| Reference  | <b>configure filter ipv6-filter</b> <i>string</i>   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### qos

|            |  |
|------------|--|
| Synopsis   | Enter the <b>qos</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>network ingress qos</b> |
| Tree       | <a href="#">qos</a>  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR                 |

### fp-redirect-group reference

|            |   |
|------------|---|
| Synopsis   | The forwarding-plane queue group Policy for this VPRN   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>network ingress qos fp-redirect-group</b> <i>reference</i> |
| Tree       | <a href="#">fp-redirect-group</a>   |
| Reference  | <b>configure qos queue-group-templates ingress queue-group</b> <i>string</i>                              |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

### instance number

|          |   |
|----------|---|
| Synopsis | Forwarding plane ingress queue group instance   |
| Context  | <b>configure service vprn</b> <i>string</i> <b>network ingress qos instance</b> <i>number</i> |
| Tree     | <a href="#">instance</a>  |



|            |  |
|------------|--|
| Range      | 1 to 65535   |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

### **network-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | Network policy name associated with a VPRN  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network ingress qos network-policy</a> <i>reference</i> |
| Tree       | <a href="#">network-policy</a>  |
| Reference  | <b>configure</b> <a href="#">qos network</a> <i>string</i>  |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR  |

### **urpf-check** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable unicast RPF check of network ingress traffic   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network ingress urpf-check</a> <i>boolean</i> |
| Tree       | <a href="#">urpf-check</a>  |
| Default    | true  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **network-interface** [[interface-name](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>network-interface</b> list instance  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> |
| Tree       | <a href="#">network-interface</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **[interface-name]** *string*

|          |   |
|----------|---|
| Synopsis | Network interface name  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> |
| Tree     | <a href="#">network-interface</a>   |

|               |                                     |
|---------------|-------------------------------------|
| String Length | 1 to 32                             |
| Notes         | This element is part of a list key. |
| Introduced    | 16.0.R1                             |
| Platforms     | All                                 |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the interface  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **cflowd-parameters**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>cflowd-parameters</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">cflowd-parameters</a> |
| Tree       | <a href="#">cflowd-parameters</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **sampling** [[sampling-type](#)] *keyword*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>sampling</b> list instance   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">cflowd-parameters</a> <a href="#">sampling</a> <i>keyword</i> |
| Tree       | <a href="#">sampling</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### [[sampling-type](#)] *keyword*

|          |                       |
|----------|-----------------------|
| Synopsis | Traffic sampling type |
|----------|-----------------------|

|             |  |
|-------------|--|
| Context     | <b>configure service vprn string network-interface string cflowd-parameters sampling keyword</b> |
| Tree        | <a href="#">sampling</a>   |
| Description | This command configures the type of traffic to be sampled on the associated IP interface.        |
| Options     | unicast, multicast, both   |
| Notes       | This element is part of a list key.  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **direction keyword**

|             |  |
|-------------|--|
| Synopsis    | Direction of traffic for cflowd sampling   |
| Context     | <b>configure service vprn string network-interface string cflowd-parameters sampling keyword direction keyword</b> |
| Tree        | <a href="#">direction</a>  |
| Description | This command configures the direction in which sampling occurs on the associated IP interfaces.                    |
| Options     | ingress-only, egress-only, both  |
| Default     | ingress-only   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **sample-profile (keyword | number)**

|             |  |
|-------------|--|
| Synopsis    | Sample profile ID  |
| Context     | <b>configure service vprn string network-interface string cflowd-parameters sampling keyword sample-profile (keyword   number)</b> |
| Tree        | <a href="#">sample-profile</a>   |
| Description | This command defines the sampling rate profile associated with this interface.   |
| Max. Range  | 0 to 4294967295  |
| Options     | 1  |
| Introduced  | 19.5.R1  |
| Platforms   | All  |

**type keyword**

|             |   |
|-------------|---|
| Synopsis    | Type of cflowd analysis   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>network-interface</b> <i>string</i> <b>cflowd-parameters</b> <b>sampling</b> <i>keyword</i> <b>type</b> <i>keyword</i> |
| Tree        | <b>type</b>   |
| Description | This command configures the cflowd sampling type on the associated IP interface.  |
| Options     | acl, interface  |
| Notes       | This element is mandatory.  |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**cpu-protection reference**

|            |   |
|------------|---|
| Synopsis   | CPM Protection policy associated with an interface  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>network-interface</b> <i>string</i> <b>cpu-protection</b> <i>reference</i> |
| Tree       | <b>cpu-protection</b>   |
| Reference  | <b>configure system security</b> <b>cpu-protection</b> <i>policy</i> <i>number</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS   |

**description string**

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure service vprn</b> <i>string</i> <b>network-interface</b> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <b>description</b>  |
| String Length | 1 to 255  |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**dist-cpu-protection reference**

|           |  |
|-----------|--|
| Synopsis  | Distributed CPU protection policy  |
| Context   | <b>configure service vprn</b> <i>string</i> <b>network-interface</b> <i>string</i> <b>dist-cpu-protection</b> <i>reference</i> |
| Tree      | <b>dist-cpu-protection</b>   |
| Reference | <b>configure system security</b> <b>dist-cpu-protection</b> <i>policy</i> <i>string</i>  |

Introduced 16.0.R1  
Platforms All

## egress

Synopsis Enter the **egress** context  
Context **configure service vprn string network-interface string egress**  
Tree **egress**  
Introduced 16.0.R1  
Platforms All

## filter

Synopsis Enter the **filter** context  
Context **configure service vprn string network-interface string egress filter**  
Tree **filter**  
Introduced 16.0.R1  
Platforms All

## ip reference

Synopsis IPv4 filter policy name  
Context **configure service vprn string network-interface string egress filter ip reference**  
Tree **ip**  
Reference **configure filter ip-filter string**  
Introduced 16.0.R1  
Platforms All

## hold-time

Synopsis Enter the **hold-time** context  
Context **configure service vprn string network-interface string hold-time**  
Tree **hold-time**  
Introduced 16.0.R1  
Platforms All

## ipv4

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv4</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> |
| Tree       | <a href="#">ipv4</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## down

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>down</b> context  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> <a href="#">down</a>  |
| Tree        | <a href="#">down</a>   |
| Description | Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the <b>init-only</b> command. |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

## init-only *boolean*

|             |  |
|-------------|--|
| Synopsis    | Apply delay only at interface configuration or reboot  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> <a href="#">down</a> <a href="#">init-only</a> <i>boolean</i> |
| Tree        | <a href="#">init-only</a>  |
| Description | This command applies a delay only when the IP interface is first configured or after a system reboot.  |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

## seconds *number*

|          |   |
|----------|---|
| Synopsis | Down hold time for the IP interface   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> <a href="#">down</a> <a href="#">seconds</a> <i>number</i> |

|            |                         |
|------------|-------------------------|
| Tree       | <a href="#">seconds</a> |
| Range      | 1 to 1200               |
| Units      | seconds                 |
| Introduced | 16.0.R1                 |
| Platforms  | All                     |

## up

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>up</b> context   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">hold-time ipv4</a> <b>up</b>  |
| Tree        | <a href="#">up</a>  |
| Description | Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down. |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

## seconds *number*

|            |  |
|------------|--|
| Synopsis   | Up hold time for the IP interface  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">hold-time ipv4</a> <b>up</b> <a href="#">seconds</a> <i>number</i> |
| Tree       | <a href="#">seconds</a>  |
| Range      | 1 to 1200  |
| Units      | seconds  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## ingress

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ingress</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <b>ingress</b> |
| Tree       | <a href="#">ingress</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## filter

|            |  |
|------------|--|
| Synopsis   | Enter the <b>filter</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ingress</a> <a href="#">filter</a> |
| Tree       | <a href="#">filter</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## ip reference

|            |   |
|------------|---|
| Synopsis   | IPv4 filter policy name   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ingress</a> <a href="#">filter</a> <a href="#">ip</a> <a href="#">reference</a> |
| Tree       | <a href="#">ip</a>  |
| Reference  | <b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## ingress-stats *boolean*

|            |  |
|------------|--|
| Synopsis   | Collect ingress statistics   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ingress-stats</a> <i>boolean</i> |
| Tree       | <a href="#">ingress-stats</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## ip-mtu *number*

|            |  |
|------------|--|
| Synopsis   | IP MTU applied to outgoing packets   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ip-mtu</a> <i>number</i> |
| Tree       | <a href="#">ip-mtu</a>   |
| Range      | 512 to 9786  |
| Units      | bytes  |
| Introduced | 16.0.R1  |
| Platforms  | All  |



## ipv4

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv4</b> context                                      |
| Context    | <b>configure service vprn string network-interface string ipv4</b> |
| Tree       | <a href="#">ipv4</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## allow-directed-broadcasts *boolean*

|            |  |
|------------|--|
| Synopsis   | Accept broadcasts that are directed to this interface  |
| Context    | <b>configure service vprn string network-interface string ipv4 allow-directed-broadcasts boolean</b> |
| Tree       | <a href="#">allow-directed-broadcasts</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## bfd

|            |  |
|------------|--|
| Synopsis   | Enter the <b>bfd</b> context   |
| Context    | <b>configure service vprn string network-interface string ipv4 bfd</b> |
| Tree       | <a href="#">bfd</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of BFD sessions   |
| Context    | <b>configure service vprn string network-interface string ipv4 bfd admin-state keyword</b> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **echo-receive** *number*

|            |   |
|------------|---|
| Synopsis   | Minimum echo interval over this interface   |
| Context    | <b>configure service vprn</b> <i>string network-interface string ipv4 bfd echo-receive number</i> |
| Tree       | <a href="#">echo-receive</a>  |
| Range      | 100 to 100000   |
| Units      | milliseconds  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **multiplier** *number*

|             |   |
|-------------|---|
| Synopsis    | Number of consecutive BFD messages missed from the peer   |
| Context     | <b>configure service vprn</b> <i>string network-interface string ipv4 bfd multiplier number</i>   |
| Tree        | <a href="#">multiplier</a>  |
| Description | This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments. |
| Range       | 1 to 20   |
| Default     | 3   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **receive** *number*

|             |  |
|-------------|--|
| Synopsis    | BFD receive interval over this interface   |
| Context     | <b>configure service vprn</b> <i>string network-interface string ipv4 bfd receive number</i>   |
| Tree        | <a href="#">receive</a>  |
| Description | This command specifies the receive interval for the BFD session.<br>On the 7750 SR, this command can only be configured to a value less than 100 when the <b>type</b> command is configured to <b>cpm-np</b> . |
| Range       | 10 to 100000   |
| Units       | milliseconds   |
| Default     | 100  |
| Introduced  | 16.0.R1  |

Platforms All

### **transmit-interval** *number*

Synopsis BFD transmit interval over this interface

Context **configure service vprn** *string network-interface string ipv4 bfd transmit-interval number*

Tree **transmit-interval**

Description This command configures the transmit intervals.  
On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.

Range 10 to 100000

Units milliseconds

Default 100

Introduced 16.0.R1

Platforms All

### **type** *keyword*

Synopsis Local termination point for the BFD session

Context **configure service vprn** *string network-interface string ipv4 bfd type keyword*

Tree **type**

Description This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity.  
The options to specify where the BFD session runs are:

- **auto** (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the **cpm-np**.
- **cpm-np** – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems.
- **fp** – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.

Options cpm-np, auto, fp

Default auto

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## icmp

|            |   |
|------------|---|
| Synopsis   | Enter the <b>icmp</b> context   |
| Context    | <b>configure service vprn string network-interface string ipv4 icmp</b> |
| Tree       | <a href="#">icmp</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## mask-reply *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow responses to ICMP mask requests on the interface                                     |
| Context    | <b>configure service vprn string network-interface string ipv4 icmp mask-reply boolean</b> |
| Tree       | <a href="#">mask-reply</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## param-problem

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>param-problem</b> context  |
| Context     | <b>configure service vprn string network-interface string ipv4 icmp param-problem</b>                         |
| Tree        | <a href="#">param-problem</a>   |
| Description | Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface. |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

## admin-state *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of sent Parameter Problem messages   |
| Context    | <b>configure service vprn string network-interface string ipv4 icmp param-problem admin-state keyword</b> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |

Platforms All

### **number** *number*

Synopsis Maximum number of Parameter Problem messages to send

Context **configure** [service vprn](#) *string* [network-interface](#) *string* [ipv4 icmp param-problem](#) *number*

Tree [number](#)

Range 10 to 1000

Default 100

Introduced 16.0.R1

Platforms All

### **seconds** *number*

Synopsis Time used to limit number of Parameter Problem messages

Context **configure** [service vprn](#) *string* [network-interface](#) *string* [ipv4 icmp param-problem](#) [seconds](#) *number*

Tree [seconds](#)

Range 1 to 60

Units seconds

Default 10

Introduced 16.0.R1

Platforms All

### **redirects**

Synopsis Enter the **redirects** context

Context **configure** [service vprn](#) *string* [network-interface](#) *string* [ipv4 icmp](#) [redirects](#)

Tree [redirects](#)

Description Commands in this context configure the settings for ICMP redirect messages generated by the interface.

The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.

Introduced 16.0.R1

Platforms All

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of sending ICMP redirect messages  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4 icmp redirects</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**number** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum number of ICMP redirect messages to send  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4 icmp redirects</a> <b>number</b> <i>number</i> |
| Tree       | <a href="#">number</a>  |
| Range      | 10 to 1000  |
| Default    | 100   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**seconds** *number*

|            |  |
|------------|--|
| Synopsis   | Time used to limit the number of ICMP redirect messages  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4 icmp redirects</a> <b>seconds</b> <i>number</i> |
| Tree       | <a href="#">seconds</a>  |
| Range      | 1 to 60  |
| Units      | seconds  |
| Default    | 10   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**ttl-expired**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>ttl-expired</b> context  |
| Context     | <b>configure service vprn string network-interface string ipv4 icmp ttl-expired</b>                       |
| Tree        | <a href="#">ttl-expired</a>   |
| Description | Commands in this context configure the settings for ICMP TTL expired messages generated by the interface. |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**admin-state keyword**

|            |   |
|------------|---|
| Synopsis   | Administrative state of sending TTL expired messages  |
| Context    | <b>configure service vprn string network-interface string ipv4 icmp ttl-expired admin-state keyword</b> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**number number**

|            |   |
|------------|---|
| Synopsis   | Maximum number of TTL expired messages to send  |
| Context    | <b>configure service vprn string network-interface string ipv4 icmp ttl-expired number number</b> |
| Tree       | <a href="#">number</a>  |
| Range      | 10 to 2000  |
| Default    | 100   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**seconds number**

|          |  |
|----------|--|
| Synopsis | Time used to limit the number of TTL expired messages  |
| Context  | <b>configure service vprn string network-interface string ipv4 icmp ttl-expired seconds number</b> |

|            |                         |
|------------|-------------------------|
| Tree       | <a href="#">seconds</a> |
| Range      | 1 to 60                 |
| Units      | seconds                 |
| Default    | 10                      |
| Introduced | 16.0.R1                 |
| Platforms  | All                     |

## unreachables

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>unreachables</b> context   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4 icmp unreachable</a> |
| Tree        | <a href="#">unreachables</a>  |
| Description | Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface.              |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of sending unreachable messages   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4 icmp unreachable</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## number *number*

|          |  |
|----------|--|
| Synopsis | Maximum number of unreachable messages to send   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4 icmp unreachable</a> <a href="#">number</a> <i>number</i> |
| Tree     | <a href="#">number</a>   |
| Range    | 10 to 2000   |
| Default  | 100  |



|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **seconds** *number*

|            |   |
|------------|---|
| Synopsis   | Time to limit the number of ICMP unreachable messages   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4 icmp unreachable</a> <a href="#">seconds</a> <i>number</i> |
| Tree       | <a href="#">seconds</a>   |
| Range      | 1 to 60   |
| Units      | seconds   |
| Default    | 10  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **neighbor-discovery**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>neighbor-discovery</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery</a> |
| Tree       | <a href="#">neighbor-discovery</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **retry-timer** *number*

|            |   |
|------------|---|
| Synopsis   | ARP retry interval  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery</a> <a href="#">retry-timer</a> <i>number</i> |
| Tree       | <a href="#">retry-timer</a>   |
| Range      | 1 to 300  |
| Units      | deciseconds   |
| Default    | 50  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**static-neighbor** [*ipv4-address*] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>static-neighbor</b> list instance  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">static-neighbor</a> <i>string</i> |
| Tree       | <a href="#">static-neighbor</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[ipv4-address]** *string*

|            |   |
|------------|---|
| Synopsis   | IPv4 address that corresponds to the physical address   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">static-neighbor</a> <i>string</i> |
| Tree       | <a href="#">static-neighbor</a>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**mac-address** *string*

|            |   |
|------------|---|
| Synopsis   | MAC address for the static neighbor   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">static-neighbor</a> <i>string</i> <a href="#">mac-address</a> <i>string</i> |
| Tree       | <a href="#">mac-address</a>   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**timeout** *number*

|             |   |
|-------------|---|
| Synopsis    | Timeout for an ARP entry learned on the interface   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">timeout</a> <i>number</i> |
| Tree        | <a href="#">timeout</a>   |
| Description | This command configures the minimum time an ARP entry learned on the IP interface is stored in the ARP table. ARP entries are automatically refreshed when an ARP request                                 |

or gratuitous ARP is seen by an IP host. Otherwise, the ARP entry is aged from the ARP table.

|            |            |
|------------|------------|
| Range      | 0 to 65535 |
| Units      | seconds    |
| Default    | 14400      |
| Introduced | 16.0.R1    |
| Platforms  | All        |

## primary

|            |  |
|------------|--|
| Synopsis   | Enable the <b>primary</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">primary</a> |
| Tree       | <a href="#">primary</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## address *string*

|            |  |
|------------|--|
| Synopsis   | Primary IPv4 address assigned to the interface   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">primary</a> <a href="#">address</a> <i>string</i> |
| Tree       | <a href="#">address</a>  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## broadcast *keyword*

|            |   |
|------------|---|
| Synopsis   | Broadcast address format  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">primary</a> <a href="#">broadcast</a> <i>keyword</i> |
| Tree       | <a href="#">broadcast</a>   |
| Options    | all-ones, host-ones   |
| Default    | host-ones   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**prefix-length** *number*

|            |  |
|------------|--|
| Synopsis   | IPv4 address prefix length   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">primary</a> <a href="#">prefix-length</a> <i>number</i> |
| Tree       | <a href="#">prefix-length</a>  |
| Range      | 0 to 32  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**secondary** [[address](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>secondary</b> list instance   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">secondary</a> <i>string</i> |
| Tree       | <a href="#">secondary</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[address]** *string*

|            |  |
|------------|--|
| Synopsis   | Secondary IPv4 address assigned to the interface   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">secondary</a> <i>string</i> |
| Tree       | <a href="#">secondary</a>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**broadcast** *keyword*

|            |   |
|------------|---|
| Synopsis   | Broadcast address format  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">secondary</a> <i>string</i> <a href="#">broadcast</a> <i>keyword</i> |
| Tree       | <a href="#">broadcast</a>   |
| Options    | all-ones, host-ones   |
| Default    | host-ones   |
| Introduced | 16.0.R1   |

Platforms All

### **igp-inhibit** *boolean*

Synopsis Disable the running IGP from recognizing secondary IP

Context **configure** [service vprn](#) *string* [network-interface](#) *string* [ipv4 secondary](#) *string* **igp-inhibit** *boolean*

Tree [igp-inhibit](#)

Description When configured to **true**, the running IGP does not recognize the secondary IP address as a local interface.

Default false

Introduced 16.0.R1

Platforms All

### **prefix-length** *number*

Synopsis IPv4 address prefix length

Context **configure** [service vprn](#) *string* [network-interface](#) *string* [ipv4 secondary](#) *string* **prefix-length** *number*

Tree [prefix-length](#)

Range 0 to 32

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

### **tcp-mss** *number*

Synopsis TCP maximum segment size for the interface

Context **configure** [service vprn](#) *string* [network-interface](#) *string* [ipv4](#) **tcp-mss** *number*

Tree [tcp-mss](#)

Range 384 to 9746

Introduced 16.0.R1

Platforms All

## urpf-check

|            |   |
|------------|---|
| Synopsis   | Enable the <b>urpf-check</b> context  |
| Context    | <b>configure service vprn string network-interface string ipv4 urpf-check</b> |
| Tree       | <a href="#">urpf-check</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## ignore-default *boolean*

|            |  |
|------------|--|
| Synopsis   | Ignore default route when performing a uRPF check  |
| Context    | <b>configure service vprn string network-interface string ipv4 urpf-check ignore-default boolean</b> |
| Tree       | <a href="#">ignore-default</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## mode *keyword*

|            |  |
|------------|--|
| Synopsis   | Unicast RPF check mode   |
| Context    | <b>configure service vprn string network-interface string ipv4 urpf-check mode keyword</b> |
| Tree       | <a href="#">mode</a>   |
| Options    | strict, loose, strict-no-ecmp  |
| Default    | strict   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## lag

|            |   |
|------------|---|
| Synopsis   | Enter the <b>lag</b> context                                      |
| Context    | <b>configure service vprn string network-interface string lag</b> |
| Tree       | <a href="#">lag</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**link-map-profile** *number*

|             |  |
|-------------|--|
| Synopsis    | LAG link map profile for a SAP or network interface  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">lag link-map-profile</a> <i>number</i>   |
| Tree        | <a href="#">link-map-profile</a>   |
| Description | This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration.<br><br>If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing. |
| Range       | 1 to 64  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**per-link-hash**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>per-link-hash</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">lag per-link-hash</a> |
| Tree       | <a href="#">per-link-hash</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**class** *number*

|            |   |
|------------|---|
| Synopsis   | Class used on LAG egress using weighted per-link-hash   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">lag per-link-hash class</a> <i>number</i> |
| Tree       | <a href="#">class</a>   |
| Range      | 1 to 3  |
| Default    | 1   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**weight** *number*

|          |  |
|----------|--|
| Synopsis | Weight used on LAG egress using weighted per-link-hash   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">lag per-link-hash weight</a> <i>number</i> |

|            |                        |
|------------|------------------------|
| Tree       | <a href="#">weight</a> |
| Range      | 1 to 1024              |
| Default    | 1                      |
| Introduced | 16.0.R1                |
| Platforms  | All                    |

## load-balancing

|            |  |
|------------|--|
| Synopsis   | Enter the <b>load-balancing</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn string network-interface string load-balancing</a> |
| Tree       | <a href="#">load-balancing</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## flow-label-load-balancing *boolean*

|             |  |
|-------------|--|
| Synopsis    | Enable flow label load balancing   |
| Context     | <b>configure</b> <a href="#">service vprn string network-interface string load-balancing flow-label-load-balancing boolean</a>   |
| Tree        | <a href="#">flow-label-load-balancing</a>  |
| Description | When configured to <b>true</b> , the router enables load balancing in ECMP and LAG based on the output of a hash performed on the triplet (SA, DA, flow label) in the header of an IPv6 packet received on an IES, VPRN, R-VPLS, CSC, or network interface.<br><br>When configured to <b>false</b> , the router disables load balancing in ECMP and LAG. |
| Default     | false  |
| Introduced  | 21.5.R1  |
| Platforms   | All  |

## ip-load-balancing *keyword*

|             |  |
|-------------|--|
| Synopsis    | IP load-balancing algorithm  |
| Context     | <b>configure</b> <a href="#">service vprn string network-interface string load-balancing ip-load-balancing keyword</a>   |
| Tree        | <a href="#">ip-load-balancing</a>  |
| Description | This command specifies whether to include the source address, destination address, or both in LAG or ECMP hash on IP interfaces. Additionally, when the <b>l4-load-balancing</b> |



command is enabled, this command also includes the source or destination port in the hash inputs.

|            |                                     |
|------------|-------------------------------------|
| Options    | both, destination, source, inner-ip |
| Default    | both                                |
| Introduced | 16.0.R3                             |
| Platforms  | All                                 |

### **lsr-load-balancing** *keyword*

|             |  |
|-------------|--|
| Synopsis    | LSR load-balancing algorithm   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">load-balancing</a> <a href="#">lsr-load-balancing</a> <i>keyword</i> |
| Tree        | <a href="#">lsr-load-balancing</a>   |
| Description | This command specifies whether the IP header is used in the LAG and ECMP LSR hashing algorithm. This is the per-interface setting.   |
| Options     | lbl-only, lbl-ip, ip-only, eth-encap-ip, lbl-ip-l4-teid  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **spi-load-balancing** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Enable SPI use in hashing  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">load-balancing</a> <a href="#">spi-load-balancing</a> <i>boolean</i> |
| Tree        | <a href="#">spi-load-balancing</a>   |
| Description | When configured to <b>true</b> , the router uses the Security Parameter Index (SPI) in hashing for ESP and AH encrypted IPv4 and IPv6 traffic. This is a per-interface setting.              |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **teid-load-balancing** *boolean*

|          |   |
|----------|---|
| Synopsis | Enable use of TEID in hashing   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">load-balancing</a> <a href="#">teid-load-balancing</a> <i>boolean</i> |
| Tree     | <a href="#">teid-load-balancing</a>   |

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

## loopback

|            |  |
|------------|--|
| Synopsis   | Use interface as a loopback interface  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">loopback</a> |
| Tree       | <a href="#">loopback</a>   |
| Notes      | The following elements are part of a choice: <b>loopback</b> or <b>port</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## mac string

|            |   |
|------------|---|
| Synopsis   | MAC address for the interface   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">mac</a> <i>string</i> |
| Tree       | <a href="#">mac</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## port string

|               |  |
|---------------|--|
| Synopsis      | Port to bind the interface   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">port</a> <i>string</i> |
| Tree          | <a href="#">port</a>   |
| String Length | 1 to 45  |
| Notes         | The following elements are part of a choice: <b>loopback</b> or <b>port</b> .  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

## qos

|          |   |
|----------|---|
| Synopsis | Enter the <b>qos</b> context  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">qos</a> |

|            |                     |
|------------|---------------------|
| Tree       | <a href="#">qos</a> |
| Introduced | 16.0.R1             |
| Platforms  | All                 |

### **egress-instance** *number*

|             |   |
|-------------|---|
| Synopsis    | Port egress queue group instance for this interface   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">qos egress-instance</a> <i>number</i>                       |
| Tree        | <a href="#">egress-instance</a>   |
| Description | This command specifies which instance to associate with this specific network IP interface since multiple instances of the same egress queue-group can be applied to the same port. |
| Range       | 1 to 65535  |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **egress-port-redirect-group** *reference*

|             |   |
|-------------|---|
| Synopsis    | QoS queue group name  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">qos egress-port-redirect-group</a> <i>reference</i>   |
| Tree        | <a href="#">egress-port-redirect-group</a>  |
| Description | This command configures the egress queue group used for all egress forwarding-class redirections specified within the network QoS policy ID. The specified queue group name must exist as an egress queue group applied to the egress context of the port associated with the IP interface. |
| Reference   | <b>configure</b> <a href="#">qos queue-group-templates egress</a> <a href="#">queue-group</a> <i>string</i>   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **ingress-fp-redirect-group** *reference*

|          |  |
|----------|--|
| Synopsis | Forwarding plane queue group policy for the interface  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">qos ingress-fp-redirect-group</a> <i>reference</i> |
| Tree     | <a href="#">ingress-fp-redirect-group</a>  |

|             |   |
|-------------|---|
| Description | This command configures the ingress queue-group used for all ingress forwarding-class redirections specified within the network QoS policy ID. The specified queue group name must exist as an ingress queue group applied to the ingress context of the forwarding plane associated with the IP interface. |
| Reference   | <b>configure qos queue-group-templates ingress queue-group</b> <i>string</i>  |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **ingress-instance** *number*

|             |   |
|-------------|---|
| Synopsis    | Forwarding plane ingress queue group for this interface   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>network-interface</b> <i>string</i> <b>qos ingress-instance</b> <i>number</i>  |
| Tree        | <a href="#">ingress-instance</a>  |
| Description | This command configures which instance to associate with this specific network IP interface. An operator can apply multiple instances of the same ingress queue group to the same forwarding plane. |
| Range       | 1 to 65535  |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **network-policy** *reference*

|             |   |
|-------------|---|
| Synopsis    | Network policy name associated with a network interface   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>network-interface</b> <i>string</i> <b>qos network-policy</b> <i>reference</i> |
| Tree        | <a href="#">network-policy</a>  |
| Description | This command associates an existing network policy name with the IP interface.  |
| Reference   | <b>configure qos network</b> <i>string</i>  |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **tos-marking-state** *keyword*

|          |  |
|----------|--|
| Synopsis | TOS marking state  |
| Context  | <b>configure service vprn</b> <i>string</i> <b>network-interface</b> <i>string</i> <b>tos-marking-state</b> <i>keyword</i> |
| Tree     | <a href="#">tos-marking-state</a>  |
| Options  | trusted, untrusted   |

---

|            |         |
|------------|---------|
| Default    | trusted |
| Introduced | 16.0.R1 |
| Platforms  | All     |

## ntp

|            |  |
|------------|--|
| Synopsis   | Enable the <b>ntp</b> context            |
| Context    | <b>configure service vprn string ntp</b> |
| Tree       | <b>ntp</b>                               |
| Introduced | 16.0.R1                                  |
| Platforms  | All                                      |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of NTP execution                        |
| Context    | <b>configure service vprn string ntp admin-state keyword</b> |
| Tree       | <b>admin-state</b>   |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## authenticate *boolean*

|            |   |
|------------|---|
| Synopsis   | Authentication of NTP PDUs when acting as a server            |
| Context    | <b>configure service vprn string ntp authenticate boolean</b> |
| Tree       | <b>authenticate</b>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## authentication-check *boolean*

|          |   |
|----------|---|
| Synopsis | Authenticate NTP PDUs and reject mismatches                           |
| Context  | <b>configure service vprn string ntp authentication-check boolean</b> |

---

|            |                                      |
|------------|--------------------------------------|
| Tree       | <a href="#">authentication-check</a> |
| Default    | true                                 |
| Introduced | 16.0.R1                              |
| Platforms  | All                                  |

### **authentication-key** [[key-id](#)] *number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>authentication-key</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ntp</a> <a href="#">authentication-key</a> <i>number</i> |
| Tree       | <a href="#">authentication-key</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **[key-id]** *number*

|            |  |
|------------|--|
| Synopsis   | Authentication key ID used for NTP packets   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ntp</a> <a href="#">authentication-key</a> <i>number</i> |
| Tree       | <a href="#">authentication-key</a>   |
| Range      | 1 to 255   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **key** *string*

|               |  |
|---------------|--|
| Synopsis      | Key to authenticate NTP packets  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ntp</a> <a href="#">authentication-key</a> <i>number</i> <a href="#">key</a> <i>string</i> |
| Tree          | <a href="#">key</a>  |
| String Length | 1 to 71  |
| Notes         | This element is mandatory.   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**type keyword**

|            |  |
|------------|--|
| Synopsis   | Authentication method to authenticate NTP packet                               |
| Context    | <b>configure service vpn string ntp authentication-key number type keyword</b> |
| Tree       | <a href="#">type</a>   |
| Options    | des, message-digest  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**broadcast [interface-name] reference**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>broadcast</b> list instance                    |
| Context    | <b>configure service vpn string ntp broadcast reference</b> |
| Tree       | <a href="#">broadcast</a>                                   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[interface-name] reference**

|            |   |
|------------|---|
| Synopsis   | Local interface used to transmit NTP broadcast packets      |
| Context    | <b>configure service vpn string ntp broadcast reference</b> |
| Tree       | <a href="#">broadcast</a>                                   |
| Reference  | <b>configure service vpn string interface string</b>        |
| Notes      | This element is part of a list key.                         |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**key-id reference**

|            |  |
|------------|--|
| Synopsis   | Authentication key and type used by the node                                 |
| Context    | <b>configure service vpn string ntp broadcast reference key-id reference</b> |
| Tree       | <a href="#">key-id</a>   |
| Reference  | <b>configure service vpn string ntp authentication-key number</b>            |
| Introduced | 16.0.R1  |

Platforms All

### **t***ttl number*

Synopsis TTL of messages transmitted by the broadcast address  
 Context **configure** [service vprn](#) *string ntp broadcast reference ttl number*  
 Tree [ttl](#)  
 Range 1 to 255  
 Default 127  
 Introduced 16.0.R1  
 Platforms All

### **v***ersion number*

Synopsis NTP version number generated by the node  
 Context **configure** [service vprn](#) *string ntp broadcast reference version number*  
 Tree [version](#)  
 Range 2 to 4  
 Default 4  
 Introduced 16.0.R1  
 Platforms All

### **ospf** [[ospf-instance](#)] *number*

Synopsis Enter the **ospf** list instance  
 Context **configure** [service vprn](#) *string ospf number*  
 Tree [ospf](#)  
 Max. Instances 32  
 Introduced 16.0.R1  
 Platforms All

### **[ospf-instance]** *number*

Synopsis Specifies the value of the integrated OSPF instance.  
 Context **configure** [service vprn](#) *string ospf number*



---

|            |                                     |
|------------|-------------------------------------|
| Tree       | <a href="#">ospf</a>                |
| Range      | 0                                   |
| Notes      | This element is part of a list key. |
| Introduced | 16.0.R1                             |
| Platforms  | All                                 |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the OSPF instance  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **advertise-router-capability** *keyword*

|            |  |
|------------|--|
| Synopsis   | Allow router advertisement capabilities  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <b>advertise-router-capability</b> <i>keyword</i> |
| Tree       | <a href="#">advertise-router-capability</a>  |
| Options    | false, link, area, as  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **area** [[area-id](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>area</b> list instance  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <b>area</b> <i>string</i> |
| Tree       | <a href="#">area</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[area-id] string**

|            |   |
|------------|---|
| Synopsis   | Area-ID attribute   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> |
| Tree       | <a href="#">area</a>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**advertise-ne-profile reference**

|            |   |
|------------|---|
| Synopsis   | Network element profile to be advertised  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">advertise-ne-profile</a> <i>reference</i> |
| Tree       | <a href="#">advertise-ne-profile</a>  |
| Reference  | <b>configure</b> <a href="#">system</a> <a href="#">network-element-discovery</a> <i>profile</i> <i>string</i>  |
| Introduced | 19.5.R1   |
| Platforms  | All   |

**advertise-router-capability boolean**

|            |  |
|------------|--|
| Synopsis   | Allow router advertisement capabilities  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">advertise-router-capability</a> <i>boolean</i> |
| Tree       | <a href="#">advertise-router-capability</a>  |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**area-range [ip-prefix-mask] string**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>area-range</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">area-range</a> <i>string</i> |
| Tree       | <a href="#">area-range</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[ip-prefix-mask]** *string*

|            |  |
|------------|--|
| Synopsis   | IPv4 unicast address prefix and mask   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">area-range</a> <i>string</i> |
| Tree       | <a href="#">area-range</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**advertise** *boolean*

|            |  |
|------------|--|
| Synopsis   | Advertise summarized range of addresses to other areas   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">area-range</a> <i>string</i> <b>advertise</b> <i>boolean</i> |
| Tree       | <a href="#">advertise</a>  |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**blackhole-aggregate** *boolean*

|            |  |
|------------|--|
| Synopsis   | Install a low priority blackhole route to avoid loops  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">blackhole-aggregate</a> <i>boolean</i> |
| Tree       | <a href="#">blackhole-aggregate</a>  |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**export-policy** *reference*

|           |  |
|-----------|--|
| Synopsis  | Type 3 Summary-LSA/OSPFv3 inter-area-prefix-LSA route  |
| Context   | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">export-policy</a> <i>reference</i> |
| Tree      | <a href="#">export-policy</a>  |
| Reference | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>   |

|                |                                      |
|----------------|--------------------------------------|
| Max. Instances | 5                                    |
| Notes          | This element is ordered by the user. |
| Introduced     | 16.0.R1                              |
| Platforms      | All                                  |

### **import-policy** *reference*

|                |  |
|----------------|--|
| Synopsis       | Route imported as Summary Type 3/Inter-Area-Prefix-LSA   |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <b>import-policy</b> <i>reference</i> |
| Tree           | <a href="#">import-policy</a>  |
| Reference      | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>   |
| Max. Instances | 5  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

### **interface** [[interface-name](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>interface</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <b>interface</b> <i>string</i> |
| Tree       | <a href="#">interface</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **[interface-name]** *string*

|               |   |
|---------------|---|
| Synopsis      | IP interface name   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <b>interface</b> <i>string</i> |
| Tree          | <a href="#">interface</a>   |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the OSPF interface  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**advertise-router-capability** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow router advertisement capabilities   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>advertise-router-capability</b> <i>boolean</i> |
| Tree       | <a href="#">advertise-router-capability</a>   |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**advertise-subnet** *boolean*

|            |  |
|------------|--|
| Synopsis   | Advertise point-to-point interfaces as subnet routes   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>advertise-subnet</b> <i>boolean</i> |
| Tree       | <a href="#">advertise-subnet</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**authentication-key** *string*

|          |   |
|----------|---|
| Synopsis | Authentication key  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>authentication-key</b> <i>string</i> |

|               |                                    |
|---------------|------------------------------------|
| Tree          | <a href="#">authentication-key</a> |
| String Length | 1 to 38                            |
| Introduced    | 16.0.R1                            |
| Platforms     | All                                |

### **authentication-keychain** *reference*

|            |   |
|------------|---|
| Synopsis   | TCP authentication keychain for the session   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf number area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">authentication-keychain</a> <i>reference</i> |
| Tree       | <a href="#">authentication-keychain</a>   |
| Reference  | <b>configure</b> <a href="#">system security keychains</a> <a href="#">keychain</a> <i>string</i>   |
| Introduced | 16.0.R3   |
| Platforms  | All   |

### **authentication-type** *keyword*

|            |   |
|------------|---|
| Synopsis   | Authentication type used on OSPF interface  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf number area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">authentication-type</a> <i>keyword</i> |
| Tree       | <a href="#">authentication-type</a>   |
| Options    | password, message-digest  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **bfd-liveness**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>bfd-liveness</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf number area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">bfd-liveness</a> |
| Tree       | <a href="#">bfd-liveness</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **remain-down-on-failure** *boolean*

|          |   |
|----------|---|
| Synopsis | Force adjacency down on failure until session returns |
|----------|---|

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>bfd-liveness</b><br><b>remain-down-on-failure</b> <i>boolean</i> |
| Tree       | <b>remain-down-on-failure</b>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**dead-interval** *number*

|            |  |
|------------|--|
| Synopsis   | OSPF wait time for Hellos before neighbor declared down  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>dead-interval</b><br><i>number</i> |
| Tree       | <b>dead-interval</b>   |
| Range      | 2 to 65535   |
| Units      | seconds  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**hello-interval** *number*

|            |   |
|------------|---|
| Synopsis   | Time between OSPF Hellos of this interface  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>hello-interval</b><br><i>number</i> |
| Tree       | <b>hello-interval</b>   |
| Range      | 1 to 65535  |
| Units      | seconds   |
| Default    | 10  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**interface-type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |                |
|----------|----------------|
| Synopsis | Interface type |
|----------|----------------|

|             |   |
|-------------|---|
| Context     | <b>configure service vprn</b> <i>string ospf number area string interface string interface-type keyword</i>   |
| Tree        | <a href="#">interface-type</a>  |
| Description | This command specifies the interface type.<br><br><b>broadcast</b> - Broadcast network<br><br>To significantly improve adjacency forming and network convergence, configure a network as point-to-point if only two routers are connected, even if the network is a broadcast media such as Ethernet.<br><br><b>non-broadcast</b> - Non-broadcast network<br><br><b>point-to-point</b> - Point-to-point link<br><br>Set the interface type of an Ethernet link to <b>point-to-point</b> to avoid having to carry the broadcast adjacency maintenance overhead if the Ethernet link provided is used as a point-to-point. Set the interface type of an Ethernet link to <b>point-to-point</b> to avoid having to carry the broadcast adjacency maintenance overhead if the Ethernet link provided is used as a point-to-point.<br><br><b>secondary</b> - Multiple secondary adjacencies allowed<br><br>A <b>secondary</b> interface allows multiple secondary adjacencies, in addition to the primary adjacency, to be established over a single IP interface. This interface type can also be applied to the system interface and to loopback interfaces to allow them to participate in multiple areas, although no adjacencies are formed over these types of interfaces. |
| Options     | broadcast, non-broadcast, point-to-point, secondary   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### load-balancing-weight *number*

|            |   |
|------------|---|
| Synopsis   | Configure load-balancing-weight.  |
| Context    | <b>configure service vprn</b> <i>string ospf number area string interface string load-balancing-weight number</i> |
| Tree       | <a href="#">load-balancing-weight</a>   |
| Range      | 1 to 4294967295   |
| Introduced | 20.2.R1   |
| Platforms  | All   |

### loopfree-alternate

|          |   |
|----------|---|
| Synopsis | Enter the <b>loopfree-alternate</b> context   |
| Context  | <b>configure service vprn</b> <i>string ospf number area string interface string loopfree-alternate</i> |
| Tree     | <a href="#">loopfree-alternate</a>  |



|            |         |
|------------|---------|
| Introduced | 16.0.R3 |
| Platforms  | All     |

### **exclude** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable fast reroute at OSPF primary interface level  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">loopfree-alternate</a> <b>exclude</b> <i>boolean</i> |
| Tree       | <a href="#">exclude</a>  |
| Default    | false  |
| Introduced | 16.0.R3  |
| Platforms  | All  |

### **policy-map**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>policy-map</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">loopfree-alternate</a> <b>policy-map</b> |
| Tree       | <a href="#">policy-map</a>   |
| Introduced | 16.0.R3  |
| Platforms  | All  |

### **route-nh-template** *reference*

|            |   |
|------------|---|
| Synopsis   | Route next hop policy template name   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">loopfree-alternate</a> <a href="#">policy-map</a> <b>route-nh-template</b> <i>reference</i> |
| Tree       | <a href="#">route-nh-template</a>   |
| Reference  | <b>configure</b> <a href="#">routing-options</a> <a href="#">route-next-hop-policy</a> <a href="#">template</a> <i>string</i>   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R3   |
| Platforms  | All   |

### **lsa-filter-out** *keyword*

|          |                        |
|----------|------------------------|
| Synopsis | LSA flooding reduction |
|----------|------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string ospf number area string interface string isa-filter-out keyword</i> |
| Tree       | <a href="#">isa-filter-out</a>  |
| Options    | none, all, except-own-rtrlsa, except-own-rtrlsa-and-defaults  |
| Default    | none  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **message-digest-key** [[key-id](#)] *number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>message-digest-key</b> list instance  |
| Context    | <b>configure service vprn</b> <i>string ospf number area string interface string message-digest-key number</i> |
| Tree       | <a href="#">message-digest-key</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **[key-id]** *number*

|            |  |
|------------|--|
| Synopsis   | Message digest index   |
| Context    | <b>configure service vprn</b> <i>string ospf number area string interface string message-digest-key number</i> |
| Tree       | <a href="#">message-digest-key</a>   |
| Range      | 1 to 255   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **md5** *string*

|               |   |
|---------------|---|
| Synopsis      | MD5 hash key  |
| Context       | <b>configure service vprn</b> <i>string ospf number area string interface string message-digest-key number md5 string</i> |
| Tree          | <a href="#">md5</a>   |
| String Length | 1 to 51   |
| Notes         | This element is mandatory.  |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

**metric number**

|            |  |
|------------|--|
| Synopsis   | Route cost metric for the interface  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">metric</a> <i>number</i> |
| Tree       | <a href="#">metric</a>   |
| Range      | 1 to 65535   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**mtu number**

|            |   |
|------------|---|
| Synopsis   | MTU for the OSPF to use on the interface  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">mtu</a> <i>number</i> |
| Tree       | <a href="#">mtu</a>   |
| Range      | 512 to 9786   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**neighbor [address] string**

|            |  |
|------------|--|
| Synopsis   | Add a list entry for <b>neighbor</b>   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> |
| Tree       | <a href="#">neighbor</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[address] string**

|          |  |
|----------|--|
| Synopsis | IPv4 address of the OSPFv2 neighbor  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> |
| Tree     | <a href="#">neighbor</a>   |
| Notes    | This element is part of a list key.  |

Introduced 16.0.R1  
 Platforms All

### **passive** *boolean*

Synopsis Advertise passive interfaces as OSPF interfaces  
 Context **configure** [service vprn](#) *string* [ospf number area](#) *string* [interface](#) *string* [passive](#) *boolean*  
 Tree [passive](#)  
 Introduced 16.0.R1  
 Platforms All

### **poll-interval** *number*

Synopsis Interval for Hellos to non-adjacent OSPF NBMA neighbor  
 Context **configure** [service vprn](#) *string* [ospf number area](#) *string* [interface](#) *string* [poll-interval](#) *number*  
 Tree [poll-interval](#)  
 Max. Range 0 to 4294967295  
 Units seconds  
 Default 120  
 Introduced 16.0.R1  
 Platforms All

### **priority** *number*

Synopsis Interface priority in the DR election on the subnet  
 Context **configure** [service vprn](#) *string* [ospf number area](#) *string* [interface](#) *string* [priority](#) *number*  
 Tree [priority](#)  
 Range 0 to 255  
 Default 1  
 Introduced 16.0.R1  
 Platforms All

### **retransmit-interval** *number*

Synopsis Time before OSPF retransmits an unacknowledged LSA

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>retransmit-interval</b> <i>number</i> |
| Tree       | <b>retransmit-interval</b>  |
| Range      | 1 to 1800   |
| Units      | seconds   |
| Default    | 5   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **rib-priority** *keyword*

|            |   |
|------------|---|
| Synopsis   | RIB priority for OSPF   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>rib-priority</b> <i>keyword</i> |
| Tree       | <b>rib-priority</b>   |
| Options    | high  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **transit-delay** *number*

|            |   |
|------------|---|
| Synopsis   | Required LSA transmit time  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>transit-delay</b> <i>number</i> |
| Tree       | <b>transit-delay</b>  |
| Range      | 1 to 1800   |
| Units      | seconds   |
| Default    | 1   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **loopfree-alternate-exclude** *boolean*

|          |  |
|----------|--|
| Synopsis | Exclude interfaces in OSPF areas in SPF LFA computation  |
| Context  | <b>configure service vprn</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>loopfree-alternate-exclude</b> <i>boolean</i> |

|            |  |
|------------|--|
| Tree       | <a href="#">loopfree-alternate-exclude</a> |
| Default    | false                                      |
| Introduced | 16.0.R1                                    |
| Platforms  | All  |

**nssa**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>nssa</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn string ospf number area string nssa</a> |
| Tree       | <a href="#">nssa</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**area-range** [\[ip-prefix-mask\] string](#)

|            |   |
|------------|---|
| Synopsis   | Enter the <b>area-range</b> list instance   |
| Context    | <b>configure</b> <a href="#">service vprn string ospf number area string nssa area-range string</a> |
| Tree       | <a href="#">area-range</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[ip-prefix-mask] string**

|            |   |
|------------|---|
| Synopsis   | IPv4 unicast address prefix and mask  |
| Context    | <b>configure</b> <a href="#">service vprn string ospf number area string nssa area-range string</a> |
| Tree       | <a href="#">area-range</a>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**advertise** *boolean*

|          |   |
|----------|---|
| Synopsis | Advertise summarized range of addresses to other areas  |
| Context  | <b>configure</b> <a href="#">service vprn string ospf number area string nssa area-range string advertise boolean</a> |

|            |                           |
|------------|---------------------------|
| Tree       | <a href="#">advertise</a> |
| Default    | true                      |
| Introduced | 16.0.R1                   |
| Platforms  | All                       |

### **originate-default-route**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>originate-default-route</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">nssa</a> <a href="#">originate-default-route</a> |
| Tree       | <a href="#">originate-default-route</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **adjacency-check** *boolean*

|            |   |
|------------|---|
| Synopsis   | Perform adjacency checks before originating a default route   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">nssa</a> <a href="#">originate-default-route</a> <a href="#">adjacency-check</a> <i>boolean</i> |
| Tree       | <a href="#">adjacency-check</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **type-nssa** *boolean*

|            |   |
|------------|---|
| Synopsis   | Generate a default route using NSSA-LSA type  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">nssa</a> <a href="#">originate-default-route</a> <a href="#">type-nssa</a> <i>boolean</i> |
| Tree       | <a href="#">type-nssa</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **redistribute-external** *boolean*

|          |  |
|----------|--|
| Synopsis | Redistribute external routes into the NSSA |
|----------|--|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string ospf number area string nssa redistribute-external</i> <i>boolean</i> |
| Tree       | <a href="#">redistribute-external</a>   |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**summaries** *boolean*

|            |   |
|------------|---|
| Synopsis   | Send summary (Type 3) LSAs into the NSSA on an ABR  |
| Context    | <b>configure service vprn</b> <i>string ospf number area string nssa summaries</i> <i>boolean</i> |
| Tree       | <a href="#">summaries</a>   |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**sham-link** [[interface](#)] *string ip-address string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>sham-link</b> list instance   |
| Context    | <b>configure service vprn</b> <i>string ospf number area string sham-link string ip-address string</i> |
| Tree       | <a href="#">sham-link</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[interface]** *string*

|               |  |
|---------------|--|
| Synopsis      | Local interface name used for the sham-link  |
| Context       | <b>configure service vprn</b> <i>string ospf number area string sham-link string ip-address string</i> |
| Tree          | <a href="#">sham-link</a>  |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |



**ip-address** *string*

|            |   |
|------------|---|
| Synopsis   | IP address of the sham-link neighbor  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">sham-link</a> <i>string</i> <a href="#">ip-address</a> <i>string</i> |
| Tree       | <a href="#">sham-link</a>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the OSPF interface   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">sham-link</a> <i>string</i> <a href="#">ip-address</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**authentication-key** *string*

|               |  |
|---------------|--|
| Synopsis      | Authentication key to send and receive OSPF packets  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">sham-link</a> <i>string</i> <a href="#">ip-address</a> <i>string</i> <a href="#">authentication-key</a> <i>string</i> |
| Tree          | <a href="#">authentication-key</a>   |
| String Length | 1 to 38  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**authentication-keychain** *reference*

|           |  |
|-----------|--|
| Synopsis  | TCP authentication keychain for the session  |
| Context   | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">sham-link</a> <i>string</i> <a href="#">ip-address</a> <i>string</i> <a href="#">authentication-keychain</a> <i>reference</i> |
| Tree      | <a href="#">authentication-keychain</a>  |
| Reference | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i>  |

Introduced 16.0.R3  
Platforms All

### **authentication-type** *keyword*

Synopsis Authentication type to be used  
Context **configure** **service vprn** *string* **ospf** *number* **area** *string* **sham-link** *string* **ip-address** *string* **authentication-type** *keyword*  
Tree **authentication-type**  
Options password, message-digest  
Introduced 16.0.R1  
Platforms All

### **dead-interval** *number*

Synopsis OSPF wait time for Hellos before neighbor declared down  
Context **configure** **service vprn** *string* **ospf** *number* **area** *string* **sham-link** *string* **ip-address** *string* **dead-interval** *number*  
Tree **dead-interval**  
Range 2 to 65535  
Units seconds  
Introduced 16.0.R1  
Platforms All

### **hello-interval** *number*

Synopsis Time between OSPF Hellos of this interface  
Context **configure** **service vprn** *string* **ospf** *number* **area** *string* **sham-link** *string* **ip-address** *string* **hello-interval** *number*  
Tree **hello-interval**  
Range 1 to 65535  
Units seconds  
Default 10  
Introduced 16.0.R1  
Platforms All

**message-digest-key** [*key-id*] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>message-digest-key</b> list instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">sham-link</a> <i>string</i> <a href="#">ip-address</a> <i>string</i> <b>message-digest-key</b> <i>number</i> |
| Tree       | <a href="#">message-digest-key</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[key-id]** *number*

|            |   |
|------------|---|
| Synopsis   | Message digest index  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">sham-link</a> <i>string</i> <a href="#">ip-address</a> <i>string</i> <b>message-digest-key</b> <i>number</i> |
| Tree       | <a href="#">message-digest-key</a>  |
| Range      | 1 to 255  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**md5** *string*

|               |  |
|---------------|--|
| Synopsis      | MD5 key or hash key  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">sham-link</a> <i>string</i> <a href="#">ip-address</a> <i>string</i> <b>message-digest-key</b> <i>number</i> <b>md5</b> <i>string</i> |
| Tree          | <a href="#">md5</a>  |
| String Length | 1 to 51  |
| Notes         | This element is mandatory.   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**metric** *number*

|          |   |
|----------|---|
| Synopsis | Explicit route cost metric that is applied to the sham link   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">sham-link</a> <i>string</i> <a href="#">ip-address</a> <i>string</i> <b>metric</b> <i>number</i> |

|            |                        |
|------------|------------------------|
| Tree       | <a href="#">metric</a> |
| Range      | 1 to 65535             |
| Default    | 1                      |
| Introduced | 16.0.R1                |
| Platforms  | All                    |

### **retransmit-interval** *number*

|            |  |
|------------|--|
| Synopsis   | Time before OSPF retransmits an unacknowledged LSA   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">sham-link</a> <i>string</i> <a href="#">ip-address</a> <i>string</i> <a href="#">retransmit-interval</a> <i>number</i> |
| Tree       | <a href="#">retransmit-interval</a>  |
| Range      | 1 to 1800  |
| Units      | seconds  |
| Default    | 5  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **transit-delay** *number*

|            |  |
|------------|--|
| Synopsis   | Required LSA transmit time   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">sham-link</a> <i>string</i> <a href="#">ip-address</a> <i>string</i> <a href="#">transit-delay</a> <i>number</i> |
| Tree       | <a href="#">transit-delay</a>  |
| Range      | 1 to 1800  |
| Units      | seconds  |
| Default    | 1  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **stub**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>stub</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">stub</a> |
| Tree       | <a href="#">stub</a>   |
| Introduced | 16.0.R1  |

Platforms All

### **default-metric** *number*

Synopsis Metric used by ABR for default route into the stub area

Context **configure service vprn** *string ospf number area string stub default-metric number*

Tree [default-metric](#)

Range 1 to 16777214

Default 1

Introduced 16.0.R1

Platforms All

### **summaries** *boolean*

Synopsis Send summary (Type 3) LSAs into the stub area on an ABR

Context **configure service vprn** *string ospf number area string stub summaries boolean*

Tree [summaries](#)

Default true

Introduced 16.0.R1

Platforms All

### **virtual-link** [[router-id](#)] *string transit-area reference*

Synopsis Enter the **virtual-link** list instance

Context **configure service vprn** *string ospf number area string virtual-link string transit-area reference*

Tree [virtual-link](#)

Introduced 16.0.R1

Platforms All

### **[router-id]** *string*

Synopsis Router identity of the virtual link neighbor

Context **configure service vprn** *string ospf number area string virtual-link string transit-area reference*

Tree [virtual-link](#)

|            |                                     |
|------------|-------------------------------------|
| Notes      | This element is part of a list key. |
| Introduced | 16.0.R1                             |
| Platforms  | All                                 |

### **transit-area** *reference*

|            |  |
|------------|--|
| Synopsis   | Transit area that links backbone area to area without physical connection with the backbone  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf number area</a> <i>string</i> <a href="#">virtual-link</a> <i>string</i> <a href="#">transit-area reference</a> |
| Tree       | <a href="#">virtual-link</a>   |
| Reference  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf number area</a> <i>string</i>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the OSPF interface  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf number area</a> <i>string</i> <a href="#">virtual-link</a> <i>string</i> <a href="#">transit-area reference</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **authentication-key** *string*

|               |   |
|---------------|---|
| Synopsis      | Authentication key  |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf number area</a> <i>string</i> <a href="#">virtual-link</a> <i>string</i> <a href="#">transit-area reference</a> <a href="#">authentication-key</a> <i>string</i> |
| Tree          | <a href="#">authentication-key</a>  |
| String Length | 1 to 38   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**authentication-keychain** *reference*

|            |  |
|------------|--|
| Synopsis   | TCP authentication keychain for the session  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf number area</a> <i>string</i> <a href="#">virtual-link</a> <i>string</i> <a href="#">transit-area</a> <i>reference</i> <a href="#">authentication-keychain</a> <i>reference</i> |
| Tree       | <a href="#">authentication-keychain</a>  |
| Reference  | <b>configure</b> <a href="#">system security keychains keychain</a> <i>string</i>  |
| Introduced | 16.0.R3  |
| Platforms  | All  |

**authentication-type** *keyword*

|            |  |
|------------|--|
| Synopsis   | Authentication type used on OSPF interface   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf number area</a> <i>string</i> <a href="#">virtual-link</a> <i>string</i> <a href="#">transit-area</a> <i>reference</i> <a href="#">authentication-type</a> <i>keyword</i> |
| Tree       | <a href="#">authentication-type</a>  |
| Options    | password, message-digest   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**dead-interval** *number*

|            |   |
|------------|---|
| Synopsis   | OSPF wait time for Hellos before neighbor declared down   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf number area</a> <i>string</i> <a href="#">virtual-link</a> <i>string</i> <a href="#">transit-area</a> <i>reference</i> <a href="#">dead-interval</a> <i>number</i> |
| Tree       | <a href="#">dead-interval</a>   |
| Range      | 2 to 65535  |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**hello-interval** *number*

|          |  |
|----------|--|
| Synopsis | Time between OSPF Hellos of this interface   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf number area</a> <i>string</i> <a href="#">virtual-link</a> <i>string</i> <a href="#">transit-area</a> <i>reference</i> <a href="#">hello-interval</a> <i>number</i> |

|            |                                |
|------------|--------------------------------|
| Tree       | <a href="#">hello-interval</a> |
| Range      | 1 to 65535                     |
| Units      | seconds                        |
| Default    | 10                             |
| Introduced | 16.0.R1                        |
| Platforms  | All                            |

### **message-digest-key** [[key-id](#)] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>message-digest-key</b> list instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">virtual-link</a> <i>string</i> <a href="#">transit-area</a> <i>reference</i> <a href="#">message-digest-key</a> <i>number</i> |
| Tree       | <a href="#">message-digest-key</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **[key-id]** *number*

|            |   |
|------------|---|
| Synopsis   | Message digest index  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">virtual-link</a> <i>string</i> <a href="#">transit-area</a> <i>reference</i> <a href="#">message-digest-key</a> <i>number</i> |
| Tree       | <a href="#">message-digest-key</a>  |
| Range      | 1 to 255  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **md5** *string*

|               |  |
|---------------|--|
| Synopsis      | MD5 hash key   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">virtual-link</a> <i>string</i> <a href="#">transit-area</a> <i>reference</i> <a href="#">message-digest-key</a> <i>number</i> <b>md5</b> <i>string</i> |
| Tree          | <a href="#">md5</a>  |
| String Length | 1 to 51  |
| Notes         | This element is mandatory.   |
| Introduced    | 16.0.R1  |



Platforms All

### **retransmit-interval** *number*

Synopsis Time before OSPF retransmits an unacknowledged LSA

Context **configure** [service vprn](#) *string* [ospf](#) *number* [area](#) *string* [virtual-link](#) *string* [transit-area](#) *reference* **retransmit-interval** *number*

Tree [retransmit-interval](#)

Range 1 to 1800

Units seconds

Default 5

Introduced 16.0.R1

Platforms All

### **transit-delay** *number*

Synopsis Required LSA transmit time

Context **configure** [service vprn](#) *string* [ospf](#) *number* [area](#) *string* [virtual-link](#) *string* [transit-area](#) *reference* **transit-delay** *number*

Tree [transit-delay](#)

Range 1 to 1800

Units seconds

Default 1

Introduced 16.0.R1

Platforms All

### **compatible-rfc1583** *boolean*

Synopsis OSPF summary and external route calculations

Context **configure** [service vprn](#) *string* [ospf](#) *number* **compatible-rfc1583** *boolean*

Tree [compatible-rfc1583](#)

Default true

Introduced 16.0.R1

Platforms All

**export-limit**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>export-limit</b> context                        |
| Context    | <b>configure service vprn string ospf number export-limit</b> |
| Tree       | <a href="#">export-limit</a>                                  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**log-percent number**

|            |  |
|------------|--|
| Synopsis   | Export limit before warning and SNMP notification sent                           |
| Context    | <b>configure service vprn string ospf number export-limit log-percent number</b> |
| Tree       | <a href="#">log-percent</a>  |
| Range      | 1 to 100   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**number number**

|            |   |
|------------|---|
| Synopsis   | Maximum routes or prefixes exported from route table                        |
| Context    | <b>configure service vprn string ospf number export-limit number number</b> |
| Tree       | <a href="#">number</a>  |
| Range      | 1 to 4294967295   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**export-policy reference**

|             |  |
|-------------|--|
| Synopsis    | Export policies that determine exported routes   |
| Context     | <b>configure service vprn string ospf number export-policy reference</b>   |
| Tree        | <a href="#">export-policy</a>  |
| Description | <p>This command configures export routing policies for the routes exported from the routing table to IS-IS.</p> <p>If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS.</p> |

If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.

If the **aggregate** command is also configured in the **configure router** context, the aggregation is applied before the export policy is applied.

Routing policies are created in the **configure router policy-options** context.

|                |  |
|----------------|--|
| Reference      | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> |
| Max. Instances | 5  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

### external-db-overflow

|            |   |
|------------|---|
| Synopsis   | Enable the <b>external-db-overflow</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">external-db-overflow</a> |
| Tree       | <a href="#">external-db-overflow</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### interval *number*

|            |  |
|------------|--|
| Synopsis   | Time during which the router operates in overload  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">external-db-overflow</a> <a href="#">interval</a> <i>number</i> |
| Tree       | <a href="#">interval</a>   |
| Range      | 0 to 2147483647  |
| Units      | seconds  |
| Default    | 0  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### limit *number*

|          |   |
|----------|---|
| Synopsis | Number of external LSA at which overload is triggered   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">external-db-overflow</a> <a href="#">limit</a> <i>number</i> |
| Tree     | <a href="#">limit</a>   |

---

|            |                 |
|------------|-----------------|
| Range      | 0 to 2147483647 |
| Default    | 0               |
| Introduced | 16.0.R1         |
| Platforms  | All             |

### **external-preference** *number*

|            |  |
|------------|--|
| Synopsis   | Preference for OSPF external routes  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">external-preference</a> <i>number</i> |
| Tree       | <a href="#">external-preference</a>  |
| Range      | 1 to 255   |
| Default    | 150  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **graceful-restart**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>graceful-restart</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">graceful-restart</a> |
| Tree       | <a href="#">graceful-restart</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **helper-mode** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable graceful restart helper for OSPF  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">graceful-restart</a> <a href="#">helper-mode</a> <i>boolean</i> |
| Tree       | <a href="#">helper-mode</a>  |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **strict-lsa-checking** *boolean*

|          |   |
|----------|---|
| Synopsis | Perform strict LSA checking during graceful restart |
|----------|---|

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string ospf number graceful-restart strict-lsa-checking boolean</i> |
| Tree       | <a href="#">strict-lsa-checking</a>  |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **ignore-dn-bit** *boolean*

|            |   |
|------------|---|
| Synopsis   | Ignore the DN bit for OSPF LSA packets for the instance                       |
| Context    | <b>configure service vprn</b> <i>string ospf number ignore-dn-bit boolean</i> |
| Tree       | <a href="#">ignore-dn-bit</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **import-policy** *reference*

|                |   |
|----------------|---|
| Synopsis       | Import policy names for routes from IGP to route table                          |
| Context        | <b>configure service vprn</b> <i>string ospf number import-policy reference</i> |
| Tree           | <a href="#">import-policy</a>   |
| Reference      | <b>configure policy-options policy-statement</b> <i>string</i>                  |
| Max. Instances | 5   |
| Notes          | This element is ordered by the user.  |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

### **loopfree-alternate**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>loopfree-alternate</b> context                               |
| Context    | <b>configure service vprn</b> <i>string ospf number loopfree-alternate</i> |
| Tree       | <a href="#">loopfree-alternate</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**exclude**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>exclude</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn string ospf number loopfree-alternate</a> <b>exclude</b> |
| Tree       | <a href="#">exclude</a>  |
| Introduced | 16.0.R3  |
| Platforms  | All  |

**prefix-policy** *reference*

|                |  |
|----------------|--|
| Synopsis       | Policy to exclude prefixes from LFA SPF calculation  |
| Context        | <b>configure</b> <a href="#">service vprn string ospf number loopfree-alternate</a> <b>exclude</b> <a href="#">prefix-policy reference</a>   |
| Tree           | <a href="#">prefix-policy</a>  |
| Description    | This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation.<br><br>An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF. |
| Reference      | <b>configure</b> <a href="#">policy-options policy-statement string</a>  |
| Max. Instances | 5  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R3  |
| Platforms      | All  |

**multicast-import** *boolean*

|            |   |
|------------|---|
| Synopsis   | Submit routes into the multicast Route Table Manager  |
| Context    | <b>configure</b> <a href="#">service vprn string ospf number</a> <b>multicast-import</b> <i>boolean</i> |
| Tree       | <a href="#">multicast-import</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**overload** *boolean*

|            |   |
|------------|---|
| Synopsis   | Change local router state to appear overloaded  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <b>overload</b> <i>boolean</i> |
| Tree       | <a href="#">overload</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**overload-include-ext-1** *boolean*

|            |   |
|------------|---|
| Synopsis   | Advertise routes with maximum metric value for overload   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <b>overload-include-ext-1</b> <i>boolean</i> |
| Tree       | <a href="#">overload-include-ext-1</a>  |
| Default    | false   |
| Introduced | 19.7.R1   |
| Platforms  | All   |

**overload-include-ext-2** *boolean*

|            |   |
|------------|---|
| Synopsis   | Advertise routes with maximum metric value for overload   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <b>overload-include-ext-2</b> <i>boolean</i> |
| Tree       | <a href="#">overload-include-ext-2</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**overload-include-stub** *boolean*

|            |  |
|------------|--|
| Synopsis   | Advertise all stub interfaces with max metric value  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <b>overload-include-stub</b> <i>boolean</i> |
| Tree       | <a href="#">overload-include-stub</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## overload-on-boot

|            |   |
|------------|---|
| Synopsis   | Enable the <b>overload-on-boot</b> context                        |
| Context    | <b>configure service vprn string ospf number overload-on-boot</b> |
| Tree       | <a href="#">overload-on-boot</a>                                  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## timeout *number*

|            |   |
|------------|---|
| Synopsis   | Time during which the router operates in overload state before reestablishing normal operations |
| Context    | <b>configure service vprn string ospf number overload-on-boot timeout number</b>                |
| Tree       | <a href="#">timeout</a>   |
| Range      | 60 to 1800  |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## preference *number*

|            |  |
|------------|--|
| Synopsis   | Preference for OSPF internal routes                                |
| Context    | <b>configure service vprn string ospf number preference number</b> |
| Tree       | <a href="#">preference</a>   |
| Range      | 1 to 255   |
| Default    | 10   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## reference-bandwidth *number*

|          |   |
|----------|---|
| Synopsis | Bandwidth to reference default costing of interfaces                        |
| Context  | <b>configure service vprn string ospf number reference-bandwidth number</b> |
| Tree     | <a href="#">reference-bandwidth</a>   |
| Range    | 1 to 18446744073709551615   |



|            |           |
|------------|-----------|
| Units      | kilobps   |
| Default    | 100000000 |
| Introduced | 16.0.R1   |
| Platforms  | All       |

## rib-priority

|            |  |
|------------|--|
| Synopsis   | Enter the <b>rib-priority</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <b>rib-priority</b> |
| Tree       | <a href="#">rib-priority</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## high

|            |   |
|------------|---|
| Synopsis   | Enter the <b>high</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">rib-priority</a> <b>high</b> |
| Tree       | <a href="#">high</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## prefix-list *reference*

|            |   |
|------------|---|
| Synopsis   | Higher priority list used during OSPF route calculation   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">rib-priority</a> <a href="#">high</a> <a href="#">prefix-list</a> <i>reference</i> |
| Tree       | <a href="#">prefix-list</a>   |
| Reference  | <b>configure</b> <a href="#">policy-options</a> <a href="#">prefix-list</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## router-id *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Unique router ID for the OSPF instance                                   |
| Context    | <b>configure service vprn</b> <i>string ospf number router-id string</i> |
| Tree       | <a href="#">router-id</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **rtr-adv-lsa-limit**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>rtr-adv-lsa-limit</b> context                               |
| Context    | <b>configure service vprn</b> <i>string ospf number rtr-adv-lsa-limit</i> |
| Tree       | <a href="#">rtr-adv-lsa-limit</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **log-only** *boolean*

|            |  |
|------------|--|
| Synopsis   | Log the event without triggering overload  |
| Context    | <b>configure service vprn</b> <i>string ospf number rtr-adv-lsa-limit log-only boolean</i> |
| Tree       | <a href="#">log-only</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **max-lsa-count** *number*

|            |  |
|------------|--|
| Synopsis   | Max number of LSAs one router can advertise  |
| Context    | <b>configure service vprn</b> <i>string ospf number rtr-adv-lsa-limit max-lsa-count number</i> |
| Tree       | <a href="#">max-lsa-count</a>  |
| Range      | 1 to 4294967295  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**overload-timeout** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Maximum time in overload after LSA limit is reached   |
| Context    | <b>configure service vprn</b> <i>string ospf number rtr-adv-lsa-limit overload-timeout</i> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">overload-timeout</a>  |
| Range      | 1 to 1800   |
| Units      | seconds   |
| Options    | forever   |
| Default    | forever   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**warning-threshold** *number*

|            |   |
|------------|---|
| Synopsis   | Percentage of the max LSA count that causes a warning   |
| Context    | <b>configure service vprn</b> <i>string ospf number rtr-adv-lsa-limit warning-threshold</i> <i>number</i> |
| Tree       | <a href="#">warning-threshold</a>   |
| Range      | 0 to 100  |
| Units      | percent   |
| Default    | 0   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**super-backbone** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable/disable super-backbone functionality.  |
| Context    | <b>configure service vprn</b> <i>string ospf number super-backbone</i> <i>boolean</i> |
| Tree       | <a href="#">super-backbone</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**suppress-dn-bit** *boolean*

|          |  |
|----------|--|
| Synopsis | Suppress the DN bit setting for OSPF LSA packets |
|----------|--|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string ospf number suppress-dn-bit boolean</i> |
| Tree       | <a href="#">suppress-dn-bit</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## timers

|            |  |
|------------|--|
| Synopsis   | Enter the <b>timers</b> context                                |
| Context    | <b>configure service vprn</b> <i>string ospf number timers</i> |
| Tree       | <a href="#">timers</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## incremental-spf-wait *number*

|            |  |
|------------|--|
| Synopsis   | Delay time before an incremental SPF calculation starts                                    |
| Context    | <b>configure service vprn</b> <i>string ospf number timers incremental-spf-wait number</i> |
| Tree       | <a href="#">incremental-spf-wait</a>   |
| Range      | 0 to 1000  |
| Units      | milliseconds   |
| Default    | 1000   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## lsa-accumulate *number*

|            |  |
|------------|--|
| Synopsis   | Delay to gather LSAs before advertising to neighbors                                 |
| Context    | <b>configure service vprn</b> <i>string ospf number timers lsa-accumulate number</i> |
| Tree       | <a href="#">lsa-accumulate</a>   |
| Range      | 0 to 1000  |
| Units      | milliseconds   |
| Default    | 1000   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **Isa-arrival** *number*

|            |  |
|------------|--|
| Synopsis   | Min delay between receipt of same LSAs from neighbors  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">timers</a> <b>Isa-arrival</b> <i>number</i> |
| Tree       | <a href="#">Isa-arrival</a>  |
| Range      | 0 to 600000  |
| Units      | milliseconds   |
| Default    | 1000   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **Isa-generate**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>Isa-generate</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">timers</a> <b>Isa-generate</b> |
| Tree       | <a href="#">Isa-generate</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **Isa-initial-wait** *number*

|            |  |
|------------|--|
| Synopsis   | First wait period between OSPF LSA generation  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">timers</a> <a href="#">Isa-generate</a> <b>Isa-initial-wait</b> <i>number</i> |
| Tree       | <a href="#">Isa-initial-wait</a>   |
| Range      | 10 to 600000   |
| Units      | milliseconds   |
| Default    | 5000   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **Isa-second-wait** *number*

|          |   |
|----------|---|
| Synopsis | Hold time between the first and second LSA generation   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">timers</a> <a href="#">Isa-generate</a> <b>Isa-second-wait</b> <i>number</i> |
| Tree     | <a href="#">Isa-second-wait</a>   |

|            |              |
|------------|--------------|
| Range      | 10 to 600000 |
| Units      | milliseconds |
| Default    | 5000         |
| Introduced | 16.0.R1      |
| Platforms  | All          |

### **max-lsa-wait** *number*

|            |  |
|------------|--|
| Synopsis   | Max time between two LSAs being generated  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">timers lsa-generate</a> <b>max-lsa-wait</b> <i>number</i> |
| Tree       | <a href="#">max-lsa-wait</a>   |
| Range      | 10 to 600000   |
| Units      | milliseconds   |
| Default    | 5000   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **redistribute-delay** *number*

|            |  |
|------------|--|
| Synopsis   | Hold down timer for external routes into OSPF  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">timers redistribute-delay</a> <i>number</i> |
| Tree       | <a href="#">redistribute-delay</a>   |
| Range      | 0 to 1000  |
| Units      | milliseconds   |
| Default    | 1000   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **spf-wait**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>spf-wait</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">timers spf-wait</a> |
| Tree       | <a href="#">spf-wait</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**spf-initial-wait** *number*

|            |  |
|------------|--|
| Synopsis   | Initial SPF calculation delay after a topology change  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf number</a> <a href="#">timers spf-wait</a> <a href="#">spf-initial-wait</a> <i>number</i> |
| Tree       | <a href="#">spf-initial-wait</a>   |
| Range      | 10 to 100000   |
| Units      | milliseconds   |
| Default    | 1000   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**spf-max-wait** *number*

|            |  |
|------------|--|
| Synopsis   | Max interval between two consecutive SPF calculations  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf number</a> <a href="#">timers spf-wait</a> <a href="#">spf-max-wait</a> <i>number</i> |
| Tree       | <a href="#">spf-max-wait</a>   |
| Range      | 10 to 120000   |
| Units      | milliseconds   |
| Default    | 10000  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**spf-second-wait** *number*

|            |   |
|------------|---|
| Synopsis   | Hold time between the first and second SPF calculation  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf number</a> <a href="#">timers spf-wait</a> <a href="#">spf-second-wait</a> <i>number</i> |
| Tree       | <a href="#">spf-second-wait</a>   |
| Range      | 10 to 100000  |
| Units      | milliseconds  |
| Default    | 1000  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**unicast-import** *boolean*

|            |  |
|------------|--|
| Synopsis   | Submit routes into the unicast Route Table Manager   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <b>unicast-import</b> <i>boolean</i> |
| Tree       | <a href="#">unicast-import</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**vpn-domain**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>vpn-domain</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <b>vpn-domain</b> |
| Tree       | <a href="#">vpn-domain</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**id** *string*

|               |   |
|---------------|---|
| Synopsis      | OSPF VPN domain ID  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <b>vpn-domain</b> <b>id</b> <i>string</i> |
| Tree          | <a href="#">id</a>  |
| Description   | This command specifies the OSPF VPN domain. This is exchanged using BGP in the Extended Community attribute associated with a prefix.                   |
| String Length | 14  |
| Default       | 0000.0000.0000  |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**type** *keyword*

|          |  |
|----------|--|
| Synopsis | VPN domain type  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <b>vpn-domain</b> <b>type</b> <i>keyword</i> |
| Tree     | <a href="#">type</a>   |
| Options  | 0005, 0105, 0205, 8005   |
| Notes    | This element is mandatory.   |



---

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **vpn-tag** *number*

|            |  |
|------------|--|
| Synopsis   | OSPF VPN tag   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">vpn-tag</a> <i>number</i> |
| Tree       | <a href="#">vpn-tag</a>  |
| Max. Range | 0 to 4294967295  |
| Default    | 0  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **ospf3** [[ospf-instance](#)] *number*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>ospf3</b> list instance  |
| Context        | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> |
| Tree           | <a href="#">ospf3</a>   |
| Max. Instances | 32  |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

### **[ospf-instance]** *number*

|            |   |
|------------|---|
| Synopsis   | Specifies the value of the integrated OSPF instance.  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> |
| Tree       | <a href="#">ospf3</a>   |
| Range      | 0 to 31   64 to 95  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the OSPF instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**advertise-router-capability** *keyword*

|            |  |
|------------|--|
| Synopsis   | Allow router advertisement capabilities  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">advertise-router-capability</a> <i>keyword</i> |
| Tree       | <a href="#">advertise-router-capability</a>  |
| Options    | false, link, area, as  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**area** [[area-id](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>area</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> |
| Tree       | <a href="#">area</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[area-id]** *string*

|            |  |
|------------|--|
| Synopsis   | Area-ID attribute  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> |
| Tree       | <a href="#">area</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**advertise-router-capability** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow router advertisement capabilities   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">advertise-router-capability</a> <i>boolean</i> |
| Tree       | <a href="#">advertise-router-capability</a>   |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**area-range** [[ip-prefix-mask](#)] (*ipv4-prefix* | *ipv6-prefix*)

|            |   |
|------------|---|
| Synopsis   | Enter the <b>area-range</b> list instance   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">area-range</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) |
| Tree       | <a href="#">area-range</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[ip-prefix-mask]** (*ipv4-prefix* | *ipv6-prefix*)

|            |   |
|------------|---|
| Synopsis   | Address ranges to create on an ABR for route summarization or suppression   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">area-range</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) |
| Tree       | <a href="#">area-range</a>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**advertise** *boolean*

|          |  |
|----------|--|
| Synopsis | Advertise summarized range of addresses to other areas   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">area-range</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">advertise</a> <i>boolean</i> |
| Tree     | <a href="#">advertise</a>  |
| Default  | true   |

Introduced 16.0.R1  
 Platforms All

### **blackhole-aggregate** *boolean*

Synopsis Install a low priority blackhole route to avoid loops  
 Context **configure** [service](#) [vprn](#) *string* [ospf3](#) *number* [area](#) *string* **blackhole-aggregate** *boolean*  
 Tree [blackhole-aggregate](#)  
 Default true  
 Introduced 16.0.R1  
 Platforms All

### **export-policy** *reference*

Synopsis Type 3 Summary-LSA/OSPFv3 inter-area-prefix-LSA route  
 Context **configure** [service](#) [vprn](#) *string* [ospf3](#) *number* [area](#) *string* **export-policy** *reference*  
 Tree [export-policy](#)  
 Reference **configure** [policy-options](#) [policy-statement](#) *string*  
 Max. Instances 5  
 Notes This element is ordered by the user.  
 Introduced 16.0.R1  
 Platforms All

### **import-policy** *reference*

Synopsis Route imported as Summary Type 3/Inter-Area-Prefix-LSA  
 Context **configure** [service](#) [vprn](#) *string* [ospf3](#) *number* [area](#) *string* **import-policy** *reference*  
 Tree [import-policy](#)  
 Reference **configure** [policy-options](#) [policy-statement](#) *string*  
 Max. Instances 5  
 Notes This element is ordered by the user.  
 Introduced 16.0.R1  
 Platforms All

**interface** [[interface-name](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>interface</b> list instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> |
| Tree       | <a href="#">interface</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[interface-name]** *string*

|               |  |
|---------------|--|
| Synopsis      | IP interface name  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> |
| Tree          | <a href="#">interface</a>  |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the OSPF interface  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**advertise-router-capability** *boolean*

|          |   |
|----------|---|
| Synopsis | Allow router advertisement capabilities   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">advertise-router-capability</a> <i>boolean</i> |
| Tree     | <a href="#">advertise-router-capability</a>   |
| Default  | true  |

Introduced 16.0.R1  
Platforms All

## authentication

Synopsis Enable the **authentication** context  
Context **configure** [service vprn string ospf3 number area string interface string authentication](#)  
Tree [authentication](#)  
Introduced 16.0.R6  
Platforms All

## inbound reference

Synopsis sa-name  
Context **configure** [service vprn string ospf3 number area string interface string authentication inbound reference](#)  
Tree [inbound](#)  
Reference **configure** [ipsec static-sa string](#)  
Notes This element is mandatory.  
Introduced 16.0.R6  
Platforms All

## outbound reference

Synopsis sa-name  
Context **configure** [service vprn string ospf3 number area string interface string authentication outbound reference](#)  
Tree [outbound](#)  
Reference **configure** [ipsec static-sa string](#)  
Notes This element is mandatory.  
Introduced 16.0.R6  
Platforms All

**bfd-liveness**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>bfd-liveness</b> context  |
| Context    | <b>configure service vprn</b> <i>string ospf3 number area string interface string</i> <b>bfd-liveness</b> |
| Tree       | <b>bfd-liveness</b>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**remain-down-on-failure** *boolean*

|            |   |
|------------|---|
| Synopsis   | Force adjacency down on failure until session returns   |
| Context    | <b>configure service vprn</b> <i>string ospf3 number area string interface string</i> <b>bfd-liveness</b><br><b>remain-down-on-failure</b> <i>boolean</i> |
| Tree       | <b>remain-down-on-failure</b>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**dead-interval** *number*

|            |   |
|------------|---|
| Synopsis   | OSPF wait time for Hellos before neighbor declared down   |
| Context    | <b>configure service vprn</b> <i>string ospf3 number area string interface string</i> <b>dead-interval</b><br><i>number</i> |
| Tree       | <b>dead-interval</b>  |
| Range      | 2 to 65535  |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**hello-interval** *number*

|          |  |
|----------|--|
| Synopsis | Time between OSPF Hellos of this interface   |
| Context  | <b>configure service vprn</b> <i>string ospf3 number area string interface string</i> <b>hello-interval</b><br><i>number</i> |
| Tree     | <b>hello-interval</b>  |
| Range    | 1 to 65535   |
| Units    | seconds  |

|            |         |
|------------|---------|
| Default    | 10      |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **interface-type** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Interface type   |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>interface-type</b> <i>keyword</i>   |
| Tree        | <b>interface-type</b>  |
| Description | <p>This command specifies the interface type.</p> <p><b>broadcast</b> - Broadcast network</p> <p>To significantly improve adjacency forming and network convergence, configure a network as point-to-point if only two routers are connected, even if the network is a broadcast media such as Ethernet.</p> <p><b>non-broadcast</b> - Non-broadcast network</p> <p><b>point-to-point</b> - Point-to-point link</p> <p>Set the interface type of an Ethernet link to <b>point-to-point</b> to avoid having to carry the broadcast adjacency maintenance overhead if the Ethernet link provided is used as a point-to-point. Set the interface type of an Ethernet link to <b>point-to-point</b> to avoid having to carry the broadcast adjacency maintenance overhead if the Ethernet link provided is used as a point-to-point.</p> <p><b>secondary</b> - Multiple secondary adjacencies allowed</p> <p>A <b>secondary</b> interface allows multiple secondary adjacencies, in addition to the primary adjacency, to be established over a single IP interface. This interface type can also be applied to the system interface and to loopback interfaces to allow them to participate in multiple areas, although no adjacencies are formed over these types of interfaces.</p> |
| Options     | broadcast, non-broadcast, point-to-point, secondary  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **load-balancing-weight** *number*

|          |                                  |
|----------|----------------------------------|
| Synopsis | Configure load-balancing-weight. |
|----------|----------------------------------|



|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string ospf3 number area string interface string load-balancing-weight number</i> |
| Tree       | <a href="#">load-balancing-weight</a>  |
| Range      | 1 to 4294967295  |
| Introduced | 20.2.R1  |
| Platforms  | All  |

## loopfree-alternate

|            |  |
|------------|--|
| Synopsis   | Enter the <b>loopfree-alternate</b> context  |
| Context    | <b>configure service vprn</b> <i>string ospf3 number area string interface string loopfree-alternate</i> |
| Tree       | <a href="#">loopfree-alternate</a>   |
| Introduced | 16.0.R3  |
| Platforms  | All  |

## exclude *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable fast reroute at OSPF primary interface level  |
| Context    | <b>configure service vprn</b> <i>string ospf3 number area string interface string loopfree-alternate exclude boolean</i> |
| Tree       | <a href="#">exclude</a>  |
| Default    | false  |
| Introduced | 16.0.R3  |
| Platforms  | All  |

## policy-map

|            |   |
|------------|---|
| Synopsis   | Enable the <b>policy-map</b> context  |
| Context    | <b>configure service vprn</b> <i>string ospf3 number area string interface string loopfree-alternate policy-map</i> |
| Tree       | <a href="#">policy-map</a>  |
| Introduced | 16.0.R3   |
| Platforms  | All   |

**route-nh-template** *reference*

|            |   |
|------------|---|
| Synopsis   | Route next hop policy template name   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">loopfree-alternate</a> <a href="#">policy-map</a> <a href="#">route-nh-template</a> <i>reference</i> |
| Tree       | <a href="#">route-nh-template</a>   |
| Reference  | <b>configure</b> <a href="#">routing-options</a> <a href="#">route-next-hop-policy</a> <a href="#">template</a> <i>string</i>   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R3   |
| Platforms  | All   |

**lsa-filter-out** *keyword*

|            |  |
|------------|--|
| Synopsis   | LSA flooding reduction   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">lsa-filter-out</a> <i>keyword</i> |
| Tree       | <a href="#">lsa-filter-out</a>   |
| Options    | none, all, except-own-rtrlsa, except-own-rtrlsa-and-defaults   |
| Default    | none   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**metric** *number*

|            |   |
|------------|---|
| Synopsis   | Route cost metric for the interface   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">metric</a> <i>number</i> |
| Tree       | <a href="#">metric</a>  |
| Range      | 1 to 65535  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**mtu** *number*

|          |  |
|----------|--|
| Synopsis | MTU for the OSPF to use on the interface   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">mtu</a> <i>number</i> |
| Tree     | <a href="#">mtu</a>  |

|            |             |
|------------|-------------|
| Range      | 512 to 9786 |
| Introduced | 16.0.R1     |
| Platforms  | All         |

### **neighbor** [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

|            |  |
|------------|--|
| Synopsis   | Add a list entry for <b>neighbor</b>   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>neighbor</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <a href="#">neighbor</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **[address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

|            |  |
|------------|--|
| Synopsis   | IPv6 link local address of the OSPFv3 neighbor   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>neighbor</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <a href="#">neighbor</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **passive** *boolean*

|            |  |
|------------|--|
| Synopsis   | Advertise passive interfaces as OSPF interfaces  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>passive</b> <i>boolean</i> |
| Tree       | <a href="#">passive</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **poll-interval** *number*

|          |   |
|----------|---|
| Synopsis | Interval for Hellos to non-adjacent OSPF NBMA neighbor  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>poll-interval</b> <i>number</i> |

|            |                               |
|------------|-------------------------------|
| Tree       | <a href="#">poll-interval</a> |
| Max. Range | 0 to 4294967295               |
| Units      | seconds                       |
| Default    | 120                           |
| Introduced | 16.0.R1                       |
| Platforms  | All                           |

### **priority** *number*

|            |  |
|------------|--|
| Synopsis   | Interface priority in the DR election on the subnet  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>priority</b> <i>number</i> |
| Tree       | <a href="#">priority</a>   |
| Range      | 0 to 255   |
| Default    | 1  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **retransmit-interval** *number*

|            |   |
|------------|---|
| Synopsis   | Time before OSPF retransmits an unacknowledged LSA  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>retransmit-interval</b> <i>number</i> |
| Tree       | <a href="#">retransmit-interval</a>   |
| Range      | 1 to 1800   |
| Units      | seconds   |
| Default    | 5   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **rib-priority** *keyword*

|          |   |
|----------|---|
| Synopsis | RIB priority for OSPF   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>rib-priority</b> <i>keyword</i> |
| Tree     | <a href="#">rib-priority</a>  |
| Options  | high  |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **transit-delay** *number*

|            |   |
|------------|---|
| Synopsis   | Required LSA transmit time  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>transit-delay</b> <i>number</i> |
| Tree       | <a href="#">transit-delay</a>   |
| Range      | 1 to 1800   |
| Units      | seconds   |
| Default    | 1   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **key-rollover-interval** *number*

|            |   |
|------------|---|
| Synopsis   | Key rollover interval   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <b>key-rollover-interval</b> <i>number</i> |
| Tree       | <a href="#">key-rollover-interval</a>   |
| Range      | 10 to 300   |
| Units      | seconds   |
| Default    | 10  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **loopfree-alternate-exclude** *boolean*

|            |   |
|------------|---|
| Synopsis   | Exclude interfaces in OSPF areas in SPF LFA computation   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <b>loopfree-alternate-exclude</b> <i>boolean</i> |
| Tree       | <a href="#">loopfree-alternate-exclude</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**nssa**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>nssa</b> context                                     |
| Context    | <b>configure service vprn string ospf3 number area string nssa</b> |
| Tree       | <b>nssa</b>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**area-range [ip-prefix-mask] (ipv4-prefix | ipv6-prefix)**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>area-range</b> list instance   |
| Context    | <b>configure service vprn string ospf3 number area string nssa area-range (ipv4-prefix   ipv6-prefix)</b> |
| Tree       | <b>area-range</b>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[ip-prefix-mask] (ipv4-prefix | ipv6-prefix)**

|            |   |
|------------|---|
| Synopsis   | Address ranges to create on an ABR for route summarization or suppression                                 |
| Context    | <b>configure service vprn string ospf3 number area string nssa area-range (ipv4-prefix   ipv6-prefix)</b> |
| Tree       | <b>area-range</b>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**advertise boolean**

|            |   |
|------------|---|
| Synopsis   | Advertise summarized range of addresses to other areas  |
| Context    | <b>configure service vprn string ospf3 number area string nssa area-range (ipv4-prefix   ipv6-prefix) advertise boolean</b> |
| Tree       | <b>advertise</b>  |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## originate-default-route

|            |  |
|------------|--|
| Synopsis   | Enable the <b>originate-default-route</b> context  |
| Context    | <b>configure service vprn string ospf3 number area string nssa originate-default-route</b> |
| Tree       | <a href="#">originate-default-route</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## adjacency-check *boolean*

|            |  |
|------------|--|
| Synopsis   | Perform adjacency checks before originating a default route  |
| Context    | <b>configure service vprn string ospf3 number area string nssa originate-default-route adjacency-check boolean</b> |
| Tree       | <a href="#">adjacency-check</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## type-nssa *boolean*

|            |  |
|------------|--|
| Synopsis   | Generate a default route using NSSA-LSA type   |
| Context    | <b>configure service vprn string ospf3 number area string nssa originate-default-route type-nssa boolean</b> |
| Tree       | <a href="#">type-nssa</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## redistribute-external *boolean*

|            |  |
|------------|--|
| Synopsis   | Redistribute external routes into the NSSA   |
| Context    | <b>configure service vprn string ospf3 number area string nssa redistribute-external boolean</b> |
| Tree       | <a href="#">redistribute-external</a>  |
| Default    | true   |
| Introduced | 16.0.R1  |

Platforms All

### **summaries** *boolean*

Synopsis Send summary (Type 3) LSAs into the NSSA on an ABR  
 Context **configure service vprn** *string ospf3 number area string nssa summaries boolean*  
 Tree [summaries](#)  
 Default true  
 Introduced 16.0.R1  
 Platforms All

### **stub**

Synopsis Enable the **stub** context  
 Context **configure service vprn** *string ospf3 number area string stub*  
 Tree [stub](#)  
 Introduced 16.0.R1  
 Platforms All

### **default-metric** *number*

Synopsis Metric used by ABR for default route into the stub area  
 Context **configure service vprn** *string ospf3 number area string stub default-metric number*  
 Tree [default-metric](#)  
 Range 1 to 16777214  
 Default 1  
 Introduced 16.0.R1  
 Platforms All

### **summaries** *boolean*

Synopsis Send summary (Type 3) LSAs into the stub area on an ABR  
 Context **configure service vprn** *string ospf3 number area string stub summaries boolean*  
 Tree [summaries](#)  
 Default true



Introduced 16.0.R1  
 Platforms All

### **virtual-link** [**router-id**] *string transit-area reference*

Synopsis Enter the **virtual-link** list instance  
 Context **configure service vprn string ospf3 number area string virtual-link string transit-area reference**  
 Tree **virtual-link**  
 Introduced 16.0.R1  
 Platforms All

### **[router-id]** *string*

Synopsis Router identity of the virtual link neighbor  
 Context **configure service vprn string ospf3 number area string virtual-link string transit-area reference**  
 Tree **virtual-link**  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **transit-area** *reference*

Synopsis Transit area that links backbone area to area without physical connection with the backbone  
 Context **configure service vprn string ospf3 number area string virtual-link string transit-area reference**  
 Tree **virtual-link**  
 Reference **configure service vprn string ospf3 number area string**  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the OSPF interface   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string ospf3 number area string virtual-link string transit-area reference</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**authentication**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>authentication</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string ospf3 number area string virtual-link string transit-area reference</i> <a href="#">authentication</a> |
| Tree       | <a href="#">authentication</a>   |
| Introduced | 16.0.R6  |
| Platforms  | All  |

**inbound** *reference*

|            |   |
|------------|---|
| Synopsis   | sa-name   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string ospf3 number area string virtual-link string transit-area reference</i> <a href="#">authentication inbound</a> <i>reference</i> |
| Tree       | <a href="#">inbound</a>   |
| Reference  | <b>configure</b> <a href="#">ipsec static-sa</a> <i>string</i>  |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R6   |
| Platforms  | All   |

**outbound** *reference*

|          |  |
|----------|--|
| Synopsis | sa-name  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string ospf3 number area string virtual-link string transit-area reference</i> <a href="#">authentication outbound</a> <i>reference</i> |
| Tree     | <a href="#">outbound</a>   |

|            |  |
|------------|--|
| Reference  | <b>configure ipsec static-sa</b> <i>string</i> |
| Notes      | This element is mandatory.                     |
| Introduced | 16.0.R6  |
| Platforms  | All  |

### **dead-interval** *number*

|            |  |
|------------|--|
| Synopsis   | OSPF wait time for Hellos before neighbor declared down  |
| Context    | <b>configure service vprn</b> <i>string ospf3 number area string virtual-link string transit-area reference dead-interval number</i> |
| Tree       | <a href="#">dead-interval</a>  |
| Range      | 2 to 65535   |
| Units      | seconds  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **hello-interval** *number*

|            |   |
|------------|---|
| Synopsis   | Time between OSPF Hellos of this interface  |
| Context    | <b>configure service vprn</b> <i>string ospf3 number area string virtual-link string transit-area reference hello-interval number</i> |
| Tree       | <a href="#">hello-interval</a>  |
| Range      | 1 to 65535  |
| Units      | seconds   |
| Default    | 10  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **retransmit-interval** *number*

|          |  |
|----------|--|
| Synopsis | Time before OSPF retransmits an unacknowledged LSA   |
| Context  | <b>configure service vprn</b> <i>string ospf3 number area string virtual-link string transit-area reference retransmit-interval number</i> |
| Tree     | <a href="#">retransmit-interval</a>  |
| Range    | 1 to 1800  |
| Units    | seconds  |

|            |         |
|------------|---------|
| Default    | 5       |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **transit-delay** *number*

|            |  |
|------------|--|
| Synopsis   | Required LSA transmit time   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">virtual-link</a> <i>string</i> <a href="#">transit-area</a> <i>reference</i> <b>transit-delay</b> <i>number</i> |
| Tree       | <a href="#">transit-delay</a>  |
| Range      | 1 to 1800  |
| Units      | seconds  |
| Default    | 1  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **export-limit**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>export-limit</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <b>export-limit</b> |
| Tree       | <a href="#">export-limit</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **log-percent** *number*

|            |   |
|------------|---|
| Synopsis   | Export limit before warning and SNMP notification sent  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">export-limit</a> <b>log-percent</b> <i>number</i> |
| Tree       | <a href="#">log-percent</a>   |
| Range      | 1 to 100  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **number** *number*

|          |  |
|----------|--|
| Synopsis | Maximum routes or prefixes exported from route table |
|----------|--|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string ospf3 number export-limit number number</i> |
| Tree       | <a href="#">number</a>  |
| Range      | 1 to 4294967295   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **export-policy** *reference*

|                |  |
|----------------|--|
| Synopsis       | Export policies that determine exported routes   |
| Context        | <b>configure service vprn</b> <i>string ospf3 number export-policy reference</i>   |
| Tree           | <a href="#">export-policy</a>  |
| Description    | <p>This command configures export routing policies for the routes exported from the routing table to IS-IS.</p> <p>If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p> <p>If the <b>aggregate</b> command is also configured in the <b>configure router</b> context, the aggregation is applied before the export policy is applied.</p> <p>Routing policies are created in the <b>configure router policy-options</b> context.</p> |
| Reference      | <b>configure</b> <a href="#">policy-options policy-statement</a> <i>string</i>   |
| Max. Instances | 5  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

### **external-db-overflow**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>external-db-overflow</b> context                                |
| Context    | <b>configure service vprn</b> <i>string ospf3 number external-db-overflow</i> |
| Tree       | <a href="#">external-db-overflow</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **interval** *number*

|            |   |
|------------|---|
| Synopsis   | Time during which the router operates in overload   |
| Context    | <b>configure service vprn</b> <i>string ospf3 number external-db-overflow interval number</i> |
| Tree       | <a href="#">interval</a>  |
| Range      | 0 to 2147483647   |
| Units      | seconds   |
| Default    | 0   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **limit** *number*

|            |  |
|------------|--|
| Synopsis   | Number of external LSA at which overload is triggered                                      |
| Context    | <b>configure service vprn</b> <i>string ospf3 number external-db-overflow limit number</i> |
| Tree       | <a href="#">limit</a>  |
| Range      | 0 to 2147483647  |
| Default    | 0  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **external-preference** *number*

|            |   |
|------------|---|
| Synopsis   | Preference for OSPF external routes   |
| Context    | <b>configure service vprn</b> <i>string ospf3 number external-preference number</i> |
| Tree       | <a href="#">external-preference</a>   |
| Range      | 1 to 255  |
| Default    | 150   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **graceful-restart**

|          |   |
|----------|---|
| Synopsis | Enable the <b>graceful-restart</b> context                                |
| Context  | <b>configure service vprn</b> <i>string ospf3 number graceful-restart</i> |

---

|            |                                  |
|------------|----------------------------------|
| Tree       | <a href="#">graceful-restart</a> |
| Introduced | 16.0.R1                          |
| Platforms  | All                              |

### **helper-mode** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable graceful restart helper for OSPF   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string ospf3 number graceful-restart helper-mode boolean</i> |
| Tree       | <a href="#">helper-mode</a>   |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **strict-lsa-checking** *boolean*

|            |   |
|------------|---|
| Synopsis   | Perform strict LSA checking during graceful restart   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string ospf3 number graceful-restart strict-lsa-checking boolean</i> |
| Tree       | <a href="#">strict-lsa-checking</a>   |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **ignore-dn-bit** *boolean*

|            |  |
|------------|--|
| Synopsis   | Ignore the DN bit for OSPF LSA packets for the instance  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string ospf3 number ignore-dn-bit boolean</i> |
| Tree       | <a href="#">ignore-dn-bit</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **import-policy** *reference*

|          |  |
|----------|--|
| Synopsis | Import policy names for routes from IGP to route table   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string ospf3 number import-policy reference</i> |

|                |  |
|----------------|--|
| Tree           | <a href="#">import-policy</a>  |
| Reference      | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> |
| Max. Instances | 5  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

## loopfree-alternate

|            |   |
|------------|---|
| Synopsis   | Enable the <b>loopfree-alternate</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">loopfree-alternate</a> |
| Tree       | <a href="#">loopfree-alternate</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## exclude

|            |   |
|------------|---|
| Synopsis   | Enter the <b>exclude</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">loopfree-alternate</a> <a href="#">exclude</a> |
| Tree       | <a href="#">exclude</a>   |
| Introduced | 16.0.R3   |
| Platforms  | All   |

## prefix-policy *reference*

|             |  |
|-------------|--|
| Synopsis    | Policy to exclude prefixes from LFA SPF calculation  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">loopfree-alternate</a> <a href="#">exclude</a> <a href="#">prefix-policy</a> <i>reference</i>                           |
| Tree        | <a href="#">prefix-policy</a>  |
| Description | This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation.<br><br>An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF. |
| Reference   | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>   |



---

|                |                                      |
|----------------|--------------------------------------|
| Max. Instances | 5                                    |
| Notes          | This element is ordered by the user. |
| Introduced     | 16.0.R3                              |
| Platforms      | All                                  |

### **multicast-import** *boolean*

|            |   |
|------------|---|
| Synopsis   | Submit routes into the multicast Route Table Manager                              |
| Context    | <b>configure</b> <i>service vprn string ospf3 number multicast-import boolean</i> |
| Tree       | <a href="#">multicast-import</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **overload** *boolean*

|            |   |
|------------|---|
| Synopsis   | Change local router state to appear overloaded                            |
| Context    | <b>configure</b> <i>service vprn string ospf3 number overload boolean</i> |
| Tree       | <a href="#">overload</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **overload-include-ext-1** *boolean*

|            |   |
|------------|---|
| Synopsis   | Advertise routes with maximum metric value for overload                                 |
| Context    | <b>configure</b> <i>service vprn string ospf3 number overload-include-ext-1 boolean</i> |
| Tree       | <a href="#">overload-include-ext-1</a>  |
| Default    | false   |
| Introduced | 19.7.R1   |
| Platforms  | All   |

**overload-include-ext-2** *boolean*

|            |  |
|------------|--|
| Synopsis   | Advertise routes with maximum metric value for overload  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string ospf3 number</i> <a href="#">overload-include-ext-2</a> <i>boolean</i> |
| Tree       | <a href="#">overload-include-ext-2</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**overload-include-stub** *boolean*

|            |   |
|------------|---|
| Synopsis   | Advertise all stub interfaces with max metric value   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string ospf3 number</i> <a href="#">overload-include-stub</a> <i>boolean</i> |
| Tree       | <a href="#">overload-include-stub</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**overload-on-boot**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>overload-on-boot</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string ospf3 number</i> <a href="#">overload-on-boot</a> |
| Tree       | <a href="#">overload-on-boot</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**timeout** *number*

|            |   |
|------------|---|
| Synopsis   | Time during which the router operates in overload state before reestablishing normal operations   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string ospf3 number</i> <a href="#">overload-on-boot</a> <a href="#">timeout</a> <i>number</i> |
| Tree       | <a href="#">timeout</a>   |
| Range      | 60 to 1800  |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**preference number**

|            |   |
|------------|---|
| Synopsis   | Preference for OSPF internal routes                                 |
| Context    | <b>configure service vprn string ospf3 number preference number</b> |
| Tree       | <a href="#">preference</a>  |
| Range      | 1 to 255  |
| Default    | 10  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**reference-bandwidth number**

|            |  |
|------------|--|
| Synopsis   | Bandwidth to reference default costing of interfaces                         |
| Context    | <b>configure service vprn string ospf3 number reference-bandwidth number</b> |
| Tree       | <a href="#">reference-bandwidth</a>  |
| Range      | 1 to 18446744073709551615  |
| Units      | kilobps  |
| Default    | 100000000  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**rib-priority**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>rib-priority</b> context                          |
| Context    | <b>configure service vprn string ospf3 number rib-priority</b> |
| Tree       | <a href="#">rib-priority</a>                                   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**high**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>high</b> context                                       |
| Context    | <b>configure service vprn string ospf3 number rib-priority high</b> |
| Tree       | <a href="#">high</a>  |
| Introduced | 16.0.R1   |

Platforms All

### **prefix-list** *reference*

Synopsis Higher priority list used during OSPF route calculation  
 Context **configure** [service vprn](#) *string* [ospf3](#) *number* [rib-priority high](#) [prefix-list reference](#)  
 Tree [prefix-list](#)  
 Reference **configure** [policy-options prefix-list](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### **router-id** *string*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Unique router ID for the OSPF instance  
 Context **configure** [service vprn](#) *string* [ospf3](#) *number* [router-id](#) *string*  
 Tree [router-id](#)  
 Introduced 16.0.R1  
 Platforms All

### **rtr-adv-lsa-limit**

Synopsis Enable the **rtr-adv-lsa-limit** context  
 Context **configure** [service vprn](#) *string* [ospf3](#) *number* [rtr-adv-lsa-limit](#)  
 Tree [rtr-adv-lsa-limit](#)  
 Introduced 16.0.R1  
 Platforms All

### **log-only** *boolean*

Synopsis Log the event without triggering overload  
 Context **configure** [service vprn](#) *string* [ospf3](#) *number* [rtr-adv-lsa-limit](#) [log-only](#) *boolean*  
 Tree [log-only](#)

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

**max-lsa-count** *number*

|            |  |
|------------|--|
| Synopsis   | Max number of LSAs one router can advertise  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">rtr-adv-lsa-limit</a> <b>max-lsa-count</b> <i>number</i> |
| Tree       | <a href="#">max-lsa-count</a>  |
| Range      | 1 to 4294967295  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**overload-timeout** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Maximum time in overload after LSA limit is reached  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">rtr-adv-lsa-limit</a> <b>overload-timeout</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">overload-timeout</a>   |
| Range      | 1 to 1800  |
| Units      | seconds  |
| Options    | forever  |
| Default    | forever  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**warning-threshold** *number*

|          |  |
|----------|--|
| Synopsis | Percentage of the max LSA count that causes a warning  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">rtr-adv-lsa-limit</a> <b>warning-threshold</b> <i>number</i> |
| Tree     | <a href="#">warning-threshold</a>  |
| Range    | 0 to 100   |
| Units    | percent  |
| Default  | 0  |

Introduced 16.0.R1  
 Platforms All

### **suppress-dn-bit** *boolean*

Synopsis Suppress the DN bit setting for OSPF LSA packets  
 Context **configure** [service vprn](#) *string* [ospf3](#) *number* **suppress-dn-bit** *boolean*  
 Tree [suppress-dn-bit](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **timers**

Synopsis Enter the **timers** context  
 Context **configure** [service vprn](#) *string* [ospf3](#) *number* **timers**  
 Tree [timers](#)  
 Introduced 16.0.R1  
 Platforms All

### **incremental-spf-wait** *number*

Synopsis Delay time before an incremental SPF calculation starts  
 Context **configure** [service vprn](#) *string* [ospf3](#) *number* [timers](#) **incremental-spf-wait** *number*  
 Tree [incremental-spf-wait](#)  
 Range 0 to 1000  
 Units milliseconds  
 Default 1000  
 Introduced 16.0.R1  
 Platforms All

### **lsa-accumulate** *number*

Synopsis Delay to gather LSAs before advertising to neighbors  
 Context **configure** [service vprn](#) *string* [ospf3](#) *number* [timers](#) **lsa-accumulate** *number*

|            |                                |
|------------|--------------------------------|
| Tree       | <a href="#">lsa-accumulate</a> |
| Range      | 0 to 1000                      |
| Units      | milliseconds                   |
| Default    | 1000                           |
| Introduced | 16.0.R1                        |
| Platforms  | All                            |

### **lsa-arrival** *number*

|            |  |
|------------|--|
| Synopsis   | Min delay between receipt of same LSAs from neighbors  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">timers</a> <a href="#">lsa-arrival</a> <i>number</i> |
| Tree       | <a href="#">lsa-arrival</a>  |
| Range      | 0 to 600000  |
| Units      | milliseconds   |
| Default    | 1000   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **lsa-generate**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>lsa-generate</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">timers</a> <a href="#">lsa-generate</a> |
| Tree       | <a href="#">lsa-generate</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **lsa-initial-wait** *number*

|            |  |
|------------|--|
| Synopsis   | First wait period between OSPF LSA generation  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">timers</a> <a href="#">lsa-generate</a> <a href="#">lsa-initial-wait</a> <i>number</i> |
| Tree       | <a href="#">lsa-initial-wait</a>   |
| Range      | 10 to 600000   |
| Units      | milliseconds   |
| Default    | 5000   |
| Introduced | 16.0.R1  |

Platforms All

### **lsa-second-wait** *number*

Synopsis Hold time between the first and second LSA generation

Context **configure** [service vprn](#) *string* [ospf3](#) *number* [timers lsa-generate lsa-second-wait](#) *number*

Tree [lsa-second-wait](#)

Range 10 to 600000

Units milliseconds

Default 5000

Introduced 16.0.R1

Platforms All

### **max-lsa-wait** *number*

Synopsis Max time between two LSAs being generated

Context **configure** [service vprn](#) *string* [ospf3](#) *number* [timers lsa-generate max-lsa-wait](#) *number*

Tree [max-lsa-wait](#)

Range 10 to 600000

Units milliseconds

Default 5000

Introduced 16.0.R1

Platforms All

### **redistribute-delay** *number*

Synopsis Hold down timer for external routes into OSPF

Context **configure** [service vprn](#) *string* [ospf3](#) *number* [timers redistribute-delay](#) *number*

Tree [redistribute-delay](#)

Range 0 to 1000

Units milliseconds

Default 1000

Introduced 16.0.R1

Platforms All



## spf-wait

|            |  |
|------------|--|
| Synopsis   | Enter the <b>spf-wait</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">timers</a> <b>spf-wait</b> |
| Tree       | <a href="#">spf-wait</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## spf-initial-wait *number*

|            |   |
|------------|---|
| Synopsis   | Initial SPF calculation delay after a topology change   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">timers</a> <a href="#">spf-wait</a> <b>spf-initial-wait</b> <i>number</i> |
| Tree       | <a href="#">spf-initial-wait</a>  |
| Range      | 10 to 100000  |
| Units      | milliseconds  |
| Default    | 1000  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## spf-max-wait *number*

|            |   |
|------------|---|
| Synopsis   | Max interval between two consecutive SPF calculations   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">timers</a> <a href="#">spf-wait</a> <b>spf-max-wait</b> <i>number</i> |
| Tree       | <a href="#">spf-max-wait</a>  |
| Range      | 10 to 120000  |
| Units      | milliseconds  |
| Default    | 10000   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## spf-second-wait *number*

|          |  |
|----------|--|
| Synopsis | Hold time between the first and second SPF calculation   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">timers</a> <a href="#">spf-wait</a> <b>spf-second-wait</b> <i>number</i> |
| Tree     | <a href="#">spf-second-wait</a>  |

|            |              |
|------------|--------------|
| Range      | 10 to 100000 |
| Units      | milliseconds |
| Default    | 1000         |
| Introduced | 16.0.R1      |
| Platforms  | All          |

### **unicast-import** *boolean*

|            |  |
|------------|--|
| Synopsis   | Submit routes into the unicast Route Table Manager   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <b>unicast-import</b> <i>boolean</i> |
| Tree       | <a href="#">unicast-import</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **pcp**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>pcp</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <b>pcp</b> |
| Tree       | <a href="#">pcp</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                           |

### **server** [*name*] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>server</b> list instance   |
| Context        | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pcp</a> <b>server</b> <i>string</i> |
| Tree           | <a href="#">server</a>  |
| Max. Instances | 8   |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **[name]** *string*

|          |                 |
|----------|-----------------|
| Synopsis | PCP server name |
|----------|-----------------|

---

|               |  |
|---------------|--|
| Context       | <b>configure service vprn string pcp server string</b> |
| Tree          | <b>server</b>  |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.                    |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR           |

### **admin-state keyword**

|            |  |
|------------|--|
| Synopsis   | Administrative state of the PCP server                                     |
| Context    | <b>configure service vprn string pcp server string admin-state keyword</b> |
| Tree       | <b>admin-state</b>   |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                               |

### **description string**

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure service vprn string pcp server string description string</b> |
| Tree          | <b>description</b>  |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                              |

### **dual-stack-lite-address string**

|            |   |
|------------|---|
| Synopsis   | Inside Dual Stack Lite AFTR address   |
| Context    | <b>configure service vprn string pcp server string dual-stack-lite-address string</b> |
| Tree       | <b>dual-stack-lite-address</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**fwd-inside-router** *string*

|            |   |
|------------|---|
| Synopsis   | PCP forwarding inside virtual router instance   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pcp server</a> <i>string</i> <b>fwd-inside-router</b> <i>string</i> |
| Tree       | <a href="#">fwd-inside-router</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**interface** [[name](#)] *reference*

|                |  |
|----------------|--|
| Synopsis       | Add a list entry for <b>interface</b>  |
| Context        | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pcp server</a> <i>string</i> <b>interface</b> <i>reference</i> |
| Tree           | <a href="#">interface</a>  |
| Max. Instances | 32   |
| Introduced     | 16.0.R4  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**[name]** *reference*

|            |  |
|------------|--|
| Synopsis   | Interface name   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pcp server</a> <i>string</i> <b>interface</b> <i>reference</i> |
| Tree       | <a href="#">interface</a>  |
| Reference  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <b>interface</b> <i>string</i>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**policy** *reference*

|            |   |
|------------|---|
| Synopsis   | PCP server policy   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pcp server</a> <i>string</i> <b>policy</b> <i>reference</i> |
| Tree       | <a href="#">policy</a>  |
| Reference  | <b>configure</b> <a href="#">service nat</a> <a href="#">pcp-server-policy</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**pim**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>pim</b> context            |
| Context    | <b>configure service vprn string pim</b> |
| Tree       | <b>pim</b>                               |
| Introduced | 16.0.R1                                  |
| Platforms  | All                                      |

**admin-state keyword**

|            |  |
|------------|--|
| Synopsis   | Administrative state of PIM                                  |
| Context    | <b>configure service vprn string pim admin-state keyword</b> |
| Tree       | <b>admin-state</b>   |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**apply-to keyword**

|            |   |
|------------|---|
| Synopsis   | IES and non-IES interfaces to create in PIM               |
| Context    | <b>configure service vprn string pim apply-to keyword</b> |
| Tree       | <b>apply-to</b>   |
| Options    | all, none   |
| Default    | none  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**bgp-nh-override boolean**

|             |   |
|-------------|---|
| Synopsis    | Disable VRF import EC support for next-hop resolution   |
| Context     | <b>configure service vprn string pim bgp-nh-override boolean</b>  |
| Tree        | <b>bgp-nh-override</b>  |
| Description | When configured to <b>true</b> , the RPF check is performed using IPv4 VPN AF next-hop instead of IPv4 AF VRF import extended community (EC). |

When configured to **false**, the RPF check is performed using IPv4 AF VRF import EC.

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 19.7.R1 |
| Platforms  | All     |

## import

|            |   |
|------------|---|
| Synopsis   | Enter the <b>import</b> context                 |
| Context    | <b>configure service vprn string pim import</b> |
| Tree       | <b>import</b>                                   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## join-policy *reference*

|                |   |
|----------------|---|
| Synopsis       | Policy name   |
| Context        | <b>configure service vprn string pim import join-policy reference</b> |
| Tree           | <b>join-policy</b>  |
| Reference      | <b>configure policy-options policy-statement string</b>               |
| Max. Instances | 5   |
| Notes          | This element is ordered by the user.                                  |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

## register-policy *reference*

|                |   |
|----------------|---|
| Synopsis       | Policy name   |
| Context        | <b>configure service vprn string pim import register-policy reference</b> |
| Tree           | <b>register-policy</b>  |
| Reference      | <b>configure policy-options policy-statement string</b>                   |
| Max. Instances | 5   |
| Notes          | This element is ordered by the user.                                      |
| Introduced     | 16.0.R1   |

Platforms All

### **interface** [[interface-name](#)] *string*

Synopsis Enter the **interface** list instance  
 Context **configure** [service vprn string pim interface string](#)  
 Tree [interface](#)  
 Introduced 16.0.R1  
 Platforms All

### **[interface-name]** *string*

Synopsis Interface name  
 Context **configure** [service vprn string pim interface string](#)  
 Tree [interface](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the PIM interface  
 Context **configure** [service vprn string pim interface string admin-state keyword](#)  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 16.0.R1  
 Platforms All

### **assert-period** *number*

Synopsis Time for periodic refreshes of PIM Assert messages on an interface  
 Context **configure** [service vprn string pim interface string assert-period number](#)  
 Tree [assert-period](#)

---

|            |          |
|------------|----------|
| Range      | 1 to 300 |
| Default    | 60       |
| Introduced | 16.0.R1  |
| Platforms  | All      |

### **bfd-liveness**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>bfd-liveness</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim interface</a> <i>string</i> <a href="#">bfd-liveness</a> |
| Tree       | <a href="#">bfd-liveness</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **ipv4 boolean**

|            |  |
|------------|--|
| Synopsis   | Use Bidirectional Forwarding Detection for IPv4 on PIM interface   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim interface</a> <i>string</i> <a href="#">bfd-liveness</a> <a href="#">ipv4</a> <i>boolean</i> |
| Tree       | <a href="#">ipv4</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **ipv6 boolean**

|            |  |
|------------|--|
| Synopsis   | Use Bidirectional Forwarding Detection for IPv6 on PIM interface   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim interface</a> <i>string</i> <a href="#">bfd-liveness</a> <a href="#">ipv6</a> <i>boolean</i> |
| Tree       | <a href="#">ipv6</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **bsm-check-rtr-alert boolean**

|          |  |
|----------|--|
| Synopsis | Check router alert option in bootstrap messages received   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim interface</a> <i>string</i> <a href="#">bsm-check-rtr-alert</a> <i>boolean</i> |



---

|            |                                     |
|------------|-------------------------------------|
| Tree       | <a href="#">bsm-check-rtr-alert</a> |
| Default    | false                               |
| Introduced | 16.0.R1                             |
| Platforms  | All                                 |

### **hello-interval** *number*

|            |  |
|------------|--|
| Synopsis   | Frequency at which PIM Hello messages are sent over this interface   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim interface</a> <i>string</i> <a href="#">hello-interval</a> <i>number</i> |
| Tree       | <a href="#">hello-interval</a>   |
| Range      | 0 to 255   |
| Default    | 30   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **hello-multiplier** *number*

|            |  |
|------------|--|
| Synopsis   | Multiplier to determine the hold time for PIM neighbor   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim interface</a> <i>string</i> <a href="#">hello-multiplier</a> <i>number</i> |
| Tree       | <a href="#">hello-multiplier</a>   |
| Range      | 20 to 100  |
| Default    | 35   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **improved-assert** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow improved assert processing on interface  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim interface</a> <i>string</i> <a href="#">improved-assert</a> <i>boolean</i> |
| Tree       | <a href="#">improved-assert</a>  |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**instant-prune-echo** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow PIM to send an instant prune echo when router starts the prune pending timer for PIM interface  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim interface</a> <i>string</i> <a href="#">instant-prune-echo</a> <i>boolean</i> |
| Tree       | <a href="#">instant-prune-echo</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**ipv4**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv4</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim interface</a> <i>string</i> <a href="#">ipv4</a> |
| Tree       | <a href="#">ipv4</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**monitor-oper-group**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>monitor-oper-group</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">monitor-oper-group</a> |
| Tree       | <a href="#">monitor-oper-group</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**name** *reference*

|            |   |
|------------|---|
| Synopsis   | Operational group identifier  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">monitor-oper-group</a> <a href="#">name</a> <i>reference</i> |
| Tree       | <a href="#">name</a>  |
| Reference  | <b>configure</b> <a href="#">service oper-group</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**operation** *keyword*

|            |  |
|------------|--|
| Synopsis   | Operation performed when operational group is active   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">monitor-oper-group</a> <a href="#">operation</a> <i>keyword</i> |
| Tree       | <a href="#">operation</a>  |
| Options    | add, subtract, set   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**priority-delta** *number*

|            |  |
|------------|--|
| Synopsis   | Delta priority with operation when operational group is active   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">monitor-oper-group</a> <a href="#">priority-delta</a> <i>number</i> |
| Tree       | <a href="#">priority-delta</a>   |
| Range      | 1 to 4294967295  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**multicast** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable PIM interface operation  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">multicast</a> <i>boolean</i> |
| Tree       | <a href="#">multicast</a>   |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**ipv6**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv6</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> |
| Tree       | <a href="#">ipv6</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**monitor-oper-group**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>monitor-oper-group</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">monitor-oper-group</a> |
| Tree       | <a href="#">monitor-oper-group</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**name** *reference*

|            |   |
|------------|---|
| Synopsis   | Operational group identifier  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">monitor-oper-group</a> <a href="#">name</a> <i>reference</i> |
| Tree       | <a href="#">name</a>  |
| Reference  | <b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**operation** *keyword*

|            |  |
|------------|--|
| Synopsis   | Operation performed when operational group is active   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">monitor-oper-group</a> <a href="#">operation</a> <i>keyword</i> |
| Tree       | <a href="#">operation</a>  |
| Options    | add, subtract, set   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**priority-delta** *number*

|            |  |
|------------|--|
| Synopsis   | Delta priority with operation when operational group is active   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">monitor-oper-group</a> <a href="#">priority-delta</a> <i>number</i> |
| Tree       | <a href="#">priority-delta</a>   |
| Range      | 1 to 4294967295  |
| Introduced | 16.0.R1  |

Platforms All

### **multicast** *boolean*

Synopsis Enable PIM interface operation  
 Context **configure** [service vprn](#) *string* [pim interface](#) *string* [ipv6 multicast](#) *boolean*  
 Tree [multicast](#)  
 Default true  
 Introduced 16.0.R1  
 Platforms All

### **max-groups** *number*

Synopsis Maximum number of groups for the interface  
 Context **configure** [service vprn](#) *string* [pim interface](#) *string* [max-groups](#) *number*  
 Tree [max-groups](#)  
 Range 0 | 1 to 16000  
 Default 0  
 Introduced 16.0.R1  
 Platforms All

### **mcac**

Synopsis Enter the **mcac** context  
 Context **configure** [service vprn](#) *string* [pim interface](#) *string* [mcac](#)  
 Tree [mcac](#)  
 Introduced 16.0.R1  
 Platforms All

### **bandwidth**

Synopsis Enter the **bandwidth** context  
 Context **configure** [service vprn](#) *string* [pim interface](#) *string* [mcac](#) [bandwidth](#)  
 Tree [bandwidth](#)  
 Introduced 16.0.R1

Platforms All

### **mandatory** (*number* | *keyword*)

Synopsis Pre-reserved bandwidth for all mandatory channels

Context **configure service vprn** *string* **pim interface** *string* **mcac bandwidth mandatory** (*number* | *keyword*)

Tree [mandatory](#)

Range 0 to 2147483647

Options unlimited

Default unlimited

Introduced 16.0.R1

Platforms All

### **total** (*number* | *keyword*)

Synopsis Maximum allowed bandwidth

Context **configure service vprn** *string* **pim interface** *string* **mcac bandwidth total** (*number* | *keyword*)

Tree [total](#)

Range 0 to 2147483647

Options unlimited

Default unlimited

Introduced 16.0.R1

Platforms All

### **interface-policy** *reference*

Synopsis Name of multicast CAC interface policy

Context **configure service vprn** *string* **pim interface** *string* **mcac interface-policy** *reference*

Tree [interface-policy](#)

Reference **configure mcac interface-policy** *string*

Introduced 16.0.R1

Platforms All

**mc-constraints**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mc-constraints</b> context                                       |
| Context    | <b>configure service vprn string pim interface string mcac mc-constraints</b> |
| Tree       | <a href="#">mc-constraints</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**admin-state keyword**

|            |   |
|------------|---|
| Synopsis   | Administrative state of the multicast CAC constraints   |
| Context    | <b>configure service vprn string pim interface string mcac mc-constraints admin-state keyword</b> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**level [level-id] number**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>level</b> list instance   |
| Context    | <b>configure service vprn string pim interface string mcac mc-constraints level number</b> |
| Tree       | <a href="#">level</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[level-id] number**

|            |  |
|------------|--|
| Synopsis   | Bandwidth level ID for an MCAC constraint  |
| Context    | <b>configure service vprn string pim interface string mcac mc-constraints level number</b> |
| Tree       | <a href="#">level</a>  |
| Range      | 1 to 8   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**bandwidth** *number*

|            |  |
|------------|--|
| Synopsis   | Bandwidth available for this level   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">level</a> <i>number</i><br><a href="#">bandwidth</a> <i>number</i> |
| Tree       | <a href="#">bandwidth</a>  |
| Range      | 0 to 2147483647  |
| Units      | kilobps  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**number-down** [[number-lag-port-down](#)] *number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>number-down</b> list instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">number-down</a><br><i>number</i> |
| Tree       | <a href="#">number-down</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[number-lag-port-down]** *number*

|            |  |
|------------|--|
| Synopsis   | Number of ports that are down in this LAG link   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">number-down</a><br><i>number</i> |
| Tree       | <a href="#">number-down</a>  |
| Range      | 1 to 64  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**level** *number*

|          |   |
|----------|---|
| Synopsis | Level ID to associate with number of down LAG ports |
|----------|---|



|             |  |
|-------------|--|
| Context     | <b>configure service vprn</b> <i>string</i> <b>pim interface</b> <i>string</i> <b>mcac mc-constraints number-down</b> <i>number</i> <b>level</b> <i>number</i> |
| Tree        | <b>level</b>   |
| Description | This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.                                  |
| Range       | 1 to 8   |
| Notes       | This element is mandatory.   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **use-lag-port-weight** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Use LAG port weight in calculating MCAC constraints   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>pim interface</b> <i>string</i> <b>mcac mc-constraints use-lag-port-weight</b> <i>boolean</i>  |
| Tree        | <b>use-lag-port-weight</b>  |
| Description | When configured to <b>true</b> , port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs. |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **policy** *reference*

|             |  |
|-------------|--|
| Synopsis    | Multicast CAC policy name  |
| Context     | <b>configure service vprn</b> <i>string</i> <b>pim interface</b> <i>string</i> <b>mcac policy</b> <i>reference</i>   |
| Tree        | <b>policy</b>  |
| Description | <p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> <li>• subscriber level and redirected interface when redirection is configured</li> </ul> |

- subscriber level and group-interface level when redirection is unconfigured

In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).

|            |  |
|------------|--|
| Reference  | <b>configure mcac policy</b> <i>string</i> |
| Introduced | 16.0.R1                                    |
| Platforms  | All  |

### **multicast-senders** *keyword*

|            |   |
|------------|---|
| Synopsis   | Subnet matching for the incoming data packets   |
| Context    | <b>configure service vpn</b> <i>string pim interface string multicast-senders keyword</i> |
| Tree       | <a href="#">multicast-senders</a>   |
| Options    | auto, always, never   |
| Default    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **p2mp-ldp-tree-join**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>p2mp-ldp-tree-join</b> context  |
| Context    | <b>configure service vpn</b> <i>string pim interface string p2mp-ldp-tree-join</i> |
| Tree       | <a href="#">p2mp-ldp-tree-join</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                       |

### **ipv4** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow dynamic mLDP in-band signaling for IPv4 PIM joins   |
| Context    | <b>configure service vpn</b> <i>string pim interface string p2mp-ldp-tree-join ipv4 boolean</i> |
| Tree       | <a href="#">ipv4</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                                    |

### **ipv6** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow dynamic mLDP in-band signaling for IPv6 PIM joins  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">p2mp-ldp-tree-join</a> <a href="#">ipv6</a> <i>boolean</i> |
| Tree       | <a href="#">ipv6</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **priority** *number*

|            |  |
|------------|--|
| Synopsis   | DR election priority for this interface  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">priority</a> <i>number</i> |
| Tree       | <a href="#">priority</a>   |
| Range      | 1 to 4294967295  |
| Default    | 1  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **sticky-dr**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>sticky-dr</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">sticky-dr</a> |
| Tree       | <a href="#">sticky-dr</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **priority** *number*

|            |  |
|------------|--|
| Synopsis   | DR election priority for this interface  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">sticky-dr</a> <a href="#">priority</a> <i>number</i> |
| Tree       | <a href="#">priority</a>   |
| Range      | 1 to 4294967295  |
| Default    | 1024   |
| Introduced | 16.0.R1  |

Platforms All

### **three-way-hello** *boolean*

Synopsis Allow three-way hello compatibility mode  
 Context **configure** [service vprn](#) *string* [pim interface](#) *string* **three-way-hello** *boolean*  
 Tree [three-way-hello](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **tracking-support** *boolean*

Synopsis Allow upstream routers to explicitly track join membership  
 Context **configure** [service vprn](#) *string* [pim interface](#) *string* **tracking-support** *boolean*  
 Tree [tracking-support](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **ipv4**

Synopsis Enter the **ipv4** context  
 Context **configure** [service vprn](#) *string* [pim ipv4](#)  
 Tree [ipv4](#)  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of PIM operation for IPv4  
 Context **configure** [service vprn](#) *string* [pim ipv4](#) **admin-state** *keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

## grt-extranet

|            |   |
|------------|---|
| Synopsis   | Enter the <b>grt-extranet</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">ipv4</a> <a href="#">grt-extranet</a> |
| Tree       | <a href="#">grt-extranet</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## any

|            |   |
|------------|---|
| Synopsis   | GRT or VRF extranet for this instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">ipv4</a> <a href="#">grt-extranet</a> <a href="#">any</a> |
| Tree       | <a href="#">any</a>   |
| Notes      | The following elements are part of a choice: <b>any</b> or <b>group-prefix</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## group-prefix [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

|            |  |
|------------|--|
| Synopsis   | Enter the <b>group-prefix</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">ipv4</a> <a href="#">grt-extranet</a> <a href="#">group-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) |
| Tree       | <a href="#">group-prefix</a>   |
| Notes      | The following elements are part of a choice: <b>any</b> or <b>group-prefix</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

|          |  |
|----------|--|
| Synopsis | IP address and mask length   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">ipv4</a> <a href="#">grt-extranet</a> <a href="#">group-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) |
| Tree     | <a href="#">group-prefix</a>   |
| Notes    | This element is part of a list key.  |

Introduced 16.0.R1  
 Platforms All

### **starg** *boolean*

Synopsis Add a static (\*,G) entry  
 Context **configure service vprn** *string* **pim ipv4 grt-extranet group-prefix** (*ipv4-prefix* | *ipv6-prefix*)  
**starg** *boolean*  
 Tree **starg**  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **rpf-table** *keyword*

Synopsis Route table for RPF lookup  
 Context **configure service vprn** *string* **pim ipv4 rpf-table** *keyword*  
 Tree **rpf-table**  
 Options rtable-m, rtable-u, both  
 Default rtable-u  
 Introduced 16.0.R1  
 Platforms All

### **ssm-assert-compatible-mode** *boolean*

Synopsis Enable SSM assert compatible mode  
 Context **configure service vprn** *string* **pim ipv4 ssm-assert-compatible-mode** *boolean*  
 Tree **ssm-assert-compatible-mode**  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **ssm-default-range** *boolean*

Synopsis SSM default range  
 Context **configure service vprn** *string* **pim ipv4 ssm-default-range** *boolean*

|            |                                   |
|------------|-----------------------------------|
| Tree       | <a href="#">ssm-default-range</a> |
| Default    | true                              |
| Introduced | 16.0.R1                           |
| Platforms  | All                               |

## ipv6

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv6</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim ipv6</a> |
| Tree       | <a href="#">ipv6</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of PIM operation for IPv6   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim ipv6</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## **rpf-table** *keyword*

|            |  |
|------------|--|
| Synopsis   | Route table for RPF lookup   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim ipv6</a> <b>rpf-table</b> <i>keyword</i> |
| Tree       | <a href="#">rpf-table</a>  |
| Options    | rtable-m, rtable-u, both   |
| Default    | rtable-u   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**ssm-default-range** *boolean*

|            |   |
|------------|---|
| Synopsis   | SSM default range   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim ipv6 ssm-default-range</a> <i>boolean</i> |
| Tree       | <a href="#">ssm-default-range</a>   |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**mc-ecmp-balance** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable multicast balancing of traffic over ECMP links  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim mc-ecmp-balance</a> <i>boolean</i> |
| Tree       | <a href="#">mc-ecmp-balance</a>  |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**mc-ecmp-balance-hold** *number*

|            |  |
|------------|--|
| Synopsis   | Hold time for multicast balancing over ECMP links  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim mc-ecmp-balance-hold</a> <i>number</i> |
| Tree       | <a href="#">mc-ecmp-balance-hold</a>   |
| Range      | 2 to 600   |
| Units      | minutes  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**mc-ecmp-hashing**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>mc-ecmp-hashing</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim mc-ecmp-hashing</a> |
| Tree       | <a href="#">mc-ecmp-hashing</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |



**rebalance** *boolean*

|            |   |
|------------|---|
| Synopsis   | Rebalance flows to newly added links immediately instead of waiting until they are pruned                                       |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim mc-ecmp-hashing</a> <b>rebalance</b> <i>boolean</i> |
| Tree       | <a href="#">rebalance</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**mtu-over-head** *number*

|             |   |
|-------------|---|
| Synopsis    | MVPN tunnel MTU size reduction to allow for BIER header   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim</a> <b>mtu-over-head</b> <i>number</i>                        |
| Tree        | <a href="#">mtu-over-head</a>   |
| Description | This command subtracts the specified value from the MVPN tunnel MTU to allow a BIER header to be added without exceeding the network MTU. |
| Range       | 0   44   76   140   268   536   |
| Default     | 0   |
| Introduced  | 20.5.R1   |
| Platforms   | All   |

**non-dr-attract-traffic** *boolean*

|            |  |
|------------|--|
| Synopsis   | Attract traffic when the router is not the designated one  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim</a> <b>non-dr-attract-traffic</b> <i>boolean</i> |
| Tree       | <a href="#">non-dr-attract-traffic</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**rp**

|          |   |
|----------|---|
| Synopsis | Enter the <b>rp</b> context   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim</a> <b>rp</b> |
| Tree     | <a href="#">rp</a>  |

Introduced 16.0.R1  
Platforms All

## **bootstrap**

Synopsis Enter the **bootstrap** context  
Context **configure** [service vprn string pim rp bootstrap](#)  
Tree [bootstrap](#)  
Introduced 16.0.R1  
Platforms All

## **export reference**

Synopsis Export policy to control the flow of bootstrap messages  
Context **configure** [service vprn string pim rp bootstrap export reference](#)  
Tree [export](#)  
Reference **configure** [policy-options policy-statement string](#)  
Max. Instances 5  
Notes This element is ordered by the user.  
Introduced 16.0.R1  
Platforms All

## **import reference**

Synopsis Import policy to control the flow of bootstrap messages  
Context **configure** [service vprn string pim rp bootstrap import reference](#)  
Tree [import](#)  
Reference **configure** [policy-options policy-statement string](#)  
Max. Instances 5  
Notes This element is ordered by the user.  
Introduced 16.0.R1  
Platforms All

**ipv4**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv4</b> context                                    |
| Context    | <b>configure</b> <a href="#">service vprn string pim rp ipv4</a> |
| Tree       | <a href="#">ipv4</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**anycast** [[ipv4-address](#)] [string rp-set-peer string](#)

|            |  |
|------------|--|
| Synopsis   | Add a list entry for <b>anycast</b>  |
| Context    | <b>configure</b> <a href="#">service vprn string pim rp ipv4 anycast string rp-set-peer string</a> |
| Tree       | <a href="#">anycast</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[ipv4-address]** [string](#)

|            |  |
|------------|--|
| Synopsis   | Loopback IP address shared by routes in RP set   |
| Context    | <b>configure</b> <a href="#">service vprn string pim rp ipv4 anycast string rp-set-peer string</a> |
| Tree       | <a href="#">anycast</a>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**rp-set-peer** [string](#)

|            |  |
|------------|--|
| Synopsis   | Configure a peer in the anycast rp-set.  |
| Context    | <b>configure</b> <a href="#">service vprn string pim rp ipv4 anycast string rp-set-peer string</a> |
| Tree       | <a href="#">anycast</a>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**auto-rp-discovery** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable auto RP discovery   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim rp ipv4</a> <a href="#">auto-rp-discovery</a> <i>boolean</i> |
| Tree       | <a href="#">auto-rp-discovery</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**bsr-candidate**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>bsr-candidate</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim rp ipv4</a> <a href="#">bsr-candidate</a> |
| Tree       | <a href="#">bsr-candidate</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**address** *string*

|            |   |
|------------|---|
| Synopsis   | Candidate BSR IP address for Bootstrap Router election  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim rp ipv4</a> <a href="#">bsr-candidate</a> <a href="#">address</a> <i>string</i> |
| Tree       | <a href="#">address</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the Candidate BSR  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim rp ipv4</a> <a href="#">bsr-candidate</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**hash-mask-len** *number*

|            |  |
|------------|--|
| Synopsis   | Length for bootstrap hash mask   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim rp ipv4 bsr-candidate</a> <b>hash-mask-len</b> <i>number</i> |
| Tree       | <a href="#">hash-mask-len</a>  |
| Range      | 0 to 32  |
| Default    | 30   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**priority** *number*

|            |   |
|------------|---|
| Synopsis   | Bootstrap priority of the router  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim rp ipv4 bsr-candidate</a> <b>priority</b> <i>number</i> |
| Tree       | <a href="#">priority</a>  |
| Range      | 0 to 255  |
| Default    | 0   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**candidate** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Enable auto-RP to advertise candidate RP information   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim rp ipv4</a> <b>candidate</b> <i>boolean</i>  |
| Tree        | <a href="#">candidate</a>  |
| Description | When configured to <b>true</b> , the auto-RP is enabled to advertise the candidate RP information. The auto-RP candidate RP announces the candidate RP messages on the 224.0.1.39 multicast address. This functionality is in addition to the listener functionality enabled by the auto RP discovery.<br><br>When configured to <b>false</b> , the candidate RP information is not specified. |
| Default     | false  |
| Introduced  | 20.10.R1   |
| Platforms   | All  |

**mapping-agent** *boolean*

|          |                                      |
|----------|--------------------------------------|
| Synopsis | Enable the mapping agent on the node |
|----------|--------------------------------------|

|             |   |
|-------------|---|
| Context     | <b>configure service vprn</b> <i>string</i> <b>pim rp ipv4 mapping-agent</b> <i>boolean</i>   |
| Tree        | <a href="#">mapping-agent</a>   |
| Description | When configured to <b>true</b> , the mapping agent is enabled on the node. The auto-RP MA observes the <b>auto-rp-announcement</b> messages, selects the RP and generates the RP discovery 224.0.1.40 messages. This functionality is in addition to the auto-RP discovery functionality. |
| Default     | false   |
| Introduced  | 20.10.R1  |
| Platforms   | All   |

### rp-candidate

|            |   |
|------------|---|
| Synopsis   | Enter the <b>rp-candidate</b> context                                       |
| Context    | <b>configure service vprn</b> <i>string</i> <b>pim rp ipv4 rp-candidate</b> |
| Tree       | <a href="#">rp-candidate</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### address *string*

|             |  |
|-------------|--|
| Synopsis    | Local RP address   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>pim rp ipv4 rp-candidate</b> <b>address</b> <i>string</i>             |
| Tree        | <a href="#">address</a>  |
| Description | This command specifies the local RP address that is sent in the RP candidate advertisements to the Bootstrap Router. |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### admin-state *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the Candidate RP  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>pim rp ipv4 rp-candidate</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |

Platforms All

### **group-range** [[ipv4-prefix](#)] *string*

Synopsis Add a list entry for **group-range**  
 Context **configure service vprn** *string* **pim rp ipv4 rp-candidate group-range** *string*  
 Tree [group-range](#)  
 Introduced 16.0.R1  
 Platforms All

### **[ipv4-prefix]** *string*

Synopsis IPv4 address and prefix length  
 Context **configure service vprn** *string* **pim rp ipv4 rp-candidate group-range** *string*  
 Tree [group-range](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **holdtime** *number*

Synopsis Time during which the neighboring router considers this router to be up  
 Context **configure service vprn** *string* **pim rp ipv4 rp-candidate holdtime** *number*  
 Tree [holdtime](#)  
 Range 5 to 255  
 Units seconds  
 Default 150  
 Introduced 16.0.R1  
 Platforms All

### **priority** *number*

Synopsis Candidate RP priority  
 Context **configure service vprn** *string* **pim rp ipv4 rp-candidate priority** *number*  
 Tree [priority](#)

|            |          |
|------------|----------|
| Range      | 0 to 255 |
| Default    | 192      |
| Introduced | 16.0.R1  |
| Platforms  | All      |

## static

|            |   |
|------------|---|
| Synopsis   | Enter the <b>static</b> context                         |
| Context    | <b>configure service vprn string pim rp ipv4 static</b> |
| Tree       | <b>static</b>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## address [ipv4-address] string

|            |  |
|------------|--|
| Synopsis   | Enter the <b>address</b> list instance                                 |
| Context    | <b>configure service vprn string pim rp ipv4 static address string</b> |
| Tree       | <b>address</b>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## [ipv4-address] string

|            |  |
|------------|--|
| Synopsis   | IPv4 address for the static RP   |
| Context    | <b>configure service vprn string pim rp ipv4 static address string</b> |
| Tree       | <b>address</b>   |
| Notes      | This element is part of a list key.                                    |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## group-prefix [ipv4-prefix] string

|          |  |
|----------|--|
| Synopsis | Add a list entry for <b>group-prefix</b>   |
| Context  | <b>configure service vprn string pim rp ipv4 static address string group-prefix string</b> |
| Tree     | <b>group-prefix</b>  |



Introduced 16.0.R1  
 Platforms All

### **[ipv4-prefix]** *string*

Synopsis IPv4 address and prefix length  
 Context **configure** [service vprn string](#) [pim rp ipv4 static address string](#) [group-prefix string](#)  
 Tree [group-prefix](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **override** *boolean*

Synopsis Change the precedence for static RP over dynamically learnt RP  
 Context **configure** [service vprn string](#) [pim rp ipv4 static address string](#) [override boolean](#)  
 Tree [override](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

## **ipv6**

Synopsis Enter the **ipv6** context  
 Context **configure** [service vprn string](#) [pim rp ipv6](#)  
 Tree [ipv6](#)  
 Introduced 16.0.R1  
 Platforms All

### **anycast** [[ipv6-address](#)] *string rp-set-peer string*

Synopsis Add a list entry for **anycast**  
 Context **configure** [service vprn string](#) [pim rp ipv6 anycast string](#) [rp-set-peer string](#)  
 Tree [anycast](#)  
 Introduced 16.0.R1

Platforms All

### **[ipv6-address]** *string*

Synopsis Loopback IP address shared by routes in RP set  
 Context **configure** [service](#) [vprn](#) *string* [pim](#) [rp](#) [ipv6](#) [anycast](#) *string* [rp-set-peer](#) *string*  
 Tree [anycast](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **rp-set-peer** *string*

Synopsis Peer in the anycast RP set  
 Context **configure** [service](#) [vprn](#) *string* [pim](#) [rp](#) [ipv6](#) [anycast](#) *string* [rp-set-peer](#) *string*  
 Tree [anycast](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **bsr-candidate**

Synopsis Enter the **bsr-candidate** context  
 Context **configure** [service](#) [vprn](#) *string* [pim](#) [rp](#) [ipv6](#) [bsr-candidate](#)  
 Tree [bsr-candidate](#)  
 Introduced 16.0.R1  
 Platforms All

### **address** *string*

Synopsis Candidate BSR IP address for Bootstrap Router election  
 Context **configure** [service](#) [vprn](#) *string* [pim](#) [rp](#) [ipv6](#) [bsr-candidate](#) [address](#) *string*  
 Tree [address](#)  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the Candidate BSR   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">rp</a> <a href="#">ipv6</a> <a href="#">bsr-candidate</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **hash-mask-len** *number*

|            |  |
|------------|--|
| Synopsis   | Length for bootstrap hash mask   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">rp</a> <a href="#">ipv6</a> <a href="#">bsr-candidate</a> <b>hash-mask-len</b> <i>number</i> |
| Tree       | <a href="#">hash-mask-len</a>  |
| Range      | 0 to 128   |
| Default    | 126  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **priority** *number*

|            |   |
|------------|---|
| Synopsis   | Bootstrap priority of the router  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">rp</a> <a href="#">ipv6</a> <a href="#">bsr-candidate</a> <b>priority</b> <i>number</i> |
| Tree       | <a href="#">priority</a>  |
| Range      | 0 to 255  |
| Default    | 0   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **embedded-rp**

|          |  |
|----------|--|
| Synopsis | Enable the <b>embedded-rp</b> context  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">rp</a> <a href="#">ipv6</a> <b>embedded-rp</b> |
| Tree     | <a href="#">embedded-rp</a>  |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of embedded RP   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">rp</a> <a href="#">ipv6</a> <a href="#">embedded-rp</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **group-range** [[ipv6-prefix](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Add a list entry for <b>group-range</b>  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">rp</a> <a href="#">ipv6</a> <a href="#">embedded-rp</a> <b>group-range</b> <i>string</i> |
| Tree       | <a href="#">group-range</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### [[ipv6-prefix](#)] *string*

|            |  |
|------------|--|
| Synopsis   | IPv6 address and prefix length   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">rp</a> <a href="#">ipv6</a> <a href="#">embedded-rp</a> <b>group-range</b> <i>string</i> |
| Tree       | <a href="#">group-range</a>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **rp-candidate**

|          |   |
|----------|---|
| Synopsis | Enter the <b>rp-candidate</b> context   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">rp</a> <a href="#">ipv6</a> <b>rp-candidate</b> |
| Tree     | <a href="#">rp-candidate</a>  |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

**address** *string*

|            |  |
|------------|--|
| Synopsis   | Local RP address   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">rp</a> <a href="#">ipv6</a> <a href="#">rp-candidate</a> <a href="#">address</a> <i>string</i> |
| Tree       | <a href="#">address</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the Candidate RP  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">rp</a> <a href="#">ipv6</a> <a href="#">rp-candidate</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**group-range** [[ipv6-prefix](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Add a list entry for <b>group-range</b>  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">rp</a> <a href="#">ipv6</a> <a href="#">rp-candidate</a> <a href="#">group-range</a> <i>string</i> |
| Tree       | <a href="#">group-range</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[[ipv6-prefix](#)]** *string*

|          |  |
|----------|--|
| Synopsis | IPv6 address and prefix length   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">rp</a> <a href="#">ipv6</a> <a href="#">rp-candidate</a> <a href="#">group-range</a> <i>string</i> |
| Tree     | <a href="#">group-range</a>  |
| Notes    | This element is part of a list key.  |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

**holdtime** *number*

|            |   |
|------------|---|
| Synopsis   | Time during which the neighboring router considers this router to be up   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim rp ipv6 rp-candidate</a> <a href="#">holdtime</a> <i>number</i> |
| Tree       | <a href="#">holdtime</a>  |
| Range      | 5 to 255  |
| Units      | seconds   |
| Default    | 150   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**priority** *number*

|            |   |
|------------|---|
| Synopsis   | Candidate RP priority   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim rp ipv6 rp-candidate</a> <a href="#">priority</a> <i>number</i> |
| Tree       | <a href="#">priority</a>  |
| Range      | 0 to 255  |
| Default    | 192   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**static**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>static</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim rp ipv6</a> <a href="#">static</a> |
| Tree       | <a href="#">static</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**address** [[ipv6-address](#)] *string*

|          |  |
|----------|--|
| Synopsis | Enter the <b>address</b> list instance |
|----------|--|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>pim rp ipv6 static address</b> <i>string</i> |
| Tree       | <b>address</b>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[ipv6-address]** *string*

|            |   |
|------------|---|
| Synopsis   | Static IP address of the RP   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>pim rp ipv6 static address</b> <i>string</i> |
| Tree       | <b>address</b>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**group-prefix** [**ipv6-prefix**] *string*

|            |   |
|------------|---|
| Synopsis   | Add a list entry for <b>group-prefix</b>  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>pim rp ipv6 static address</b> <i>string</i> <b>group-prefix</b> <i>string</i> |
| Tree       | <b>group-prefix</b>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[ipv6-prefix]** *string*

|            |   |
|------------|---|
| Synopsis   | IPv6 address and prefix length  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>pim rp ipv6 static address</b> <i>string</i> <b>group-prefix</b> <i>string</i> |
| Tree       | <b>group-prefix</b>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**override** *boolean*

|          |  |
|----------|--|
| Synopsis | Change the precedence for static RP over dynamically learnt RP   |
| Context  | <b>configure service vprn</b> <i>string</i> <b>pim rp ipv6 static address</b> <i>string</i> <b>override</b> <i>boolean</i> |

|            |                          |
|------------|--------------------------|
| Tree       | <a href="#">override</a> |
| Default    | false                    |
| Introduced | 16.0.R1                  |
| Platforms  | All                      |

### **spt-switchover** [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

|            |  |
|------------|--|
| Synopsis   | Enter the <b>spt-switchover</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">spt-switchover</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) |
| Tree       | <a href="#">spt-switchover</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

|            |  |
|------------|--|
| Synopsis   | IP address and mask length   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">spt-switchover</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) |
| Tree       | <a href="#">spt-switchover</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **threshold** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | SPT switchover threshold  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">spt-switchover</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">threshold</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">threshold</a>   |
| Range      | 1 to 4294967294   |
| Units      | kilobps   |
| Options    | infinity  |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | All   |



## ssm-groups

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ssm-groups</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">ssm-groups</a> |
| Tree       | <a href="#">ssm-groups</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## group-range [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

|            |  |
|------------|--|
| Synopsis   | Add a list entry for <b>group-range</b>  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">ssm-groups</a> <a href="#">group-range</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) |
| Tree       | <a href="#">group-range</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

|            |  |
|------------|--|
| Synopsis   | IP address and mask length   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">ssm-groups</a> <a href="#">group-range</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) |
| Tree       | <a href="#">group-range</a>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## radius

|            |  |
|------------|--|
| Synopsis   | Enter the <b>radius</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">radius</a> |
| Tree       | <a href="#">radius</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**proxy** [*name*] *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>proxy</b> list instance   |
| Context        | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> |
| Tree           | <a href="#">proxy</a>  |
| Max. Instances | 8  |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**[name]** *string*

|               |  |
|---------------|--|
| Synopsis      | RADIUS proxy name  |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> |
| Tree          | <a href="#">proxy</a>  |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of RADIUS proxy   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**attribute-matching**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>attribute-matching</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <b>attribute-matching</b> |
| Tree       | <a href="#">attribute-matching</a>   |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **entry** [[index](#)] *number*

Synopsis Enter the **entry** list instance

Context **configure** [service](#) [vpn](#) *string* [radius](#) [proxy](#) *string* [attribute-matching](#) [entry](#) *number*

Tree [entry](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[index]** *number*

Synopsis Index of this entry

Context **configure** [service](#) [vpn](#) *string* [radius](#) [proxy](#) *string* [attribute-matching](#) [entry](#) *number*

Tree [entry](#)

Range 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **accounting-server-policy** *string*

Synopsis Accounting server policy

Context **configure** [service](#) [vpn](#) *string* [radius](#) [proxy](#) *string* [attribute-matching](#) [entry](#) *number*  
[accounting-server-policy](#) *string*

Tree [accounting-server-policy](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **authentication-server-policy** *string*

Synopsis Authentication server policy

Context **configure** [service](#) [vpn](#) *string* [radius](#) [proxy](#) *string* [attribute-matching](#) [entry](#) *number*  
[authentication-server-policy](#) *string*

Tree [authentication-server-policy](#)

String Length 1 to 32  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **prefix-string** *string*

Synopsis Prefix string  
 Context **configure** [service vprn](#) *string* [radius proxy](#) *string* [attribute-matching entry](#) *number* [prefix-string](#) *string*  
 Tree [prefix-string](#)  
 String Length 1 to 128  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **suffix-string** *string*

Synopsis Prefix string  
 Context **configure** [service vprn](#) *string* [radius proxy](#) *string* [attribute-matching entry](#) *number* [suffix-string](#) *string*  
 Tree [suffix-string](#)  
 String Length 1 to 128  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **type** *number*

Synopsis Matching attribute type to RADIUS server policy  
 Context **configure** [service vprn](#) *string* [radius proxy](#) *string* [attribute-matching type](#) *number*  
 Tree [type](#)  
 Range 1 to 255  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **vendor** (*number* | *keyword*)

Synopsis Matching Vendor ID to RADIUS server policy

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string</i> <b>radius proxy</b> <i>string</i> <b>attribute-matching</b> <i>vendor (number   keyword)</i> |
| Tree       | <b>vendor</b>  |
| Range      | 1 to 16777215  |
| Options    | nokia  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## cache

|            |  |
|------------|--|
| Synopsis   | Enter the <b>cache</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>radius proxy</b> <i>string</i> <b>cache</b> |
| Tree       | <b>cache</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                    |

## admin-state *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the RADIUS proxy cache  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>radius proxy</b> <i>string</i> <b>cache admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## key

|            |  |
|------------|--|
| Synopsis   | Enable the <b>key</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>radius proxy</b> <i>string</i> <b>cache key</b> |
| Tree       | <b>key</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**attribute-type** *number*

|            |  |
|------------|--|
| Synopsis   | RADIUS attribute type to cache for this RADIUS proxy server  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">radius</a> <a href="#">proxy</a> <i>string</i> <a href="#">cache</a> <a href="#">key</a> <a href="#">attribute-type</a> <i>number</i> |
| Tree       | <a href="#">attribute-type</a>   |
| Range      | 1 to 255   |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**packet-type** *keyword*

|            |  |
|------------|--|
| Synopsis   | Packet type of the RADIUS messages   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">radius</a> <a href="#">proxy</a> <i>string</i> <a href="#">cache</a> <a href="#">key</a> <a href="#">packet-type</a> <i>keyword</i> |
| Tree       | <a href="#">packet-type</a>  |
| Options    | access-request, access-accept  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**vendor** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | RADIUS Vendor ID  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">radius</a> <a href="#">proxy</a> <i>string</i> <a href="#">cache</a> <a href="#">key</a> <a href="#">vendor</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">vendor</a>  |
| Range      | 1 to 16777215   |
| Options    | nokia   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**timeout** *number*

|          |   |
|----------|---|
| Synopsis | Idle timeout value  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">radius</a> <a href="#">proxy</a> <i>string</i> <a href="#">cache</a> <a href="#">timeout</a> <i>number</i> |
| Tree     | <a href="#">timeout</a>   |
| Range    | 60 to 3600  |

---

|            |   |
|------------|---|
| Units      | seconds   |
| Default    | 300   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **track-accounting**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>track-accounting</b> context                                       |
| Context    | <b>configure service vprn string radius proxy string cache track-accounting</b> |
| Tree       | <a href="#">track-accounting</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                         |

### **accounting-off *boolean***

|            |   |
|------------|---|
| Synopsis   | Remove all ESM hosts associated with the RADIUS client  |
| Context    | <b>configure service vprn string radius proxy string cache track-accounting accounting-off <i>boolean</i></b> |
| Tree       | <a href="#">accounting-off</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **accounting-on *boolean***

|            |  |
|------------|--|
| Synopsis   | Remove all ESM hosts associated with the RADIUS client   |
| Context    | <b>configure service vprn string radius proxy string cache track-accounting accounting-on <i>boolean</i></b> |
| Tree       | <a href="#">accounting-on</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **interim-update *boolean***

|          |  |
|----------|--|
| Synopsis | Update the ESM host with the RADIUS client that generated the interim update |
|----------|--|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>radius proxy</b> <i>string</i> <b>cache track-accounting interim-update</b> <i>boolean</i> |
| Tree       | <a href="#">interim-update</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**start** *boolean*

|            |  |
|------------|--|
| Synopsis   | Update host with client that generated accounting-start  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>radius proxy</b> <i>string</i> <b>cache track-accounting start</b> <i>boolean</i> |
| Tree       | <a href="#">start</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**stop** *boolean*

|            |   |
|------------|---|
| Synopsis   | Remove ESM host and forward accounting-stop packet  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>radius proxy</b> <i>string</i> <b>cache track-accounting stop</b> <i>boolean</i> |
| Tree       | <a href="#">stop</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**track-authentication**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>track-authentication</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>radius proxy</b> <i>string</i> <b>cache track-authentication</b> |
| Tree       | <a href="#">track-authentication</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**accept** *boolean*

|          |  |
|----------|--|
| Synopsis | Track Access-Accept message for mobility |
|----------|--|



|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>radius proxy</b> <i>string</i> <b>cache track-authentication accept</b> <i>boolean</i> |
| Tree       | <a href="#">accept</a>  |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **track-delete-hold-time** *number*

|            |   |
|------------|---|
| Synopsis   | Delete hold time  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>radius proxy</b> <i>string</i> <b>cache track-delete-hold-time</b> <i>number</i> |
| Tree       | <a href="#">track-delete-hold-time</a>  |
| Range      | 0 to 6000   |
| Units      | seconds   |
| Default    | 0   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **defaults**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>defaults</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>radius proxy</b> <i>string</i> <b>defaults</b> |
| Tree       | <a href="#">defaults</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                       |

### **accounting-server-policy** *string*

|               |  |
|---------------|--|
| Synopsis      | Default accounting RADIUS server policy  |
| Context       | <b>configure service vprn</b> <i>string</i> <b>radius proxy</b> <i>string</i> <b>defaults accounting-server-policy</b> <i>string</i> |
| Tree          | <a href="#">accounting-server-policy</a>   |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**authentication-server-policy** *string*

|               |  |
|---------------|--|
| Synopsis      | Default authentication RADIUS server policy  |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">defaults authentication-server-policy</a> <i>string</i> |
| Tree          | <a href="#">authentication-server-policy</a>   |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**interface** [[interface-name](#)] *reference*

|            |   |
|------------|---|
| Synopsis   | Add a list entry for <b>interface</b>   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">interface</a> <i>reference</i> |
| Tree       | <a href="#">interface</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**[interface-name]** *reference*

|            |   |
|------------|---|
| Synopsis   | IP interface name   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">interface</a> <i>reference</i> |
| Tree       | <a href="#">interface</a>   |
| Reference  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## load-balance-key

|            |   |
|------------|---|
| Synopsis   | Enter the <b>load-balance-key</b> context                                 |
| Context    | <b>configure service vprn string radius proxy string load-balance-key</b> |
| Tree       | <a href="#">load-balance-key</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                   |

## attribute-1

|            |   |
|------------|---|
| Synopsis   | Enter the <b>attribute-1</b> context  |
| Context    | <b>configure service vprn string radius proxy string load-balance-key attribute-1</b>   |
| Tree       | <a href="#">attribute-1</a>   |
| Notes      | The following elements are part of a choice: ( <b>attribute-1</b> , <b>attribute-2</b> , <b>attribute-3</b> , <b>attribute-4</b> , and <b>attribute-5</b> ) or <b>source-ip-udp</b> . |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## type *number*

|            |  |
|------------|--|
| Synopsis   | Attribute type to cache for this RADIUS Proxy server   |
| Context    | <b>configure service vprn string radius proxy string load-balance-key attribute-1 type <i>number</i></b> |
| Tree       | <a href="#">type</a>   |
| Range      | 1 to 255   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## vendor (*number* | *keyword*)

|          |   |
|----------|---|
| Synopsis | Vendor-Id attribute   |
| Context  | <b>configure service vprn string radius proxy string load-balance-key attribute-1 vendor (<i>number</i>   <i>keyword</i>)</b> |
| Tree     | <a href="#">vendor</a>  |
| Range    | 1 to 16777215   |
| Options  | nokia   |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## **attribute-2**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>attribute-2</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">radius</a> <a href="#">proxy</a> <i>string</i> <a href="#">load-balance-key</a> <a href="#">attribute-2</a> |
| Tree       | <a href="#">attribute-2</a>   |
| Notes      | The following elements are part of a choice: ( <b>attribute-1</b> , <b>attribute-2</b> , <b>attribute-3</b> , <b>attribute-4</b> , and <b>attribute-5</b> ) or <b>source-ip-udp</b> .               |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## **type** *number*

|            |  |
|------------|--|
| Synopsis   | Attribute type to cache for this RADIUS Proxy server   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">radius</a> <a href="#">proxy</a> <i>string</i> <a href="#">load-balance-key</a> <a href="#">attribute-2</a> <a href="#">type</a> <i>number</i> |
| Tree       | <a href="#">type</a>   |
| Range      | 1 to 255   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## **vendor** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Vendor-Id attribute   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">radius</a> <a href="#">proxy</a> <i>string</i> <a href="#">load-balance-key</a> <a href="#">attribute-2</a> <a href="#">vendor</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">vendor</a>  |
| Range      | 1 to 16777215   |
| Options    | nokia   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**attribute-3**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>attribute-3</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">radius</a> <a href="#">proxy</a> <i>string</i> <a href="#">load-balance-key</a> <a href="#">attribute-3</a> |
| Tree       | <a href="#">attribute-3</a>   |
| Notes      | The following elements are part of a choice: ( <b>attribute-1</b> , <b>attribute-2</b> , <b>attribute-3</b> , <b>attribute-4</b> , and <b>attribute-5</b> ) or <b>source-ip-udp</b> .               |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**type number**

|            |  |
|------------|--|
| Synopsis   | Attribute type to cache for this RADIUS Proxy server   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">radius</a> <a href="#">proxy</a> <i>string</i> <a href="#">load-balance-key</a> <a href="#">attribute-3</a> <a href="#">type</a> <i>number</i> |
| Tree       | <a href="#">type</a>   |
| Range      | 1 to 255   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**vendor (number | keyword)**

|            |   |
|------------|---|
| Synopsis   | Vendor-Id attribute   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">radius</a> <a href="#">proxy</a> <i>string</i> <a href="#">load-balance-key</a> <a href="#">attribute-3</a> <a href="#">vendor</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">vendor</a>  |
| Range      | 1 to 16777215   |
| Options    | nokia   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**attribute-4**

|          |   |
|----------|---|
| Synopsis | Enter the <b>attribute-4</b> context  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">radius</a> <a href="#">proxy</a> <i>string</i> <a href="#">load-balance-key</a> <a href="#">attribute-4</a> |
| Tree     | <a href="#">attribute-4</a>   |

|            |   |
|------------|---|
| Notes      | The following elements are part of a choice: ( <b>attribute-1</b> , <b>attribute-2</b> , <b>attribute-3</b> , <b>attribute-4</b> , and <b>attribute-5</b> ) or <b>source-ip-udp</b> . |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **type number**

|            |   |
|------------|---|
| Synopsis   | Attribute type to cache for this RADIUS Proxy server  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">load-balance-key</a> <a href="#">attribute-4</a> <b>type</b> <i>number</i> |
| Tree       | <a href="#">type</a>  |
| Range      | 1 to 255  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **vendor (number | keyword)**

|            |   |
|------------|---|
| Synopsis   | Vendor-Id attribute   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">load-balance-key</a> <a href="#">attribute-4</a> <b>vendor</b> <i>(number   keyword)</i> |
| Tree       | <a href="#">vendor</a>  |
| Range      | 1 to 16777215   |
| Options    | nokia   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **attribute-5**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>attribute-5</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">load-balance-key</a> <b>attribute-5</b>                            |
| Tree       | <a href="#">attribute-5</a>   |
| Notes      | The following elements are part of a choice: ( <b>attribute-1</b> , <b>attribute-2</b> , <b>attribute-3</b> , <b>attribute-4</b> , and <b>attribute-5</b> ) or <b>source-ip-udp</b> . |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**type** *number*

|            |  |
|------------|--|
| Synopsis   | Attribute type to cache for this RADIUS Proxy server   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">radius</a> <a href="#">proxy</a> <i>string</i> <a href="#">load-balance-key</a> <a href="#">attribute-5</a> <b>type</b> <i>number</i> |
| Tree       | <a href="#">type</a>   |
| Range      | 1 to 255   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**vendor** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Vendor-Id attribute   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">radius</a> <a href="#">proxy</a> <i>string</i> <a href="#">load-balance-key</a> <a href="#">attribute-5</a> <b>vendor</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">vendor</a>  |
| Range      | 1 to 16777215   |
| Options    | nokia   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**source-ip-udp**

|            |   |
|------------|---|
| Synopsis   | Key to consist of the source IP address and source UDP port of the RADIUS message   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">radius</a> <a href="#">proxy</a> <i>string</i> <a href="#">load-balance-key</a> <b>source-ip-udp</b> |
| Tree       | <a href="#">source-ip-udp</a>   |
| Notes      | The following elements are part of a choice: ( <b>attribute-1</b> , <b>attribute-2</b> , <b>attribute-3</b> , <b>attribute-4</b> , and <b>attribute-5</b> ) or <b>source-ip-udp</b> .       |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**purpose** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Purpose of the RADIUS proxy   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">radius</a> <a href="#">proxy</a> <i>string</i> <a href="#">purpose</a> <i>keyword</i> |
| Tree       | <a href="#">purpose</a>   |
| Options    | accounting, authentication, accounting-authentication   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **python-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | Python policy   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">radius</a> <a href="#">proxy</a> <i>string</i> <a href="#">python-policy</a> <i>reference</i> |
| Tree       | <a href="#">python-policy</a>   |
| Reference  | <b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **secret** *string*

|               |   |
|---------------|---|
| Synopsis      | Format of the secret key to access the RADIUS proxy server  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">radius</a> <a href="#">proxy</a> <i>string</i> <a href="#">secret</a> <i>string</i> |
| Tree          | <a href="#">secret</a>  |
| String Length | 1 to 115  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **send-accounting-response** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow RADIUS proxy server to respond to Accounting-Response messages   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">radius</a> <a href="#">proxy</a> <i>string</i> <a href="#">send-accounting-response</a> <i>boolean</i> |
| Tree       | <a href="#">send-accounting-response</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |



**wlan-gw**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>wlan-gw</b> context                                 |
| Context    | <b>configure service vprn string radius proxy string wlan-gw</b> |
| Tree       | <b>wlan-gw</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR                               |

**address string**

|             |   |
|-------------|---|
| Synopsis    | IPv4 address of the distributed RADIUS proxy server   |
| Context     | <b>configure service vprn string radius proxy string wlan-gw address string</b>                               |
| Tree        | <b>address</b>  |
| Description | This command configures the IPv4 address of the distributed RADIUS proxy server for use by the access points. |
| Introduced  | 16.0.R1   |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**ipv6-address string**

|             |   |
|-------------|---|
| Synopsis    | IPv6 address of the distributed RADIUS proxy server   |
| Context     | <b>configure service vprn string radius proxy string wlan-gw ipv6-address string</b>                          |
| Tree        | <b>ipv6-address</b>   |
| Description | This command configures the IPv6 address of the distributed RADIUS proxy server for use by the access points. |
| Introduced  | 16.0.R1   |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**wlan-gw-group reference****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | ISA WLAN gateway group   |
| Context  | <b>configure service vprn string radius proxy string wlan-gw-group reference</b> |

|            |  |
|------------|--|
| Tree       | <a href="#">wlan-gw-group</a>                                    |
| Reference  | <b>configure</b> <a href="#">isa wlan-gw-group</a> <i>number</i> |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR                               |

**server** [[name](#)] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>server</b> list instance   |
| Context        | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius server</a> <i>string</i> |
| Tree           | <a href="#">server</a>  |
| Max. Instances | 64  |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**[name]** *string*

|               |   |
|---------------|---|
| Synopsis      | External RADIUS server name   |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius server</a> <i>string</i> |
| Tree          | <a href="#">server</a>  |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**accept-coa** *boolean*

|            |  |
|------------|--|
| Synopsis   | Process Change of Authorization (CoA) messages   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius server</a> <i>string</i> <b>accept-coa</b> <i>boolean</i> |
| Tree       | <a href="#">accept-coa</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**acct-port number**

|            |  |
|------------|--|
| Synopsis   | UDP port number of the RADIUS for accounting events  |
| Context    | <b>configure</b> <a href="#">service vprn string radius server string acct-port number</a> |
| Tree       | <a href="#">acct-port</a>  |
| Range      | 1 to 65535   |
| Default    | 1813   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                    |

**address (ipv4-address-no-zone | ipv6-address-no-zone)**

|            |   |
|------------|---|
| Synopsis   | IP address of the RADIUS server   |
| Context    | <b>configure</b> <a href="#">service vprn string radius server string address (ipv4-address-no-zone   ipv6-address-no-zone)</a> |
| Tree       | <a href="#">address</a>   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**auth-port number**

|            |  |
|------------|--|
| Synopsis   | UDP port number of the RADIUS to be used as match criteria                                 |
| Context    | <b>configure</b> <a href="#">service vprn string radius server string auth-port number</a> |
| Tree       | <a href="#">auth-port</a>  |
| Range      | 1 to 65535   |
| Default    | 1812   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                    |

**description string**

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service vprn string radius server string description string</a> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pending-requests-limit** *number*

Synopsis Limit of the number for pending RADIUS requests  
Context **configure** [service vprn](#) *string* [radius server](#) *string* **pending-requests-limit** *number*  
Tree [pending-requests-limit](#)  
Range 1 to 4096  
Default 4096  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **python-policy** *reference*

Synopsis Python script policy to modify CoA messages  
Context **configure** [service vprn](#) *string* [radius server](#) *string* **python-policy** *reference*  
Tree [python-policy](#)  
Reference **configure** [python](#) **python-policy** *string*  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **secret** *string*

Synopsis Secret key associated with this RADIUS server  
Context **configure** [service vprn](#) *string* [radius server](#) *string* **secret** *string*  
Tree [secret](#)  
String Length 1 to 115  
Notes This element is mandatory.  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **reassembly**

Synopsis Enable the **reassembly** context

|            |   |
|------------|---|
| Context    | <b>configure service vprn string reassembly</b> |
| Tree       | <a href="#">reassembly</a>                      |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR    |

### **nat-group** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | NAT group (including WLAN Gateway group) that executes the reassembly |
| Context    | <b>configure service vprn string reassembly nat-group number</b>      |
| Tree       | <a href="#">nat-group</a>   |
| Max. Range | 0 to 4294967295   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                          |

### **to-base-network** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow reassembled traffic sent to network interface                     |
| Context    | <b>configure service vprn string reassembly to-base-network boolean</b> |
| Tree       | <a href="#">to-base-network</a>   |
| Default    | false   |
| Introduced | 19.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR                            |

### **redundant-interface** [[interface-name](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>redundant-interface</b> list instance              |
| Context    | <b>configure service vprn string redundant-interface string</b> |
| Tree       | <a href="#">redundant-interface</a>                             |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR         |

**[interface-name] string**

|               |   |
|---------------|---|
| Synopsis      | Interface name  |
| Context       | <b>configure service vprn string redundant-interface string</b> |
| Tree          | <a href="#">redundant-interface</a>                             |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.                             |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR         |

**admin-state keyword**

|            |   |
|------------|---|
| Synopsis   | Administrative state of the interface   |
| Context    | <b>configure service vprn string redundant-interface string admin-state keyword</b> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                             |

**description string**

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure service vprn string redundant-interface string description string</b> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 255   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                            |

**hold-time**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>hold-time</b> context  |
| Context    | <b>configure service vprn string redundant-interface string hold-time</b> |
| Tree       | <a href="#">hold-time</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                   |

## ipv4

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv4</b> context  |
| Context    | <b>configure service vprn string redundant-interface string hold-time ipv4</b> |
| Tree       | <b>ipv4</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                        |

## down

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>down</b> context  |
| Context     | <b>configure service vprn string redundant-interface string hold-time ipv4 down</b>  |
| Tree        | <b>down</b>  |
| Description | Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the <b>init-only</b> command. |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## init-only *boolean*

|             |   |
|-------------|---|
| Synopsis    | Apply delay only at interface configuration or reboot   |
| Context     | <b>configure service vprn string redundant-interface string hold-time ipv4 down init-only boolean</b> |
| Tree        | <b>init-only</b>  |
| Description | This command applies a delay only when the IP interface is first configured or after a system reboot. |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## seconds *number*

|          |  |
|----------|--|
| Synopsis | Down hold time for the IP interface  |
| Context  | <b>configure service vprn string redundant-interface string hold-time ipv4 down seconds number</b> |

|            |   |
|------------|---|
| Tree       | <a href="#">seconds</a>                                 |
| Range      | 1 to 1200   |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## up

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>up</b> context   |
| Context     | <b>configure</b> <a href="#">service vprn string</a> <a href="#">redundant-interface string</a> <a href="#">hold-time ipv4 up</a>   |
| Tree        | <a href="#">up</a>  |
| Description | Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down. |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## seconds *number*

|            |  |
|------------|--|
| Synopsis   | Up hold time for the IP interface  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">redundant-interface string</a> <a href="#">hold-time ipv4 up seconds number</a> |
| Tree       | <a href="#">seconds</a>  |
| Range      | 1 to 1200  |
| Units      | seconds  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## ip-mtu *number*

|            |   |
|------------|---|
| Synopsis   | IP MTU applied to outgoing packets  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">redundant-interface string</a> <a href="#">ip-mtu number</a> |
| Tree       | <a href="#">ip-mtu</a>  |
| Range      | 512 to 9786   |
| Units      | bytes   |
| Introduced | 16.0.R1   |



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv4

Synopsis Enter the **ipv4** context  
Context **configure service vprn string redundant-interface string ipv4**  
Tree [ipv4](#)  
Introduced 16.0.R4  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## primary

Synopsis Enable the **primary** context  
Context **configure service vprn string redundant-interface string ipv4 primary**  
Tree [primary](#)  
Introduced 16.0.R4  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## address *string*

Synopsis IPv4 address to be assigned to the interface  
Context **configure service vprn string redundant-interface string ipv4 primary address string**  
Tree [address](#)  
Notes This element is mandatory.  
Introduced 16.0.R4  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## prefix-length *number*

Synopsis IPv4 address prefix length  
Context **configure service vprn string redundant-interface string ipv4 primary prefix-length number**  
Tree [prefix-length](#)  
Range 0 to 32  
Notes This element is mandatory.

Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **remote-ip** *string*

Synopsis Remote IP address for the interface  
 Context **configure** [service](#) [vpn](#) *string* [redundant-interface](#) *string* [ipv4](#) [primary](#) [remote-ip](#) *string*  
 Tree [remote-ip](#)  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **spoke-sdp** [[sdp-bind-id](#)] *string*

Synopsis Enter the **spoke-sdp** list instance  
 Context **configure** [service](#) [vpn](#) *string* [redundant-interface](#) *string* [spoke-sdp](#) *string*  
 Tree [spoke-sdp](#)  
 Max. Instances 1  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[sdp-bind-id]** *string*

Synopsis SDP binding ID  
 Context **configure** [service](#) [vpn](#) *string* [redundant-interface](#) *string* [spoke-sdp](#) *string*  
 Tree [spoke-sdp](#)  
 String Length 3 to 16  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the SDP binding to the service  
 Context **configure** [service](#) [vpn](#) *string* [redundant-interface](#) *string* [spoke-sdp](#) *string* [admin-state](#) *keyword*

|            |   |
|------------|---|
| Tree       | <a href="#">admin-state</a>                             |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

**control-word** *boolean*

|            |   |
|------------|---|
| Synopsis   | Use the control word as preferred   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>control-word</b> <i>boolean</i> |
| Tree       | <a href="#">control-word</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**egress**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>egress</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>egress</b> |
| Tree       | <a href="#">egress</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## filter

|            |   |
|------------|---|
| Synopsis   | Enter the <b>filter</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress filter</a> |
| Tree       | <a href="#">filter</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## ip reference

|            |  |
|------------|--|
| Synopsis   | IPv4 filter policy name  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress filter ip reference</a> |
| Tree       | <a href="#">ip</a>   |
| Reference  | <b>configure</b> <a href="#">filter ip-filter</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## vc-label *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Egress MPLS VC label to send packets to the far end   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress vc-label</a> <i>number</i> |
| Tree       | <a href="#">vc-label</a>  |
| Range      | 16 to 1048575   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## ingress

|          |   |
|----------|---|
| Synopsis | Enter the <b>ingress</b> context  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress</a> |
| Tree     | <a href="#">ingress</a>   |

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## filter

Synopsis Enter the **filter** context  
 Context **configure** [service](#) [vpn](#) *string* [redundant-interface](#) *string* [spoke-sdp](#) *string* [ingress](#) [filter](#)  
 Tree [filter](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ip reference

Synopsis IPv4 filter policy name  
 Context **configure** [service](#) [vpn](#) *string* [redundant-interface](#) *string* [spoke-sdp](#) *string* [ingress](#) [filter](#) [ip](#) [reference](#)  
 Tree [ip](#)  
 Reference **configure** [filter](#) [ip-filter](#) *string*  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## vc-label number



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Ingress MPLS VC label to send packets to the far end  
 Context **configure** [service](#) [vpn](#) *string* [redundant-interface](#) *string* [spoke-sdp](#) *string* [ingress](#) [vc-label](#) *number*  
 Tree [vc-label](#)  
 Range 1 to 1048575  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## rip

|            |  |
|------------|--|
| Synopsis   | Enable the <b>rip</b> context            |
| Context    | <b>configure service vprn string rip</b> |
| Tree       | <a href="#">rip</a>                      |
| Introduced | 16.0.R4                                  |
| Platforms  | All                                      |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the RIP instance                     |
| Context    | <b>configure service vprn string rip admin-state keyword</b> |
| Tree       | <a href="#">admin-state</a>                                  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

## authentication-key *string*

|               |   |
|---------------|---|
| Synopsis      | Authentication password passed between RIP neighbors  |
| Context       | <b>configure service vprn string rip authentication-key string</b>  |
| Tree          | <a href="#">authentication-key</a>  |
| Description   | <p>This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication password from the configuration and disables authentication.</p> |
| String Length | 1 to 51   |
| Introduced    | 16.0.R4   |
| Platforms     | All   |

## authentication-type *keyword*

|          |  |
|----------|--|
| Synopsis | Authentication type used between RIP neighbors |
|----------|--|

|             |  |
|-------------|--|
| Context     | <b>configure service vprn</b> <i>string rip authentication-type keyword</i>  |
| Tree        | <a href="#">authentication-type</a>  |
| Description | This command sets the type of authentication to be used between RIP neighbors.<br>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.<br>When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication. |
| Options     | none, password, md5, md20  |
| Default     | none   |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

### **bfd-liveness** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Enable BFD to control the state of protocol adjacency  |
| Context     | <b>configure service vprn</b> <i>string rip bfd-liveness boolean</i>   |
| Tree        | <a href="#">bfd-liveness</a>   |
| Description | When configured to <b>true</b> , this command enables BFD to control the state of the associated protocol adjacency.<br>When configured to <b>false</b> , this command removes BFD from the associated protocol adjacency. |
| Default     | false  |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

### **check-zero** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Enable checking of mandatory zero fields  |
| Context     | <b>configure service vprn</b> <i>string rip check-zero boolean</i>  |
| Tree        | <a href="#">check-zero</a>  |
| Description | When configured to <b>true</b> , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages.<br>When configured to <b>false</b> , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero. |
| Default     | false   |
| Introduced  | 16.0.R4   |

Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [service](#) [vprn](#) *string* [rip](#) [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R4  
 Platforms All

### **export-limit**

Synopsis Enable the **export-limit** context  
 Context **configure** [service](#) [vprn](#) *string* [rip](#) [export-limit](#)  
 Tree [export-limit](#)  
 Introduced 16.0.R4  
 Platforms All

### **log-percent** *number*

Synopsis Export limit before warning and SNMP notification sent  
 Context **configure** [service](#) [vprn](#) *string* [rip](#) [export-limit](#) [log-percent](#) *number*  
 Tree [log-percent](#)  
 Range 1 to 100  
 Introduced 16.0.R4  
 Platforms All

### **number** *number*

Synopsis Maximum routes or prefixes exported from route table  
 Context **configure** [service](#) [vprn](#) *string* [rip](#) [export-limit](#) [number](#) *number*  
 Tree [number](#)  
 Range 1 to 4294967295  
 Notes This element is mandatory.



Introduced 16.0.R4  
 Platforms All

### **export-policy** *reference*

Synopsis Policies to determine exported routes  
 Context **configure** [service](#) [vprn](#) *string* [rip](#) [export-policy](#) *reference*  
 Tree [export-policy](#)  
 Reference **configure** [policy-options](#) [policy-statement](#) *string*  
 Max. Instances 5  
 Notes This element is ordered by the user.  
 Introduced 16.0.R4  
 Platforms All

### **group** [[group-name](#)] *string*

Synopsis Enter the **group** list instance  
 Context **configure** [service](#) [vprn](#) *string* [rip](#) [group](#) *string*  
 Tree [group](#)  
 Introduced 16.0.R4  
 Platforms All

### [[group-name](#)] *string*

Synopsis RIP group name  
 Context **configure** [service](#) [vprn](#) *string* [rip](#) [group](#) *string*  
 Tree [group](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R4  
 Platforms All

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of RIP neighbor interface group  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**authentication-key** *string*

|               |   |
|---------------|---|
| Synopsis      | Authentication password passed between RIP neighbors  |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <b>authentication-key</b> <i>string</i>   |
| Tree          | <a href="#">authentication-key</a>  |
| Description   | <p>This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication password from the configuration and disables authentication.</p> |
| String Length | 1 to 51   |
| Introduced    | 16.0.R4   |
| Platforms     | All   |

**authentication-type** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Authentication type   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <b>authentication-type</b> <i>keyword</i>   |
| Tree        | <a href="#">authentication-type</a>   |
| Description | <p>This command configures the type of authentication to be used.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication.</p> |
| Options     | none, password, md5, md20   |

|            |         |
|------------|---------|
| Introduced | 16.0.R4 |
| Platforms  | All     |

### **bfd-liveness** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Enable BFD to control the state of protocol adjacency  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <a href="#">bfd-liveness</a> <i>boolean</i>  |
| Tree        | <a href="#">bfd-liveness</a>   |
| Description | When configured to <b>true</b> , this command enables BFD to control the state of the associated protocol adjacency.<br>When configured to <b>false</b> , this command removes BFD from the associated protocol adjacency. |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

### **check-zero** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Enable checking of mandatory zero fields  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <a href="#">check-zero</a> <i>boolean</i>   |
| Tree        | <a href="#">check-zero</a>  |
| Description | When configured to <b>true</b> , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages.<br>When configured to <b>false</b> , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero. |
| Introduced  | 16.0.R4   |
| Platforms   | All   |

### **description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R4   |
| Platforms     | All   |

**export-policy** *reference*

|                |   |
|----------------|---|
| Synopsis       | Policies used to rule which routes are exported to RIP  |
| Context        | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <a href="#">export-policy</a> <i>reference</i>  |
| Tree           | <a href="#">export-policy</a>   |
| Description    | This command specifies the export route policies used to determine which routes are exported to RIP.<br><br>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied. |
| Reference      | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>  |
| Max. Instances | 5   |
| Notes          | This element is ordered by the user.  |
| Introduced     | 16.0.R4   |
| Platforms      | All   |

**import-policy** *reference*

|                |   |
|----------------|---|
| Synopsis       | Policies to decide routes accepted from RIP neighbors   |
| Context        | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <a href="#">import-policy</a> <i>reference</i>  |
| Tree           | <a href="#">import-policy</a>   |
| Description    | This command configures import route policies to determine which routes are accepted from RIP neighbors.<br><br>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied. |
| Reference      | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>  |
| Max. Instances | 5   |
| Notes          | This element is ordered by the user.  |
| Introduced     | 16.0.R4   |
| Platforms      | All   |

**message-size** *number*

|          |  |
|----------|--|
| Synopsis | Maximum number of routes per RIP update message  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <a href="#">message-size</a> <i>number</i> |
| Tree     | <a href="#">message-size</a>   |

|            |           |
|------------|-----------|
| Range      | 25 to 255 |
| Introduced | 16.0.R4   |
| Platforms  | All       |

**metric-in** *number*

|            |  |
|------------|--|
| Synopsis   | Metric added to routes received from a RIP neighbor  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <b>metric-in</b> <i>number</i> |
| Tree       | <a href="#">metric-in</a>  |
| Range      | 1 to 16  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**metric-out** *number*

|            |   |
|------------|---|
| Synopsis   | Metric added to routes exported into RIP  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <b>metric-out</b> <i>number</i> |
| Tree       | <a href="#">metric-out</a>  |
| Range      | 1 to 16   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**neighbor** [[interface-name](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>neighbor</b> list instance   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <b>neighbor</b> <i>string</i> |
| Tree       | <a href="#">neighbor</a>  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**[interface-name]** *string*

|          |   |
|----------|---|
| Synopsis | IP interface name   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <b>neighbor</b> <i>string</i> |
| Tree     | <a href="#">neighbor</a>  |

|               |                                     |
|---------------|-------------------------------------|
| String Length | 1 to 32                             |
| Notes         | This element is part of a list key. |
| Introduced    | 16.0.R4                             |
| Platforms     | All                                 |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the RIP neighbor interface   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **authentication-key** *string*

|               |   |
|---------------|---|
| Synopsis      | Authentication password passed between RIP neighbors  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <b>authentication-key</b> <i>string</i>  |
| Tree          | <a href="#">authentication-key</a>  |
| Description   | <p>This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication password from the configuration and disables authentication.</p> |
| String Length | 1 to 51   |
| Introduced    | 16.0.R4   |
| Platforms     | All   |

### **authentication-type** *keyword*

|          |  |
|----------|--|
| Synopsis | Authentication type  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <b>authentication-type</b> <i>keyword</i> |

|             |  |
|-------------|--|
| Tree        | <a href="#">authentication-type</a>  |
| Description | This command configures the type of authentication to be used.<br><br>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.<br><br>When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication. |
| Options     | none, password, md5, md20  |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

**bfd-liveness** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Enable BFD to control the state of protocol adjacency  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string rip group</i> <i>string neighbor</i> <i>string bfd-liveness</i> <i>boolean</i>   |
| Tree        | <a href="#">bfd-liveness</a>   |
| Description | When configured to <b>true</b> , this command enables BFD to control the state of the associated protocol adjacency.<br><br>When configured to <b>false</b> , this command removes BFD from the associated protocol adjacency. |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

**check-zero** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Enable checking of mandatory zero fields  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string rip group</i> <i>string neighbor</i> <i>string check-zero</i> <i>boolean</i>  |
| Tree        | <a href="#">check-zero</a>  |
| Description | When configured to <b>true</b> , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages.<br><br>When configured to <b>false</b> , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero. |
| Introduced  | 16.0.R4   |
| Platforms   | All   |

**description** *string*

|          |                  |
|----------|------------------|
| Synopsis | Text description |
|----------|------------------|

|               |   |
|---------------|---|
| Context       | <b>configure service vprn</b> <i>string</i> <b>rip group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <b>description</b>  |
| String Length | 1 to 80   |
| Introduced    | 16.0.R4   |
| Platforms     | All   |

### **export-policy** *reference*

|                |   |
|----------------|---|
| Synopsis       | Policies used to rule which routes are exported to RIP  |
| Context        | <b>configure service vprn</b> <i>string</i> <b>rip group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>export-policy</b> <i>reference</i>  |
| Tree           | <b>export-policy</b>  |
| Description    | This command specifies the export route policies used to determine which routes are exported to RIP.<br><br>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied. |
| Reference      | <b>configure</b> <b>policy-options</b> <b>policy-statement</b> <i>string</i>  |
| Max. Instances | 5   |
| Notes          | This element is ordered by the user.  |
| Introduced     | 16.0.R4   |
| Platforms      | All   |

### **import-policy** *reference*

|                |   |
|----------------|---|
| Synopsis       | Policies to decide routes accepted from RIP neighbors   |
| Context        | <b>configure service vprn</b> <i>string</i> <b>rip group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>import-policy</b> <i>reference</i>  |
| Tree           | <b>import-policy</b>  |
| Description    | This command configures import route policies to determine which routes are accepted from RIP neighbors.<br><br>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied. |
| Reference      | <b>configure</b> <b>policy-options</b> <b>policy-statement</b> <i>string</i>  |
| Max. Instances | 5   |
| Notes          | This element is ordered by the user.  |
| Introduced     | 16.0.R4   |



Platforms All

### **message-size** *number*

Synopsis Maximum number of routes per RIP update message  
Context **configure** [service vprn](#) *string* [rip group](#) *string* [neighbor](#) *string* **message-size** *number*  
Tree [message-size](#)  
Range 25 to 255  
Introduced 16.0.R4  
Platforms All

### **metric-in** *number*

Synopsis Metric added to routes received from a RIP neighbor  
Context **configure** [service vprn](#) *string* [rip group](#) *string* [neighbor](#) *string* **metric-in** *number*  
Tree [metric-in](#)  
Range 1 to 16  
Introduced 16.0.R4  
Platforms All

### **metric-out** *number*

Synopsis Metric added to routes exported into RIP  
Context **configure** [service vprn](#) *string* [rip group](#) *string* [neighbor](#) *string* **metric-out** *number*  
Tree [metric-out](#)  
Range 1 to 16  
Introduced 16.0.R4  
Platforms All

### **preference** *number*

Synopsis Route preference  
Context **configure** [service vprn](#) *string* [rip group](#) *string* [neighbor](#) *string* **preference** *number*  
Tree [preference](#)  
Range 1 to 255

|            |         |
|------------|---------|
| Introduced | 16.0.R4 |
| Platforms  | All     |

### **receive** *keyword*

|            |   |
|------------|---|
| Synopsis   | Accepted version on received packets  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>rip</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>receive</b> <i>keyword</i> |
| Tree       | <b>receive</b>  |
| Options    | version-1, version-2, both, none  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **send** *keyword*

|            |  |
|------------|--|
| Synopsis   | RIP version and method used to send RIP updates  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>rip</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>send</b> <i>keyword</i> |
| Tree       | <b>send</b>  |
| Options    | none, version-1, broadcast, multicast, unicast   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **split-horizon** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Enable split horizon and poison reverse   |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>rip</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>split-horizon</b> <i>boolean</i>   |
| Tree        | <b>split-horizon</b>  |
| Description | <p>When configured to <b>true</b>, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to <b>false</b>, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p> |
| Introduced  | 16.0.R4   |
| Platforms   | All   |

## timers

|            |  |
|------------|--|
| Synopsis   | Enable the <b>timers</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <b>timers</b> |
| Tree       | <a href="#">timers</a>   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

## flush number

|             |  |
|-------------|--|
| Synopsis    | RIP flush timer  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <b>timers</b> <a href="#">flush</a> <i>number</i> |
| Tree        | <a href="#">flush</a>  |
| Description | This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.                                 |
| Range       | 1 to 1200  |
| Units       | seconds  |
| Notes       | This element is mandatory.   |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

## timeout number

|             |  |
|-------------|--|
| Synopsis    | RIP timeout timer  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <b>timers</b> <a href="#">timeout</a> <i>number</i> |
| Tree        | <a href="#">timeout</a>  |
| Description | This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.   |
| Range       | 1 to 1200  |
| Units       | seconds  |
| Notes       | This element is mandatory.   |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

**update** *number*

|            |  |
|------------|--|
| Synopsis   | Timer that controls the frequency of updates   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <a href="#">timers</a> <a href="#">update</a> <i>number</i> |
| Tree       | <a href="#">update</a>   |
| Range      | 1 to 600   |
| Units      | seconds  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**unicast-address** [[address](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Add a list entry for <b>unicast-address</b>  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <a href="#">unicast-address</a> <i>string</i> |
| Tree       | <a href="#">unicast-address</a>  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**[address]** *string*

|            |  |
|------------|--|
| Synopsis   | Unicast IPv6 address for the neighbor  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <a href="#">unicast-address</a> <i>string</i> |
| Tree       | <a href="#">unicast-address</a>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**preference** *number*

|            |  |
|------------|--|
| Synopsis   | Route preference   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">preference</a> <i>number</i> |
| Tree       | <a href="#">preference</a>   |
| Range      | 1 to 255   |
| Introduced | 16.0.R4  |

Platforms All

### **receive** *keyword*

Synopsis Accepted version on received packets  
 Context **configure** **service vprn** *string rip group string receive keyword*  
 Tree **receive**  
 Options version-1, version-2, both, none  
 Introduced 16.0.R4  
 Platforms All

### **send** *keyword*

Synopsis RIP version and method used to send RIP updates  
 Context **configure** **service vprn** *string rip group string send keyword*  
 Tree **send**  
 Options none, version-1, broadcast, multicast  
 Introduced 16.0.R4  
 Platforms All

### **split-horizon** *boolean*

Synopsis Enable split horizon and poison reverse  
 Context **configure** **service vprn** *string rip group string split-horizon boolean*  
 Tree **split-horizon**  
 Description When configured to **true**, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).  
 When configured to **false**, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.  
 Introduced 16.0.R4  
 Platforms All

## timers

|            |  |
|------------|--|
| Synopsis   | Enable the <b>timers</b> context                             |
| Context    | <b>configure service vprn string rip group string timers</b> |
| Tree       | <b>timers</b>  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

## flush number

|             |  |
|-------------|--|
| Synopsis    | RIP flush timer  |
| Context     | <b>configure service vprn string rip group string timers flush number</b>  |
| Tree        | <b>flush</b>   |
| Description | This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely. |
| Range       | 1 to 1200  |
| Units       | seconds  |
| Notes       | This element is mandatory.   |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

## timeout number

|             |  |
|-------------|--|
| Synopsis    | RIP timeout timer  |
| Context     | <b>configure service vprn string rip group string timers timeout number</b>  |
| Tree        | <b>timeout</b>   |
| Description | This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database. |
| Range       | 1 to 1200  |
| Units       | seconds  |
| Notes       | This element is mandatory.   |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

### **update** *number*

|            |   |
|------------|---|
| Synopsis   | Timer that controls the frequency of updates  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <a href="#">timers</a> <a href="#">update</a> <i>number</i> |
| Tree       | <a href="#">update</a>  |
| Range      | 1 to 600  |
| Units      | seconds   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **import-policy** *reference*

|                |  |
|----------------|--|
| Synopsis       | Import policies to decide routes for routing table   |
| Context        | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">rip</a> <a href="#">import-policy</a> <i>reference</i> |
| Tree           | <a href="#">import-policy</a>  |
| Reference      | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>                                 |
| Max. Instances | 5  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R4  |
| Platforms      | All  |

### **message-size** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of routes in the RIP message  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">rip</a> <a href="#">message-size</a> <i>number</i> |
| Tree       | <a href="#">message-size</a>   |
| Range      | 25 to 255  |
| Default    | 25   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **metric-in** *number*

|          |   |
|----------|---|
| Synopsis | Metric added to routes received from a RIP neighbor |
|----------|---|

---

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string rip metric-in number</i> |
| Tree       | <a href="#">metric-in</a>  |
| Range      | 1 to 16  |
| Default    | 1  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **metric-out** *number*

|            |   |
|------------|---|
| Synopsis   | Metric added to routes exported into RIP                          |
| Context    | <b>configure service vprn</b> <i>string rip metric-out number</i> |
| Tree       | <a href="#">metric-out</a>  |
| Range      | 1 to 16   |
| Default    | 1   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **preference** *number*

|            |   |
|------------|---|
| Synopsis   | Route preference  |
| Context    | <b>configure service vprn</b> <i>string rip preference number</i> |
| Tree       | <a href="#">preference</a>  |
| Range      | 1 to 255  |
| Default    | 100   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **propagate-metric** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Enable the BGP MED used to configure the RIP metric  |
| Context     | <b>configure service vprn</b> <i>string rip propagate-metric boolean</i>   |
| Tree        | <a href="#">propagate-metric</a>   |
| Description | When configured to <b>true</b> , this command enables the BGP MED to be used to configure the RIP metric at the BGP to RIP transition on egress routers.<br><br>When configured to <b>false</b> , this command sets the RIP metric to the optional value configured with the <b>metric-out</b> command plus one. |



|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R4 |
| Platforms  | All     |

### **receive** *keyword*

|            |  |
|------------|--|
| Synopsis   | Accepted version on received packets                                   |
| Context    | <b>configure</b> <b>service vprn</b> <i>string rip receive keyword</i> |
| Tree       | <b>receive</b>   |
| Options    | version-1, version-2, both, none                                       |
| Default    | both   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **send** *keyword*

|            |   |
|------------|---|
| Synopsis   | RIP version and method used to send RIP updates                     |
| Context    | <b>configure</b> <b>service vprn</b> <i>string rip send keyword</i> |
| Tree       | <b>send</b>   |
| Options    | none, version-1, broadcast, multicast                               |
| Default    | broadcast   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **split-horizon** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Enable split horizon and poison reverse   |
| Context     | <b>configure</b> <b>service vprn</b> <i>string rip split-horizon boolean</i>  |
| Tree        | <b>split-horizon</b>  |
| Description | <p>When configured to <b>true</b>, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to <b>false</b>, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p> |

|            |         |
|------------|---------|
| Default    | true    |
| Introduced | 16.0.R4 |
| Platforms  | All     |

## timers

|            |   |
|------------|---|
| Synopsis   | Enable the <b>timers</b> context                |
| Context    | <b>configure service vprn string rip timers</b> |
| Tree       | <b>timers</b>                                   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

## flush number

|             |  |
|-------------|--|
| Synopsis    | RIP flush timer  |
| Context     | <b>configure service vprn string rip timers flush number</b>   |
| Tree        | <b>flush</b>   |
| Description | This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely. |
| Range       | 1 to 1200  |
| Units       | seconds  |
| Notes       | This element is mandatory.   |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

## timeout number

|             |  |
|-------------|--|
| Synopsis    | RIP timeout timer  |
| Context     | <b>configure service vprn string rip timers timeout number</b>   |
| Tree        | <b>timeout</b>   |
| Description | This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database. |
| Range       | 1 to 1200  |
| Units       | seconds  |

|            |                            |
|------------|----------------------------|
| Notes      | This element is mandatory. |
| Introduced | 16.0.R4                    |
| Platforms  | All                        |

### **update** *number*

|            |   |
|------------|---|
| Synopsis   | Timer that controls the frequency of updates  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">rip timers</a> <a href="#">update</a> <i>number</i> |
| Tree       | <a href="#">update</a>  |
| Range      | 1 to 600  |
| Units      | seconds   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **ripng**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>ripng</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng</a> |
| Tree       | <a href="#">ripng</a>   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the RIPng instance   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**bfd-liveness** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Enable BFD to control the state of protocol adjacency  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string ripng</i> <b>bfd-liveness</b> <i>boolean</i>   |
| Tree        | <a href="#">bfd-liveness</a>   |
| Description | When configured to <b>true</b> , this command enables BFD to control the state of the associated protocol adjacency.<br>When configured to <b>false</b> , this command removes BFD from the associated protocol adjacency. |
| Default     | false  |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

**check-zero** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Enable checking of mandatory zero fields  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string ripng</i> <b>check-zero</b> <i>boolean</i>  |
| Tree        | <a href="#">check-zero</a>  |
| Description | When configured to <b>true</b> , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages.<br>When configured to <b>false</b> , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero. |
| Default     | false   |
| Introduced  | 16.0.R4   |
| Platforms   | All   |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string ripng</i> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R4  |
| Platforms     | All  |

**export-limit**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>export-limit</b> context                  |
| Context    | <b>configure service vprn string ripng export-limit</b> |
| Tree       | <a href="#">export-limit</a>                            |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**log-percent number**

|            |  |
|------------|--|
| Synopsis   | Export limit before warning and SNMP notification sent                     |
| Context    | <b>configure service vprn string ripng export-limit log-percent number</b> |
| Tree       | <a href="#">log-percent</a>  |
| Range      | 1 to 100   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**number number**

|            |   |
|------------|---|
| Synopsis   | Maximum routes or prefixes exported from route table                  |
| Context    | <b>configure service vprn string ripng export-limit number number</b> |
| Tree       | <a href="#">number</a>  |
| Range      | 1 to 4294967295   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**export-policy reference**

|                |  |
|----------------|--|
| Synopsis       | Policies to determine exported routes                              |
| Context        | <b>configure service vprn string ripng export-policy reference</b> |
| Tree           | <a href="#">export-policy</a>                                      |
| Reference      | <b>configure policy-options policy-statement string</b>            |
| Max. Instances | 5  |
| Notes          | This element is ordered by the user.                               |

Introduced 16.0.R4  
 Platforms All

### **group** [*group-name*] *string*

Synopsis Enter the **group** list instance  
 Context **configure** *service vprn string ripng group string*  
 Tree *group*  
 Introduced 16.0.R4  
 Platforms All

### **[group-name]** *string*

Synopsis RIP group name  
 Context **configure** *service vprn string ripng group string*  
 Tree *group*  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R4  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of RIPng neighbor interface group  
 Context **configure** *service vprn string ripng group string admin-state keyword*  
 Tree *admin-state*  
 Options enable, disable  
 Default enable  
 Introduced 16.0.R4  
 Platforms All

### **bfd-liveness** *boolean*

Synopsis Enable BFD to control the state of protocol adjacency  
 Context **configure** *service vprn string ripng group string bfd-liveness boolean*

|             |  |
|-------------|--|
| Tree        | <a href="#">bfd-liveness</a>   |
| Description | When configured to <b>true</b> , this command enables BFD to control the state of the associated protocol adjacency.<br>When configured to <b>false</b> , this command removes BFD from the associated protocol adjacency. |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

### **check-zero** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Enable checking of mandatory zero fields  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng group</a> <i>string</i> <b>check-zero</b> <i>boolean</i>  |
| Tree        | <a href="#">check-zero</a>  |
| Description | When configured to <b>true</b> , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages.<br>When configured to <b>false</b> , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero. |
| Introduced  | 16.0.R4   |
| Platforms   | All   |

### **description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng group</a> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R4  |
| Platforms     | All  |

### **export-policy** *reference*

|             |   |
|-------------|---|
| Synopsis    | Policies used to rule which routes are exported to RIP  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng group</a> <i>string</i> <b>export-policy</b> <i>reference</i> |
| Tree        | <a href="#">export-policy</a>   |
| Description | This command specifies the export route policies used to determine which routes are exported to RIP.  |

If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.

|                |  |
|----------------|--|
| Reference      | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> |
| Max. Instances | 5  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R4  |
| Platforms      | All  |

### **import-policy** *reference*

|                |   |
|----------------|---|
| Synopsis       | Policies to decide routes accepted from RIP neighbors   |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ripng</a> <a href="#">group</a> <i>string</i> <b>import-policy</b> <i>reference</i>   |
| Tree           | <a href="#">import-policy</a>   |
| Description    | This command configures import route policies to determine which routes are accepted from RIP neighbors.<br><br>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied. |
| Reference      | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>  |
| Max. Instances | 5   |
| Notes          | This element is ordered by the user.  |
| Introduced     | 16.0.R4   |
| Platforms      | All   |

### **message-size** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum number of routes in the message   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ripng</a> <a href="#">group</a> <i>string</i> <b>message-size</b> <i>number</i> |
| Tree       | <a href="#">message-size</a>  |
| Range      | 25 to 255   |
| Introduced | 16.0.R4   |
| Platforms  | All   |



**metric-in** *number*

|            |  |
|------------|--|
| Synopsis   | Metric added to routes received from the neighbor  |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>ripng group</b> <i>string</i> <b>metric-in</b> <i>number</i> |
| Tree       | <b>metric-in</b>   |
| Range      | 1 to 16  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**metric-out** *number*

|            |   |
|------------|---|
| Synopsis   | Metric added to routes exported into RIPng  |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>ripng group</b> <i>string</i> <b>metric-out</b> <i>number</i> |
| Tree       | <b>metric-out</b>   |
| Range      | 1 to 16   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**neighbor** [**interface-name**] *reference*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>neighbor</b> list instance  |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>ripng group</b> <i>string</i> <b>neighbor</b> <i>reference</i> |
| Tree       | <b>neighbor</b>  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**[interface-name]** *reference*

|            |  |
|------------|--|
| Synopsis   | IP interface name  |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>ripng group</b> <i>string</i> <b>neighbor</b> <i>reference</i> |
| Tree       | <b>neighbor</b>  |
| Reference  | <b>configure</b> <b>service vprn</b> <i>string</i> <b>interface</b> <i>string</i>                                    |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the RIPng neighbor   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng group</a> <i>string</i> <a href="#">neighbor reference</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**bfd-liveness** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Enable BFD to control the state of protocol adjacency  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng group</a> <i>string</i> <a href="#">neighbor reference</a> <b>bfd-liveness</b> <i>boolean</i>  |
| Tree        | <a href="#">bfd-liveness</a>   |
| Description | When configured to <b>true</b> , this command enables BFD to control the state of the associated protocol adjacency.<br><br>When configured to <b>false</b> , this command removes BFD from the associated protocol adjacency. |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

**check-zero** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Enable checking of mandatory zero fields  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng group</a> <i>string</i> <a href="#">neighbor reference</a> <b>check-zero</b> <i>boolean</i>   |
| Tree        | <a href="#">check-zero</a>  |
| Description | When configured to <b>true</b> , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages.<br><br>When configured to <b>false</b> , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero. |
| Introduced  | 16.0.R4   |
| Platforms   | All   |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng group</a> <i>string</i> <a href="#">neighbor reference</a> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R4  |
| Platforms     | All  |

**export-policy** *reference*

|                |   |
|----------------|---|
| Synopsis       | Policies used to rule which routes are exported to RIP  |
| Context        | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng group</a> <i>string</i> <a href="#">neighbor reference</a> <a href="#">export-policy</a> <i>reference</i>   |
| Tree           | <a href="#">export-policy</a>   |
| Description    | This command specifies the export route policies used to determine which routes are exported to RIP.<br><br>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied. |
| Reference      | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>  |
| Max. Instances | 5   |
| Notes          | This element is ordered by the user.  |
| Introduced     | 16.0.R4   |
| Platforms      | All   |

**import-policy** *reference*

|             |   |
|-------------|---|
| Synopsis    | Policies to decide routes accepted from RIP neighbors   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng group</a> <i>string</i> <a href="#">neighbor reference</a> <a href="#">import-policy</a> <i>reference</i>   |
| Tree        | <a href="#">import-policy</a>   |
| Description | This command configures import route policies to determine which routes are accepted from RIP neighbors.<br><br>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied. |
| Reference   | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>  |

|                |                                      |
|----------------|--------------------------------------|
| Max. Instances | 5                                    |
| Notes          | This element is ordered by the user. |
| Introduced     | 16.0.R4                              |
| Platforms      | All                                  |

### **message-size** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of routes in the message  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng group</a> <i>string</i> <a href="#">neighbor reference</a> <a href="#">message-size number</a> |
| Tree       | <a href="#">message-size</a>   |
| Range      | 25 to 255  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **metric-in** *number*

|            |   |
|------------|---|
| Synopsis   | Metric added to routes received from the neighbor   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng group</a> <i>string</i> <a href="#">neighbor reference</a> <a href="#">metric-in number</a> |
| Tree       | <a href="#">metric-in</a>   |
| Range      | 1 to 16   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **metric-out** *number*

|            |  |
|------------|--|
| Synopsis   | Metric added to routes exported into RIPng   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng group</a> <i>string</i> <a href="#">neighbor reference</a> <a href="#">metric-out number</a> |
| Tree       | <a href="#">metric-out</a>   |
| Range      | 1 to 16  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**preference** *number*

|            |  |
|------------|--|
| Synopsis   | Route preference   |
| Context    | <b>configure</b> <b>service vprn</b> <i>string ripng group string neighbor reference preference number</i> |
| Tree       | <b>preference</b>  |
| Range      | 1 to 255   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**receive** *keyword*

|            |  |
|------------|--|
| Synopsis   | Accepted version on received packets   |
| Context    | <b>configure</b> <b>service vprn</b> <i>string ripng group string neighbor reference receive keyword</i> |
| Tree       | <b>receive</b>   |
| Options    | none, ripng  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**send** *keyword*

|            |   |
|------------|---|
| Synopsis   | RIPng version and method used to send RIPng updates   |
| Context    | <b>configure</b> <b>service vprn</b> <i>string ripng group string neighbor reference send keyword</i> |
| Tree       | <b>send</b>   |
| Options    | none, ripng, unicast  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**split-horizon** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Enable split horizon and poison reverse   |
| Context     | <b>configure</b> <b>service vprn</b> <i>string ripng group string neighbor reference split-horizon boolean</i>  |
| Tree        | <b>split-horizon</b>  |
| Description | When configured to <b>true</b> , this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity). |

When configured to **false**, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.

|            |         |
|------------|---------|
| Introduced | 16.0.R4 |
| Platforms  | All     |

## timers

|            |  |
|------------|--|
| Synopsis   | Enable the <b>timers</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng group</a> <i>string</i> <a href="#">neighbor reference</a> <b>timers</b> |
| Tree       | <a href="#">timers</a>   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

## flush number

|             |  |
|-------------|--|
| Synopsis    | RIP flush timer  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng group</a> <i>string</i> <a href="#">neighbor reference</a> <a href="#">timers</a> <b>flush</b> <i>number</i>   |
| Tree        | <a href="#">flush</a>  |
| Description | This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely. |
| Range       | 1 to 1200  |
| Units       | seconds  |
| Notes       | This element is mandatory.   |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

## timeout number

|          |  |
|----------|--|
| Synopsis | RIP timeout timer  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng group</a> <i>string</i> <a href="#">neighbor reference</a> <a href="#">timers</a> <b>timeout</b> <i>number</i> |
| Tree     | <a href="#">timeout</a>  |

|             |  |
|-------------|--|
| Description | This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database. |
| Range       | 1 to 1200  |
| Units       | seconds  |
| Notes       | This element is mandatory.   |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

### **update** *number*

|            |  |
|------------|--|
| Synopsis   | Timer that controls the frequency of updates   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ripng</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <a href="#">reference</a> <a href="#">timers</a> <a href="#">update</a> <i>number</i> |
| Tree       | <a href="#">update</a>   |
| Range      | 1 to 600   |
| Units      | seconds  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **unicast-address** [[address](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Add a list entry for <b>unicast-address</b>  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ripng</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <a href="#">reference</a> <a href="#">unicast-address</a> <i>string</i> |
| Tree       | <a href="#">unicast-address</a>  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **[address]** *string*

|          |  |
|----------|--|
| Synopsis | Unicast IPv6 address for the neighbor  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ripng</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <a href="#">reference</a> <a href="#">unicast-address</a> <i>string</i> |
| Tree     | <a href="#">unicast-address</a>  |

---

|            |                                     |
|------------|-------------------------------------|
| Notes      | This element is part of a list key. |
| Introduced | 16.0.R4                             |
| Platforms  | All                                 |

### **preference** *number*

|            |  |
|------------|--|
| Synopsis   | Route preference   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng group</a> <i>string</i> <a href="#">preference</a> <i>number</i> |
| Tree       | <a href="#">preference</a>   |
| Range      | 1 to 255   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **receive** *keyword*

|            |  |
|------------|--|
| Synopsis   | Accepted version on received packets   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng group</a> <i>string</i> <a href="#">receive</a> <i>keyword</i> |
| Tree       | <a href="#">receive</a>  |
| Options    | none, ripng  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **send** *keyword*

|            |   |
|------------|---|
| Synopsis   | RIPng version and method used to send RIPng updates   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng group</a> <i>string</i> <a href="#">send</a> <i>keyword</i> |
| Tree       | <a href="#">send</a>  |
| Options    | none, ripng   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **split-horizon** *boolean*

|          |  |
|----------|--|
| Synopsis | Enable split horizon and poison reverse  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng group</a> <i>string</i> <a href="#">split-horizon</a> <i>boolean</i> |



|             |   |
|-------------|---|
| Tree        | <a href="#">split-horizon</a>   |
| Description | <p>When configured to <b>true</b>, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to <b>false</b>, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p> |
| Introduced  | 16.0.R4   |
| Platforms   | All   |

## timers

|            |  |
|------------|--|
| Synopsis   | Enable the <b>timers</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng group</a> <i>string</i> <a href="#">timers</a> |
| Tree       | <a href="#">timers</a>   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

## flush number

|             |  |
|-------------|--|
| Synopsis    | RIP flush timer  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng group</a> <i>string</i> <a href="#">timers</a> <a href="#">flush</a> <i>number</i>                             |
| Tree        | <a href="#">flush</a>  |
| Description | This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely. |
| Range       | 1 to 1200  |
| Units       | seconds  |
| Notes       | This element is mandatory.   |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

## timeout number

|          |                   |
|----------|-------------------|
| Synopsis | RIP timeout timer |
|----------|-------------------|

|             |  |
|-------------|--|
| Context     | <b>configure service vprn string ripng group string timers timeout number</b>  |
| Tree        | <b>timeout</b>   |
| Description | This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database. |
| Range       | 1 to 1200  |
| Units       | seconds  |
| Notes       | This element is mandatory.   |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

### **update number**

|            |  |
|------------|--|
| Synopsis   | Timer that controls the frequency of updates                                 |
| Context    | <b>configure service vprn string ripng group string timers update number</b> |
| Tree       | <b>update</b>  |
| Range      | 1 to 600   |
| Units      | seconds  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **import-policy reference**

|                |  |
|----------------|--|
| Synopsis       | Import policies to decide routes for routing table                 |
| Context        | <b>configure service vprn string ripng import-policy reference</b> |
| Tree           | <b>import-policy</b>   |
| Reference      | <b>configure policy-options policy-statement string</b>            |
| Max. Instances | 5  |
| Notes          | This element is ordered by the user.                               |
| Introduced     | 16.0.R4  |
| Platforms      | All  |

**message-size** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of routes in the message  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng</a> <a href="#">message-size</a> <i>number</i> |
| Tree       | <a href="#">message-size</a>   |
| Range      | 25 to 255  |
| Default    | 25   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**metric-in** *number*

|            |   |
|------------|---|
| Synopsis   | Metric added to routes received from the neighbor   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng</a> <a href="#">metric-in</a> <i>number</i> |
| Tree       | <a href="#">metric-in</a>   |
| Range      | 1 to 16   |
| Default    | 1   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**metric-out** *number*

|            |  |
|------------|--|
| Synopsis   | Metric added to routes exported into RIPng   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng</a> <a href="#">metric-out</a> <i>number</i> |
| Tree       | <a href="#">metric-out</a>   |
| Range      | 1 to 16  |
| Default    | 1  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**preference** *number*

|          |  |
|----------|--|
| Synopsis | Route preference   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng</a> <a href="#">preference</a> <i>number</i> |
| Tree     | <a href="#">preference</a>   |
| Range    | 1 to 255   |

|            |         |
|------------|---------|
| Default    | 100     |
| Introduced | 16.0.R4 |
| Platforms  | All     |

**receive keyword**

|            |   |
|------------|---|
| Synopsis   | Accepted version on received packets  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ripng</a> <b>receive</b> <i>keyword</i> |
| Tree       | <a href="#">receive</a>   |
| Options    | none, ripng   |
| Default    | ripng   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**send keyword**

|            |  |
|------------|--|
| Synopsis   | RIPng version and method used to send RIPng updates  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ripng</a> <b>send</b> <i>keyword</i> |
| Tree       | <a href="#">send</a>   |
| Options    | none, ripng  |
| Default    | ripng  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**split-horizon boolean**

|             |   |
|-------------|---|
| Synopsis    | Enable split horizon and poison reverse   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ripng</a> <b>split-horizon</b> <i>boolean</i>   |
| Tree        | <a href="#">split-horizon</a>   |
| Description | <p>When configured to <b>true</b>, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to <b>false</b>, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p> |

|            |         |
|------------|---------|
| Default    | true    |
| Introduced | 16.0.R4 |
| Platforms  | All     |

## timers

|            |   |
|------------|---|
| Synopsis   | Enable the <b>timers</b> context                  |
| Context    | <b>configure service vprn string ripng timers</b> |
| Tree       | <b>timers</b>                                     |
| Introduced | 16.0.R4   |
| Platforms  | All   |

## flush *number*

|             |  |
|-------------|--|
| Synopsis    | RIP flush timer  |
| Context     | <b>configure service vprn string ripng timers flush number</b>   |
| Tree        | <b>flush</b>   |
| Description | This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely. |
| Range       | 1 to 1200  |
| Units       | seconds  |
| Notes       | This element is mandatory.   |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

## timeout *number*

|             |  |
|-------------|--|
| Synopsis    | RIP timeout timer  |
| Context     | <b>configure service vprn string ripng timers timeout number</b>   |
| Tree        | <b>timeout</b>   |
| Description | This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database. |
| Range       | 1 to 1200  |
| Units       | seconds  |

|            |                            |
|------------|----------------------------|
| Notes      | This element is mandatory. |
| Introduced | 16.0.R4                    |
| Platforms  | All                        |

### **update** *number*

|            |   |
|------------|---|
| Synopsis   | Timer that controls the frequency of updates  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng timers</a> <a href="#">update</a> <i>number</i> |
| Tree       | <a href="#">update</a>  |
| Range      | 1 to 600  |
| Units      | seconds   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **router-id** *string*

|            |   |
|------------|---|
| Synopsis   | Unique router ID for the router in the AS   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">router-id</a> <i>string</i> |
| Tree       | <a href="#">router-id</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **segment-routing-v6** [[instance](#)] *number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>segment-routing-v6</b> list instance  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">segment-routing-v6</a> <i>number</i> |
| Tree       | <a href="#">segment-routing-v6</a>   |
| Introduced | 21.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

### [[instance](#)] *number*

|          |  |
|----------|--|
| Synopsis | Segment routing IPv6 instance  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">segment-routing-v6</a> <i>number</i> |

|            |   |
|------------|---|
| Tree       | <a href="#">segment-routing-v6</a>          |
| Range      | 1 to 2                                      |
| Notes      | This element is part of a list key.         |
| Introduced | 21.5.R1                                     |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

### **locator** [[locator-name](#)] *reference*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>locator</b> list instance  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">segment-routing-v6</a> <i>number</i> <a href="#">locator</a> <i>reference</i> |
| Tree       | <a href="#">locator</a>   |
| Introduced | 21.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

### **[locator-name]** *reference*

|            |  |
|------------|--|
| Synopsis   | SRv6 locator name  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">segment-routing-v6</a> <i>number</i> <a href="#">locator</a> <i>reference</i>          |
| Tree       | <a href="#">locator</a>  |
| Reference  | <b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">locator</a> <i>string</i> |
| Notes      | This element is part of a list key.  |
| Introduced | 21.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

### **function**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>function</b> context   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">segment-routing-v6</a> <i>number</i> <a href="#">locator</a> <i>reference</i> <a href="#">function</a>  |
| Tree        | <a href="#">function</a>  |
| Description | Commands in this context configure the End SID functions for each SRH mode.<br>The <b>end-dt4</b> configuration and the <b>end-dt46</b> configuration are mutually exclusive.<br>The <b>end-dt6</b> configuration and the <b>end-dt46</b> configuration are mutually exclusive. |
| Introduced  | 21.5.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

**end-dt4**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>end-dt4</b> context   |
| Context    | <b>configure service vprn string segment-routing-v6 number locator reference function end-dt4</b> |
| Tree       | <b>end-dt4</b>  |
| Introduced | 21.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

**value number**

|             |  |
|-------------|--|
| Synopsis    | SRv6 function value  |
| Context     | <b>configure service vprn string segment-routing-v6 number locator reference function end-dt4 value number</b>   |
| Tree        | <b>value</b>   |
| Description | This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance.<br><br>When unconfigured, the system allocates a value dynamically. |
| Range       | 1 to 1048575   |
| Introduced  | 21.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

**end-dt46**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>end-dt46</b> context   |
| Context    | <b>configure service vprn string segment-routing-v6 number locator reference function end-dt46</b> |
| Tree       | <b>end-dt46</b>  |
| Introduced | 21.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

**value number**

|          |   |
|----------|---|
| Synopsis | SRv6 function value   |
| Context  | <b>configure service vprn string segment-routing-v6 number locator reference function end-dt46 value number</b> |
| Tree     | <b>value</b>  |



|             |  |
|-------------|--|
| Description | This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance.<br>When unconfigured, the system allocates a value dynamically. |
| Range       | 1 to 1048575   |
| Introduced  | 21.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

## end-dt6

|            |  |
|------------|--|
| Synopsis   | Enable the <b>end-dt6</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>segment-routing-v6</b> <i>number</i> <b>locator</b> <i>reference</i> <b>function</b> <b>end-dt6</b> |
| Tree       | <b>end-dt6</b>   |
| Introduced | 21.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

## value *number*

|             |   |
|-------------|---|
| Synopsis    | SRv6 function value   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>segment-routing-v6</b> <i>number</i> <b>locator</b> <i>reference</i> <b>function</b> <b>end-dt6</b> <b>value</b> <i>number</i> |
| Tree        | <b>value</b>  |
| Description | This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance.<br>When unconfigured, the system allocates a value dynamically.  |
| Range       | 1 to 1048575  |
| Introduced  | 21.5.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

## micro-segment-locator [*locator-name*] *reference*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>micro-segment-locator</b> list instance  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>segment-routing-v6</b> <i>number</i> <b>micro-segment-locator</b> <i>reference</i> |
| Tree       | <b>micro-segment-locator</b>  |
| Introduced | 22.10.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### [locator-name] *reference*

Synopsis Micro-segment SRv6 locator name

Context **configure** [service vprn](#) *string* [segment-routing-v6](#) *number* [micro-segment-locator](#) *reference*

Tree [micro-segment-locator](#)

Description This command associates a pre-defined micro-segment SRv6 locator (defined in the **configure router segment-routing segment-routing-v6** context) with the SRv6 instance in the service. The same micro-segment locator can be referenced in multiple BGP instances used by IPVPN or EVPN.

Reference **configure** [router](#) *string* [segment-routing](#) [segment-routing-v6](#) [micro-segment-locator](#) *string*

Notes This element is part of a list key.

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### function

Synopsis Enter the **function** context

Context **configure** [service vprn](#) *string* [segment-routing-v6](#) *number* [micro-segment-locator](#) *reference* [function](#)

Tree [function](#)

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### udt4

Synopsis Enable the **udt4** context

Context **configure** [service vprn](#) *string* [segment-routing-v6](#) *number* [micro-segment-locator](#) *reference* [function](#) [udt4](#)

Tree [udt4](#)

Description Commands in this context configure the SRv6 uDT4 behavior and the function value that is associated with the SRv6 instance in the service. When configured, decapsulation and table lookup for IPv4 prefixes occur in the VPRN service.

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **value number**

Synopsis SRv6 function value

Context **configure service vprn string segment-routing-v6 number micro-segment-locator reference function udt4 value number**

Tree [value](#)

Description This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance.  
When unconfigured, the system allocates a value dynamically.

Range 1 to 1048575

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **udt46**

Synopsis Enable the **udt46** context

Context **configure service vprn string segment-routing-v6 number micro-segment-locator reference function udt46**

Tree [udt46](#)

Description The commands in this context configure the SRv6 uDT46 behavior and the function value that is associated with the SRv6 instance in the service. When configured, decapsulation and table lookup for IPv4 and IPv6 prefixes occur in the VPRN service.

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **value number**

Synopsis SRv6 function value

Context **configure service vprn string segment-routing-v6 number micro-segment-locator reference function udt46 value number**

Tree [value](#)

Description This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance.  
When unconfigured, the system allocates a value dynamically.

Range 1 to 1048575

|            |   |
|------------|---|
| Introduced | 22.10.R1                                    |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

## udt6

|             |   |
|-------------|---|
| Synopsis    | Enable the <b>udt6</b> context  |
| Context     | <b>configure service vprn</b> <i>string</i> <b>segment-routing-v6</b> <i>number</i> <b>micro-segment-locator</b> <i>reference</i> <b>function</b> <b>udt6</b>   |
| Tree        | <b>udt6</b>   |
| Description | Commands in this context configure the SRv6 uDT6 behavior and the function value that is associated with the SRv6 instance in the service. When configured, decapsulation and table lookup for IPv6 prefixes occur in the VPRN service. |
| Introduced  | 22.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR   |

## value *number*

|             |  |
|-------------|--|
| Synopsis    | SRv6 function value  |
| Context     | <b>configure service vprn</b> <i>string</i> <b>segment-routing-v6</b> <i>number</i> <b>micro-segment-locator</b> <i>reference</i> <b>function</b> <b>udt6</b> <b>value</b> <i>number</i> |
| Tree        | <b>value</b>   |
| Description | This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance.<br><br>When unconfigured, the system allocates a value dynamically.         |
| Range       | 1 to 1048575   |
| Introduced  | 22.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR  |

## selective-fib *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable selective FIB  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>selective-fib</b> <i>boolean</i> |
| Tree       | <b>selective-fib</b>  |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                    |

**service-id** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Service ID  |
| Context    | <b>configure service vprn</b> <i>string service-id number</i> |
| Tree       | <a href="#">service-id</a>                                    |
| Range      | 1 to 2147483647   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**sfm-overload**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>sfm-overload</b> context   |
| Context    | <b>configure service vprn</b> <i>string sfm-overload</i>   |
| Tree       | <a href="#">sfm-overload</a>   |
| Introduced | 16.0.R2  |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS, VSR |

**holdoff-time** *number*

|            |  |
|------------|--|
| Synopsis   | Delay in detecting SFM failures and setting overload   |
| Context    | <b>configure service vprn</b> <i>string sfm-overload holdoff-time number</i>   |
| Tree       | <a href="#">holdoff-time</a>   |
| Range      | 1 to 600   |
| Units      | seconds  |
| Introduced | 16.0.R2  |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS, VSR |

**sgt-qos**

|          |   |
|----------|---|
| Synopsis | Enter the <b>sgt-qos</b> context                    |
| Context  | <b>configure service vprn</b> <i>string sgt-qos</i> |

|            |                         |
|------------|-------------------------|
| Tree       | <a href="#">sgt-qos</a> |
| Introduced | 16.0.R1                 |
| Platforms  | All                     |

## dot1p

|            |  |
|------------|--|
| Synopsis   | Enter the <b>dot1p</b> context                                     |
| Context    | <b>configure</b> <a href="#">service vprn string sgt-qos dot1p</a> |
| Tree       | <a href="#">dot1p</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## application [[dot1p-app-name](#)] *keyword*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>application</b> list instance   |
| Context    | <b>configure</b> <a href="#">service vprn string sgt-qos dot1p application keyword</a> |
| Tree       | <a href="#">application</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## [[dot1p-app-name](#)] *keyword*

|            |  |
|------------|--|
| Synopsis   | Dot1p application ID that generates control traffic                                    |
| Context    | <b>configure</b> <a href="#">service vprn string sgt-qos dot1p application keyword</a> |
| Tree       | <a href="#">application</a>  |
| Options    | arp, isis, pppoe   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## dot1p (*keyword* | *number*)

|          |   |
|----------|---|
| Synopsis | Dot1p value to the traffic generated by this application  |
| Context  | <b>configure</b> <a href="#">service vprn string sgt-qos dot1p application keyword dot1p (keyword   number)</a> |

|            |                                |
|------------|--------------------------------|
| Tree       | <a href="#">dot1p</a>          |
| Range      | 0 to 7                         |
| Options    | be, l2, af, l1, h2, ef, h1, nc |
| Introduced | 16.0.R1                        |
| Platforms  | All                            |

## dscp

|            |  |
|------------|--|
| Synopsis   | Enter the <b>dscp</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">sgt-qos</a> <a href="#">dscp</a> |
| Tree       | <a href="#">dscp</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## application [[dscp-app-name](#)] *keyword*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>application</b> list instance  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">sgt-qos</a> <a href="#">dscp</a> <a href="#">application</a> <i>keyword</i> |
| Tree       | <a href="#">application</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## [[dscp-app-name](#)] *keyword*

|             |  |
|-------------|--|
| Synopsis    | DSCP application ID that generates control traffic   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">sgt-qos</a> <a href="#">dscp</a> <a href="#">application</a> <i>keyword</i>  |
| Tree        | <a href="#">application</a>  |
| Description | This command configures the DSCP application ID that generates control traffic.  |
| Options     | bgp, dhcp, dns, ftp, icmp, igmp, l2tp, ldp, mld, msdp, ndis, ntp, ospf, pim, radius, rip, rsvp, snmp, snmp-notification, srrp, ssh, syslog, tacplus, telnet, tftp, traceroute, vrrp, ptp, gtp, diameter, pcep, call-trace, bmp, grpc, mtrace2, http, pfc, ibcp |
| Notes       | This element is part of a list key.  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**dscp** (*keyword* | *number*)

|            |   |
|------------|---|
| Synopsis   | DSCP value to the traffic generated by this application   |
| Context    | <b>configure</b> <i>service vprn string sgt-qos dscp application keyword dscp</i> ( <i>keyword</i>   <i>number</i> )  |
| Tree       | <a href="#">dscp</a>  |
| Range      | 0 to 63   |
| Options    | be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63 |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**dscp-map** [[dscp-name](#)] *keyword*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>dscp-map</b> list instance                                   |
| Context    | <b>configure</b> <i>service vprn string sgt-qos dscp dscp-map keyword</i> |
| Tree       | <a href="#">dscp-map</a>  |
| Introduced | 16.0.R2   |
| Platforms  | All   |

**[dscp-name]** *keyword*

|            |   |
|------------|---|
| Synopsis   | DSCP name mapped to forwarding class  |
| Context    | <b>configure</b> <i>service vprn string sgt-qos dscp dscp-map keyword</i>   |
| Tree       | <a href="#">dscp-map</a>  |
| Options    | be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63 |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R2   |
| Platforms  | All   |



**fc keyword**

|            |   |
|------------|---|
| Synopsis   | Value for the forwarding class for this mapping                               |
| Context    | <b>configure service vprn string sgt-qos dscp dscp-map keyword fc keyword</b> |
| Tree       | <b>fc</b>   |
| Options    | be, l2, af, l1, h2, ef, h1, nc  |
| Introduced | 16.0.R2   |
| Platforms  | All   |

**snmp**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>snmp</b> context             |
| Context    | <b>configure service vprn string snmp</b> |
| Tree       | <b>snmp</b>                               |
| Introduced | 16.0.R5                                   |
| Platforms  | All                                       |

**access boolean**

|            |  |
|------------|--|
| Synopsis   | Enable SNMP access for the VPRN service                  |
| Context    | <b>configure service vprn string snmp access boolean</b> |
| Tree       | <b>access</b>  |
| Default    | false  |
| Introduced | 16.0.R5  |
| Platforms  | All  |

**community [community-string] string**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>community</b> list instance   |
| Context     | <b>configure service vprn string snmp community string</b>   |
| Tree        | <b>community</b>   |
| Description | <p>Commands in this context set the SNMP community names to be used with the associated VPRN instance. These VPRN community names are used to associate SNMP v1/v2c requests with a particular VPRN context and to return a reply that contains VPRN-specific data or limit SNMP access to data in a specific VPRN instance.</p> <p>VPRN SNMP communities configured with an access permission of 'r' are automatically associated with the default access group "snmp-vprn-ro" and the "vprn-view" view (read only). VPRN SNMP communities configured with an access permission of 'rw' are</p> |

automatically associated with the default access group "snmp-vprn" and the "vprn-view" view (read/write).

The community in an SNMP v1/v2 request determines the SNMP context (that is, the VPRN number for accessing SNMP tables) and not the VPRN of the incoming interface on which the request was received. For example, when an SNMP request arrives on VPRN 5 interface "ringo" with a destination IP address equal to the "ringo" interface, but the community in the SNMP request is the community configured against VPRN 101, the SNMP request is processed using the VPRN 101 context. (the response contains information about VPRN 101). Nokia recommends avoiding the use of a simple series of VPRN SNMP community values that are similar to each other (for example, avoid my-vprncomm-1, my-vprn-comm-2, and so on).

|            |         |
|------------|---------|
| Introduced | 16.0.R5 |
| Platforms  | All     |

### **[community-string] string**

|               |  |
|---------------|--|
| Synopsis      | SNMP v1/v2c community name associated with the VPRN                        |
| Context       | <b>configure</b> <a href="#">service vprn string snmp community string</a> |
| Tree          | <a href="#">community</a>  |
| String Length | 1 to 114   |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R5  |
| Platforms     | All  |

### **access-permissions keyword**

|            |   |
|------------|---|
| Synopsis   | Access permissions to MIB objects   |
| Context    | <b>configure</b> <a href="#">service vprn string snmp community string access-permissions keyword</a> |
| Tree       | <a href="#">access-permissions</a>  |
| Options    | r, rw   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R5   |
| Platforms  | All   |

### **source-access-list reference**

|          |   |
|----------|---|
| Synopsis | List name used to validate the source IP address  |
| Context  | <b>configure</b> <a href="#">service vprn string snmp community string source-access-list reference</a> |

|             |   |
|-------------|---|
| Tree        | <a href="#">source-access-list</a>  |
| Description | This command specifies the SNMP source access list to use with the SNMP community. The source access list is used to validate the source IP address of all received SNMP requests that use the community. |
| Reference   | <b>configure</b> <a href="#">system security snmp source-access-list</a> <i>string</i>  |
| Introduced  | 16.0.R5   |
| Platforms   | All   |

### **version** *keyword*

|            |   |
|------------|---|
| Synopsis   | SNMP version  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">snmp community</a> <i>string</i> <a href="#">version</a> <i>keyword</i> |
| Tree       | <a href="#">version</a>   |
| Options    | v1, v2c, both   |
| Default    | both  |
| Introduced | 16.0.R5   |
| Platforms  | All   |

### **source-address**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>source-address</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">source-address</a> |
| Tree       | <a href="#">source-address</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **ipv4** [[application](#)] *keyword*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv4</b> list instance  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">source-address</a> <a href="#">ipv4</a> <i>keyword</i> |
| Tree       | <a href="#">ipv4</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[application]** *keyword*

|            |  |
|------------|--|
| Synopsis   | Application that uses the source IP address  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">source-address</a> <a href="#">ipv4</a> <i>keyword</i> |
| Tree       | <a href="#">ipv4</a>   |
| Options    | telnet, ssh, snmptrap, ping, traceroute, ntp, cflowd, ptp, icmp-error  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**address** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Source IPv4 address  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">source-address</a> <a href="#">ipv4</a> <i>keyword</i> <a href="#">address</a> <i>string</i> |
| Tree       | <a href="#">address</a>  |
| Notes      | The following elements are part of a mandatory choice: <b>address</b> or <b>interface-name</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**interface-name** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | IP interface name   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">source-address</a> <a href="#">ipv4</a> <i>keyword</i> <a href="#">interface-name</a> <i>string</i> |
| Tree          | <a href="#">interface-name</a>  |
| String Length | 1 to 32   |
| Notes         | The following elements are part of a mandatory choice: <b>address</b> or <b>interface-name</b> .  |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**ipv6** [[application](#)] *keyword*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv6</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">source-address</a> <a href="#">ipv6</a> <i>keyword</i> |
| Tree       | <a href="#">ipv6</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[application]** *keyword*

|            |  |
|------------|--|
| Synopsis   | Application that uses the source IP address  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">source-address</a> <a href="#">ipv6</a> <i>keyword</i> |
| Tree       | <a href="#">ipv6</a>   |
| Options    | telnet, snmptrap, ping, traceroute, cflowd, ntp, icmp6-error   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**address** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Source IPv6 address  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">source-address</a> <a href="#">ipv6</a> <i>keyword</i> <a href="#">address</a> <i>string</i> |
| Tree       | <a href="#">address</a>  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**spoke-sdp** [[sdp-bind-id](#)] *string*

|          |   |
|----------|---|
| Synopsis | Enter the <b>spoke-sdp</b> list instance  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> |
| Tree     | <a href="#">spoke-sdp</a>   |

Introduced 16.0.R1  
Platforms All

### **[sdp-bind-id]** *string*

Synopsis SDP binding ID  
Context **configure** [service vprn](#) *string* [spoke-sdp](#) *string*  
Tree [spoke-sdp](#)  
String Length 3 to 16  
Notes This element is part of a list key.  
Introduced 16.0.R3  
Platforms All

### **description** *string*

Synopsis Text description  
Context **configure** [service vprn](#) *string* [spoke-sdp](#) *string* [description](#) *string*  
Tree [description](#)  
String Length 1 to 80  
Introduced 16.0.R1  
Platforms All

### **static-routes**

Synopsis Enter the **static-routes** context  
Context **configure** [service vprn](#) *string* [static-routes](#)  
Tree [static-routes](#)  
Introduced 16.0.R1  
Platforms All

### **hold-down**

Synopsis Enable the **hold-down** context  
Context **configure** [service vprn](#) *string* [static-routes](#) [hold-down](#)  
Tree [hold-down](#)

---

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **initial** *number*

|            |   |
|------------|---|
| Synopsis   | Value for the initial hold down time  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">static-routes hold-down initial</a> <i>number</i> |
| Tree       | <a href="#">initial</a>   |
| Range      | 1 to 65535  |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **max-value** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum value of the hold down time   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">static-routes hold-down max-value</a> <i>number</i> |
| Tree       | <a href="#">max-value</a>   |
| Range      | 1 to 65535  |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **multiplier** *number*

|            |  |
|------------|--|
| Synopsis   | Value by which the previous hold-down time is multiplied to calculate the new one  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">static-routes hold-down multiplier</a> <i>number</i> |
| Tree       | <a href="#">multiplier</a>   |
| Range      | 1 to 10  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**route** [*ip-prefix*] (*ipv4-prefix* | *ipv6-prefix*) *route-type* *keyword*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>route</b> list instance   |
| Context    | <b>configure service vpn</b> <i>string static-routes route</i> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <i>route-type keyword</i> |
| Tree       | <a href="#">route</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

|            |  |
|------------|--|
| Synopsis   | IP prefix and prefix length for the static routes  |
| Context    | <b>configure service vpn</b> <i>string static-routes route</i> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <i>route-type keyword</i> |
| Tree       | <a href="#">route</a>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**route-type** *keyword*

|            |  |
|------------|--|
| Synopsis   | Static route type  |
| Context    | <b>configure service vpn</b> <i>string static-routes route</i> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <i>route-type keyword</i> |
| Tree       | <a href="#">route</a>  |
| Options    | unicast, multicast   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**backup-tag** *number*

|          |  |
|----------|--|
| Synopsis | Static route backup tag  |
| Context  | <b>configure service vpn</b> <i>string static-routes route</i> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <i>route-type keyword backup-tag number</i> |
| Tree     | <a href="#">backup-tag</a>   |



|             |  |
|-------------|--|
| Description | This command associates a 4-byte backup route tag with the static route when the backup next-hop functionality is activated. The tag value is used in route policies to control distribution of the static route into other protocols when the backup next-hop function is activated for the associated static route.<br><br>The tag specified at this level of the static route causes the tag values that are configured under the <b>next-hop</b> , <b>black-hole</b> , and <b>indirect</b> contexts of the static route to be ignored. |
| Range       | 1 to 4294967295  |
| Introduced  | 21.2.R1  |
| Platforms   | All  |

## blackhole

|            |   |
|------------|---|
| Synopsis   | Enable the <b>blackhole</b> context   |
| Context    | <b>configure service vprn string static-routes route (ipv4-prefix   ipv6-prefix) route-type keyword blackhole</b> |
| Tree       | <a href="#">blackhole</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## admin-state keyword

|            |   |
|------------|---|
| Synopsis   | Administrative state of the static route operation  |
| Context    | <b>configure service vprn string static-routes route (ipv4-prefix   ipv6-prefix) route-type keyword blackhole admin-state keyword</b> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## community string

|               |  |
|---------------|--|
| Synopsis      | Community ID associated with the static route  |
| Context       | <b>configure service vprn string static-routes route (ipv4-prefix   ipv6-prefix) route-type keyword blackhole community string</b> |
| Tree          | <a href="#">community</a>  |
| String Length | 1 to 72  |
| Introduced    | 16.0.R1  |

Platforms All

### **description** *string*

Synopsis Text description

Context **configure** **service** **vprn** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type**  
*keyword* **blackhole** **description** *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

### **generate-icmp** *boolean*

Synopsis Send ICMP unreachable messages when received packets match a static route with black-hole next-hop

Context **configure** **service** **vprn** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type**  
*keyword* **blackhole** **generate-icmp** *boolean*

Tree [generate-icmp](#)

Default false

Introduced 16.0.R1

Platforms All

### **metric** *number*

Synopsis Static route metric

Context **configure** **service** **vprn** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type**  
*keyword* **blackhole** **metric** *number*

Tree [metric](#)

Range 0 to 65535

Default 1

Introduced 16.0.R1

Platforms All

### **preference** *number*

Synopsis Priority of this static route over the routes from different sources

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>blackhole preference</b> <i>number</i> |
| Tree       | <b>preference</b>   |
| Range      | 1 to 255  |
| Default    | 5   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## prefix-list

|            |  |
|------------|--|
| Synopsis   | Enter the <b>prefix-list</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>blackhole prefix-list</b> |
| Tree       | <b>prefix-list</b>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## flag *keyword*

|            |  |
|------------|--|
| Synopsis   | Static route match condition from prefix list  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>blackhole prefix-list flag</b> <i>keyword</i> |
| Tree       | <b>flag</b>  |
| Options    | any, all, none   |
| Default    | any  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## name *reference*

|            |  |
|------------|--|
| Synopsis   | Prefix list name   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>blackhole prefix-list name</b> <i>reference</i> |
| Tree       | <b>name</b>  |
| Reference  | <b>configure policy-options prefix-list</b> <i>string</i>  |
| Introduced | 16.0.R1  |

Platforms All

### **tag number**

Synopsis Static route tag

Context **configure service vprn string static-routes route (ipv4-prefix | ipv6-prefix) route-type keyword blackhole tag number**

Tree [tag](#)

Range 1 to 4294967295

Introduced 16.0.R1

Platforms All

### **community string**

Synopsis Community ID associated with the static route

Context **configure service vprn string static-routes route (ipv4-prefix | ipv6-prefix) route-type keyword community string**

Tree [community](#)

String Length 1 to 72

Max. Instances 12

Notes This element is ordered by the user.

Introduced 16.0.R1

Platforms All

### **grt**

Synopsis Enable the **grt** context

Context **configure service vprn string static-routes route (ipv4-prefix | ipv6-prefix) route-type keyword grt**

Tree [grt](#)

Introduced 16.0.R1

Platforms All

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the static route operation  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>grt</b> <b>admin-state</b> <b>keyword</b> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>grt</b> <b>description</b> <b>string</b> |
| Tree          | <b>description</b>   |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**metric** *number*

|            |   |
|------------|---|
| Synopsis   | Static route metric   |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>grt</b> <b>metric</b> <b>number</b> |
| Tree       | <b>metric</b>   |
| Range      | 0 to 65535  |
| Default    | 1   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**preference** *number*

|          |   |
|----------|---|
| Synopsis | Priority of this static route over the routes from different sources  |
| Context  | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>grt</b> <b>preference</b> <b>number</b> |
| Tree     | <b>preference</b>   |

|            |          |
|------------|----------|
| Range      | 1 to 255 |
| Default    | 5        |
| Introduced | 16.0.R1  |
| Platforms  | All      |

### **indirect** [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

|            |   |
|------------|---|
| Synopsis   | Enter the <b>indirect</b> list instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <a href="#">keyword</a> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <a href="#">indirect</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

|            |   |
|------------|---|
| Synopsis   | Next-hop IP address used to reach the destination   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <a href="#">keyword</a> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <a href="#">indirect</a>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the static route operation  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <a href="#">keyword</a> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**community string**

|               |   |
|---------------|---|
| Synopsis      | Community ID associated with the static route   |
| Context       | <b>configure service vprn string static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword indirect</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>community string</b> |
| Tree          | <b>community</b>  |
| String Length | 1 to 72   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**cpe-check [address]** (*ipv4-address-no-zone | ipv6-address-no-zone*)

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>cpe-check</b> list instance   |
| Context        | <b>configure service vprn string static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword indirect</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )  |
| Tree           | <b>cpe-check</b>   |
| Description    | <p>When configured, this command enables the Customer Premises Equipment (CPE) check feature and specifies the IP address of the target CPE device.</p> <p>This option initiates a background ICMP ping test to the configured target IP address. The IP address can either be an IPv4 address for IPv4 static routes or an IPv6 address for IPv6 static routes. To avoid possible circular references, the target IP address cannot exist in the same subnet as the static route subnet. This command is mutually exclusive with BFD support on a specific static route.</p> <p><b>Note:</b> A node that is sourcing CPE-check packets waits an additional full interval before taking action, which gives the CPE time to respond. For example, with a drop-count of 3 and an interval of 1s, three CPE-check packets are sent out and the node waits for the duration of another interval before acting on the loss. Failure declaration may take extra time depending on the load, interval, and other factors. In line with multitasking, multi-priority operating principles of the node, and the relative priority of <b>cpe-ping</b>, the node paces these minor events.</p> |
| Max. Instances | 1  |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

**[address]** (*ipv4-address-no-zone | ipv6-address-no-zone*)

|          |                                     |
|----------|-------------------------------------|
| Synopsis | IP address of the target CPE device |
|----------|-------------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>indirect</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) |
| Tree       | <b>cpe-check</b>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **drop-count** *number*

|            |   |
|------------|---|
| Synopsis   | Consecutive ping replies missed before CPE deemed down  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>indirect</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>drop-count</b> <i>number</i> |
| Tree       | <b>drop-count</b>   |
| Range      | 1 to 255  |
| Default    | 3   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **interval** *number*

|            |   |
|------------|---|
| Synopsis   | Interval between ICMP pings to target CPE IP address  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>indirect</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>interval</b> <i>number</i> |
| Tree       | <b>interval</b>   |
| Range      | 1 to 255  |
| Units      | seconds   |
| Default    | 1   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **log** *boolean*

|          |   |
|----------|---|
| Synopsis | Log CPE connectivity checks transitions |
|----------|---|



|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>log</b> <i>boolean</i> |
| Tree       | <b>log</b>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **padding-size** *number*

|            |  |
|------------|--|
| Synopsis   | Padding size for CPE connectivity checks   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>padding-size</b> <i>number</i> |
| Tree       | <b>padding-size</b>  |
| Range      | 0 to 16384   |
| Units      | bytes  |
| Default    | 56   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>description</b> <i>string</i> |
| Tree          | <b>description</b>   |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

### **destination-class** *number*

|          |  |
|----------|--|
| Synopsis | Destination class for this static route  |
| Context  | <b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>destination-class</b> <i>number</i> |

|            |  |
|------------|--|
| Tree       | <a href="#">destination-class</a>      |
| Range      | 1 to 255                               |
| Introduced | 16.0.R1                                |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS |

### **metric number**

|            |   |
|------------|---|
| Synopsis   | Static route metric   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">route-type</a> <i>keyword</i> <a href="#">indirect</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">metric</a> <i>number</i> |
| Tree       | <a href="#">metric</a>  |
| Range      | 0 to 65535  |
| Default    | 1   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **preference number**

|            |   |
|------------|---|
| Synopsis   | Priority of this static route over the routes from different sources  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">route-type</a> <i>keyword</i> <a href="#">indirect</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">preference</a> <i>number</i> |
| Tree       | <a href="#">preference</a>  |
| Range      | 1 to 255  |
| Default    | 5   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **prefix-list**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>prefix-list</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">route-type</a> <i>keyword</i> <a href="#">indirect</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">prefix-list</a> |
| Tree       | <a href="#">prefix-list</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**flag keyword**

|            |   |
|------------|---|
| Synopsis   | Static route match condition from prefix list   |
| Context    | <b>configure service vprn string static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword indirect</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>prefix-list flag keyword</b> |
| Tree       | <b>flag</b>   |
| Options    | any, all, none  |
| Default    | any   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**name reference**

|            |   |
|------------|---|
| Synopsis   | Prefix list name  |
| Context    | <b>configure service vprn string static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword indirect</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>prefix-list name reference</b> |
| Tree       | <b>name</b>   |
| Reference  | <b>configure policy-options prefix-list string</b>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**qos**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>qos</b> context   |
| Context    | <b>configure service vprn string static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword indirect</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>qos</b> |
| Tree       | <b>qos</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**forwarding-class keyword**

|          |   |
|----------|---|
| Synopsis | Forwarding class associated with the static route   |
| Context  | <b>configure service vprn string static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword indirect</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>qos forwarding-class keyword</b> |

|            |  |
|------------|--|
| Tree       | <a href="#">forwarding-class</a>                             |
| Options    | be, l2, af, l1, h2, ef, h1, nc                               |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **priority** *keyword*

|            |  |
|------------|--|
| Synopsis   | Static route priority  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <a href="#">keyword</a> <a href="#">indirect</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">qos</a> <a href="#">priority</a> <a href="#">keyword</a> |
| Tree       | <a href="#">priority</a>   |
| Options    | low, high  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **source-class** *number*

|            |   |
|------------|---|
| Synopsis   | Source class for this static route  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <a href="#">keyword</a> <a href="#">indirect</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">source-class</a> <a href="#">number</a> |
| Tree       | <a href="#">source-class</a>  |
| Range      | 1 to 255  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS  |

### **tag** *number*

|            |  |
|------------|--|
| Synopsis   | Static route tag   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <a href="#">keyword</a> <a href="#">indirect</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">tag</a> <a href="#">number</a> |
| Tree       | <a href="#">tag</a>  |
| Range      | 1 to 4294967295  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**interface** [[interface-name](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>interface</b> list instance  |
| Context    | <b>configure service vprn</b> <i>string</i> <a href="#">static-routes route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a><br><i>keyword interface string</i> |
| Tree       | <a href="#">interface</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[interface-name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Router interface name.  |
| Context       | <b>configure service vprn</b> <i>string</i> <a href="#">static-routes route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a><br><i>keyword interface string</i> |
| Tree          | <a href="#">interface</a>   |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the static route operation  |
| Context    | <b>configure service vprn</b> <i>string</i> <a href="#">static-routes route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a><br><i>keyword interface string admin-state keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**community** *string*

|               |  |
|---------------|--|
| Synopsis      | Community ID associated with the static route  |
| Context       | <b>configure service vprn</b> <i>string</i> <a href="#">static-routes route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a><br><i>keyword interface string community string</i> |
| Tree          | <a href="#">community</a>  |
| String Length | 1 to 72  |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **cpe-check** [address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>cpe-check</b> list instance   |
| Context        | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>interface</b> <i>string</i> <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )   |
| Tree           | <b>cpe-check</b>   |
| Description    | <p>When configured, this command enables the Customer Premises Equipment (CPE) check feature and specifies the IP address of the target CPE device.</p> <p>This option initiates a background ICMP ping test to the configured target IP address. The IP address can either be an IPv4 address for IPv4 static routes or an IPv6 address for IPv6 static routes. To avoid possible circular references, the target IP address cannot exist in the same subnet as the static route subnet. This command is mutually exclusive with BFD support on a specific static route.</p> <p><b>Note:</b> A node that is sourcing CPE-check packets waits an additional full interval before taking action, which gives the CPE time to respond. For example, with a drop-count of 3 and an interval of 1s, three CPE-check packets are sent out and the node waits for the duration of another interval before acting on the loss. Failure declaration may take extra time depending on the load, interval, and other factors. In line with multitasking, multi-priority operating principles of the node, and the relative priority of <b>cpe-ping</b>, the node paces these minor events.</p> |
| Max. Instances | 1  |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

### **[address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

|            |  |
|------------|--|
| Synopsis   | IP address of the target CPE device  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>interface</b> <i>string</i> <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <b>cpe-check</b>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### drop-count *number*

|            |   |
|------------|---|
| Synopsis   | Consecutive ping replies missed before CPE deemed down  |
| Context    | <b>configure service vprn</b> <i>string static-routes route (ipv4-prefix   ipv6-prefix) route-type keyword interface string cpe-check (ipv4-address-no-zone   ipv6-address-no-zone) drop-count number</i> |
| Tree       | <a href="#">drop-count</a>  |
| Range      | 1 to 255  |
| Default    | 3   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### interval *number*

|            |   |
|------------|---|
| Synopsis   | Interval between ICMP pings to target CPE IP address  |
| Context    | <b>configure service vprn</b> <i>string static-routes route (ipv4-prefix   ipv6-prefix) route-type keyword interface string cpe-check (ipv4-address-no-zone   ipv6-address-no-zone) interval number</i> |
| Tree       | <a href="#">interval</a>  |
| Range      | 1 to 255  |
| Units      | seconds   |
| Default    | 1   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### log *boolean*

|            |   |
|------------|---|
| Synopsis   | Log CPE connectivity checks transitions   |
| Context    | <b>configure service vprn</b> <i>string static-routes route (ipv4-prefix   ipv6-prefix) route-type keyword interface string cpe-check (ipv4-address-no-zone   ipv6-address-no-zone) log boolean</i> |
| Tree       | <a href="#">log</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**padding-size** *number*

|            |  |
|------------|--|
| Synopsis   | Padding size for CPE connectivity checks   |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>interface</b> <i>string</i> <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>padding-size</b> <i>number</i> |
| Tree       | <b>padding-size</b>  |
| Range      | 0 to 16384   |
| Units      | bytes  |
| Default    | 56   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>interface</b> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <b>description</b>   |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**destination-class** *number*

|            |  |
|------------|--|
| Synopsis   | Destination class for this static route  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>interface</b> <i>string</i> <b>destination-class</b> <i>number</i> |
| Tree       | <b>destination-class</b>   |
| Range      | 1 to 255   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS   |

**load-balancing-weight** *number*

|          |   |
|----------|---|
| Synopsis | Load-balancing weight for all of the ECMP next hops |
|----------|---|



|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>interface</b> <i>string</i> <b>load-balancing-weight</b> <i>number</i> |
| Tree       | <b>load-balancing-weight</b>  |
| Range      | 1 to 4294967295   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **metric** *number*

|            |  |
|------------|--|
| Synopsis   | Static route metric  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>interface</b> <i>string</i> <b>metric</b> <i>number</i> |
| Tree       | <b>metric</b>  |
| Range      | 0 to 65535   |
| Default    | 1  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **preference** *number*

|            |  |
|------------|--|
| Synopsis   | Priority of this static route over the routes from different sources   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>interface</b> <i>string</i> <b>preference</b> <i>number</i> |
| Tree       | <b>preference</b>  |
| Range      | 1 to 255   |
| Default    | 5  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **prefix-list**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>prefix-list</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>interface</b> <i>string</i> <b>prefix-list</b> |
| Tree       | <b>prefix-list</b>  |
| Introduced | 16.0.R1   |

Platforms All

### **flag** *keyword*

Synopsis Static route match condition from prefix list

Context **configure** **service** **vpn** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** **keyword** **interface** *string* **prefix-list** **flag** **keyword**

Tree **flag**

Options any, all, none

Default any

Introduced 16.0.R1

Platforms All

### **name** *reference*

Synopsis Prefix list name

Context **configure** **service** **vpn** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** **keyword** **interface** *string* **prefix-list** **name** *reference*

Tree **name**

Reference **configure** **policy-options** **prefix-list** *string*

Introduced 16.0.R1

Platforms All

### **qos**

Synopsis Enter the **qos** context

Context **configure** **service** **vpn** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** **keyword** **interface** *string* **qos**

Tree **qos**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **forwarding-class** *keyword*

Synopsis Forwarding class associated with the static route

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>interface</b> <i>string</i> <b>qos forwarding-class</b> <b>keyword</b> |
| Tree       | <b>forwarding-class</b>   |
| Options    | be, l2, af, l1, h2, ef, h1, nc  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **priority** *keyword*

|            |   |
|------------|---|
| Synopsis   | Static route priority   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>interface</b> <i>string</i> <b>qos priority</b> <b>keyword</b> |
| Tree       | <b>priority</b>   |
| Options    | low, high   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **source-class** *number*

|            |  |
|------------|--|
| Synopsis   | Source class for this static route   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>interface</b> <i>string</i> <b>source-class</b> <b>number</b> |
| Tree       | <b>source-class</b>  |
| Range      | 1 to 255   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS   |

### **tag** *number*

|            |   |
|------------|---|
| Synopsis   | Static route tag  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>interface</b> <i>string</i> <b>tag</b> <b>number</b> |
| Tree       | <b>tag</b>  |
| Range      | 1 to 4294967295   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**ipsec-tunnel** [*ipsec-tunnel-name*] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ipsec-tunnel</b> list instance   |
| Context    | <b>configure service vpn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b><br><i>keyword ipsec-tunnel string</i> |
| Tree       | <a href="#">ipsec-tunnel</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[ipsec-tunnel-name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Ipssec tunnel name.   |
| Context       | <b>configure service vpn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b><br><i>keyword ipsec-tunnel string</i> |
| Tree          | <a href="#">ipsec-tunnel</a>  |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the static route operation  |
| Context    | <b>configure service vpn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b><br><i>keyword ipsec-tunnel string admin-state keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**community** *string*

|          |  |
|----------|--|
| Synopsis | Community ID associated with the static route  |
| Context  | <b>configure service vpn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b><br><i>keyword ipsec-tunnel string community string</i> |
| Tree     | <a href="#">community</a>  |

String Length 1 to 72  
Introduced 16.0.R1  
Platforms All

### **description** *string*

Synopsis Text description  
Context **configure service vpn** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type**  
*keyword ipsec-tunnel string description string*  
Tree [description](#)  
String Length 1 to 80  
Introduced 16.0.R1  
Platforms All

### **destination-class** *number*

Synopsis Destination class for this static route  
Context **configure service vpn** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type**  
*keyword ipsec-tunnel string destination-class number*  
Tree [destination-class](#)  
Range 1 to 255  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **metric** *number*

Synopsis Static route metric  
Context **configure service vpn** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type**  
*keyword ipsec-tunnel string metric number*  
Tree [metric](#)  
Range 0 to 65535  
Default 1  
Introduced 16.0.R1  
Platforms All

**preference number**

|            |   |
|------------|---|
| Synopsis   | Priority of this static route over the routes from different sources  |
| Context    | <b>configure service vpn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>ipsec-tunnel</b> <i>string</i> <b>preference number</b> |
| Tree       | <b>preference</b>   |
| Range      | 1 to 255  |
| Default    | 5   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**qos**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>qos</b> context  |
| Context    | <b>configure service vpn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>ipsec-tunnel</b> <i>string</i> <b>qos</b> |
| Tree       | <b>qos</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**forwarding-class keyword**

|            |   |
|------------|---|
| Synopsis   | Forwarding class associated with the static route   |
| Context    | <b>configure service vpn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>ipsec-tunnel</b> <i>string</i> <b>qos forwarding-class</b> <i>keyword</i> |
| Tree       | <b>forwarding-class</b>   |
| Options    | be, l2, af, l1, h2, ef, h1, nc  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**priority keyword**

|          |   |
|----------|---|
| Synopsis | Static route priority   |
| Context  | <b>configure service vpn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>ipsec-tunnel</b> <i>string</i> <b>qos priority</b> <i>keyword</i> |
| Tree     | <b>priority</b>   |
| Options  | low, high   |

|            |  |
|------------|--|
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

**source-class** *number*

|            |  |
|------------|--|
| Synopsis   | Source class for this static route   |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>ipsec-tunnel</b> <i>string</i> <b>source-class</b> <i>number</i> |
| Tree       | <b>source-class</b>  |
| Range      | 1 to 255   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS   |

**tag** *number*

|            |   |
|------------|---|
| Synopsis   | Static route tag  |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>ipsec-tunnel</b> <i>string</i> <b>tag</b> <i>number</i> |
| Tree       | <b>tag</b>  |
| Range      | 1 to 4294967295   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**next-hop** [**ip-address**] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

|            |  |
|------------|--|
| Synopsis   | Enter the <b>next-hop</b> list instance  |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) |
| Tree       | <b>next-hop</b>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[ip-address]** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

|          |  |
|----------|--|
| Synopsis | Next-hop IP address used to reach the destination  |
| Context  | <b>configure</b> <b>service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) |

|            |                                     |
|------------|-------------------------------------|
| Tree       | <a href="#">next-hop</a>            |
| Notes      | This element is part of a list key. |
| Introduced | 16.0.R1                             |
| Platforms  | All                                 |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the static route operation   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">route-type</a> <i>keyword</i> <a href="#">next-hop</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **backup-next-hop**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>backup-next-hop</b> context  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">route-type</a> <i>keyword</i> <a href="#">next-hop</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">backup-next-hop</a> |
| Tree        | <a href="#">backup-next-hop</a>   |
| Description | Commands in this context configure static route entry fast failover.  |
| Introduced  | 21.2.R1   |
| Platforms   | All   |

### **address** ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#))

|             |   |
|-------------|---|
| Synopsis    | Backup next-hop IP address  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> ) <a href="#">route-type</a> <i>keyword</i> <a href="#">next-hop</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">backup-next-hop</a> <a href="#">address</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) |
| Tree        | <a href="#">address</a>   |
| Description | This command specifies the backup IP forwarding address that is used for static route Fast ReRoute (FRR). The configured address, if reachable, acts as pre-installed backup forwarding information that can be used when the primary IP next-hop suddenly fails.<br><br>The configured backup next-hop IP address can be directly or indirectly connected (using an IGP or tunnel) to the node. The backup next-hop forwarding information or the  |



Next-hop Label Forwarding Entry (NHLFE) tunnel forwarding information from the IP Routing Table Manager (RTM) is used to preconfigure an IP fast-reroute backup path.

One backup next-hop address can protect a single primary static route entry next-hop address without ECMP and it is only activated when the primary next-hop has no active ECMP.

The configured IP address can be either on the network or the access side.

|            |         |
|------------|---------|
| Introduced | 21.2.R1 |
| Platforms  | All     |

### **bfd-liveness** *boolean*

|            |   |
|------------|---|
| Synopsis   | Use Bidirectional Forwarding Detection on this static route   |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>bfd-liveness</b> <i>boolean</i> |
| Tree       | <b>bfd-liveness</b>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **community** *string*

|               |   |
|---------------|---|
| Synopsis      | Community ID associated with the static route   |
| Context       | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>community</b> <i>string</i> |
| Tree          | <b>community</b>  |
| String Length | 1 to 72   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

### **cpe-check** [**address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

|          |   |
|----------|---|
| Synopsis | Enter the <b>cpe-check</b> list instance  |
| Context  | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree     | <b>cpe-check</b>  |

|                |         |
|----------------|---------|
| Max. Instances | 1       |
| Introduced     | 16.0.R1 |
| Platforms      | All     |

### [address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

|            |   |
|------------|---|
| Synopsis   | IP address of the target CPE device   |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <b>cpe-check</b>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### drop-count *number*

|            |   |
|------------|---|
| Synopsis   | Consecutive ping replies missed before CPE deemed down  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>drop-count</b> <i>number</i> |
| Tree       | <b>drop-count</b>   |
| Range      | 1 to 255  |
| Default    | 3   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### interval *number*

|          |   |
|----------|---|
| Synopsis | Interval between ICMP pings to target CPE IP address  |
| Context  | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>interval</b> <i>number</i> |
| Tree     | <b>interval</b>   |
| Range    | 1 to 255  |
| Units    | seconds   |

|            |         |
|------------|---------|
| Default    | 1       |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **log** *boolean*

|            |  |
|------------|--|
| Synopsis   | Log CPE connectivity checks transitions  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>log</b> <i>boolean</i> |
| Tree       | <b>log</b>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **padding-size** *number*

|            |  |
|------------|--|
| Synopsis   | Padding size for CPE connectivity checks   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>padding-size</b> <i>number</i> |
| Tree       | <b>padding-size</b>  |
| Range      | 0 to 16384   |
| Units      | bytes  |
| Default    | 56   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>description</b> <i>string</i> |
| Tree          | <b>description</b>   |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |

Platforms All

### **destination-class** *number*

Synopsis Destination class for this static route

Context **configure service vprn** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** **keyword** **next-hop** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **destination-class** *number*

Tree **destination-class**

Range 1 to 255

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **load-balancing-weight** *number*

Synopsis Load-balancing weight for all of the ECMP next hops

Context **configure service vprn** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** **keyword** **next-hop** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **load-balancing-weight** *number*

Tree **load-balancing-weight**

Range 1 to 4294967295

Introduced 16.0.R1

Platforms All

### **metric** *number*

Synopsis Static route metric

Context **configure service vprn** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** **keyword** **next-hop** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **metric** *number*

Tree **metric**

Range 0 to 65535

Default 1

Introduced 16.0.R1

Platforms All

**preference number**

|            |  |
|------------|--|
| Synopsis   | Priority of this static route over the routes from different sources   |
| Context    | <b>configure service vprn string static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword next-hop</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>preference number</b> |
| Tree       | <b>preference</b>  |
| Range      | 1 to 255   |
| Default    | 5  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**prefix-list**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>prefix-list</b> context   |
| Context    | <b>configure service vprn string static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword next-hop</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>prefix-list</b> |
| Tree       | <b>prefix-list</b>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**flag keyword**

|            |   |
|------------|---|
| Synopsis   | Static route match condition from prefix list   |
| Context    | <b>configure service vprn string static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword next-hop</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>prefix-list flag keyword</b> |
| Tree       | <b>flag</b>   |
| Options    | any, all, none  |
| Default    | any   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**name reference**

|          |   |
|----------|---|
| Synopsis | Prefix list name  |
| Context  | <b>configure service vprn string static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword next-hop</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>prefix-list name reference</b> |

|            |   |
|------------|---|
| Tree       | <a href="#">name</a>  |
| Reference  | <b>configure</b> <a href="#">policy-options</a> <a href="#">prefix-list</a> <i>string</i> |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## qos

|            |   |
|------------|---|
| Synopsis   | Enter the <b>qos</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <a href="#">keyword</a> <a href="#">next-hop</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">qos</a> |
| Tree       | <a href="#">qos</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## forwarding-class *keyword*

|            |   |
|------------|---|
| Synopsis   | Forwarding class associated with the static route   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <a href="#">keyword</a> <a href="#">next-hop</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">qos</a> <a href="#">forwarding-class</a> <i>keyword</i> |
| Tree       | <a href="#">forwarding-class</a>  |
| Options    | be, l2, af, l1, h2, ef, h1, nc  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## priority *keyword*

|            |   |
|------------|---|
| Synopsis   | Static route priority   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <a href="#">keyword</a> <a href="#">next-hop</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">qos</a> <a href="#">priority</a> <i>keyword</i> |
| Tree       | <a href="#">priority</a>  |
| Options    | low, high   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**source-class** *number*

|            |  |
|------------|--|
| Synopsis   | Source class for this static route   |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>source-class</b> <b>number</b> |
| Tree       | <b>source-class</b>  |
| Range      | 1 to 255   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS   |

**tag** *number*

|            |   |
|------------|---|
| Synopsis   | Static route tag  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>tag</b> <b>number</b> |
| Tree       | <b>tag</b>  |
| Range      | 1 to 4294967295   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**validate-next-hop** *boolean*

|            |  |
|------------|--|
| Synopsis   | Track the state of the next hop in the IPv4 ARP Cache or the IPv6 Neighbor Cache   |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>validate-next-hop</b> <b>boolean</b> |
| Tree       | <b>validate-next-hop</b>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**tag** *number*

|          |   |
|----------|---|
| Synopsis | Static route tag  |
| Context  | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>tag</b> <b>number</b> |
| Tree     | <b>tag</b>  |

|            |                 |
|------------|-----------------|
| Range      | 1 to 4294967295 |
| Introduced | 16.0.R1         |
| Platforms  | All             |

### **subscriber-interface** [[interface-name](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>subscriber-interface</b> list instance  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> |
| Tree       | <a href="#">subscriber-interface</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **[interface-name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Subscriber interface name  |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> |
| Tree          | <a href="#">subscriber-interface</a>   |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the subscriber interface   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **description** *string*

|          |                  |
|----------|------------------|
| Synopsis | Text description |
|----------|------------------|



|               |  |
|---------------|--|
| Context       | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <b>description</b>   |
| String Length | 1 to 255   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **fwd-service** *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Configure the forwarding service.   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>fwd-service</b> <i>reference</i> |
| Tree       | <b>fwd-service</b>  |
| Reference  | <b>configure service vprn</b> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **fwd-subscriber-interface** *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Forwarding subscriber interface name   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>fwd-subscriber-interface</b> <i>reference</i> |
| Tree       | <b>fwd-subscriber-interface</b>  |
| Reference  | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **group-interface** [**group-interface-name**] *string*

|          |  |
|----------|--|
| Synopsis | Enter the <b>group-interface</b> list instance   |
| Context  | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> |

|            |   |
|------------|---|
| Tree       | <a href="#">group-interface</a>                         |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **[group-interface-name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Group interface name  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> |
| Tree          | <a href="#">group-interface</a>   |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the interface   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **bonding-parameters**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>bonding-parameters</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <b>bonding-parameters</b> |
| Tree       | <a href="#">bonding-parameters</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of ESM connection bonding   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">bonding-parameters</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**connection** [[connection-index](#)] *number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>connection</b> list instance  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">bonding-parameters</a> <a href="#">connection</a> <i>number</i> |
| Tree       | <a href="#">connection</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**[connection-index]** *number*

|            |  |
|------------|--|
| Synopsis   | Bonding connection index   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">bonding-parameters</a> <a href="#">connection</a> <i>number</i> |
| Tree       | <a href="#">connection</a>   |
| Range      | 1 to 2   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**service** *string*

|          |  |
|----------|--|
| Synopsis | Connection service   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">bonding-parameters</a> <a href="#">connection</a> <i>number</i> <a href="#">service</a> <i>string</i> |
| Tree     | <a href="#">service</a>  |

|               |  |
|---------------|--|
| String Length | 1 to 64                                      |
| Introduced    | 16.0.R1                                      |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

## fpe reference



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | FPE that provisions bonding functionality  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">bonding-parameters</a> <a href="#">fpe</a> <i>reference</i> |
| Tree       | <a href="#">fpe</a>  |
| Reference  | <b>configure</b> <a href="#">fwd-path-ext</a> <a href="#">fpe</a> <i>number</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## multicast

|            |   |
|------------|---|
| Synopsis   | Enter the <b>multicast</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">bonding-parameters</a> <a href="#">multicast</a> |
| Tree       | <a href="#">multicast</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## connection (*number* | *keyword*)



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Multicast connection  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">bonding-parameters</a> <a href="#">multicast</a> <a href="#">connection</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <a href="#">connection</a>  |
| Range    | 1 to 2  |

|            |  |
|------------|--|
| Options    | use-incoming                                 |
| Default    | use-incoming                                 |
| Introduced | 16.0.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

## brg

|            |  |
|------------|--|
| Synopsis   | Enter the <b>brg</b> context   |
| Context    | <b>configure service vpn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>brg</b> |
| Tree       | <b>brg</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## admin-state *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of BRG   |
| Context    | <b>configure service vpn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>brg</b><br><b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## authenticated-brg-only *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Allow BRGs that have been pre-authenticated  |
| Context    | <b>configure service vpn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>brg</b><br><b>authenticated-brg-only</b> <i>boolean</i> |
| Tree       | <b>authenticated-brg-only</b>  |
| Default    | false  |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### default-brg-profile *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Default BRG profile for new BRGs

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [brg default-brg-profile](#) *reference*

Tree [default-brg-profile](#)

Reference **configure** [subscriber-mgmt vrgw brg-profile](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### cflowd-parameters

Synopsis Enter the **cflowd-parameters** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [cflowd-parameters](#)

Tree [cflowd-parameters](#)

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### sampling [[sampling-type](#)] *keyword*

Synopsis Enter the **sampling** list instance

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [cflowd-parameters](#) [sampling](#) *keyword*

Tree [sampling](#)

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### [[sampling-type](#)] *keyword*

Synopsis Traffic sampling type

|             |   |
|-------------|---|
| Context     | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>cflowd-parameters sampling</b> <i>keyword</i> |
| Tree        | <b>sampling</b>   |
| Description | This command configures the type of traffic to be sampled on the associated IP interface.   |
| Options     | unicast, multicast, both  |
| Notes       | This element is part of a list key.   |
| Introduced  | 16.0.R4   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **direction** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Direction of traffic for cflowd sampling  |
| Context     | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>cflowd-parameters sampling</b> <i>keyword</i> <b>direction</b> <i>keyword</i> |
| Tree        | <b>direction</b>  |
| Description | This command configures the direction in which sampling occurs on the associated IP interfaces.   |
| Options     | ingress-only, egress-only, both   |
| Default     | ingress-only  |
| Introduced  | 16.0.R4   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **sample-profile** (*keyword* | *number*)

|             |  |
|-------------|--|
| Synopsis    | Sample profile ID  |
| Context     | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>cflowd-parameters sampling</b> <i>keyword</i> <b>sample-profile</b> ( <i>keyword</i>   <i>number</i> ) |
| Tree        | <b>sample-profile</b>  |
| Description | This command defines the sampling rate profile associated with this interface.   |
| Max. Range  | 0 to 4294967295  |
| Options     | 1  |
| Introduced  | 19.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**type keyword**

|             |   |
|-------------|---|
| Synopsis    | Type of cflowd analysis   |
| Context     | <b>configure service vprn string subscriber-interface string group-interface string cflowd-parameters sampling keyword type keyword</b> |
| Tree        | <b>type</b>   |
| Description | This command configures the cflowd sampling type on the associated IP interface.  |
| Options     | acl, interface  |
| Notes       | This element is mandatory.  |
| Introduced  | 16.0.R4   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**data-trigger**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>data-trigger</b> context  |
| Context    | <b>configure service vprn string subscriber-interface string group-interface string data-trigger</b> |
| Tree       | <b>data-trigger</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state keyword**

|            |  |
|------------|--|
| Synopsis   | Administrative state of data-triggered host creation   |
| Context    | <b>configure service vprn string subscriber-interface string group-interface string data-trigger admin-state keyword</b> |
| Tree       | <b>admin-state</b>   |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**description string**

|          |  |
|----------|--|
| Synopsis | Text description   |
| Context  | <b>configure service vprn string subscriber-interface string group-interface string description string</b> |



---

|               |   |
|---------------|---|
| Tree          | <a href="#">description</a>                             |
| String Length | 1 to 255  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### dynamic-routes-track-srrp

|            |  |
|------------|--|
| Synopsis   | Enable the <b>dynamic-routes-track-srrp</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">dynamic-routes-track-srrp</a> |
| Tree       | <a href="#">dynamic-routes-track-srrp</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### hold-time *number*

|            |  |
|------------|--|
| Synopsis   | Time before route state updated after SRRP transition  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">dynamic-routes-track-srrp</a> <a href="#">hold-time</a> <i>number</i> |
| Tree       | <a href="#">hold-time</a>  |
| Range      | 1 to 50  |
| Units      | deciseconds  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### gtp-parameters

|            |   |
|------------|---|
| Synopsis   | Enter the <b>gtp-parameters</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">gtp-parameters</a> |
| Tree       | <a href="#">gtp-parameters</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of GTP access  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">gtp-parameters</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**fpe** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | PE that provisions the GTP user interface   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">gtp-parameters</a> <b>fpe</b> <i>reference</i> |
| Tree       | <a href="#">fpe</a>   |
| Reference  | <b>configure</b> <a href="#">fwd-path-ext</a> <b>fpe</b> <i>number</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**gx-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | Diameter application policy   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">gx-policy</a> <i>reference</i> |
| Tree       | <a href="#">gx-policy</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## ingress

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ingress</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ingress</a> |
| Tree       | <a href="#">ingress</a>  |
| Introduced | 19.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## policy-accounting *reference*

|            |   |
|------------|---|
| Synopsis   | Ingress policy accounting template name   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ingress</a> <a href="#">policy-accounting</a> <i>reference</i> |
| Tree       | <a href="#">policy-accounting</a>   |
| Reference  | <b>configure</b> <a href="#">routing-options</a> <a href="#">policy-accounting</a> <a href="#">policy-acct-template</a> <i>string</i>   |
| Introduced | 19.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-s  |

## ingress-stats *boolean*

|            |   |
|------------|---|
| Synopsis   | Collect ingress interface statistics  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ingress-stats</a> <i>boolean</i> |
| Tree       | <a href="#">ingress-stats</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## ip-mtu *number*

|            |   |
|------------|---|
| Synopsis   | Interface IP MTU  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ip-mtu</a> <i>number</i> |
| Tree       | <a href="#">ip-mtu</a>  |
| Range      | 512 to 9786   |
| Units      | bytes   |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipoe-linking

Synopsis Enter the **ipoe-linking** context

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **ipoe-linking**

Tree **ipoe-linking**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis Administrative state of IPoE host linking

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **ipoe-linking admin-state** *keyword*

Tree **admin-state**

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## gratuitous-router-advertisement *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Send unsolicited router advertisement after DHCP setup

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **ipoe-linking gratuitous-router-advertisement** *boolean*

Tree **gratuitous-router-advertisement**

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**shared-circuit-id** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enable circuit ID in DHCPv4 Option82 to validate DHCPv6  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipoe-linking</b> <b>shared-circuit-id</b> <i>boolean</i> |
| Tree       | <a href="#">shared-circuit-id</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**ipoe-session**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipoe-session</b> context  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipoe-session</b> |
| Tree       | <a href="#">ipoe-session</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of IPoE session management  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipoe-session</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**description** *string*

|          |   |
|----------|---|
| Synopsis | Text description  |
| Context  | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipoe-session</b> <b>description</b> <i>string</i> |

---

|               |   |
|---------------|---|
| Tree          | <a href="#">description</a>                             |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **force-auth**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>force-auth</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipoe-session</a> <a href="#">force-auth</a> |
| Tree       | <a href="#">force-auth</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **cid-change** *boolean*

|            |   |
|------------|---|
| Synopsis   | Ignore min-auth-interval when circuit ID changed  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipoe-session</a> <a href="#">force-auth</a> <a href="#">cid-change</a> <i>boolean</i> |
| Tree       | <a href="#">cid-change</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **rid-change** *boolean*

|            |   |
|------------|---|
| Synopsis   | Ignore min-auth-interval when remote ID changed   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipoe-session</a> <a href="#">force-auth</a> <a href="#">rid-change</a> <i>boolean</i> |
| Tree       | <a href="#">rid-change</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## ipoe-session-policy *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | IPoE Session policy to be used for new sessions  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipoe-session ipoe-session-policy</a> <i>reference</i> |
| Tree       | <a href="#">ipoe-session-policy</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt ipoe-session-policy</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## min-auth-interval (*keyword* | *number*)

|            |  |
|------------|--|
| Synopsis   | Minimum time between two authentication attempts   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipoe-session min-auth-interval</a> ( <i>keyword</i>   <i>number</i> ) |
| Tree       | <a href="#">min-auth-interval</a>  |
| Range      | 1 to 32000000  |
| Units      | seconds  |
| Options    | infinite, always-reauthenticate  |
| Default    | infinite   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## radius-session-timeout *keyword*

|            |   |
|------------|---|
| Synopsis   | Session timeout attribute to be interpreted   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipoe-session radius-session-timeout</a> <i>keyword</i> |
| Tree       | <a href="#">radius-session-timeout</a>  |
| Options    | absolute, ignore, backwards-compatible  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**sap-session-limit** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of sessions per SAP   |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipoe-session</b> <b>sap-session-limit</b> <i>number</i> |
| Tree       | <b>sap-session-limit</b>   |
| Range      | 1 to 131071  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**session-limit** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of sessions on this group interface   |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipoe-session</b> <b>session-limit</b> <i>number</i> |
| Tree       | <b>session-limit</b>   |
| Range      | 1 to 500000  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**stateless-redundancy** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Remove IPoE sessions when the system becomes stand-by in a stateless multi-chassis redundancy setup  |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipoe-session</b> <b>stateless-redundancy</b> <i>boolean</i> |
| Tree       | <b>stateless-redundancy</b>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |



## user-db *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Local user database for IPoE session authentication  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipoe-session user-db</a> <i>reference</i> |
| Tree       | <a href="#">user-db</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## ipv4

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ipv4</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a> |
| Tree       | <a href="#">ipv4</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## arp-host

|            |  |
|------------|--|
| Synopsis   | Enter the <b>arp-host</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 arp-host</a> |
| Tree       | <a href="#">arp-host</a>   |
| Introduced | 16.0.R6  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## admin-state *keyword*

|          |   |
|----------|---|
| Synopsis | Administrative state of ARP hosts   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 arp-host admin-state</a> <i>keyword</i> |
| Tree     | <a href="#">admin-state</a>   |
| Options  | enable, disable   |

|            |   |
|------------|---|
| Introduced | 16.0.R6   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **host-limit** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of ARP hosts  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">arp-host</a> <b>host-limit</b> <i>number</i> |
| Tree       | <a href="#">host-limit</a>   |
| Range      | 1 to 524287  |
| Introduced | 16.0.R6  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **min-auth-interval** *number*

|            |   |
|------------|---|
| Synopsis   | Minimum authentication interval   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">arp-host</a> <b>min-auth-interval</b> <i>number</i> |
| Tree       | <a href="#">min-auth-interval</a>   |
| Range      | 1 to 6000   |
| Units      | minutes   |
| Default    | 15  |
| Introduced | 16.0.R6   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **sap-host-limit** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of ARP hosts per SAP  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">arp-host</a> <b>sap-host-limit</b> <i>number</i> |
| Tree       | <a href="#">sap-host-limit</a>   |
| Range      | 1 to 131071  |
| Default    | 1  |
| Introduced | 16.0.R6  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**bfd**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>bfd</b> context  |
| Context     | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 bfd</b>              |
| Tree        | <b>bfd</b>  |
| Description | Commands in this context configure the attributes of bidirectional forwarding detection (BFD) sessions that control the state of ESM dynamic BGP peers. |
| Introduced  | 21.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of BFD sessions  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 bfd</b><br><b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**echo-receive** *number*

|            |   |
|------------|---|
| Synopsis   | Minimum echo interval over this interface   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 bfd</b><br><b>echo-receive</b> <i>number</i> |
| Tree       | <b>echo-receive</b>   |
| Range      | 100 to 100000   |
| Units      | milliseconds  |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**multiplier** *number*

|          |   |
|----------|---|
| Synopsis | Number of consecutive BFD messages missed from the peer |
|----------|---|

|             |   |
|-------------|---|
| Context     | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 bfd multiplier</b> <i>number</i>   |
| Tree        | <b>multiplier</b>   |
| Description | This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments. |
| Range       | 1 to 20   |
| Default     | 3   |
| Introduced  | 21.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **receive number**

|             |  |
|-------------|--|
| Synopsis    | BFD receive interval over this interface   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 bfd receive number</b>  |
| Tree        | <b>receive</b>   |
| Description | This command specifies the receive interval for the BFD session.<br>On the 7750 SR, this command can only be configured to a value less than 100 when the <b>type</b> command is configured to <b>cpm-np</b> . |
| Range       | 10 to 100000   |
| Units       | milliseconds   |
| Default     | 100  |
| Introduced  | 21.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **transmit-interval number**

|             |   |
|-------------|---|
| Synopsis    | BFD transmit interval over this interface   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 bfd transmit-interval number</b>                           |
| Tree        | <b>transmit-interval</b>  |
| Description | This command configures the transmit intervals.<br>On the 7750 SR, this command can only be configured to a value less than 100 when the <b>type</b> command is configured to <b>cpm-np</b> . |
| Range       | 10 to 100000  |
| Units       | milliseconds  |

|            |   |
|------------|---|
| Default    | 100   |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **type** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Local termination point for the BFD session   |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>bfd</b> <b>type</b> <i>keyword</i>  |
| Tree        | <b>type</b>   |
| Description | This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity.<br>The options to specify where the BFD session runs are: <ul style="list-style-type: none"> <li>• <b>auto</b> (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the <b>cpm-np</b>.</li> <li>• <b>cpm-np</b> – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems.</li> <li>• <b>fp</b> – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.</li> </ul> |
| Options     | cpm-np, auto, fp  |
| Default     | auto  |
| Introduced  | 21.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s  |

### **dhcp**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>dhcp</b> context  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> |
| Tree       | <b>dhcp</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **admin-state** *keyword*

|          |                              |
|----------|------------------------------|
| Synopsis | Administrative state of DHCP |
|----------|------------------------------|

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string subscriber-interface string group-interface string ipv4 dhcp admin-state keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## client-applications

|            |  |
|------------|--|
| Synopsis   | Enter the <b>client-applications</b> context   |
| Context    | <b>configure service vprn</b> <i>string subscriber-interface string group-interface string ipv4 dhcp client-applications</i> |
| Tree       | <a href="#">client-applications</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## dhcp boolean

|            |   |
|------------|---|
| Synopsis   | Enable IPoE clients to use DHCP relay or proxy server   |
| Context    | <b>configure service vprn</b> <i>string subscriber-interface string group-interface string ipv4 dhcp client-applications dhcp boolean</i> |
| Tree       | <a href="#">dhcp</a>  |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## ppp boolean

|            |  |
|------------|--|
| Synopsis   | Enable PPPoE clients to use DHCP relay or proxy server   |
| Context    | <b>configure service vprn</b> <i>string subscriber-interface string group-interface string ipv4 dhcp client-applications ppp boolean</i> |
| Tree       | <a href="#">ppp</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**description string**

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure service vpn string subscriber-interface string group-interface string ipv4 dhcp description string</b> |
| Tree          | <b>description</b>  |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**filter reference**

|            |   |
|------------|---|
| Synopsis   | DHCP filter ID for the group interface  |
| Context    | <b>configure service vpn string subscriber-interface string group-interface string ipv4 dhcp filter reference</b> |
| Tree       | <b>filter</b>   |
| Reference  | <b>configure filter dhcp-filter number</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**gi-address string**

|             |   |
|-------------|---|
| Synopsis    | GI address for the DHCP relay   |
| Context     | <b>configure service vpn string subscriber-interface string group-interface string ipv4 dhcp gi-address string</b>  |
| Tree        | <b>gi-address</b>   |
| Description | <p>This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay.</p> <p>By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.</p> |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## lease-populate

|            |  |
|------------|--|
| Synopsis   | Enter the <b>lease-populate</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp lease-populate</b> |
| Tree       | <b>lease-populate</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## I2-header

|            |  |
|------------|--|
| Synopsis   | Enable the <b>I2-header</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp lease-populate I2-header</b> |
| Tree       | <b>I2-header</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## mac *string*

|            |  |
|------------|--|
| Synopsis   | IEEE address used in anti-spoofing entries for the SAP   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp lease-populate I2-header mac</b> <i>string</i> |
| Tree       | <b>mac</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## max-leases *number*

|            |   |
|------------|---|
| Synopsis   | Maximum number of DHCPv4 leases   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp lease-populate max-leases</b> <i>number</i> |
| Tree       | <b>max-leases</b>   |
| Range      | 1 to 511999   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |



### **match-circuit-id** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable Option 82 circuit ID on relayed DHCP packets  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">match-circuit-id</a> <i>boolean</i> |
| Tree       | <a href="#">match-circuit-id</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **offer-selection**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>offer-selection</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">offer-selection</a> |
| Tree       | <a href="#">offer-selection</a>  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **client-mac**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>client-mac</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">offer-selection</a> <a href="#">client-mac</a> |
| Tree       | <a href="#">client-mac</a>  |
| Notes      | The following elements are part of a choice: <b>client-mac</b> or <b>server</b> .   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **discover-delay** *number*

|             |  |
|-------------|--|
| Synopsis    | Delay before sending DHCP Discover messages  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">offer-selection</a> <a href="#">client-mac</a> <a href="#">discover-delay</a> <i>number</i> |
| Tree        | <a href="#">discover-delay</a>   |
| Description | This command configures the time to delay sending DHCP Discover messages from the specified MAC addresses.   |

|            |   |
|------------|---|
| Range      | 1 to 100  |
| Units      | deciseconds   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **mac-address** *keyword*

|             |  |
|-------------|--|
| Synopsis    | Designated client MAC addresses for Offer selection  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp offer-selection</a> <a href="#">client-mac</a> <a href="#">mac-address</a> <i>keyword</i> |
| Tree        | <a href="#">mac-address</a>  |
| Description | This command specifies the client MAC addresses for which the Discover delay applies.  |
| Options     | odd, even  |
| Introduced  | 20.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **discover-delay** *number*

|             |   |
|-------------|---|
| Synopsis    | Delay before sending DHCP Discover messages   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp offer-selection</a> <a href="#">discover-delay</a> <i>number</i> |
| Tree        | <a href="#">discover-delay</a>  |
| Description | This command configures the time to delay sending DHCP Discover messages. The delay is applied to all DHCP Discover messages for which no per DHCP server or per client MAC delay is configured.  |
| Range       | 1 to 100  |
| Units       | deciseconds   |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **server** [[ipv4-address](#)] *string*

|          |   |
|----------|---|
| Synopsis | Enter the <b>server</b> list instance   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp offer-selection</a> <a href="#">server</a> <i>string</i> |
| Tree     | <a href="#">server</a>  |

|                |   |
|----------------|---|
| Max. Instances | 8   |
| Notes          | The following elements are part of a choice: <b>client-mac</b> or <b>server</b> . |
| Introduced     | 20.10.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                           |

### [**ipv4-address**] *string*

|            |  |
|------------|--|
| Synopsis   | IP address of the DHCP server  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp offer-selection server</b> <i>string</i> |
| Tree       | <a href="#">server</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **discover-delay** *number*

|             |  |
|-------------|--|
| Synopsis    | Delay before sending DHCP Discover messages  |
| Context     | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp offer-selection server</b> <i>string</i> <b>discover-delay</b> <i>number</i> |
| Tree        | <a href="#">discover-delay</a>   |
| Description | This command configures the time to delay DHCP Discover messages sent to the server.   |
| Range       | 1 to 100   |
| Units       | deciseconds  |
| Introduced  | 20.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **option-82**

|          |   |
|----------|---|
| Synopsis | Enter the <b>option-82</b> context  |
| Context  | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp option-82</b> |
| Tree     | <a href="#">option-82</a>   |

|             |   |
|-------------|---|
| Description | Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet. |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **action** *keyword*

|            |  |
|------------|--|
| Synopsis   | Action to take with received DHCP Option 82  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>option-82</b> <b>action</b> <i>keyword</i> |
| Tree       | <a href="#">action</a>   |
| Options    | replace, drop, keep  |
| Default    | keep   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **circuit-id**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>circuit-id</b> context   |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>option-82</b> <b>circuit-id</b> |
| Tree       | <a href="#">circuit-id</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ascii-tuple**

|            |  |
|------------|--|
| Synopsis   | Use the ASCII-encoded tuple for the circuit ID   |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>option-82</b> <b>circuit-id</b> <b>ascii-tuple</b> |
| Tree       | <a href="#">ascii-tuple</a>  |
| Notes      | The following elements are part of a choice: <b>ascii-tuple</b> , <b>ifindex</b> , <b>none</b> , <b>sap-id</b> , or <b>vlan-ascii-tuple</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## ifindex

|            |   |
|------------|---|
| Synopsis   | Use the interface index for the circuit ID  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82 circuit-id</a> <a href="#">ifindex</a> |
| Tree       | <a href="#">ifindex</a>   |
| Notes      | The following elements are part of a choice: <b>ascii-tuple</b> , <b>ifindex</b> , <b>none</b> , <b>sap-id</b> , or <b>vlan-ascii-tuple</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## none

|            |  |
|------------|--|
| Synopsis   | Do not include the circuit ID  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82 circuit-id</a> <a href="#">none</a> |
| Tree       | <a href="#">none</a>   |
| Notes      | The following elements are part of a choice: <b>ascii-tuple</b> , <b>ifindex</b> , <b>none</b> , <b>sap-id</b> , or <b>vlan-ascii-tuple</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## sap-id

|            |  |
|------------|--|
| Synopsis   | Use the SAP ID   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82 circuit-id</a> <a href="#">sap-id</a> |
| Tree       | <a href="#">sap-id</a>   |
| Notes      | The following elements are part of a choice: <b>ascii-tuple</b> , <b>ifindex</b> , <b>none</b> , <b>sap-id</b> , or <b>vlan-ascii-tuple</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## vlan-ascii-tuple

|          |  |
|----------|--|
| Synopsis | Include the VLAN ID and dot1p bits in the ASCII tuple  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82 circuit-id</a> <a href="#">vlan-ascii-tuple</a> |

|             |   |
|-------------|---|
| Tree        | <a href="#">vlan-ascii-tuple</a>  |
| Description | When configured, the router includes the VLAN ID and dot1p bits with the ASCII-tuple information. This only occurs on dot1q and QinQ-encapsulated ports. When the Option 82 bits are stripped, dot1p bits are copied to the Ethernet header of the outgoing packet.<br>When unconfigured, the router leaves the circuit ID sub-option of the DHCP packet empty. |
| Notes       | The following elements are part of a choice: <b>ascii-tuple</b> , <b>ifindex</b> , <b>none</b> , <b>sap-id</b> , or <b>vlan-ascii-tuple</b> .   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## remote-id

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>remote-id</b> context  |
| Context     | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp option-82 remote-id</b> |
| Tree        | <a href="#">remote-id</a>   |
| Description | Commands in this context configure the remote IP sub-option of the DHCP packet with the identity of the remote host end (typically the DHCP client).            |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## ascii-string *string*

|               |  |
|---------------|--|
| Synopsis      | User-defined ASCII string for the remote ID  |
| Context       | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp option-82 remote-id ascii-string</b> <i>string</i> |
| Tree          | <a href="#">ascii-string</a>   |
| String Length | 1 to 32  |
| Notes         | The following elements are part of a choice: <b>ascii-string</b> , <b>mac</b> , or <b>none</b> .   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## mac

|          |                                       |
|----------|---------------------------------------|
| Synopsis | Use the MAC address for the remote ID |
|----------|---------------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp option-82 remote-id mac</b> |
| Tree       | <b>mac</b>  |
| Notes      | The following elements are part of a choice: <b>ascii-string</b> , <b>mac</b> , or <b>none</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### none

|            |  |
|------------|--|
| Synopsis   | Do not include the remote ID   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp option-82 remote-id none</b> |
| Tree       | <b>none</b>  |
| Notes      | The following elements are part of a choice: <b>ascii-string</b> , <b>mac</b> , or <b>none</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### vendor-specific-option

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>vendor-specific-option</b> context  |
| Context     | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp option-82 vendor-specific-option</b> |
| Tree        | <b>vendor-specific-option</b>  |
| Description | Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### client-mac-address *boolean*

|            |  |
|------------|--|
| Synopsis   | Send the MAC address in the VSO  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp option-82 vendor-specific-option client-mac-address</b> <i>boolean</i> |
| Tree       | <b>client-mac-address</b>  |
| Default    | false  |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pool-name** *boolean*

Synopsis Send the pool name in the VSO

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 dhcp option-82 vendor-specific-option pool-name](#) *boolean*

Tree [pool-name](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sap-id** *boolean*

Synopsis Send SAP ID in the sub-option of the DHCP relay packet

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 dhcp option-82 vendor-specific-option sap-id](#) *boolean*

Tree [sap-id](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **service-id** *boolean*

Synopsis Send the service ID in the Vendor Specific Option

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 dhcp option-82 vendor-specific-option service-id](#) *boolean*

Tree [service-id](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **string** *string*

Synopsis User-defined ASCII string for the VSO

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 dhcp option-82 vendor-specific-option string](#) *string*



|               |   |
|---------------|---|
| Tree          | <a href="#">string</a>                                  |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **system-id** *boolean*

|            |  |
|------------|--|
| Synopsis   | Send the system ID in the VSO  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82 vendor-specific-option</a> <a href="#">system-id</a> <i>boolean</i> |
| Tree       | <a href="#">system-id</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **proxy-server**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>proxy-server</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp proxy-server</a> |
| Tree       | <a href="#">proxy-server</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the DHCP proxy server  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp proxy-server</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**emulated-server** *string*

|            |   |
|------------|---|
| Synopsis   | IP address used as DHCP server address in SAP context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp proxy-server emulated-server</a> <i>string</i> |
| Tree       | <a href="#">emulated-server</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**lease-time**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>lease-time</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp proxy-server lease-time</a> |
| Tree       | <a href="#">lease-time</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**radius-override** *boolean*

|            |   |
|------------|---|
| Synopsis   | Use lease time information provided by RADIUS server  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp proxy-server lease-time radius-override</a> <i>boolean</i> |
| Tree       | <a href="#">radius-override</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**value** *number*

|            |  |
|------------|--|
| Synopsis   | DHCP lease time  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp proxy-server lease-time value</a> <i>number</i> |
| Tree       | <a href="#">value</a>  |
| Range      | 300 to 315446399   |
| Units      | seconds  |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **python-policy** *reference*

Synopsis Python policy name

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 dhcp python-policy](#) *reference*

Tree [python-policy](#)

Description This command associates a Python policy name with the interface.

Reference **configure** [python](#) [python-policy](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **relay-proxy**

Synopsis Enable the **relay-proxy** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 dhcp relay-proxy](#)

Tree [relay-proxy](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **release-update-src-ip** *boolean*

Synopsis Update the source IP address of a DHCP RELEASE message

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 dhcp relay-proxy](#) [release-update-src-ip](#) *boolean*

Tree [release-update-src-ip](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **siaddr-override** *string*

Synopsis DHCP server IP address for address hiding function

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp relay-proxy siaddr-override</b> <i>string</i> |
| Tree       | <b>siaddr-override</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **release-include-gi-address** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include gateway IP address in DHCP Release messages   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp release-include-gi-address</b> <i>boolean</i> |
| Tree       | <b>release-include-gi-address</b>   |
| Default    | false   |
| Introduced | 21.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **server** *string*

|                |  |
|----------------|--|
| Synopsis       | IP addresses for DHCP server requests  |
| Context        | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp server</b> <i>string</i>   |
| Tree           | <b>server</b>  |
| Description    | This command configures a list of servers that this interface forwards requests to.<br>The operator can enter the list of servers as either IP addresses or fully qualified domain names. The operator must specify at least one server specified for DHCP relay to work. If there are multiple servers, the system forwards the request to all the servers in the list. |
| Max. Instances | 8  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **src-ip-addr** *keyword*

|          |  |
|----------|--|
| Synopsis | Type of source address to use for DHCP relay   |
| Context  | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp src-ip-addr</b> <i>keyword</i> |

|            |   |
|------------|---|
| Tree       | <a href="#">src-ip-addr</a>                             |
| Options    | auto, gi-address  |
| Default    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### trusted *boolean*

|             |   |
|-------------|---|
| Synopsis    | Relay untrusted packets   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">trusted</a> <i>boolean</i>   |
| Tree        | <a href="#">trusted</a>   |
| Description | <p>When configured to <b>true</b>, the router enables the trusted mode on the interface. When enabled, the relay agent changes the existing GI address (of the request) to the ingress interface, and forwards the request.</p> <p>A DHCP request that contains a GI address of 0.0.0.0 and an Option 82 field in the packet is discarded unless it arrives on a trusted circuit.</p> <p>This behavior only applies if the Relay Agent Information Option action is to keep the existing information. When the Option 82 field is replaced by the relay agent, the original Option 82 information is lost, and there is no reason to enable the trusted option.</p> |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### user-db *reference*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Local user database for authentication  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">user-db</a> <i>reference</i> |
| Tree       | <a href="#">user-db</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**icmp**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>icmp</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp</b> |
| Tree       | <b>icmp</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**mask-reply** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow responses to ICMP mask requests on the interface  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp mask-reply</b> <i>boolean</i> |
| Tree       | <b>mask-reply</b>   |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**param-problem**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>param-problem</b> context  |
| Context     | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp param-problem</b> |
| Tree        | <b>param-problem</b>  |
| Description | Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface.   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**admin-state** *keyword*

|          |  |
|----------|--|
| Synopsis | Administrative state of sent Parameter Problem messages  |
| Context  | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp param-problem admin-state</b> <i>keyword</i> |
| Tree     | <b>admin-state</b>   |
| Options  | enable, disable  |

|            |   |
|------------|---|
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **number** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum number of Parameter Problem messages to send  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>icmp</b> <b>param-problem</b> <b>number</b> <i>number</i> |
| Tree       | <b>number</b>   |
| Range      | 10 to 1000  |
| Default    | 100   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **seconds** *number*

|            |  |
|------------|--|
| Synopsis   | Time used to limit number of Parameter Problem messages  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>icmp</b> <b>param-problem</b> <b>seconds</b> <i>number</i> |
| Tree       | <b>seconds</b>   |
| Range      | 1 to 60  |
| Units      | seconds  |
| Default    | 10   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **redirects**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>redirects</b> context  |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>icmp</b> <b>redirects</b>   |
| Tree        | <b>redirects</b>  |
| Description | <p>Commands in this context configure the settings for ICMP redirect messages generated by the interface.</p> <p>The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.</p> |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of sending ICMP redirect messages   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">redirects</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **number** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of ICMP redirect messages to send   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">redirects</a> <b>number</b> <i>number</i> |
| Tree       | <a href="#">number</a>   |
| Range      | 10 to 1000   |
| Default    | 100  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **seconds** *number*

|            |   |
|------------|---|
| Synopsis   | Time used to limit the number of ICMP redirect messages   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">redirects</a> <b>seconds</b> <i>number</i> |
| Tree       | <a href="#">seconds</a>   |
| Range      | 1 to 60   |
| Units      | seconds   |
| Default    | 10  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |



**ttl-expired**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>ttl-expired</b> context   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp</b> <b>ttl-expired</b> |
| Tree        | <b>ttl-expired</b>   |
| Description | Commands in this context configure the settings for ICMP TTL expired messages generated by the interface.  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of sending TTL expired messages  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp</b> <b>ttl-expired admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**number** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum number of TTL expired messages to send  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp</b> <b>ttl-expired number</b> <i>number</i> |
| Tree       | <b>number</b>   |
| Range      | 10 to 2000  |
| Default    | 100   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**seconds** *number*

|          |   |
|----------|---|
| Synopsis | Time used to limit the number of TTL expired messages |
|----------|---|

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp ttl-expired</b> <i>seconds</i> <i>number</i> |
| Tree       | <b>seconds</b>   |
| Range      | 1 to 60  |
| Units      | seconds  |
| Default    | 10   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **use-matching-address** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Use the subscriber interface address as source address   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp ttl-expired use-matching-address</b> <i>boolean</i>  |
| Tree        | <b>use-matching-address</b>  |
| Description | <p>When configured to <b>true</b>, the system uses a matching subscriber interface address as the source address of the ICMP TTL expired message.</p> <p>For matching to occur, the source address of the offending packet must be in the same subnet of the subscriber interface address.</p> <p>When configured to <b>false</b>, the system uses the first configured address.</p> |
| Default     | false  |
| Introduced  | 22.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **unreachables**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>unreachables</b> context  |
| Context     | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp unreachables</b> |
| Tree        | <b>unreachables</b>  |
| Description | Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface.                     |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of sending unreachable messages  |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp unreachables</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**number** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum number of unreachable messages to send  |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp unreachables</b> <b>number</b> <i>number</i> |
| Tree       | <b>number</b>   |
| Range      | 10 to 2000  |
| Default    | 100   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**seconds** *number*

|            |  |
|------------|--|
| Synopsis   | Time to limit the number of ICMP unreachable messages  |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp unreachables</b> <b>seconds</b> <i>number</i> |
| Tree       | <b>seconds</b>   |
| Range      | 1 to 60  |
| Units      | seconds  |
| Default    | 10   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**ignore-df-bit** *boolean*

|          |   |
|----------|---|
| Synopsis | Ignore DF bit in the IPv4 header when fragmenting |
|----------|---|

|             |   |
|-------------|---|
| Context     | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 ignore-df-bit</b> <i>boolean</i>   |
| Tree        | <b>ignore-df-bit</b>  |
| Description | When configured to <b>true</b> , fragmentation is applied according to the applicable egress MTU instead of the DF bit for frames egressing the WLAN-GW group. The DF bit is reset for frames that are fragmented.<br><br>When configured to <b>false</b> , the router fragments a packet larger than the MTU if the DF bit is set to 0 and drops the packet if the DF bit is set to 1. |
| Default     | false   |
| Introduced  | 20.5.R1   |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## neighbor-discovery

|            |   |
|------------|---|
| Synopsis   | Enter the <b>neighbor-discovery</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 neighbor-discovery</b> |
| Tree       | <b>neighbor-discovery</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## local-proxy-arp *boolean*

|             |  |
|-------------|--|
| Synopsis    | Enable local proxy ARP on interface  |
| Context     | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 neighbor-discovery local-proxy-arp</b> <i>boolean</i>                     |
| Tree        | <b>local-proxy-arp</b>   |
| Description | When configured to <b>true</b> , the router enables local proxy ARP on the interface.<br><br>When configured to <b>false</b> , the router does not respond to ARP requests for addresses on the same subnet. |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## populate *boolean*

|          |  |
|----------|--|
| Synopsis | Allow population of static and dynamic hosts |
|----------|--|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 neighbor-discovery populate</b> <i>boolean</i> |
| Tree       | <a href="#">populate</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **proxy-arp-policy** *reference*

|                |   |
|----------------|---|
| Synopsis       | Proxy ARP policy name   |
| Context        | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 neighbor-discovery proxy-arp-policy</b> <i>reference</i> |
| Tree           | <a href="#">proxy-arp-policy</a>  |
| Reference      | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>  |
| Max. Instances | 5   |
| Notes          | This element is ordered by the user.  |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **remote-proxy-arp** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable remote proxy ARP on the interface  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 neighbor-discovery remote-proxy-arp</b> <i>boolean</i> |
| Tree       | <a href="#">remote-proxy-arp</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **timeout** *number*

|          |   |
|----------|---|
| Synopsis | Timeout for an ARP entry learned on the interface   |
| Context  | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 neighbor-discovery timeout</b> <i>number</i> |
| Tree     | <a href="#">timeout</a>   |
| Range    | 0 to 65535  |

|            |   |
|------------|---|
| Units      | seconds   |
| Default    | 14400   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **qos-route-lookup** *keyword*

|            |  |
|------------|--|
| Synopsis   | QoS route lookup   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a> <b>qos-route-lookup</b> <i>keyword</i> |
| Tree       | <a href="#">qos-route-lookup</a>   |
| Options    | destination  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

### **urpf-check**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>urpf-check</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a> <b>urpf-check</b> |
| Tree       | <a href="#">urpf-check</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **mode** *keyword*

|            |  |
|------------|--|
| Synopsis   | Unicast RPF check mode   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a> <b>urpf-check</b> <b>mode</b> <i>keyword</i> |
| Tree       | <a href="#">mode</a>   |
| Options    | strict, loose, strict-no-ecmp  |
| Default    | strict   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## ipv6

|            |   |
|------------|---|
| Synopsis   | Enable the <b>ipv6</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> |
| Tree       | <a href="#">ipv6</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## allow-multiple-wan-addresses *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow multiple WAN addresses  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">allow-multiple-wan-addresses</a> <i>boolean</i> |
| Tree       | <a href="#">allow-multiple-wan-addresses</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## auto-reply

|            |  |
|------------|--|
| Synopsis   | Enter the <b>auto-reply</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">auto-reply</a> |
| Tree       | <a href="#">auto-reply</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## neighbor-solicitation *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable auto-reply for NS  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">auto-reply</a> <a href="#">neighbor-solicitation</a> <i>boolean</i> |
| Tree       | <a href="#">neighbor-solicitation</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**router-solicitation** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable auto-reply for RS   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">auto-reply</a> <a href="#">router-solicitation</a> <i>boolean</i> |
| Tree       | <a href="#">router-solicitation</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**bfd**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>bfd</b> context   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">bfd</a> |
| Tree        | <a href="#">bfd</a>  |
| Description | Commands in this context configure the attributes of bidirectional forwarding detection (BFD) sessions that control the state of ESM dynamic BGP peers.  |
| Introduced  | 21.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of BFD sessions  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">bfd</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**echo-receive** *number*

|          |   |
|----------|---|
| Synopsis | Minimum echo interval over this interface   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">bfd</a> <a href="#">echo-receive</a> <i>number</i> |



|            |   |
|------------|---|
| Tree       | <a href="#">echo-receive</a>                            |
| Range      | 100 to 100000   |
| Units      | milliseconds  |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **multiplier number**

|             |   |
|-------------|---|
| Synopsis    | Number of consecutive BFD messages missed from the peer   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 bfd multiplier number</a>                                 |
| Tree        | <a href="#">multiplier</a>  |
| Description | This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments. |
| Range       | 1 to 20   |
| Default     | 3   |
| Introduced  | 21.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **receive number**

|             |  |
|-------------|--|
| Synopsis    | BFD receive interval over this interface   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 bfd receive number</a>           |
| Tree        | <a href="#">receive</a>  |
| Description | This command specifies the receive interval for the BFD session.<br>On the 7750 SR, this command can only be configured to a value less than 100 when the <b>type</b> command is configured to <b>cpm-np</b> . |
| Range       | 10 to 100000   |
| Units       | milliseconds   |
| Default     | 100  |
| Introduced  | 21.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**transmit-interval** *number*

|             |  |
|-------------|--|
| Synopsis    | BFD transmit interval over this interface  |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>bfd</b> <b>transmit-interval</b> <i>number</i> |
| Tree        | <b>transmit-interval</b>   |
| Description | This command configures the transmit intervals.<br>On the 7750 SR, this command can only be configured to a value less than 100 when the <b>type</b> command is configured to <b>cpm-np</b> .          |
| Range       | 10 to 100000   |
| Units       | milliseconds   |
| Default     | 100  |
| Introduced  | 21.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**type** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Local termination point for the BFD session   |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>bfd</b> <b>type</b> <i>keyword</i>  |
| Tree        | <b>type</b>   |
| Description | This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity.<br>The options to specify where the BFD session runs are: <ul style="list-style-type: none"> <li>• <b>auto</b> (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the <b>cpm-np</b>.</li> <li>• <b>cpm-np</b> – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems.</li> <li>• <b>fp</b> – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.</li> </ul> |
| Options     | cpm-np, auto, fp  |
| Default     | auto  |
| Introduced  | 21.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s  |

## dhcp6

|            |   |
|------------|---|
| Synopsis   | Enter the <b>dhcp6</b> context  |
| Context    | <b>configure service vprn</b> <i>string subscriber-interface string group-interface string ipv6 dhcp6</i> |
| Tree       | <a href="#">dhcp6</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## filter reference

|            |  |
|------------|--|
| Synopsis   | DHCPv6 filter  |
| Context    | <b>configure service vprn</b> <i>string subscriber-interface string group-interface string ipv6 dhcp6 filter reference</i> |
| Tree       | <a href="#">filter</a>   |
| Reference  | <b>configure filter dhcp6-filter</b> <i>number</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## option

|            |  |
|------------|--|
| Synopsis   | Enter the <b>option</b> context  |
| Context    | <b>configure service vprn</b> <i>string subscriber-interface string group-interface string ipv6 dhcp6 option</i> |
| Tree       | <a href="#">option</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## interface-id

|            |   |
|------------|---|
| Synopsis   | Enter the <b>interface-id</b> context   |
| Context    | <b>configure service vprn</b> <i>string subscriber-interface string group-interface string ipv6 dhcp6 option interface-id</i> |
| Tree       | <a href="#">interface-id</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## ascii-tuple

|            |   |
|------------|---|
| Synopsis   | Use ASCII-encoded concatenated tuple  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 option interface-id</a> <a href="#">ascii-tuple</a> |
| Tree       | <a href="#">ascii-tuple</a>   |
| Notes      | The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-index</b> , <b>sap-id</b> , or <b>string</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## if-index

|            |  |
|------------|--|
| Synopsis   | Use interface index in the DHCPv6 relay packet   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 option interface-id</a> <a href="#">if-index</a> |
| Tree       | <a href="#">if-index</a>   |
| Notes      | The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-index</b> , <b>sap-id</b> , or <b>string</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## sap-id

|            |  |
|------------|--|
| Synopsis   | Use SAP ID in interface ID option in relay packet  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 option interface-id</a> <a href="#">sap-id</a> |
| Tree       | <a href="#">sap-id</a>   |
| Notes      | The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-index</b> , <b>sap-id</b> , or <b>string</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## string *string*

|          |  |
|----------|--|
| Synopsis | String for interface ID option in DHCPv6 relay packet  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 option interface-id</a> <a href="#">string</a> <i>string</i> |
| Tree     | <a href="#">string</a>   |

---

|               |  |
|---------------|--|
| String Length | 1 to 80  |
| Notes         | The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-index</b> , <b>sap-id</b> , or <b>string</b> . |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **remote-id** *boolean*

|            |  |
|------------|--|
| Synopsis   | Send remote ID option in the DHCPv6 relay packet   |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 option remote-id</b> <i>boolean</i> |
| Tree       | <a href="#">remote-id</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **override-slaac** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow WAN address offered by DHCP to overwrite the WAN address acquired from SLAAC   |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 override-slaac</b> <i>boolean</i> |
| Tree       | <a href="#">override-slaac</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **pd-managed-route**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>pd-managed-route</b> context  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 pd-managed-route</b> |
| Tree       | <a href="#">pd-managed-route</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**next-hop** *keyword*

|            |  |
|------------|--|
| Synopsis   | Next hop type  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 pd-managed-route next-hop</a> <i>keyword</i> |
| Tree       | <a href="#">next-hop</a>   |
| Options    | ipv4, ipv6   |
| Default    | ipv6   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**proxy-server**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>proxy-server</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 proxy-server</a> |
| Tree       | <a href="#">proxy-server</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the DHCPv6 proxy server   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 proxy-server admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**client-applications**

|          |  |
|----------|--|
| Synopsis | Enter the <b>client-applications</b> context   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 proxy-server client-applications</a> |
| Tree     | <a href="#">client-applications</a>  |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **dhcp boolean**

|            |  |
|------------|--|
| Synopsis   | Enable IPoE clients to use the DHCP proxy server   |
| Context    | <b>configure</b> <a href="#">service vprn string subscriber-interface string group-interface string ipv6 dhcp6 proxy-server client-applications dhcp boolean</a> |
| Tree       | <a href="#">dhcp</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **ppp boolean**

|            |   |
|------------|---|
| Synopsis   | Allow PPPoE clients to use DHCP relay functionality   |
| Context    | <b>configure</b> <a href="#">service vprn string subscriber-interface string group-interface string ipv6 dhcp6 proxy-server client-applications ppp boolean</a> |
| Tree       | <a href="#">ppp</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **preferred-lifetime (number | keyword)**

|            |   |
|------------|---|
| Synopsis   | Time for prefix to remain preferred on this interface   |
| Context    | <b>configure</b> <a href="#">service vprn string subscriber-interface string group-interface string ipv6 dhcp6 proxy-server preferred-lifetime (number   keyword)</a> |
| Tree       | <a href="#">preferred-lifetime</a>  |
| Range      | 300 to 4294967294   |
| Units      | seconds   |
| Options    | infinite  |
| Default    | 3600  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**rebind-timer** *number*

|            |  |
|------------|--|
| Synopsis   | Rebind timer (T2) for this interface   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 proxy-server</a> <b>rebind-timer</b> <i>number</i> |
| Tree       | <a href="#">rebind-timer</a>   |
| Range      | 0 to 1209600   |
| Units      | seconds  |
| Default    | 2880   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**renew-timer** *number*

|            |   |
|------------|---|
| Synopsis   | Renew timer (T1)  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 proxy-server</a> <b>renew-timer</b> <i>number</i> |
| Tree       | <a href="#">renew-timer</a>   |
| Range      | 0 to 604800   |
| Units      | seconds   |
| Default    | 1800  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**server-id**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>server-id</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 proxy-server</a> <b>server-id</b> |
| Tree       | <a href="#">server-id</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**duid-en-ascii** *string*

|          |   |
|----------|---|
| Synopsis | Vendor-assigned ID based on Enterprise Number (DUID-EN) |
|----------|---|



|               |   |
|---------------|---|
| Context       | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 proxy-server server-id duid-en-ascii</b> <i>string</i> |
| Tree          | <b>duid-en-ascii</b>  |
| String Length | 1 to 58   |
| Notes         | The following elements are part of a choice: <b>duid-en-ascii</b> , <b>duid-en-hex</b> , or <b>duid-ll</b> .  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **duid-en-hex** *string*

|               |   |
|---------------|---|
| Synopsis      | DUID system ID in hexadecimal format  |
| Context       | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 proxy-server server-id duid-en-hex</b> <i>string</i> |
| Tree          | <b>duid-en-hex</b>  |
| String Length | 1 to 118  |
| Notes         | The following elements are part of a choice: <b>duid-en-ascii</b> , <b>duid-en-hex</b> , or <b>duid-ll</b> .  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **duid-ll**

|            |   |
|------------|---|
| Synopsis   | Use link-layer address (DUID-LL) as DUID  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 proxy-server server-id duid-ll</b> |
| Tree       | <b>duid-ll</b>  |
| Notes      | The following elements are part of a choice: <b>duid-en-ascii</b> , <b>duid-en-hex</b> , or <b>duid-ll</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **valid-lifetime** (*number* | *keyword*)

|          |   |
|----------|---|
| Synopsis | Time for prefix to remain valid on this interface   |
| Context  | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 proxy-server valid-lifetime</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <b>valid-lifetime</b>   |
| Range    | 300 to 4294967294   |

|            |   |
|------------|---|
| Units      | seconds   |
| Options    | infinite  |
| Default    | 86400   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **python-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | Python policy   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 python-policy reference</a> |
| Tree       | <a href="#">python-policy</a>   |
| Reference  | <b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **relay**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>relay</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay</a> |
| Tree       | <a href="#">relay</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of DHCPv6 Relay   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## advertise-selection

|            |  |
|------------|--|
| Synopsis   | Enter the <b>advertise-selection</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn string subscriber-interface string group-interface string ipv6 dhcp6 relay advertise-selection</a> |
| Tree       | <a href="#">advertise-selection</a>  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## client-mac

|            |   |
|------------|---|
| Synopsis   | Enter the <b>client-mac</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn string subscriber-interface string group-interface string ipv6 dhcp6 relay advertise-selection client-mac</a> |
| Tree       | <a href="#">client-mac</a>  |
| Notes      | The following elements are part of a choice: <b>client-mac</b> or <b>server</b> .   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## mac-address *keyword*

|            |   |
|------------|---|
| Synopsis   | Designated client MAC addresses for Advertise selection   |
| Context    | <b>configure</b> <a href="#">service vprn string subscriber-interface string group-interface string ipv6 dhcp6 relay advertise-selection client-mac mac-address keyword</a> |
| Tree       | <a href="#">mac-address</a>   |
| Options    | odd, even   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## preference-option

|          |   |
|----------|---|
| Synopsis | Enter the <b>preference-option</b> context  |
| Context  | <b>configure</b> <a href="#">service vprn string subscriber-interface string group-interface string ipv6 dhcp6 relay advertise-selection client-mac preference-option</a> |
| Tree     | <a href="#">preference-option</a>   |

|             |   |
|-------------|---|
| Description | Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message. |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **value** *number*

|            |   |
|------------|---|
| Synopsis   | Preference option value for DHCPv6 Advertise messages   |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>relay</b> <b>advertise-selection</b> <b>client-mac</b> <b>preference-option</b> <b>value</b> <i>number</i> |
| Tree       | <b>value</b>  |
| Range      | 0 to 255  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **solicit-delay** *number*

|             |  |
|-------------|--|
| Synopsis    | Delay before sending DHCPv6 Solicit messages   |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>relay</b> <b>advertise-selection</b> <b>client-mac</b> <b>solicit-delay</b> <i>number</i> |
| Tree        | <b>solicit-delay</b>   |
| Description | This command configures the time to delay DHCPv6 Solicit messages sent from the designated client MAC addresses.   |
| Range       | 1 to 100   |
| Units       | deciseconds  |
| Introduced  | 20.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **preference-option**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>preference-option</b> context   |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>relay</b> <b>advertise-selection</b> <b>preference-option</b> |
| Tree        | <b>preference-option</b>   |
| Description | Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message.  |
| Introduced  | 20.10.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **value** *number*

Synopsis Preference option value for DHCPv6 Advertise messages

Context **configure** *service vprn string subscriber-interface string group-interface string ipv6 dhcp6 relay advertise-selection preference-option value number*

Tree *value*

Range 0 to 255

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **server** [*ipv6-address*] *string*

Synopsis Enter the **server** list instance

Context **configure** *service vprn string subscriber-interface string group-interface string ipv6 dhcp6 relay advertise-selection server string*

Tree *server*

Max. Instances 8

Notes The following elements are part of a choice: **client-mac** or **server**.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[ipv6-address]** *string*

Synopsis IP address of the DHCPv6 server

Context **configure** *service vprn string subscriber-interface string group-interface string ipv6 dhcp6 relay advertise-selection server string*

Tree *server*

Notes This element is part of a list key.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**preference-option**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>preference-option</b> context   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 relay advertise-selection server</b> <i>string</i> <b>preference-option</b> |
| Tree        | <b>preference-option</b>   |
| Description | Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message.  |
| Introduced  | 20.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**value number**

|            |  |
|------------|--|
| Synopsis   | Preference option value for DHCPv6 Advertise messages  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 relay advertise-selection server</b> <i>string</i> <b>preference-option value</b> <i>number</i> |
| Tree       | <b>value</b>   |
| Range      | 0 to 255   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**solicit-delay number**

|             |  |
|-------------|--|
| Synopsis    | Delay before sending DHCPv6 Solicit messages   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 relay advertise-selection server</b> <i>string</i> <b>solicit-delay</b> <i>number</i> |
| Tree        | <b>solicit-delay</b>   |
| Description | This command configures the time to delay DHCPv6 Solicit messages sent to the server.  |
| Range       | 1 to 100   |
| Units       | deciseconds  |
| Introduced  | 20.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**solicit-delay number**

|          |  |
|----------|--|
| Synopsis | Delay before sending DHCPv6 Solicit messages |
|----------|--|

|             |  |
|-------------|--|
| Context     | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 relay advertise-selection solicit-delay</b> <i>number</i>                             |
| Tree        | <b>solicit-delay</b>   |
| Description | This command configures the time to delay DHCPv6 Solicit messages. The delay is applied to DHCPv6 Solicit messages for which no overriding value is configured in the <b>server</b> instance or the <b>client-mac</b> context. |
| Range       | 1 to 100   |
| Units       | deciseconds  |
| Introduced  | 20.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## client-applications

|            |  |
|------------|--|
| Synopsis   | Enter the <b>client-applications</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 relay client-applications</b> |
| Tree       | <b>client-applications</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## dhcp boolean

|            |  |
|------------|--|
| Synopsis   | Enable IPoE clients to use DHCP relay or proxy server  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 relay client-applications dhcp</b> <i>boolean</i> |
| Tree       | <b>dhcp</b>  |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## ppp boolean

|          |   |
|----------|---|
| Synopsis | Allow the PPP application to use DHCP relay functionality   |
| Context  | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 relay client-applications ppp</b> <i>boolean</i> |
| Tree     | <b>ppp</b>  |
| Default  | false   |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **lease-split**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>lease-split</b> context  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <a href="#">lease-split</a>   |
| Tree        | <a href="#">lease-split</a>   |
| Description | <p>Commands in this context configure DHCPv6 lease split.</p> <p>DHCPv6 lease split is active when administratively enabled and for all IA_NA and IA_PD options in the transaction, the configured lease split valid lifetime (short lease time) is less than or equal to one of the following:</p> <ul style="list-style-type: none"> <li>• the renew time T1 committed by the server (long renew time)</li> <li>• half of the preferred lifetime committed by the server when T1 committed by the server equals zero</li> </ul> |
| Introduced  | 21.2.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **admin-state** *keyword*

|          |  |
|----------|--|
| Synopsis | Administrative state of DHCPv6 lease split   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <a href="#">lease-split</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree     | <a href="#">admin-state</a>  |
| Options  | enable, disable  |
| Default  | disable  |



|            |   |
|------------|---|
| Introduced | 21.2.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

**valid-lifetime** *number*

|            |  |
|------------|--|
| Synopsis   | DHCPv6 lease split valid lifetime (short lease time)   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay lease-split valid-lifetime</a> <i>number</i> |
| Tree       | <a href="#">valid-lifetime</a>   |
| Range      | 300 to 315446399   |
| Units      | seconds  |
| Default    | 3600   |
| Introduced | 21.2.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**link-address** *string*

|            |  |
|------------|--|
| Synopsis   | Link address for the DHCPv6 relay messages   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay link-address</a> <i>string</i> |
| Tree       | <a href="#">link-address</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**server** *string*

|                |  |
|----------------|--|
| Synopsis       | DHCP6 server(s) to which the DHCP6 requests are forwarded  |
| Context        | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay server</a> <i>string</i> |
| Tree           | <a href="#">server</a>   |
| Max. Instances | 8  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**source-address** *string*

|            |  |
|------------|--|
| Synopsis   | Source IPv6 address for the DHCPv6 relay messages  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay source-address</a> <i>string</i> |
| Tree       | <a href="#">source-address</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**snooping**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>snooping</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 snooping</a> |
| Tree       | <a href="#">snooping</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of DHCPv6 snooping   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 snooping admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s  |

**user-db** *reference*

|            |  |
|------------|--|
| Synopsis   | Local user database used for authentication  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 user-db</a> <i>reference</i> |
| Tree       | <a href="#">user-db</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i>   |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **user-ident** *keyword*

Synopsis DHCP6 user identification for this interface

Context **configure service vprn** *string subscriber-interface string group-interface string ipv6 dhcp6 user-ident keyword*

Tree [user-ident](#)

Options mac, mac-interface-id

Default mac

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipoe-bridged-mode** *boolean*

Synopsis Enable IPv6 IPoE bridged mode

Context **configure service vprn** *string subscriber-interface string group-interface string ipv6 ipoe-bridged-mode boolean*

Tree [ipoe-bridged-mode](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **neighbor-discovery**

Synopsis Enter the **neighbor-discovery** context

Context **configure service vprn** *string subscriber-interface string group-interface string ipv6 neighbor-discovery*

Tree [neighbor-discovery](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dad-snooping** *boolean*

Synopsis Populate table via duplicate address detection packets

Context **configure service vprn** *string subscriber-interface string group-interface string ipv6 neighbor-discovery dad-snooping boolean*

|            |   |
|------------|---|
| Tree       | <a href="#">dad-snooping</a>                            |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **neighbor-limit** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum neighbor entries learned per SLAAC host   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 neighbor-discovery neighbor-limit</a> <i>number</i> |
| Tree       | <a href="#">neighbor-limit</a>  |
| Range      | 1 to 8  |
| Default    | 1   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **qos-route-lookup** *keyword*

|            |   |
|------------|---|
| Synopsis   | QoS route lookup  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 qos-route-lookup</a> <i>keyword</i> |
| Tree       | <a href="#">qos-route-lookup</a>  |
| Options    | destination   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s  |

### **router-advertisements**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>router-advertisements</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 router-advertisements</a> |
| Tree       | <a href="#">router-advertisements</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of router advertisements   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 router-advertisements</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**force-mcast** *keyword*

|            |   |
|------------|---|
| Synopsis   | Protocol with forced multicast  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 router-advertisements</a> <b>force-mcast</b> <i>keyword</i> |
| Tree       | <a href="#">force-mcast</a>   |
| Options    | ip, ip-mac  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**max-advertisement-interval** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum advertisement interval  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 router-advertisements</a> <b>max-advertisement-interval</b> <i>number</i> |
| Tree       | <a href="#">max-advertisement-interval</a>  |
| Range      | 900 to 1800   |
| Units      | seconds   |
| Default    | 1800  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**min-advertisement-interval** *number*

|          |                                |
|----------|--------------------------------|
| Synopsis | Minimum advertisement interval |
|----------|--------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 router-advertisements min-advertisement-interval</b> <i>number</i> |
| Tree       | <b>min-advertisement-interval</b>   |
| Range      | 900 to 1350   |
| Units      | seconds   |
| Default    | 900   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## options

|            |  |
|------------|--|
| Synopsis   | Enter the <b>options</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 router-advertisements options</b> |
| Tree       | <b>options</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## current-hop-limit *number*

|            |  |
|------------|--|
| Synopsis   | Hop limit to be advertised   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 router-advertisements options current-hop-limit</b> <i>number</i> |
| Tree       | <b>current-hop-limit</b>   |
| Range      | 0 to 255   |
| Default    | 64   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## dns

|            |  |
|------------|--|
| Synopsis   | Enter the <b>dns</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 router-advertisements options dns</b> |
| Tree       | <b>dns</b>   |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **include-rdnss** *boolean*

Synopsis Include the RDNSS server option 25

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv6 router-advertisements options dns include-rdnss](#) *boolean*

Tree [include-rdnss](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **rdnss-lifetime** (*number* | *keyword*)

Synopsis Maximum time for the RDNSS address to remain valid

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv6 router-advertisements options dns rdnss-lifetime](#) (*number* | *keyword*)

Tree [rdnss-lifetime](#)

Range 900 to 3600

Units seconds

Options infinite

Default 3600

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **managed-configuration** *boolean*

Synopsis Managed address configuration flag

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv6 router-advertisements options managed-configuration](#) *boolean*

Tree [managed-configuration](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mtu** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Advertised MTU value   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 router-advertisements</a> <a href="#">options mtu</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">mtu</a>  |
| Range      | 1280 to 9212   |
| Units      | bytes  |
| Options    | not-included   |
| Default    | not-included   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**other-stateful-configuration** *boolean*

|            |   |
|------------|---|
| Synopsis   | Other stateful configuration flag   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 router-advertisements</a> <a href="#">options other-stateful-configuration</a> <i>boolean</i> |
| Tree       | <a href="#">other-stateful-configuration</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**reachable-time** *number*

|            |  |
|------------|--|
| Synopsis   | Reachable time for advertisements  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 router-advertisements</a> <a href="#">options reachable-time</a> <i>number</i> |
| Tree       | <a href="#">reachable-time</a>   |
| Range      | 0 to 3600000   |
| Units      | milliseconds   |
| Default    | 0  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |



**retransmit-timer** *number*

|            |  |
|------------|--|
| Synopsis   | Retransmit time in router advertisements from interface  |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b><br><b>router-advertisements</b> <b>options</b> <b>retransmit-timer</b> <i>number</i> |
| Tree       | <a href="#">retransmit-timer</a>   |
| Range      | 0 to 1800000   |
| Units      | seconds  |
| Default    | 0  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**router-lifetime** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Router lifetime  |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b><br><b>router-advertisements</b> <b>options</b> <b>router-lifetime</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">router-lifetime</a>  |
| Range      | 2700 to 9000   |
| Units      | seconds  |
| Options    | no-default-router  |
| Default    | 4500   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**prefix-options**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>prefix-options</b> context   |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b><br><b>router-advertisements</b> <b>prefix-options</b> |
| Tree       | <a href="#">prefix-options</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**autonomous** *boolean*

|          |                              |
|----------|------------------------------|
| Synopsis | Value of the autonomous flag |
|----------|------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b><br><b>router-advertisements prefix-options autonomous</b> <i>boolean</i> |
| Tree       | <b>autonomous</b>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**on-link** *boolean*

|            |  |
|------------|--|
| Synopsis   | Assign the prefix to an interface on the specified link  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b><br><b>router-advertisements prefix-options on-link</b> <i>boolean</i> |
| Tree       | <b>on-link</b>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**preferred-lifetime** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Time for a prefix to remain preferred   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b><br><b>router-advertisements prefix-options preferred-lifetime</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <b>preferred-lifetime</b>   |
| Range      | 0 to 4294967294   |
| Units      | seconds   |
| Options    | infinite  |
| Default    | 3600  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**valid-lifetime** (*number* | *keyword*)

|          |   |
|----------|---|
| Synopsis | Time for a prefix to remain valid   |
| Context  | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b><br><b>router-advertisements prefix-options valid-lifetime</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <b>valid-lifetime</b>   |

|            |   |
|------------|---|
| Range      | 0 to 4294967294   |
| Units      | seconds   |
| Options    | infinite  |
| Default    | 86400   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## router-solicit

|            |  |
|------------|--|
| Synopsis   | Enter the <b>router-solicit</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a><br><a href="#">router-solicit</a> |
| Tree       | <a href="#">router-solicit</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## admin-state *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of router-solicit authentication   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a><br><a href="#">router-solicit</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## inactivity-timer (*number* | *keyword*)

|          |  |
|----------|--|
| Synopsis | Time before an inactive host is removed  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a><br><a href="#">router-solicit</a> <a href="#">inactivity-timer</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <a href="#">inactivity-timer</a>   |
| Range    | 1 to 31536000  |
| Units    | seconds  |
| Options  | infinite   |

|            |   |
|------------|---|
| Default    | 300   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **min-auth-interval** *number*

|            |   |
|------------|---|
| Synopsis   | Minimum time between successive authentication attempts   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-solicit</a> <b>min-auth-interval</b> <i>number</i> |
| Tree       | <a href="#">min-auth-interval</a>   |
| Range      | 1 to 360000   |
| Units      | seconds   |
| Default    | 300   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **user-db** *reference*

|            |  |
|------------|--|
| Synopsis   | Local user database used for authentication  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-solicit</a> <b>user-db</b> <i>reference</i> |
| Tree       | <a href="#">user-db</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **urpf-check**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>urpf-check</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <b>urpf-check</b> |
| Tree       | <a href="#">urpf-check</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**mode keyword**

|            |   |
|------------|---|
| Synopsis   | Unicast RPF check mode  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 urpf-check mode</b> <i>keyword</i> |
| Tree       | <b>mode</b>   |
| Options    | strict, loose, strict-no-ecmp   |
| Default    | strict  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**local-address-assignment**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>local-address-assignment</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>local-address-assignment</b> |
| Tree       | <b>local-address-assignment</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state keyword**

|            |   |
|------------|---|
| Synopsis   | Administrative state of Local Address Assignment  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>local-address-assignment admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**ipv4**

|          |   |
|----------|---|
| Synopsis | Enter the <b>ipv4</b> context   |
| Context  | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>local-address-assignment ipv4</b> |
| Tree     | <b>ipv4</b>   |

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## client-applications

Synopsis Enter the **client-applications** context  
 Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [local-address-assignment](#) [ipv4](#) [client-applications](#)  
 Tree [client-applications](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipoe *boolean*

Synopsis Request local addresses for non-DHCP/managed IPoE hosts  
 Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [local-address-assignment](#) [ipv4](#) [client-applications](#) [ipoe](#) *boolean*  
 Tree [ipoe](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ppp *boolean*

Synopsis Request local addresses for PPP IPCP hosts  
 Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [local-address-assignment](#) [ipv4](#) [client-applications](#) [ppp](#) *boolean*  
 Tree [ppp](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## default-pool *string*

Synopsis Default pools  
 Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [local-address-assignment](#) [ipv4](#) [default-pool](#) *string*

---

|                |   |
|----------------|---|
| Tree           | <a href="#">default-pool</a>                            |
| String Length  | 1 to 32   |
| Max. Instances | 2   |
| Notes          | This element is ordered by the user.                    |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **server reference**

|            |   |
|------------|---|
| Synopsis   | Local DHCPv4 server for local pools management  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">local-address-assignment</a> <a href="#">ipv4</a> <a href="#">server</a> <a href="#">reference</a> |
| Tree       | <a href="#">server</a>  |
| Reference  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ipv6**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv6</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">local-address-assignment</a> <a href="#">ipv6</a> |
| Tree       | <a href="#">ipv6</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **client-applications**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>client-applications</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">local-address-assignment</a> <a href="#">ipv6</a> <a href="#">client-applications</a> |
| Tree       | <a href="#">client-applications</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **ipoe-slaac** *boolean*

|            |  |
|------------|--|
| Synopsis   | Request local addresses for IPoE SLAAC hosts   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">local-address-assignment</a> <a href="#">ipv6</a> <a href="#">client-applications</a> <a href="#">ipoe-slaac</a> <i>boolean</i> |
| Tree       | <a href="#">ipoe-slaac</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **ipoe-wan** *boolean*

|            |  |
|------------|--|
| Synopsis   | Request local addresses for IPoE IA NA hosts   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">local-address-assignment</a> <a href="#">ipv6</a> <a href="#">client-applications</a> <a href="#">ipoe-wan</a> <i>boolean</i> |
| Tree       | <a href="#">ipoe-wan</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **ppp-slaac** *boolean*

|            |   |
|------------|---|
| Synopsis   | Request local addresses for PPP SLAAC hosts   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">local-address-assignment</a> <a href="#">ipv6</a> <a href="#">client-applications</a> <a href="#">ppp-slaac</a> <i>boolean</i> |
| Tree       | <a href="#">ppp-slaac</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **server** *reference*

|          |  |
|----------|--|
| Synopsis | Local DHCPv6 server for local pools management   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">local-address-assignment</a> <a href="#">ipv6</a> <a href="#">server</a> <i>reference</i> |
| Tree     | <a href="#">server</a>   |



|            |  |
|------------|--|
| Reference  | <b>configure service vpn</b> <i>string dhcp-server dhcpv6 string</i> |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR              |

### **mac** *string*

|            |  |
|------------|--|
| Synopsis   | MAC address for the interface  |
| Context    | <b>configure service vpn</b> <i>string subscriber-interface string group-interface string mac string</i> |
| Tree       | <a href="#">mac</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **nasreq-auth-policy** *reference*

|            |  |
|------------|--|
| Synopsis   | Diameter NASREQ application policy to use for authentication   |
| Context    | <b>configure service vpn</b> <i>string subscriber-interface string group-interface string nasreq-auth-policy reference</i> |
| Tree       | <a href="#">nasreq-auth-policy</a>   |
| Reference  | <b>configure subscriber-mgmt diameter-nasreq-policy</b> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **oper-up-while-empty** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable this group interface without any active SAPs   |
| Context    | <b>configure service vpn</b> <i>string subscriber-interface string group-interface string oper-up-while-empty boolean</i> |
| Tree       | <a href="#">oper-up-while-empty</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **pppoe**

|          |                                |
|----------|--------------------------------|
| Synopsis | Enter the <b>pppoe</b> context |
|----------|--------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>pppoe</b> |
| Tree       | <b>pppoe</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of PPPoE  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>pppoe</b><br><b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>   |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**anti-spoof** *keyword*

|            |   |
|------------|---|
| Synopsis   | PPPoE anti-spoof filtering  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>pppoe</b><br><b>anti-spoof</b> <i>keyword</i> |
| Tree       | <b>anti-spoof</b>   |
| Options    | mac-sid, mac-sid-ip   |
| Default    | mac-sid   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>pppoe</b><br><b>description</b> <i>string</i> |
| Tree          | <b>description</b>  |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## dhcp-client

|            |  |
|------------|--|
| Synopsis   | Enter the <b>dhcp-client</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">pppoe</a> <a href="#">dhcp-client</a> |
| Tree       | <a href="#">dhcp-client</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## client-id *keyword*

|            |   |
|------------|---|
| Synopsis   | Type of information that DHCP option 61 contains  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">pppoe</a> <a href="#">dhcp-client</a> <a href="#">client-id</a> <i>keyword</i> |
| Tree       | <a href="#">client-id</a>   |
| Options    | mac-pppoe-session-id  |
| Introduced | 16.0.R7   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## policy *reference*

|            |  |
|------------|--|
| Synopsis   | PPPoE policy   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">pppoe</a> <a href="#">policy</a> <i>reference</i> |
| Tree       | <a href="#">policy</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## python-policy *reference*

|           |   |
|-----------|---|
| Synopsis  | Python policy used to modify PPPoE packets  |
| Context   | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">pppoe</a> <a href="#">python-policy</a> <i>reference</i> |
| Tree      | <a href="#">python-policy</a>   |
| Reference | <b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i>   |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **sap-session-limit** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum PPPoE sessions per SAP   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">pppoe</a> <a href="#">sap-session-limit</a> <i>number</i> |
| Tree       | <a href="#">sap-session-limit</a>  |
| Range      | 1 to 131071  |
| Default    | 1  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **session-limit** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum PPPoE sessions   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">pppoe</a> <a href="#">session-limit</a> <i>number</i> |
| Tree       | <a href="#">session-limit</a>  |
| Range      | 1 to 333823  |
| Default    | 1  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **user-db** *reference*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Local user database for authentication  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">pppoe</a> <a href="#">user-db</a> <i>reference</i> |
| Tree       | <a href="#">user-db</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i>  |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-auth-policy** *reference*

Synopsis RADIUS authentication policy

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [radius-auth-policy](#) *reference*

Tree [radius-auth-policy](#)

Reference **configure** [subscriber-mgmt radius-authentication-policy](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **redundant-interface** *reference*

Synopsis Redundant interface

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [redundant-interface](#) *reference*

Tree [redundant-interface](#)

Reference **configure** [service vprn](#) *string* [redundant-interface](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sap** [[sap-id](#)] *string*

Synopsis Enter the **sap** list instance

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string*

Tree [sap](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[sap-id]** *string*

Synopsis SAP ID

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string*

Tree [sap](#)

String Length 1 to 45

|            |   |
|------------|---|
| Notes      | This element is part of a list key.                     |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **accounting-policy** *reference*

|            |  |
|------------|--|
| Synopsis   | Accounting policy  |
| Context    | <b>configure</b> <a href="#">service vprn string subscriber-interface string group-interface string sap string accounting-policy reference</a> |
| Tree       | <a href="#">accounting-policy</a>  |
| Reference  | <b>configure</b> <a href="#">log accounting-policy number</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the SAP  |
| Context    | <b>configure</b> <a href="#">service vprn string subscriber-interface string group-interface string sap string admin-state keyword</a> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **anti-spoof** *keyword*

|            |   |
|------------|---|
| Synopsis   | Type of anti-spoof filtering  |
| Context    | <b>configure</b> <a href="#">service vprn string subscriber-interface string group-interface string sap string anti-spoof keyword</a> |
| Tree       | <a href="#">anti-spoof</a>  |
| Options    | source-ip-addr, source-ip-and-mac-addr, next-hop-ip-and-mac-addr  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**app-profile** *reference*

|            |   |
|------------|---|
| Synopsis   | Application profile name  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">app-profile</a> <i>reference</i> |
| Tree       | <a href="#">app-profile</a>   |
| Reference  | <b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy app-profile</a> <i>string</i>   |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**calling-station-id** *string*

|               |   |
|---------------|---|
| Synopsis      | Calling station ID  |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">calling-station-id</a> <i>string</i> |
| Tree          | <a href="#">calling-station-id</a>  |
| String Length | 1 to 64   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**collect-stats** *boolean*

|            |   |
|------------|---|
| Synopsis   | Collect accounting statistics   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">collect-stats</a> <i>boolean</i> |
| Tree       | <a href="#">collect-stats</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**cpu-protection**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>cpu-protection</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cpu-protection</a> |
| Tree       | <a href="#">cpu-protection</a>  |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

## eth-cfm-monitoring

Synopsis Enable the **eth-cfm-monitoring** context

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **cpu-protection eth-cfm-monitoring**

Tree [eth-cfm-monitoring](#)

Notes The following elements are part of a choice: **eth-cfm-monitoring**, **ip-src-monitoring**, or **mac-monitoring**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

## aggregate

Synopsis Apply rate limit to the sum of the per peer packet rates

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **cpu-protection eth-cfm-monitoring aggregate**

Tree [aggregate](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

## car

Synopsis Ignore Ethernet CFM packets when enforcing overall rate

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **cpu-protection eth-cfm-monitoring car**

Tree [car](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

## ip-src-monitoring

Synopsis Enable IP source monitoring for CPU protection

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **cpu-protection ip-src-monitoring**

Tree [ip-src-monitoring](#)



|            |  |
|------------|--|
| Notes      | The following elements are part of a choice: <b>eth-cfm-monitoring</b> , <b>ip-src-monitoring</b> , or <b>mac-monitoring</b> . |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s  |

## mac-monitoring

|            |  |
|------------|--|
| Synopsis   | Monitor MAC for CPU protection   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cpu-protection mac-monitoring</a> |
| Tree       | <a href="#">mac-monitoring</a>   |
| Notes      | The following elements are part of a choice: <b>eth-cfm-monitoring</b> , <b>ip-src-monitoring</b> , or <b>mac-monitoring</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s  |

## policy-id *reference*

|            |   |
|------------|---|
| Synopsis   | CPM protection policy   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cpu-protection policy-id reference</a> |
| Tree       | <a href="#">policy-id</a>   |
| Reference  | <b>configure</b> <a href="#">system security cpu-protection policy</a> <i>number</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s   |

## default-host

|            |   |
|------------|---|
| Synopsis   | Enter the <b>default-host</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">default-host</a> |
| Tree       | <a href="#">default-host</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s  |

**ipv4** [address] *reference* **prefix-length** *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ipv4</b> list instance   |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>default-host</b> <b>ipv4</b> <i>reference</i> <b>prefix-length</b> <i>number</i> |
| Tree       | <b>ipv4</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s  |

**[address]** *reference*

|            |   |
|------------|---|
| Synopsis   | IPv4 default host address   |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>default-host</b> <b>ipv4</b> <i>reference</i> <b>prefix-length</b> <i>number</i> |
| Tree       | <b>ipv4</b>   |
| Reference  | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4</b> <b>address</b> <i>string</i>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s  |

**prefix-length** *number*

|            |   |
|------------|---|
| Synopsis   | IPv4 address prefix length  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>default-host</b> <b>ipv4</b> <i>reference</i> <b>prefix-length</b> <i>number</i> |
| Tree       | <b>ipv4</b>   |
| Range      | 0 to 32   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s  |

**next-hop** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Next-hop IP address used to forward traffic on the SAP   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">default-host</a> <a href="#">ipv4</a> <i>reference</i> <a href="#">prefix-length</a> <i>number</i> <a href="#">next-hop</a> <i>string</i> |
| Tree       | <a href="#">next-hop</a>   |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

### **ipv6** [[address](#)] *string* [prefix-length](#) *number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv6</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">default-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">prefix-length</a> <i>number</i> |
| Tree       | <a href="#">ipv6</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

### **[address]** *string*

|            |  |
|------------|--|
| Synopsis   | IPv6 default host address  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">default-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">prefix-length</a> <i>number</i> |
| Tree       | <a href="#">ipv6</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

### **prefix-length** *number*

|            |  |
|------------|--|
| Synopsis   | IPv6 prefix length   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">default-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">prefix-length</a> <i>number</i> |
| Tree       | <a href="#">ipv6</a>   |
| Range      | 0 to 128   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### next-hop *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Next-hop IP address used to forward traffic on the SAP

Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [default-host](#) [ipv6](#) *string* [prefix-length](#) *number* **next-hop** *string*

Tree [next-hop](#)

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### description *string*

Synopsis Text description

Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* **description** *string*

Tree [description](#)

String Length 1 to 160

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### dist-cpu-protection *reference*

Synopsis Distributed CPU protection policy for SAP

Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* **dist-cpu-protection** *reference*

Tree [dist-cpu-protection](#)

Reference **configure** [system](#) [security](#) [dist-cpu-protection](#) [policy](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**egress**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>egress</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress</b> |
| Tree       | <b>egress</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**agg-rate**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>agg-rate</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress agg-rate</b> |
| Tree       | <b>agg-rate</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**adaptation-rule** *keyword*

|            |   |
|------------|---|
| Synopsis   | Adaptation rule to compute the operational PIR value when an aggregate shaper is used   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress agg-rate adaptation-rule</b> <i>keyword</i> |
| Tree       | <b>adaptation-rule</b>  |
| Options    | max, min, closest   |
| Default    | closest   |
| Introduced | 22.10.R1  |
| Platforms  | 7750 SR-1, 7750 SR-s  |

**burst-limit** (*number* | *keyword*)

|          |   |
|----------|---|
| Synopsis | Shaping burst size when an aggregate shaper is used   |
| Context  | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress agg-rate burst-limit</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <b>burst-limit</b>  |
| Range    | 1 to 14000000   |
| Units    | bytes   |

|            |                      |
|------------|----------------------|
| Options    | auto                 |
| Default    | auto                 |
| Introduced | 22.10.R1             |
| Platforms  | 7750 SR-1, 7750 SR-s |

### **limit-unused-bandwidth** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable aggregate rate overrun protection   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a> <a href="#">limit-unused-bandwidth</a> <i>boolean</i> |
| Tree       | <a href="#">limit-unused-bandwidth</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **queue-frame-based-accounting** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable frame based accounting on policers and queues   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a> <a href="#">queue-frame-based-accounting</a> <i>boolean</i> |
| Tree       | <a href="#">queue-frame-based-accounting</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **rate** *number*

|            |   |
|------------|---|
| Synopsis   | Enforced aggregate rate for all queues  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a> <a href="#">rate</a> <i>number</i> |
| Tree       | <a href="#">rate</a>  |
| Range      | 1 to 6400000000   |
| Units      | kilobps   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## filter

|            |  |
|------------|--|
| Synopsis   | Enter the <b>filter</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress filter</b> |
| Tree       | <b>filter</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## ip reference

|            |   |
|------------|---|
| Synopsis   | IPv4 filter policy name   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress filter ip reference</b> |
| Tree       | <b>ip</b>   |
| Reference  | <b>configure filter ip-filter</b> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## ipv6 reference

|            |   |
|------------|---|
| Synopsis   | IPv6 filter policy name   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress filter ipv6 reference</b> |
| Tree       | <b>ipv6</b>   |
| Reference  | <b>configure filter ipv6-filter</b> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## qos

|            |   |
|------------|---|
| Synopsis   | Enter the <b>qos</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos</b> |
| Tree       | <b>qos</b>  |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **policer-control-policy**

Synopsis Enter the **policer-control-policy** context

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **egress qos policer-control-policy**

Tree [policer-control-policy](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **policy-name** *reference*

Synopsis Policer control policy name

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **egress qos policer-control-policy policy-name** *reference*

Tree [policy-name](#)

Reference **configure qos policer-control-policy** *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **qinq-mark-top-only** *boolean*

Synopsis Mark top Q-tags

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **egress qos qinq-mark-top-only** *boolean*

Tree [qinq-mark-top-only](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sap-egress**

Synopsis Enter the **sap-egress** context

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **egress qos sap-egress**



|            |   |
|------------|---|
| Tree       | <a href="#">sap-egress</a>                              |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **policy-name** *reference*

|            |  |
|------------|--|
| Synopsis   | Policy ID to associate with SAP for mirrored service   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">sap-egress</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **scheduler-policy**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>scheduler-policy</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> |
| Tree       | <a href="#">scheduler-policy</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **policy-name** *reference*

|            |  |
|------------|--|
| Synopsis   | Scheduler policy name  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">scheduler-policy</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **eth-cfm**

|          |                                  |
|----------|----------------------------------|
| Synopsis | Enter the <b>eth-cfm</b> context |
|----------|----------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string subscriber-interface string group-interface string sap string eth-cfm</i> |
| Tree       | <b>eth-cfm</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s  |

### collect-lmm-fc-stats

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>collect-lmm-fc-stats</b> context  |
| Context     | <b>configure service vprn</b> <i>string subscriber-interface string group-interface string sap string eth-cfm collect-lmm-fc-stats</i>   |
| Tree        | <b>collect-lmm-fc-stats</b>  |
| Description | <p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands <b>fc-in-profile</b> and <b>fc</b> in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the <b>collect-lmm-stats</b> command are mutually exclusive when there is entity resource contention.</p> |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

### fc keyword

|                |   |
|----------------|---|
| Synopsis       | Forwarding class name for profile-unaware counter   |
| Context        | <b>configure service vprn</b> <i>string subscriber-interface string group-interface string sap string eth-cfm collect-lmm-fc-stats fc keyword</i>   |
| Tree           | <b>fc</b>   |
| Description    | <p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the <b>fc-in-profile</b> command under the <b>collect-lmm-fc-stats</b> context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p> |
| Options        | be, l2, af, l1, h2, ef, h1, nc  |
| Max. Instances | 8   |
| Introduced     | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **fc-in-profile** *keyword*

Synopsis Forwarding class name for profile-aware counter

Context **configure** **service** **vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **eth-cfm** **collect-lmm-fc-stats** **fc-in-profile** *keyword*

Tree **fc-in-profile**

Description This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.

An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the **fc** command under the **collect-lmm-fc-stats** context.

When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.

Options be, l2, af, l1, h2, ef, h1, nc

Max. Instances 8

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **collect-lmm-stats** *boolean*

Synopsis Collect statistics for loss measurement message tests

Context **configure** **service** **vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **eth-cfm** **collect-lmm-stats** *boolean*

Tree **collect-lmm-stats**

Description When configured to **true**, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.

The **show eth-cfm collect-lmm-stats** command displays entities that have been enabled to collect transit and receive counters.

When configured to **false**, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**mep** *md-admin-name reference ma-admin-name reference mep-id number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mep</b> list instance   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">group-interface string</a> <a href="#">sap string</a> <a href="#">eth-cfm mep md-admin-name reference</a> <a href="#">ma-admin-name reference</a> <a href="#">mep-id number</a> |
| Tree       | <a href="#">mep</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

**md-admin-name** *reference*

|            |  |
|------------|--|
| Synopsis   | Maintenance Domain (MD) name   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">group-interface string</a> <a href="#">sap string</a> <a href="#">eth-cfm mep md-admin-name reference</a> <a href="#">ma-admin-name reference</a> <a href="#">mep-id number</a> |
| Tree       | <a href="#">mep</a>  |
| Reference  | <b>configure</b> <a href="#">eth-cfm domain string</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

**ma-admin-name** *reference*

|            |  |
|------------|--|
| Synopsis   | Maintenance Association (MA) name  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">group-interface string</a> <a href="#">sap string</a> <a href="#">eth-cfm mep md-admin-name reference</a> <a href="#">ma-admin-name reference</a> <a href="#">mep-id number</a> |
| Tree       | <a href="#">mep</a>  |
| Reference  | <b>configure</b> <a href="#">eth-cfm domain string</a> <a href="#">association string</a>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

**mep-id** *number*

|          |  |
|----------|--|
| Synopsis | Maintenance Endpoint (MEP) ID  |
| Context  | <b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">group-interface string</a> <a href="#">sap string</a> <a href="#">eth-cfm mep md-admin-name reference</a> <a href="#">ma-admin-name reference</a> <a href="#">mep-id number</a> |
| Tree     | <a href="#">mep</a>  |

|            |  |
|------------|--|
| Range      | 1 to 8191  |
| Notes      | This element is part of a list key.                |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the MEP   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s  |

### **ais** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable the generation and the reception of AIS messages   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>ais</b> <i>boolean</i> |
| Tree       | <a href="#">ais</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s  |

### **alarm-notification**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>alarm-notification</b> context   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>alarm-notification</b> |
| Tree        | <a href="#">alarm-notification</a>  |
| Description | Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.  |

Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.

|            |  |
|------------|--|
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

### **fng-alarm-time** *number*

|            |   |
|------------|---|
| Synopsis   | Time that must expire before an FNG alarm is raised   |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm</b> <b>mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>alarm-notification</b> <b>fng-alarm-time</b> <i>number</i> |
| Tree       | <b>fng-alarm-time</b>   |
| Range      | 250   500   1000  |
| Units      | centiseconds  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s  |

### **fng-reset-time** *number*

|            |   |
|------------|---|
| Synopsis   | Time that must expire before an FNG alarm is reset  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm</b> <b>mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>alarm-notification</b> <b>fng-reset-time</b> <i>number</i> |
| Tree       | <b>fng-reset-time</b>   |
| Range      | 250   500   1000  |
| Units      | centiseconds  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s  |

### **ccm** *boolean*

|          |   |
|----------|---|
| Synopsis | Generate CCM messages   |
| Context  | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm</b> <b>mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>ccm</b> <i>boolean</i> |
| Tree     | <b>ccm</b>  |
| Default  | false   |

|            |  |
|------------|--|
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

### **ccm-ltm-priority** *number*

|            |   |
|------------|---|
| Synopsis   | Priority of CCM and LTM messages transmitted by the MEP   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>ccm-ltm-priority</b> <i>number</i> |
| Tree       | <a href="#">ccm-ltm-priority</a>  |
| Range      | 0 to 7  |
| Default    | 7   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s  |

### **ccm-padding-size** *number*

|             |   |
|-------------|---|
| Synopsis    | Number of octets of padding to insert in CCM packets  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>ccm-padding-size</b> <i>number</i>   |
| Tree        | <a href="#">ccm-padding-size</a>  |
| Description | This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.<br><br>This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through <b>configure eth-cfm domain association ccm-interval</b> ) is less than 1 second. |
| Range       | 3 to 1500   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s  |

### **csf**

|          |  |
|----------|--|
| Synopsis | Enable the <b>csf</b> context  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>csf</b> |

|            |  |
|------------|--|
| Tree       | <a href="#">csf</a>                                |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

### **multiplier** *decimal-number*

|            |  |
|------------|--|
| Synopsis   | Multiplication factor used to clear the CSF condition  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">csf</a> <a href="#">multiplier</a> <i>decimal-number</i> |
| Tree       | <a href="#">multiplier</a>   |
| Range      | 0.0   2.0 to 30.0  |
| Default    | 3.5  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

### **description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s  |

### **eth-test**

|             |  |
|-------------|--|
| Synopsis    | Enable the <b>eth-test</b> context   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test</a> |
| Tree        | <a href="#">eth-test</a>   |
| Description | Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the <b>oam eth-cfm eth-test</b> command.  |



|            |  |
|------------|--|
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

### **bit-error-threshold** *number*

|            |  |
|------------|--|
| Synopsis   | Lowest priority defect allowed to generate fault alarm   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test bit-error-threshold</a> <i>number</i> |
| Tree       | <a href="#">bit-error-threshold</a>  |
| Range      | 0 to 11840   |
| Units      | bit errors   |
| Default    | 1  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

### **test-pattern**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>test-pattern</b> context   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test test-pattern</a> |
| Tree        | <a href="#">test-pattern</a>  |
| Description | Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s  |

### **crc-tlv** *boolean*

|            |  |
|------------|--|
| Synopsis   | Generate a CRC checksum  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test test-pattern</a> <a href="#">crc-tlv</a> <i>boolean</i> |
| Tree       | <a href="#">crc-tlv</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **pattern** *keyword*

Synopsis Test pattern for Ethernet Test frames

Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [eth-test](#) [test-pattern](#) [pattern](#) *keyword*

Tree [pattern](#)

Description This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.

Options all-zeros, all-ones

Default all-zeros

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **fault-propagation** *keyword*

Synopsis Fault propagation for the MEP

Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [fault-propagation](#) *keyword*

Tree [fault-propagation](#)

Options use-if-status-tlv, suspend-ccm

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **grace**

Synopsis Enter the **grace** context

Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [grace](#)

Tree [grace](#)

Description Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

## eth-ed

Synopsis Enter the **eth-ed** context

Context **configure** *service* *vprn string* *subscriber-interface string* *group-interface string* *sap string* *eth-cfm mep md-admin-name reference* *ma-admin-name reference* *mep-id number* *grace eth-ed*

Tree [eth-ed](#)

Description Commands in this context configure the ITU-T Y.1731 ETH-ED function.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

## max-rx-defect-window *number*

Synopsis Maximum received ETH-ED expected defect window duration

Context **configure** *service* *vprn string* *subscriber-interface string* *group-interface string* *sap string* *eth-cfm mep md-admin-name reference* *ma-admin-name reference* *mep-id number* *grace eth-ed max-rx-defect-window number*

Tree [max-rx-defect-window](#)

Range 1 to 86400

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

## priority *number*

Synopsis Transmission priority for ETH-ED PDUs

Context **configure** *service* *vprn string* *subscriber-interface string* *group-interface string* *sap string* *eth-cfm mep md-admin-name reference* *ma-admin-name reference* *mep-id number* *grace eth-ed priority number*

Tree [priority](#)

Range 0 to 7

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**rx-eth-ed** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-ed</a> <a href="#">rx-eth-ed</a> <i>boolean</i> |
| Tree        | <a href="#">rx-eth-ed</a>   |
| Description | This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.  |
| Default     | true  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s  |

**tx-eth-ed** *boolean*

|            |   |
|------------|---|
| Synopsis   | Transmit ETH-ED PDUs from the MEP   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-ed</a> <a href="#">tx-eth-ed</a> <i>boolean</i> |
| Tree       | <a href="#">tx-eth-ed</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s  |

**eth-vsm-grace**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>eth-vsm-grace</b> context  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-vsm-grace</a> |
| Tree        | <a href="#">eth-vsm-grace</a>   |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function.  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s  |

**rx-eth-vsm-grace** *boolean*

|          |  |
|----------|--|
| Synopsis | Receive and process Nokia ETH-CFM Grace PDU on the MEP |
|----------|--|

|             |  |
|-------------|--|
| Context     | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>grace eth-vsm-grace rx-eth-vsm-grace</b> <i>boolean</i> |
| Tree        | <b>rx-eth-vsm-grace</b>  |
| Description | When configured to <b>true</b> , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.<br><br>When configured to <b>false</b> , the router disables the Nokia Grace function.  |
| Default     | true   |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

### **tx-eth-vsm-grace** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Transmit ETH-ED PDUs from the MEP  |
| Context     | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>grace eth-vsm-grace tx-eth-vsm-grace</b> <i>boolean</i>   |
| Tree        | <b>tx-eth-vsm-grace</b>  |
| Description | When configured to <b>true</b> , the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.<br><br>The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.<br><br>The operator must configure the <b>configure system eth-cfm grace</b> command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).<br><br>When configured to <b>false</b> , the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP. |
| Default     | true   |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

### **low-priority-defect** *keyword*

|          |   |
|----------|---|
| Synopsis | Lowest priority defect allowed to generate fault alarm  |
| Context  | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>low-priority-defect</b> <i>keyword</i> |

|            |  |
|------------|--|
| Tree       | <a href="#">low-priority-defect</a>                              |
| Options    | all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon |
| Default    | mac-rem-err-xcon   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s               |

### **one-way-delay-threshold** *number*

|            |  |
|------------|--|
| Synopsis   | Threshold time limit for the one-way delay test  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>one-way-delay-threshold</b> <i>number</i> |
| Tree       | <a href="#">one-way-delay-threshold</a>  |
| Range      | 0 to 600   |
| Units      | seconds  |
| Default    | 3  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

### **squelch-ingress-levels** *number*

|                |  |
|----------------|--|
| Synopsis       | Levels for which ETH-CFM packets are silently discarded  |
| Context        | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <b>squelch-ingress-levels</b> <i>number</i>   |
| Tree           | <a href="#">squelch-ingress-levels</a>   |
| Description    | <p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.</p> |
| Range          | 0 to 7   |
| Max. Instances | 8  |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

**fwd-wholesale**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>fwd-wholesale</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i><br><b>fwd-wholesale</b> |
| Tree       | <b>fwd-wholesale</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**pppoe-service** *reference*

|            |  |
|------------|--|
| Synopsis   | PPPoE service name   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i><br><b>fwd-wholesale pppoe-service</b> <i>reference</i> |
| Tree       | <b>pppoe-service</b>   |
| Reference  | <b>configure service epipe</b> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**host-admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the hosts   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i><br><b>host-admin-state</b> <i>keyword</i> |
| Tree       | <b>host-admin-state</b>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**host-lockout-policy** *reference*

|          |  |
|----------|--|
| Synopsis | Host lockout policy  |
| Context  | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i><br><b>host-lockout-policy</b> <i>reference</i> |
| Tree     | <b>host-lockout-policy</b>   |

|            |  |
|------------|--|
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">host-lockout-policy</a> <i>string</i> |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## igmp-host-tracking

|            |   |
|------------|---|
| Synopsis   | Enter the <b>igmp-host-tracking</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-host-tracking</a> |
| Tree       | <a href="#">igmp-host-tracking</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## expiry-time *number*

|            |   |
|------------|---|
| Synopsis   | Time that the system continues to track inactive hosts  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-host-tracking</a> <a href="#">expiry-time</a> <i>number</i> |
| Tree       | <a href="#">expiry-time</a>   |
| Range      | 1 to 65535  |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## import-policy *reference*

|            |  |
|------------|--|
| Synopsis   | Import policy that filters IGMP packets  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-host-tracking</a> <a href="#">import-policy</a> <i>reference</i> |
| Tree       | <a href="#">import-policy</a>  |
| Reference  | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |



**maximum-number-group-sources** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of multicast groups to track per group  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-host-tracking</a> <a href="#">maximum-number-group-sources</a> <i>number</i> |
| Tree       | <a href="#">maximum-number-group-sources</a>   |
| Range      | 1 to 32000   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**maximum-number-groups** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum number of multicast groups to be tracked  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-host-tracking</a> <a href="#">maximum-number-groups</a> <i>number</i> |
| Tree       | <a href="#">maximum-number-groups</a>   |
| Range      | 1 to 16000  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**maximum-number-sources** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of multicast sources to be tracked  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-host-tracking</a> <a href="#">maximum-number-sources</a> <i>number</i> |
| Tree       | <a href="#">maximum-number-sources</a>   |
| Range      | 1 to 1000  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**router-alert-check** *boolean*

|          |   |
|----------|---|
| Synopsis | Enable IGMP router alert check option   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-host-tracking</a> <a href="#">router-alert-check</a> <i>boolean</i> |
| Tree     | <a href="#">router-alert-check</a>  |
| Default  | true  |

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ingress

Synopsis Enter the **ingress** context  
 Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [ingress](#)  
 Tree [ingress](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## filter

Synopsis Enter the **filter** context  
 Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [ingress](#) [filter](#)  
 Tree [filter](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ip reference

Synopsis IPv4 filter policy name  
 Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [ingress](#) [filter](#) [ip](#) *reference*  
 Tree [ip](#)  
 Reference **configure** [filter](#) [ip-filter](#) *string*  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv6 reference

Synopsis IPv6 filter policy name  
 Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [ingress](#) [filter](#) [ipv6](#) *reference*

|            |   |
|------------|---|
| Tree       | <a href="#">ipv6</a>  |
| Reference  | <b>configure filter</b> <a href="#">ipv6-filter</a> <i>string</i> |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR           |

## qos

|            |   |
|------------|---|
| Synopsis   | Enter the <b>qos</b> context  |
| Context    | <b>configure service vpn</b> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos</a> |
| Tree       | <a href="#">qos</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## match-qinq-dot1p *keyword*

|            |   |
|------------|---|
| Synopsis   | Ingress match QinQ Dot1p  |
| Context    | <b>configure service vpn</b> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos match-qinq-dot1p</a> <i>keyword</i> |
| Tree       | <a href="#">match-qinq-dot1p</a>  |
| Options    | top, bottom   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## policer-control-policy

|            |  |
|------------|--|
| Synopsis   | Enter the <b>policer-control-policy</b> context  |
| Context    | <b>configure service vpn</b> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos policer-control-policy</a> |
| Tree       | <a href="#">policer-control-policy</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## policy-name *reference*

|          |                             |
|----------|-----------------------------|
| Synopsis | Policer control policy name |
|----------|-----------------------------|

|            |  |
|------------|--|
| Context    | <b>configure service vpn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos policer-control-policy</b> <i>policy-name</i> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>  |
| Reference  | <b>configure qos policer-control-policy</b> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## **sap-ingress**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>sap-ingress</b> context  |
| Context    | <b>configure service vpn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress</b> |
| Tree       | <a href="#">sap-ingress</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## **policy-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Policy ID   |
| Context    | <b>configure service vpn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress</b> <i>policy-name</i> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure qos sap-ingress</b> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## **queuing-type** *keyword*

|            |  |
|------------|--|
| Synopsis   | Queuing type   |
| Context    | <b>configure service vpn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress</b> <i>queuing-type</i> <i>keyword</i> |
| Tree       | <a href="#">queuing-type</a>   |
| Options    | shared, multipoint-shared  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR  |

## **scheduler-policy**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>scheduler-policy</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos scheduler-policy</b> |
| Tree       | <b>scheduler-policy</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## **policy-name** *reference*

|            |  |
|------------|--|
| Synopsis   | Scheduler policy name  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos scheduler-policy policy-name</b> <i>reference</i> |
| Tree       | <b>policy-name</b>   |
| Reference  | <b>configure qos scheduler-policy</b> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## **lag**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>lag</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>lag</b> |
| Tree       | <b>lag</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## **link-map-profile** *number*

|             |   |
|-------------|---|
| Synopsis    | LAG link map profile for a SAP or network interface   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>lag link-map-profile</b> <i>number</i> |
| Tree        | <b>link-map-profile</b>   |
| Description | This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator                              |

assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration.

If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.

|            |   |
|------------|---|
| Range      | 1 to 64   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## per-link-hash

|            |   |
|------------|---|
| Synopsis   | Enter the <b>per-link-hash</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">lag</a> <b>per-link-hash</b> |
| Tree       | <a href="#">per-link-hash</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## class *number*

|            |   |
|------------|---|
| Synopsis   | Class used on LAG egress using weighted per-link-hash   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">lag</a> <a href="#">per-link-hash</a> <b>class</b> <i>number</i> |
| Tree       | <a href="#">class</a>   |
| Range      | 1 to 3  |
| Default    | 1   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## weight *number*

|            |  |
|------------|--|
| Synopsis   | Weight used on LAG egress using weighted per-link-hash   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">lag</a> <a href="#">per-link-hash</a> <b>weight</b> <i>number</i> |
| Tree       | <a href="#">weight</a>   |
| Range      | 1 to 1024  |
| Default    | 1  |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **monitor-oper-group** *reference*

Synopsis Monitor operational group

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [monitor-oper-group](#) *reference*

Tree [monitor-oper-group](#)

Reference **configure** [service oper-group](#) *string*

Notes The following elements are part of a choice: **monitor-oper-group** or **oper-group**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **multi-service-site** *reference*

Synopsis Multi service site name

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [multi-service-site](#) *reference*

Tree [multi-service-site](#)

Reference **configure** [service customer](#) *string* [multi-service-site](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **oper-group** *reference*

Synopsis Operational group

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [oper-group](#) *reference*

Tree [oper-group](#)

Reference **configure** [service oper-group](#) *string*

Notes The following elements are part of a choice: **monitor-oper-group** or **oper-group**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**static-host**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>static-host</b> context  |
| Context    | <b>configure service vprn</b> <i>string subscriber-interface string group-interface string sap string static-host</i> |
| Tree       | <a href="#">static-host</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**ipv4 [ip] string mac string**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv4</b> list instance  |
| Context    | <b>configure service vprn</b> <i>string subscriber-interface string group-interface string sap string static-host ipv4 string mac string</i> |
| Tree       | <a href="#">ipv4</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**[ip] string**

|            |  |
|------------|--|
| Synopsis   | IPv4 address used by the static host   |
| Context    | <b>configure service vprn</b> <i>string subscriber-interface string group-interface string sap string static-host ipv4 string mac string</i> |
| Tree       | <a href="#">ipv4</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**mac string**

|            |  |
|------------|--|
| Synopsis   | MAC address used by the static host  |
| Context    | <b>configure service vprn</b> <i>string subscriber-interface string group-interface string sap string static-host ipv4 string mac string</i> |
| Tree       | <a href="#">ipv4</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |



**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the static host  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**ancp-string** *string*

|               |   |
|---------------|---|
| Synopsis      | ANCP string   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <b>ancp-string</b> <i>string</i> |
| Tree          | <a href="#">ancp-string</a>   |
| String Length | 1 to 63   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**app-profile**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>app-profile</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <b>app-profile</b> |
| Tree       | <a href="#">app-profile</a>   |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**profile** *reference*

|          |   |
|----------|---|
| Synopsis | Application profile used by the static host   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <b>app-profile</b> <b>profile</b> <i>reference</i> |
| Tree     | <a href="#">profile</a>   |

|            |   |
|------------|---|
| Reference  | <b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i> |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**scope** *keyword*

|            |   |
|------------|---|
| Synopsis   | Scope of the static host application profile  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">app-profile</a> <a href="#">scope</a> <i>keyword</i> |
| Tree       | <a href="#">scope</a>   |
| Options    | subscriber, mac   |
| Default    | subscriber  |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**int-dest-id** *string*

|               |  |
|---------------|--|
| Synopsis      | Intermediate destination ID  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">int-dest-id</a> <i>string</i> |
| Tree          | <a href="#">int-dest-id</a>  |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**managed-route** [[prefix](#)] *string*

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>managed-route</b> list instance   |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> |
| Tree        | <a href="#">managed-route</a>  |
| Description | Commands in this context configure managed route parameters.   |
| Introduced  | 16.0.R4  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**[prefix] string**

|             |  |
|-------------|--|
| Synopsis    | Managed route prefix associated with IPv4 static host  |
| Context     | <b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">group-interface string</a> <a href="#">sap string</a> <a href="#">static-host ipv4 string</a> <a href="#">mac string</a> <a href="#">managed-route string</a> |
| Tree        | <a href="#">managed-route</a>  |
| Description | This command configures the managed route prefix. The prefix length must be in the range of 1 to 32.   |
| Notes       | This element is part of a list key.  |
| Introduced  | 16.0.R4  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**cpe-check**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>cpe-check</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">group-interface string</a> <a href="#">sap string</a> <a href="#">static-host ipv4 string</a> <a href="#">mac string</a> <a href="#">managed-route string</a> <a href="#">cpe-check</a> |
| Tree       | <a href="#">cpe-check</a>  |
| Introduced | 22.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**destination-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | IP address of the target CPE device   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">group-interface string</a> <a href="#">sap string</a> <a href="#">static-host ipv4 string</a> <a href="#">mac string</a> <a href="#">managed-route string</a> <a href="#">cpe-check</a> <a href="#">destination-ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <a href="#">destination-ip-address</a>  |
| Introduced | 22.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**drop-count number**

|          |  |
|----------|--|
| Synopsis | Consecutive ping replies missed before CPE deemed down |
|----------|--|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check drop-count</b> <i>number</i> |
| Tree       | <b>drop-count</b>   |
| Range      | 1 to 255  |
| Default    | 3   |
| Introduced | 22.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **failed-action**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>failed-action</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check failed-action</b> |
| Tree       | <b>failed-action</b>   |
| Introduced | 22.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **metric number**

|            |   |
|------------|---|
| Synopsis   | Metric associated with the provisioned managed route  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check failed-action metric</b> <i>number</i> |
| Tree       | <b>metric</b>   |
| Max. Range | 0 to 4294967295   |
| Default    | 0   |
| Notes      | The following elements are part of a choice: ( <b>metric</b> , <b>preference</b> , and <b>tag</b> ) or <b>withdraw</b> .  |
| Introduced | 22.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **preference number**

|          |   |
|----------|---|
| Synopsis | Preference associated to the provisioned managed route  |
| Context  | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check failed-action preference</b> <i>number</i> |
| Tree     | <b>preference</b>   |

|            |  |
|------------|--|
| Range      | 0 to 255   |
| Notes      | The following elements are part of a choice: ( <b>metric</b> , <b>preference</b> , and <b>tag</b> ) or <b>withdraw</b> . |
| Introduced | 22.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**tag number**

|            |  |
|------------|--|
| Synopsis   | Route tag used if CPE check fails  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">cpe-check</a> <a href="#">failed-action</a> <a href="#">tag number</a> |
| Tree       | <a href="#">tag</a>  |
| Max. Range | 0 to 4294967295  |
| Default    | 0  |
| Notes      | The following elements are part of a choice: ( <b>metric</b> , <b>preference</b> , and <b>tag</b> ) or <b>withdraw</b> .   |
| Introduced | 22.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**withdraw boolean**

|            |  |
|------------|--|
| Synopsis   | Withdraw the route when the CPE check fails  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">cpe-check</a> <a href="#">failed-action</a> <a href="#">withdraw boolean</a> |
| Tree       | <a href="#">withdraw</a>   |
| Default    | false  |
| Notes      | The following elements are part of a choice: ( <b>metric</b> , <b>preference</b> , and <b>tag</b> ) or <b>withdraw</b> .   |
| Introduced | 22.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**interval number**

|          |   |
|----------|---|
| Synopsis | Interval between ICMP pings to target CPE IP address  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">cpe-check</a> <a href="#">interval number</a> |
| Tree     | <a href="#">interval</a>  |

|            |   |
|------------|---|
| Range      | 1 to 255  |
| Units      | seconds   |
| Default    | 1   |
| Introduced | 22.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **log** *boolean*

|            |  |
|------------|--|
| Synopsis   | Log CPE connectivity checks transitions  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">cpe-check</a> <a href="#">log</a> <i>boolean</i> |
| Tree       | <a href="#">log</a>  |
| Default    | false  |
| Introduced | 22.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **padding-size** *number*

|            |  |
|------------|--|
| Synopsis   | Padding size for CPE connectivity checks   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">cpe-check</a> <a href="#">padding-size</a> <i>number</i> |
| Tree       | <a href="#">padding-size</a>   |
| Range      | 0 to 16384   |
| Units      | bytes  |
| Default    | 56   |
| Introduced | 22.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **source-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

|            |   |
|------------|---|
| Synopsis   | Source IP address used in the ICMP messages   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">cpe-check</a> <a href="#">source-ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <a href="#">source-ip-address</a>   |
| Introduced | 22.10.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **timeout** *number*

Synopsis Time interval determining that a ping is missed

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [static-host ipv4](#) *string* [mac](#) *string* [managed-route](#) *string* [cpe-check](#) *timeout* *number*

Tree [timeout](#)

Range 1 to 10

Units seconds

Default 1

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **metric** *number*

Synopsis Metric associated with the provisioned managed route

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [static-host ipv4](#) *string* [mac](#) *string* [managed-route](#) *string* [metric](#) *number*

Tree [metric](#)

Description This command configures a metric to associate with the provisioned managed route.

Max. Range 0 to 4294967295

Default 0

Introduced 22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **preference** *number*

Synopsis Preference associated to the provisioned managed route

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [static-host ipv4](#) *string* [mac](#) *string* [managed-route](#) *string* [preference](#) *number*

Tree [preference](#)

Description This command configures the preference associated with the provisioned managed route.

Range 0 to 255

Default 0

|            |   |
|------------|---|
| Introduced | 22.2.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

**tag number**

|            |  |
|------------|--|
| Synopsis   | Route tag used if CPE check fails  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">tag number</a> |
| Tree       | <a href="#">tag</a>  |
| Max. Range | 0 to 4294967295  |
| Default    | 0  |
| Introduced | 22.2.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**rip-policy reference**

|            |  |
|------------|--|
| Synopsis   | RIP policy name  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">rip-policy reference</a> |
| Tree       | <a href="#">rip-policy</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">rip-policy</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**shcv**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>shcv</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">shcv</a> |
| Tree       | <a href="#">shcv</a>   |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**sla-profile reference**

|          |                  |
|----------|------------------|
| Synopsis | SLA profile name |
|----------|------------------|



|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>sla-profile</b> <i>reference</i> |
| Tree       | <a href="#">sla-profile</a>  |
| Reference  | <b>configure subscriber-mgmt sla-profile</b> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **sub-profile** *reference*

|            |  |
|------------|--|
| Synopsis   | Sub-profile name   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>sub-profile</b> <i>reference</i> |
| Tree       | <a href="#">sub-profile</a>  |
| Reference  | <b>configure subscriber-mgmt sub-profile</b> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **subscriber-id**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>subscriber-id</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>subscriber-id</b> |
| Tree       | <a href="#">subscriber-id</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **string** *string*

|               |   |
|---------------|---|
| Synopsis      | Subscriber identification   |
| Context       | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>subscriber-id</b> <i>string</i> <b>string</b> |
| Tree          | <a href="#">string</a>  |
| String Length | 1 to 64   |
| Notes         | The following elements are part of a choice: <b>string</b> or <b>use-sap-id</b> .   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**use-sap-id**

|            |  |
|------------|--|
| Synopsis   | Use the SAP id as subscriber ID  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">subscriber-id</a> <a href="#">use-sap-id</a> |
| Tree       | <a href="#">use-sap-id</a>   |
| Notes      | The following elements are part of a choice: <b>string</b> or <b>use-sap-id</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**ipv6** [[prefix](#)] *string* [mac](#) *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ipv6</b> list instance   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> |
| Tree       | <a href="#">ipv6</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**[prefix]** *string*

|            |   |
|------------|---|
| Synopsis   | IPv6 prefix   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> |
| Tree       | <a href="#">ipv6</a>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**mac** *string*

|          |   |
|----------|---|
| Synopsis | MAC address   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> |
| Tree     | <a href="#">ipv6</a>  |
| Notes    | This element is part of a list key.   |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the static host   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ancc-string** *string*

|               |  |
|---------------|--|
| Synopsis      | ANCP string  |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <b>ancc-string</b> <i>string</i> |
| Tree          | <a href="#">ancc-string</a>  |
| String Length | 1 to 63  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **app-profile**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>app-profile</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <b>app-profile</b> |
| Tree       | <a href="#">app-profile</a>  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **profile** *reference*

|          |   |
|----------|---|
| Synopsis | Application profile used by the static host |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>app-profile</b> <i>profile</i> <i>reference</i> |
| Tree       | <a href="#">profile</a>   |
| Reference  | <b>configure application-assurance group</b> <i>number</i> <b>partition</b> <i>number</i> <b>policy app-profile</b> <i>string</i>   |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **scope** *keyword*

|            |   |
|------------|---|
| Synopsis   | Scope of the static host application profile  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>app-profile</b> <i>scope</i> <i>keyword</i> |
| Tree       | <a href="#">scope</a>   |
| Options    | subscriber, mac   |
| Default    | subscriber  |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **int-dest-id** *string*

|               |   |
|---------------|---|
| Synopsis      | Intermediate destination ID   |
| Context       | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>int-dest-id</b> <i>string</i> |
| Tree          | <a href="#">int-dest-id</a>   |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **mac-linking** *string*

|            |   |
|------------|---|
| Synopsis   | IPv6 host linked with IPv4 host via learned MAC address   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>mac-linking</b> <i>string</i> |
| Tree       | <a href="#">mac-linking</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**managed-route** [ipv6-prefix] *string*

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>managed-route</b> list instance   |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host</b> <b>ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> |
| Tree        | <b>managed-route</b>   |
| Description | Commands in this context configure managed route parameters.   |
| Introduced  | 16.0.R4  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**[ipv6-prefix]** *string*

|             |  |
|-------------|--|
| Synopsis    | Managed route prefix associated with IPv6 static host  |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host</b> <b>ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> |
| Tree        | <b>managed-route</b>   |
| Description | This command configures the managed route prefix. The prefix length must be in the range of 1 to 128.  |
| Notes       | This element is part of a list key.  |
| Introduced  | 16.0.R4  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**cpe-check**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>cpe-check</b> context   |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host</b> <b>ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check</b> |
| Tree       | <b>cpe-check</b>  |
| Introduced | 22.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**destination-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | IP address of the target CPE device   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check destination-ip-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <b>destination-ip-address</b>   |
| Introduced | 22.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **drop-count** *number*

|            |   |
|------------|---|
| Synopsis   | Consecutive ping replies missed before CPE deemed down  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check drop-count</b> <i>number</i> |
| Tree       | <b>drop-count</b>   |
| Range      | 1 to 255  |
| Default    | 3   |
| Introduced | 22.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **failed-action**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>failed-action</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check failed-action</b> |
| Tree       | <b>failed-action</b>   |
| Introduced | 22.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **metric** *number*

|            |   |
|------------|---|
| Synopsis   | Metric associated with the provisioned managed route  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check failed-action metric</b> <i>number</i> |
| Tree       | <b>metric</b>   |
| Max. Range | 0 to 4294967295   |
| Default    | 0   |

|            |  |
|------------|--|
| Notes      | The following elements are part of a choice: ( <b>metric</b> , <b>preference</b> , and <b>tag</b> ) or <b>withdraw</b> . |
| Introduced | 22.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **preference number**

|            |  |
|------------|--|
| Synopsis   | Preference associated to the provisioned managed route   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">cpe-check</a> <a href="#">failed-action</a> <a href="#">preference</a> <i>number</i> |
| Tree       | <a href="#">preference</a>   |
| Range      | 0 to 255   |
| Notes      | The following elements are part of a choice: ( <b>metric</b> , <b>preference</b> , and <b>tag</b> ) or <b>withdraw</b> .   |
| Introduced | 22.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **tag number**

|            |   |
|------------|---|
| Synopsis   | Route tag used if CPE check fails   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">cpe-check</a> <a href="#">failed-action</a> <a href="#">tag</a> <i>number</i> |
| Tree       | <a href="#">tag</a>   |
| Max. Range | 0 to 4294967295   |
| Default    | 0   |
| Notes      | The following elements are part of a choice: ( <b>metric</b> , <b>preference</b> , and <b>tag</b> ) or <b>withdraw</b> .  |
| Introduced | 22.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **withdraw boolean**

|          |   |
|----------|---|
| Synopsis | Withdraw the route when the CPE check fails   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">cpe-check</a> <a href="#">failed-action</a> <a href="#">withdraw</a> <i>boolean</i> |
| Tree     | <a href="#">withdraw</a>  |
| Default  | false   |

|            |  |
|------------|--|
| Notes      | The following elements are part of a choice: ( <b>metric</b> , <b>preference</b> , and <b>tag</b> ) or <b>withdraw</b> . |
| Introduced | 22.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **interval** *number*

|            |  |
|------------|--|
| Synopsis   | Interval between ICMP pings to target CPE IP address   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">cpe-check</a> <a href="#">interval</a> <i>number</i> |
| Tree       | <a href="#">interval</a>   |
| Range      | 1 to 255   |
| Units      | seconds  |
| Default    | 1  |
| Introduced | 22.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **log** *boolean*

|            |  |
|------------|--|
| Synopsis   | Log CPE connectivity checks transitions  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">cpe-check</a> <a href="#">log</a> <i>boolean</i> |
| Tree       | <a href="#">log</a>  |
| Default    | false  |
| Introduced | 22.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **padding-size** *number*

|            |  |
|------------|--|
| Synopsis   | Padding size for CPE connectivity checks   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">cpe-check</a> <a href="#">padding-size</a> <i>number</i> |
| Tree       | <a href="#">padding-size</a>   |
| Range      | 0 to 16384   |
| Units      | bytes  |
| Default    | 56   |
| Introduced | 22.10.R1   |



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **source-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Source IP address used in the ICMP messages

Context **configure** **service** **vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **static-host** **ipv6** *string* **mac** *string* **managed-route** *string* **cpe-check** **source-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [source-ip-address](#)

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **timeout** *number*

Synopsis Time interval determining that a ping is missed

Context **configure** **service** **vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **static-host** **ipv6** *string* **mac** *string* **managed-route** *string* **cpe-check** **timeout** *number*

Tree [timeout](#)

Range 1 to 10

Units seconds

Default 1

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **metric** *number*

Synopsis Metric associated with the provisioned managed route

Context **configure** **service** **vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **static-host** **ipv6** *string* **mac** *string* **managed-route** *string* **metric** *number*

Tree [metric](#)

Description This command configures a metric to associate with the provisioned managed route.

Max. Range 0 to 4294967295

Default 0

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**preference number**

|             |  |
|-------------|--|
| Synopsis    | Preference associated to the provisioned managed route   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">preference</a> <i>number</i> |
| Tree        | <a href="#">preference</a>   |
| Description | This command configures the preference associated with the provisioned managed route.  |
| Range       | 0 to 255   |
| Default     | 0  |
| Introduced  | 22.2.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**tag number**

|            |   |
|------------|---|
| Synopsis   | Route tag used if CPE check fails   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">tag</a> <i>number</i> |
| Tree       | <a href="#">tag</a>   |
| Max. Range | 0 to 4294967295   |
| Default    | 0   |
| Introduced | 22.2.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**retail-svc-id number****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Retail service ID   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">retail-svc-id</a> <i>number</i> |
| Tree       | <a href="#">retail-svc-id</a>   |
| Range      | 1 to 2147483647   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**shcv**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>shcv</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">shcv</a> |
| Tree       | <a href="#">shcv</a>   |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**sla-profile** *reference*

|            |  |
|------------|--|
| Synopsis   | SLA profile name   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">sla-profile</a> <i>reference</i> |
| Tree       | <a href="#">sla-profile</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**sub-profile** *reference*

|            |  |
|------------|--|
| Synopsis   | Sub-profile name   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">sub-profile</a> <i>reference</i> |
| Tree       | <a href="#">sub-profile</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**subscriber-id**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>subscriber-id</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">subscriber-id</a> |
| Tree       | <a href="#">subscriber-id</a>   |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **string** *string*

Synopsis Subscriber identification

Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [static-host](#) [ipv6](#) *string* [mac](#) *string* [subscriber-id](#) *string* *string*

Tree [string](#)

String Length 1 to 64

Notes The following elements are part of a choice: **string** or **use-sap-id**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **use-sap-id**

Synopsis Use the SAP id as subscriber ID

Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [static-host](#) [ipv6](#) *string* [mac](#) *string* [subscriber-id](#) [use-sap-id](#)

Tree [use-sap-id](#)

Notes The following elements are part of a choice: **string** or **use-sap-id**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mac-learning**

Synopsis Enter the **mac-learning** context

Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [static-host](#) [mac-learning](#)

Tree [mac-learning](#)

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **data-triggered** *boolean*

Synopsis Enable learning of MAC addresses from data packets

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host mac-learning data-triggered</b> <i>boolean</i> |
| Tree       | <a href="#">data-triggered</a>  |
| Default    | false   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **single-mac** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enforce single MAC address and subscriber for the SAP   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host mac-learning single-mac</b> <i>boolean</i> |
| Tree       | <a href="#">single-mac</a>  |
| Default    | false   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **sub-sla-mgmt**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>sub-sla-mgmt</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>sub-sla-mgmt</b> |
| Tree       | <a href="#">sub-sla-mgmt</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of SAP subscriber management  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>sub-sla-mgmt admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**defaults**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>defaults</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>sub-sla-mgmt defaults</b> |
| Tree       | <b>defaults</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**app-profile** *reference*

|            |   |
|------------|---|
| Synopsis   | Default application profile name for this SAP   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>sub-sla-mgmt defaults app-profile</b> <i>reference</i> |
| Tree       | <b>app-profile</b>  |
| Reference  | <b>configure application-assurance group</b> <i>number</i> <b>partition</b> <i>number</i> <b>policy app-profile</b> <i>string</i>   |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**int-dest-id**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>int-dest-id</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>sub-sla-mgmt defaults int-dest-id</b> |
| Tree       | <b>int-dest-id</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**string** *string*

|               |   |
|---------------|---|
| Synopsis      | Use the configured string   |
| Context       | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>sub-sla-mgmt defaults int-dest-id string</b> <i>string</i> |
| Tree          | <b>string</b>   |
| String Length | 1 to 32   |
| Notes         | The following elements are part of a choice: <b>string</b> or <b>top-q-tag</b> .  |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## top-q-tag

|            |  |
|------------|--|
| Synopsis   | Use the top Q-tag of this SAP  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt defaults int-dest-id</a> <a href="#">top-q-tag</a> |
| Tree       | <a href="#">top-q-tag</a>  |
| Notes      | The following elements are part of a choice: <b>string</b> or <b>top-q-tag</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## sla-profile *reference*

|            |   |
|------------|---|
| Synopsis   | Default SLA profile for hosts on this SAP   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt defaults sla-profile</a> <i>reference</i> |
| Tree       | <a href="#">sla-profile</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## sub-profile *reference*

|            |   |
|------------|---|
| Synopsis   | Default subscriber profile for the SAP  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt defaults sub-profile</a> <i>reference</i> |
| Tree       | <a href="#">sub-profile</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## subscriber-id

|          |  |
|----------|--|
| Synopsis | Enter the <b>subscriber-id</b> context |
|----------|--|

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>sub-sla-mgmt defaults subscriber-id</b> |
| Tree       | <b>subscriber-id</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## auto-id

|            |  |
|------------|--|
| Synopsis   | Use auto-generated subscriber identification string  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>sub-sla-mgmt defaults subscriber-id auto-id</b> |
| Tree       | <b>auto-id</b>   |
| Notes      | The following elements are part of a choice: <b>auto-id</b> , <b>sap-id</b> , or <b>string</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## sap-id

|            |   |
|------------|---|
| Synopsis   | Use SAP ID as default subscriber identification string  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>sub-sla-mgmt defaults subscriber-id sap-id</b> |
| Tree       | <b>sap-id</b>   |
| Notes      | The following elements are part of a choice: <b>auto-id</b> , <b>sap-id</b> , or <b>string</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## string *string*

|               |   |
|---------------|---|
| Synopsis      | Default subscriber identification string for the SAP  |
| Context       | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>sub-sla-mgmt defaults subscriber-id string</b> <i>string</i> |
| Tree          | <b>string</b>   |
| String Length | 1 to 64   |
| Notes         | The following elements are part of a choice: <b>auto-id</b> , <b>sap-id</b> , or <b>string</b> .  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |



## single-sub-parameters

|            |   |
|------------|---|
| Synopsis   | Enter the <b>single-sub-parameters</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">single-sub-parameters</a> |
| Tree       | <a href="#">single-sub-parameters</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## non-sub-traffic

|            |   |
|------------|---|
| Synopsis   | Enable the <b>non-sub-traffic</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">single-sub-parameters</a> <a href="#">non-sub-traffic</a> |
| Tree       | <a href="#">non-sub-traffic</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## app-profile *reference*

|            |  |
|------------|--|
| Synopsis   | Application profile name for all non-subscriber traffic  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">single-sub-parameters</a> <a href="#">non-sub-traffic</a> <a href="#">app-profile</a> <i>reference</i> |
| Tree       | <a href="#">app-profile</a>  |
| Reference  | <b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i>  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## sla-profile *reference*

|           |  |
|-----------|--|
| Synopsis  | SLA profile applicable for all non-subscriber traffic  |
| Context   | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">single-sub-parameters</a> <a href="#">non-sub-traffic</a> <a href="#">sla-profile</a> <i>reference</i> |
| Tree      | <a href="#">sla-profile</a>  |
| Reference | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i>   |
| Notes     | This element is mandatory.   |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **sub-profile** *reference*

|            |  |
|------------|--|
| Synopsis   | Subscriber profile all non-subscriber traffic  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">single-sub-parameters</a> <a href="#">non-sub-traffic</a> <a href="#">sub-profile</a> <i>reference</i> |
| Tree       | <a href="#">sub-profile</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i>   |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **subscriber-id** *string*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Subscriber ID applied for all non-subscriber traffic  |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">single-sub-parameters</a> <a href="#">non-sub-traffic</a> <a href="#">subscriber-id</a> <i>string</i> |
| Tree          | <a href="#">subscriber-id</a>   |
| String Length | 1 to 64   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **profiled-traffic-only** *boolean*

|            |  |
|------------|--|
| Synopsis   | Include all traffic in subscriber profile  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">single-sub-parameters</a> <a href="#">profiled-traffic-only</a> <i>boolean</i> |
| Tree       | <a href="#">profiled-traffic-only</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sub-ident-policy** *reference*

Synopsis Subscriber identification policy used on this SAP

Context **configure** **service** **vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **sub-sla-mgmt** **sub-ident-policy** *reference*

Tree [sub-ident-policy](#)

Reference **configure** **subscriber-mgmt** **sub-ident-policy** *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **subscriber-limit** (*keyword* | *number*)

Synopsis Maximum number of subscribers on this SAP

Context **configure** **service** **vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **sub-sla-mgmt** **subscriber-limit** (*keyword* | *number*)

Tree [subscriber-limit](#)

Range 1 to 131071

Options no-limit

Default 1

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sap-parameters**

Synopsis Enter the **sap-parameters** context

Context **configure** **service** **vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap-parameters**

Tree [sap-parameters](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **anti-spoof** *keyword*

Synopsis Anti-spoof type of the SAP

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap-parameters anti-spoof</b> <i>keyword</i> |
| Tree       | <b>anti-spoof</b>  |
| Options    | ip-mac, nh-mac   |
| Default    | ip-mac   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### description *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap-parameters description</b> <i>string</i> |
| Tree          | <b>description</b>   |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### sub-sla-mgmt

|            |   |
|------------|---|
| Synopsis   | Enter the <b>sub-sla-mgmt</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap-parameters sub-sla-mgmt</b> |
| Tree       | <b>sub-sla-mgmt</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### defaults

|            |  |
|------------|--|
| Synopsis   | Enter the <b>defaults</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap-parameters sub-sla-mgmt defaults</b> |
| Tree       | <b>defaults</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**app-profile** *reference*

|            |  |
|------------|--|
| Synopsis   | Default application profile name   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">group-interface string</a> <a href="#">sap-parameters sub-sla-mgmt defaults app-profile reference</a> |
| Tree       | <a href="#">app-profile</a>  |
| Reference  | <b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-profile string</a>   |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**sla-profile** *reference*

|            |  |
|------------|--|
| Synopsis   | Default SLA profile  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">group-interface string</a> <a href="#">sap-parameters sub-sla-mgmt defaults sla-profile reference</a> |
| Tree       | <a href="#">sla-profile</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt sla-profile string</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**sub-profile** *reference*

|            |  |
|------------|--|
| Synopsis   | Default subscriber profile   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">group-interface string</a> <a href="#">sap-parameters sub-sla-mgmt defaults sub-profile reference</a> |
| Tree       | <a href="#">sub-profile</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**subscriber-id**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>subscriber-id</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">group-interface string</a> <a href="#">sap-parameters sub-sla-mgmt defaults subscriber-id</a> |
| Tree       | <a href="#">subscriber-id</a>  |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## auto-id

Synopsis Subscriber ID that is autogenerated

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap-parameters](#) [sub-sla-mgmt](#) [defaults](#) [subscriber-id](#) [auto-id](#)

Tree [auto-id](#)

Notes The following elements are part of a choice: **auto-id** or **string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## string *string*

Synopsis String to be used as default subscriber ID

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap-parameters](#) [sub-sla-mgmt](#) [defaults](#) [subscriber-id](#) [string](#) [string](#)

Tree [string](#)

String Length 1 to 64

Notes The following elements are part of a choice: **auto-id** or **string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## sub-ident-policy *reference*

Synopsis Subscriber identification policy

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap-parameters](#) [sub-sla-mgmt](#) [sub-ident-policy](#) [reference](#)

Tree [sub-ident-policy](#)

Reference **configure** [subscriber-mgmt](#) [sub-ident-policy](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## shcv-policy *reference*

Synopsis SHCV policy for IPv4 and IPv6 subscriber hosts

|            |   |
|------------|---|
| Context    | <b>configure service vpn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>shcv-policy</b> <i>reference</i> |
| Tree       | <a href="#">shcv-policy</a>   |
| Reference  | <b>configure subscriber-mgmt shcv-policy</b> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **shcv-policy-ipv4** *reference*

|            |  |
|------------|--|
| Synopsis   | SHCV for IPv4 subscriber hosts   |
| Context    | <b>configure service vpn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>shcv-policy-ipv4</b> <i>reference</i> |
| Tree       | <a href="#">shcv-policy-ipv4</a>   |
| Reference  | <b>configure subscriber-mgmt shcv-policy</b> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **shcv-policy-ipv6** *reference*

|            |  |
|------------|--|
| Synopsis   | SHCV for IPv6 subscriber hosts   |
| Context    | <b>configure service vpn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>shcv-policy-ipv6</b> <i>reference</i> |
| Tree       | <a href="#">shcv-policy-ipv6</a>   |
| Reference  | <b>configure subscriber-mgmt shcv-policy</b> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **srrp** [**srrp-id**] *number*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>srrp</b> list instance   |
| Context        | <b>configure service vpn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>srrp</b> <i>number</i> |
| Tree           | <a href="#">srrp</a>  |
| Max. Instances | 1   |
| Introduced     | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[srrp-id]** *number*

Synopsis SRRP instance ID

Context **configure** **service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **srrp** *number*

Tree **srrp**

Range 1 to 4294967295

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of SRRP

Context **configure** **service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **srrp** *number* **admin-state** *keyword*

Tree **admin-state**

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **bfd-liveness**

Synopsis Enable the **bfd-liveness** context

Context **configure** **service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **srrp** *number* **bfd-liveness**

Tree **bfd-liveness**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**dest-ip** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Destination IPv4 prefix   |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>srp</b> <i>number</i> <b>bfd-liveness</b> <b>dest-ip</b> <i>string</i> |
| Tree       | <b>dest-ip</b>  |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**interface-name** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Name of the interface running BFD  |
| Context       | <b>configure</b> <b>service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>srp</b> <i>number</i> <b>bfd-liveness</b> <b>interface-name</b> <i>string</i> |
| Tree          | <b>interface-name</b>  |
| String Length | 1 to 32  |
| Notes         | This element is mandatory.   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**service-name** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | Administrative service name  |
| Context  | <b>configure</b> <b>service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>srp</b> <i>number</i> <b>bfd-liveness</b> <b>service-name</b> <i>string</i> |
| Tree     | <b>service-name</b>  |

String Length 1 to 64  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
Context **configure** **service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **srrp**  
*number* **description** *string*  
Tree [description](#)  
String Length 1 to 80  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **gw-mac** *string*

Synopsis Gateway MAC address  
Context **configure** **service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **srrp**  
*number* **gw-mac** *string*  
Tree [gw-mac](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **keep-alive-interval** *number*

Synopsis Interval between SRRP advertisements  
Context **configure** **service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **srrp**  
*number* **keep-alive-interval** *number*  
Tree [keep-alive-interval](#)  
Range 1 to 100  
Units deciseconds  
Default 10  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**message-path** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | SAP to use as the SRRP message path   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">srrp</a> <i>number</i> <a href="#">message-path</a> <i>reference</i> |
| Tree       | <a href="#">message-path</a>  |
| Reference  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**monitor-oper-group**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>monitor-oper-group</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">srrp</a> <i>number</i> <a href="#">monitor-oper-group</a> |
| Tree       | <a href="#">monitor-oper-group</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**group-name** *reference*

|            |  |
|------------|--|
| Synopsis   | Operational group name   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">srrp</a> <i>number</i> <a href="#">monitor-oper-group</a> <a href="#">group-name</a> <i>reference</i> |
| Tree       | <a href="#">group-name</a>   |
| Reference  | <b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**priority-step** *number*

|          |  |
|----------|--|
| Synopsis | Step value to change priority of SRRP instance   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">srrp</a> <i>number</i> <a href="#">monitor-oper-group</a> <a href="#">priority-step</a> <i>number</i> |

|            |   |
|------------|---|
| Tree       | <a href="#">priority-step</a>                           |
| Range      | 1 to 10   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **one-garp-per-sap** *boolean*

|            |  |
|------------|--|
| Synopsis   | Send one gratuitous ARP to each SAP  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">srrp</a> <i>number</i> <b>one-garp-per-sap</b> <i>boolean</i> |
| Tree       | <a href="#">one-garp-per-sap</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **policy** *reference*

|                |  |
|----------------|--|
| Synopsis       | VRRP priority control policy associated with the SRRP  |
| Context        | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">srrp</a> <i>number</i> <b>policy</b> <i>reference</i> |
| Tree           | <a href="#">policy</a>   |
| Reference      | <b>configure</b> <a href="#">vrrp</a> <b>policy</b> <i>number</i>  |
| Max. Instances | 2  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **preempt** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow the SRRP instance to override an existing master  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">srrp</a> <i>number</i> <b>preempt</b> <i>boolean</i> |
| Tree       | <a href="#">preempt</a>   |
| Default    | true  |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **priority** *number*

Synopsis Priority for this interface at this level

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [srrp](#) *number* **priority** *number*

Tree [priority](#)

Range 1 to 254

Default 100

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **send-fib-population-packets** *keyword*

Synopsis Mode used to send FIB population packets on switchover

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [srrp](#) *number* **send-fib-population-packets** *keyword*

Tree [send-fib-population-packets](#)

Options all, outer-tag-only

Default all

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **suppress-aa-sub** *boolean*

Synopsis Enable application assurance suppression for ESM subscribers

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* **suppress-aa-sub** *boolean*

Tree [suppress-aa-sub](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**tos-marking-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | TOS marking state  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <b>tos-marking-state</b> <i>keyword</i> |
| Tree       | <a href="#">tos-marking-state</a>  |
| Options    | trusted, untrusted   |
| Default    | trusted  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Group interface type  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <b>type</b> <i>keyword</i> |
| Tree       | <a href="#">type</a>  |
| Options    | plain, lns, wlan-gw, gtp, bonding   |
| Default    | plain   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**wlan-gw**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>wlan-gw</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <b>wlan-gw</b> |
| Tree       | <a href="#">wlan-gw</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state** *keyword*

|          |                                      |
|----------|--------------------------------------|
| Synopsis | Administrative state of WLAN Gateway |
|----------|--------------------------------------|

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b><br><b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>   |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **gateway-address** [**address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>gateway-address</b> list instance  |
| Context        | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b><br><b>gateway-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree           | <b>gateway-address</b>  |
| Max. Instances | 10  |
| Introduced     | 16.0.R4   |
| Platforms      | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **[address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

|            |   |
|------------|---|
| Synopsis   | Gateway endpoint address of the WLAN Gateway tunnel   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b><br><b>gateway-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <b>gateway-address</b>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R4   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **purpose**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>purpose</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b><br><b>gateway-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>purpose</b> |
| Tree       | <b>purpose</b>   |
| Introduced | 16.0.R4  |

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **xconnect** *boolean*

Synopsis Use tunnel IP address for cross-connect traffic

Context **configure** **service** **vpn** *string* **subscriber-interface** *string* **group-interface** *string* **wlan-gw** **gateway-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **purpose** **xconnect** *boolean*

Tree [xconnect](#)

Default false

Introduced 16.0.R4

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **gateway-router** *string*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Routing instance the WLAN-GW endpoint resides in

Context **configure** **service** **vpn** *string* **subscriber-interface** *string* **group-interface** *string* **wlan-gw** **gateway-router** *string*

Tree [gateway-router](#)

Introduced 16.0.R4

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **group-encryption**

Synopsis Enter the **group-encryption** context

Context **configure** **service** **vpn** *string* **subscriber-interface** *string* **group-interface** *string* **wlan-gw** **group-encryption**

Tree [group-encryption](#)

Introduced 21.10.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**encryption-keygroup-inbound** *reference*

|            |  |
|------------|--|
| Synopsis   | Encryption keygroup for inbound traffic  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">group-encryption</a> <a href="#">encryption-keygroup-inbound</a> <i>reference</i> |
| Tree       | <a href="#">encryption-keygroup-inbound</a>  |
| Reference  | <b>configure</b> <a href="#">group-encryption</a> <a href="#">encryption-keygroup</a> <i>number</i>  |
| Introduced | 21.10.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**encryption-keygroup-outbound** *reference*

|            |   |
|------------|---|
| Synopsis   | Encryption keygroup for inbound traffic   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">group-encryption</a> <a href="#">encryption-keygroup-outbound</a> <i>reference</i> |
| Tree       | <a href="#">encryption-keygroup-outbound</a>  |
| Reference  | <b>configure</b> <a href="#">group-encryption</a> <a href="#">encryption-keygroup</a> <i>number</i>   |
| Introduced | 21.10.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**l2-ap**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>l2-ap</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">l2-ap</a> |
| Tree       | <a href="#">l2-ap</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**access-point** [[sap-id](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>access-point</b> list instance   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">l2-ap</a> <a href="#">access-point</a> <i>string</i> |
| Tree       | <a href="#">access-point</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**[sap-id]** *string*

|               |   |
|---------------|---|
| Synopsis      | SAP ID for the Layer 2 access point   |
| Context       | <b>configure</b> <b>service</b> <b>vpn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>l2-ap</b> <b>access-point</b> <i>string</i> |
| Tree          | <b>access-point</b>   |
| String Length | 1 to 45   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the L2 access points  |
| Context    | <b>configure</b> <b>service</b> <b>vpn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>l2-ap</b> <b>access-point</b> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**encap-type** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Service encapsulation type of this access point  |
| Context    | <b>configure</b> <b>service</b> <b>vpn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>l2-ap</b> <b>access-point</b> <i>string</i> <b>encap-type</b> <i>keyword</i> |
| Tree       | <b>encap-type</b>  |
| Options    | null, dot1q, qinq  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## epipe-sap-template *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Parameters template for the L2 access point SAP   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw l2-ap access-point</b> <i>string</i> <b>epipe-sap-template</b> <i>reference</i> |
| Tree       | <a href="#">epipe-sap-template</a>  |
| Reference  | <b>configure service template epipe-sap-template</b> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## auto-sub-id-fmt *keyword*

|            |  |
|------------|--|
| Synopsis   | Format of the auto-generated subscriber ID   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw l2-ap auto-sub-id-fmt</b> <i>keyword</i> |
| Tree       | <a href="#">auto-sub-id-fmt</a>  |
| Options    | include-ap-tags, sap-only  |
| Default    | include-ap-tags  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## default-encap-type *keyword*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Default encapsulation type for Layer 2 access points  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw l2-ap default-encap-type</b> <i>keyword</i> |
| Tree       | <a href="#">default-encap-type</a>  |
| Options    | null, dot1q, qinq   |
| Default    | null  |
| Introduced | 16.0.R1   |

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## lanext



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable the **lanext** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) **lanext**

Tree [lanext](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## max-bd *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Maximum number of bridge domains

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) **lanext** **max-bd** *number*

Tree [max-bd](#)

Range 1 to 131071

Default 131071

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## learn-ap-mac

Synopsis Enable the **learn-ap-mac** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) **learn-ap-mac**

Tree [learn-ap-mac](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**delay-auth** *boolean*

|            |  |
|------------|--|
| Synopsis   | Delay AP-MAC until after ARP/ND authentication response  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">learn-ap-mac</a> <b>delay-auth</b> <i>boolean</i> |
| Tree       | <a href="#">delay-auth</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**mobility**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mobility</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <b>mobility</b> |
| Tree       | <a href="#">mobility</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**hold-time** *number*

|            |  |
|------------|--|
| Synopsis   | Minimum time between two mobility events for single UE   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">mobility</a> <b>hold-time</b> <i>number</i> |
| Tree       | <a href="#">hold-time</a>  |
| Range      | 0 to 255   |
| Units      | seconds  |
| Default    | 5  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**inter-tunnel-type** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enable mobility between terminating tunnel types  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b><br><b>mobility inter-tunnel-type</b> <i>boolean</i> |
| Tree       | <b>inter-tunnel-type</b>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **inter-vlan** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow mobility within different VLANs of the same range  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b><br><b>mobility inter-vlan</b> <i>boolean</i> |
| Tree       | <b>inter-vlan</b>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **trigger**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>trigger</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b><br><b>mobility trigger</b> |
| Tree       | <b>trigger</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **control** *boolean*

|            |   |
|------------|---|
| Synopsis   | Use control traffic as a mobility trigger   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b><br><b>mobility trigger control</b> <i>boolean</i> |
| Tree       | <b>control</b>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**data** *boolean*

|            |   |
|------------|---|
| Synopsis   | Use data traffic as mobility trigger  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">mobility trigger data</a> <i>boolean</i> |
| Tree       | <a href="#">data</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**iapp** *boolean*

|            |   |
|------------|---|
| Synopsis   | Use IAPP messages as a mobility trigger   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">mobility trigger iapp</a> <i>boolean</i> |
| Tree       | <a href="#">iapp</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**oper-down-on-group-degrade** *boolean*

|            |  |
|------------|--|
| Synopsis   | Bring interface down when the ISA WLAN Gateway degraded  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">oper-down-on-group-degrade</a> <i>boolean</i> |
| Tree       | <a href="#">oper-down-on-group-degrade</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**tcp-mss-adjust** *number*

|          |   |
|----------|---|
| Synopsis | TCP Maximum Segment Size (MSS) adjustment for gateway   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">tcp-mss-adjust</a> <i>number</i> |
| Tree     | <a href="#">tcp-mss-adjust</a>  |

|            |                                    |
|------------|------------------------------------|
| Range      | 160 to 10240                       |
| Units      | bytes                              |
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

## tunnel-egress-qos

|            |   |
|------------|---|
| Synopsis   | Enter the <b>tunnel-egress-qos</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <b>tunnel-egress-qos</b> |
| Tree       | <a href="#">tunnel-egress-qos</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## admin-state *keyword*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Administrative state of egress QoS for WLAN-GW tunnels  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <b>tunnel-egress-qos</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## agg-rate-limit (*number* | *keyword*)

|          |  |
|----------|--|
| Synopsis | HQoS aggregate rate limit  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <b>tunnel-egress-qos</b> <b>agg-rate-limit</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <a href="#">agg-rate-limit</a>   |
| Range    | 1 to 100000000   |
| Options  | max  |



|            |                                    |
|------------|------------------------------------|
| Default    | max                                |
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **granularity** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Granularity of the egress shaping for WLAN Gateway   |
| Context    | <b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">tunnel-egress-qos</a> <a href="#">granularity</a> <i>keyword</i> |
| Tree       | <a href="#">granularity</a>  |
| Options    | per-tunnel, per-retailer   |
| Default    | per-tunnel   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **hold-time** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Minimum time to hold egress shaping resources  |
| Context    | <b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">tunnel-egress-qos</a> <a href="#">hold-time</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">hold-time</a>  |
| Range      | 1 to 86400   |
| Units      | seconds  |
| Options    | infinite   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **multi-client-only** *boolean*

|          |  |
|----------|--|
| Synopsis | Allow shaping for tunnel traffic for multiple UEs  |
| Context  | <b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">tunnel-egress-qos</a> <a href="#">multi-client-only</a> <i>boolean</i> |
| Tree     | <a href="#">multi-client-only</a>  |

|            |                                    |
|------------|------------------------------------|
| Default    | false                              |
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### qos reference



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Egress QoS policy linked with each interface tunnel   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">tunnel-egress-qos</a> <a href="#">qos</a> <i>reference</i> |
| Tree       | <a href="#">qos</a>   |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">sap-egress</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### scheduler-policy reference



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Egress scheduler policy linked with each tunnel  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">tunnel-egress-qos</a> <a href="#">scheduler-policy</a> <i>reference</i> |
| Tree       | <a href="#">scheduler-policy</a>   |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">scheduler-policy</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### tunnel-encaps

|          |  |
|----------|--|
| Synopsis | Enter the <b>tunnel-encaps</b> context   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">tunnel-encaps</a> |

Tree [tunnel-encaps](#)  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **learn-l2tp-cookie** (*keyword* | *hex-string*)

Synopsis System that learns the cookie from L2TP tunnels terminating on this interface  
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [tunnel-encaps](#) [learn-l2tp-cookie](#) (*keyword* | *hex-string*)  
 Tree [learn-l2tp-cookie](#)  
 String Length 6  
 Options never, always  
 Default never  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **vlan-range** [[range](#)] *string*

Synopsis Enter the **vlan-range** list instance  
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string*  
 Tree [vlan-range](#)  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[range]** *string*

Synopsis IEEE 802.1q VLAN tag range  
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string*  
 Tree [vlan-range](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## authentication

|            |   |
|------------|---|
| Synopsis   | Enter the <b>authentication</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <b>authentication</b> |
| Tree       | <a href="#">authentication</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## hold-time *number*

|            |  |
|------------|--|
| Synopsis   | Minimum time UE held down after failed authentication  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <b>authentication</b> <b>hold-time</b> <i>number</i> |
| Tree       | <a href="#">hold-time</a>  |
| Range      | 0 to 3600  |
| Units      | seconds  |
| Default    | 5  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## local

|            |  |
|------------|--|
| Synopsis   | Enable the <b>local</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <b>authentication</b> <b>local</b> |
| Tree       | <a href="#">local</a>  |
| Introduced | 22.2.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## coa-policy *reference*

|           |   |
|-----------|---|
| Synopsis  | RADIUS ISA policy applied to CoA or disconnect messages   |
| Context   | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <b>authentication</b> <b>local</b> <b>coa-policy</b> <i>reference</i> |
| Tree      | <a href="#">coa-policy</a>  |
| Reference | <b>configure</b> <b>aaa</b> <b>radius</b> <b>isa-policy</b> <i>string</i>   |

Introduced 22.2.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **default-ue-state** *keyword*

Synopsis UE state accepted for immediate authentication  
Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [authentication local default-ue-state](#) *keyword*  
Tree [default-ue-state](#)  
Options portal, dsm  
Notes This element is mandatory.  
Introduced 22.2.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **on-control-plane** *boolean*

Synopsis Allow authentication on first control plane packet  
Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [authentication on-control-plane](#) *boolean*  
Tree [on-control-plane](#)  
Default false  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **policy** *reference*

Synopsis RADIUS policy for authentication  
Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [authentication policy](#) *reference*  
Tree [policy](#)  
Reference **configure** [aaa radius isa-policy](#) *string*  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**vlan-mismatch-timeout** *number*

|            |  |
|------------|--|
| Synopsis   | Timeout if packet received with a non-matching VLAN tag  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">authentication</a> <a href="#">vlan-mismatch-timeout</a> <i>number</i> |
| Tree       | <a href="#">vlan-mismatch-timeout</a>  |
| Range      | 5 to 60  |
| Units      | seconds  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**data-triggered-ue-creation**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>data-triggered-ue-creation</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">data-triggered-ue-creation</a> |
| Tree       | <a href="#">data-triggered-ue-creation</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of data-triggered UE creation  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">data-triggered-ue-creation</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**arp** *boolean*

|          |   |
|----------|---|
| Synopsis | Authenticate ARP packets received from an unknown UE  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">data-triggered-ue-creation</a> <a href="#">arp</a> <i>boolean</i> |
| Tree     | <a href="#">arp</a>   |

|            |                                    |
|------------|------------------------------------|
| Default    | false                              |
| Introduced | 22.7.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **create-proxy-cache-entry**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>create-proxy-cache-entry</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">data-triggered-ue-creation</a> <a href="#">create-proxy-cache-entry</a> |
| Tree       | <a href="#">create-proxy-cache-entry</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **mac-format** *string*

|               |  |
|---------------|--|
| Synopsis      | MAC address format   |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">data-triggered-ue-creation</a> <a href="#">create-proxy-cache-entry</a> <a href="#">mac-format</a> <i>string</i> |
| Tree          | <a href="#">mac-format</a>   |
| String Length | 2 to 7   |
| Default       | aa:  |
| Introduced    | 16.0.R1  |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **proxy-server**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>proxy-server</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">data-triggered-ue-creation</a> <a href="#">create-proxy-cache-entry</a> <a href="#">proxy-server</a> |
| Tree       | <a href="#">proxy-server</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **name** *string*

|          |                          |
|----------|--------------------------|
| Synopsis | RADIUS Proxy server name |
|----------|--------------------------|

|               |   |
|---------------|---|
| Context       | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>data-triggered-ue-creation</b> <b>create-proxy-cache-entry</b> <b>proxy-server</b> <b>name</b> <i>string</i> |
| Tree          | <b>name</b>   |
| String Length | 1 to 32   |
| Notes         | This element is mandatory.  |
| Introduced    | 16.0.R1   |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **router-instance** *string*

|            |  |
|------------|--|
| Synopsis   | Router instance of the RADIUS proxy server   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>data-triggered-ue-creation</b> <b>create-proxy-cache-entry</b> <b>proxy-server</b> <b>router-instance</b> <i>string</i> |
| Tree       | <b>router-instance</b>   |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R4  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **dhcp4**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>dhcp4</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>dhcp4</b> |
| Tree       | <b>dhcp4</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **admin-state** *keyword*

|          |  |
|----------|--|
| Synopsis | Administrative state of DHCPv4   |
| Context  | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>dhcp4</b> <b>admin-state</b> <i>keyword</i> |
| Tree     | <b>admin-state</b>   |
| Options  | enable, disable  |
| Default  | disable  |



|            |                                    |
|------------|------------------------------------|
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

**dns string**

|                |   |
|----------------|---|
| Synopsis       | DNS servers signaled in DHCP  |
| Context        | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dhcp4</a> <a href="#">dns</a> <i>string</i> |
| Tree           | <a href="#">dns</a>   |
| Max. Instances | 2   |
| Notes          | This element is ordered by the user.  |
| Introduced     | 16.0.R1   |
| Platforms      | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**l2-aware-ip-address** (*ipv4-unicast-address* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | L2-Aware NAT inside IP address   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dhcp4</a> <a href="#">l2-aware-ip-address</a> ( <i>ipv4-unicast-address</i>   <i>keyword</i> ) |
| Tree       | <a href="#">l2-aware-ip-address</a>  |
| Options    | from-pool  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**lease-time**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>lease-time</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dhcp4</a> <a href="#">lease-time</a> |
| Tree       | <a href="#">lease-time</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**active number**

|            |  |
|------------|--|
| Synopsis   | Lease time an authenticated user   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dhcp4 lease-time active number</a> |
| Tree       | <a href="#">active</a>   |
| Range      | 300 to 3600  |
| Units      | seconds  |
| Default    | 600  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**initial number**

|            |   |
|------------|---|
| Synopsis   | Lease time for migrant user (unauthenticated)   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dhcp4 lease-time initial number</a> |
| Tree       | <a href="#">initial</a>   |
| Range      | 300 to 3600   |
| Units      | seconds   |
| Default    | 600   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**nbns string**

|                |   |
|----------------|---|
| Synopsis       | NetBIOS servers signaled in DHCP  |
| Context        | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dhcp4 nbns string</a> |
| Tree           | <a href="#">nbns</a>  |
| Max. Instances | 2   |
| Notes          | This element is ordered by the user.  |
| Introduced     | 16.0.R1   |
| Platforms      | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## dhcp6

|            |   |
|------------|---|
| Synopsis   | Enter the <b>dhcp6</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dhcp6</a> |
| Tree       | <a href="#">dhcp6</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the protocol   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dhcp6</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## preferred-lifetime

|            |  |
|------------|--|
| Synopsis   | Enter the <b>preferred-lifetime</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dhcp6</a> <a href="#">preferred-lifetime</a> |
| Tree       | <a href="#">preferred-lifetime</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## active *number*

|          |   |
|----------|---|
| Synopsis | Preferred signaled lifetime after full authentication   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dhcp6</a> <a href="#">preferred-lifetime</a> <a href="#">active</a> <i>number</i> |
| Tree     | <a href="#">active</a>  |
| Range    | 300 to 3600   |
| Units    | seconds   |

|            |                                    |
|------------|------------------------------------|
| Default    | 600                                |
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **initial number**

|            |   |
|------------|---|
| Synopsis   | Signaled preferred lifetime after full authentication   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dhcp6</a> <a href="#">preferred-lifetime</a> <b>initial</b> <i>number</i> |
| Tree       | <a href="#">initial</a>   |
| Range      | 300 to 3600   |
| Units      | seconds   |
| Default    | 300   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **valid-lifetime**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>valid-lifetime</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dhcp6</a> <b>valid-lifetime</b> |
| Tree       | <a href="#">valid-lifetime</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **active number**

|            |  |
|------------|--|
| Synopsis   | Signaled valid lifetime after full authentication  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dhcp6</a> <a href="#">valid-lifetime</a> <b>active</b> <i>number</i> |
| Tree       | <a href="#">active</a>   |
| Range      | 300 to 3600  |
| Units      | seconds  |
| Default    | 600  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**initial number**

|            |   |
|------------|---|
| Synopsis   | Valid signaled lifetime UE is not fully authenticated   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>dhcp6 valid-lifetime initial</b> <i>number</i> |
| Tree       | <b>initial</b>  |
| Range      | 300 to 3600   |
| Units      | seconds   |
| Default    | 300   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**dsm**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>dsm</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>dsm</b> |
| Tree       | <b>dsm</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**accounting-policy** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | ISA Radius Policy for accounting  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>dsm accounting-policy</b> <i>reference</i> |
| Tree       | <b>accounting-policy</b>  |
| Reference  | <b>configure aaa radius isa-policy</b> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## accounting-update

|            |  |
|------------|--|
| Synopsis   | Enable the <b>accounting-update</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dsm</a> <b>accounting-update</b> |
| Tree       | <a href="#">accounting-update</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## interval *number*

|            |  |
|------------|--|
| Synopsis   | Interim accounting update messages interval  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dsm</a> <b>accounting-update</b> <b>interval</b> <i>number</i> |
| Tree       | <a href="#">interval</a>   |
| Range      | 5 to 259200  |
| Units      | minutes  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## admin-state *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of DSM   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dsm</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## application-assurance

|          |  |
|----------|--|
| Synopsis | Enter the <b>application-assurance</b> context   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dsm</a> <b>application-assurance</b> |

Tree [application-assurance](#)  
 Introduced 21.10.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **accounting-statistics** *boolean*

Synopsis Collect AA statistics  
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [dsm](#) [application-assurance](#) [accounting-statistics](#) *boolean*  
 Tree [accounting-statistics](#)  
 Default false  
 Introduced 21.10.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **profile** *reference*

Synopsis AA application profile used for portal authentication  
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [dsm](#) [application-assurance](#) [profile](#) *reference*  
 Tree [profile](#)  
 Reference **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-profile](#) *string*  
 Introduced 21.10.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **url-parameter** *string*

Synopsis AA URL parameter included for HTTP portal redirect  
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [dsm](#) [application-assurance](#) [url-parameter](#) *string*  
 Tree [url-parameter](#)  
 String Length 1 to 247  
 Introduced 22.2.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## egress

|            |  |
|------------|--|
| Synopsis   | Enter the <b>egress</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dsm</a> <a href="#">egress</a> |
| Tree       | <a href="#">egress</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## policer reference

|            |   |
|------------|---|
| Synopsis   | Policer for egress traffic  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dsm</a> <a href="#">egress</a> <a href="#">policer</a> <i>reference</i> |
| Tree       | <a href="#">policer</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt isa-policer</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## ingress

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ingress</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dsm</a> <a href="#">ingress</a> |
| Tree       | <a href="#">ingress</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## ip-filter reference

|            |  |
|------------|--|
| Synopsis   | Filter for ingress traffic   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dsm</a> <a href="#">ingress</a> <a href="#">ip-filter</a> <i>reference</i> |
| Tree       | <a href="#">ip-filter</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt isa-filter</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |



### **policer** *reference*

|            |  |
|------------|--|
| Synopsis   | Policer for ingress traffic  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dsm ingress policer</a> <i>reference</i> |
| Tree       | <a href="#">policer</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt isa-policer</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **soft-quota-exhausted-filter** *reference*

|             |   |
|-------------|---|
| Synopsis    | Filter applied when soft volume quota is reached  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dsm ingress soft-quota-exhausted-filter</a> <i>reference</i>  |
| Tree        | <a href="#">soft-quota-exhausted-filter</a>   |
| Description | This command applies a filter when a soft volume quota is reached. The filter replaces the currently applied filter (which can be preconfigured using the <b>ip-filter</b> command in the <b>configure service vprn subscriber-interface group-interface wlan-gw vlan-range dsm ingress ip-filter</b> context or be set using a RADIUS CoA message) for the UE upon quota exhaustion. If the quota is extended using a RADIUS CoA message, the filter is automatically reverted. Configuration changes apply only to new DSM UEs and not to existing UEs. |
| Reference   | <b>configure</b> <a href="#">subscriber-mgmt isa-filter</a> <i>string</i>   |
| Introduced  | 21.7.R1   |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **one-time-redirect**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>one-time-redirect</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dsm one-time-redirect</a> |
| Tree       | <a href="#">one-time-redirect</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**port number**

|            |  |
|------------|--|
| Synopsis   | Destination port of packets for HTTP redirect  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dsm one-time-redirect</a> <a href="#">port</a> <i>number</i> |
| Tree       | <a href="#">port</a>   |
| Range      | 1 to 65535   |
| Default    | 80   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**url string**

|               |   |
|---------------|---|
| Synopsis      | URL for redirected HTTP protocol packets  |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dsm one-time-redirect</a> <a href="#">url</a> <i>string</i> |
| Tree          | <a href="#">url</a>   |
| String Length | 1 to 255  |
| Introduced    | 16.0.R1   |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**volume-quota-direction keyword**

|             |   |
|-------------|---|
| Synopsis    | Volume quota direction for WLAN GW  |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dsm volume-quota-direction</a> <i>keyword</i> |
| Tree        | <a href="#">volume-quota-direction</a>  |
| Description | This command specifies the direction that volume quotas are applied. Configuration changes apply only to new DSM UEs and not to existing UEs.   |
| Options     | both, ingress, egress   |
| Default     | both  |
| Introduced  | 21.7.R1   |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**extension [[extension-range](#)] string**

|          |                                       |
|----------|---------------------------------------|
| Synopsis | Add a list entry for <b>extension</b> |
|----------|---------------------------------------|

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>extension</b> <i>string</i> |
| Tree       | <b>extension</b>   |
| Introduced | 21.7.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **[extension-range]** *string*

|             |  |
|-------------|--|
| Synopsis    | VLAN tag range used for matching   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>extension</b> <i>string</i> |
| Tree        | <b>extension</b>   |
| Description | This command configures the additional VLAN range that is used for matching. Any traffic within the extension range is considered part of the same VLAN range for purposes of intra-SSID mobility.       |
| Notes       | This element is part of a list key.  |
| Introduced  | 21.7.R1  |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **http-redirect-policy** *reference*

|            |  |
|------------|--|
| Synopsis   | Default HTTP redirect policy for portal authentication   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>http-redirect-policy</b> <i>reference</i> |
| Tree       | <b>http-redirect-policy</b>  |
| Reference  | <b>configure subscriber-mgmt</b> <b>http-redirect-policy</b> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **idle-timeout-action** *keyword*

|          |   |
|----------|---|
| Synopsis | Action to perform when the idle timeout expires   |
| Context  | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>idle-timeout-action</b> <i>keyword</i> |
| Tree     | <b>idle-timeout-action</b>  |
| Options  | remove, shcv  |
| Default  | remove  |

|            |                                    |
|------------|------------------------------------|
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

## I2-service

|            |  |
|------------|--|
| Synopsis   | Enable the <b>I2-service</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn string subscriber-interface string group-interface string wlan-gw vlan-range string I2-service</a> |
| Tree       | <a href="#">I2-service</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of Layer 2 service for VLAN range   |
| Context    | <b>configure</b> <a href="#">service vprn string subscriber-interface string group-interface string wlan-gw vlan-range string I2-service admin-state keyword</a> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## description *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">service vprn string subscriber-interface string group-interface string wlan-gw vlan-range string I2-service description string</a> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## service reference

|          |   |
|----------|---|
| Synopsis | Layer 2 service associated with the range |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>l2-service</b> <i>service</i> <i>reference</i> |
| Tree       | <a href="#">service</a>   |
| Reference  | <b>configure service vpls</b> <i>string</i>   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **nat-policy** *reference*

|            |  |
|------------|--|
| Synopsis   | NAT policy for DSM and ISA portal authentication   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>nat-policy</b> <i>reference</i> |
| Tree       | <a href="#">nat-policy</a>   |
| Reference  | <b>configure service nat nat-policy</b> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **retail-service** *string*

|               |   |
|---------------|---|
| Synopsis      | Default retail service for new UEs in this range  |
| Context       | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>retail-service</b> <i>string</i> |
| Tree          | <a href="#">retail-service</a>  |
| String Length | 1 to 64   |
| Introduced    | 16.0.R1   |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **slaac**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>slaac</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>slaac</b> |
| Tree       | <a href="#">slaac</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the protocol  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">slaac</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**preferred-lifetime**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>preferred-lifetime</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">slaac</a> <b>preferred-lifetime</b> |
| Tree       | <a href="#">preferred-lifetime</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**active** *number*

|            |   |
|------------|---|
| Synopsis   | Preferred signaled lifetime after full authentication   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">slaac</a> <b>preferred-lifetime</b> <b>active</b> <i>number</i> |
| Tree       | <a href="#">active</a>  |
| Range      | 300 to 3600   |
| Units      | seconds   |
| Default    | 600   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**initial** *number*

|          |   |
|----------|---|
| Synopsis | Signaled preferred lifetime after full authentication |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>slaac preferred-lifetime initial</b> <i>number</i> |
| Tree       | <b>initial</b>  |
| Range      | 300 to 3600   |
| Units      | seconds   |
| Default    | 300   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **valid-lifetime**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>valid-lifetime</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>slaac valid-lifetime</b> |
| Tree       | <b>valid-lifetime</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **active number**

|            |  |
|------------|--|
| Synopsis   | Signaled valid lifetime after full authentication  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>slaac valid-lifetime active</b> <i>number</i> |
| Tree       | <b>active</b>  |
| Range      | 300 to 3600  |
| Units      | seconds  |
| Default    | 600  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **initial number**

|          |   |
|----------|---|
| Synopsis | Valid signaled lifetime UE is not fully authenticated   |
| Context  | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>slaac valid-lifetime initial</b> <i>number</i> |
| Tree     | <b>initial</b>  |

|            |                                    |
|------------|------------------------------------|
| Range      | 300 to 3600                        |
| Units      | seconds                            |
| Default    | 300                                |
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

## vrgw

|            |  |
|------------|--|
| Synopsis   | Enter the <b>vrgw</b> context  |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>vrgw</b> |
| Tree       | <b>vrgw</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of vRGW   |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>vrgw</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>   |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## brg

|            |   |
|------------|---|
| Synopsis   | Enter the <b>brg</b> context  |
| Context    | <b>configure</b> <b>service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>vrgw</b> <b>brg</b> |
| Tree       | <b>brg</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |



**authenticated-brg-only** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Only allow hosts from BRGs pre-authenticated using the radius-proxy  |
| Context    | <b>configure</b> <i>service vprn string subscriber-interface string group-interface string wlan-gw vlan-range string vrgw brg authenticated-brg-only boolean</i> |
| Tree       | <a href="#">authenticated-brg-only</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**default-brg-profile** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Default BRG profile to use if the AAA server does not specify one   |
| Context    | <b>configure</b> <i>service vprn string subscriber-interface string group-interface string wlan-gw vlan-range string vrgw brg default-brg-profile reference</i> |
| Tree       | <a href="#">default-brg-profile</a>   |
| Reference  | <b>configure</b> <i>subscriber-mgmt vrgw brg-profile string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**lanext**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>lanext</b> context  |
| Context    | <b>configure</b> <i>service vprn string subscriber-interface string group-interface string wlan-gw vlan-range string vrgw lanext</i> |
| Tree       | <a href="#">lanext</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**access****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enter the <b>access</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">vrgw lanext</a> <b>access</b> |
| Tree       | <a href="#">access</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**max-mac number****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Maximum number of allowed MAC entries on access side  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">vrgw lanext</a> <b>access max-mac</b> <i>number</i> |
| Tree       | <a href="#">max-mac</a>   |
| Range      | 1 to 256  |
| Default    | 20  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**multi-access boolean****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Allow multiple access points  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">vrgw lanext</a> <b>access multi-access</b> <i>boolean</i> |
| Tree     | <a href="#">multi-access</a>  |
| Default  | false   |

|            |                                    |
|------------|------------------------------------|
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **policer** *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Policer for ingress home traffic  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">vrgw lanext</a> <a href="#">access policer</a> <i>reference</i> |
| Tree       | <a href="#">policer</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt isa-policer</a> <i>string</i>  |
| Introduced | 19.7.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of HLE  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">vrgw lanext</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **assistive-address-resolution** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | ISA assists in address resolution   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">vrgw lanext</a> <a href="#">assistive-address-resolution</a> <i>boolean</i> |
| Tree     | <a href="#">assistive-address-resolution</a>  |

|            |                                    |
|------------|------------------------------------|
| Default    | false                              |
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **bd-mac-prefix** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Prefix of the HLE BD MAC address   |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">vrgw lanext</a> <b>bd-mac-prefix</b> <i>string</i> |
| Tree          | <a href="#">bd-mac-prefix</a>  |
| String Length | 8  |
| Introduced    | 16.0.R1  |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **mac-translation** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Allow MAC address translation for HLE services  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">vrgw lanext</a> <b>mac-translation</b> <i>boolean</i> |
| Tree       | <a href="#">mac-translation</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **network**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enter the <b>network</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn string subscriber-interface string group-interface string wlan-gw vlan-range string vrgw lanext network</a> |
| Tree       | <a href="#">network</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **admin-state** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Administrative state of the HLE network   |
| Context    | <b>configure</b> <a href="#">service vprn string subscriber-interface string group-interface string wlan-gw vlan-range string vrgw lanext network admin-state keyword</a> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **max-mac** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Maximum number of allowed MAC entries on network side  |
| Context    | <b>configure</b> <a href="#">service vprn string subscriber-interface string group-interface string wlan-gw vlan-range string vrgw lanext network max-mac number</a> |
| Tree       | <a href="#">max-mac</a>  |
| Range      | 1 to 64  |
| Default    | 20   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## policer *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Policer for ingress data center traffic  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">vrgw lanext network</a> <a href="#">policer</a> <i>reference</i> |
| Tree       | <a href="#">policer</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt isa-policer</a> <i>string</i>   |
| Introduced | 19.7.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## xconnect

|            |  |
|------------|--|
| Synopsis   | Enter the <b>xconnect</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">xconnect</a> |
| Tree       | <a href="#">xconnect</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## accounting

|            |   |
|------------|---|
| Synopsis   | Enter the <b>accounting</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">xconnect</a> <a href="#">accounting</a> |
| Tree       | <a href="#">accounting</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## mobility-updates *boolean*

|          |   |
|----------|---|
| Synopsis | Accounting updates triggered by mobility  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">xconnect</a> <a href="#">accounting</a> <a href="#">mobility-updates</a> <i>boolean</i> |
| Tree     | <a href="#">mobility-updates</a>  |

|            |                                    |
|------------|------------------------------------|
| Default    | false                              |
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### policy reference



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | ISA RADIUS accounting policy for cross-connected UEs   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">xconnect</a> <a href="#">accounting</a> <a href="#">policy reference</a> |
| Tree       | <a href="#">policy</a>   |
| Reference  | <b>configure</b> <a href="#">aaa radius isa-policy</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### update-interval number

|            |   |
|------------|---|
| Synopsis   | Time between successive interim accounting updates  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">xconnect</a> <a href="#">accounting</a> <a href="#">update-interval</a> <i>number</i> |
| Tree       | <a href="#">update-interval</a>   |
| Range      | 5 to 259200   |
| Units      | minutes   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### admin-state keyword

|          |   |
|----------|---|
| Synopsis | Administrative state of the cross-connect   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">xconnect</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree     | <a href="#">admin-state</a>   |
| Options  | enable, disable   |
| Default  | disable   |

|            |                                    |
|------------|------------------------------------|
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### wlan-gw-group *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | ID of WLAN Gateway ISA group that gateway binds to  |
| Context    | <b>configure service vpn</b> <i>string subscriber-interface string group-interface string wlan-gw-wlan-gw-group reference</i> |
| Tree       | <a href="#">wlan-gw-group</a>   |
| Reference  | <b>configure isa wlan-gw-group</b> <i>number</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### wpp

|            |   |
|------------|---|
| Synopsis   | Enable the <b>wpp</b> context   |
| Context    | <b>configure service vpn</b> <i>string subscriber-interface string group-interface string wpp</i> |
| Tree       | <a href="#">wpp</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### admin-state *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of WPP   |
| Context    | <b>configure service vpn</b> <i>string subscriber-interface string group-interface string wpp admin-state keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |



**initial**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>initial</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wpp initial</b> |
| Tree       | <b>initial</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**app-profile** *reference*

|            |  |
|------------|--|
| Synopsis   | Initial application profile name   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wpp initial</b><br><b>app-profile</b> <i>reference</i> |
| Tree       | <b>app-profile</b>   |
| Reference  | <b>configure application-assurance group</b> <i>number</i> <b>partition</b> <i>number</i> <b>policy app-profile</b> <i>string</i>  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**sla-profile** *reference*

|            |  |
|------------|--|
| Synopsis   | Initial SLA profile  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wpp initial</b><br><b>sla-profile</b> <i>reference</i> |
| Tree       | <b>sla-profile</b>   |
| Reference  | <b>configure subscriber-mgmt sla-profile</b> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**sub-profile** *reference*

|            |  |
|------------|--|
| Synopsis   | Initial subscriber profile   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wpp initial</b><br><b>sub-profile</b> <i>reference</i> |
| Tree       | <b>sub-profile</b>   |
| Reference  | <b>configure subscriber-mgmt sub-profile</b> <i>string</i>   |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lease-time** *number*

Synopsis Lease time

Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wpp](#) [lease-time](#) *number*

Tree [lease-time](#)

Range 10 to 315446399

Units seconds

Default 600

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **portal**

Synopsis Enter the **portal** context

Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wpp](#) [portal](#)

Tree [portal](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **name** *string*

Synopsis Web portal server name

Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wpp](#) [portal](#) [name](#) *string*

Tree [name](#)

String Length 1 to 32

Notes The following elements are part of a choice: **portal-group** or (**name** and **router-instance**).

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**portal-group** *reference*

|            |   |
|------------|---|
| Synopsis   | WPP portal group for this interface   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wpp portal</a> <a href="#">portal-group</a> <i>reference</i> |
| Tree       | <a href="#">portal-group</a>  |
| Reference  | <b>configure</b> <a href="#">aaa wpp portal-group</a> <i>string</i>   |
| Notes      | The following elements are part of a choice: <b>portal-group</b> or ( <b>name</b> and <b>router-instance</b> ).   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**router-instance** *string*

|            |   |
|------------|---|
| Synopsis   | Virtual router instance of WPP portal for interface   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wpp portal</a> <a href="#">router-instance</a> <i>string</i> |
| Tree       | <a href="#">router-instance</a>   |
| Notes      | The following elements are part of a choice: <b>portal-group</b> or ( <b>name</b> and <b>router-instance</b> ).   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**restore-to-initial-on-disconnect** *boolean*

|            |  |
|------------|--|
| Synopsis   | Restore initial profiles after a host has disconnected   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wpp restore-to-initial-on-disconnect</a> <i>boolean</i> |
| Tree       | <a href="#">restore-to-initial-on-disconnect</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**triggered-hosts** *boolean*

|          |                                |
|----------|--------------------------------|
| Synopsis | Enable/disable triggered hosts |
|----------|--------------------------------|

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wpp triggered-hosts</b> <i>boolean</i> |
| Tree       | <a href="#">triggered-hosts</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **user-db** *reference*

|            |  |
|------------|--|
| Synopsis   | User database  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wpp user-db</b> <i>reference</i> |
| Tree       | <a href="#">user-db</a>  |
| Reference  | <b>configure subscriber-mgmt local-user-db</b> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **hold-time**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>hold-time</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>hold-time</b> |
| Tree       | <a href="#">hold-time</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **ipv4**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv4</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>hold-time</b> <b>ipv4</b> |
| Tree       | <a href="#">ipv4</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **down**

|          |                               |
|----------|-------------------------------|
| Synopsis | Enter the <b>down</b> context |
|----------|-------------------------------|

|             |  |
|-------------|--|
| Context     | <b>configure service vprn string subscriber-interface string hold-time ipv4 down</b>   |
| Tree        | <b>down</b>  |
| Description | Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the <b>init-only</b> command. |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **init-only boolean**

|             |  |
|-------------|--|
| Synopsis    | Apply delay only at interface configuration or reboot  |
| Context     | <b>configure service vprn string subscriber-interface string hold-time ipv4 down init-only boolean</b> |
| Tree        | <b>init-only</b>   |
| Description | This command applies a delay only when the IP interface is first configured or after a system reboot.  |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **seconds number**

|            |   |
|------------|---|
| Synopsis   | Down hold time for the IP interface   |
| Context    | <b>configure service vprn string subscriber-interface string hold-time ipv4 down seconds number</b> |
| Tree       | <b>seconds</b>  |
| Range      | 1 to 1200   |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **up**

|          |  |
|----------|--|
| Synopsis | Enter the <b>up</b> context  |
| Context  | <b>configure service vprn string subscriber-interface string hold-time ipv4 up</b> |
| Tree     | <b>up</b>  |

|             |   |
|-------------|---|
| Description | Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down. |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **seconds** *number*

|            |  |
|------------|--|
| Synopsis   | Up hold time for the IP interface  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">hold-time ipv4</a> <b>seconds</b> <i>number</i> |
| Tree       | <a href="#">seconds</a>  |
| Range      | 1 to 1200  |
| Units      | seconds  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **ipv6**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ipv6</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">hold-time ipv6</a> |
| Tree       | <a href="#">ipv6</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **down**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>down</b> context   |
| Context     | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">hold-time ipv6</a> <b>down</b>   |
| Tree        | <a href="#">down</a>  |
| Description | Commands in this context configure the down hold timer, which specifies the delay before activation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the <b>init-only</b> command. |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**init-only** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Apply delay only at interface configuration or reboot  |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>hold-time</b> <b>ipv6</b> <b>down</b> <b>init-only</b> <i>boolean</i> |
| Tree        | <b>init-only</b>   |
| Description | This command applies the delay only when when the IP interface is first configured or after a system reboot.   |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**seconds** *number*

|            |   |
|------------|---|
| Synopsis   | Down hold time for the IP interface   |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>hold-time</b> <b>ipv6</b> <b>down</b> <b>seconds</b> <i>number</i> |
| Tree       | <b>seconds</b>  |
| Range      | 1 to 1200   |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**up**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>up</b> context   |
| Context     | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>hold-time</b> <b>ipv6</b> <b>up</b>  |
| Tree        | <b>up</b>   |
| Description | Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down. |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**seconds** *number*

|            |  |
|------------|--|
| Synopsis   | Up hold time for the IP interface  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">hold-time ipv6 up</a> <a href="#">seconds</a> <i>number</i> |
| Tree       | <a href="#">seconds</a>  |
| Range      | 1 to 1200  |
| Units      | seconds  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**ipoe-linking**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ipoe-linking</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipoe-linking</a> |
| Tree       | <a href="#">ipoe-linking</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**gratuitous-router-advertisement** *boolean*

|            |  |
|------------|--|
| Synopsis   | Send unsolicited router advertisement after DHCP setup   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipoe-linking</a> <a href="#">gratuitous-router-advertisement</a> <i>boolean</i> |
| Tree       | <a href="#">gratuitous-router-advertisement</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**ipoe-session**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ipoe-session</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipoe-session</a> |
| Tree       | <a href="#">ipoe-session</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |



**session-limit** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum number of sessions on this group interface  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipoe-session</a> <a href="#">session-limit</a> <i>number</i> |
| Tree       | <a href="#">session-limit</a>   |
| Range      | 1 to 500000   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**ipv4**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ipv4</b> context   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> |
| Tree       | <a href="#">ipv4</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**address** [[ipv4-address](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>address</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">address</a> <i>string</i> |
| Tree       | <a href="#">address</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**[[ipv4-address](#)]** *string*

|            |   |
|------------|---|
| Synopsis   | IP address associated with the subscriber subnet  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">address</a> <i>string</i> |
| Tree       | <a href="#">address</a>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **gateway string**

|            |   |
|------------|---|
| Synopsis   | Gateway IP address within the subnet for SRRP routing   |
| Context    | <b>configure service vprn string subscriber-interface string ipv4 address string gateway string</b> |
| Tree       | <a href="#">gateway</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **holdup-time number**

|            |   |
|------------|---|
| Synopsis   | Wait time before accepting new state attribute  |
| Context    | <b>configure service vprn string subscriber-interface string ipv4 address string holdup-time number</b> |
| Tree       | <a href="#">holdup-time</a>   |
| Range      | 100 to 5000   |
| Units      | milliseconds  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **populate-host-routes boolean**

|            |   |
|------------|---|
| Synopsis   | Populate subscriber host routes in local FIB  |
| Context    | <b>configure service vprn string subscriber-interface string ipv4 address string populate-host-routes boolean</b> |
| Tree       | <a href="#">populate-host-routes</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **prefix-length number**

|          |   |
|----------|---|
| Synopsis | IPv4 address prefix length  |
| Context  | <b>configure service vprn string subscriber-interface string ipv4 address string prefix-length number</b> |
| Tree     | <a href="#">prefix-length</a>   |
| Range    | 0 to 32   |

|            |   |
|------------|---|
| Notes      | This element is mandatory.                              |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **track-srrp** *number*

|            |   |
|------------|---|
| Synopsis   | SRRP instance whose state is tracked on this IP address   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 address</a> <i>string</i> <a href="#">track-srrp number</a> |
| Tree       | <a href="#">track-srrp</a>  |
| Range      | 1 to 4294967295   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **allow-unmatching-subnets** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow subscriber hosts without a matching subnet   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 allow-unmatching-subnets boolean</a> |
| Tree       | <a href="#">allow-unmatching-subnets</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **arp-host**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>arp-host</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 arp-host</a> |
| Tree       | <a href="#">arp-host</a>   |
| Introduced | 16.0.R6  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **admin-state** *keyword*

|          |                                   |
|----------|-----------------------------------|
| Synopsis | Administrative state of ARP hosts |
|----------|-----------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 arp-host admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Introduced | 16.0.R6   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **host-limit** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum number of ARP hosts   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 arp-host host-limit</b> <i>number</i> |
| Tree       | <a href="#">host-limit</a>  |
| Range      | 1 to 524287   |
| Introduced | 16.0.R6   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **bfd**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>bfd</b> context  |
| Context     | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 bfd</b>   |
| Tree        | <a href="#">bfd</a>   |
| Description | Commands in this context configure the attributes of bidirectional forwarding detection (BFD) sessions that control the state of ESM dynamic BGP peers. |
| Introduced  | 21.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of BFD sessions   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 bfd admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **echo-receive** *number*

|            |  |
|------------|--|
| Synopsis   | Minimum echo interval over this interface  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 bfd echo-receive</b> <i>number</i> |
| Tree       | <b>echo-receive</b>  |
| Range      | 100 to 100000  |
| Units      | milliseconds   |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **multiplier** *number*

|             |   |
|-------------|---|
| Synopsis    | Number of consecutive BFD messages missed from the peer   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 bfd multiplier</b> <i>number</i>  |
| Tree        | <b>multiplier</b>   |
| Description | This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments. |
| Range       | 1 to 20   |
| Default     | 3   |
| Introduced  | 21.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **receive** *number*

|             |  |
|-------------|--|
| Synopsis    | BFD receive interval over this interface   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 bfd receive</b> <i>number</i>  |
| Tree        | <b>receive</b>   |
| Description | This command specifies the receive interval for the BFD session.<br>On the 7750 SR, this command can only be configured to a value less than 100 when the <b>type</b> command is configured to <b>cpm-np</b> . |
| Range       | 10 to 100000   |
| Units       | milliseconds   |
| Default     | 100  |
| Introduced  | 21.10.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **transmit-interval** *number*

Synopsis BFD transmit interval over this interface

Context **configure service vprn** *string* **subscriber-interface** *string* **ipv4 bfd transmit-interval** *number*

Tree **transmit-interval**

Description This command configures the transmit intervals.  
On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.

Range 10 to 100000

Units milliseconds

Default 100

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **type** *keyword*

Synopsis Local termination point for the BFD session

Context **configure service vprn** *string* **subscriber-interface** *string* **ipv4 bfd type** *keyword*

Tree **type**

Description This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity.  
The options to specify where the BFD session runs are:

- **auto** (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the **cpm-np**.
- **cpm-np** – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems.
- **fp** – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.

Options cpm-np, auto, fp

Default auto

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**default-dns** *string*

|                |  |
|----------------|--|
| Synopsis       | Default DNS server addresses   |
| Context        | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <b>default-dns</b> <i>string</i> |
| Tree           | <a href="#">default-dns</a>  |
| Max. Instances | 2  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**dhcp**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>dhcp</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <b>dhcp</b> |
| Tree       | <a href="#">dhcp</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of DHCP  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <b>dhcp</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**client-applications**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>client-applications</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <b>dhcp</b> <b>client-applications</b> |
| Tree       | <a href="#">client-applications</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **dhcp boolean**

|            |   |
|------------|---|
| Synopsis   | Enable IPoE clients to use the DHCP relay or proxy server   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp client-applications</a> <a href="#">dhcp boolean</a> |
| Tree       | <a href="#">dhcp</a>  |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ppp boolean**

|            |  |
|------------|--|
| Synopsis   | Enable PPPoE clients to use DHCP relay or proxy server   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp client-applications</a> <a href="#">ppp boolean</a> |
| Tree       | <a href="#">ppp</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **description string**

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **gi-address string**

|          |   |
|----------|---|
| Synopsis | GI address for the DHCP relay   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp gi-address</a> <i>string</i> |
| Tree     | <a href="#">gi-address</a>  |



|             |   |
|-------------|---|
| Description | <p>This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay.</p> <p>By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.</p> |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### lease-populate

|            |   |
|------------|---|
| Synopsis   | Enter the <b>lease-populate</b> context   |
| Context    | <b>configure service vprn string subscriber-interface string ipv4 dhcp lease-populate</b> |
| Tree       | <a href="#">lease-populate</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                   |

### max-leases *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of DHCPv4 leases  |
| Context    | <b>configure service vprn string subscriber-interface string ipv4 dhcp lease-populate max-leases <i>number</i></b> |
| Tree       | <a href="#">max-leases</a>   |
| Range      | 0 to 511999  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### offer-selection

|            |  |
|------------|--|
| Synopsis   | Enter the <b>offer-selection</b> context   |
| Context    | <b>configure service vprn string subscriber-interface string ipv4 dhcp offer-selection</b> |
| Tree       | <a href="#">offer-selection</a>  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                    |

**client-mac**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>client-mac</b> context   |
| Context    | <b>configure service vprn string subscriber-interface string ipv4 dhcp offer-selection client-mac</b> |
| Tree       | <a href="#">client-mac</a>  |
| Notes      | The following elements are part of a choice: <b>client-mac</b> or <b>server</b> .                     |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**discover-delay number**

|             |   |
|-------------|---|
| Synopsis    | Delay before sending DHCP Discover messages   |
| Context     | <b>configure service vprn string subscriber-interface string ipv4 dhcp offer-selection client-mac discover-delay number</b> |
| Tree        | <a href="#">discover-delay</a>  |
| Description | This command configures the time to delay sending DHCP Discover messages from the specified MAC addresses.                  |
| Range       | 1 to 100  |
| Units       | deciseconds   |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**mac-address keyword**

|             |   |
|-------------|---|
| Synopsis    | Designated client MAC addresses for Offer selection   |
| Context     | <b>configure service vprn string subscriber-interface string ipv4 dhcp offer-selection client-mac mac-address keyword</b> |
| Tree        | <a href="#">mac-address</a>   |
| Description | This command specifies the client MAC addresses for which the Discover delay applies.                                     |
| Options     | odd, even   |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**discover-delay number**

|          |   |
|----------|---|
| Synopsis | Delay before sending DHCP Discover messages |
|----------|---|

|             |  |
|-------------|--|
| Context     | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 dhcp offer-selection discover-delay</b> <i>number</i>  |
| Tree        | <b>discover-delay</b>  |
| Description | This command configures the time to delay sending DHCP Discover messages. The delay is applied to all DHCP Discover messages for which no per DHCP server or per client MAC delay is configured. |
| Range       | 1 to 100   |
| Units       | deciseconds  |
| Introduced  | 20.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **server** [**ipv4-address**] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>server</b> list instance   |
| Context        | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 dhcp offer-selection server</b> <i>string</i> |
| Tree           | <b>server</b>   |
| Max. Instances | 8   |
| Notes          | The following elements are part of a choice: <b>client-mac</b> or <b>server</b> .   |
| Introduced     | 20.10.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **[ipv4-address]** *string*

|            |   |
|------------|---|
| Synopsis   | IP address of the DHCP server   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 dhcp offer-selection server</b> <i>string</i> |
| Tree       | <b>server</b>   |
| Notes      | This element is part of a list key.   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **discover-delay** *number*

|          |   |
|----------|---|
| Synopsis | Delay before sending DHCP Discover messages |
|----------|---|

|             |   |
|-------------|---|
| Context     | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 dhcp offer-selection server</b> <i>string</i> <b>discover-delay</b> <i>number</i> |
| Tree        | <a href="#">discover-delay</a>  |
| Description | This command configures the time to delay DHCP Discover messages sent to the server.  |
| Range       | 1 to 100  |
| Units       | deciseconds   |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## option-82

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>option-82</b> context  |
| Context     | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 dhcp option-82</b>                                      |
| Tree        | <a href="#">option-82</a>   |
| Description | Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet. |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## vendor-specific-option

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>vendor-specific-option</b> context   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 dhcp option-82 vendor-specific-option</b> |
| Tree        | <a href="#">vendor-specific-option</a>  |
| Description | Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## client-mac-address *boolean*

|          |   |
|----------|---|
| Synopsis | Send the MAC address in the VSO   |
| Context  | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 dhcp option-82 vendor-specific-option client-mac-address</b> <i>boolean</i> |
| Tree     | <a href="#">client-mac-address</a>  |

|            |   |
|------------|---|
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

**sap-id** *boolean*

|            |  |
|------------|--|
| Synopsis   | Send SAP ID in the sub-option of the DHCP relay packet   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82 vendor-specific-option</a> <b>sap-id</b> <i>boolean</i> |
| Tree       | <a href="#">sap-id</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**service-id** *boolean*

|            |  |
|------------|--|
| Synopsis   | Send the service ID in the Vendor Specific Option  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82 vendor-specific-option</a> <b>service-id</b> <i>boolean</i> |
| Tree       | <a href="#">service-id</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**string** *string*

|               |   |
|---------------|---|
| Synopsis      | User-defined ASCII string for the VSO   |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82 vendor-specific-option</a> <b>string</b> <i>string</i> |
| Tree          | <a href="#">string</a>  |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**system-id** *boolean*

|            |  |
|------------|--|
| Synopsis   | Send the system ID in the VSO  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82 vendor-specific-option</a> <a href="#">system-id</a> <i>boolean</i> |
| Tree       | <a href="#">system-id</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**proxy-server**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>proxy-server</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp proxy-server</a> |
| Tree       | <a href="#">proxy-server</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the DHCP proxy server  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp proxy-server admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**emulated-server** *string*

|            |   |
|------------|---|
| Synopsis   | IP address used as DHCP server address in SAP context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp proxy-server emulated-server</a> <i>string</i> |
| Tree       | <a href="#">emulated-server</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## lease-time

|            |  |
|------------|--|
| Synopsis   | Enter the <b>lease-time</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">proxy-server</a> <a href="#">lease-time</a> |
| Tree       | <a href="#">lease-time</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## radius-override *boolean*

|            |   |
|------------|---|
| Synopsis   | Use lease time information provided by RADIUS server  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">proxy-server</a> <a href="#">lease-time</a> <a href="#">radius-override</a> <i>boolean</i> |
| Tree       | <a href="#">radius-override</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## value *number*

|            |  |
|------------|--|
| Synopsis   | DHCP lease time  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">proxy-server</a> <a href="#">lease-time</a> <a href="#">value</a> <i>number</i> |
| Tree       | <a href="#">value</a>  |
| Range      | 300 to 315446399   |
| Units      | seconds  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## python-policy *reference*

|          |  |
|----------|--|
| Synopsis | Python policy  |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">python-policy</a> <a href="#">reference</a> |
| Tree     | <a href="#">python-policy</a>  |

|            |   |
|------------|---|
| Reference  | <b>configure</b> <a href="#">python python-policy</a> <i>string</i> |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR             |

## relay-proxy

|            |  |
|------------|--|
| Synopsis   | Enable the <b>relay-proxy</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp relay-proxy</a> |
| Tree       | <a href="#">relay-proxy</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## release-update-src-ip *boolean*

|            |   |
|------------|---|
| Synopsis   | Update the source IP address of a DHCP RELEASE message  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp relay-proxy release-update-src-ip</a> <i>boolean</i> |
| Tree       | <a href="#">release-update-src-ip</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## siaddr-override *string*

|            |  |
|------------|--|
| Synopsis   | DHCP server IP address for address hiding function   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp relay-proxy siaddr-override</a> <i>string</i> |
| Tree       | <a href="#">siaddr-override</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## release-include-gi-address *boolean*

|          |  |
|----------|--|
| Synopsis | Include the GI address in DHCP relay messages  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp release-include-gi-address</a> <i>boolean</i> |



|            |   |
|------------|---|
| Tree       | <a href="#">release-include-gi-address</a>              |
| Default    | false   |
| Introduced | 21.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

**server string**

|                |  |
|----------------|--|
| Synopsis       | DHCP server IP addresses   |
| Context        | <b>configure</b> <a href="#">service vprn string subscriber-interface string ipv4 dhcp server string</a> |
| Tree           | <a href="#">server</a>   |
| Max. Instances | 8  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**src-ip-addr keyword**

|            |  |
|------------|--|
| Synopsis   | Type of source address to use for DHCP relay   |
| Context    | <b>configure</b> <a href="#">service vprn string subscriber-interface string ipv4 dhcp src-ip-addr keyword</a> |
| Tree       | <a href="#">src-ip-addr</a>  |
| Options    | auto, gi-address   |
| Default    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**virtual-subnet boolean**

|            |   |
|------------|---|
| Synopsis   | Enable a virtual subnet for DHCPv4 hosts  |
| Context    | <b>configure</b> <a href="#">service vprn string subscriber-interface string ipv4 dhcp virtual-subnet boolean</a> |
| Tree       | <a href="#">virtual-subnet</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**export-host-routes** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow export of subscriber management host routes   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">export-host-routes</a> <i>boolean</i> |
| Tree       | <a href="#">export-host-routes</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**unnumbered**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>unnumbered</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">unnumbered</a> |
| Tree       | <a href="#">unnumbered</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**ip-address** *string*

|            |   |
|------------|---|
| Synopsis   | IP address for the subscriber interface   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">unnumbered</a> <a href="#">ip-address</a> <i>string</i> |
| Tree       | <a href="#">ip-address</a>  |
| Notes      | The following elements are part of a choice: <b>ip-address</b> or <b>ip-int-name</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**ip-int-name** *string*

|               |  |
|---------------|--|
| Synopsis      | Interface name from which an IPv4 address is borrowed  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">unnumbered</a> <a href="#">ip-int-name</a> <i>string</i> |
| Tree          | <a href="#">ip-int-name</a>  |
| String Length | 1 to 32  |
| Notes         | The following elements are part of a choice: <b>ip-address</b> or <b>ip-int-name</b> .   |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## ipv6

|            |  |
|------------|--|
| Synopsis   | Enable the <b>ipv6</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <b>ipv6</b> |
| Tree       | <a href="#">ipv6</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## address [[ipv6-address](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>address</b> list instance   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <b>address</b> <i>string</i> |
| Tree       | <a href="#">address</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## [[ipv6-address](#)] *string*

|            |  |
|------------|--|
| Synopsis   | IPv6 address for the subscriber interface  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <b>address</b> <i>string</i> |
| Tree       | <a href="#">address</a>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## host-type *keyword*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Host type for subscriber interface prefixes |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 address</b> <i>string</i> <b>host-type</b> <i>keyword</i> |
| Tree       | <a href="#">host-type</a>   |
| Options    | pd, wan, pd-wan   |
| Default    | pd  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **prefix-length** *number*

|            |  |
|------------|--|
| Synopsis   | IPv6 address prefix length   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 address</b> <i>string</i> <b>prefix-length</b> <i>number</i> |
| Tree       | <a href="#">prefix-length</a>  |
| Range      | 0 to 128   |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **allow-multiple-wan-addresses** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow multiple WAN addresses  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 allow-multiple-wan-addresses</b> <i>boolean</i> |
| Tree       | <a href="#">allow-multiple-wan-addresses</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **allow-unmatching-prefixes** *boolean*

|          |  |
|----------|--|
| Synopsis | Allow subscriber hosts without a matching prefix   |
| Context  | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 allow-unmatching-prefixes</b> <i>boolean</i> |
| Tree     | <a href="#">allow-unmatching-prefixes</a>  |
| Default  | false  |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## **bfd**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>bfd</b> context  |
| Context     | <b>configure service vprn string subscriber-interface string ipv6 bfd</b>   |
| Tree        | <b>bfd</b>  |
| Description | Commands in this context configure the attributes of bidirectional forwarding detection (BFD) sessions that control the state of ESM dynamic BGP peers. |
| Introduced  | 21.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## **admin-state keyword**

|            |   |
|------------|---|
| Synopsis   | Administrative state of BFD sessions  |
| Context    | <b>configure service vprn string subscriber-interface string ipv6 bfd admin-state keyword</b> |
| Tree       | <b>admin-state</b>  |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                       |

## **echo-receive number**

|            |   |
|------------|---|
| Synopsis   | Minimum echo interval over this interface   |
| Context    | <b>configure service vprn string subscriber-interface string ipv6 bfd echo-receive number</b> |
| Tree       | <b>echo-receive</b>   |
| Range      | 100 to 100000   |
| Units      | milliseconds  |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                       |

**multiplier number**

|             |   |
|-------------|---|
| Synopsis    | Number of consecutive BFD messages missed from the peer   |
| Context     | <b>configure service vprn</b> <i>string subscriber-interface string ipv6 bfd multiplier number</i>  |
| Tree        | <b>multiplier</b>   |
| Description | This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments. |
| Range       | 1 to 20   |
| Default     | 3   |
| Introduced  | 21.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**receive number**

|             |  |
|-------------|--|
| Synopsis    | BFD receive interval over this interface   |
| Context     | <b>configure service vprn</b> <i>string subscriber-interface string ipv6 bfd receive number</i>  |
| Tree        | <b>receive</b>   |
| Description | This command specifies the receive interval for the BFD session.<br>On the 7750 SR, this command can only be configured to a value less than 100 when the <b>type</b> command is configured to <b>cpm-np</b> . |
| Range       | 10 to 100000   |
| Units       | milliseconds   |
| Default     | 100  |
| Introduced  | 21.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**transmit-interval number**

|             |   |
|-------------|---|
| Synopsis    | BFD transmit interval over this interface   |
| Context     | <b>configure service vprn</b> <i>string subscriber-interface string ipv6 bfd transmit-interval number</i>   |
| Tree        | <b>transmit-interval</b>  |
| Description | This command configures the transmit intervals.<br>On the 7750 SR, this command can only be configured to a value less than 100 when the <b>type</b> command is configured to <b>cpm-np</b> . |
| Range       | 10 to 100000  |

|            |   |
|------------|---|
| Units      | milliseconds  |
| Default    | 100   |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **type** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Local termination point for the BFD session   |
| Context     | <b>configure</b> <b>service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 bfd type</b> <i>keyword</i>  |
| Tree        | <b>type</b>   |
| Description | This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity.<br>The options to specify where the BFD session runs are: <ul style="list-style-type: none"> <li>• <b>auto</b> (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the <b>cpm-np</b>.</li> <li>• <b>cpm-np</b> – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems.</li> <li>• <b>fp</b> – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.</li> </ul> |
| Options     | cpm-np, auto, fp  |
| Default     | auto  |
| Introduced  | 21.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s  |

### **default-dns** *string*

|                |  |
|----------------|--|
| Synopsis       | Default DNS server addresses   |
| Context        | <b>configure</b> <b>service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 default-dns</b> <i>string</i> |
| Tree           | <b>default-dns</b>   |
| Max. Instances | 2  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**delegated-prefix-length** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | IPv6 delegated prefix length   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 delegated-prefix-length</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">delegated-prefix-length</a>  |
| Range      | 48 to 64   |
| Options    | variable   |
| Default    | 64   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**dhcp6**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>dhcp6</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6</a> |
| Tree       | <a href="#">dhcp6</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**override-slaac** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow WAN address offered by DHCP to overwrite the WAN address acquired from SLAAC  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 override-slaac</a> <i>boolean</i> |
| Tree       | <a href="#">override-slaac</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**pd-managed-route**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>pd-managed-route</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 pd-managed-route</a> |
| Tree       | <a href="#">pd-managed-route</a>   |
| Introduced | 16.0.R1  |



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **next-hop** *keyword*

Synopsis Next hop type

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [ipv6 dhcp6 pd-managed-route](#) [next-hop](#) *keyword*

Tree [next-hop](#)

Options ipv4, ipv6

Default ipv6

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **proxy-server**

Synopsis Enter the **proxy-server** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [ipv6 dhcp6 proxy-server](#)

Tree [proxy-server](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the DHCPv6 proxy server

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [ipv6 dhcp6 proxy-server admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **client-applications**

Synopsis Enter the **client-applications** context

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 dhcp6 proxy-server client-applications</b> |
| Tree       | <b>client-applications</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **dhcp boolean**

|            |   |
|------------|---|
| Synopsis   | Enable IPoE clients to use DHCP relay or proxy server   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 dhcp6 proxy-server client-applications dhcp boolean</b> |
| Tree       | <b>dhcp</b>   |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ppp boolean**

|            |  |
|------------|--|
| Synopsis   | Allow PPPoE clients to use DHCP relay functionality  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 dhcp6 proxy-server client-applications ppp boolean</b> |
| Tree       | <b>ppp</b>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **preferred-lifetime** (*number* | *keyword*)

|          |  |
|----------|--|
| Synopsis | Time for prefix to remain preferred on this interface  |
| Context  | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 dhcp6 proxy-server preferred-lifetime</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <b>preferred-lifetime</b>  |
| Range    | 300 to 4294967294  |
| Units    | seconds  |
| Options  | infinite   |
| Default  | 3600   |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **rebind-timer** *number*

|            |  |
|------------|--|
| Synopsis   | Rebind timer (T2) for this interface   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">proxy-server</a> <b>rebind-timer</b> <i>number</i> |
| Tree       | <a href="#">rebind-timer</a>   |
| Range      | 0 to 1209600   |
| Units      | seconds  |
| Default    | 2880   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **renew-timer** *number*

|            |   |
|------------|---|
| Synopsis   | Renew timer (T1)  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">proxy-server</a> <b>renew-timer</b> <i>number</i> |
| Tree       | <a href="#">renew-timer</a>   |
| Range      | 0 to 604800   |
| Units      | seconds   |
| Default    | 1800  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **server-id**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>server-id</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">proxy-server</a> <b>server-id</b> |
| Tree       | <a href="#">server-id</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **duid-en-ascii** *string*

|               |   |
|---------------|---|
| Synopsis      | Vendor-assigned ID based on Enterprise Number (DUID-EN)   |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">proxy-server</a> <a href="#">server-id</a> <b>duid-en-ascii</b> <i>string</i> |
| Tree          | <a href="#">duid-en-ascii</a>   |
| String Length | 1 to 58   |
| Notes         | The following elements are part of a choice: <b>duid-en-ascii</b> , <b>duid-en-hex</b> , or <b>duid-ll</b> .  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **duid-en-hex** *string*

|               |   |
|---------------|---|
| Synopsis      | DUID system ID in hexadecimal format  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">proxy-server</a> <a href="#">server-id</a> <b>duid-en-hex</b> <i>string</i> |
| Tree          | <a href="#">duid-en-hex</a>   |
| String Length | 1 to 118  |
| Notes         | The following elements are part of a choice: <b>duid-en-ascii</b> , <b>duid-en-hex</b> , or <b>duid-ll</b> .  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **duid-ll**

|            |   |
|------------|---|
| Synopsis   | Use link-layer address (DUID-LL) as DUID  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">proxy-server</a> <a href="#">server-id</a> <b>duid-ll</b> |
| Tree       | <a href="#">duid-ll</a>   |
| Notes      | The following elements are part of a choice: <b>duid-en-ascii</b> , <b>duid-en-hex</b> , or <b>duid-ll</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **valid-lifetime** (*number* | *keyword*)

|          |   |
|----------|---|
| Synopsis | Time for prefix to remain valid on this interface |
|----------|---|

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 dhcp6 proxy-server valid-lifetime</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">valid-lifetime</a>   |
| Range      | 300 to 4294967294  |
| Units      | seconds  |
| Options    | infinite   |
| Default    | 86400  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **python-policy** *reference*

|            |  |
|------------|--|
| Synopsis   | Python policy  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 dhcp6 python-policy</b> <i>reference</i> |
| Tree       | <a href="#">python-policy</a>  |
| Reference  | <b>configure python</b> <a href="#">python-policy</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **relay**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>relay</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 dhcp6 relay</b> |
| Tree       | <a href="#">relay</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **admin-state** *keyword*

|          |  |
|----------|--|
| Synopsis | Administrative state of DHCPv6 Relay   |
| Context  | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 dhcp6 relay admin-state</b> <i>keyword</i> |
| Tree     | <a href="#">admin-state</a>  |
| Options  | enable, disable  |
| Default  | disable  |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### advertise-selection

|            |   |
|------------|---|
| Synopsis   | Enter the <b>advertise-selection</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <a href="#">advertise-selection</a> |
| Tree       | <a href="#">advertise-selection</a>   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### client-mac

|            |  |
|------------|--|
| Synopsis   | Enter the <b>client-mac</b> context  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <a href="#">advertise-selection</a> <a href="#">client-mac</a> |
| Tree       | <a href="#">client-mac</a>   |
| Notes      | The following elements are part of a choice: <b>client-mac</b> or <b>server</b> .  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### mac-address *keyword*

|            |   |
|------------|---|
| Synopsis   | Designated client MAC addresses for Advertise selection   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <a href="#">advertise-selection</a> <a href="#">client-mac</a> <a href="#">mac-address</a> <i>keyword</i> |
| Tree       | <a href="#">mac-address</a>   |
| Options    | odd, even   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### preference-option

|          |  |
|----------|--|
| Synopsis | Enter the <b>preference-option</b> context |
|----------|--|

|             |  |
|-------------|--|
| Context     | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 dhcp6 relay advertise-selection client-mac preference-option</b> |
| Tree        | <a href="#">preference-option</a>  |
| Description | Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message.  |
| Introduced  | 20.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **value** *number*

|            |  |
|------------|--|
| Synopsis   | Preference option value for DHCPv6 Advertise messages  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 dhcp6 relay advertise-selection client-mac preference-option value</b> <i>number</i> |
| Tree       | <a href="#">value</a>  |
| Range      | 0 to 255   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **solicit-delay** *number*

|             |  |
|-------------|--|
| Synopsis    | Delay before sending DHCPv6 Solicit messages   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 dhcp6 relay advertise-selection client-mac solicit-delay</b> <i>number</i> |
| Tree        | <a href="#">solicit-delay</a>  |
| Description | This command configures the time to delay DHCPv6 Solicit messages sent from the designated client MAC addresses.   |
| Range       | 1 to 100   |
| Units       | deciseconds  |
| Introduced  | 20.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **preference-option**

|          |   |
|----------|---|
| Synopsis | Enter the <b>preference-option</b> context  |
| Context  | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 dhcp6 relay advertise-selection preference-option</b> |
| Tree     | <a href="#">preference-option</a>   |

|             |   |
|-------------|---|
| Description | Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message. |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**value number**

|            |   |
|------------|---|
| Synopsis   | Preference option value for DHCPv6 Advertise messages   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay advertise-selection preference-option value</a> <i>number</i> |
| Tree       | <a href="#">value</a>   |
| Range      | 0 to 255  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**server [ipv6-address] string**

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>server</b> list instance  |
| Context        | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay advertise-selection server</a> <i>string</i> |
| Tree           | <a href="#">server</a>   |
| Max. Instances | 8  |
| Notes          | The following elements are part of a choice: <b>client-mac</b> or <b>server</b> .  |
| Introduced     | 20.10.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**[ipv6-address] string**

|            |  |
|------------|--|
| Synopsis   | IP address of the DHCPv6 server  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay advertise-selection server</a> <i>string</i> |
| Tree       | <a href="#">server</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |



## preference-option

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>preference-option</b> context  |
| Context     | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 dhcp6 relay advertise-selection server</b> <i>string</i> <b>preference-option</b> |
| Tree        | <b>preference-option</b>  |
| Description | Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message.   |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## value *number*

|            |   |
|------------|---|
| Synopsis   | Preference option value for DHCPv6 Advertise messages   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 dhcp6 relay advertise-selection server</b> <i>string</i> <b>preference-option value</b> <i>number</i> |
| Tree       | <b>value</b>  |
| Range      | 0 to 255  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## solicit-delay *number*

|             |   |
|-------------|---|
| Synopsis    | Delay before sending DHCPv6 Solicit messages  |
| Context     | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 dhcp6 relay advertise-selection server</b> <i>string</i> <b>solicit-delay</b> <i>number</i> |
| Tree        | <b>solicit-delay</b>  |
| Description | This command configures the time to delay DHCPv6 Solicit messages sent to the server.   |
| Range       | 1 to 100  |
| Units       | deciseconds   |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**solicit-delay** *number*

|             |  |
|-------------|--|
| Synopsis    | Delay before sending DHCPv6 Solicit messages   |
| Context     | <b>configure</b> <a href="#">service vprn string subscriber-interface string ipv6 dhcp6 relay advertise-selection solicit-delay number</a>   |
| Tree        | <a href="#">solicit-delay</a>  |
| Description | This command configures the time to delay DHCPv6 Solicit messages. The delay is applied to DHCPv6 Solicit messages for which no overriding value is configured in the <b>server</b> instance or the <b>client-mac</b> context. |
| Range       | 1 to 100   |
| Units       | deciseconds  |
| Introduced  | 20.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**client-applications**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>client-applications</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn string subscriber-interface string ipv6 dhcp6 relay client-applications</a> |
| Tree       | <a href="#">client-applications</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**dhcp** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable IPoE clients to use DHCP relay or proxy server  |
| Context    | <b>configure</b> <a href="#">service vprn string subscriber-interface string ipv6 dhcp6 relay client-applications dhcp boolean</a> |
| Tree       | <a href="#">dhcp</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**ppp** *boolean*

|          |   |
|----------|---|
| Synopsis | Allow PPPoE clients to use DHCP relay functionality   |
| Context  | <b>configure</b> <a href="#">service vprn string subscriber-interface string ipv6 dhcp6 relay client-applications ppp boolean</a> |

|            |   |
|------------|---|
| Tree       | <a href="#">ppp</a>                                     |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay</a> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **lease-split**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>lease-split</b> context  |
| Context     | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay</a> <a href="#">lease-split</a>   |
| Tree        | <a href="#">lease-split</a>   |
| Description | <p>Commands in this context configure DHCPv6 lease split.</p> <p>DHCPv6 lease split is active when administratively enabled and for all IA_NA and IA_PD options in the transaction, the configured lease split valid lifetime (short lease time) is less than or equal to one of the following:</p> <ul style="list-style-type: none"> <li>• the renew time T1 committed by the server (long renew time)</li> <li>• half of the preferred lifetime committed by the server when T1 committed by the server equals zero</li> </ul> |
| Introduced  | 21.2.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **admin-state** *keyword*

|          |  |
|----------|--|
| Synopsis | Administrative state of DHCPv6 lease split   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay</a> <a href="#">lease-split</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree     | <a href="#">admin-state</a>  |
| Options  | enable, disable  |

|            |   |
|------------|---|
| Default    | disable   |
| Introduced | 21.2.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

**valid-lifetime** *number*

|            |  |
|------------|--|
| Synopsis   | DHCPv6 lease split valid lifetime (short lease time)   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay lease-split</a> <a href="#">valid-lifetime</a> <i>number</i> |
| Tree       | <a href="#">valid-lifetime</a>   |
| Range      | 300 to 315446399   |
| Units      | seconds  |
| Default    | 3600   |
| Introduced | 21.2.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**link-address** *string*

|            |  |
|------------|--|
| Synopsis   | Link address for the DHCPv6 relay messages   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay link-address</a> <i>string</i> |
| Tree       | <a href="#">link-address</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**server** *string*

|                |  |
|----------------|--|
| Synopsis       | DHCP6 server(s) to which the DHCP6 requests are forwarded  |
| Context        | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay server</a> <i>string</i> |
| Tree           | <a href="#">server</a>   |
| Max. Instances | 8  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### source-address *string*

|            |  |
|------------|--|
| Synopsis   | Source IPv6 address for the DHCPv6 relay messages  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay source-address</a> <i>string</i> |
| Tree       | <a href="#">source-address</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### ipoe-bridged-mode *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable IPv6 IPoE bridged mode  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 ipoe-bridged-mode</a> <i>boolean</i> |
| Tree       | <a href="#">ipoe-bridged-mode</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### link-local-address

|            |  |
|------------|--|
| Synopsis   | Enter the <b>link-local-address</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 link-local-address</a> |
| Tree       | <a href="#">link-local-address</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### address *string*

|            |   |
|------------|---|
| Synopsis   | IPv6 link local address   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 link-local-address</a> <i>address</i> <i>string</i> |
| Tree       | <a href="#">address</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**prefix** [ipv6-prefix] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>prefix</b> list instance  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 prefix</a> <i>string</i> |
| Tree       | <a href="#">prefix</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**[ipv6-prefix]** *string*

|            |  |
|------------|--|
| Synopsis   | IPv6 address for a router interface  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 prefix</a> <i>string</i> |
| Tree       | <a href="#">prefix</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**holdup-time** *number*

|            |   |
|------------|---|
| Synopsis   | Time to wait before route accepts new state attribute   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 prefix</a> <i>string</i> <b>holdup-time</b> <i>number</i> |
| Tree       | <a href="#">holdup-time</a>   |
| Range      | 100 to 5000   |
| Units      | milliseconds  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**host-type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Host type for subscriber interface prefixes |
|----------|---|

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 prefix</b> <i>string</i> <b>host-type</b> <i>keyword</i> |
| Tree       | <a href="#">host-type</a>  |
| Options    | pd, wan, pd-wan  |
| Default    | pd   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **track-srrp** *number*

|            |  |
|------------|--|
| Synopsis   | SRRP instance whose state is tracked on this IP address  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 prefix</b> <i>string</i> <b>track-srrp</b> <i>number</i> |
| Tree       | <a href="#">track-srrp</a>   |
| Range      | 1 to 4294967295  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **router-advertisements**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>router-advertisements</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> |
| Tree       | <a href="#">router-advertisements</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of router advertisements  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**force-mcast** *keyword*

|            |   |
|------------|---|
| Synopsis   | Protocol with forced multicast  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisements</a> <b>force-mcast</b> <i>keyword</i> |
| Tree       | <a href="#">force-mcast</a>   |
| Options    | ip, ip-mac  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**max-advertisement-interval** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum advertisement interval  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisements</a> <b>max-advertisement-interval</b> <i>number</i> |
| Tree       | <a href="#">max-advertisement-interval</a>  |
| Range      | 900 to 1800   |
| Units      | seconds   |
| Default    | 1800  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**min-advertisement-interval** *number*

|            |   |
|------------|---|
| Synopsis   | Minimum advertisement interval  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisements</a> <b>min-advertisement-interval</b> <i>number</i> |
| Tree       | <a href="#">min-advertisement-interval</a>  |
| Range      | 900 to 1350   |
| Units      | seconds   |
| Default    | 900   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |



## options

|            |   |
|------------|---|
| Synopsis   | Enter the <b>options</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 router-advertisements options</b> |
| Tree       | <b>options</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## current-hop-limit *number*

|            |   |
|------------|---|
| Synopsis   | Hop limit to be advertised  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 router-advertisements options current-hop-limit</b> <i>number</i> |
| Tree       | <b>current-hop-limit</b>  |
| Range      | 0 to 255  |
| Default    | 64  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## dns

|            |   |
|------------|---|
| Synopsis   | Enter the <b>dns</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 router-advertisements options dns</b> |
| Tree       | <b>dns</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## include-rdnss *boolean*

|            |  |
|------------|--|
| Synopsis   | Include the RDNSS server option 25   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 router-advertisements options dns include-rdnss</b> <i>boolean</i> |
| Tree       | <b>include-rdnss</b>   |
| Default    | false  |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **rdnss-lifetime** (*number* | *keyword*)

Synopsis Maximum time for the RDNSS address to remain valid

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [ipv6](#) [router-advertisements](#) [options dns rdnss-lifetime](#) (*number* | *keyword*)

Tree [rdnss-lifetime](#)

Range 900 to 3600

Units seconds

Options infinite

Default 3600

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **managed-configuration** *boolean*

Synopsis Managed address configuration flag

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [ipv6](#) [router-advertisements](#) [options managed-configuration](#) *boolean*

Tree [managed-configuration](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mtu** (*number* | *keyword*)

Synopsis Advertised MTU value

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [ipv6](#) [router-advertisements](#) [options mtu](#) (*number* | *keyword*)

Tree [mtu](#)

Range 1280 to 9212

Units bytes

Options not-included

Default not-included

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **other-stateful-configuration** *boolean*

Synopsis Other stateful configuration flag

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [ipv6](#) [router-advertisements](#) [options other-stateful-configuration](#) *boolean*

Tree [other-stateful-configuration](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **reachable-time** *number*

Synopsis Reachable time for advertisements

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [ipv6](#) [router-advertisements](#) [options reachable-time](#) *number*

Tree [reachable-time](#)

Range 0 to 3600000

Units milliseconds

Default 0

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **retransmit-timer** *number*

Synopsis Retransmit time in router advertisements from interface

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [ipv6](#) [router-advertisements](#) [options retransmit-timer](#) *number*

Tree [retransmit-timer](#)

Range 0 to 1800000

Units seconds

Default 0

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**router-lifetime** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Router lifetime  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisements</a> <a href="#">options router-lifetime</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">router-lifetime</a>  |
| Range      | 2700 to 9000   |
| Units      | seconds  |
| Options    | no-default-router  |
| Default    | 4500   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**prefix-options**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>prefix-options</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisements</a> <a href="#">prefix-options</a> |
| Tree       | <a href="#">prefix-options</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**autonomous** *boolean*

|            |  |
|------------|--|
| Synopsis   | Value of the autonomous flag   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisements</a> <a href="#">prefix-options</a> <a href="#">autonomous</a> <i>boolean</i> |
| Tree       | <a href="#">autonomous</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**on-link** *boolean*

|          |   |
|----------|---|
| Synopsis | Assign the prefix to an interface on the specified link |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 router-advertisements</b><br><b>prefix-options on-link</b> <i>boolean</i> |
| Tree       | <b>on-link</b>  |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **preferred-lifetime** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Time for a prefix to remain preferred  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 router-advertisements</b><br><b>prefix-options preferred-lifetime</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <b>preferred-lifetime</b>  |
| Range      | 0 to 4294967294  |
| Units      | seconds  |
| Options    | infinite   |
| Default    | 3600   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **valid-lifetime** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Time for a prefix to remain valid  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 router-advertisements</b><br><b>prefix-options valid-lifetime</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <b>valid-lifetime</b>  |
| Range      | 0 to 4294967294  |
| Units      | seconds  |
| Options    | infinite   |
| Default    | 86400  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **router-solicit**

|          |   |
|----------|---|
| Synopsis | Enter the <b>router-solicit</b> context |
|----------|---|

|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 router-solicit</b> |
| Tree       | <a href="#">router-solicit</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **inactivity-timer** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Time before an inactive host is removed  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 router-solicit inactivity-timer</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">inactivity-timer</a>   |
| Range      | 1 to 31536000  |
| Units      | seconds  |
| Options    | infinite   |
| Default    | 300  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **local-address-assignment**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>local-address-assignment</b> context   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>local-address-assignment</b> |
| Tree       | <a href="#">local-address-assignment</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of Local Address Assignment   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>local-address-assignment admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv4

Synopsis Enter the **ipv4** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [local-address-assignment](#) [ipv4](#)

Tree [ipv4](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## client-applications

Synopsis Enter the **client-applications** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [local-address-assignment](#) [ipv4](#)  
[client-applications](#)

Tree [client-applications](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ppp *boolean*

Synopsis Request local addresses for PPP IPCP hosts

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [local-address-assignment](#) [ipv4](#)  
[client-applications](#) [ppp](#) *boolean*

Tree [ppp](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## default-pool *string*

Synopsis Default pools

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [local-address-assignment](#) [ipv4](#)  
[default-pool](#) *string*

Tree [default-pool](#)

String Length 1 to 32

|                |   |
|----------------|---|
| Max. Instances | 2   |
| Notes          | This element is ordered by the user.                    |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **server reference**

|            |   |
|------------|---|
| Synopsis   | Local DHCPv4 server for local pools management  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">local-address-assignment ipv4 server reference</a> |
| Tree       | <a href="#">server</a>  |
| Reference  | <b>configure</b> <a href="#">service vprn string</a> <a href="#">dhcp-server dhcpv4 string</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ipv6**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv6</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">local-address-assignment ipv6</a> |
| Tree       | <a href="#">ipv6</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **client-applications**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>client-applications</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">local-address-assignment ipv6 client-applications</a> |
| Tree       | <a href="#">client-applications</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **ipoe-slaac boolean**

|          |  |
|----------|--|
| Synopsis | Request local addresses for IPoE SLAAC hosts |
|----------|--|



|            |  |
|------------|--|
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>local-address-assignment ipv6 client-applications ipoe-slaac</b> <i>boolean</i> |
| Tree       | <a href="#">ipoe-slaac</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **ipoe-wan** *boolean*

|            |  |
|------------|--|
| Synopsis   | Request local addresses for IPoE IA NA hosts   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>local-address-assignment ipv6 client-applications ipoe-wan</b> <i>boolean</i> |
| Tree       | <a href="#">ipoe-wan</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **ppp-slaac** *boolean*

|            |   |
|------------|---|
| Synopsis   | Request local addresses for PPP SLAAC hosts   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>local-address-assignment ipv6 client-applications ppp-slaac</b> <i>boolean</i> |
| Tree       | <a href="#">ppp-slaac</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **server** *reference*

|            |  |
|------------|--|
| Synopsis   | Local DHCPv6 server for local pools management   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>local-address-assignment ipv6 server</b> <i>reference</i> |
| Tree       | <a href="#">server</a>   |
| Reference  | <b>configure service vprn</b> <i>string</i> <b>dhcp-server dhcpv6</b> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**pppoe**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>pppoe</b> context   |
| Context    | <b>configure service vprn string subscriber-interface string pppoe</b> |
| Tree       | <b>pppoe</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                |

**description string**

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure service vprn string subscriber-interface string pppoe description string</b> |
| Tree          | <b>description</b>  |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                   |

**session-limit number**

|            |   |
|------------|---|
| Synopsis   | Maximum PPPoE sessions  |
| Context    | <b>configure service vprn string subscriber-interface string pppoe session-limit number</b> |
| Tree       | <b>session-limit</b>  |
| Range      | 1 to 333823   |
| Default    | 1   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                     |

**private-retail-subnets boolean****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Export subnets to the forwarding service  |
| Context  | <b>configure service vprn string subscriber-interface string private-retail-subnets boolean</b> |
| Tree     | <b>private-retail-subnets</b>   |

|            |   |
|------------|---|
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### wan-mode *keyword*



#### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Mode of operation for hosts with /128 WAN IPv6 address  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <b>wan-mode</b> <i>keyword</i> |
| Tree       | <a href="#">wan-mode</a>  |
| Options    | mode64, mode128   |
| Default    | mode64  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### wlan-gw

|            |   |
|------------|---|
| Synopsis   | Enable the <b>wlan-gw</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <b>wlan-gw</b> |
| Tree       | <a href="#">wlan-gw</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### pool-manager

|            |   |
|------------|---|
| Synopsis   | Enter the <b>pool-manager</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <b>wlan-gw</b> <b>pool-manager</b> |
| Tree       | <a href="#">pool-manager</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## dhcp6-client

|            |  |
|------------|--|
| Synopsis   | Enter the <b>dhcp6-client</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw pool-manager dhcp6-client</a> |
| Tree       | <a href="#">dhcp6-client</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## dhcpv4-nat

|            |   |
|------------|---|
| Synopsis   | Enter the <b>dhcpv4-nat</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw pool-manager dhcp6-client dhcpv4-nat</a> |
| Tree       | <a href="#">dhcpv4-nat</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the DHCPv6 client entity   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw pool-manager dhcp6-client dhcpv4-nat admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## link-address *string*

|            |  |
|------------|--|
| Synopsis   | IPv6 address in the link address field of relay header   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw pool-manager dhcp6-client dhcpv4-nat link-address</a> <i>string</i> |
| Tree       | <a href="#">link-address</a>   |
| Default    | ::   |
| Introduced | 16.0.R4  |

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **pool-name** *string*

Synopsis Pool name to be sent in the DHCPv6 messages

Context **configure service vprn** *string* **subscriber-interface** *string* **wlan-gw pool-manager dhcp6-client dhcpv4-nat pool-name** *string*

Tree [pool-name](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ia-na**

Synopsis Enter the **ia-na** context

Context **configure service vprn** *string* **subscriber-interface** *string* **wlan-gw pool-manager dhcp6-client ia-na**

Tree [ia-na](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the DHCPv6 client entity

Context **configure service vprn** *string* **subscriber-interface** *string* **wlan-gw pool-manager dhcp6-client ia-na admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **link-address** *string*

Synopsis IPv6 address in the link address field of relay header

Context **configure service vprn** *string* **subscriber-interface** *string* **wlan-gw pool-manager dhcp6-client ia-na link-address** *string*

---

|            |                                    |
|------------|------------------------------------|
| Tree       | <a href="#">link-address</a>       |
| Default    | ::                                 |
| Introduced | 16.0.R4                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **pool-name** *string*

|               |  |
|---------------|--|
| Synopsis      | Pool name to be sent in the DHCPv6 messages  |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw pool-manager dhcp6-client ia-na</a> <a href="#">pool-name</a> <i>string</i> |
| Tree          | <a href="#">pool-name</a>  |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **lease-query**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>lease-query</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw pool-manager dhcp6-client</a> <a href="#">lease-query</a> |
| Tree       | <a href="#">lease-query</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **max-retries** *number*

|            |  |
|------------|--|
| Synopsis   | Retries before lease query assumes no allocated subnets  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw pool-manager dhcp6-client lease-query</a> <a href="#">max-retries</a> <i>number</i> |
| Tree       | <a href="#">max-retries</a>  |
| Range      | 0 to 10  |
| Default    | 2  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**servers** *string*

|                |  |
|----------------|--|
| Synopsis       | DHCPv6 servers that are used for requesting addresses  |
| Context        | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw pool-manager dhcp6-client</a> <a href="#">servers</a> <i>string</i> |
| Tree           | <a href="#">servers</a>  |
| Max. Instances | 8  |
| Introduced     | 16.0.R1  |
| Platforms      | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**slaac**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>slaac</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw pool-manager dhcp6-client</a> <a href="#">slaac</a> |
| Tree       | <a href="#">slaac</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the DHCPv6 client entity  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw pool-manager dhcp6-client</a> <a href="#">slaac</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**link-address** *string*

|          |   |
|----------|---|
| Synopsis | IPv6 address in the link address field of relay header  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw pool-manager dhcp6-client</a> <a href="#">slaac</a> <a href="#">link-address</a> <i>string</i> |
| Tree     | <a href="#">link-address</a>  |

|            |                                    |
|------------|------------------------------------|
| Default    | ::                                 |
| Introduced | 16.0.R4                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **pool-name** *string*

|               |   |
|---------------|---|
| Synopsis      | Pool name to be sent in the DHCPv6 messages   |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">pool-manager</a> <a href="#">dhcp6-client</a> <a href="#">slaac</a> <b>pool-name</b> <i>string</i> |
| Tree          | <a href="#">pool-name</a>   |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **source-ip** (*keyword* | *ipv6-address*)

|            |  |
|------------|--|
| Synopsis   | Source IP address that is used by the DHCPv6 client  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">pool-manager</a> <a href="#">dhcp6-client</a> <b>source-ip</b> ( <i>keyword</i>   <i>ipv6-address</i> ) |
| Tree       | <a href="#">source-ip</a>  |
| Options    | use-interface-ip   |
| Default    | use-interface-ip   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **watermarks**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>watermarks</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">pool-manager</a> <b>watermarks</b> |
| Tree       | <a href="#">watermarks</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |



## high number

|            |   |
|------------|---|
| Synopsis   | High watermark when new prefix is allocated   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw pool-manager watermarks</a> <a href="#">high</a> <i>number</i> |
| Tree       | <a href="#">high</a>  |
| Range      | 51 to 99  |
| Default    | 95  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## low number

|            |  |
|------------|--|
| Synopsis   | Low watermark when unused prefix is released   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw pool-manager watermarks</a> <a href="#">low</a> <i>number</i> |
| Tree       | <a href="#">low</a>  |
| Range      | 50 to 98   |
| Default    | 90   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## wlan-gw-group reference

|            |   |
|------------|---|
| Synopsis   | ID of WLAN gateway group where prefixes are installed   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw pool-manager wlan-gw-group</a> <a href="#">reference</a> |
| Tree       | <a href="#">wlan-gw-group</a>   |
| Reference  | <b>configure</b> <a href="#">isa wlan-gw-group</a> <i>number</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## redundancy

|          |   |
|----------|---|
| Synopsis | Enter the <b>redundancy</b> context   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">redundancy</a> |
| Tree     | <a href="#">redundancy</a>  |

|            |                                    |
|------------|------------------------------------|
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of WLAN-GW redundancy  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw redundancy</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **export** *string*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Route to export to peer   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw redundancy</a> <b>export</b> <i>string</i> |
| Tree       | <a href="#">export</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **monitor** *string*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Peer route to monitor  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw redundancy</a> <b>monitor</b> <i>string</i> |
| Tree       | <a href="#">monitor</a>  |
| Introduced | 16.0.R1  |

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## subscriber-mgmt

Synopsis Enter the **subscriber-mgmt** context

Context **configure service vprn string subscriber-mgmt**

Tree [subscriber-mgmt](#)

Introduced 22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## multi-chassis-shunt-id *number*

Synopsis Shunt ID for a pair of resilient nodes

Context **configure service vprn string subscriber-mgmt multi-chassis-shunt-id *number***

Tree [multi-chassis-shunt-id](#)

Description This command configures the shunt ID that is used to shunt downstream traffic from a standby node to an active node. Because this ID identifies the traffic service on the standby node, the same ID must be configured per service on each node.

This configuration is required for BNG CUPS inter-UPF resiliency shunting, but not for non-BNG CUPS shunting. However, when configured, it is also used for shunting non-BNG CUPS sessions in the same service.

Range 1 to 8191

Introduced 22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## up-resiliency

Synopsis Enter the **up-resiliency** context

Context **configure service vprn string subscriber-mgmt up-resiliency**

Tree [up-resiliency](#)

Introduced 22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## monitor-oper-group [[oper-group](#)] *reference*

Synopsis Enter the **monitor-oper-group** list instance

|                |   |
|----------------|---|
| Context        | <b>configure service vprn</b> <i>string</i> <b>subscriber-mgmt up-resiliency monitor-oper-group</b> <i>reference</i>  |
| Tree           | <a href="#">monitor-oper-group</a>  |
| Description    | Commands in this context define parameters to derive the service health based on monitored operational groups. The BNG UPF sends the health value to the BNG CPF. The BNG CPF uses the value to determine the need for a BNG UPF status change (active or standby).<br><b>Note:</b><br>The following is only applicable for the <b>configure service vpls capture-sap</b> context. If the configured groups are not the same for all capture SAPs sharing the same underlying port or LAG, the configuration of a Layer 2 access ID alias is required, or else the system chooses arbitrarily one set of configured groups. |
| Max. Instances | 4   |
| Introduced     | 22.2.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**[oper-group]** *reference*

|            |  |
|------------|--|
| Synopsis   | Operational group name   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>subscriber-mgmt up-resiliency monitor-oper-group</b> <i>reference</i> |
| Tree       | <a href="#">monitor-oper-group</a>   |
| Reference  | <b>configure service oper-group</b> <i>string</i>  |
| Notes      | This element is part of a list key.  |
| Introduced | 22.2.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**health-drop** *number*

|             |   |
|-------------|---|
| Synopsis    | Number subtracted from the health value per failure   |
| Context     | <b>configure service vprn</b> <i>string</i> <b>subscriber-mgmt up-resiliency monitor-oper-group</b> <i>reference</i> <b>health-drop</b> <i>number</i>   |
| Tree        | <a href="#">health-drop</a>   |
| Description | This command configures the drop in the health value for every operational group member failure. Every failure of an operational group member decreases the base health value to a possible minimum of 0. |
| Range       | 1 to 255  |

|            |   |
|------------|---|
| Default    | 1   |
| Introduced | 22.2.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## ttl-propagate

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ttl-propagate</b> context             |
| Context    | <b>configure service vprn string ttl-propagate</b> |
| Tree       | <b>ttl-propagate</b>                               |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## local keyword

|             |  |
|-------------|--|
| Synopsis    | Local TTL propagation control for the VPRN   |
| Context     | <b>configure service vprn string ttl-propagate local keyword</b>   |
| Tree        | <b>local</b>   |
| Description | This command specifies the local TTL propagation control for the VPRN and overrides the global configuration of the TTL propagation for locally generated packets that are forwarded over MPLS LSPs in a given VPRN service context. |
| Options     | none, all, vc-only, use-base   |
| Default     | use-base   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

## transit keyword

|             |  |
|-------------|--|
| Synopsis    | Transit TTL propagation control for the VPRN   |
| Context     | <b>configure service vprn string ttl-propagate transit keyword</b>   |
| Tree        | <b>transit</b>   |
| Description | This command overrides the global configuration of the TTL propagation for in transit packets that are forwarded over MPLS LSPs in a given VPRN service context. |
| Options     | none, all, vc-only, use-base   |
| Default     | use-base   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

## twamp-light

|            |  |
|------------|--|
| Synopsis   | Enter the <b>twamp-light</b> context                         |
| Context    | <b>configure service vprn string twamp-light</b>             |
| Tree       | <a href="#">twamp-light</a>                                  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

## reflector

|            |  |
|------------|--|
| Synopsis   | Enable the <b>reflector</b> context                          |
| Context    | <b>configure service vprn string twamp-light reflector</b>   |
| Tree       | <a href="#">reflector</a>                                    |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of TWAMP Light functionality                              |
| Context    | <b>configure service vprn string twamp-light reflector admin-state keyword</b> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                   |

## allow-ipv6-udp-checksum-zero *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Process IPv6 packets with a zero UDP checksum   |
| Context  | <b>configure service vprn string twamp-light reflector allow-ipv6-udp-checksum-zero boolean</b> |
| Tree     | <a href="#">allow-ipv6-udp-checksum-zero</a>  |

|             |   |
|-------------|---|
| Description | When configured to <b>true</b> , this command allows the processing of IPv6 packets that arrive with a UDP checksum of zero. The destination UDP ports that are registered as TWAMP Test packets as part of this template allow this behavior.<br><br>When configured to <b>false</b> , IPv6 packets that arrive with a UDP checksum of zero are discarded. |
| Default     | false   |
| Introduced  | 21.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">twamp-light reflector</a> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R4   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **prefix** [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>prefix</b> list instance  |
| Context        | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">twamp-light reflector</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) |
| Tree           | <a href="#">prefix</a>   |
| Max. Instances | 50   |
| Introduced     | 16.0.R4  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

|            |  |
|------------|--|
| Synopsis   | Source prefix for the TWAMP-Light reflector  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">twamp-light reflector</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) |
| Tree       | <a href="#">prefix</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**description string**

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure service vprn string twamp-light reflector prefix</b> ( <i>ipv4-prefix   ipv6-prefix</i> )<br><b>description string</b> |
| Tree          | <b>description</b>  |
| String Length | 1 to 80   |
| Introduced    | 16.0.R4   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**type keyword**

|             |   |
|-------------|---|
| Synopsis    | Processing behavior type for the reflector  |
| Context     | <b>configure service vprn string twamp-light reflector type keyword</b>   |
| Tree        | <b>type</b>   |
| Description | <p>This command configures the processing behavior of the TWAMP Light reflector. When the value is <b>twamp-light</b> the reflector does not check the received PDU as a traditional base TWAMP Light packet without TLV processing. When the value is <b>stamp</b>, the reflector attempts to find and process supported STAMP TLVs that follow the base STAMP packet.</p> <p>In mixed environments where different types of Session-Senders may be targeting a common TWAMP Light reflector, set the value to <b>stamp</b>. When the reflector is operating in <b>stamp</b> mode, the primary parsing is based on STAMP, checking and processing known TLVs, or determining if the arriving PDU is a TWAMP Light PDU. A Session-Sender launching a TWAMP Light-based packet must use all zeros padding pattern when the pad size is non zero.</p> |
| Options     | stamp, twamp-light  |
| Default     | twamp-light   |
| Introduced  | 22.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**udp-port number****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | UDP port on which the specified TWAMP-Light reflector listens for TWAMP PDUs |
| Context  | <b>configure service vprn string twamp-light reflector udp-port number</b>   |



|            |  |
|------------|--|
| Tree       | <a href="#">udp-port</a>                                     |
| Range      | 862   64364 to 64373   |
| Notes      | This element is mandatory.                                   |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **video-interface** [[interface-name](#)] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>video-interface</b> list instance  |
| Context        | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> |
| Tree           | <a href="#">video-interface</a>   |
| Max. Instances | 9   |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s                    |

### **[interface-name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Video interface name  |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> |
| Tree          | <a href="#">video-interface</a>   |
| String Length | 1 to 29   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s                    |

### **accounting-policy** *reference*

|            |  |
|------------|--|
| Synopsis   | Accounting Policy  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">accounting-policy</a> <i>reference</i> |
| Tree       | <a href="#">accounting-policy</a>  |
| Reference  | <b>configure</b> <a href="#">log accounting-policy</a> <i>number</i>   |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **address** [[ip-address](#)] *string*

Synopsis Add a list entry for **address**

Context **configure** [service vprn](#) *string* [video-interface](#) *string* [address](#) *string*

Tree [address](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **[ip-address]** *string*

Synopsis IPv4 address for the video interface within the service

Context **configure** [service vprn](#) *string* [video-interface](#) *string* [address](#) *string*

Tree [address](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## **adi**



### **WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis Enter the **adi** context

Context **configure** [service vprn](#) *string* [video-interface](#) *string* [adi](#)

Tree [adi](#)

Introduced 16.0.R1

Deprecated 22.10.R3

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## scte30

**WARNING:**

This element is deprecated and will be removed in a future release.

|            |  |
|------------|--|
| Synopsis   | Enter the <b>scte30</b> context  |
| Context    | <b>configure service vprn string video-interface string adi scte30</b>                 |
| Tree       | <b>scte30</b>  |
| Introduced | 16.0.R1  |
| Deprecated | 22.10.R3   |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

## ad-server [address] string

**WARNING:**

This element is deprecated and will be removed in a future release.

|                |   |
|----------------|---|
| Synopsis       | Add a list entry for <b>ad-server</b>   |
| Context        | <b>configure service vprn string video-interface string adi scte30 ad-server string</b> |
| Tree           | <b>ad-server</b>  |
| Max. Instances | 4   |
| Introduced     | 16.0.R1   |
| Deprecated     | 22.10.R3  |
| Platforms      | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s  |

## [address] string

**WARNING:**

This element is deprecated and will be removed in a future release.

|            |   |
|------------|---|
| Synopsis   | Ad server address   |
| Context    | <b>configure service vprn string video-interface string adi scte30 ad-server string</b> |
| Tree       | <b>ad-server</b>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |

|            |  |
|------------|--|
| Deprecated | 22.10.R3   |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

## local-address



### WARNING:

This element is deprecated and will be removed in a future release.

|            |  |
|------------|--|
| Synopsis   | Enable the <b>local-address</b> context  |
| Context    | <b>configure service vprn string video-interface string adi scte30 local-address</b>   |
| Tree       | <a href="#">local-address</a>  |
| Introduced | 16.0.R1  |
| Deprecated | 22.10.R3   |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

## control string



### WARNING:

This element is deprecated and will be removed in a future release.

|            |   |
|------------|---|
| Synopsis   | Control   |
| Context    | <b>configure service vprn string video-interface string adi scte30 local-address control string</b> |
| Tree       | <a href="#">control</a>   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Deprecated | 22.10.R3  |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s              |

## data string



### WARNING:

This element is deprecated and will be removed in a future release.

|          |      |
|----------|------|
| Synopsis | Data |
|----------|------|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>video-interface</b> <i>string</i> <b>adi scte30 local-address data</b> <i>string</i> |
| Tree       | <b>data</b>   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Deprecated | 22.10.R3  |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s  |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the video interface  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>video-interface</b> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <b>admin-state</b>   |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s                             |

### **channel** [**mcast-address**] *string* **source** *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>channel</b> list instance  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>video-interface</b> <i>string</i> <b>channel</b> <i>string</i> <b>source</b> <i>string</i> |
| Tree       | <b>channel</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s  |

### **[mcast-address]** *string*

|            |   |
|------------|---|
| Synopsis   | Multicast channel address   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>video-interface</b> <i>string</i> <b>channel</b> <i>string</i> <b>source</b> <i>string</i> |
| Tree       | <b>channel</b>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **source string**

Synopsis Unicast source address

Context **configure** **service vprn** *string* **video-interface** *string* **channel** *string* **source** *string*

Tree **channel**

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **channel-name string**

Synopsis Channel name

Context **configure** **service vprn** *string* **video-interface** *string* **channel** *string* **source** *string* **channel-name** *string*

Tree **channel-name**

String Length 1 to 32

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **description string**

Synopsis Text description

Context **configure** **service vprn** *string* **video-interface** *string* **channel** *string* **source** *string* **description** *string*

Tree **description**

String Length 1 to 80

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**scte35-action** *keyword*

|            |  |
|------------|--|
| Synopsis   | Enable downstream forwarding of SCTE 35 cue avails   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">channel</a> <i>string</i> <a href="#">source</a> <i>string</i> <b>scte35-action</b> <i>keyword</i> |
| Tree       | <a href="#">scte35-action</a>  |
| Options    | forward, drop  |
| Default    | forward  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s   |

**zone-channel** [[zone-mcast-address](#)] *string* [zone-source](#) *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>zone-channel</b> list instance  |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">channel</a> <i>string</i> <a href="#">source</a> <i>string</i> <b>zone-channel</b> <i>string</i> <a href="#">zone-source</a> <i>string</i> |
| Tree       | <a href="#">zone-channel</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s   |

**[zone-mcast-address]** *string*

|            |  |
|------------|--|
| Synopsis   | Multicast zone channel address   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">channel</a> <i>string</i> <a href="#">source</a> <i>string</i> <b>zone-channel</b> <i>string</i> <a href="#">zone-source</a> <i>string</i> |
| Tree       | <a href="#">zone-channel</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s   |

**zone-source** *string*

|          |  |
|----------|--|
| Synopsis | Unicast source address   |
| Context  | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">channel</a> <i>string</i> <a href="#">source</a> <i>string</i> <b>zone-channel</b> <i>string</i> <a href="#">zone-source</a> <i>string</i> |

|            |  |
|------------|--|
| Tree       | <a href="#">zone-channel</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

### **adi-channel-name** *string*

|               |  |
|---------------|--|
| Synopsis      | Zone channel name  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">channel</a> <i>string</i> <a href="#">source</a> <i>string</i> <a href="#">zone-channel</a> <i>string</i> <a href="#">zone-source</a> <i>string</i> <a href="#">adi-channel-name</a> <i>string</i> |
| Tree          | <a href="#">adi-channel-name</a>   |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s   |

### **cpu-protection** *reference*

|            |   |
|------------|---|
| Synopsis   | CPU protection policy   |
| Context    | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">cpu-protection</a> <i>reference</i> |
| Tree       | <a href="#">cpu-protection</a>  |
| Reference  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpu-protection</a> <i>policy</i> <i>number</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s   |

### **description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s  |



**multicast-service** *number*

|            |   |
|------------|---|
| Synopsis   | Associated multicast service ID   |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>video-interface</b> <i>string</i> <b>multicast-service</b> <i>number</i> |
| Tree       | <b>multicast-service</b>  |
| Range      | 1 to 2147483647   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s  |

**output-format** *keyword*

|            |  |
|------------|--|
| Synopsis   | Output format  |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>video-interface</b> <i>string</i> <b>output-format</b> <i>keyword</i> |
| Tree       | <b>output-format</b>   |
| Options    | udp, rtp-udp   |
| Default    | rtp-udp  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s   |

**rt-client****WARNING:**

This element is deprecated and will be removed in a future release.

|            |   |
|------------|---|
| Synopsis   | Enable the <b>rt-client</b> context   |
| Context    | <b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>video-interface</b> <i>string</i> <b>rt-client</b> |
| Tree       | <b>rt-client</b>  |
| Introduced | 16.0.R2   |
| Deprecated | 22.10.R3  |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s                          |

**src-address** *string***WARNING:**

This element is deprecated and will be removed in a future release.

|            |   |
|------------|---|
| Synopsis   | IP address for the RET client on the video interface  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">rt-client</a> <a href="#">src-address</a> <i>string</i> |
| Tree       | <a href="#">src-address</a>   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R2   |
| Deprecated | 22.10.R3  |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s  |

**video-sap**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>video-sap</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">video-sap</a> |
| Tree       | <a href="#">video-sap</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s  |

**egress**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>egress</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">video-sap</a> <a href="#">egress</a> |
| Tree       | <a href="#">egress</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s   |

**filter**

|          |   |
|----------|---|
| Synopsis | Enter the <b>filter</b> context   |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">video-sap</a> <a href="#">egress</a> <a href="#">filter</a> |
| Tree     | <a href="#">filter</a>  |

|            |  |
|------------|--|
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

### **ip reference**

|            |  |
|------------|--|
| Synopsis   | IPv4 filter policy name  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">video-sap egress filter ip reference</a> |
| Tree       | <a href="#">ip</a>   |
| Reference  | <b>configure filter ip-filter</b> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s   |

### **qos**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>qos</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">video-sap egress qos</a> |
| Tree       | <a href="#">qos</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s   |

### **policy-name reference**

|            |  |
|------------|--|
| Synopsis   | SAP egress QoS policy ID   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">video-sap egress qos policy-name reference</a> |
| Tree       | <a href="#">policy-name</a>  |
| Reference  | <b>configure qos sap-egress</b> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s   |

### **ingress**

|          |                                  |
|----------|----------------------------------|
| Synopsis | Enter the <b>ingress</b> context |
|----------|----------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string</i> <b>video-interface</b> <i>string</i> <b>video-sap ingress</b> |
| Tree       | <b>ingress</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s                    |

## filter

|            |  |
|------------|--|
| Synopsis   | Enter the <b>filter</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>video-interface</b> <i>string</i> <b>video-sap ingress filter</b> |
| Tree       | <b>filter</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s                           |

## ip reference

|            |   |
|------------|---|
| Synopsis   | IPv4 filter policy name   |
| Context    | <b>configure service vprn</b> <i>string</i> <b>video-interface</b> <i>string</i> <b>video-sap ingress filter ip reference</b> |
| Tree       | <b>ip</b>   |
| Reference  | <b>configure filter ip-filter</b> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s  |

## qos

|            |   |
|------------|---|
| Synopsis   | Enter the <b>qos</b> context  |
| Context    | <b>configure service vprn</b> <i>string</i> <b>video-interface</b> <i>string</i> <b>video-sap ingress qos</b> |
| Tree       | <b>qos</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s                        |

**policy-name** *reference*

|            |  |
|------------|--|
| Synopsis   | SAP ingress QoS policy ID  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">video-sap ingress qos</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s   |

**video-group-id** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Video group ID  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">video-sap</a> <a href="#">video-group-id</a> <i>reference</i> |
| Tree       | <a href="#">video-group-id</a>  |
| Reference  | <b>configure</b> <a href="#">isa video-group</a> <i>number</i>  |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s  |

**vprn-type** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | VPRN type  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">vprn-type</a> <i>keyword</i> |
| Tree       | <a href="#">vprn-type</a>  |
| Options    | regular, hub, spoke, subscriber-split-horizon  |
| Default    | regular  |
| Introduced | 16.0.R1  |

Platforms All

## vxlan

Synopsis Enter the **vxlan** context  
 Context **configure service vprn string vxlan**  
 Tree **vxlan**  
 Introduced 16.0.R1  
 Platforms All

## tunnel-termination [**ip-address**] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis Enter the **tunnel-termination** list instance  
 Context **configure service vprn string vxlan tunnel-termination** (*ipv4-address-no-zone | ipv6-address-no-zone*)  
 Tree **tunnel-termination**  
 Introduced 16.0.R1  
 Platforms All

## [**ip-address**] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis Non-system IP address that terminates the VXLAN  
 Context **configure service vprn string vxlan tunnel-termination** (*ipv4-address-no-zone | ipv6-address-no-zone*)  
 Tree **tunnel-termination**  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

## fpe-id *reference*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis FPE id for this entry

|            |  |
|------------|--|
| Context    | <b>configure service vprn string vxlan tunnel-termination</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>fpe-id reference</b> |
| Tree       | <b>fpe-id</b>  |
| Reference  | <b>configure fwd-path-ext fpe number</b>   |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **weighted-ecmp keyword**

|            |  |
|------------|--|
| Synopsis   | Weighted load-balancing capability for ECMP routes         |
| Context    | <b>configure service vprn string weighted-ecmp keyword</b> |
| Tree       | <b>weighted-ecmp</b>                                       |
| Options    | false, true, strict  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **wlan-gw**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>wlan-gw</b> context            |
| Context    | <b>configure service vprn string wlan-gw</b> |
| Tree       | <b>wlan-gw</b>                               |
| Introduced | 16.0.R1                                      |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR           |

### **distributed-subscriber-mgmt**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>distributed-subscriber-mgmt</b> context                     |
| Context    | <b>configure service vprn string wlan-gw distributed-subscriber-mgmt</b> |
| Tree       | <b>distributed-subscriber-mgmt</b>                                       |
| Introduced | 16.0.R4  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                       |

**ipv6-tcp-mss-adjust** *number*

|            |   |
|------------|---|
| Synopsis   | TCP-MSS adjustment value in upstream direction for DSM  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">wlan-gw distributed-subscriber-mgmt</a> <a href="#">ipv6-tcp-mss-adjust</a> <i>number</i> |
| Tree       | <a href="#">ipv6-tcp-mss-adjust</a>   |
| Range      | 160 to 10240  |
| Introduced | 16.0.R4   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**mobility-triggered-accounting**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mobility-triggered-accounting</b> context  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">wlan-gw mobility-triggered-accounting</a> |
| Tree       | <a href="#">mobility-triggered-accounting</a>   |
| Introduced | 16.0.R4   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of mobility triggered accounting  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">wlan-gw mobility-triggered-accounting</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R4  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**hold-down** *number*

|          |   |
|----------|---|
| Synopsis | Hold additional mobility-triggered update until this timer expires  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">wlan-gw mobility-triggered-accounting</a> <a href="#">hold-down</a> <i>number</i> |
| Tree     | <a href="#">hold-down</a>   |
| Range    | 60 to 86400   |
| Units    | seconds   |



Introduced 16.0.R4  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **include-counters** *boolean*

Synopsis Include counters in interim updates  
Context **configure service vprn string wlan-gw mobility-triggered-accounting include-counters boolean**  
Tree [include-counters](#)  
Default false  
Introduced 16.0.R4  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **xconnect**

Synopsis Enter the **xconnect** context  
Context **configure service vprn string wlan-gw xconnect**  
Tree [xconnect](#)  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the WLAN-GW cross-connect  
Context **configure service vprn string wlan-gw xconnect admin-state keyword**  
Tree [admin-state](#)  
Options enable, disable  
Default disable  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**tunnel-source-ip** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | IPv6 address and prefix for the tunnel source   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">wlan-gw xconnect</a> <a href="#">tunnel-source-ip</a> <i>string</i> |
| Tree       | <a href="#">tunnel-source-ip</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**wlan-gw-group** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | ISA WLAN-GW Group   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">wlan-gw xconnect</a> <a href="#">wlan-gw-group</a> <i>reference</i> |
| Tree       | <a href="#">wlan-gw-group</a>   |
| Reference  | <b>configure</b> <a href="#">isa</a> <a href="#">wlan-gw-group</a> <i>number</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**wpp**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>wpp</b> context   |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">wpp</a> |
| Tree       | <a href="#">wpp</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                         |

**admin-state** *keyword*

|          |  |
|----------|--|
| Synopsis | Administrative state of WPP  |
| Context  | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">wpp</a> <a href="#">admin-state</a> <i>keyword</i> |

|            |   |
|------------|---|
| Tree       | <a href="#">admin-state</a>                             |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

**portal** [[name](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>portal</b> list instance  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">wpp portal</a> <i>string</i> |
| Tree       | <a href="#">portal</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**[name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Web portal name  |
| Context       | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">wpp portal</a> <i>string</i> |
| Tree          | <a href="#">portal</a>   |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**ack-auth-retry-count** *number*

|            |  |
|------------|--|
| Synopsis   | Number of retransmissions of an ACK_OUT message  |
| Context    | <b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">wpp portal</a> <i>string</i> <b>ack-auth-retry-count</b> <i>number</i> |
| Tree       | <a href="#">ack-auth-retry-count</a>   |
| Range      | 0 to 5   |
| Default    | 5  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | WPP portal address  |
| Context    | <b>configure service vprn</b> <i>string wpp portal string address</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <a href="#">address</a>   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the WPP portal server                                     |
| Context    | <b>configure service vprn</b> <i>string wpp portal string admin-state keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                           |

**ntf-logout-retry-count** *number*

|            |   |
|------------|---|
| Synopsis   | Number of retransmissions of an NTF_LOGOUT message  |
| Context    | <b>configure service vprn</b> <i>string wpp portal string ntf-logout-retry-count number</i> |
| Tree       | <a href="#">ntf-logout-retry-count</a>  |
| Range      | 0 to 5  |
| Default    | 5   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                     |

**port-format** *keyword*

|          |   |
|----------|---|
| Synopsis | Format of the port in the ACK_INO message |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure service vprn</b> <i>string wpp portal string port-format keyword</i> |
| Tree       | <b>port-format</b>  |
| Options    | standard, vendor-specific   |
| Default    | standard  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                           |

### **retry-interval** *number*

|            |   |
|------------|---|
| Synopsis   | Time between two consecutive retransmissions  |
| Context    | <b>configure service vprn</b> <i>string wpp portal string retry-interval number</i> |
| Tree       | <b>retry-interval</b>   |
| Range      | 10 to 2000  |
| Units      | milliseconds  |
| Default    | 2000  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                             |

### **secret** *string*

|               |   |
|---------------|---|
| Synopsis      | Message authentication between portal and BRAS by applying the secret used by WPPv2 |
| Context       | <b>configure service vprn</b> <i>string wpp portal string secret string</i>         |
| Tree          | <b>secret</b>   |
| String Length | 1 to 115  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                             |

### **version** *number*

|          |  |
|----------|--|
| Synopsis | Protocol version to be expected by the WPP portal                            |
| Context  | <b>configure service vprn</b> <i>string wpp portal string version number</i> |
| Tree     | <b>version</b>   |
| Range    | 1   2  |
| Default  | 1  |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## 3.44 sfm commands

```
configure
- sfm number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- sfm-type keyword
```

### 3.44.1 sfm command descriptions

#### **sfm** [**sfm-slot**] *number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>sfm</b> list instance   |
| Context    | <b>configure sfm number</b>  |
| Tree       | <b>sfm</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

#### **[sfm-slot]** *number*

|            |  |
|------------|--|
| Synopsis   | Unique value to identify this SFM slot within a chassis in the system                  |
| Context    | <b>configure sfm number</b>  |
| Tree       | <b>sfm</b>   |
| Range      | 1 to 16  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

#### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of SFM  |
| Context    | <b>configure sfm number admin-state keyword</b>  |
| Tree       | <b>admin-state</b>   |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS |



## **sfm-type** keyword

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Provision the SFM type   |
| Context    | <b>configure</b> <i>sfm number sfm-type keyword</i>  |
| Tree       | <a href="#">sfm-type</a>   |
| Options    | sfm-x20, sfm-x20-b, m-sfm5-7, m-sfm5-12, m-sfm5-12e, sfm-x20s-b, sfm-ixr-6, sfm-ixr-10, sfm-s, m-sfm6-12e, sfm2-x20s, sfm-2s, m-sfm6-7/12, sfm-2se, sfm2-s |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS   |

## 3.45 subscriber-mgmt commands

```

configure
- subscriber-mgmt
- accu-stats-policy string
- apply-groups reference
- apply-groups-exclude reference
- description string
- egress keyword id number
- ingress keyword id number
- ancp
- ancp-policy string
- apply-groups reference
- apply-groups-exclude reference
- egress
- rate-adjustment number
- rate-modify
- agg-rate
- scheduler string
- rate-monitor
- alarm boolean
- rate number
- rate-reduction number
- ingress
- rate-adjustment number
- rate-modify
- scheduler string
- rate-monitor
- alarm boolean
- rate number
- rate-reduction number
- port-down
- suspend-shcv
- alarm boolean
- hold-time number
- ancp-static-map
- multi-service-site-entry string customer-name reference customer-site-
name reference
- ancp-policy reference
- apply-groups reference
- apply-groups-exclude reference
- sap-entry string sap-id string
- ancp-policy reference
- apply-groups reference
- apply-groups-exclude reference
- apply-groups reference
- apply-groups-exclude reference
- authentication-origin
- overrides
- priority number
- apply-groups reference
- apply-groups-exclude reference
- source keyword
- auto-sub-id
- apply-groups reference
- apply-groups-exclude reference
- implicit-generation boolean
- ipoe-key keyword
- ppp-key keyword

```

## configure subscriber-mgmt bgp-peering-policy

- **bgp-peering-policy** *string*
  - **advertise-inactive** *boolean*
  - **aggregator-id-zero** *boolean*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **as-override** *boolean*
  - **asn-4-byte** *boolean*
  - **authentication-key** *string*
  - **authentication-keychain** *reference*
  - **bfd-liveness** *boolean*
  - **client-reflect** *boolean*
  - **cluster** *string*
  - **connect-retry** *number*
  - **damping** *boolean*
  - **description** *string*
  - **export** *reference*
  - **fast-external-failover** *boolean*
  - **hold-time** *number*
  - **import** *reference*
  - **keepalive** *number*
  - **local-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **local-as**
    - **as-number** *number*
    - **private** *boolean*
  - **local-preference** *number*
  - **loop-detect** *keyword*
  - **med-out** (*number* | *keyword*)
  - **min-route-advertisement** *number*
  - **multihop** *number*
  - **next-hop-self** *boolean*
  - **passive** *boolean*
  - **peer-as** *number*
  - **preference** *number*
  - **prefix-limit** *number*
  - **remove-private**
    - **limited** *boolean*
  - **send-communities**
    - **extended** *boolean*
    - **standard** *boolean*
  - **ttl-security** *number*
  - **type** *keyword*
- **category-map** *string*
  - **activity-threshold** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **category** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **credit-type-override** *keyword*
    - **default-credit**
      - **time** *number*
      - **volume**
        - **unit** *keyword*
        - **value** *number*
    - **description** *string*
    - **egress**
      - **policer** *number*
      - **queue** *number*
    - **exhausted-credit-service-level**
      - **egress**
        - **ip-filter**
          - **entry** *number*
            - **action**
              - **drop**

configure subscriber-mgmt category-map category exhausted-credit-service-level egress ip-filter entry action forward

```

- forward
- http-redirect
  - allow-override boolean
  - url string
- apply-groups reference
- apply-groups-exclude reference
- description string
- match
  - dscp keyword
  - dst-port
    - eq number
    - gt number
    - lt number
    - range
      - end number
      - start number
  - fragment keyword
  - icmp
    - code number
    - type number
  - ip-option
    - mask number
    - type number
  - multiple-option boolean
  - option-present boolean
  - protocol (number | keyword)
  - src-ip string
  - src-port
    - eq number
    - gt number
    - lt number
    - range
      - end number
      - start number
  - tcp-flags
    - ack boolean
    - syn boolean
- ipv6-filter
  - entry number
    - action
      - drop
      - forward
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - match
      - dscp keyword
      - dst-port
        - eq number
        - gt number
        - lt number
        - range
          - end number
          - start number
      - icmp
        - code number
        - type number
      - next-header (number | keyword)
      - src-ip string
      - src-port
        - eq number
        - gt number
        - lt number
        - range

```

configure subscriber-mgmt category-map category exhausted-credit-service-level egress ipv6-filter entry match src-port range end

```

        - end number
        - start number
    - tcp-flags
      - ack boolean
      - syn boolean
- ingress
  - ip-filter
    - entry number
    - action
      - drop
      - forward
      - http-redirect
        - allow-override boolean
        - url string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - match
      - dscp keyword
      - dst-ip string
      - dst-port
        - eq number
        - gt number
        - lt number
        - range
          - end number
          - start number
      - fragment keyword
      - icmp
        - code number
        - type number
      - ip-option
        - mask number
        - type number
      - multiple-option boolean
      - option-present boolean
      - protocol (number | keyword)
      - src-port
        - eq number
        - gt number
        - lt number
        - range
          - end number
          - start number
      - tcp-flags
        - ack boolean
        - syn boolean
  - ipv6-filter
    - entry number
    - action
      - drop
      - forward
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - match
      - dscp keyword
      - dst-ip string
      - dst-port
        - eq number
        - gt number
        - lt number
        - range
          - end number

```

configure subscriber-mgmt category-map category exhausted-credit-service-level ingress ipv6-filter entry match dst-port range start

```

    - start number
  - icmp
    - code number
    - type number
  - next-header (number | keyword)
  - src-port
    - eq number
    - gt number
    - lt number
    - range
      - end number
      - start number
  - tcp-flags
    - ack boolean
    - syn boolean
  - pir (number | keyword)
- ingress
  - policer number
  - queue number
  - out-of-credit-action-override keyword
  - rating-group number
- credit-exhaust-threshold number
- credit-type keyword
- description string
- gx-session-level-usage boolean
- credit-control-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - default-category-map reference
  - description string
  - error-handling-action keyword
  - out-of-credit-action keyword
  - server
    - diameter reference
    - radius
- diameter-gx-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
- gx
  - avp-subscription-id
    - origin keyword
    - type keyword
  - ccrt-replay
    - interval number
    - max-lifetime number
  - credit-mcs-interval number
  - destination-realm-learning boolean
  - features
    - extended-bandwidth boolean
  - include-avp
    - an-gw-address boolean
    - apn-ambr boolean
    - called-station-id boolean
    - calling-station-id
      - type keyword
    - ip-can-type boolean
    - logical-access-id boolean
  - nas-port
    - bit-spec string
  - nas-port-id
    - prefix-string string
    - suffix
      - circuit-id

```

configure subscriber-mgmt diameter-gx-policy gx include-avp nas-port-id suffix not-included

```

    - not-included
    - remote-id
    - user-string string
  - nas-port-type
    - type number
  - pdn-connection-id boolean
  - physical-access-id boolean
  - rai boolean
  - rat-type boolean
  - sgsn-mcc-mnc boolean
  - supported-features boolean
  - user-equipment-info
    - type keyword
  - user-location-info boolean
- mac-format string
- report-ip-address-event boolean
- three-gpp-qos-mapping
  - apn-ambr-dl
    - aggregate-rate
    - arbiter string
    - hs-sla-agg-rate
    - ignore-override
    - policer number
    - queue number
    - scheduler string
  - apn-ambr-ul
    - arbiter string
    - ignore-override
    - policer number
    - queue number
    - scheduler string
- node
  - destination-realm string
  - origin-host reference
- on-failure
  - failover boolean
  - handling keyword
- peer-policy reference
- tx-timer number
- diameter-gy-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - gy
    - avp-subscription-id
      - origin keyword
      - type keyword
    - ccrt-replay
      - interval number
      - max-lifetime number
    - destination-realm-learning boolean
    - extended-failure-handling
      - admin-state keyword
      - interim-credit
        - max-attempts (number | keyword)
        - reporting boolean
        - validity-time (number | keyword)
        - volume
          - credits number
          - units keyword
    - new-session-id boolean
  - include-avp
    - aaa-user-name boolean
    - address-avp boolean

```

configure subscriber-mgmt diameter-gy-policy gy include-avp called-station-id

```

- called-station-id
  - id string
- charging-rule-base-name
  - category-map
  - not-included
  - user-string string
- ggsn-address
  - type keyword
- pdp-context-type boolean
- ps-information boolean
- service-context-id
  - id string
- three-gpp-charging-characteristics boolean
- three-gpp-charging-id keyword
- three-gpp-ggsn-ipv4-address boolean
- three-gpp-ggsn-ipv6-address boolean
- three-gpp-gprs-negotiated-qos-profile boolean
- three-gpp-imsi keyword
- three-gpp-nsapi boolean
- three-gpp-rat-type
  - type number
- three-gpp-selection-mode boolean
- three-gpp-session-stop-indicator boolean
- three-gpp-user-location-info boolean
- user-equipment-info-type
  - type keyword
- mac-format string
- out-of-credit-reporting keyword
- vendor-support keyword
- node
  - destination-realm string
  - origin-host reference
- on-failure
  - failover boolean
  - handling keyword
- peer-policy reference
- tx-timer number
- diameter-nasreq-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - nasreq
    - include-avp
      - called-station-id boolean
      - calling-station-id
        - type keyword
      - circuit-id boolean
      - imei boolean
      - nas-port
        - bit-spec string
      - nas-port-id
        - prefix-string string
        - suffix
          - circuit-id
          - not-included
          - remote-id
          - user-string string
      - nas-port-type
        - type (keyword | number)
      - rat-type boolean
      - remote-id boolean
      - user-location-info boolean
    - mac-format string
    - password string

```



configure subscriber-mgmt diameter-nasreq-policy nasreq user-name

```

- user-name
  - domain-name string
  - format keyword
  - operation keyword
- node
  - destination-realm string
  - origin-host reference
- on-failure
  - failover boolean
  - handling keyword
- peer-policy reference
- tx-timer number
- explicit-subscriber-map
- entry string
  - alias string
  - app-profile reference
  - apply-groups reference
  - apply-groups-exclude reference
  - sla-profile reference
  - sub-profile reference
- group-interface-statistics
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- group-interface-template string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - ip-mtu number
  - ipv4
    - icmp
      - mask-reply boolean
      - param-problem
        - admin-state keyword
        - number number
        - seconds number
      - redirects
        - admin-state keyword
        - number number
        - seconds number
      - ttl-expired
        - admin-state keyword
        - number number
        - seconds number
      - unreachableables
        - admin-state keyword
        - number number
        - seconds number
    - neighbor-discovery
      - proxy-arp-policy reference
      - remote-proxy-arp boolean
  - urpf-check
    - mode keyword
  - ipv6
    - urpf-check
      - mode keyword
- gtp
  - apn-policy string
  - apn string
    - ambr-qos-mapping
      - apply-groups reference
      - apply-groups-exclude reference
      - downlink
        - aggregate-rate

```

configure subscriber-mgmt gtp apn-policy apn ambr-qos-mapping downlink arbiter

```

    - arbiter string
    - policer number
    - queue number
    - scheduler string
  - uplink
    - arbiter string
    - policer number
    - queue number
    - scheduler string
  - apply-groups reference
  - apply-groups-exclude reference
  - defaults
    - group-interface
      - name string
      - svc-name string
    - diameter-nasreq-policy reference
    - radius-auth-policy reference
    - skip-gtp-ipv4-allocation boolean
    - user-db reference
  - apply-groups reference
  - apply-groups-exclude reference
  - apply-groups reference
  - apply-groups-exclude reference
  - max-held-uplink-sessions number
  - peer-profile string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - interface-type keyword
    - ip-ttl number
    - keep-alive
      - admin-state keyword
      - interval number
      - retry-count number
      - timeout number
    - message-retransmit
      - retry-count number
      - timeout number
    - python-policy reference
  - sll
    - change-reporting-action (number | keyword)
    - end-marker-count number
    - ipv4-mtu number
    - qos
      - ambr
        - down-link number
        - up-link number
      - arp number
      - down-link
        - gbr number
        - mbr number
      - qci number
      - up-link
        - gbr number
        - mbr number
  - uplink
    - charging-characteristics
      - home
        - bit0 boolean
        - bit1 boolean
        - bit10 boolean
        - bit11 boolean
        - bit12 boolean
        - bit13 boolean

```

configure subscriber-mgmt gtp peer-profile uplink charging-characteristics home bit14

```

- bit14 boolean
- bit15 boolean
- bit2 boolean
- bit3 boolean
- bit4 boolean
- bit5 boolean
- bit6 boolean
- bit7 boolean
- bit8 boolean
- bit9 boolean
- roaming
- bit0 boolean
- bit1 boolean
- bit10 boolean
- bit11 boolean
- bit12 boolean
- bit13 boolean
- bit14 boolean
- bit15 boolean
- bit2 boolean
- bit3 boolean
- bit4 boolean
- bit5 boolean
- bit6 boolean
- bit7 boolean
- bit8 boolean
- bit9 boolean
- ggsn
- qos
- ambr
- down-link number
- up-link number
- arp number
- down-link
- gbr number
- mbr number
- up-link
- gbr number
- mbr number
- pgw
- qos
- ambr
- down-link number
- up-link number
- arp number
- down-link
- gbr number
- mbr number
- qci number
- up-link
- gbr number
- mbr number
- protocol-configuration-options keyword
- rat-type (number | keyword)
- report-wlan-location boolean
- session-hold-time (number | keyword)
- serving-network
- mcc string
- mnc string
- host-lockout-policy string
- apply-groups reference
- apply-groups-exclude reference
- description string
- host-key keyword

```

configure subscriber-mgmt host-lockout-policy lockout-reset-time

```

- lockout-reset-time number
- lockout-time
  - max number
  - min number
- max-lockout-hosts number
- host-tracking-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - egress-rate-modify
    - agg-rate
    - scheduler string
- http-redirect-policy string
  - aa-url-parameter string
  - application-assurance reference
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - dst-port number
  - forward-entry dst-ip (ipv4-prefix | ipv6-prefix) protocol keyword dst-port number
  - ignore-app-profile boolean
  - portal-hold-time number
  - url string
- igmp-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - egress-rate-modify
    - agg-rate
    - scheduler string
  - fast-leave boolean
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
  - multicast-reporter
    - admin-state keyword
    - destination reference
    - optional-fields
      - host-mac boolean
      - pppoe-session-id boolean
      - sap-id boolean
      - svc-id boolean
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - redirection-policy reference
  - replication keyword
  - router-alert-check boolean
  - static
    - group string
      - apply-groups reference
      - apply-groups-exclude reference
      - source string
      - starg
  - use-multicast-destination-mac boolean
  - version keyword
- ipoe-session-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - circuit-id-from-auth boolean
  - description string
  - session-key
    - cid boolean

```

configure subscriber-mgmt ipoe-session-policy session-key mac

```

- mac boolean
- rid boolean
- sap boolean
- session-timeout (number | keyword)
- isa-filter string
- apply-groups reference
- apply-groups-exclude reference
- description string
- ipv4
- default-action keyword
- entry number
- action
- drop
- forward
- http-redirect
- url string
- apply-groups reference
- apply-groups-exclude reference
- description string
- match
- dst-ip string
- dst-port
- equals number
- protocol keyword
- ipv6
- default-action keyword
- entry number
- action
- drop
- forward
- http-redirect
- url string
- apply-groups reference
- apply-groups-exclude reference
- description string
- match
- dst-ip string
- dst-port
- equals number
- protocol keyword
- type keyword
- isa-policer string
- action keyword
- adaptation-rule
- cir keyword
- pir keyword
- apply-groups reference
- apply-groups-exclude reference
- cbs number
- description string
- mbs number
- rate
- cir (number | keyword)
- pir (number | keyword)
- type keyword
- isa-service-chaining
- apply-groups reference
- apply-groups-exclude reference
- evpn string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- bgp
- route-distinguisher

```

configure subscriber-mgmt isa-service-chaining evpn bgp route-distinguisher rd

```

- rd (keyword | vpn-route-distinguisher)
- route-target
  - export string
  - import string
- description string
- export
- advertise-pools
  - admin-state keyword
  - pool router-instance string name string
- gateway-address-range
  - end string
  - start string
- vxlan
  - vni number
- import-mode keyword
- prefix-route-resolution keyword
- mac-prefix string
- vas-filter string
- apply-groups reference
- apply-groups-exclude reference
- description string
- entry number
  - action keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - fail-action keyword
    - forward
      - esi string
      - sf-ip (ipv4-address-no-zone | ipv6-address-no-zone)
      - svc reference
    - insert-nsh
      - meta-data
        - insert-subscriber-id
        - opaque-data string
      - svc-path
        - path-id number
        - svc-index number
    - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - match
    - foreign-ip (ipv4-unicast-prefix | ipv4-unicast-address)
    - foreign-port number
    - protocol keyword
- local-user-db string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- description string
- ipoe
  - host string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - authentication
    - auth-domain-name string
    - gx-policy string
    - nasreq-auth-policy string
    - radius-auth-policy string
  - gtp-interface
    - name string
    - service-id number
  - host-identification

```

configure subscriber-mgmt local-user-db ipoe host host-identification circuit-id

```

- circuit-id
  - ascii-string string
  - hex-string string
- derived-id string
- encap-tag-range
  - from string
  - to string
- encap-tag-separate-range
  - inner
    - end number
    - start number
  - outer
    - end number
    - start number
- ip-prefix (ipv4-prefix-with-host-bits | ipv6-prefix-with-host-bits)
- mac string
- option60
  - ascii-string string
  - hex-string string
- remote-id
  - ascii-string string
  - hex-string string
- sap-id string
- service-id number
- string string
- system-id string
- identification
  - ancp-string string
  - app-profile-string string
  - category-map-name string
  - int-dest-id string
  - option-number number
  - sla-profile-string string
  - spi-sharing-group-id number
  - sub-profile-string string
  - subscriber-id string
- ipv4
  - address
    - gi-address keyword
    - ip-address string
    - pool
      - delimiter string
      - primary string
      - secondary string
    - use-pool-from-client
      - delimiter string
  - gi-address string
  - option (number | keyword)
    - apply-groups reference
    - apply-groups-exclude reference
    - ascii-string string
    - duration number
    - empty
    - hex-string string
    - ipv4-address string
    - netbios-node-type keyword
  - server string
- ipv6
  - address string
  - address-pool string
  - delegated-prefix string
  - delegated-prefix-length number
  - delegated-prefix-pool string
  - link-address string

```

configure subscriber-mgmt local-user-db ipoe host ipv6 option

- **option** (number | keyword)
  - **apply-groups** reference
  - **apply-groups-exclude** reference
  - **hex-string** string
  - **ipv6-address** string
  - **router-advertisement-policy** string
  - **server** string
  - **slaac-prefix** string
  - **slaac-prefix-pool** string
  - **timers**
    - **preferred-lifetime** (number | keyword)
    - **rebind** number
    - **renew** number
    - **valid-lifetime** (number | keyword)
- **match-radius-proxy-cache**
  - **fail-action** keyword
  - **mac-format** string
  - **match**
    - **circuit-id** boolean
    - **ipv4-option** number
    - **ipv6-option** number
    - **mac** boolean
    - **remote-id** boolean
  - **server**
    - **name** string
    - **service** number
- **mld-import** string
- **msap-defaults**
  - **group-interface**
    - **name** string
    - **prefix** keyword
    - **suffix** keyword
  - **policy** string
  - **service** number
- **radius-accounting-policy**
  - **duplicate** string
  - **name** string
- **retail-service-id** number
- **rip-policy** string
- **to-client-options**
  - **ipv4-option** (number | keyword)
    - **apply-groups** reference
    - **apply-groups-exclude** reference
    - **ascii-string** string
    - **duration** number
    - **empty**
    - **hex-string** string
    - **ipv4-address** string
    - **netbios-node-type** keyword
  - **ipv6-option** (number | keyword)
    - **apply-groups** reference
    - **apply-groups-exclude** reference
    - **ascii-string** string
    - **domain-string** string
    - **empty**
    - **hex-string** string
    - **ipv6-address** string
- **to-server-options**
  - **ipv6-option** (number | keyword)
    - **apply-groups** reference
    - **apply-groups-exclude** reference
    - **ascii-string** string
    - **domain-string** string
    - **empty**



configure subscriber-mgmt local-user-db ipoe host to-server-options ipv6-option hex-string

```

    - hex-string string
    - ipv6-address string
  - wpp
    - initial
      - app-profile string
      - sla-profile string
      - sub-profile string
    - portal
      - name string
      - portal-group string
      - router-instance (keyword | number)
      - restore-to-initial-on-disconnect keyword
  - mask type keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - prefix
    - length number
    - string string
  - suffix
    - length number
    - string string
  - match-list keyword
- ppp
  - host string
    - access-loop-encapsulation
      - apply-groups reference
      - apply-groups-exclude reference
      - encap-offset
        - type keyword
      - rate-down number
    - access-loop-information
      - circuit-id
        - ascii-string string
        - use-sap-id
      - remote-id
        - ascii-string string
        - use-mac-address
    - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication
    - gx-policy string
    - nasreq-auth-policy string
    - padi-auth-policy string
    - pre-auth-policy string
    - radius-auth-policy string
    - user-db string
  - host-identification
    - circuit-id
      - ascii-string string
      - hex-string string
    - derived-id string
    - encap-tag-range
      - from string
      - to string
    - encap-tag-separate-range
      - inner
        - end number
        - start number
      - outer
        - end number
        - start number
    - mac string
    - remote-id

```

configure subscriber-mgmt local-user-db ppp host host-identification remote-id ascii-string

```

- ascii-string string
- hex-string string
- sap-id string
- service-name string
- user-name
  - format keyword
  - name string
- identification
  - ancp-string string
  - app-profile-string string
  - category-map-name string
  - int-dest-id string
  - option-number number
  - sla-profile-string string
  - spi-sharing-group-id number
  - sub-profile-string string
  - subscriber-id string
- ipv4
  - address
    - gi-address keyword
    - ip-address string
    - pool
      - delimiter string
      - primary string
      - secondary string
    - prefix-length number
    - use-pool-from-client
      - delimiter string
  - ignore-df-bit boolean
  - option (number | keyword)
    - apply-groups reference
    - apply-groups-exclude reference
    - ascii-string string
    - duration number
    - empty
    - hex-string string
    - ipv4-address string
    - netbios-node-type keyword
- ipv6
  - address string
  - address-pool string
  - delegated-prefix string
  - delegated-prefix-length number
  - delegated-prefix-pool string
  - force-ipv6cp boolean
  - option (number | keyword)
    - apply-groups reference
    - apply-groups-exclude reference
    - hex-string string
    - ipv6-address string
  - router-advertisement-policy string
  - slaac-prefix string
  - slaac-prefix-pool string
  - timers
    - preferred-lifetime (number | keyword)
    - rebind number
    - renew number
    - valid-lifetime (number | keyword)
- l2tp
  - group
    - name string
    - service-id number
- lns-interface
  - name string

```

configure subscriber-mgmt local-user-db ppp host lns-interface service-id

```

- service-id number
- mld-import string
- msap-defaults
- group-interface
  - name string
  - prefix keyword
  - suffix keyword
- policy string
- service number
- pado-delay number
- password
  - chap string
  - ignore
  - pap string
- ppp-policy-parameters
  - max-sessions-per-mac number
- radius-accounting-policy
  - duplicate string
  - name string
- retail-service-id number
- rip-policy string
- steering-profile string
- to-client-options
  - ipv6-option (number | keyword)
    - apply-groups reference
    - apply-groups-exclude reference
    - ascii-string string
    - domain-string string
    - empty
    - hex-string string
    - ipv6-address string
- mask type keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - prefix
    - length number
    - string string
  - suffix
    - length number
    - string string
  - match-list keyword
- mld-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - egress-rate-modify
    - agg-rate
    - scheduler string
  - fast-leave boolean
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - redirection-policy reference
  - replication keyword
  - router-alert-check boolean
  - static
    - group string
      - apply-groups reference
      - apply-groups-exclude reference
      - source string

```

configure subscriber-mgmt mld-policy static group starg

- **starg**
- **use-multicast-destination-mac** *boolean*
- **version** *keyword*
- **msap-policy** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **cpu-protection**
  - **ip-src-monitoring**
  - **mac-monitoring**
  - **policy-id** *reference*
- **description** *string*
- **dist-cpu-protection** *string*
- **ies-vprn-only-sap-parameters**
  - **anti-spoof** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **egress**
  - **qos**
    - **policy-name** *reference*
- **ingress**
  - **qos**
    - **policy-name** *reference*
    - **queuing-type** *keyword*
- **igmp-host-tracking**
  - **expiry-time** *number*
  - **import-policy** *reference*
  - **maximum-number-group-sources** *number*
  - **maximum-number-groups** *number*
  - **maximum-number-sources** *number*
- **lag-link-map-profile** *number*
- **sticky-msaps** *boolean*
- **sticky-msaps-idle-timeout** *number*
- **sub-sla-mgmt**
  - **defaults**
    - **app-profile** *reference*
    - **int-dest-id**
      - **string** *string*
      - **top-q-tag**
    - **sla-profile** *reference*
    - **sub-profile** *reference*
    - **subscriber-id**
      - **auto-id**
      - **sap-id**
      - **string** *string*
  - **single-sub-parameters**
    - **non-sub-traffic-profiles**
      - **app-profile** *reference*
      - **sla-profile** *reference*
      - **sub-profile** *reference*
      - **subscriber-id** *string*
    - **profiled-traffic-only** *boolean*
  - **sub-ident-policy** *reference*
  - **subscriber-limit** (*keyword* | *number*)
- **vpls-only-sap-parameters**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **arp-host**
    - **host-limit** *number*
    - **min-auth-interval** *number*
  - **arp-reply-agent** *keyword*
  - **dhcp**
    - **lease-populate** *number*
    - **option-82**
      - **action** *keyword*

configure subscriber-mgmt msap-policy vpls-only-sap-parameters dhcp option-82 circuit-id

```

    - circuit-id keyword
    - remote-id
      - mac
      - string string
    - vendor-specific-option
      - client-mac-address boolean
      - sap-id boolean
      - service-id boolean
      - string string
      - system-id boolean
    - proxy-server
      - admin-state keyword
      - emulated-server string
      - lease-time
        - radius-override boolean
        - value number
    - egress
      - qos
        - policy-name reference
    - igmp-snooping
      - fast-leave boolean
      - import-policy reference
      - maximum-number-groups (keyword | number)
    - mcac
      - bandwidth
        - mandatory (number | keyword)
        - total (number | keyword)
      - interface-policy reference
      - mc-constraints
        - level number
          - apply-groups reference
          - apply-groups-exclude reference
          - bandwidth number
        - number-down number
          - apply-groups reference
          - apply-groups-exclude reference
          - level number
        - use-lag-port-weight boolean
      - policy reference
    - mvr
      - from-vpls reference
    - query-interval number
    - query-last-member-interval number
    - query-response-interval number
    - robust-count number
    - send-queries boolean
    - version keyword
    - ingress
      - qos
        - policy-name reference
        - queuing-type keyword
    - mac-da-hashing boolean
    - split-horizon-group string
  - pfc
    - association string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - association-release-timeout (keyword | number)
    - association-setup-retry number
    - bfd-expedited-path-down boolean
    - description string
    - heartbeat
      - interval number

```

configure subscriber-mgmt pfcf association heartbeat retries

```

    - retries number
    - timeout number
  - interface
    - name string
    - router-instance string
  - nat
    - nat-group reference
    - wlan-gw-group reference
  - node-id
    - fqdn string
    - use-ip-address
  - path-restoration-time number
  - peer
    - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - python-policy reference
  - tx
    - retries number
    - timeout number
    - ttl number
  - up-resiliency
- pim-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
- ppp-policy string
  - allow-same-circuit-id-for-dhcp boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - cookies boolean
  - default-pap-password string
  - default-user-name string
  - description string
  - force-ppp-mtu-gt-1492 boolean
  - ipcp-subnet-negotiation boolean
  - keepalive
    - hold-up-multiplier number
    - interval number
  - lcp-ignore-identifier boolean
  - lcp-ignore-magic-numbers boolean
  - max-sessions-per-cid
    - allow-sessions-without-cid boolean
    - limit number
  - max-sessions-per-mac number
- mlppp
  - accept-mrru boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - endpoint
    - ip (ipv4-address | keyword)
    - mac (mac-address | keyword)
    - short-sequence-numbers boolean
  - ncp-renegotiation keyword
  - pado-ac-name string
  - pado-delay number
  - ppp-authentication keyword
  - ppp-chap-challenge-length
    - max number
    - min number
  - ppp-initial-delay boolean
  - ppp-mtu number
  - ppp-options
    - custom-option protocol keyword option-number number
    - address string
    - apply-groups reference

```

configure subscriber-mgmt ppp-policy ppp-options custom-option apply-groups-exclude

```

    - apply-groups-exclude reference
    - ascii-string string
    - empty
    - hex-string string
  - re-establish-session boolean
  - reject-unconfigured-ncp boolean
  - reply-on-padt boolean
  - session-timeout number
  - sid-allocation keyword
  - unique-sid keyword
- pppoe-client-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - keepalive
    - hold-up-multiplier number
    - interval number
  - mru number
  - mtu number
  - python-policy reference
  - restart-backoff
    - initial-time number
    - max-time number
  - stack
    - ipv4 boolean
    - ipv6-slaac boolean
- radius-accounting-policy string
  - acct-tunnel-connection-fmt string
  - apply-groups reference
  - apply-groups-exclude reference
  - custom-record
    - apply-groups reference
    - apply-groups-exclude reference
    - queue number
      - apply-groups reference
      - apply-groups-exclude reference
    - e-counters
      - in-profile-octets-discarded-count boolean
      - in-profile-octets-forwarded-count boolean
      - in-profile-packets-discarded-count boolean
      - in-profile-packets-forwarded-count boolean
      - out-profile-octets-discarded-count boolean
      - out-profile-octets-forwarded-count boolean
      - out-profile-packets-discarded-count boolean
      - out-profile-packets-forwarded-count boolean
    - i-counters
      - all-octets-offered-count boolean
      - all-packets-offered-count boolean
      - high-octets-discarded-count boolean
      - high-octets-offered-count boolean
      - high-packets-discarded-count boolean
      - high-packets-offered-count boolean
      - in-profile-octets-forwarded-count boolean
      - in-profile-packets-forwarded-count boolean
      - low-octets-discarded-count boolean
      - low-octets-offered-count boolean
      - low-packets-discarded-count boolean
      - low-packets-offered-count boolean
      - out-profile-octets-forwarded-count boolean
      - out-profile-packets-forwarded-count boolean
      - uncoloured-octets-offered-count boolean
      - uncoloured-packets-offered-count boolean
  - ref-queue
    - all

```

configure subscriber-mgmt radius-accounting-policy custom-record ref-queue e-counters

```

- e-counters
  - in-profile-octets-discarded-count boolean
  - in-profile-octets-forwarded-count boolean
  - in-profile-packets-discarded-count boolean
  - in-profile-packets-forwarded-count boolean
  - out-profile-octets-discarded-count boolean
  - out-profile-octets-forwarded-count boolean
  - out-profile-packets-discarded-count boolean
  - out-profile-packets-forwarded-count boolean
- i-counters
  - all-octets-offered-count boolean
  - all-packets-offered-count boolean
  - high-octets-discarded-count boolean
  - high-octets-offered-count boolean
  - high-packets-discarded-count boolean
  - high-packets-offered-count boolean
  - in-profile-octets-forwarded-count boolean
  - in-profile-packets-forwarded-count boolean
  - low-octets-discarded-count boolean
  - low-octets-offered-count boolean
  - low-packets-discarded-count boolean
  - low-packets-offered-count boolean
  - out-profile-octets-forwarded-count boolean
  - out-profile-packets-forwarded-count boolean
  - uncoloured-octets-offered-count boolean
  - uncoloured-packets-offered-count boolean
- id reference
- significant-change number
- delay-start-time number
- description string
- host-accounting
  - admin-state keyword
  - interim-update boolean
- include-radius-attribute
  - access-loop-options boolean
  - acct-authentic boolean
  - acct-delay-time boolean
  - acct-triggered-reason boolean
  - all-authorized-session-addresses boolean
  - apn boolean
  - bearer-fteid boolean
  - bonding-active-connections boolean
  - bonding-id boolean
  - brg-num-active-sessions boolean
  - called-station-id boolean
  - calling-station-id
    - type keyword
  - circuit-id boolean
  - delegated-ipv6-prefix boolean
  - detailed-acct-attributes boolean
  - dhcp-vendor-class-id boolean
  - error-code boolean
  - firewall-info boolean
  - framed-interface-id boolean
  - framed-ip-address boolean
  - framed-ip-netmask boolean
  - framed-ipv6-prefix boolean
  - framed-ipv6-route boolean
  - framed-route boolean
  - imei boolean
  - imsi boolean
  - ipv6-address boolean
  - lanext-bridge-id boolean
  - lanext-device-type boolean

```



configure subscriber-mgmt radius-accounting-policy include-radius-attribute lanext-route-distinguisher

- **lanext-route-distinguisher** *boolean*
- **lanext-route-target** *boolean*
- **lanext-vni** *boolean*
- **mac-address** *boolean*
- **msisdn** *boolean*
- **nas-identifier** *boolean*
- **nas-port**
  - **bit-spec** *string*
- **nas-port-id**
  - **prefix-string** *string*
  - **suffix** *keyword*
- **nas-port-type**
  - **type** (*keyword | number*)
- **nat-port-range** *boolean*
- **remote-id** *boolean*
- **sla-profile** *boolean*
- **spi-sharing-id** *boolean*
- **std-acct-attributes** *boolean*
- **steering-profile** *boolean*
- **sub-profile** *boolean*
- **subscriber-id** *boolean*
- **tunnel-client-attrs** *boolean*
- **tunnel-server-attrs** *boolean*
- **uli** *boolean*
- **user-name** *boolean*
- **v6-aggregate-stats** *boolean*
- **wifi-num-attached-ues** *boolean*
- **wifi-rssi** *boolean*
- **wifi-ssid-vlan** *boolean*
- **xconnect-tunnel-home-address** *boolean*
- **mcs-interval**
  - **interval** (*keyword | number*)
- **queue-instance-accounting**
  - **admin-state** *keyword*
  - **interim-update** *boolean*
- **radius-server-policy** *reference*
- **session-accounting**
  - **admin-state** *keyword*
  - **host-update** *boolean*
  - **interim-update** *boolean*
- **session-id-format** *keyword*
- **triggered-updates**
  - **gtp-mobility** *boolean*
- **update-interval**
  - **interval** *number*
  - **jitter** (*keyword | number*)
- **radius-authentication-policy** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **fallback**
    - **action**
      - **accept**
      - **user-db** *string*
    - **force-probing** *boolean*
  - **include-radius-attribute**
    - **access-loop-options** *boolean*
    - **acct-session-id**
      - **type** *keyword*
    - **apn** *boolean*
    - **called-station-id** *boolean*
    - **calling-station-id**
      - **type** *keyword*
    - **circuit-id** *boolean*

configure subscriber-mgmt radius-authentication-policy include-radius-attribute dhcp-options

```

- dhcp-options boolean
- dhcp-vendor-class-id boolean
- dhcp6-options boolean
- gprs-negotiated-qos-profile boolean
- imei boolean
- imsi boolean
- mac-address boolean
- msisdn boolean
- nas-identifier boolean
- nas-port
  - bit-spec string
- nas-port-id
  - prefix-string string
  - suffix keyword
- nas-port-type
  - type (keyword | number)
- pppoe-service-name boolean
- rat-type boolean
- remote-id boolean
- sap-session-index boolean
- tunnel-server-attrs boolean
- uli boolean
- wifi-num-attached-ues boolean
- wifi-ssid-vlan boolean
- xconnect-tunnel-home-address boolean
- password string
- ppp-user-name
  - domain-name string
  - domain-operation keyword
- pppoe-access-method keyword
- radius-server-policy reference
- re-authentication boolean
- send-acct-stop-on-fail
  - on-accept-failure boolean
  - on-reject boolean
  - on-request-failure boolean
- user-name
  - domain-name string
  - domain-operation keyword
  - format keyword
  - gtp-format keyword
  - mac-format string
- rip-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication-key string
  - authentication-type keyword
  - description string
- router-advertisement-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - force-mcast keyword
  - max-advertisement-interval number
  - min-advertisement-interval number
  - options
    - current-hop-limit number
    - dns
      - include-rdnss boolean
      - rdnss-lifetime (number | keyword)
    - managed-configuration boolean
    - mtu (number | keyword)
    - other-stateful-configuration boolean
    - reachable-time number
    - retransmit-timer number

```

configure subscriber-mgmt router-advertisement-policy options router-lifetime

- **router-lifetime** *(number | keyword)*
- **prefix-options**
  - **stateful**
    - **auto-lifetimes** *boolean*
    - **on-link** *boolean*
    - **preferred-lifetime** *(number | keyword)*
    - **valid-lifetime** *(number | keyword)*
  - **stateless**
    - **on-link** *boolean*
    - **preferred-lifetime** *(number | keyword)*
    - **valid-lifetime** *(number | keyword)*
- **sap-template** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **cpu-protection**
  - **ip-src-monitoring**
  - **mac-monitoring**
  - **policy-id** *reference*
- **description** *string*
- **dist-cpu-protection** *reference*
- **hold-time** *(number | keyword)*
- **shcv-policy** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **layer-3**
    - **source-ip-origin** *keyword*
    - **unnumbered-source-ip** *string*
- **periodic**
  - **action** *keyword*
  - **admin-state** *keyword*
  - **interval** *number*
  - **retry-count** *number*
  - **timeout** *number*
- **trigger**
  - **host-limit-exceeded**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **retry-count** *number*
    - **timeout** *number*
  - **inactivity**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **retry-count** *number*
    - **timeout** *number*
  - **ip-conflict**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **retry-count** *number*
    - **timeout** *number*
  - **mac-learning**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **retry-count** *number*
    - **timeout** *number*
  - **mobility**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **retry-count** *number*

configure subscriber-mgmt shcv-policy trigger mobility timeout

```

- timeout number
- vpls
  - source-ip string
  - source-mac string
- sla-profile string
  - apply-groups reference
  - apply-groups-exclude reference
  - control
    - cups boolean
    - local boolean
  - credit-control-policy reference
  - def-instance-sharing keyword
  - description string
  - egress
    - bonding-selection
      - apply-groups reference
      - apply-groups-exclude reference
      - rate-thresholds
        - high number
        - low number
      - weight
        - change number
        - initial number
    - ip-filter reference
    - ipv6-filter reference
    - qos
      - hs-agg-rate number
      - qos-marking-from-sap boolean
      - sap-egress
        - overrides
          - hs-queue-stat-mode keyword
          - hs-wrr-group reference
          - apply-groups reference
          - apply-groups-exclude reference
          - hs-class-weight number
          - rate (number | keyword)
          - policer reference
          - apply-groups reference
          - apply-groups-exclude reference
          - cbs (number | keyword)
          - mbs (number | keyword)
          - packet-byte-offset number
          - rate
            - cir (number | keyword)
            - pir (number | keyword)
          - stat-mode keyword
        - queue reference
          - apply-groups reference
          - apply-groups-exclude reference
          - avg-frame-overhead decimal-number
          - cbs (number | keyword)
          - high-prio-only (number | keyword)
          - hs-class-weight number
          - hs-wred-queue
            - policy reference
          - hs-wrr-weight number
          - mbs (number | keyword)
          - rate
            - cir (number | keyword)
            - pir (number | keyword)
          - stat-mode keyword
      - policy-name reference
      - port-parent-location keyword
    - scheduler-policy

```

configure subscriber-mgmt sla-profile egress qos scheduler-policy overrides

```

- overrides
  - scheduler reference
  - apply-groups reference
  - apply-groups-exclude reference
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
  - policy-name reference
- use-ingress-l2tp-dscp boolean
- report-rate
- agg-rate
- policer number
- pppoe-actual-rate
- rfc5515-actual-rate
- scheduler string
- host-limits
- ipv4
  - arp number
  - dhcp number
  - overall number
  - ppp number
- ipv6
  - overall number
  - pd-ipoe-dhcp number
  - pd-overall number
  - pd-ppp-dhcp number
  - wan-ipoe-dhcp number
  - wan-ipoe-slaac number
  - wan-overall number
  - wan-ppp-dhcp number
  - wan-ppp-slaac number
- lac-overall number
- overall number
- remove-oldest boolean
- idle-timeout
  - apply-groups reference
  - apply-groups-exclude reference
  - category reference
    - action keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - timeout number
  - category-map-name reference
- ingress
  - ip-filter reference
  - ipv6-filter reference
  - qos
    - sap-ingress
      - overrides
        - policer reference
          - apply-groups reference
          - apply-groups-exclude reference
          - cbs (number | keyword)
          - mbs (number | keyword)
          - packet-byte-offset number
          - rate
            - cir (number | keyword)
            - pir (number | keyword)
          - stat-mode keyword
        - queue reference
          - apply-groups reference
          - apply-groups-exclude reference
          - cbs (number | keyword)
          - high-prio-only (number | keyword)

```

configure subscriber-mgmt sla-profile ingress qos sap-ingress overrides queue mbs

```

    - mbs (number | keyword)
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
      - stat-mode keyword
    - policy-name reference
    - queuing-type keyword
  - report-rate
    - agg-rate
    - policer number
    - pppoe-actual-rate
    - rfc5515-actual-rate
    - scheduler string
  - one-time-http-redirection
    - ip-filter reference
  - pfcp-mappings
    - session-qer
      - downlink
        - aggregate-rate
        - arbiter string
        - policer number
        - queue number
        - scheduler string
      - uplink
        - arbiter string
        - policer number
        - queue number
        - scheduler string
    - session-limits
      - ipoe number
      - l2tp
        - lns number
        - lts number
        - overall number
      - overall number
      - pppoe
        - lac number
        - local number
        - overall number
  - steering-profile string
    - access
      - router-instance string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - network
      - next-hop string
      - router-instance string
  - sub-ident-policy string
    - app-profile-map
      - entry string
        - app-profile reference
        - apply-groups reference
        - apply-groups-exclude reference
      - use-direct-map-as-default boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - primary
      - admin-state keyword
      - script-url string
    - secondary
      - admin-state keyword
      - script-url string

```

configure subscriber-mgmt sub-ident-policy sla-profile-map

```

- sla-profile-map
  - entry string
    - apply-groups reference
    - apply-groups-exclude reference
    - sla-profile reference
  - use-direct-map-as-default boolean
- strings-from-option number
- sub-profile-map
  - entry string
    - apply-groups reference
    - apply-groups-exclude reference
    - sub-profile reference
  - use-direct-map-as-default boolean
- tertiary
  - admin-state keyword
  - script-url string
- sub-mcac-policy string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bandwidth
    - mandatory (number | keyword)
    - total (number | keyword)
  - description string
- sub-profile string
  - accounting-policy reference
  - accu-stats-policy reference
  - ancp
    - ancp-policy reference
    - apply-groups reference
    - apply-groups-exclude reference
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-stats boolean
  - control
    - cups boolean
    - local boolean
  - description string
- egress
  - lag-per-link-hash
    - apply-groups reference
    - apply-groups-exclude reference
    - class number
    - weight number
  - qos
    - agg-rate
      - adaptation-rule keyword
      - burst-limit (number | keyword)
      - min-resv-bw number
      - queue-frame-based-accounting boolean
      - rate number
    - encap-offset
      - type keyword
    - hs-agg-rate number
    - hs-low-burst-max-class number
    - hs-min-resv-bw number
    - policer-control-policy
      - overrides
        - root
          - apply-groups reference
          - apply-groups-exclude reference
          - max-rate (number | keyword)
          - priority-mbs-thresholds
            - min-thresh-separation (number | keyword)

```

configure subscriber-mgmt sub-profile egress qos policer-control-policy overrides root priority-mbs-thresholds priority

```

    - priority number
      - apply-groups reference
      - apply-groups-exclude reference
      - mbs-contribution (number | keyword)
  - policy-name reference
- scheduler-policy
- overrides
  - scheduler reference
  - apply-groups reference
  - apply-groups-exclude reference
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
  - policy-name reference
- firewall-policy reference
- host-limits
- ipv4
  - arp number
  - dhcp number
  - overall number
  - ppp number
- ipv6
  - overall number
  - pd-ipoe-dhcp number
  - pd-overall number
  - pd-ppp-dhcp number
  - wan-ipoe-dhcp number
  - wan-ipoe-slaac number
  - wan-overall number
  - wan-ppp-dhcp number
  - wan-ppp-slaac number
- lac-overall number
- overall number
- host-tracking-policy reference
- hs-sla-mode keyword
- igmp-policy reference
- ingress
- qos
  - policer-control-policy
    - overrides
      - root
        - apply-groups reference
        - apply-groups-exclude reference
        - max-rate (number | keyword)
        - priority-mbs-thresholds
          - min-thresh-separation (number | keyword)
          - priority number
            - apply-groups reference
            - apply-groups-exclude reference
            - mbs-contribution (number | keyword)
        - policy-name reference
      - scheduler-policy
      - overrides
        - scheduler reference
        - apply-groups reference
        - apply-groups-exclude reference
        - rate
          - cir (number | keyword)
          - pir (number | keyword)
        - policy-name reference
    - mld-policy reference
  - nat
    - access-mode keyword
    - allow-bypass boolean

```



## configure subscriber-mgmt sub-profile nat policy

- **policy** *reference*
- **prefix-list** *reference*
- **pim-policy** *reference*
- **preference** *number*
- **radius-accounting**
  - **policy** *reference*
  - **session-optimized-stop** *boolean*
- **secondary-shaper-hashing** *boolean*
- **session-limits**
  - **ipoe** *number*
  - **l2tp**
    - **lns** *number*
    - **lts** *number*
    - **overall** *number*
  - **overall** *number*
- **pppoe**
  - **lac** *number*
  - **local** *number*
  - **overall** *number*
- **sla-profile-map**
  - **entry** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **sla-profile** *reference*
  - **use-direct-map-as-default** *boolean*
- **sub-mcac-policy** *reference*
- **upnp-policy** *reference*
- **volume-stats-type** *keyword*
- **vport-hashing** *boolean*
- **subscriber-interface-statistics**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **svlan-statistics**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **system-behavior**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **legacy-dns-nbns** *boolean*
- **up-resiliency**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **fate-sharing-group-template** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **gratuitous-arp** *keyword*
    - **redundant-interface**
      - **name** *string*
      - **service** *string*
    - **uplink-forwarding-while-standby** *boolean*
- **vrgw**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **brg-profile** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **connectivity-verification**
    - **admin-state** *keyword*
    - **count** *number*
    - **retry-time** *number*
    - **timeout** *number*

## configure subscriber-mgmt vrgw brg-profile description

```

- description string
- hold-time number
- home-pool
  - lease-time number
  - option (number | keyword)
    - apply-groups reference
    - apply-groups-exclude reference
    - ascii-string string
    - duration number
    - empty
    - hex-string string
    - ipv4-address string
    - netbios-node-type keyword
  - standby-ip-lifetime number
- subnet
  - end string
  - prefix string
  - start string
- initial-hold-time number
- radius-authentication
  - password string
  - server-policy reference
- radius-proxy-server string name string
- sla-profile-string string
- sub-profile-string string
- uplink-initial-wait number
- lanext
  - apply-groups reference
  - apply-groups-exclude reference
  - router-target-as-number number
- wlan-gw
  - apply-groups reference
  - apply-groups-exclude reference
  - queries
    - apply-groups reference
    - apply-groups-exclude reference
  - tunnel string
    - access-point-mac-address-learning-status keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - calculate-counts boolean
    - encapsulation
      - gre boolean
      - l2 boolean
      - l2tp boolean
      - vxlan boolean
    - l2
      - inner-vlan number
      - outer-vlan number
      - sap string
    - l3
      - address-type keyword
      - local-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - remote-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - router-instance string
    - ues
      - maximum number
      - minimum number
      - state
        - cross-connect boolean
        - dsm boolean
        - esm boolean
        - l2 boolean
        - migrant boolean

```

---

configure subscriber-mgmt wlan-gw queries ue

```
- ue string
  - address
    - dhcp6-na string
    - ipv4 string
    - slaac string
    - type keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bridge-domain number
  - connection-state
    - already-signed-in boolean
    - authorized-only boolean
    - cross-connect boolean
    - data-triggered boolean
    - delete-pending boolean
    - dhcp-triggered boolean
    - dsm boolean
    - esm boolean
    - gtp-authorized boolean
    - ip-assigned boolean
    - ip-assigned-authorized boolean
    - l2 boolean
    - portal boolean
  - mac-address string
  - soft-quota-exhausted boolean
  - tunnel
    - encapsulation keyword
    - local-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - remote-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - router-instance string
  - vlan number
  - wlan-gw-group
    - id number
    - member number
- virtual-chassis-identifier string
```

### 3.45.1 subscriber-mgmt command descriptions

#### subscriber-mgmt

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>subscriber-mgmt</b> context   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a>   |
| Tree        | <a href="#">subscriber-mgmt</a>  |
| Description | Commands in this context configure subscriber management attributes, policies, and profiles. |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                      |

#### accu-stats-policy [[name](#)] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>accu-stats-policy</b> list instance  |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">accu-stats-policy</a> <i>string</i>  |
| Tree           | <a href="#">accu-stats-policy</a>   |
| Description    | <p>Commands in this context configure a storage policy for cumulative statistics for subscribers.</p> <p>The policy defines the direction for the policer or the queue to be stored.</p> <p>The policy stores subscriber statistics even if the subscriber session has ended. The subscriber statistics can be viewed even if the subscriber is offline.</p> <p>When the subscriber session ends, the statistics are added to the past statistics stored in memory so that all previous session statistics are accumulated. The accumulated statistics are not persistent; they are only stored in memory and reset to zero when the chassis reboots.</p> |
| Max. Instances | 32  |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

#### [\[name\]](#) *string*

|               |  |
|---------------|--|
| Synopsis      | Policy name  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">accu-stats-policy</a> <i>string</i> |
| Tree          | <a href="#">accu-stats-policy</a>  |
| String Length | 1 to 32  |

|            |   |
|------------|---|
| Notes      | This element is part of a list key.                     |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">accu-stats-policy</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **egress** [[type](#)] *keyword id number*

|                |  |
|----------------|--|
| Synopsis       | Add a list entry for <b>egress</b>   |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">accu-stats-policy</a> <i>string</i> <a href="#">egress</a> <i>keyword id number</i> |
| Tree           | <a href="#">egress</a>   |
| Max. Instances | 4  |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### [[type](#)] *keyword*

|            |  |
|------------|--|
| Synopsis   | Type   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">accu-stats-policy</a> <i>string</i> <a href="#">egress</a> <i>keyword id number</i> |
| Tree       | <a href="#">egress</a>   |
| Options    | queue, policer   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**id number**

|            |   |
|------------|---|
| Synopsis   | Queue or policer ID   |
| Context    | <b>configure subscriber-mgmt accu-stats-policy</b> <i>string egress keyword id number</i> |
| Tree       | <a href="#">egress</a>  |
| Range      | 1 to 63   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                   |

**ingress** [[type](#)] *keyword id number*

|                |  |
|----------------|--|
| Synopsis       | Add a list entry for <b>ingress</b>  |
| Context        | <b>configure subscriber-mgmt accu-stats-policy</b> <i>string ingress keyword id number</i> |
| Tree           | <a href="#">ingress</a>  |
| Max. Instances | 4  |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                    |

**[type]** *keyword*

|            |  |
|------------|--|
| Synopsis   | Type   |
| Context    | <b>configure subscriber-mgmt accu-stats-policy</b> <i>string ingress keyword id number</i> |
| Tree       | <a href="#">ingress</a>  |
| Options    | queue, policer   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                    |

**id number**

|          |  |
|----------|--|
| Synopsis | Queue or policer ID  |
| Context  | <b>configure subscriber-mgmt accu-stats-policy</b> <i>string ingress keyword id number</i> |
| Tree     | <a href="#">ingress</a>  |
| Range    | 1 to 63  |

|            |   |
|------------|---|
| Notes      | This element is part of a list key.                     |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## ancp

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>ancp</b> context  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt ancp</a>                            |
| Tree        | <a href="#">ancp</a>   |
| Description | Commands in this context configure Access Node Control Protocol (ANCP) settings. |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                          |

## ancp-policy [[name](#)] *string*

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>ancp-policy</b> list instance  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt ancp ancp-policy</a> <i>string</i>   |
| Tree        | <a href="#">ancp-policy</a>   |
| Description | <p>Commands in this context configure the specified ANCP policy, which can be associated with either an ANCP string (static) or a subscriber-profile (dynamic), and define the behavior of hosts belonging to these profiles.</p> <p>ANCP policies control rates and subscribers based on port-up/port-down messages from the access node. When configured, the node stops SHCV to a host that is part of a port that is down (by port-down message). When a port-up message is received for the port that was down, the node initiates the SHCV process immediately to verify connectivity.</p> <p>When ANCP is used with ESM, all hosts of a subscriber are updated with the ANCP string last associated with the subscriber.</p> |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## [[name](#)] *string*

|               |   |
|---------------|---|
| Synopsis      | Policy name   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt ancp ancp-policy</a> <i>string</i> |
| Tree          | <a href="#">ancp-policy</a>   |
| String Length | 1 to 32   |

|            |   |
|------------|---|
| Notes      | This element is part of a list key.                     |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## egress

|            |  |
|------------|--|
| Synopsis   | Enter the <b>egress</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-policy</a> <i>string</i> <a href="#">egress</a> |
| Tree       | <a href="#">egress</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## rate-adjustment *number*

|             |   |
|-------------|---|
| Synopsis    | Rate adjustment for the scheduler   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-policy</a> <i>string</i> <a href="#">egress</a> <a href="#">rate-adjustment</a> <i>number</i>  |
| Tree        | <a href="#">rate-adjustment</a>   |
| Description | This command configures the rate adjustment for the scheduler. This setting is used when the rate returned by the DSLAM is calculated with a different encapsulation than the SR node. The node adjusts the rate by the percentage specified as:<br><br>$\text{DSLAM\_RATE} * (\text{adjustment rate})/100 - (\text{rate reduction})$ |
| Range       | 1 to 200  |
| Units       | percent   |
| Default     | 100   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## rate-modify

|            |  |
|------------|--|
| Synopsis   | Enter the <b>rate-modify</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-policy</a> <i>string</i> <a href="#">egress</a> <a href="#">rate-modify</a> |
| Tree       | <a href="#">rate-modify</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |



**agg-rate**

|             |   |
|-------------|---|
| Synopsis    | Maximum total rate for all subscriber egress queues   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-policy</a> <i>string</i> <a href="#">egress</a> <a href="#">rate-modify</a> <a href="#">agg-rate</a> |
| Tree        | <a href="#">agg-rate</a>  |
| Description | This command specifies the maximum total rate for all subscriber egress queues for each subscriber associated with the policy.  |
| Notes       | The following elements are part of a choice: <b>agg-rate</b> or <b>scheduler</b> .  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**scheduler** *string*

|               |  |
|---------------|--|
| Synopsis      | Scheduler to be applied for rate modification  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-policy</a> <i>string</i> <a href="#">egress</a> <a href="#">rate-modify</a> <a href="#">scheduler</a> <i>string</i> |
| Tree          | <a href="#">scheduler</a>  |
| String Length | 1 to 32  |
| Notes         | The following elements are part of a choice: <b>agg-rate</b> or <b>scheduler</b> .   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**rate-monitor**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>rate-monitor</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-policy</a> <i>string</i> <a href="#">egress</a> <a href="#">rate-monitor</a> |
| Tree       | <a href="#">rate-monitor</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**alarm** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Generate SNMP notification when monitor event is raised  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-policy</a> <i>string</i> <a href="#">egress</a> <a href="#">rate-monitor</a> <a href="#">alarm</a> <i>boolean</i>           |
| Tree        | <a href="#">alarm</a>  |
| Description | When configured to <b>true</b> , the system generates an alarm (trap) to the management system including the rate, the ANCP policy name, and the ANCP string when the monitored rate is below the configured rate. |

When configured to **false**, no alarm is generated.

|            |   |
|------------|---|
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **rate number**

|            |   |
|------------|---|
| Synopsis   | Rate below which the system generates an event  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt ancp ancp-policy</a> <i>string</i> <a href="#">egress rate-monitor rate number</a> |
| Tree       | <a href="#">rate</a>  |
| Range      | 1 to 4294967295   |
| Units      | kilobps   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **rate-reduction number**

|             |  |
|-------------|--|
| Synopsis    | Constant rate reduction to specified DSLAM rate  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt ancp ancp-policy</a> <i>string</i> <a href="#">egress rate-reduction number</a>   |
| Tree        | <a href="#">rate-reduction</a>   |
| Description | This command configures a constant rate reduction to the rate specified by the DSLAM. This setting is used if the node must adjust the rate to a value that is offset (for example by a fixed multicast dedicated bandwidth) compared to the total available on the DSLAM. The rate is calculated as:<br><br>$\text{DSLAM\_RATE} * (\text{adjustment rate})/100 - (\text{rate reduction})$ |
| Range       | 1 to 4294967295  |
| Units       | kilobps  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **ingress**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ingress</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt ancp ancp-policy</a> <i>string</i> <a href="#">ingress</a> |
| Tree       | <a href="#">ingress</a>   |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **rate-adjustment** *number*

Synopsis Rate adjustment for the scheduler

Context **configure** [subscriber-mgmt](#) [ancp](#) [ancp-policy](#) *string* [ingress](#) **rate-adjustment** *number*

Tree [rate-adjustment](#)

Description This command configures the rate adjustment for the scheduler. This setting is used when the rate returned by the DSLAM is calculated with a different encapsulation than the SR node. The node adjusts the rate by the percentage specified as:  

$$\text{DSLAM\_RATE} * (\text{adjustment rate})/100 \text{ — (rate reduction)}$$

Range 1 to 200

Units percent

Default 100

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **rate-modify**

Synopsis Enter the **rate-modify** context

Context **configure** [subscriber-mgmt](#) [ancp](#) [ancp-policy](#) *string* [ingress](#) **rate-modify**

Tree [rate-modify](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **scheduler** *string*

Synopsis Scheduler to be applied for rate modification

Context **configure** [subscriber-mgmt](#) [ancp](#) [ancp-policy](#) *string* [ingress](#) [rate-modify](#) **scheduler** *string*

Tree [scheduler](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**rate-monitor**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>rate-monitor</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-policy</a> <i>string</i> <a href="#">ingress</a> <a href="#">rate-monitor</a> |
| Tree       | <a href="#">rate-monitor</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**alarm** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Generate SNMP notification when monitor event is raised  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-policy</a> <i>string</i> <a href="#">ingress</a> <a href="#">rate-monitor</a> <a href="#">alarm</a> <i>boolean</i>  |
| Tree        | <a href="#">alarm</a>  |
| Description | When configured to <b>true</b> , the system generates an alarm (trap) to the management system including the rate, the ANCP policy name, and the ANCP string when the monitored rate is below the configured rate.<br><br>When configured to <b>false</b> , no alarm is generated. |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**rate** *number*

|            |   |
|------------|---|
| Synopsis   | Rate below which the system generates an event  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-policy</a> <i>string</i> <a href="#">ingress</a> <a href="#">rate-monitor</a> <a href="#">rate</a> <i>number</i> |
| Tree       | <a href="#">rate</a>  |
| Range      | 1 to 4294967295   |
| Units      | kilobps   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**rate-reduction** *number*

|          |  |
|----------|--|
| Synopsis | Constant rate reduction to specified DSLAM rate  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-policy</a> <i>string</i> <a href="#">ingress</a> <a href="#">rate-reduction</a> <i>number</i> |
| Tree     | <a href="#">rate-reduction</a>   |

|             |  |
|-------------|--|
| Description | This command configures a constant rate reduction to the rate specified by the DSLAM. This setting is used if the node must adjust the rate to a value that is offset (for example by a fixed multicast dedicated bandwidth) compared to the total available on the DSLAM. The rate is calculated as:<br>$\text{DSLAM\_RATE} * (\text{adjustment rate})/100 - (\text{rate reduction})$ |
| Range       | 1 to 4294967295  |
| Units       | kilobps  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## port-down

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>port-down</b> context   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt ancp ancp-policy</a> <i>string</i> <b>port-down</b> |
| Tree        | <a href="#">port-down</a>  |
| Description | Commands in this context configure the actions taken on port-down.                               |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## suspend-shcv

|             |  |
|-------------|--|
| Synopsis    | Enable the <b>suspend-shcv</b> context   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt ancp ancp-policy</a> <i>string</i> <b>port-down suspend-shcv</b>  |
| Tree        | <a href="#">suspend-shcv</a>   |
| Description | Commands in this context specify the configuration to suspend SHCV for the hosts defined with the ANCP policy. |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## alarm *boolean*

|          |  |
|----------|--|
| Synopsis | Send an alarm before suspending SHCV   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt ancp ancp-policy</a> <i>string</i> <b>port-down suspend-shcv alarm</b> <i>boolean</i> |
| Tree     | <a href="#">alarm</a>  |
| Default  | false  |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **hold-time** *number*

|             |   |
|-------------|---|
| Synopsis    | Time that SHCV is suspended   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-policy</a> <i>string</i> <a href="#">port-down</a> <a href="#">suspend-shcv</a> <b>hold-time</b> <i>number</i> |
| Tree        | <a href="#">hold-time</a>   |
| Description | This command configures the time that the node suspends SHCV.<br>When unconfigured, SHCV is suspended until a port-up message is received.  |
| Range       | 1 to 7200   |
| Units       | seconds   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ancp-static-map**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ancp-static-map</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <b>ancp-static-map</b> |
| Tree       | <a href="#">ancp-static-map</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                      |

### **multi-service-site-entry** [[ancp-string](#)] *string* [customer-name](#) *reference* [customer-site-name](#) *reference*

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>multi-service-site-entry</b> list instance  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-static-map</a> <b>multi-service-site-entry</b> <i>string</i> <a href="#">customer-name</a> <i>reference</i> <a href="#">customer-site-name</a> <i>reference</i> |
| Tree        | <a href="#">multi-service-site-entry</a>   |
| Description | Commands in this context configure the ANCP key mapping (usually the circuit ID of the DSLAM port) to a customer, site, and scheduler name when Multi-Service site (MSS) is used.  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**[ancp-string]** *string*

|               |  |
|---------------|--|
| Synopsis      | ANCP string  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-static-map</a> <a href="#">multi-service-site-entry</a> <i>string</i><br><a href="#">customer-name</a> <i>reference</i> <a href="#">customer-site-name</a> <i>reference</i> |
| Tree          | <a href="#">multi-service-site-entry</a>   |
| String Length | 1 to 63  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**customer-name** *reference*

|            |  |
|------------|--|
| Synopsis   | Customer ID  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-static-map</a> <a href="#">multi-service-site-entry</a> <i>string</i><br><a href="#">customer-name</a> <i>reference</i> <a href="#">customer-site-name</a> <i>reference</i> |
| Tree       | <a href="#">multi-service-site-entry</a>   |
| Reference  | <b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**customer-site-name** *reference*

|            |  |
|------------|--|
| Synopsis   | Service customer multi-service site name   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-static-map</a> <a href="#">multi-service-site-entry</a> <i>string</i><br><a href="#">customer-name</a> <i>reference</i> <a href="#">customer-site-name</a> <i>reference</i> |
| Tree       | <a href="#">multi-service-site-entry</a>   |
| Reference  | <b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**ancp-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | ANCP policy name  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-static-map</a> <a href="#">multi-service-site-entry</a> <i>string</i> <a href="#">customer-name</a> <i>reference</i> <a href="#">customer-site-name</a> <i>reference</i> <b>ancp-policy</b> <i>reference</i> |
| Tree       | <a href="#">ancp-policy</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <b>ancp-policy</b> <i>string</i>  |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**sap-entry** [[ancp-string](#)] *string* **sap-id** *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>sap-entry</b> list instance   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-static-map</a> <b>sap-entry</b> <i>string</i> <b>sap-id</b> <i>string</i> |
| Tree       | <a href="#">sap-entry</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**[ancp-string]** *string*

|               |  |
|---------------|--|
| Synopsis      | ANCP key name  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-static-map</a> <b>sap-entry</b> <i>string</i> <b>sap-id</b> <i>string</i> |
| Tree          | <a href="#">sap-entry</a>  |
| String Length | 1 to 63  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**sap-id** *string*

|               |  |
|---------------|--|
| Synopsis      | SAP ID   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-static-map</a> <b>sap-entry</b> <i>string</i> <b>sap-id</b> <i>string</i> |
| Tree          | <a href="#">sap-entry</a>  |
| String Length | 1 to 45  |
| Notes         | This element is part of a list key.  |



Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ancp-policy** *reference*

Synopsis ANCP policy name  
 Context **configure** [subscriber-mgmt](#) [ancp](#) [ancp-static-map](#) [sap-entry](#) *string* [sap-id](#) *string* [ancp-policy](#) *reference*  
 Tree [ancp-policy](#)  
 Reference **configure** [subscriber-mgmt](#) [ancp](#) [ancp-policy](#) *string*  
 Notes This element is mandatory.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **authentication-origin**

Synopsis Enter the **authentication-origin** context  
 Context **configure** [subscriber-mgmt](#) [authentication-origin](#)  
 Tree [authentication-origin](#)  
 Introduced 21.2.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **overrides**

Synopsis Enter the **overrides** context  
 Context **configure** [subscriber-mgmt](#) [authentication-origin](#) [overrides](#)  
 Tree [overrides](#)  
 Introduced 21.2.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **priority** [*id*] *number*

Synopsis Enter the **priority** list instance  
 Context **configure** [subscriber-mgmt](#) [authentication-origin](#) [overrides](#) [priority](#) *number*  
 Tree [priority](#)

|             |   |
|-------------|---|
| Description | Commands in this context arrange the relative order of authentication priorities. |
| Introduced  | 21.2.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                           |

**[id] number**

|             |   |
|-------------|---|
| Synopsis    | Authentication origin priority override   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">authentication-origin overrides</a> <a href="#">priority</a> <i>number</i> |
| Tree        | <a href="#">priority</a>  |
| Description | This command configures the insert position of the authentication origin priority override.   |
| Range       | 1 to 4294967295   |
| Notes       | This element is part of a list key.   |
| Introduced  | 21.2.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**source keyword**

|             |   |
|-------------|---|
| Synopsis    | Source of authentication priority   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">authentication-origin overrides</a> <a href="#">priority</a> <i>number</i> <a href="#">source</a> <i>keyword</i> |
| Tree        | <a href="#">source</a>  |
| Description | This command specifies the prioritization of authentication sources.  |
| Options     | python, diameter-gx, ludb, radius, diameter-nasreq, gtp, dhcp, local-address-assignment, pfc, config  |
| Notes       | This element is mandatory.  |
| Introduced  | 21.2.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**auto-sub-id**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>auto-sub-id</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">auto-sub-id</a> |
| Tree       | <a href="#">auto-sub-id</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                      |

### **implicit-generation** *boolean*

|            |   |
|------------|---|
| Synopsis   | Generate implicitly a subscriber ID when not provided   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt auto-sub-id implicit-generation</a> <i>boolean</i> |
| Tree       | <a href="#">implicit-generation</a>   |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ipoe-key** *keyword*

|                |  |
|----------------|--|
| Synopsis       | Auto-generated subscriber ID key1 for IPoE hosts                                     |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt auto-sub-id ipoe-key</a> <i>keyword</i> |
| Tree           | <a href="#">ipoe-key</a>   |
| Options        | mac, sap-id, circuit-id, remote-id, dual-stack-remote-id, service-name               |
| Max. Instances | 4  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                              |

### **ppp-key** *keyword*

|                |   |
|----------------|---|
| Synopsis       | Auto-generated subscriber identifier key1 for PPP hosts                             |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt auto-sub-id ppp-key</a> <i>keyword</i> |
| Tree           | <a href="#">ppp-key</a>   |
| Options        | mac, sap-id, circuit-id, remote-id, session-id                                      |
| Max. Instances | 5   |
| Notes          | This element is ordered by the user.  |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                             |

**bgp-peering-policy** [*name*] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>bgp-peering-policy</b> list instance   |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> |
| Tree           | <a href="#">bgp-peering-policy</a>  |
| Max. Instances | 255   |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**[name]** *string*

|               |   |
|---------------|---|
| Synopsis      | BGP peer policy name  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> |
| Tree          | <a href="#">bgp-peering-policy</a>  |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**advertise-inactive** *boolean*

|            |   |
|------------|---|
| Synopsis   | Advertise inactive BGP routes to other BGP peers  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <a href="#">advertise-inactive</a> <i>boolean</i> |
| Tree       | <a href="#">advertise-inactive</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**aggregator-id-zero** *boolean*

|            |   |
|------------|---|
| Synopsis   | Add router ID to BGP aggregator path attribute  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <a href="#">aggregator-id-zero</a> <i>boolean</i> |
| Tree       | <a href="#">aggregator-id-zero</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**as-override** *boolean*

|            |   |
|------------|---|
| Synopsis   | Replace the peer ASN with the local ASN in AS Path  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt bgp-peering-policy</a> <i>string</i> <b>as-override</b> <i>boolean</i> |
| Tree       | <a href="#">as-override</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**asn-4-byte** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable the use of 4-byte ASNs  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt bgp-peering-policy</a> <i>string</i> <b>asn-4-byte</b> <i>boolean</i> |
| Tree       | <a href="#">asn-4-byte</a>   |
| Introduced | 16.0.R3  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**authentication-key** *string*

|               |   |
|---------------|---|
| Synopsis      | BGP authentication key for all peers  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt bgp-peering-policy</a> <i>string</i> <b>authentication-key</b> <i>string</i> |
| Tree          | <a href="#">authentication-key</a>  |
| String Length | 1 to 370  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**authentication-keychain** *reference*

|            |   |
|------------|---|
| Synopsis   | Keychain name used for the TCP session  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt bgp-peering-policy</a> <i>string</i> <b>authentication-keychain</b> <i>reference</i> |
| Tree       | <a href="#">authentication-keychain</a>   |
| Reference  | <b>configure</b> <a href="#">system security keychains</a> <b>keychain</b> <i>string</i>  |
| Introduced | 16.0.R3   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**bfd-liveness** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Enable BFD  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt bgp-peering-policy</a> <i>string</i> <a href="#">bfd-liveness</a> <i>boolean</i>   |
| Tree        | <a href="#">bfd-liveness</a>  |
| Description | <p>When configured to <b>true</b>, this command enables the use of Bi-directional Forwarding Detection (BFD) to control the state of an ESM dynamic BGP peer that is set up with the BGP peering policy. The parameters used for the BFD session are configured in the BFD context of the group interface or retail subscriber interface.</p> <p>When configured to <b>false</b>, this command disables the use of BFD for new ESM dynamic BGP peers that are set up with the BGP peering policy.</p> |
| Default     | false   |
| Introduced  | 21.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**client-reflect** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable client reflection of routes to all client peers  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt bgp-peering-policy</a> <i>string</i> <a href="#">client-reflect</a> <i>boolean</i> |
| Tree       | <a href="#">client-reflect</a>  |
| Introduced | 16.0.R3   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**cluster** *string*

|            |   |
|------------|---|
| Synopsis   | Cluster ID for route reflector server   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt bgp-peering-policy</a> <i>string</i> <a href="#">cluster</a> <i>string</i> |
| Tree       | <a href="#">cluster</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**connect-retry** *number*

|          |   |
|----------|---|
| Synopsis | BGP connect retry timer value   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt bgp-peering-policy</a> <i>string</i> <a href="#">connect-retry</a> <i>number</i> |
| Tree     | <a href="#">connect-retry</a>   |
| Range    | 1 to 65535  |

|            |   |
|------------|---|
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **damping** *boolean*

|            |   |
|------------|---|
| Synopsis   | Use BGP route damping for learned routes  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <b>damping</b> <i>boolean</i> |
| Tree       | <a href="#">damping</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **export** *reference*

|                |  |
|----------------|--|
| Synopsis       | Export route policies to control advertised routes   |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <b>export</b> <i>reference</i> |
| Tree           | <a href="#">export</a>   |
| Reference      | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>                                   |
| Max. Instances | 15   |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**fast-external-failover** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable/disable BGP fast external failover.   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <b>fast-external-failover</b> <i>boolean</i> |
| Tree       | <a href="#">fast-external-failover</a>   |
| Introduced | 16.0.R3  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**hold-time** *number*

|            |  |
|------------|--|
| Synopsis   | BGP hold time before closing connection  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <b>hold-time</b> <i>number</i> |
| Tree       | <a href="#">hold-time</a>  |
| Range      | 0   3 to 65535   |
| Units      | seconds  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**import** *reference*

|                |  |
|----------------|--|
| Synopsis       | Import route policies to control advertised routes   |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <b>import</b> <i>reference</i> |
| Tree           | <a href="#">import</a>   |
| Reference      | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>                                   |
| Max. Instances | 15   |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**keepalive** *number*

|          |  |
|----------|--|
| Synopsis | BGP keepalive timer  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <b>keepalive</b> <i>number</i> |
| Tree     | <a href="#">keepalive</a>  |
| Range    | 0 to 21845   |



|            |   |
|------------|---|
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **local-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

|            |  |
|------------|--|
| Synopsis   | Local IP address used when communicating with BGP peers  |
| Context    | <b>configure</b> <b>subscriber-mgmt</b> <b>bgp-peering-policy</b> <i>string</i> <b>local-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <a href="#">local-address</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **local-as**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>local-as</b> context   |
| Context    | <b>configure</b> <b>subscriber-mgmt</b> <b>bgp-peering-policy</b> <i>string</i> <b>local-as</b> |
| Tree       | <a href="#">local-as</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **as-number** *number*

|            |  |
|------------|--|
| Synopsis   | AS number to be advertised to peer   |
| Context    | <b>configure</b> <b>subscriber-mgmt</b> <b>bgp-peering-policy</b> <i>string</i> <b>local-as</b> <b>as-number</b> <i>number</i> |
| Tree       | <a href="#">as-number</a>  |
| Range      | 1 to 4294967295  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **private** *boolean*

|          |   |
|----------|---|
| Synopsis | Hide local AS number in paths learned from peering  |
| Context  | <b>configure</b> <b>subscriber-mgmt</b> <b>bgp-peering-policy</b> <i>string</i> <b>local-as</b> <b>private</b> <i>boolean</i> |
| Tree     | <a href="#">private</a>   |
| Default  | false   |

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **local-preference** *number*

Synopsis Local preference for incoming routes if not specified  
 Context **configure** [subscriber-mgmt](#) [bgp-peering-policy](#) *string* [local-preference](#) *number*  
 Tree [local-preference](#)  
 Range 0 to 4294967295  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **loop-detect** *keyword*

Synopsis Strategy for loop detection in the AS path  
 Context **configure** [subscriber-mgmt](#) [bgp-peering-policy](#) *string* [loop-detect](#) *keyword*  
 Tree [loop-detect](#)  
 Options drop-peer, ignore-loop, off, discard-route  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **med-out** (*number* | *keyword*)

Synopsis Multi-Exit Discriminator (MED) advertising  
 Context **configure** [subscriber-mgmt](#) [bgp-peering-policy](#) *string* [med-out](#) (*number* | *keyword*)  
 Tree [med-out](#)  
 Max. Range 0 to 4294967295  
 Options igp-cost  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **min-route-advertisement** *number*

Synopsis Minimum interval for prefix to be advertised to a peer  
 Context **configure** [subscriber-mgmt](#) [bgp-peering-policy](#) *string* [min-route-advertisement](#) *number*

|            |   |
|------------|---|
| Tree       | <a href="#">min-route-advertisement</a>                 |
| Range      | 1 to 255  |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **multihop** *number*

|            |   |
|------------|---|
| Synopsis   | TTL value entered in IP header of packets sent to peer  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt bgp-peering-policy</a> <i>string</i> <b>multihop</b> <i>number</i> |
| Tree       | <a href="#">multihop</a>  |
| Range      | 1 to 255  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **next-hop-self** *boolean*

|            |   |
|------------|---|
| Synopsis   | Set net hop path attribute to self when advertising   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt bgp-peering-policy</a> <i>string</i> <b>next-hop-self</b> <i>boolean</i> |
| Tree       | <a href="#">next-hop-self</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **passive** *boolean*

|            |   |
|------------|---|
| Synopsis   | Wait passively for BGP peer to connect  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt bgp-peering-policy</a> <i>string</i> <b>passive</b> <i>boolean</i> |
| Tree       | <a href="#">passive</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **peer-as** *number*

|          |  |
|----------|--|
| Synopsis | AS number for remote peer  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt bgp-peering-policy</a> <i>string</i> <b>peer-as</b> <i>number</i> |

---

|            |   |
|------------|---|
| Tree       | <a href="#">peer-as</a>                                 |
| Range      | 1 to 4294967295   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **preference** *number*

|            |  |
|------------|--|
| Synopsis   | Route preference for routes learned via configured peer  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <a href="#">preference</a> <i>number</i> |
| Tree       | <a href="#">preference</a>   |
| Range      | 1 to 255   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **prefix-limit** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of routes that can be learned from peer   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <a href="#">prefix-limit</a> <i>number</i> |
| Tree       | <a href="#">prefix-limit</a>   |
| Range      | 1 to 4294967295  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **remove-private**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>remove-private</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <a href="#">remove-private</a> |
| Tree       | <a href="#">remove-private</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **limited** *boolean*

|          |  |
|----------|--|
| Synopsis | Remove private AS numbers up to first public ASN encountered   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <a href="#">remove-private</a> <i>limited</i> <i>boolean</i> |

|            |   |
|------------|---|
| Tree       | <a href="#">limited</a>                                 |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## send-communities

|            |  |
|------------|--|
| Synopsis   | Enter the <b>send-communities</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <a href="#">send-communities</a> |
| Tree       | <a href="#">send-communities</a>   |
| Introduced | 16.0.R3  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## extended *boolean*

|            |   |
|------------|---|
| Synopsis   | Send communities which includes VRF target handling   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <a href="#">send-communities</a> <b>extended</b> <i>boolean</i> |
| Tree       | <a href="#">extended</a>  |
| Introduced | 16.0.R3   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## standard *boolean*

|            |   |
|------------|---|
| Synopsis   | Send standard communities that existed before VPRNs   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <a href="#">send-communities</a> <b>standard</b> <i>boolean</i> |
| Tree       | <a href="#">standard</a>  |
| Introduced | 16.0.R3   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## ttl-security *number*

|          |  |
|----------|--|
| Synopsis | Minimum TTL value for incoming BGP packet  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <a href="#">ttl-security</a> <i>number</i> |
| Tree     | <a href="#">ttl-security</a>   |

|            |   |
|------------|---|
| Range      | 1 to 255  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

**type keyword**

|            |  |
|------------|--|
| Synopsis   | Peer type  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt bgp-peering-policy</a> <i>string</i> <b>type</b> <i>keyword</i> |
| Tree       | <a href="#">type</a>   |
| Options    | no-type, internal, external  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**category-map** [[category-map-name](#)] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>category-map</b> list instance                                 |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> |
| Tree           | <a href="#">category-map</a>  |
| Max. Instances | 255   |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                     |

**[category-map-name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Category map name   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> |
| Tree          | <a href="#">category-map</a>  |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                     |

**activity-threshold** *number*

|            |   |
|------------|---|
| Synopsis   | Threshold to determine whether an activity is ongoing   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <b>activity-threshold</b> <i>number</i> |
| Tree       | <a href="#">activity-threshold</a>  |
| Range      | 1 to 100000000  |
| Units      | kilobps   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**category** [[category-name](#)] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>category</b> list instance   |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <b>category</b> <i>string</i> |
| Tree           | <a href="#">category</a>  |
| Max. Instances | 16  |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**[category-name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Category name   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <b>category</b> <i>string</i> |
| Tree          | <a href="#">category</a>  |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**credit-type-override** *keyword*

|          |  |
|----------|--|
| Synopsis | Credit type override in category map   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <b>category</b> <i>string</i> <b>credit-type-override</b> <i>keyword</i> |
| Tree     | <a href="#">credit-type-override</a>   |

|            |   |
|------------|---|
| Options    | volume, time  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### default-credit

|            |  |
|------------|--|
| Synopsis   | Enter the <b>default-credit</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <b>default-credit</b> |
| Tree       | <a href="#">default-credit</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### time *number*

|            |  |
|------------|--|
| Synopsis   | Default time credit  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <b>default-credit</b> <i>time</i> <i>number</i> |
| Tree       | <a href="#">time</a>   |
| Range      | 1 to 4294967295  |
| Units      | seconds  |
| Notes      | The following elements are part of a choice: <b>time</b> or <b>volume</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### volume

|            |  |
|------------|--|
| Synopsis   | Enable the <b>volume</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <b>default-credit</b> <b>volume</b> |
| Tree       | <a href="#">volume</a>   |
| Notes      | The following elements are part of a choice: <b>time</b> or <b>volume</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |



**unit keyword**

|            |   |
|------------|---|
| Synopsis   | Unit for the default volume credit  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map string category string default-credit volume unit keyword</a> |
| Tree       | <a href="#">unit</a>  |
| Options    | bytes, kilobytes, megabytes, gigabytes  |
| Default    | bytes   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**value number**

|            |   |
|------------|---|
| Synopsis   | Value for the default volume credit   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map string category string default-credit volume value number</a> |
| Tree       | <a href="#">value</a>   |
| Range      | 1 to 4294967295   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**description string**

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt category-map string category string description string</a> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**egress**

|          |   |
|----------|---|
| Synopsis | Enter the <b>egress</b> context   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt category-map string category string egress</a> |
| Tree     | <a href="#">egress</a>  |

---

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **policer** *number*

|                   |   |
|-------------------|---|
| Synopsis          | Egress policers for this category   |
| Context           | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">egress</a> <a href="#">policer</a> <i>number</i> |
| Tree              | <a href="#">policer</a>   |
| Range             | 1 to 63   |
| Max.<br>Instances | 63  |
| Introduced        | 16.0.R1   |
| Platforms         | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **queue** *number*

|                   |   |
|-------------------|---|
| Synopsis          | Egress queues for this category   |
| Context           | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">egress</a> <a href="#">queue</a> <i>number</i> |
| Tree              | <a href="#">queue</a>   |
| Range             | 1 to 8  |
| Max.<br>Instances | 8   |
| Introduced        | 16.0.R1   |
| Platforms         | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **exhausted-credit-service-level**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>exhausted-credit-service-level</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> |
| Tree       | <a href="#">exhausted-credit-service-level</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## egress

|            |  |
|------------|--|
| Synopsis   | Enter the <b>egress</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">egress</a> |
| Tree       | <a href="#">egress</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## ip-filter

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ip-filter</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">egress</a> <a href="#">ip-filter</a> |
| Tree       | <a href="#">ip-filter</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## entry [*id*] *number*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>entry</b> list instance   |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">egress</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> |
| Tree           | <a href="#">entry</a>  |
| Max. Instances | 10   |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## [*id*] *number*

|          |  |
|----------|--|
| Synopsis | IP filter entry ID   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">egress</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> |
| Tree     | <a href="#">entry</a>  |
| Range    | 1 to 65535   |
| Notes    | This element is part of a list key.  |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## action

|            |  |
|------------|--|
| Synopsis   | Enter the <b>action</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">egress</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <b>action</b> |
| Tree       | <a href="#">action</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## drop

|            |  |
|------------|--|
| Synopsis   | Packets matching the filter entry are dropped  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">egress</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <b>action</b> <b>drop</b> |
| Tree       | <a href="#">drop</a>   |
| Notes      | The following elements are part of a choice: <b>drop</b> , <b>forward</b> , or <b>http-redirect</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## forward

|            |   |
|------------|---|
| Synopsis   | Packets matching the filter entry are forwarded   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">egress</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <b>action</b> <b>forward</b> |
| Tree       | <a href="#">forward</a>   |
| Notes      | The following elements are part of a choice: <b>drop</b> , <b>forward</b> , or <b>http-redirect</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## http-redirect

|          |   |
|----------|---|
| Synopsis | Enable the <b>http-redirect</b> context |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">egress</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">http-redirect</a> |
| Tree       | <a href="#">http-redirect</a>   |
| Notes      | The following elements are part of a choice: <b>drop</b> , <b>forward</b> , or <b>http-redirect</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **allow-override** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow URL to be overridden by RADIUS/Diameter   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">egress</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">http-redirect</a> <a href="#">allow-override</a> <i>boolean</i> |
| Tree       | <a href="#">allow-override</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **url** *string*

|               |   |
|---------------|---|
| Synopsis      | URL that is used to redirect the packets  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">egress</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">http-redirect</a> <a href="#">url</a> <i>string</i> |
| Tree          | <a href="#">url</a>   |
| String Length | 1 to 255  |
| Notes         | This element is mandatory.  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">egress</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## match

Synopsis Enter the **match** context

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [exhausted-credit-service-level egress ip-filter entry](#) *number* **match**

Tree [match](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## dscp keyword

Synopsis DSCP to match

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [exhausted-credit-service-level egress ip-filter entry](#) *number* **match dscp** *keyword*

Tree [dscp](#)

Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## dst-port

Synopsis Enter the **dst-port** context

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [exhausted-credit-service-level egress ip-filter entry](#) *number* **match dst-port**

Tree [dst-port](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## eq number

Synopsis Port equal

|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">match dst-port eq</a> <i>number</i> |
| Tree       | <a href="#">eq</a>   |
| Range      | 0 to 65535   |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **gt** *number*

|            |  |
|------------|--|
| Synopsis   | Port greater than  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">match dst-port gt</a> <i>number</i> |
| Tree       | <a href="#">gt</a>   |
| Range      | 0 to 65534   |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **lt** *number*

|            |  |
|------------|--|
| Synopsis   | Port less than   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">match dst-port lt</a> <i>number</i> |
| Tree       | <a href="#">lt</a>   |
| Range      | 1 to 65535   |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **range**

|          |   |
|----------|---|
| Synopsis | Enable the <b>range</b> context   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">match dst-port range</a> |
| Tree     | <a href="#">range</a>   |

|            |  |
|------------|--|
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> . |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**end number**

|            |   |
|------------|---|
| Synopsis   | Upper bound of the port range to match  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">match dst-port range end</a> <i>number</i> |
| Tree       | <a href="#">end</a>   |
| Range      | 0 to 65535  |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**start number**

|            |   |
|------------|---|
| Synopsis   | Lower bound of the port range to match  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">match dst-port range start</a> <i>number</i> |
| Tree       | <a href="#">start</a>   |
| Range      | 0 to 65535  |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**fragment keyword**

|            |  |
|------------|--|
| Synopsis   | Fragmentation to match   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">match fragment</a> <i>keyword</i> |
| Tree       | <a href="#">fragment</a>   |
| Options    | false, true  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |



## icmp

|            |   |
|------------|---|
| Synopsis   | Enter the <b>icmp</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">match icmp</a> |
| Tree       | <a href="#">icmp</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## code number

|            |  |
|------------|--|
| Synopsis   | ICMP code to match   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">match icmp code</a> <i>number</i> |
| Tree       | <a href="#">code</a>   |
| Range      | 0 to 255   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## type number

|            |  |
|------------|--|
| Synopsis   | ICMP type to match   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">match icmp type</a> <i>number</i> |
| Tree       | <a href="#">type</a>   |
| Range      | 0 to 255   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## ip-option

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ip-option</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">match ip-option</a> |
| Tree       | <a href="#">ip-option</a>  |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mask** *number*

Synopsis IP option mask

Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ip-filter](#) [entry](#) *number* [match](#) [ip-option](#) [mask](#) *number*

Tree [mask](#)

Range 0 to 255

Default 0

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **type** *number*

Synopsis First IP option value for the IP header

Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ip-filter](#) [entry](#) *number* [match](#) [ip-option](#) [type](#) *number*

Tree [type](#)

Range 0 to 255

Default 0

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **multiple-option** *boolean*

Synopsis Match the multiple option

Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ip-filter](#) [entry](#) *number* [match](#) [multiple-option](#) *boolean*

Tree [multiple-option](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **option-present** *boolean*

Synopsis Match the present option

|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">match option-present</a> <i>boolean</i> |
| Tree       | <a href="#">option-present</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **protocol** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | IPv4 protocol to match   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">match protocol</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">protocol</a>   |
| Range      | 0 to 255   |
| Options    | tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp                                    |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **src-ip** *string*

|            |   |
|------------|---|
| Synopsis   | Source IP address and mask to match   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">match src-ip</a> <i>string</i> |
| Tree       | <a href="#">src-ip</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **src-port**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>src-port</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">match src-port</a> |
| Tree       | <a href="#">src-port</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **eq** *number*

|            |   |
|------------|---|
| Synopsis   | Port equal  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">egress</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <b>eq</b> <i>number</i> |
| Tree       | <a href="#">eq</a>  |
| Range      | 0 to 65535  |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **gt** *number*

|            |   |
|------------|---|
| Synopsis   | Port greater than   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">egress</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <b>gt</b> <i>number</i> |
| Tree       | <a href="#">gt</a>  |
| Range      | 0 to 65534  |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **lt** *number*

|            |   |
|------------|---|
| Synopsis   | Port less than  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">egress</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <b>lt</b> <i>number</i> |
| Tree       | <a href="#">lt</a>  |
| Range      | 1 to 65535  |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **range**

|          |                                 |
|----------|---------------------------------|
| Synopsis | Enable the <b>range</b> context |
|----------|---------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">match src-port range</a> |
| Tree       | <a href="#">range</a>   |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **end number**

|            |  |
|------------|--|
| Synopsis   | Upper bound of the port range to match   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">match src-port range</a> <b>end</b> <i>number</i> |
| Tree       | <a href="#">end</a>  |
| Range      | 0 to 65535   |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **start number**

|            |  |
|------------|--|
| Synopsis   | Lower bound of the port range to match   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">match src-port range</a> <b>start</b> <i>number</i> |
| Tree       | <a href="#">start</a>  |
| Range      | 0 to 65535   |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **tcp-flags**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>tcp-flags</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">match tcp-flags</a> |
| Tree       | <a href="#">tcp-flags</a>  |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ack** *boolean*

Synopsis Check for ACK bit

Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ip-filter](#) [entry](#) *number* [match](#) [tcp-flags](#) **ack** *boolean*

Tree [ack](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **syn** *boolean*

Synopsis Check for SYN bit

Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ip-filter](#) [entry](#) *number* [match](#) [tcp-flags](#) **syn** *boolean*

Tree [syn](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv6-filter**

Synopsis Enter the **ipv6-filter** context

Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) **ipv6-filter**

Tree [ipv6-filter](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance

Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ipv6-filter](#) **entry** *number*

Tree [entry](#)

Max. 10

Instances

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

**[id]** *number*

|            |  |
|------------|--|
| Synopsis   | IP filter entry ID   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">egress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> |
| Tree       | <a href="#">entry</a>  |
| Range      | 1 to 65535   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**action**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>action</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">egress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <b>action</b> |
| Tree       | <a href="#">action</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**drop**

|            |   |
|------------|---|
| Synopsis   | Packets matching the filter entry are dropped   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">egress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <b>drop</b> |
| Tree       | <a href="#">drop</a>  |
| Notes      | The following elements are part of a choice: <b>drop</b> or <b>forward</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**forward**

|          |   |
|----------|---|
| Synopsis | Packets matching the filter entry are forwarded |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ipv6-filter entry</a> <i>number</i> <a href="#">action forward</a> |
| Tree       | <a href="#">forward</a>   |
| Notes      | The following elements are part of a choice: <b>drop</b> or <b>forward</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ipv6-filter entry</a> <i>number</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **match**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>match</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ipv6-filter entry</a> <i>number</i> <a href="#">match</a> |
| Tree       | <a href="#">match</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **dscp** *keyword*

|          |   |
|----------|---|
| Synopsis | DSCP to match   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ipv6-filter entry</a> <i>number</i> <a href="#">match</a> <a href="#">dscp</a> <i>keyword</i>  |
| Tree     | <a href="#">dscp</a>  |
| Options  | be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63 |



|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **dst-port**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>dst-port</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">egress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <b>dst-port</b> |
| Tree       | <a href="#">dst-port</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **eq number**

|            |  |
|------------|--|
| Synopsis   | Port equal   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">egress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <b>dst-port</b> <b>eq</b> <i>number</i> |
| Tree       | <a href="#">eq</a>   |
| Range      | 0 to 65535   |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **gt number**

|            |  |
|------------|--|
| Synopsis   | Port greater than  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">egress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <b>dst-port</b> <b>gt</b> <i>number</i> |
| Tree       | <a href="#">gt</a>   |
| Range      | 0 to 65534   |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**lt number**

|            |   |
|------------|---|
| Synopsis   | Port less than  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress</a> <a href="#">ipv6-filter entry</a> <i>number</i> <a href="#">match dst-port</a> <b>lt</b> <i>number</i> |
| Tree       | <a href="#">lt</a>  |
| Range      | 1 to 65535  |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**range**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>range</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress</a> <a href="#">ipv6-filter entry</a> <i>number</i> <a href="#">match dst-port</a> <b>range</b> |
| Tree       | <a href="#">range</a>  |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**end number**

|            |  |
|------------|--|
| Synopsis   | Upper bound of the port range to match   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress</a> <a href="#">ipv6-filter entry</a> <i>number</i> <a href="#">match dst-port</a> <b>range end</b> <i>number</i> |
| Tree       | <a href="#">end</a>  |
| Range      | 0 to 65535   |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**start number**

|          |  |
|----------|--|
| Synopsis | Lower bound of the port range to match   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress</a> <a href="#">ipv6-filter entry</a> <i>number</i> <a href="#">match dst-port</a> <b>range start</b> <i>number</i> |

|            |   |
|------------|---|
| Tree       | <a href="#">start</a>                                   |
| Range      | 0 to 65535  |
| Notes      | This element is mandatory.                              |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## icmp

|            |   |
|------------|---|
| Synopsis   | Enter the <b>icmp</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ipv6-filter entry</a> <i>number</i> <a href="#">match icmp</a> |
| Tree       | <a href="#">icmp</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## code number

|            |  |
|------------|--|
| Synopsis   | ICMP code to match   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ipv6-filter entry</a> <i>number</i> <a href="#">match icmp code</a> <i>number</i> |
| Tree       | <a href="#">code</a>   |
| Range      | 0 to 255   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## type number

|            |  |
|------------|--|
| Synopsis   | ICMP type to match   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ipv6-filter entry</a> <i>number</i> <a href="#">match icmp type</a> <i>number</i> |
| Tree       | <a href="#">type</a>   |
| Range      | 0 to 255   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**next-header** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | IP protocol to match  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ipv6-filter entry</a> <i>number</i> <a href="#">match next-header</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">next-header</a>   |
| Range      | 0 to 255  |
| Options    | tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**src-ip** *string*

|            |   |
|------------|---|
| Synopsis   | Source IP address and mask as the match condition   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ipv6-filter entry</a> <i>number</i> <a href="#">match src-ip</a> <i>string</i> |
| Tree       | <a href="#">src-ip</a>  |
| Default    | 0::0 0::0   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**src-port**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>src-port</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ipv6-filter entry</a> <i>number</i> <a href="#">match src-port</a> |
| Tree       | <a href="#">src-port</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**eq** *number*

|          |  |
|----------|--|
| Synopsis | Port equal   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ipv6-filter entry</a> <i>number</i> <a href="#">match src-port eq</a> <i>number</i> |
| Tree     | <a href="#">eq</a>   |

|            |  |
|------------|--|
| Range      | 0 to 65535   |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> . |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**gt number**

|            |   |
|------------|---|
| Synopsis   | Port greater than   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">egress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <b>gt</b> <i>number</i> |
| Tree       | <a href="#">gt</a>  |
| Range      | 0 to 65534  |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**lt number**

|            |   |
|------------|---|
| Synopsis   | Port less than  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">egress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <b>lt</b> <i>number</i> |
| Tree       | <a href="#">lt</a>  |
| Range      | 1 to 65535  |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**range**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>range</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">egress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <b>range</b> |
| Tree       | <a href="#">range</a>  |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .   |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **end number**

Synopsis Upper bound of the port range to match

Context **configure** [subscriber-mgmt category-map](#) *string category string* [exhausted-credit-service-level egress ipv6-filter entry](#) *number match src-port range end number*

Tree [end](#)

Range 0 to 65535

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **start number**

Synopsis Lower bound of the port range to match

Context **configure** [subscriber-mgmt category-map](#) *string category string* [exhausted-credit-service-level egress ipv6-filter entry](#) *number match src-port range start number*

Tree [start](#)

Range 0 to 65535

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **tcp-flags**

Synopsis Enter the **tcp-flags** context

Context **configure** [subscriber-mgmt category-map](#) *string category string* [exhausted-credit-service-level egress ipv6-filter entry](#) *number match tcp-flags*

Tree [tcp-flags](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ack boolean**

Synopsis Check for ACK bit

|            |  |
|------------|--|
| Context    | <b>configure subscriber-mgmt category-map</b> <i>string category string exhausted-credit-service-level egress ipv6-filter entry number match tcp-flags ack boolean</i> |
| Tree       | <a href="#">ack</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **syn** *boolean*

|            |  |
|------------|--|
| Synopsis   | Check for SYN bit  |
| Context    | <b>configure subscriber-mgmt category-map</b> <i>string category string exhausted-credit-service-level egress ipv6-filter entry number match tcp-flags syn boolean</i> |
| Tree       | <a href="#">syn</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **ingress**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ingress</b> context   |
| Context    | <b>configure subscriber-mgmt category-map</b> <i>string category string exhausted-credit-service-level ingress</i> |
| Tree       | <a href="#">ingress</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **ip-filter**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ip-filter</b> context   |
| Context    | <b>configure subscriber-mgmt category-map</b> <i>string category string exhausted-credit-service-level ingress ip-filter</i> |
| Tree       | <a href="#">ip-filter</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **entry** [*id*] *number*

|          |                                      |
|----------|--------------------------------------|
| Synopsis | Enter the <b>entry</b> list instance |
|----------|--------------------------------------|

|                |   |
|----------------|---|
| Context        | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> |
| Tree           | <a href="#">entry</a>   |
| Max. Instances | 10  |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**[id] number**

|            |   |
|------------|---|
| Synopsis   | IP filter entry ID  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> |
| Tree       | <a href="#">entry</a>   |
| Range      | 1 to 65535  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**action**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>action</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <b>action</b> |
| Tree       | <a href="#">action</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**drop**

|            |  |
|------------|--|
| Synopsis   | Packets matching the filter entry are dropped  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <b>action</b> <a href="#">drop</a> |
| Tree       | <a href="#">drop</a>   |
| Notes      | The following elements are part of a choice: <b>drop</b> , <b>forward</b> , or <b>http-redirect</b> .  |
| Introduced | 16.0.R1  |



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## forward

Synopsis Packets matching the filter entry are forwarded

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [exhausted-credit-service-level ingress ip-filter entry](#) *number* [action forward](#)

Tree [forward](#)

Notes The following elements are part of a choice: **drop**, **forward**, or **http-redirect**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## http-redirect

Synopsis Enable the **http-redirect** context

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [exhausted-credit-service-level ingress ip-filter entry](#) *number* [action http-redirect](#)

Tree [http-redirect](#)

Notes The following elements are part of a choice: **drop**, **forward**, or **http-redirect**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## allow-override *boolean*

Synopsis Allow URL to be overridden by RADIUS/Diameter

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [exhausted-credit-service-level ingress ip-filter entry](#) *number* [action http-redirect allow-override](#) *boolean*

Tree [allow-override](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## url *string*

Synopsis URL that is used to redirect the packets

|               |  |
|---------------|--|
| Context       | <b>configure subscriber-mgmt category-map</b> <i>string</i> <i>category</i> <i>string</i> <i>exhausted-credit-service-level ingress ip-filter entry</i> <i>number</i> <i>action</i> <i>http-redirect url</i> <i>string</i> |
| Tree          | <a href="#">url</a>  |
| String Length | 1 to 255   |
| Notes         | This element is mandatory.   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure subscriber-mgmt category-map</b> <i>string</i> <i>category</i> <i>string</i> <i>exhausted-credit-service-level ingress ip-filter entry</i> <i>number</i> <i>description</i> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **match**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>match</b> context   |
| Context    | <b>configure subscriber-mgmt category-map</b> <i>string</i> <i>category</i> <i>string</i> <i>exhausted-credit-service-level ingress ip-filter entry</i> <i>number</i> <i>match</i> |
| Tree       | <a href="#">match</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **dscp** *keyword*

|          |  |
|----------|--|
| Synopsis | DSCP to match  |
| Context  | <b>configure subscriber-mgmt category-map</b> <i>string</i> <i>category</i> <i>string</i> <i>exhausted-credit-service-level ingress ip-filter entry</i> <i>number</i> <i>match</i> <i>dscp</i> <i>keyword</i>  |
| Tree     | <a href="#">dscp</a>   |
| Options  | be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, |

|            |  |
|------------|--|
|            | cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63 |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**dst-ip string**

|            |  |
|------------|--|
| Synopsis   | Destination IP address and mask to match   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map string category string</a> <a href="#">exhausted-credit-service-level ingress ip-filter entry number match dst-ip string</a> |
| Tree       | <a href="#">dst-ip</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**dst-port**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>dst-port</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map string category string</a> <a href="#">exhausted-credit-service-level ingress ip-filter entry number match dst-port</a> |
| Tree       | <a href="#">dst-port</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**eq number**

|            |   |
|------------|---|
| Synopsis   | Port equal  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map string category string</a> <a href="#">exhausted-credit-service-level ingress ip-filter entry number match dst-port eq number</a> |
| Tree       | <a href="#">eq</a>  |
| Range      | 0 to 65535  |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**gt number**

|          |                   |
|----------|-------------------|
| Synopsis | Port greater than |
|----------|-------------------|

|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">match dst-port</a> <b>gt</b> <i>number</i> |
| Tree       | <a href="#">gt</a>   |
| Range      | 0 to 65534   |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**lt** *number*

|            |  |
|------------|--|
| Synopsis   | Port less than   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">match dst-port</a> <b>lt</b> <i>number</i> |
| Tree       | <a href="#">lt</a>   |
| Range      | 1 to 65535   |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**range**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>range</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">match dst-port</a> <b>range</b> |
| Tree       | <a href="#">range</a>   |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**end** *number*

|          |   |
|----------|---|
| Synopsis | Upper bound of the port range to match  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">match dst-port</a> <b>range end</b> <i>number</i> |
| Tree     | <a href="#">end</a>   |
| Range    | 0 to 65535  |

|            |   |
|------------|---|
| Notes      | This element is mandatory.                              |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **start** *number*

|            |  |
|------------|--|
| Synopsis   | Lower bound of the port range to match   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <a href="#">range</a> <a href="#">start</a> <i>number</i> |
| Tree       | <a href="#">start</a>  |
| Range      | 0 to 65535   |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **fragment** *keyword*

|            |   |
|------------|---|
| Synopsis   | Fragmentation to match  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">fragment</a> <i>keyword</i> |
| Tree       | <a href="#">fragment</a>  |
| Options    | false, true   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **icmp**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>icmp</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">icmp</a> |
| Tree       | <a href="#">icmp</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**code number**

|            |   |
|------------|---|
| Synopsis   | ICMP code to match  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">match icmp code</a> <i>number</i> |
| Tree       | <a href="#">code</a>  |
| Range      | 0 to 255  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**type number**

|            |   |
|------------|---|
| Synopsis   | ICMP type to match  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">match icmp type</a> <i>number</i> |
| Tree       | <a href="#">type</a>  |
| Range      | 0 to 255  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**ip-option**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ip-option</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">match ip-option</a> |
| Tree       | <a href="#">ip-option</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**mask number**

|          |  |
|----------|--|
| Synopsis | IP option mask   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">match ip-option mask</a> <i>number</i> |
| Tree     | <a href="#">mask</a>   |
| Range    | 0 to 255   |
| Default  | 0  |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

**type** *number*

|            |   |
|------------|---|
| Synopsis   | First IP option value for the IP header   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">ip-option</a> <b>type</b> <i>number</i> |
| Tree       | <a href="#">type</a>  |
| Range      | 0 to 255  |
| Default    | 0   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**multiple-option** *boolean*

|            |  |
|------------|--|
| Synopsis   | Match the multiple option  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">multiple-option</a> <b>boolean</b> |
| Tree       | <a href="#">multiple-option</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**option-present** *boolean*

|            |   |
|------------|---|
| Synopsis   | Match the present option  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">option-present</a> <b>boolean</b> |
| Tree       | <a href="#">option-present</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**protocol** (*number* | *keyword*)

|          |   |
|----------|---|
| Synopsis | IPv4 protocol to match  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">protocol</a> ( <i>number</i>   <i>keyword</i> ) |

|            |   |
|------------|---|
| Tree       | <a href="#">protocol</a>  |
| Range      | 0 to 255  |
| Options    | tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### src-port

|            |  |
|------------|--|
| Synopsis   | Enter the <b>src-port</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">match src-port</a> |
| Tree       | <a href="#">src-port</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### eq number

|            |   |
|------------|---|
| Synopsis   | Port equal  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">match src-port eq</a> <i>number</i> |
| Tree       | <a href="#">eq</a>  |
| Range      | 0 to 65535  |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### gt number

|          |   |
|----------|---|
| Synopsis | Port greater than   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">match src-port gt</a> <i>number</i> |
| Tree     | <a href="#">gt</a>  |
| Range    | 0 to 65534  |
| Notes    | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .  |



|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

**lt number**

|            |  |
|------------|--|
| Synopsis   | Port less than   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">match src-port</a> <b>lt</b> <i>number</i> |
| Tree       | <b>lt</b>  |
| Range      | 1 to 65535   |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**range**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>range</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">match src-port</a> <b>range</b> |
| Tree       | <b>range</b>  |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**end number**

|            |  |
|------------|--|
| Synopsis   | Upper bound of the port range to match   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">match src-port</a> <b>range</b> <b>end</b> <i>number</i> |
| Tree       | <b>end</b>   |
| Range      | 0 to 65535   |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **start** *number*

|            |   |
|------------|---|
| Synopsis   | Lower bound of the port range to match  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">match src-port range</a> <b>start</b> <i>number</i> |
| Tree       | <a href="#">start</a>   |
| Range      | 0 to 65535  |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **tcp-flags**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>tcp-flags</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">match tcp-flags</a> |
| Tree       | <a href="#">tcp-flags</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ack** *boolean*

|            |   |
|------------|---|
| Synopsis   | Check for ACK bit   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">match tcp-flags</a> <b>ack</b> <i>boolean</i> |
| Tree       | <a href="#">ack</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **syn** *boolean*

|            |   |
|------------|---|
| Synopsis   | Check for SYN bit   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">match tcp-flags</a> <b>syn</b> <i>boolean</i> |
| Tree       | <a href="#">syn</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**ipv6-filter**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ipv6-filter</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress</a> <a href="#">ipv6-filter</a> |
| Tree       | <a href="#">ipv6-filter</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**entry** [*id*] *number*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>entry</b> list instance  |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress</a> <a href="#">ipv6-filter entry</a> <i>number</i> |
| Tree           | <a href="#">entry</a>   |
| Max. Instances | 10  |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**[id]** *number*

|            |   |
|------------|---|
| Synopsis   | IP filter entry ID  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress</a> <a href="#">ipv6-filter entry</a> <i>number</i> |
| Tree       | <a href="#">entry</a>   |
| Range      | 1 to 65535  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**action**

|          |  |
|----------|--|
| Synopsis | Enter the <b>action</b> context  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress</a> <a href="#">ipv6-filter entry</a> <i>number</i> <a href="#">action</a> |
| Tree     | <a href="#">action</a>   |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## drop

|            |   |
|------------|---|
| Synopsis   | Packets matching the filter entry are dropped   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">drop</a> |
| Tree       | <a href="#">drop</a>  |
| Notes      | The following elements are part of a choice: <b>drop</b> or <b>forward</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## forward

|            |  |
|------------|--|
| Synopsis   | Packets matching the filter entry are forwarded  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forward</a> |
| Tree       | <a href="#">forward</a>  |
| Notes      | The following elements are part of a choice: <b>drop</b> or <b>forward</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## description *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## match

|          |                                |
|----------|--------------------------------|
| Synopsis | Enter the <b>match</b> context |
|----------|--------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure subscriber-mgmt category-map</b> <i>string category string exhausted-credit-service-level ingress ipv6-filter entry number match</i> |
| Tree       | <a href="#">match</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **dscp keyword**

|            |   |
|------------|---|
| Synopsis   | DSCP to match   |
| Context    | <b>configure subscriber-mgmt category-map</b> <i>string category string exhausted-credit-service-level ingress ipv6-filter entry number match dscp keyword</i>  |
| Tree       | <a href="#">dscp</a>  |
| Options    | be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63 |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **dst-ip string**

|            |   |
|------------|---|
| Synopsis   | Destination IP address and mask to match  |
| Context    | <b>configure subscriber-mgmt category-map</b> <i>string category string exhausted-credit-service-level ingress ipv6-filter entry number match dst-ip string</i> |
| Tree       | <a href="#">dst-ip</a>  |
| Default    | 0::0 0::0   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **dst-port**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>dst-port</b> context  |
| Context    | <b>configure subscriber-mgmt category-map</b> <i>string category string exhausted-credit-service-level ingress ipv6-filter entry number match dst-port</i> |
| Tree       | <a href="#">dst-port</a>   |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **eq number**

Synopsis Port equal

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [exhausted-credit-service-level ingress ipv6-filter entry](#) *number match dst-port eq number*

Tree [eq](#)

Range 0 to 65535

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **gt number**

Synopsis Port greater than

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [exhausted-credit-service-level ingress ipv6-filter entry](#) *number match dst-port gt number*

Tree [gt](#)

Range 0 to 65534

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lt number**

Synopsis Port less than

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [exhausted-credit-service-level ingress ipv6-filter entry](#) *number match dst-port lt number*

Tree [lt](#)

Range 1 to 65535

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## range

|            |  |
|------------|--|
| Synopsis   | Enable the <b>range</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <a href="#">range</a> |
| Tree       | <a href="#">range</a>  |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## end number

|            |  |
|------------|--|
| Synopsis   | Upper bound of the port range to match   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <a href="#">range</a> <a href="#">end</a> <i>number</i> |
| Tree       | <a href="#">end</a>  |
| Range      | 0 to 65535   |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## start number

|            |  |
|------------|--|
| Synopsis   | Lower bound of the port range to match   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <a href="#">range</a> <a href="#">start</a> <i>number</i> |
| Tree       | <a href="#">start</a>  |
| Range      | 0 to 65535   |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## icmp

|          |  |
|----------|--|
| Synopsis | Enter the <b>icmp</b> context  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">icmp</a> |

|            |   |
|------------|---|
| Tree       | <a href="#">icmp</a>                                    |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

**code number**

|            |   |
|------------|---|
| Synopsis   | ICMP code to match  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ipv6-filter entry</a> <i>number</i> <a href="#">match icmp code</a> <i>number</i> |
| Tree       | <a href="#">code</a>  |
| Range      | 0 to 255  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**type number**

|            |   |
|------------|---|
| Synopsis   | ICMP type to match  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ipv6-filter entry</a> <i>number</i> <a href="#">match icmp type</a> <i>number</i> |
| Tree       | <a href="#">type</a>  |
| Range      | 0 to 255  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**next-header** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | IP protocol to match   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ipv6-filter entry</a> <i>number</i> <a href="#">match next-header</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">next-header</a>  |
| Range      | 0 to 255   |
| Options    | tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |



## src-port

|            |  |
|------------|--|
| Synopsis   | Enter the <b>src-port</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> |
| Tree       | <a href="#">src-port</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## eq number

|            |   |
|------------|---|
| Synopsis   | Port equal  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">eq</a> <i>number</i> |
| Tree       | <a href="#">eq</a>  |
| Range      | 0 to 65535  |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## gt number

|            |   |
|------------|---|
| Synopsis   | Port greater than   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">gt</a> <i>number</i> |
| Tree       | <a href="#">gt</a>  |
| Range      | 0 to 65534  |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## lt number

|          |   |
|----------|---|
| Synopsis | Port less than  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">lt</a> <i>number</i> |

|            |  |
|------------|--|
| Tree       | <a href="#">lt</a>   |
| Range      | 1 to 65535   |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> . |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## range

|            |  |
|------------|--|
| Synopsis   | Enable the <b>range</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string category string exhausted-credit-service-level ingress ipv6-filter entry number match src-port range</i> |
| Tree       | <a href="#">range</a>  |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## end number

|            |   |
|------------|---|
| Synopsis   | Upper bound of the port range to match  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string category string exhausted-credit-service-level ingress ipv6-filter entry number match src-port range end number</i> |
| Tree       | <a href="#">end</a>   |
| Range      | 0 to 65535  |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## start number

|          |   |
|----------|---|
| Synopsis | Lower bound of the port range to match  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string category string exhausted-credit-service-level ingress ipv6-filter entry number match src-port range start number</i> |
| Tree     | <a href="#">start</a>   |
| Range    | 0 to 65535  |
| Notes    | This element is mandatory.  |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## tcp-flags

|            |   |
|------------|---|
| Synopsis   | Enter the <b>tcp-flags</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">tcp-flags</a> |
| Tree       | <a href="#">tcp-flags</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## ack *boolean*

|            |  |
|------------|--|
| Synopsis   | Check for ACK bit  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">tcp-flags</a> <a href="#">ack</a> <i>boolean</i> |
| Tree       | <a href="#">ack</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## syn *boolean*

|            |  |
|------------|--|
| Synopsis   | Check for SYN bit  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">tcp-flags</a> <a href="#">syn</a> <i>boolean</i> |
| Tree       | <a href="#">syn</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## pir (*number* | *keyword*)

|          |  |
|----------|--|
| Synopsis | PIR  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">pir</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <a href="#">pir</a>  |
| Range    | 1 to 100000000   |

|            |   |
|------------|---|
| Options    | max   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## ingress

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ingress</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string category string ingress</i> |
| Tree       | <a href="#">ingress</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## *policer number*

|            |  |
|------------|--|
| Synopsis   | Ingress policers used in this category   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string category string ingress policer number</i> |
| Tree       | <a href="#">policer</a>  |
| Range      | 1 to 63  |
| Max.       | 63   |
| Instances  |  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## *queue number*

|            |  |
|------------|--|
| Synopsis   | Ingress queues used in this category   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string category string ingress queue number</i> |
| Tree       | <a href="#">queue</a>  |
| Range      | 1 to 32  |
| Max.       | 32   |
| Instances  |  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**out-of-credit-action-override** *keyword*

|            |  |
|------------|--|
| Synopsis   | Out of credit action that is overridden in category map  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <b>out-of-credit-action-override</b> <i>keyword</i> |
| Tree       | <a href="#">out-of-credit-action-override</a>  |
| Options    | continue, disconnect-host, block-category, change-service-level  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**rating-group** *number*

|            |  |
|------------|--|
| Synopsis   | Rating group for this category   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <b>rating-group</b> <i>number</i> |
| Tree       | <a href="#">rating-group</a>   |
| Range      | 0 to 4294967295  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**credit-exhaust-threshold** *number*

|            |   |
|------------|---|
| Synopsis   | Percentage for credit exhaust threshold   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <b>credit-exhaust-threshold</b> <i>number</i> |
| Tree       | <a href="#">credit-exhaust-threshold</a>  |
| Range      | 50 to 100   |
| Units      | percent   |
| Default    | 100   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**credit-type** *keyword*

|          |   |
|----------|---|
| Synopsis | Credit type   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <b>credit-type</b> <i>keyword</i> |
| Tree     | <a href="#">credit-type</a>   |
| Options  | volume, time  |

|            |   |
|------------|---|
| Default    | volume  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**gx-session-level-usage** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow Gx session level Usage Monitoring  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <b>gx-session-level-usage</b> <i>boolean</i> |
| Tree       | <a href="#">gx-session-level-usage</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**credit-control-policy** [[name](#)] *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>credit-control-policy</b> list instance   |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">credit-control-policy</a> <i>string</i> |
| Tree           | <a href="#">credit-control-policy</a>  |
| Max. Instances | 255  |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**[name]** *string*

|          |  |
|----------|--|
| Synopsis | Credit control policy name   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">credit-control-policy</a> <i>string</i> |

|               |   |
|---------------|---|
| Tree          | <a href="#">credit-control-policy</a>                   |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.                     |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **default-category-map** *reference*

|            |  |
|------------|--|
| Synopsis   | Default category map for this policy   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt credit-control-policy</a> <i>string</i> <a href="#">default-category-map</a> <i>reference</i> |
| Tree       | <a href="#">default-category-map</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt credit-control-policy</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **error-handling-action** *keyword*

|            |   |
|------------|---|
| Synopsis   | Error handling action for the policy  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt credit-control-policy</a> <i>string</i> <a href="#">error-handling-action</a> <i>keyword</i> |
| Tree       | <a href="#">error-handling-action</a>   |
| Options    | continue, block   |
| Default    | continue  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**out-of-credit-action** *keyword*

|            |   |
|------------|---|
| Synopsis   | Action when out of credit is reached  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt credit-control-policy</a> <i>string</i> <b>out-of-credit-action</b> <i>keyword</i> |
| Tree       | <a href="#">out-of-credit-action</a>  |
| Options    | continue, disconnect-host, block-category, change-service-level   |
| Default    | continue  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**server**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>server</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt credit-control-policy</a> <i>string</i> <b>server</b> |
| Tree       | <a href="#">server</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**diameter** *reference*

|            |  |
|------------|--|
| Synopsis   | Diameter policy that specifies Diameter peers to use   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt credit-control-policy</a> <i>string</i> <b>server</b> <a href="#">diameter</a> <i>reference</i> |
| Tree       | <a href="#">diameter</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt diameter-gy-policy</a> <i>string</i>  |
| Notes      | The following elements are part of a choice: <b>diameter</b> or <b>radius</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**radius**

|            |   |
|------------|---|
| Synopsis   | Use RADIUS servers in the authentication policy   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt credit-control-policy</a> <i>string</i> <b>server</b> <a href="#">radius</a> |
| Tree       | <a href="#">radius</a>  |
| Notes      | The following elements are part of a choice: <b>diameter</b> or <b>radius</b> .   |
| Introduced | 16.0.R1   |



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **diameter-gx-policy** [*name*] *string*

Synopsis Enter the **diameter-gx-policy** list instance  
 Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string*  
 Tree [diameter-gx-policy](#)  
 Max. Instances 32  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis Diameter application policy name  
 Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string*  
 Tree [diameter-gx-policy](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
 Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **gx**

Synopsis Enter the **gx** context  
 Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* **gx**

|            |   |
|------------|---|
| Tree       | <a href="#">gx</a>                                      |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **avp-subscription-id**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>avp-subscription-id</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">avp-subscription-id</a> |
| Tree       | <a href="#">avp-subscription-id</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **origin** *keyword*

|            |  |
|------------|--|
| Synopsis   | Format of the Subscription-Id-Data AVP   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">avp-subscription-id</a> <a href="#">origin</a> <i>keyword</i> |
| Tree       | <a href="#">origin</a>   |
| Options    | subscriber-id, circuit-id, imsi, msisdn, imei, dual-stack-remote-id, mac, username, nas-port-id  |
| Default    | subscriber-id  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **type** *keyword*

|            |  |
|------------|--|
| Synopsis   | Format of the Subscription-Id-Type AVP   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">avp-subscription-id</a> <a href="#">type</a> <i>keyword</i> |
| Tree       | <a href="#">type</a>   |
| Options    | e164, imsi, nai, private   |
| Default    | private  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**ccrt-replay**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>ccrt-replay</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">ccrt-replay</a> |
| Tree       | <a href="#">ccrt-replay</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**interval** *number*

|            |   |
|------------|---|
| Synopsis   | Time between consecutive CCR-T replay attempts  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">ccrt-replay</a> <a href="#">interval</a> <i>number</i> |
| Tree       | <a href="#">interval</a>  |
| Range      | 60 to 86400   |
| Default    | 3600  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**max-lifetime** *number*

|             |   |
|-------------|---|
| Synopsis    | Maximum time that CCR-t messages are replayed   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">ccrt-replay</a> <a href="#">max-lifetime</a> <i>number</i> |
| Tree        | <a href="#">max-lifetime</a>  |
| Description | This command specifies the maximum time that CCR-t messages for Diameter Gx sessions that belong to the Diameter application policy are replayed.   |
| Range       | 1 to 24   |
| Units       | hours   |
| Default     | 24  |
| Introduced  | 16.0.R4   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**credit-mcs-interval** *number*

|          |  |
|----------|--|
| Synopsis | Volume syncing interval for usage monitoring   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">credit-mcs-interval</a> <i>number</i> |
| Tree     | <a href="#">credit-mcs-interval</a>  |

|             |   |
|-------------|---|
| Description | This command configures the MCS interval at which the accounting data of subscriber hosts is updated. |
| Range       | 5 to 60   |
| Units       | minutes   |
| Default     | 10  |
| Introduced  | 19.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **destination-realm-learning** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Learn the destination realm from the incoming messages  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <b>destination-realm-learning</b> <i>boolean</i>   |
| Tree        | <a href="#">destination-realm-learning</a>  |
| Description | <p>When configured to <b>true</b>, destination realm learning is enabled on the application level. The destination realm is a mandatory configuration parameter used in outgoing Credit Control Request messages (CCR). The configured destination realm is always used in the initial request (CCR-I) message. The consecutive request message of a Gx session can use the destination realm learned from the replies.</p> <p>When configured to <b>false</b>, destination realm learning is disabled and the configured destination realm is used in outgoing request messages.</p> |
| Default     | true  |
| Introduced  | 20.5.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **features**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>features</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <b>features</b> |
| Tree       | <a href="#">features</a>   |
| Introduced | 20.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **extended-bandwidth** *boolean*

|          |   |
|----------|---|
| Synopsis | Negotiate support for extended bandwidth AVPs |
|----------|---|

|             |   |
|-------------|---|
| Context     | <b>configure subscriber-mgmt diameter-gx-policy</b> <i>string gx features extended-bandwidth boolean</i>  |
| Tree        | <a href="#">extended-bandwidth</a>  |
| Description | <p>When configured to <b>true</b>, negotiation occurs for the support of extended AVPs that are capable of supporting bandwidth values greater than <math>(2^{32} - 1)</math> b/s. The extended AVPs allow bitrates in kb/s and are as follows:</p> <ul style="list-style-type: none"> <li>• Extended-GBR-DL (AVP code 2850)</li> <li>• Extended-GBR-UL (AVP code 2851)</li> <li>• Extended-Max-Requested-BW-DL (AVP code 554)</li> <li>• Extended-Max-Requested-BW-UL (AVP code 555)</li> <li>• Extended-APN-AMBR-DL (AVP code 2848)</li> <li>• Extended-APN-AMBR-UL (AVP code 2849)</li> </ul> <p>When configured to <b>false</b>, the extended AVPs are not supported.</p> |
| Default     | false   |
| Introduced  | 20.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## include-avp

|            |  |
|------------|--|
| Synopsis   | Enter the <b>include-avp</b> context   |
| Context    | <b>configure subscriber-mgmt diameter-gx-policy</b> <i>string gx include-avp</i> |
| Tree       | <a href="#">include-avp</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                          |

## an-gw-address *boolean*

|            |  |
|------------|--|
| Synopsis   | Include the IP address of this gateway   |
| Context    | <b>configure subscriber-mgmt diameter-gx-policy</b> <i>string gx include-avp an-gw-address boolean</i> |
| Tree       | <a href="#">an-gw-address</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**apn-ambr** *boolean*

|            |  |
|------------|--|
| Synopsis   | Include the APN aggregate maximum bitrate  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">apn-ambr</a> <i>boolean</i> |
| Tree       | <a href="#">apn-ambr</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**called-station-id** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include the called station ID   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">called-station-id</a> <i>boolean</i> |
| Tree       | <a href="#">called-station-id</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**calling-station-id**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>calling-station-id</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">calling-station-id</a> |
| Tree       | <a href="#">calling-station-id</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**type** *keyword*

|            |  |
|------------|--|
| Synopsis   | Format of the Calling-Station-ID AVP   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">calling-station-id</a> <i>type</i> <i>keyword</i> |
| Tree       | <a href="#">type</a>   |
| Options    | sap-string, mac, sap-id, remote-id, llid   |
| Default    | sap-string   |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ip-can-type** *boolean*

Synopsis Include the IP CAN type

Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [gx](#) [include-avp](#) [ip-can-type](#) *boolean*

Tree [ip-can-type](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **logical-access-id** *boolean*

Synopsis Include the logical access id

Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [gx](#) [include-avp](#) [logical-access-id](#) *boolean*

Tree [logical-access-id](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **nas-port**

Synopsis Enable the **nas-port** context

Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [gx](#) [include-avp](#) [nas-port](#)

Tree [nas-port](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **bit-spec** *string*

Synopsis NAS-Port AVP format

Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [gx](#) [include-avp](#) [nas-port](#) [bit-spec](#) *string*

Tree [bit-spec](#)

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|               |   |
|---------------|---|
| String Length | 1 to 255  |
| Notes         | This element is mandatory.                              |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **nas-port-id**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>nas-port-id</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">nas-port-id</a> |
| Tree       | <a href="#">nas-port-id</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **prefix-string** *string*

|               |  |
|---------------|--|
| Synopsis      | Prefix string for NAS-Port-Id AVP  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">nas-port-id</a> <a href="#">prefix-string</a> <i>string</i> |
| Tree          | <a href="#">prefix-string</a>  |
| String Length | 1 to 8   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **suffix**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>suffix</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">nas-port-id</a> <a href="#">suffix</a> |
| Tree       | <a href="#">suffix</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **circuit-id**

|          |  |
|----------|--|
| Synopsis | Add Circuit ID as suffix   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">nas-port-id</a> <a href="#">suffix</a> <a href="#">circuit-id</a> |



|            |   |
|------------|---|
| Tree       | <a href="#">circuit-id</a>  |
| Notes      | The following elements are part of a choice: <b>circuit-id</b> , <b>not-included</b> , <b>remote-id</b> , or <b>user-string</b> . |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### not-included

|            |  |
|------------|--|
| Synopsis   | Do not add a suffix  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">nas-port-id</a> <a href="#">suffix</a> <a href="#">not-included</a> |
| Tree       | <a href="#">not-included</a>   |
| Notes      | The following elements are part of a choice: <b>circuit-id</b> , <b>not-included</b> , <b>remote-id</b> , or <b>user-string</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### remote-id

|            |   |
|------------|---|
| Synopsis   | Add Remote ID as suffix   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">nas-port-id</a> <a href="#">suffix</a> <a href="#">remote-id</a> |
| Tree       | <a href="#">remote-id</a>   |
| Notes      | The following elements are part of a choice: <b>circuit-id</b> , <b>not-included</b> , <b>remote-id</b> , or <b>user-string</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### user-string *string*

|               |   |
|---------------|---|
| Synopsis      | Add a user configurable string as suffix  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">nas-port-id</a> <a href="#">suffix</a> <a href="#">user-string</a> <i>string</i> |
| Tree          | <a href="#">user-string</a>   |
| String Length | 1 to 64   |
| Notes         | The following elements are part of a choice: <b>circuit-id</b> , <b>not-included</b> , <b>remote-id</b> , or <b>user-string</b> .   |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **nas-port-type**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>nas-port-type</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">nas-port-type</a> |
| Tree       | <a href="#">nas-port-type</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **type number**

|            |  |
|------------|--|
| Synopsis   | NAS-Port-Type AVP value  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">nas-port-type</a> <a href="#">type</a> <a href="#">number</a> |
| Tree       | <a href="#">type</a>   |
| Range      | 0 to 255   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **pdn-connection-id boolean**

|            |  |
|------------|--|
| Synopsis   | Include the PDN connection id  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">pdn-connection-id</a> <a href="#">boolean</a> |
| Tree       | <a href="#">pdn-connection-id</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **physical-access-id boolean**

|          |   |
|----------|---|
| Synopsis | Include the physical access ID  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">physical-access-id</a> <a href="#">boolean</a> |

|            |   |
|------------|---|
| Tree       | <a href="#">physical-access-id</a>                      |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

**rai boolean**

|            |  |
|------------|--|
| Synopsis   | Include the routing area identity  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx include-avp</a> <a href="#">rai boolean</a> |
| Tree       | <a href="#">rai</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**rat-type boolean**

|            |   |
|------------|---|
| Synopsis   | Include the RAT type  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx include-avp</a> <a href="#">rat-type boolean</a> |
| Tree       | <a href="#">rat-type</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**sgsn-mcc-mnc boolean**

|             |   |
|-------------|---|
| Synopsis    | Include the 3GPP-SGSN-MCC-MNC AVP   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx include-avp</a> <a href="#">sgsn-mcc-mnc boolean</a>                                       |
| Tree        | <a href="#">sgsn-mcc-mnc</a>  |
| Description | When configured to <b>true</b> , this command enables the inclusion of the 3GPP-SGSN-MCC-MNC AVP, which contains the MCC and MNC as configured under <b>configure subscriber-mgmt gtp serving-network</b> . |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**supported-features** *boolean*

|            |  |
|------------|--|
| Synopsis   | Include the supported features   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">supported-features</a> <i>boolean</i> |
| Tree       | <a href="#">supported-features</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**user-equipment-info**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>user-equipment-info</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">user-equipment-info</a> |
| Tree       | <a href="#">user-equipment-info</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**type** *keyword*

|            |   |
|------------|---|
| Synopsis   | Information for User-Equipment-Info attribute   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">user-equipment-info</a> <i>type</i> <i>keyword</i> |
| Tree       | <a href="#">type</a>  |
| Options    | imeisv, mac, eui64, modified-eui64  |
| Default    | mac   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**user-location-info** *boolean*

|          |  |
|----------|--|
| Synopsis | Include the 3GPP-User-Location-Information AVP   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">user-location-info</a> <i>boolean</i> |
| Tree     | <a href="#">user-location-info</a>   |

---

|             |  |
|-------------|--|
| Description | When configured to <b>true</b> , this command enables the inclusion of the 3GPP-User-Location-Information AVP as signaled in the incoming GTP setup message. |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **mac-format** *string*

|               |  |
|---------------|--|
| Synopsis      | MAC address format   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <b>mac-format</b> <i>string</i> |
| Tree          | <a href="#">mac-format</a>   |
| String Length | 2 to 7   |
| Default       | aa:  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **report-ip-address-event** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable CCR-u messages on IP address allocation events  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <b>report-ip-address-event</b> <i>boolean</i> |
| Tree       | <a href="#">report-ip-address-event</a>  |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **three-gpp-qos-mapping**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>three-gpp-qos-mapping</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <b>three-gpp-qos-mapping</b> |
| Tree       | <a href="#">three-gpp-qos-mapping</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## apn-ambr-dl

|            |  |
|------------|--|
| Synopsis   | Enter the <b>apn-ambr-dl</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">three-gpp-qos-mapping</a> <a href="#">apn-ambr-dl</a> |
| Tree       | <a href="#">apn-ambr-dl</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## aggregate-rate

|            |   |
|------------|---|
| Synopsis   | Map to an aggregate rate  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">three-gpp-qos-mapping</a> <a href="#">apn-ambr-dl</a> <a href="#">aggregate-rate</a> |
| Tree       | <a href="#">aggregate-rate</a>  |
| Notes      | The following elements are part of a choice: <b>aggregate-rate</b> , <b>arbiter</b> , <b>hs-sla-agg-rate</b> , <b>ignore-override</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .                         |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## arbiter *string*

|               |  |
|---------------|--|
| Synopsis      | Arbiter name to be overridden  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">three-gpp-qos-mapping</a> <a href="#">apn-ambr-dl</a> <a href="#">arbiter</a> <i>string</i> |
| Tree          | <a href="#">arbiter</a>  |
| String Length | 1 to 32  |
| Notes         | The following elements are part of a choice: <b>aggregate-rate</b> , <b>arbiter</b> , <b>hs-sla-agg-rate</b> , <b>ignore-override</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .                                |
| Introduced    | 16.0.R1  |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## hs-sla-agg-rate

|          |  |
|----------|--|
| Synopsis | Map to an HS SLA aggregate rate  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">three-gpp-qos-mapping</a> <a href="#">apn-ambr-dl</a> <a href="#">hs-sla-agg-rate</a> |
| Tree     | <a href="#">hs-sla-agg-rate</a>  |

|            |   |
|------------|---|
| Notes      | The following elements are part of a choice: <b>aggregate-rate</b> , <b>arbiter</b> , <b>hs-sla-agg-rate</b> , <b>ignore-override</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> . |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### ignore-override

|            |   |
|------------|---|
| Synopsis   | no override on apn-ambr-dl  |
| Context    | <b>configure</b> <b>subscriber-mgmt</b> <b>diameter-gx-policy</b> <i>string</i> <b>gx</b> <b>three-gpp-qos-mapping</b> <b>apn-ambr-dl</b> <b>ignore-override</b>                              |
| Tree       | <a href="#">ignore-override</a>   |
| Notes      | The following elements are part of a choice: <b>aggregate-rate</b> , <b>arbiter</b> , <b>hs-sla-agg-rate</b> , <b>ignore-override</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> . |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### policer *number*

|            |   |
|------------|---|
| Synopsis   | Policer ID to be overridden   |
| Context    | <b>configure</b> <b>subscriber-mgmt</b> <b>diameter-gx-policy</b> <i>string</i> <b>gx</b> <b>three-gpp-qos-mapping</b> <b>apn-ambr-dl</b> <b>policer</b> <i>number</i>                        |
| Tree       | <a href="#">policer</a>   |
| Range      | 1 to 63   |
| Notes      | The following elements are part of a choice: <b>aggregate-rate</b> , <b>arbiter</b> , <b>hs-sla-agg-rate</b> , <b>ignore-override</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> . |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### queue *number*

|          |   |
|----------|---|
| Synopsis | Queue ID to be overridden   |
| Context  | <b>configure</b> <b>subscriber-mgmt</b> <b>diameter-gx-policy</b> <i>string</i> <b>gx</b> <b>three-gpp-qos-mapping</b> <b>apn-ambr-dl</b> <b>queue</b> <i>number</i>                          |
| Tree     | <a href="#">queue</a>   |
| Range    | 1 to 8  |
| Notes    | The following elements are part of a choice: <b>aggregate-rate</b> , <b>arbiter</b> , <b>hs-sla-agg-rate</b> , <b>ignore-override</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> . |

Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **scheduler** *string*

Synopsis Name of the scheduler to be overridden  
 Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [gx](#) [three-gpp-qos-mapping](#) [apn-ambr-dl](#) **scheduler** *string*  
 Tree [scheduler](#)  
 String Length 1 to 32  
 Notes The following elements are part of a choice: **aggregate-rate**, **arbiter**, **hs-sla-agg-rate**, **ignore-override**, **policer**, **queue**, or **scheduler**.  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **apn-ambr-ul**

Synopsis Enter the **apn-ambr-ul** context  
 Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [gx](#) [three-gpp-qos-mapping](#) [apn-ambr-ul](#)  
 Tree [apn-ambr-ul](#)  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **arbiter** *string*

Synopsis Arbiter name to be overridden  
 Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [gx](#) [three-gpp-qos-mapping](#) [apn-ambr-ul](#) **arbiter** *string*  
 Tree [arbiter](#)  
 String Length 1 to 32  
 Notes The following elements are part of a choice: **arbiter**, **ignore-override**, **policer**, **queue**, or **scheduler**.  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR



## ignore-override

|            |   |
|------------|---|
| Synopsis   | no override on apn-ambr-ul  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">three-gpp-qos-mapping</a> <a href="#">apn-ambr-ul</a> <b>ignore-override</b> |
| Tree       | <a href="#">ignore-override</a>   |
| Notes      | The following elements are part of a choice: <b>arbiter</b> , <b>ignore-override</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## policer *number*

|            |   |
|------------|---|
| Synopsis   | Policer ID to be overridden   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">three-gpp-qos-mapping</a> <a href="#">apn-ambr-ul</a> <b>policer</b> <i>number</i> |
| Tree       | <a href="#">policer</a>   |
| Range      | 1 to 63   |
| Notes      | The following elements are part of a choice: <b>arbiter</b> , <b>ignore-override</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## queue *number*

|            |   |
|------------|---|
| Synopsis   | Queue ID to be overridden   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">three-gpp-qos-mapping</a> <a href="#">apn-ambr-ul</a> <b>queue</b> <i>number</i> |
| Tree       | <a href="#">queue</a>   |
| Range      | 1 to 32   |
| Notes      | The following elements are part of a choice: <b>arbiter</b> , <b>ignore-override</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**scheduler** *string*

|               |  |
|---------------|--|
| Synopsis      | Name of the scheduler to be overridden   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">three-gpp-qos-mapping</a> <a href="#">apn-ambr-ul</a> <a href="#">scheduler</a> <i>string</i> |
| Tree          | <a href="#">scheduler</a>  |
| String Length | 1 to 32  |
| Notes         | The following elements are part of a choice: <b>arbiter</b> , <b>ignore-override</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .   |
| Introduced    | 16.0.R1  |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**node**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>node</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">node</a> |
| Tree       | <a href="#">node</a>   |
| Notes      | The following elements are part of a choice: <b>node</b> or <b>peer-policy</b> .                                       |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**destination-realm** *string*

|               |  |
|---------------|--|
| Synopsis      | Destination-Realm AVP used by the Diameter peer policy   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">node</a> <a href="#">destination-realm</a> <i>string</i> |
| Tree          | <a href="#">destination-realm</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R4  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**origin-host** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Origin-Host AVP used by the Diameter policy |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">node</a> <a href="#">origin-host</a> <i>reference</i> |
| Tree       | <a href="#">origin-host</a>   |
| Reference  | <b>configure</b> <a href="#">aaa</a> <a href="#">diameter</a> <a href="#">node</a> <i>string</i>  |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **on-failure**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>on-failure</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">on-failure</a> |
| Tree       | <a href="#">on-failure</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **failover** *boolean*

|            |  |
|------------|--|
| Synopsis   | Session peer failover  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">on-failure</a> <a href="#">failover</a> <i>boolean</i> |
| Tree       | <a href="#">failover</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **handling** *keyword*

|            |  |
|------------|--|
| Synopsis   | Session peer failure handling  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">on-failure</a> <a href="#">handling</a> <i>keyword</i> |
| Tree       | <a href="#">handling</a>   |
| Options    | terminate, continue, retry-and-terminate   |
| Default    | terminate  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**peer-policy** *reference***WARNING:**

This element is deprecated and will be removed in a future release.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Policy for the Diameter peers  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">peer-policy</a> <i>reference</i> |
| Tree       | <a href="#">peer-policy</a>  |
| Reference  | <b>configure</b> <a href="#">aaa</a> <a href="#">diameter</a> <a href="#">peer-policy</a> <i>string</i>  |
| Notes      | The following elements are part of a choice: <b>node</b> or <b>peer-policy</b> .   |
| Introduced | 16.0.R4  |
| Deprecated | 20.2.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**tx-timer** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum wait time for a pending session request  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">tx-timer</a> <i>number</i> |
| Tree       | <a href="#">tx-timer</a>   |
| Range      | 10 to 1000   |
| Units      | seconds  |
| Default    | 10   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**diameter-gy-policy** [*name*] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>diameter-gy-policy</b> list instance   |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> |
| Tree           | <a href="#">diameter-gy-policy</a>  |
| Max. Instances | 32  |
| Introduced     | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### [name] *string*

Synopsis Diameter application policy name  
 Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string*  
 Tree [diameter-gy-policy](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### description *string*

Synopsis Text description  
 Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### gy

Synopsis Enter the **gy** context  
 Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#)  
 Tree [gy](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### avp-subscription-id

Synopsis Enter the **avp-subscription-id** context  
 Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [avp-subscription-id](#)  
 Tree [avp-subscription-id](#)  
 Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **origin** keyword

Synopsis Origin for the Subscription-Id-Data AVP

Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [avp-subscription-id](#) **origin** *keyword*

Tree [origin](#)

Options subscriber-id, circuit-id, imsi, msisdn, imei, dual-stack-remote-id, mac, username, nas-port-id

Default subscriber-id

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **type** keyword

Synopsis Origin for the Subscription-Id-Type AVP

Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [avp-subscription-id](#) **type** *keyword*

Tree [type](#)

Options e164, imsi, nai, private

Default private

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ccrt-replay**

Synopsis Enable the **ccrt-replay** context

Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) **ccrt-replay**

Tree [ccrt-replay](#)

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **interval** number

Synopsis Interval at which CCR-t messages are replayed

|             |  |
|-------------|--|
| Context     | <b>configure subscriber-mgmt diameter-gy-policy</b> <i>string gy ccrt-replay interval number</i>   |
| Tree        | <a href="#">interval</a>   |
| Description | This command specifies the interval at which CCR-t messages for Diameter Gy sessions that belong to the Diameter application policy are replayed, until a valid CCA-t response is received or until the configured maximum lifetime period expires.<br>When unconfigured, this command is configured to the default value. |
| Range       | 60 to 86400  |
| Default     | 3600   |
| Introduced  | 16.0.R4  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **max-lifetime** *number*

|             |   |
|-------------|---|
| Synopsis    | Maximum time that CCR-t messages are replayed   |
| Context     | <b>configure subscriber-mgmt diameter-gy-policy</b> <i>string gy ccrt-replay max-lifetime number</i>  |
| Tree        | <a href="#">max-lifetime</a>  |
| Description | This command specifies the maximum period of time that CCR-t messages for Diameter Gy sessions that belong to the Diameter application policy are replayed. |
| Range       | 1 to 24   |
| Units       | hours   |
| Default     | 24  |
| Introduced  | 16.0.R4   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **destination-realm-learning** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Learn the destination realm from the incoming messages  |
| Context     | <b>configure subscriber-mgmt diameter-gy-policy</b> <i>string gy destination-realm-learning boolean</i>   |
| Tree        | <a href="#">destination-realm-learning</a>  |
| Description | When configured to <b>true</b> , destination realm learning is enabled on the application level.<br>The destination realm is a mandatory configuration parameter used in outgoing Credit Control Request messages (CCR). The configured destination realm is always used in the initial request (CCR-I) message. The consecutive request message of a Gy session can use the destination realm learned from the replies.<br>When configured to <b>false</b> , destination realm learning is disabled and the configured destination realm is used in outgoing request messages. |

|            |   |
|------------|---|
| Default    | true  |
| Introduced | 20.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **extended-failure-handling**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>extended-failure-handling</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">extended-failure-handling</a> |
| Tree       | <a href="#">extended-failure-handling</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of Extended Failure Handling   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">extended-failure-handling</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **interim-credit**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>interim-credit</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">extended-failure-handling</a> <a href="#">interim-credit</a> |
| Tree       | <a href="#">interim-credit</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **max-attempts** (*number* | *keyword*)

|          |   |
|----------|---|
| Synopsis | Attempts to retry setting up a session to the OCS |
|----------|---|



|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">extended-failure-handling</a> <a href="#">interim-credit</a> <a href="#">max-attempts</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">max-attempts</a>  |
| Range      | 1 to 4294967295   |
| Options    | infinite  |
| Default    | 10  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **reporting** *boolean*

|            |  |
|------------|--|
| Synopsis   | Report interim Credit  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">extended-failure-handling</a> <a href="#">interim-credit</a> <a href="#">reporting</a> <i>boolean</i> |
| Tree       | <a href="#">reporting</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **validity-time** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Validity time for interim credit   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">extended-failure-handling</a> <a href="#">interim-credit</a> <a href="#">validity-time</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">validity-time</a>  |
| Range      | 1 to 4294967295  |
| Units      | seconds  |
| Options    | none   |
| Default    | 1800   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **volume**

|          |                                 |
|----------|---------------------------------|
| Synopsis | Enter the <b>volume</b> context |
|----------|---------------------------------|

|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">extended-failure-handling</a> <a href="#">interim-credit</a> <a href="#">volume</a> |
| Tree       | <a href="#">volume</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**credits** *number*

|            |  |
|------------|--|
| Synopsis   | Default volume credit value  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">extended-failure-handling</a> <a href="#">interim-credit</a> <a href="#">volume</a> <a href="#">credits</a> <i>number</i> |
| Tree       | <a href="#">credits</a>  |
| Range      | 1 to 4294967295  |
| Default    | 500  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**units** *keyword*

|            |   |
|------------|---|
| Synopsis   | Default volume credit units   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">extended-failure-handling</a> <a href="#">interim-credit</a> <a href="#">volume</a> <a href="#">units</a> <i>keyword</i> |
| Tree       | <a href="#">units</a>   |
| Options    | bytes, kilobytes, megabytes, gigabytes  |
| Default    | megabytes   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**new-session-id** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable use of a new session ID for CCR-i messages  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">extended-failure-handling</a> <a href="#">new-session-id</a> <i>boolean</i> |
| Tree       | <a href="#">new-session-id</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## include-avp

Synopsis Enter the **include-avp** context

Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [include-avp](#)

Tree [include-avp](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## aaa-user-name *boolean*

Synopsis Include RADIUS user name AVP in Diameter Gy messages

Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [include-avp](#) [aaa-user-name](#) *boolean*

Tree [aaa-user-name](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## address-avp *boolean*

Synopsis DCCA AVPs that contain the host address or prefix

Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [include-avp](#) [address-avp](#) *boolean*

Tree [address-avp](#)

Default true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## called-station-id

Synopsis Enable the **called-station-id** context

Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [include-avp](#) [called-station-id](#)

Tree [called-station-id](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **id string**

Synopsis Called station ID

Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [include-avp](#) [called-station-id](#) [id](#) *string*

Tree [id](#)

String Length 1 to 64

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **charging-rule-base-name**

Synopsis Enter the **charging-rule-base-name** context

Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [include-avp](#) [charging-rule-base-name](#)

Tree [charging-rule-base-name](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **category-map**

Synopsis Use the category map name in use for this session

Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [include-avp](#) [charging-rule-base-name](#) [category-map](#)

Tree [category-map](#)

Notes The following elements are part of a choice: **category-map**, **not-included**, or **user-string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **not-included**

Synopsis Do not include Charging-Rule-Base-Name AVP in Diameter DCCA CCR messages

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">include-avp</a> <a href="#">charging-rule-base-name</a> <a href="#">not-included</a> |
| Tree       | <a href="#">not-included</a>  |
| Notes      | The following elements are part of a choice: <b>category-map</b> , <b>not-included</b> , or <b>user-string</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **user-string** *string*

|               |  |
|---------------|--|
| Synopsis      | String for charging rule base name   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">include-avp</a> <a href="#">charging-rule-base-name</a> <a href="#">user-string</a> <i>string</i> |
| Tree          | <a href="#">user-string</a>  |
| String Length | 1 to 64  |
| Notes         | The following elements are part of a choice: <b>category-map</b> , <b>not-included</b> , or <b>user-string</b> .   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **ggsn-address**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>ggsn-address</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">include-avp</a> <a href="#">ggsn-address</a> |
| Tree       | <a href="#">ggsn-address</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **type** *keyword*

|          |   |
|----------|---|
| Synopsis | Address type of GGSN address AVP  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">include-avp</a> <a href="#">ggsn-address</a> <a href="#">type</a> <i>keyword</i> |
| Tree     | <a href="#">type</a>  |
| Options  | ipv4, ipv6  |
| Notes    | This element is mandatory.  |

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pdp-context-type** *boolean*

Synopsis Include the DCCA PDP-Context-Type AVP Parameter  
Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy include-avp pdp-context-type](#) *boolean*  
Tree [pdp-context-type](#)  
Default true  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ps-information** *boolean*

Synopsis Enable reporting of AVPs in grouped PS-Information AVP  
Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy include-avp ps-information](#) *boolean*  
Tree [ps-information](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **service-context-id**

Synopsis Enable the **service-context-id** context  
Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy include-avp service-context-id](#)  
Tree [service-context-id](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **id** *string*

Synopsis Name for the service context ID AVP  
Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy include-avp service-context-id](#) *id string*

|               |   |
|---------------|---|
| Tree          | <a href="#">id</a>                                      |
| String Length | 1 to 32   |
| Notes         | This element is mandatory.                              |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **three-gpp-charging-characteristics** *boolean*

|            |  |
|------------|--|
| Synopsis   | DCCA 3GPP charging characteristics AVP parameter   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">include-avp</a> <a href="#">three-gpp-charging-characteristics</a> <i>boolean</i> |
| Tree       | <a href="#">three-gpp-charging-characteristics</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **three-gpp-charging-id** *keyword*

|            |   |
|------------|---|
| Synopsis   | DCCA 3GPP charging ID AVP parameter   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">include-avp</a> <a href="#">three-gpp-charging-id</a> <i>keyword</i> |
| Tree       | <a href="#">three-gpp-charging-id</a>   |
| Options    | false, auto, esm-info, id   |
| Default    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **three-gpp-ggsn-ipv4-address** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Include the 3GPP-GGSN Address in Diameter Gy messages   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">include-avp</a> <a href="#">three-gpp-ggsn-ipv4-address</a> <i>boolean</i> |
| Tree        | <a href="#">three-gpp-ggsn-ipv4-address</a>   |
| Description | When configured to <b>true</b> , this command includes the 3GPP GGSN Address AVP in the Diameter Gy messages. The value is set to the source IPv4 address that is used for outgoing diameter messages.      |

|            |   |
|------------|---|
| Default    | true  |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **three-gpp-ggsn-ipv6-address** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include the 3GPP-GGSN-Ipv6 address  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">include-avp</a> <a href="#">three-gpp-ggsn-ipv6-address</a> <i>boolean</i> |
| Tree       | <a href="#">three-gpp-ggsn-ipv6-address</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **three-gpp-gprs-negotiated-qos-profile** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include the 3GPP GPRS-QoS-Negotiated-Profile AVP  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">include-avp</a> <a href="#">three-gpp-gprs-negotiated-qos-profile</a> <i>boolean</i> |
| Tree       | <a href="#">three-gpp-gprs-negotiated-qos-profile</a>   |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **three-gpp-imsi** *keyword*

|            |  |
|------------|--|
| Synopsis   | Origin of the information to send in the IMSI AVP  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">include-avp</a> <a href="#">three-gpp-imsi</a> <i>keyword</i> |
| Tree       | <a href="#">three-gpp-imsi</a>   |
| Options    | false, subscriber-id, circuit-id, imsi   |
| Default    | subscriber-id  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |



**three-gpp-nsapi** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include the 3GPP-NSAPI  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">include-avp</a> <a href="#">three-gpp-nsapi</a> <i>boolean</i> |
| Tree       | <a href="#">three-gpp-nsapi</a>   |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**three-gpp-rat-type**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>three-gpp-rat-type</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">include-avp</a> <a href="#">three-gpp-rat-type</a> |
| Tree       | <a href="#">three-gpp-rat-type</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**type** *number*

|            |   |
|------------|---|
| Synopsis   | Value for 3GPP-RAT-Type AVP   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">include-avp</a> <a href="#">three-gpp-rat-type</a> <i>type</i> <i>number</i> |
| Tree       | <a href="#">type</a>  |
| Range      | 1 to 255  |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**three-gpp-selection-mode** *boolean*

|            |  |
|------------|--|
| Synopsis   | DCCA 3GPP selection mode AVP parameter   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">include-avp</a> <a href="#">three-gpp-selection-mode</a> <i>boolean</i> |
| Tree       | <a href="#">three-gpp-selection-mode</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **three-gpp-session-stop-indicator** *boolean*

Synopsis DCCA 3GPP session stop indicator AVP parameter

Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [include-avp](#) [three-gpp-session-stop-indicator](#) *boolean*

Tree [three-gpp-session-stop-indicator](#)

Default true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **three-gpp-user-location-info** *boolean*

Synopsis DCCA 3GPP session stop indicator AVP parameter

Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [include-avp](#) [three-gpp-user-location-info](#) *boolean*

Tree [three-gpp-user-location-info](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **user-equipment-info-type**

Synopsis Enable the **user-equipment-info-type** context

Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [include-avp](#) [user-equipment-info-type](#)

Tree [user-equipment-info-type](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **type** *keyword*

Synopsis Information to include in User-Equipment-Info attribute

Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [include-avp](#) [user-equipment-info-type](#) *type* *keyword*

Tree [type](#)

|            |                                    |
|------------|------------------------------------|
| Options    | imeisv                             |
| Notes      | This element is mandatory.         |
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **mac-format** *string*

|               |   |
|---------------|---|
| Synopsis      | MAC address format  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <a href="#">string</a> <a href="#">gy</a> <a href="#">mac-format</a> <a href="#">string</a> |
| Tree          | <a href="#">mac-format</a>  |
| String Length | 2 to 7  |
| Default       | aa:   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **out-of-credit-reporting** *keyword*

|            |   |
|------------|---|
| Synopsis   | Reporting reason when final granted units are consumed  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <a href="#">string</a> <a href="#">gy</a> <a href="#">out-of-credit-reporting</a> <a href="#">keyword</a> |
| Tree       | <a href="#">out-of-credit-reporting</a>   |
| Options    | final, quota-exhausted  |
| Default    | final   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **vendor-support** *keyword*

|            |  |
|------------|--|
| Synopsis   | Vendor support type announced in capability exchange   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <a href="#">string</a> <a href="#">gy</a> <a href="#">vendor-support</a> <a href="#">keyword</a> |
| Tree       | <a href="#">vendor-support</a>   |
| Options    | vodafone, three-gpp  |
| Default    | three-gpp  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**node**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>node</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <b>node</b> |
| Tree       | <a href="#">node</a>  |
| Notes      | The following elements are part of a choice: <b>node</b> or <b>peer-policy</b> .                              |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**destination-realm** *string*

|               |   |
|---------------|---|
| Synopsis      | Destination-Realm AVP used by the Diameter peer policy  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <b>node</b> <a href="#">destination-realm</a> <i>string</i> |
| Tree          | <a href="#">destination-realm</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R4   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**origin-host** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Origin-Host AVP used by the Diameter policy  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <b>node</b> <a href="#">origin-host</a> <i>reference</i> |
| Tree       | <a href="#">origin-host</a>  |
| Reference  | <b>configure</b> <a href="#">aaa</a> <a href="#">diameter</a> <b>node</b> <i>string</i>  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**on-failure**

|          |   |
|----------|---|
| Synopsis | Enter the <b>on-failure</b> context   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <b>on-failure</b> |
| Tree     | <a href="#">on-failure</a>  |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

**failover** *boolean*

|            |  |
|------------|--|
| Synopsis   | Session peer failover  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">on-failure</a> <a href="#">failover</a> <i>boolean</i> |
| Tree       | <a href="#">failover</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**handling** *keyword*

|            |  |
|------------|--|
| Synopsis   | Session peer failure handling  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">on-failure</a> <a href="#">handling</a> <i>keyword</i> |
| Tree       | <a href="#">handling</a>   |
| Options    | terminate, continue, retry-and-terminate   |
| Default    | terminate  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**peer-policy** *reference***WARNING:**

This element is deprecated and will be removed in a future release.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|           |  |
|-----------|--|
| Synopsis  | Policy for the Diameter peers  |
| Context   | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">peer-policy</a> <i>reference</i> |
| Tree      | <a href="#">peer-policy</a>  |
| Reference | <b>configure</b> <a href="#">aaa</a> <a href="#">diameter</a> <a href="#">peer-policy</a> <i>string</i>  |
| Notes     | The following elements are part of a choice: <b>node</b> or <b>peer-policy</b> .   |

|            |   |
|------------|---|
| Introduced | 16.0.R4   |
| Deprecated | 20.2.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

**tx-timer** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum wait time for a pending session request   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <b>tx-timer</b> <i>number</i> |
| Tree       | <a href="#">tx-timer</a>  |
| Range      | 10 to 1000  |
| Units      | seconds   |
| Default    | 10  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**diameter-nasreq-policy** [*name*] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>diameter-nasreq-policy</b> list instance   |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> |
| Tree           | <a href="#">diameter-nasreq-policy</a>  |
| Max. Instances | 32  |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**[name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Diameter application policy name  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> |
| Tree          | <a href="#">diameter-nasreq-policy</a>  |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**nasreq**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>nasreq</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> |
| Tree       | <a href="#">nasreq</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**include-avp**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>include-avp</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> |
| Tree       | <a href="#">include-avp</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**called-station-id** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include the called station ID AVP   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">called-station-id</a> <i>boolean</i> |
| Tree       | <a href="#">called-station-id</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**calling-station-id**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>calling-station-id</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">calling-station-id</a> |
| Tree       | <a href="#">calling-station-id</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**type** *keyword*

|            |  |
|------------|--|
| Synopsis   | Format of the Calling-Station-ID AVP   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">calling-station-id</a> <i>type</i> <i>keyword</i> |
| Tree       | <a href="#">type</a>   |
| Options    | sap-string, mac, sap-id, remote-id, llid   |
| Default    | sap-string   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**circuit-id** *boolean*

|            |  |
|------------|--|
| Synopsis   | Include the Agent-Circuit-ID AVP   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">circuit-id</a> <i>boolean</i> |
| Tree       | <a href="#">circuit-id</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**imei** *boolean*

|          |  |
|----------|--|
| Synopsis | Include the IMEI   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">imei</a> <i>boolean</i> |
| Tree     | <a href="#">imei</a>   |
| Default  | false  |



|            |                                    |
|------------|------------------------------------|
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

## nas-port

|            |   |
|------------|---|
| Synopsis   | Enable the <b>nas-port</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">nas-port</a> |
| Tree       | <a href="#">nas-port</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## bit-spec *string*

|               |  |
|---------------|--|
| Synopsis      | NAS-Port AVP format  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">nas-port</a> <a href="#">bit-spec</a> <i>string</i> |
| Tree          | <a href="#">bit-spec</a>   |
| String Length | 1 to 255   |
| Notes         | This element is mandatory.   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## nas-port-id

|            |  |
|------------|--|
| Synopsis   | Enable the <b>nas-port-id</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">nas-port-id</a> |
| Tree       | <a href="#">nas-port-id</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## prefix-string *string*

|          |  |
|----------|--|
| Synopsis | Prefix string for NAS-Port-Id AVP  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">nas-port-id</a> <a href="#">prefix-string</a> <i>string</i> |

|               |   |
|---------------|---|
| Tree          | <a href="#">prefix-string</a>                           |
| String Length | 1 to 8  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## suffix

|            |   |
|------------|---|
| Synopsis   | Enter the <b>suffix</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">nas-port-id</a> <a href="#">suffix</a> |
| Tree       | <a href="#">suffix</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## circuit-id

|            |  |
|------------|--|
| Synopsis   | Add Circuit ID as suffix   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">nas-port-id</a> <a href="#">suffix</a> <a href="#">circuit-id</a> |
| Tree       | <a href="#">circuit-id</a>   |
| Notes      | The following elements are part of a choice: <b>circuit-id</b> , <b>not-included</b> , <b>remote-id</b> , or <b>user-string</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## not-included

|            |  |
|------------|--|
| Synopsis   | Do not add a suffix  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">nas-port-id</a> <a href="#">suffix</a> <a href="#">not-included</a> |
| Tree       | <a href="#">not-included</a>   |
| Notes      | The following elements are part of a choice: <b>circuit-id</b> , <b>not-included</b> , <b>remote-id</b> , or <b>user-string</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**remote-id**

|            |   |
|------------|---|
| Synopsis   | Add Remote ID as suffix   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">nas-port-id</a> <a href="#">suffix</a> <a href="#">remote-id</a> |
| Tree       | <a href="#">remote-id</a>   |
| Notes      | The following elements are part of a choice: <b>circuit-id</b> , <b>not-included</b> , <b>remote-id</b> , or <b>user-string</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**user-string** *string*

|               |   |
|---------------|---|
| Synopsis      | Add a user configurable string as suffix  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">nas-port-id</a> <a href="#">suffix</a> <a href="#">user-string</a> <i>string</i> |
| Tree          | <a href="#">user-string</a>   |
| String Length | 1 to 64   |
| Notes         | The following elements are part of a choice: <b>circuit-id</b> , <b>not-included</b> , <b>remote-id</b> , or <b>user-string</b> .   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**nas-port-type**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>nas-port-type</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">nas-port-type</a> |
| Tree       | <a href="#">nas-port-type</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**type** (*keyword* | *number*)

|          |   |
|----------|---|
| Synopsis | NAS-Port-Type AVP value   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">nas-port-type</a> <i>type</i> ( <i>keyword</i>   <i>number</i> ) |
| Tree     | <a href="#">type</a>  |

|            |   |
|------------|---|
| Range      | 0 to 255  |
| Options    | rfc-aligned   |
| Default    | rfc-aligned   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **rat-type** *boolean*

|            |  |
|------------|--|
| Synopsis   | Include the Radio Access Technology (RAT) type AVP   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">rat-type</a> <i>boolean</i> |
| Tree       | <a href="#">rat-type</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **remote-id** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include the agent remote ID AVP   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">remote-id</a> <i>boolean</i> |
| Tree       | <a href="#">remote-id</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **user-location-info** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Include the 3GPP-User-Location-Information AVP   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">user-location-info</a> <i>boolean</i> |
| Tree        | <a href="#">user-location-info</a>   |
| Description | When configured to <b>true</b> , this command enables the inclusion of the 3GPP-User-Location-Information AVP as signaled in the incoming GTP setup message.   |
| Default     | false  |
| Introduced  | 16.0.R1  |

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mac-format** *string*

Synopsis MAC address format

Context **configure** [subscriber-mgmt](#) [diameter-nasreq-policy](#) *string* [nasreq](#) [mac-format](#) *string*

Tree [mac-format](#)

String Length 2 to 7

Default aa:

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **password** *string*

Synopsis AA-request password

Context **configure** [subscriber-mgmt](#) [diameter-nasreq-policy](#) *string* [nasreq](#) [password](#) *string*

Tree [password](#)

String Length 1 to 115

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **user-name**

Synopsis Enter the **user-name** context

Context **configure** [subscriber-mgmt](#) [diameter-nasreq-policy](#) *string* [nasreq](#) [user-name](#)

Tree [user-name](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **domain-name** *string*

Synopsis Domain name

Context **configure** [subscriber-mgmt](#) [diameter-nasreq-policy](#) *string* [nasreq](#) [user-name](#) [domain-name](#) *string*

Tree [domain-name](#)

String Length 1 to 128

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **format** *keyword*

|            |   |
|------------|---|
| Synopsis   | Format type for username  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">user-name</a> <b>format</b> <i>keyword</i> |
| Tree       | <a href="#">format</a>  |
| Options    | mac, circuit-id, tuple, ascii-converted-circuit-id, ascii-converted-tuple, dhcp-client-vendor-opts, mac-giaddr, nas-port-id   |
| Default    | mac   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **operation** *keyword*

|            |  |
|------------|--|
| Synopsis   | Operation to perform   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">user-name</a> <b>operation</b> <i>keyword</i> |
| Tree       | <a href="#">operation</a>  |
| Options    | append, strip, replace, default  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **node**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>node</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <b>node</b> |
| Tree       | <a href="#">node</a>  |
| Notes      | The following elements are part of a choice: <b>node</b> or <b>peer-policy</b> .                                  |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**destination-realm** *string*

|               |  |
|---------------|--|
| Synopsis      | Destination-Realm AVP used by the Diameter peer policy   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">node</a> <a href="#">destination-realm</a> <i>string</i> |
| Tree          | <a href="#">destination-realm</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R4  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**origin-host** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Origin-Host AVP used by the Diameter policy   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">node</a> <a href="#">origin-host</a> <i>reference</i> |
| Tree       | <a href="#">origin-host</a>   |
| Reference  | <b>configure</b> <a href="#">aaa</a> <a href="#">diameter</a> <a href="#">node</a> <i>string</i>  |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**on-failure**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>on-failure</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">on-failure</a> |
| Tree       | <a href="#">on-failure</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**failover** *boolean*

|            |  |
|------------|--|
| Synopsis   | Session peer failover  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">on-failure</a> <a href="#">failover</a> <i>boolean</i> |
| Tree       | <a href="#">failover</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### handling *keyword*

Synopsis Session peer failure handling  
 Context **configure** [subscriber-mgmt](#) [diameter-nasreq-policy](#) *string* [on-failure](#) [handling](#) *keyword*  
 Tree [handling](#)  
 Options terminate, continue, retry-and-terminate  
 Default terminate  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### peer-policy *reference*



**WARNING:**

This element is deprecated and will be removed in a future release.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Policy for the Diameter peers  
 Context **configure** [subscriber-mgmt](#) [diameter-nasreq-policy](#) *string* [peer-policy](#) *reference*  
 Tree [peer-policy](#)  
 Reference **configure** [aaa](#) [diameter](#) [peer-policy](#) *string*  
 Notes The following elements are part of a choice: **node** or **peer-policy**.  
 Introduced 16.0.R4  
 Deprecated 20.2.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### tx-timer *number*

Synopsis Maximum wait time for a pending session request  
 Context **configure** [subscriber-mgmt](#) [diameter-nasreq-policy](#) *string* [tx-timer](#) *number*  
 Tree [tx-timer](#)  
 Range 10 to 1000



|            |   |
|------------|---|
| Units      | seconds   |
| Default    | 10  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **explicit-subscriber-map**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>explicit-subscriber-map</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">explicit-subscriber-map</a> |
| Tree       | <a href="#">explicit-subscriber-map</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                  |

### **entry** [[subscriber-id](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>entry</b> list instance   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">explicit-subscriber-map</a> <a href="#">entry</a> <i>string</i> |
| Tree       | <a href="#">entry</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **[subscriber-id]** *string*

|               |  |
|---------------|--|
| Synopsis      | Subscriber Identification string   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">explicit-subscriber-map</a> <a href="#">entry</a> <i>string</i> |
| Tree          | <a href="#">entry</a>  |
| String Length | 1 to 64  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **alias** *string*

|          |  |
|----------|--|
| Synopsis | Alias for subscriber identification string   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">explicit-subscriber-map</a> <a href="#">entry</a> <i>string</i> <a href="#">alias</a> <i>string</i> |

|               |   |
|---------------|---|
| Tree          | <a href="#">alias</a>                                   |
| String Length | 1 to 64   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **app-profile** *reference*

|            |   |
|------------|---|
| Synopsis   | Application profile name  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">explicit-subscriber-map</a> <a href="#">entry</a> <i>string</i> <a href="#">app-profile</a> <i>reference</i>                           |
| Tree       | <a href="#">app-profile</a>   |
| Reference  | <b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i> |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **sla-profile** *reference*

|            |   |
|------------|---|
| Synopsis   | SLA profile name  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">explicit-subscriber-map</a> <a href="#">entry</a> <i>string</i> <a href="#">sla-profile</a> <i>reference</i> |
| Tree       | <a href="#">sla-profile</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **sub-profile** *reference*

|            |   |
|------------|---|
| Synopsis   | Subscriber profile name   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">explicit-subscriber-map</a> <a href="#">entry</a> <i>string</i> <a href="#">sub-profile</a> <i>reference</i> |
| Tree       | <a href="#">sub-profile</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **group-interface-statistics**

|          |   |
|----------|---|
| Synopsis | Enter the <b>group-interface-statistics</b> context |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-statistics</a> |
| Tree       | <a href="#">group-interface-statistics</a>  |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                     |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state for statistics collection  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-statistics</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **group-interface-template** [[name](#)] *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>group-interface-template</b> list instance  |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i>  |
| Tree           | <a href="#">group-interface-template</a>   |
| Description    | Commands in this context configure a template for automatically-generated group interfaces that is used when creating CUPS sessions. A template with the name "default" is used when no other instance is created, however, the "default" template must be explicitly provisioned. |
| Max. Instances | 256  |
| Introduced     | 20.5.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **[name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Identifies this group interface template template   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> |
| Tree          | <a href="#">group-interface-template</a>  |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |

Introduced 20.5.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
Context **configure** [subscriber-mgmt](#) [group-interface-template](#) *string* [description](#) *string*  
Tree [description](#)  
String Length 1 to 80  
Introduced 20.5.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ip-mtu** *number*

Synopsis IP MTU applied to outgoing packets  
Context **configure** [subscriber-mgmt](#) [group-interface-template](#) *string* [ip-mtu](#) *number*  
Tree [ip-mtu](#)  
Range 512 to 9786  
Units bytes  
Introduced 20.5.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv4**

Synopsis Enter the **ipv4** context  
Context **configure** [subscriber-mgmt](#) [group-interface-template](#) *string* [ipv4](#)  
Tree [ipv4](#)  
Introduced 20.5.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **icmp**

Synopsis Enter the **icmp** context  
Context **configure** [subscriber-mgmt](#) [group-interface-template](#) *string* [ipv4](#) [icmp](#)  
Tree [icmp](#)

|            |   |
|------------|---|
| Introduced | 20.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **mask-reply** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow responses to ICMP mask requests on the interface  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4 icmp mask-reply</a> <i>boolean</i> |
| Tree       | <a href="#">mask-reply</a>  |
| Default    | true  |
| Introduced | 20.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **param-problem**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>param-problem</b> context  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4 icmp param-problem</a> |
| Tree        | <a href="#">param-problem</a>   |
| Description | Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface.                                   |
| Introduced  | 20.5.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of sent Parameter Problem messages  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4 icmp param-problem</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 20.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**number** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum number of Parameter Problem messages to send  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">param-problem</a> <b>number</b> <i>number</i> |
| Tree       | <a href="#">number</a>  |
| Range      | 10 to 1000  |
| Default    | 100   |
| Introduced | 20.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**seconds** *number*

|            |  |
|------------|--|
| Synopsis   | Time used to limit number of Parameter Problem messages  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">param-problem</a> <b>seconds</b> <i>number</i> |
| Tree       | <a href="#">seconds</a>  |
| Range      | 1 to 60  |
| Units      | seconds  |
| Default    | 10   |
| Introduced | 20.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**redirects**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>redirects</b> context  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <b>redirects</b>  |
| Tree        | <a href="#">redirects</a>   |
| Description | <p>Commands in this context configure the settings for ICMP redirect messages generated by the interface.</p> <p>The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.</p> |
| Introduced  | 20.5.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of sending ICMP redirect messages   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">redirects</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 20.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**number** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of ICMP redirect messages to send   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">redirects</a> <a href="#">number</a> <i>number</i> |
| Tree       | <a href="#">number</a>   |
| Range      | 10 to 1000   |
| Default    | 100  |
| Introduced | 20.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**seconds** *number*

|            |   |
|------------|---|
| Synopsis   | Time used to limit the number of ICMP redirect messages   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">redirects</a> <a href="#">seconds</a> <i>number</i> |
| Tree       | <a href="#">seconds</a>   |
| Range      | 1 to 60   |
| Units      | seconds   |
| Default    | 10  |
| Introduced | 20.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**ttl-expired**

|          |                                      |
|----------|--------------------------------------|
| Synopsis | Enter the <b>ttl-expired</b> context |
|----------|--------------------------------------|

|             |   |
|-------------|---|
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">ttl-expired</a> |
| Tree        | <a href="#">ttl-expired</a>   |
| Description | Commands in this context configure the settings for ICMP TTL expired messages generated by the interface.   |
| Introduced  | 20.5.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of sending TTL expired messages   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">ttl-expired</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 20.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **number** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of TTL expired messages to send   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">ttl-expired</a> <a href="#">number</a> <i>number</i> |
| Tree       | <a href="#">number</a>   |
| Range      | 10 to 2000   |
| Default    | 100  |
| Introduced | 20.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **seconds** *number*

|          |   |
|----------|---|
| Synopsis | Time used to limit the number of TTL expired messages   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">ttl-expired</a> <a href="#">seconds</a> <i>number</i> |
| Tree     | <a href="#">seconds</a>   |
| Range    | 1 to 60   |



|            |   |
|------------|---|
| Units      | seconds   |
| Default    | 10  |
| Introduced | 20.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## unreachables

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>unreachables</b> context  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">unreachables</a> |
| Tree        | <a href="#">unreachables</a>   |
| Description | Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface.   |
| Introduced  | 20.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## admin-state *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of sending unreachable messages  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">unreachables</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 20.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## number *number*

|            |   |
|------------|---|
| Synopsis   | Maximum number of unreachable messages to send  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">unreachables</a> <a href="#">number</a> <i>number</i> |
| Tree       | <a href="#">number</a>  |
| Range      | 10 to 2000  |
| Default    | 100   |
| Introduced | 20.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**seconds** *number*

|            |   |
|------------|---|
| Synopsis   | Time to limit the number of ICMP unreachable messages   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">unreachables</a> <b>seconds</b> <i>number</i> |
| Tree       | <a href="#">seconds</a>   |
| Range      | 1 to 60   |
| Units      | seconds   |
| Default    | 10  |
| Introduced | 20.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**neighbor-discovery**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>neighbor-discovery</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> |
| Tree       | <a href="#">neighbor-discovery</a>  |
| Introduced | 20.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**proxy-arp-policy** *reference*

|                |   |
|----------------|---|
| Synopsis       | Proxy ARP policy name   |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">proxy-arp-policy</a> <i>reference</i> |
| Tree           | <a href="#">proxy-arp-policy</a>  |
| Reference      | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>  |
| Max. Instances | 5   |
| Notes          | This element is ordered by the user.  |
| Introduced     | 20.5.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**remote-proxy-arp** *boolean*

|          |  |
|----------|--|
| Synopsis | Enable remote proxy ARP on the interface |
|----------|--|

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">remote-proxy-arp</a> <i>boolean</i> |
| Tree       | <a href="#">remote-proxy-arp</a>  |
| Default    | false   |
| Introduced | 20.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## urpf-check

|            |   |
|------------|---|
| Synopsis   | Enable the <b>urpf-check</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">urpf-check</a> |
| Tree       | <a href="#">urpf-check</a>  |
| Introduced | 20.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## mode *keyword*

|            |  |
|------------|--|
| Synopsis   | Unicast RPF check mode   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">urpf-check</a> <i>mode</i> <i>keyword</i> |
| Tree       | <a href="#">mode</a>   |
| Options    | strict, loose, strict-no-ecmp  |
| Default    | strict   |
| Introduced | 20.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## ipv6

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv6</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv6</a> |
| Tree       | <a href="#">ipv6</a>   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## urpf-check

|            |   |
|------------|---|
| Synopsis   | Enable the <b>urpf-check</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv6</a> <a href="#">urpf-check</a> |
| Tree       | <a href="#">urpf-check</a>  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## mode *keyword*

|            |  |
|------------|--|
| Synopsis   | Unicast RPF check mode   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv6</a> <a href="#">urpf-check</a> <i>mode</i> <i>keyword</i> |
| Tree       | <a href="#">mode</a>   |
| Options    | strict, loose, strict-no-ecmp  |
| Default    | strict   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## gtp

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>gtp</b> context  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a>                |
| Tree        | <a href="#">gtp</a>   |
| Description | This command enables the context to configure box-wide GTP parameters and profiles. |
| Introduced  | 16.0.R1   |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## apn-policy [*name*] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>apn-policy</b> list instance   |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">apn-policy</a> <i>string</i> |
| Tree           | <a href="#">apn-policy</a>  |
| Max. Instances | 128   |
| Introduced     | 16.0.R1   |

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### [name] string

Synopsis APN policy name for a new incoming GTP connection

Context **configure** subscriber-mgmt gtp apn-policy string

Tree [apn-policy](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### apn [apn-name] string

Synopsis Enter the **apn** list instance

Context **configure** subscriber-mgmt gtp apn-policy string apn string

Tree [apn](#)

Max. 1024

Instances

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### [apn-name] string

Synopsis GTP APN name

Context **configure** subscriber-mgmt gtp apn-policy string apn string

Tree [apn](#)

String Length 1 to 80

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### ambr-qos-mapping

Synopsis Enter the **ambr-qos-mapping** context

|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">apn-policy</a> <i>string</i> <a href="#">apn</a> <i>string</i> <a href="#">ambr-qos-mapping</a> |
| Tree       | <a href="#">ambr-qos-mapping</a>   |
| Introduced | 16.0.R7  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## downlink

|            |   |
|------------|---|
| Synopsis   | Enable the <b>downlink</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">apn-policy</a> <i>string</i> <a href="#">apn</a> <i>string</i> <a href="#">ambr-qos-mapping</a> <a href="#">downlink</a> |
| Tree       | <a href="#">downlink</a>  |
| Introduced | 16.0.R7   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## aggregate-rate

|            |  |
|------------|--|
| Synopsis   | Map the downlink APN-AMBR rate to an aggregate rate  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">apn-policy</a> <i>string</i> <a href="#">apn</a> <i>string</i> <a href="#">ambr-qos-mapping</a> <a href="#">downlink</a> <a href="#">aggregate-rate</a> |
| Tree       | <a href="#">aggregate-rate</a>   |
| Notes      | The following elements are part of a mandatory choice: <b>aggregate-rate</b> , <b>arbiter</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .  |
| Introduced | 16.0.R7  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## arbiter *string*

|               |   |
|---------------|---|
| Synopsis      | Name of arbiter to be overridden  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">apn-policy</a> <i>string</i> <a href="#">apn</a> <i>string</i> <a href="#">ambr-qos-mapping</a> <a href="#">downlink</a> <a href="#">arbiter</a> <i>string</i> |
| Tree          | <a href="#">arbiter</a>   |
| String Length | 1 to 32   |
| Notes         | The following elements are part of a mandatory choice: <b>aggregate-rate</b> , <b>arbiter</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .   |
| Introduced    | 16.0.R7   |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **policer** *number*

|            |   |
|------------|---|
| Synopsis   | ID of policer to be overridden  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">apn-policy</a> <i>string</i> <a href="#">apn</a> <i>string</i> <a href="#">ambr-qos-mapping</a> <a href="#">downlink</a> <a href="#">policer</a> <i>number</i> |
| Tree       | <a href="#">policer</a>   |
| Range      | 1 to 63   |
| Notes      | The following elements are part of a mandatory choice: <b>aggregate-rate</b> , <b>arbiter</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .   |
| Introduced | 16.0.R7   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **queue** *number*

|            |   |
|------------|---|
| Synopsis   | Map the downlink APN-AMBR rate to a queue PIR override  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">apn-policy</a> <i>string</i> <a href="#">apn</a> <i>string</i> <a href="#">ambr-qos-mapping</a> <a href="#">downlink</a> <a href="#">queue</a> <i>number</i> |
| Tree       | <a href="#">queue</a>   |
| Range      | 1 to 8  |
| Notes      | The following elements are part of a mandatory choice: <b>aggregate-rate</b> , <b>arbiter</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .   |
| Introduced | 16.0.R7   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **scheduler** *string*

|               |   |
|---------------|---|
| Synopsis      | Name of the scheduler to be overridden  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">apn-policy</a> <i>string</i> <a href="#">apn</a> <i>string</i> <a href="#">ambr-qos-mapping</a> <a href="#">downlink</a> <a href="#">scheduler</a> <i>string</i> |
| Tree          | <a href="#">scheduler</a>   |
| String Length | 1 to 32   |
| Notes         | The following elements are part of a mandatory choice: <b>aggregate-rate</b> , <b>arbiter</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .   |
| Introduced    | 16.0.R7   |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## uplink

|            |   |
|------------|---|
| Synopsis   | Enable the <b>uplink</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">apn-policy</a> <i>string</i> <a href="#">apn</a> <i>string</i> <a href="#">ambr-qos-mapping</a> <a href="#">uplink</a> |
| Tree       | <a href="#">uplink</a>  |
| Introduced | 16.0.R7   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## arbiter *string*

|               |   |
|---------------|---|
| Synopsis      | Name of arbiter to be overridden  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">apn-policy</a> <i>string</i> <a href="#">apn</a> <i>string</i> <a href="#">ambr-qos-mapping</a> <a href="#">uplink</a> <a href="#">arbiter</a> <i>string</i> |
| Tree          | <a href="#">arbiter</a>   |
| String Length | 1 to 32   |
| Notes         | The following elements are part of a mandatory choice: <b>arbiter</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .   |
| Introduced    | 16.0.R7   |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## policer *number*

|            |   |
|------------|---|
| Synopsis   | Map the uplink APN-AMBR rate to a policer PIR override  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">apn-policy</a> <i>string</i> <a href="#">apn</a> <i>string</i> <a href="#">ambr-qos-mapping</a> <a href="#">uplink</a> <a href="#">policer</a> <i>number</i> |
| Tree       | <a href="#">policer</a>   |
| Range      | 1 to 63   |
| Notes      | The following elements are part of a mandatory choice: <b>arbiter</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .   |
| Introduced | 16.0.R7   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## queue *number*

|          |   |
|----------|---|
| Synopsis | Map the uplink APN-AMBR rate to a queue PIR override  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">apn-policy</a> <i>string</i> <a href="#">apn</a> <i>string</i> <a href="#">ambr-qos-mapping</a> <a href="#">uplink</a> <a href="#">queue</a> <i>number</i> |



|            |   |
|------------|---|
| Tree       | <a href="#">queue</a>   |
| Range      | 1 to 32   |
| Notes      | The following elements are part of a mandatory choice: <b>arbiter</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> . |
| Introduced | 16.0.R7   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **scheduler** *string*

|               |   |
|---------------|---|
| Synopsis      | Name of scheduler to be overridden  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">apn-policy</a> <i>string</i> <a href="#">apn</a> <i>string</i> <a href="#">ambr-qos-mapping</a> <a href="#">uplink</a> <a href="#">scheduler</a> <i>string</i> |
| Tree          | <a href="#">scheduler</a>   |
| String Length | 1 to 32   |
| Notes         | The following elements are part of a mandatory choice: <b>arbiter</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .   |
| Introduced    | 16.0.R7   |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **defaults**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>defaults</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">apn-policy</a> <i>string</i> <a href="#">apn</a> <i>string</i> <a href="#">defaults</a> |
| Tree       | <a href="#">defaults</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **group-interface**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>group-interface</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">apn-policy</a> <i>string</i> <a href="#">apn</a> <i>string</i> <a href="#">defaults</a> <a href="#">group-interface</a> |
| Tree       | <a href="#">group-interface</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**name** *string*

|               |   |
|---------------|---|
| Synopsis      | Group interface name  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">apn-policy</a> <i>string</i> <a href="#">apn</a> <i>string</i> <a href="#">defaults</a> <a href="#">group-interface</a> <a href="#">name</a> <i>string</i> |
| Tree          | <a href="#">name</a>  |
| String Length | 1 to 32   |
| Notes         | This element is mandatory.  |
| Introduced    | 16.0.R1   |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**svc-name** *string*

|               |   |
|---------------|---|
| Synopsis      | Service name where the group interface resides  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">apn-policy</a> <i>string</i> <a href="#">apn</a> <i>string</i> <a href="#">defaults</a> <a href="#">group-interface</a> <a href="#">svc-name</a> <i>string</i> |
| Tree          | <a href="#">svc-name</a>  |
| String Length | 1 to 64   |
| Notes         | This element is mandatory.  |
| Introduced    | 16.0.R1   |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**diameter-nasreq-policy** *reference*

|            |  |
|------------|--|
| Synopsis   | NASREQ authentication policy name  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">apn-policy</a> <i>string</i> <a href="#">apn</a> <i>string</i> <a href="#">diameter-nasreq-policy</a> <a href="#">reference</a> |
| Tree       | <a href="#">diameter-nasreq-policy</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i>  |
| Notes      | The following elements are part of a choice: <b>diameter-nasreq-policy</b> , <b>radius-auth-policy</b> , or <b>user-db</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**radius-auth-policy** *reference*

|          |                                   |
|----------|-----------------------------------|
| Synopsis | RADIUS authentication policy name |
|----------|-----------------------------------|

|            |  |
|------------|--|
| Context    | <b>configure subscriber-mgmt gtp apn-policy</b> <i>string apn string radius-auth-policy reference</i>                        |
| Tree       | <a href="#">radius-auth-policy</a>   |
| Reference  | <b>configure subscriber-mgmt radius-authentication-policy</b> <i>string</i>  |
| Notes      | The following elements are part of a choice: <b>diameter-nasreq-policy</b> , <b>radius-auth-policy</b> , or <b>user-db</b> . |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **skip-gtp-ipv4-allocation** *boolean*

|            |   |
|------------|---|
| Synopsis   | defer IPv4 address allocation to DHCP   |
| Context    | <b>configure subscriber-mgmt gtp apn-policy</b> <i>string apn string skip-gtp-ipv4-allocation boolean</i> |
| Tree       | <a href="#">skip-gtp-ipv4-allocation</a>  |
| Default    | false   |
| Introduced | 16.0.R4   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **user-db** *reference*

|            |  |
|------------|--|
| Synopsis   | Local user database name   |
| Context    | <b>configure subscriber-mgmt gtp apn-policy</b> <i>string apn string user-db reference</i>                                   |
| Tree       | <a href="#">user-db</a>  |
| Reference  | <b>configure subscriber-mgmt local-user-db</b> <i>string</i>   |
| Notes      | The following elements are part of a choice: <b>diameter-nasreq-policy</b> , <b>radius-auth-policy</b> , or <b>user-db</b> . |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **max-held-uplink-sessions** *number*

|          |   |
|----------|---|
| Synopsis | Maximum GTP sessions held while UE is disconnected                          |
| Context  | <b>configure subscriber-mgmt gtp max-held-uplink-sessions</b> <i>number</i> |
| Tree     | <a href="#">max-held-uplink-sessions</a>                                    |
| Range    | 0 to 500000   |

|            |                                    |
|------------|------------------------------------|
| Default    | 2000                               |
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

**peer-profile** *[name] string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>peer-profile</b> list instance   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> |
| Tree       | <a href="#">peer-profile</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**[name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Peer profile name   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> |
| Tree          | <a href="#">peer-profile</a>  |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**interface-type** *keyword*

|          |   |
|----------|---|
| Synopsis | 3GPP interface type for connections toward this peer  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">interface-type</a> <i>keyword</i> |

---

|            |                                    |
|------------|------------------------------------|
| Tree       | <a href="#">interface-type</a>     |
| Options    | gn, s2a, s2b, s11                  |
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **ip-ttl** *number*

|            |  |
|------------|--|
| Synopsis   | IP header TTL value for GTP control messages   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">ip-ttl</a> <i>number</i> |
| Tree       | <a href="#">ip-ttl</a>   |
| Range      | 1 to 255   |
| Default    | 255  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **keep-alive**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>keep-alive</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">keep-alive</a> |
| Tree       | <a href="#">keep-alive</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of GTP-C echo request messages   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">keep-alive</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R4   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **interval** *number*

|            |   |
|------------|---|
| Synopsis   | Frequency for sending keepalives  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">keep-alive</a> <a href="#">interval</a> <i>number</i> |
| Tree       | <a href="#">interval</a>  |
| Range      | 60 to 180   |
| Units      | seconds   |
| Default    | 60  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **retry-count** *number*

|            |  |
|------------|--|
| Synopsis   | Time between echo retries toward the same peer   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">keep-alive</a> <a href="#">retry-count</a> <i>number</i> |
| Tree       | <a href="#">retry-count</a>  |
| Range      | 1 to 15  |
| Default    | 4  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **timeout** *number*

|            |  |
|------------|--|
| Synopsis   | Timeout after which echo request is deemed unanswered  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">keep-alive</a> <a href="#">timeout</a> <i>number</i> |
| Tree       | <a href="#">timeout</a>  |
| Range      | 1 to 20  |
| Units      | seconds  |
| Default    | 5  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **message-retransmit**

|          |  |
|----------|--|
| Synopsis | Enter the <b>message-retransmit</b> context  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">message-retransmit</a> |

|            |                                    |
|------------|------------------------------------|
| Tree       | <a href="#">message-retransmit</a> |
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **retry-count** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum unanswered retries before message deemed failed  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">message-retransmit</a> <a href="#">retry-count</a> <i>number</i> |
| Tree       | <a href="#">retry-count</a>  |
| Range      | 1 to 8   |
| Default    | 3  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **timeout** *number*

|            |  |
|------------|--|
| Synopsis   | Timeout after which a message is considered unanswered   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">message-retransmit</a> <a href="#">timeout</a> <i>number</i> |
| Tree       | <a href="#">timeout</a>  |
| Range      | 1 to 30  |
| Units      | seconds  |
| Default    | 5  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **python-policy** *reference*

|            |  |
|------------|--|
| Synopsis   | Python policy for MGW profile packets sent or received   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">python-policy</a> <i>reference</i> |
| Tree       | <a href="#">python-policy</a>  |
| Reference  | <b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**s11**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>s11</b> context  |
| Context    | <b>configure subscriber-mgmt gtp peer-profile</b> <i>string s11</i> |
| Tree       | <b>s11</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                  |

**change-reporting-action** (*number* | *keyword*)

|             |  |
|-------------|--|
| Synopsis    | Value of change reporting action IE sends to the peer  |
| Context     | <b>configure subscriber-mgmt gtp peer-profile</b> <i>string s11 change-reporting-action</i> ( <i>number</i>   <i>keyword</i> )   |
| Tree        | <b>change-reporting-action</b>   |
| Description | <p>This command specifies the value of the change reporting action IE sends to the peer in applicable messages. The peer needs to indicate support first using the appropriate flag in the indication IE.</p> <p>This can be overridden by AAA, if AAA explicitly request notification changes for either ECGI, TAI or both. If AAA does not request any notification changes or only the generic location changes, the configured value is used.</p> <p>When unconfigured, this command indicates that the IE is not sent, unless specified by AAA.</p> |
| Range       | 0 to 255   |
| Options     | cgi-sai, rai, tai, ecgi, cgi-sai-rai, tai-ecgi   |
| Introduced  | 16.0.R5  |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**end-marker-count** *number*

|             |  |
|-------------|--|
| Synopsis    | Number of GTP-U end marker packets that are sent   |
| Context     | <b>configure subscriber-mgmt gtp peer-profile</b> <i>string s11 end-marker-count</i> <i>number</i>   |
| Tree        | <b>end-marker-count</b>  |
| Description | This command specifies the number of end marker packets that are sent when it is certain no more packets will be sent over the corresponding GTP-U tunnel, such as after a completed mobility event. |
| Range       | 0 to 5   |
| Default     | 1  |
| Introduced  | 16.0.R5  |



Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### ipv4-mtu *number*

Synopsis IPv4-MTU PCO sent in S11 GTP messages  
Context **configure subscriber-mgmt gtp peer-profile** *string s11 ipv4-mtu number*  
Tree [ipv4-mtu](#)  
Range 512 to 9000  
Default 1400  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### qos

Synopsis Enter the **qos** context  
Context **configure subscriber-mgmt gtp peer-profile** *string s11 qos*  
Tree [qos](#)  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### ambr

Synopsis Enter the **ambr** context  
Context **configure subscriber-mgmt gtp peer-profile** *string s11 qos ambr*  
Tree [ambr](#)  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### down-link *number*

Synopsis Downlink Aggregated Maximum Bit Rate (AMBR)  
Context **configure subscriber-mgmt gtp peer-profile** *string s11 qos ambr down-link number*  
Tree [down-link](#)  
Range 0 to 10000000  
Units kilobps

---

|            |                                    |
|------------|------------------------------------|
| Default    | 20000                              |
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **up-link number**

|            |   |
|------------|---|
| Synopsis   | Uplink Aggregated Maximum Bit Rate (AMBR)   |
| Context    | <b>configure subscriber-mgmt gtp peer-profile</b> <i>string s11 qos ambr up-link number</i> |
| Tree       | <a href="#">up-link</a>   |
| Range      | 0 to 10000000   |
| Units      | kilobps   |
| Default    | 10000   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **arp number**

|            |  |
|------------|--|
| Synopsis   | Allocation or retention priority   |
| Context    | <b>configure subscriber-mgmt gtp peer-profile</b> <i>string s11 qos arp number</i> |
| Tree       | <a href="#">arp</a>  |
| Range      | 1 to 15  |
| Default    | 1  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **down-link**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>down-link</b> context  |
| Context    | <b>configure subscriber-mgmt gtp peer-profile</b> <i>string s11 qos down-link</i> |
| Tree       | <a href="#">down-link</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **gbr number**

|            |  |
|------------|--|
| Synopsis   | Guaranteed Bit Rate (GBR)  |
| Context    | <b>configure subscriber-mgmt gtp peer-profile</b> <i>string s11 qos down-link gbr number</i> |
| Tree       | <a href="#">gbr</a>  |
| Range      | 0 to 100000  |
| Units      | kilobps  |
| Default    | 0  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **mbr number**

|            |  |
|------------|--|
| Synopsis   | Maximum Bit Rate (MBR)   |
| Context    | <b>configure subscriber-mgmt gtp peer-profile</b> <i>string s11 qos down-link mbr number</i> |
| Tree       | <a href="#">mbr</a>  |
| Range      | 0 to 100000  |
| Units      | kilobps  |
| Default    | 0  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **qci number**

|            |  |
|------------|--|
| Synopsis   | QoS Class Identifier (QCI) to send in GTP messages                                 |
| Context    | <b>configure subscriber-mgmt gtp peer-profile</b> <i>string s11 qos qci number</i> |
| Tree       | <a href="#">qci</a>  |
| Range      | 1 to 9   |
| Default    | 8  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **up-link**

|          |   |
|----------|---|
| Synopsis | Enter the <b>up-link</b> context  |
| Context  | <b>configure subscriber-mgmt gtp peer-profile</b> <i>string s11 qos up-link</i> |

|            |                                    |
|------------|------------------------------------|
| Tree       | <a href="#">up-link</a>            |
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

**gbr number**

|            |   |
|------------|---|
| Synopsis   | Guaranteed Bit Rate (GBR)   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">s11</a> <a href="#">qos</a> <a href="#">up-link</a> <a href="#">gbr</a> <i>number</i> |
| Tree       | <a href="#">gbr</a>   |
| Range      | 0 to 100000   |
| Units      | kilobps   |
| Default    | 0   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**mbr number**

|            |   |
|------------|---|
| Synopsis   | Maximum Bit Rate (MBR)  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">s11</a> <a href="#">qos</a> <a href="#">up-link</a> <a href="#">mbr</a> <i>number</i> |
| Tree       | <a href="#">mbr</a>   |
| Range      | 0 to 100000   |
| Units      | kilobps   |
| Default    | 0   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**uplink**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>uplink</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> |
| Tree       | <a href="#">uplink</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## charging-characteristics

|            |   |
|------------|---|
| Synopsis   | Enter the <b>charging-characteristics</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> |
| Tree       | <a href="#">charging-characteristics</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## home

|            |  |
|------------|--|
| Synopsis   | Enter the <b>home</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">home</a> |
| Tree       | <a href="#">home</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## bit0 *boolean*

|            |  |
|------------|--|
| Synopsis   | Set bit in charging characteristics information element  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">home</a> <a href="#">bit0</a> <i>boolean</i> |
| Tree       | <a href="#">bit0</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## bit1 *boolean*

|            |  |
|------------|--|
| Synopsis   | Set bit in charging characteristics information element  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">home</a> <a href="#">bit1</a> <i>boolean</i> |
| Tree       | <a href="#">bit1</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**bit10** *boolean*

|            |  |
|------------|--|
| Synopsis   | Set bit in charging characteristics information element  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">home</a><br><a href="#">bit10</a> <i>boolean</i> |
| Tree       | <a href="#">bit10</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**bit11** *boolean*

|            |  |
|------------|--|
| Synopsis   | Set bit in charging characteristics information element  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">home</a><br><a href="#">bit11</a> <i>boolean</i> |
| Tree       | <a href="#">bit11</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**bit12** *boolean*

|            |  |
|------------|--|
| Synopsis   | Set bit in charging characteristics information element  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">home</a><br><a href="#">bit12</a> <i>boolean</i> |
| Tree       | <a href="#">bit12</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**bit13** *boolean*

|          |  |
|----------|--|
| Synopsis | Set bit in charging characteristics information element  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">home</a><br><a href="#">bit13</a> <i>boolean</i> |
| Tree     | <a href="#">bit13</a>  |
| Default  | false  |

Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **bit14** *boolean*

Synopsis Set bit in charging characteristics information element  
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* [uplink](#) [charging-characteristics](#) [home](#)  
[bit14](#) *boolean*  
Tree [bit14](#)  
Default false  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **bit15** *boolean*

Synopsis Set bit in charging characteristics information element  
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* [uplink](#) [charging-characteristics](#) [home](#)  
[bit15](#) *boolean*  
Tree [bit15](#)  
Default false  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **bit2** *boolean*

Synopsis Set bit in charging characteristics information element  
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* [uplink](#) [charging-characteristics](#) [home](#)  
[bit2](#) *boolean*  
Tree [bit2](#)  
Default false  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **bit3** *boolean*

Synopsis Set bit in charging characteristics information element

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|            |   |
|------------|---|
| Context    | <b>configure subscriber-mgmt gtp peer-profile</b> <i>string</i> <b>uplink charging-characteristics home bit3</b> <i>boolean</i> |
| Tree       | <b>bit3</b>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**bit4** *boolean*

|            |   |
|------------|---|
| Synopsis   | Set bit in charging characteristics information element   |
| Context    | <b>configure subscriber-mgmt gtp peer-profile</b> <i>string</i> <b>uplink charging-characteristics home bit4</b> <i>boolean</i> |
| Tree       | <b>bit4</b>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**bit5** *boolean*

|            |   |
|------------|---|
| Synopsis   | Set bit in charging characteristics information element   |
| Context    | <b>configure subscriber-mgmt gtp peer-profile</b> <i>string</i> <b>uplink charging-characteristics home bit5</b> <i>boolean</i> |
| Tree       | <b>bit5</b>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**bit6** *boolean*

|            |   |
|------------|---|
| Synopsis   | Set bit in charging characteristics information element   |
| Context    | <b>configure subscriber-mgmt gtp peer-profile</b> <i>string</i> <b>uplink charging-characteristics home bit6</b> <i>boolean</i> |
| Tree       | <b>bit6</b>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |



**bit7** *boolean*

|            |  |
|------------|--|
| Synopsis   | Set bit in charging characteristics information element  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">home</a> <a href="#">bit7</a> <i>boolean</i> |
| Tree       | <a href="#">bit7</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**bit8** *boolean*

|            |  |
|------------|--|
| Synopsis   | Set bit in charging characteristics information element  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">home</a> <a href="#">bit8</a> <i>boolean</i> |
| Tree       | <a href="#">bit8</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**bit9** *boolean*

|            |  |
|------------|--|
| Synopsis   | Set bit in charging characteristics information element  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">home</a> <a href="#">bit9</a> <i>boolean</i> |
| Tree       | <a href="#">bit9</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**roaming**

|          |   |
|----------|---|
| Synopsis | Enter the <b>roaming</b> context  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">roaming</a> |
| Tree     | <a href="#">roaming</a>   |

Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **bit0** *boolean*

Synopsis Set bit in charging characteristics information element  
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* [uplink](#) [charging-characteristics](#) [roaming](#) **bit0** *boolean*  
Tree [bit0](#)  
Default false  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **bit1** *boolean*

Synopsis Set bit in charging characteristics information element  
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* [uplink](#) [charging-characteristics](#) [roaming](#) **bit1** *boolean*  
Tree [bit1](#)  
Default false  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **bit10** *boolean*

Synopsis Set bit in charging characteristics information element  
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* [uplink](#) [charging-characteristics](#) [roaming](#) **bit10** *boolean*  
Tree [bit10](#)  
Default false  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **bit11** *boolean*

Synopsis Set bit in charging characteristics information element

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|            |   |
|------------|---|
| Context    | <b>configure subscriber-mgmt gtp peer-profile</b> <i>string</i> <b>uplink charging-characteristics roaming bit11</b> <i>boolean</i> |
| Tree       | <b>bit11</b>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **bit12** *boolean*

|            |   |
|------------|---|
| Synopsis   | Set bit in charging characteristics information element   |
| Context    | <b>configure subscriber-mgmt gtp peer-profile</b> <i>string</i> <b>uplink charging-characteristics roaming bit12</b> <i>boolean</i> |
| Tree       | <b>bit12</b>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **bit13** *boolean*

|            |   |
|------------|---|
| Synopsis   | Set bit in charging characteristics information element   |
| Context    | <b>configure subscriber-mgmt gtp peer-profile</b> <i>string</i> <b>uplink charging-characteristics roaming bit13</b> <i>boolean</i> |
| Tree       | <b>bit13</b>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **bit14** *boolean*

|            |   |
|------------|---|
| Synopsis   | Set bit in charging characteristics information element   |
| Context    | <b>configure subscriber-mgmt gtp peer-profile</b> <i>string</i> <b>uplink charging-characteristics roaming bit14</b> <i>boolean</i> |
| Tree       | <b>bit14</b>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**bit15 boolean**

|            |  |
|------------|--|
| Synopsis   | Set bit in charging characteristics information element  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">roaming</a> <a href="#">bit15</a> <i>boolean</i> |
| Tree       | <a href="#">bit15</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**bit2 boolean**

|            |   |
|------------|---|
| Synopsis   | Set bit in charging characteristics information element   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">roaming</a> <a href="#">bit2</a> <i>boolean</i> |
| Tree       | <a href="#">bit2</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**bit3 boolean**

|            |   |
|------------|---|
| Synopsis   | Set bit in charging characteristics information element   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">roaming</a> <a href="#">bit3</a> <i>boolean</i> |
| Tree       | <a href="#">bit3</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**bit4 boolean**

|          |   |
|----------|---|
| Synopsis | Set bit in charging characteristics information element   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">roaming</a> <a href="#">bit4</a> <i>boolean</i> |
| Tree     | <a href="#">bit4</a>  |

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|            |                                    |
|------------|------------------------------------|
| Default    | false                              |
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

**bit5** *boolean*

|            |  |
|------------|--|
| Synopsis   | Set bit in charging characteristics information element  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">roaming</a> <b>bit5</b> <i>boolean</i> |
| Tree       | <a href="#">bit5</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**bit6** *boolean*

|            |  |
|------------|--|
| Synopsis   | Set bit in charging characteristics information element  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">roaming</a> <b>bit6</b> <i>boolean</i> |
| Tree       | <a href="#">bit6</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**bit7** *boolean*

|            |  |
|------------|--|
| Synopsis   | Set bit in charging characteristics information element  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">roaming</a> <b>bit7</b> <i>boolean</i> |
| Tree       | <a href="#">bit7</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**bit8** *boolean*

|            |  |
|------------|--|
| Synopsis   | Set bit in charging characteristics information element  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">roaming</a> <b>bit8</b> <i>boolean</i> |
| Tree       | <a href="#">bit8</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**bit9** *boolean*

|            |  |
|------------|--|
| Synopsis   | Set bit in charging characteristics information element  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">roaming</a> <b>bit9</b> <i>boolean</i> |
| Tree       | <a href="#">bit9</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**ggsn**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ggsn</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <b>ggsn</b> |
| Tree       | <a href="#">ggsn</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**qos**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>qos</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <b>ggsn</b> <b>qos</b> |
| Tree       | <a href="#">qos</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**ambr**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>ambr</b> context   |
| Context    | <b>configure subscriber-mgmt gtp peer-profile</b> <i>string</i> <a href="#">uplink</a> <a href="#">ggsn</a> <a href="#">qos</a> <a href="#">ambr</a> |
| Tree       | <a href="#">ambr</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**down-link** *number*

|            |  |
|------------|--|
| Synopsis   | Downlink Aggregated Maximum Bit Rate (AMBR)  |
| Context    | <b>configure subscriber-mgmt gtp peer-profile</b> <i>string</i> <a href="#">uplink</a> <a href="#">ggsn</a> <a href="#">qos</a> <a href="#">ambr</a> <a href="#">down-link</a> <i>number</i> |
| Tree       | <a href="#">down-link</a>  |
| Range      | 0 to 10000000  |
| Units      | kilobps  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**up-link** *number*

|            |  |
|------------|--|
| Synopsis   | Uplink Aggregated Maximum Bit Rate (AMBR)  |
| Context    | <b>configure subscriber-mgmt gtp peer-profile</b> <i>string</i> <a href="#">uplink</a> <a href="#">ggsn</a> <a href="#">qos</a> <a href="#">ambr</a> <a href="#">up-link</a> <i>number</i> |
| Tree       | <a href="#">up-link</a>  |
| Range      | 0 to 10000000  |
| Units      | kilobps  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**arp** *number*

|          |   |
|----------|---|
| Synopsis | Allocation or retention priority  |
| Context  | <b>configure subscriber-mgmt gtp peer-profile</b> <i>string</i> <a href="#">uplink</a> <a href="#">ggsn</a> <a href="#">qos</a> <a href="#">arp</a> <i>number</i> |
| Tree     | <a href="#">arp</a>   |

|            |                                    |
|------------|------------------------------------|
| Range      | 1 to 3                             |
| Default    | 1                                  |
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **down-link**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>down-link</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">ggsn</a> <a href="#">qos</a> <a href="#">down-link</a> |
| Tree       | <a href="#">down-link</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **gbr number**

|            |   |
|------------|---|
| Synopsis   | Guaranteed Bit Rate (GBR)   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">ggsn</a> <a href="#">qos</a> <a href="#">down-link</a> <a href="#">gbr</a> <i>number</i> |
| Tree       | <a href="#">gbr</a>   |
| Range      | 0 to 100000   |
| Units      | kilobps   |
| Default    | 2000  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **mbr number**

|            |   |
|------------|---|
| Synopsis   | Maximum Bit Rate (MBR)  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">ggsn</a> <a href="#">qos</a> <a href="#">down-link</a> <a href="#">mbr</a> <i>number</i> |
| Tree       | <a href="#">mbr</a>   |
| Range      | 0 to 100000   |
| Units      | kilobps   |
| Default    | 2000  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |



## up-link

|            |   |
|------------|---|
| Synopsis   | Enter the <b>up-link</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">ggsn</a> <a href="#">qos</a> <a href="#">up-link</a> |
| Tree       | <a href="#">up-link</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## gbr number

|            |   |
|------------|---|
| Synopsis   | Guaranteed Bit Rate (GBR)   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">ggsn</a> <a href="#">qos</a> <a href="#">up-link</a> <a href="#">gbr</a> <i>number</i> |
| Tree       | <a href="#">gbr</a>   |
| Range      | 0 to 100000   |
| Units      | kilobps   |
| Default    | 5000  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## mbr number

|            |   |
|------------|---|
| Synopsis   | Maximum Bit Rate (MBR)  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">ggsn</a> <a href="#">qos</a> <a href="#">up-link</a> <a href="#">mbr</a> <i>number</i> |
| Tree       | <a href="#">mbr</a>   |
| Range      | 0 to 100000   |
| Units      | kilobps   |
| Default    | 5000  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## pgw

|          |  |
|----------|--|
| Synopsis | Enter the <b>pgw</b> context   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">pgw</a> |
| Tree     | <a href="#">pgw</a>  |

|            |                                    |
|------------|------------------------------------|
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

## qos

|            |  |
|------------|--|
| Synopsis   | Enter the <b>qos</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">pgw</a> <a href="#">qos</a> |
| Tree       | <a href="#">qos</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## ambr

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ambr</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">pgw</a> <a href="#">qos</a> <a href="#">ambr</a> |
| Tree       | <a href="#">ambr</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## down-link *number*

|            |   |
|------------|---|
| Synopsis   | Downlink Aggregated Maximum Bit Rate (AMBR)   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">pgw</a> <a href="#">qos</a> <a href="#">ambr</a> <a href="#">down-link</a> <i>number</i> |
| Tree       | <a href="#">down-link</a>   |
| Range      | 0 to 10000000   |
| Units      | kilobps   |
| Default    | 20000   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## up-link *number*

|          |   |
|----------|---|
| Synopsis | Uplink Aggregated Maximum Bit Rate (AMBR)   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">pgw</a> <a href="#">qos</a> <a href="#">ambr</a> <a href="#">up-link</a> <i>number</i> |
| Tree     | <a href="#">up-link</a>   |

|            |                                    |
|------------|------------------------------------|
| Range      | 0 to 10000000                      |
| Units      | kilobps                            |
| Default    | 10000                              |
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

**arp number**

|            |   |
|------------|---|
| Synopsis   | Allocation or retention priority  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">pgw</a> <a href="#">qos</a> <b>arp</b> <i>number</i> |
| Tree       | <a href="#">arp</a>   |
| Range      | 1 to 15   |
| Default    | 1   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**down-link**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>down-link</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">pgw</a> <a href="#">qos</a> <b>down-link</b> |
| Tree       | <a href="#">down-link</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**gbr number**

|            |   |
|------------|---|
| Synopsis   | Guaranteed Bit Rate (GBR)   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">pgw</a> <a href="#">qos</a> <a href="#">down-link</a> <b>gbr</b> <i>number</i> |
| Tree       | <a href="#">gbr</a>   |
| Range      | 0 to 100000   |
| Units      | kilobps   |
| Default    | 0   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **mbr number**

|            |  |
|------------|--|
| Synopsis   | Maximum Bit Rate (MBR)   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">pgw</a> <a href="#">qos</a> <a href="#">down-link</a> <i>mbr number</i> |
| Tree       | <a href="#">mbr</a>  |
| Range      | 0 to 100000  |
| Units      | kilobps  |
| Default    | 0  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **qci number**

|            |  |
|------------|--|
| Synopsis   | QoS Class Identifier (QCI) to send in GTP messages   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">pgw</a> <a href="#">qos</a> <i>qci number</i> |
| Tree       | <a href="#">qci</a>  |
| Range      | 1 to 9   |
| Default    | 8  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **up-link**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>up-link</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">pgw</a> <a href="#">qos</a> <i>up-link</i> |
| Tree       | <a href="#">up-link</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **gbr number**

|          |  |
|----------|--|
| Synopsis | Guaranteed Bit Rate (GBR)  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">pgw</a> <a href="#">qos</a> <a href="#">up-link</a> <i>gbr number</i> |
| Tree     | <a href="#">gbr</a>  |
| Range    | 0 to 100000  |

|            |                                    |
|------------|------------------------------------|
| Units      | kilobps                            |
| Default    | 0                                  |
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

**mbr number**

|            |   |
|------------|---|
| Synopsis   | Maximum Bit Rate (MBR)  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">pgw</a> <a href="#">qos</a> <a href="#">up-link</a> <b>mbr</b> <i>number</i> |
| Tree       | <a href="#">mbr</a>   |
| Range      | 0 to 100000   |
| Units      | kilobps   |
| Default    | 0   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**protocol-configuration-options keyword**

|            |  |
|------------|--|
| Synopsis   | Information Element for Protocol Configuration Options   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">protocol-configuration-options</a> <i>keyword</i> |
| Tree       | <a href="#">protocol-configuration-options</a>   |
| Options    | pco, apco  |
| Default    | pco  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**rat-type (number | keyword)**

|             |   |
|-------------|---|
| Synopsis    | Default Radio Access Type (RAT) signaled in GTP setup   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <b>rat-type</b> ( <i>number</i>   <i>keyword</i> )   |
| Tree        | <a href="#">rat-type</a>  |
| Description | This command configures the default Radio Access Technology (RAT) type signaled during GTP setup. RAT identifies the underlying physical connection method for a radio-based communication network. This can be overridden by RADIUS. |
| Range       | 0 to 255  |

|            |  |
|------------|--|
| Options    | utran, geran, wlan, gan, hspa, eutran, virtual |
| Default    | wlan   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR             |

### **report-wlan-location** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Report WLAN or cellular location of UE during setup   |
| Context     | <b>configure</b> <b>subscriber-mgmt</b> <b>gtp</b> <b>peer-profile</b> <i>string</i> <b>uplink</b> <b>report-wlan-location</b> <i>boolean</i>   |
| Tree        | <a href="#">report-wlan-location</a>  |
| Description | When configured to <b>true</b> , this command enables reporting of the WLAN location or cellular location of the UE in the signaling interface (S2a or Gn) between the WLAN GW and the mobile gateway (PGW or GGSN).<br><br>When configured to <b>false</b> , this command disables location reporting. |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **session-hold-time** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Time to hold a GTP session after its UE is disconnected  |
| Context    | <b>configure</b> <b>subscriber-mgmt</b> <b>gtp</b> <b>peer-profile</b> <i>string</i> <b>uplink</b> <b>session-hold-time</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">session-hold-time</a>  |
| Range      | 0 to 3600  |
| Units      | seconds  |
| Options    | remaining-lease-time   |
| Default    | 30   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **serving-network**

|          |   |
|----------|---|
| Synopsis | Enable the <b>serving-network</b> context                                 |
| Context  | <b>configure</b> <b>subscriber-mgmt</b> <b>gtp</b> <b>serving-network</b> |
| Tree     | <a href="#">serving-network</a>   |

|             |   |
|-------------|---|
| Description | Commands in this context configure the 3GPP serving network that the node is part of. |
| Introduced  | 16.0.R1   |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **mcc string**

|               |  |
|---------------|--|
| Synopsis      | Mobile Country Code (MCC) portion of serving network   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">serving-network</a> <a href="#">mcc</a> <i>string</i> |
| Tree          | <a href="#">mcc</a>  |
| String Length | 3  |
| Notes         | This element is mandatory.   |
| Introduced    | 16.0.R1  |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **mnc string**

|               |  |
|---------------|--|
| Synopsis      | Mobile Network Code (MNC) portion of serving network   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">serving-network</a> <a href="#">mnc</a> <i>string</i> |
| Tree          | <a href="#">mnc</a>  |
| String Length | 2 to 3   |
| Notes         | This element is mandatory.   |
| Introduced    | 16.0.R1  |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **host-lockout-policy [name] string**

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>host-lockout-policy</b> list instance   |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">host-lockout-policy</a> <i>string</i> |
| Tree           | <a href="#">host-lockout-policy</a>  |
| Max. Instances | 128  |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**[name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Host lockout policy name to associate with the SAP   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">host-lockout-policy</a> <i>string</i> |
| Tree          | <a href="#">host-lockout-policy</a>  |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">host-lockout-policy</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**host-key** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Parameters in host identification for lockout on a SAP   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">host-lockout-policy</a> <i>string</i> <a href="#">host-key</a> <i>keyword</i> |
| Tree       | <a href="#">host-key</a>   |
| Options    | all, mac   |
| Default    | all  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**lockout-reset-time** *number*

|          |   |
|----------|---|
| Synopsis | Lockout reset time settings   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">host-lockout-policy</a> <i>string</i> <a href="#">lockout-reset-time</a> <i>number</i> |



|            |   |
|------------|---|
| Tree       | <a href="#">lockout-reset-time</a>                      |
| Range      | 1 to 86400  |
| Units      | seconds   |
| Default    | 60  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## lockout-time

|            |   |
|------------|---|
| Synopsis   | Enter the <b>lockout-time</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">host-lockout-policy</a> <i>string</i> <a href="#">lockout-time</a> |
| Tree       | <a href="#">lockout-time</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## max number

|            |   |
|------------|---|
| Synopsis   | Maximum lockout time  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">host-lockout-policy</a> <i>string</i> <a href="#">lockout-time</a> <i>max number</i> |
| Tree       | <a href="#">max</a>   |
| Range      | 1 to 86400  |
| Units      | seconds   |
| Default    | 3600  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## min number

|            |   |
|------------|---|
| Synopsis   | Minimum lockout time  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">host-lockout-policy</a> <i>string</i> <a href="#">lockout-time</a> <i>min number</i> |
| Tree       | <a href="#">min</a>   |
| Range      | 1 to 86400  |
| Units      | seconds   |
| Default    | 10  |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max-lockout-hosts** *number*

Synopsis Max lockout hosts  
 Context **configure** [subscriber-mgmt](#) [host-lockout-policy](#) *string* [max-lockout-hosts](#) *number*  
 Tree [max-lockout-hosts](#)  
 Range 1 to 32000  
 Default 100  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **host-tracking-policy** [[name](#)] *string*

Synopsis Enter the **host-tracking-policy** list instance  
 Context **configure** [subscriber-mgmt](#) [host-tracking-policy](#) *string*  
 Tree [host-tracking-policy](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis Host tracking policy name  
 Context **configure** [subscriber-mgmt](#) [host-tracking-policy](#) *string*  
 Tree [host-tracking-policy](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
 Context **configure** [subscriber-mgmt](#) [host-tracking-policy](#) *string* [description](#) *string*  
 Tree [description](#)

|               |   |
|---------------|---|
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **egress-rate-modify**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>egress-rate-modify</b> context   |
| Context    | <b>configure subscriber-mgmt host-tracking-policy</b> <i>string</i> <b>egress-rate-modify</b> |
| Tree       | <a href="#">egress-rate-modify</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                       |

### **agg-rate**

|             |  |
|-------------|--|
| Synopsis    | Maximum total rate for all subscriber egress queues  |
| Context     | <b>configure subscriber-mgmt host-tracking-policy</b> <i>string</i> <b>egress-rate-modify agg-rate</b>                         |
| Tree        | <a href="#">agg-rate</a>   |
| Description | This command specifies the maximum total rate for all subscriber egress queues for each subscriber associated with the policy. |
| Notes       | The following elements are part of a choice: <b>agg-rate</b> or <b>scheduler</b> .   |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **scheduler** *string*

|               |   |
|---------------|---|
| Synopsis      | Scheduler to be applied for rate modification   |
| Context       | <b>configure subscriber-mgmt host-tracking-policy</b> <i>string</i> <b>egress-rate-modify scheduler</b> <i>string</i> |
| Tree          | <a href="#">scheduler</a>   |
| String Length | 1 to 32   |
| Notes         | The following elements are part of a choice: <b>agg-rate</b> or <b>scheduler</b> .                                    |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**http-redirect-policy** [*name*] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>http-redirect-policy</b> list instance   |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">http-redirect-policy</a> <i>string</i> |
| Tree           | <a href="#">http-redirect-policy</a>  |
| Max. Instances | 16  |
| Introduced     | 16.0.R1   |
| Platforms      | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**[name]** *string*

|               |   |
|---------------|---|
| Synopsis      | HTTP redirect policy name   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">http-redirect-policy</a> <i>string</i> |
| Tree          | <a href="#">http-redirect-policy</a>  |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**aa-url-parameter** *string*

|               |  |
|---------------|--|
| Synopsis      | AA URL parameter included for HTTP portal redirect   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">http-redirect-policy</a> <i>string</i> <a href="#">aa-url-parameter</a> <i>string</i> |
| Tree          | <a href="#">aa-url-parameter</a>   |
| String Length | 1 to 247   |
| Introduced    | 22.2.R1  |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**application-assurance** *reference*

|            |  |
|------------|--|
| Synopsis   | AA application profile used for portal authentication  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">http-redirect-policy</a> <i>string</i> <a href="#">application-assurance</a> <i>reference</i>                                 |
| Tree       | <a href="#">application-assurance</a>  |
| Reference  | <b>configure</b> <a href="#">application-assurance</a> <i>group</i> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i> |
| Introduced | 22.2.R1  |

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
 Context **configure** **subscriber-mgmt** **http-redirect-policy** *string* **description** *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dst-port** *number*

Synopsis Destination port number of the HTTP request to match  
 Context **configure** **subscriber-mgmt** **http-redirect-policy** *string* **dst-port** *number*  
 Tree [dst-port](#)  
 Range 1 to 65535  
 Default 80  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **forward-entry** **dst-ip** (*ipv4-prefix* | *ipv6-prefix*) **protocol** *keyword* **dst-port** *number*

Synopsis Add a list entry for **forward-entry**  
 Context **configure** **subscriber-mgmt** **http-redirect-policy** *string* **forward-entry** **dst-ip** (*ipv4-prefix* | *ipv6-prefix*) **protocol** *keyword* **dst-port** *number*  
 Tree [forward-entry](#)  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dst-ip** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Destination address  
 Context **configure** **subscriber-mgmt** **http-redirect-policy** *string* **forward-entry** **dst-ip** (*ipv4-prefix* | *ipv6-prefix*) **protocol** *keyword* **dst-port** *number*  
 Tree [forward-entry](#)

|            |                                     |
|------------|-------------------------------------|
| Notes      | This element is part of a list key. |
| Introduced | 16.0.R1                             |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **protocol** *keyword*

|            |   |
|------------|---|
| Synopsis   | Destination protocol  |
| Context    | <b>configure</b> <b>subscriber-mgmt</b> <b>http-redirect-policy</b> <i>string</i> <b>forward-entry</b> <b>dst-ip</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>protocol</b> <b>keyword</b> <b>dst-port</b> <i>number</i> |
| Tree       | <b>forward-entry</b>  |
| Options    | tcp, udp  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **dst-port** *number*

|            |   |
|------------|---|
| Synopsis   | Destination port  |
| Context    | <b>configure</b> <b>subscriber-mgmt</b> <b>http-redirect-policy</b> <i>string</i> <b>forward-entry</b> <b>dst-ip</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>protocol</b> <b>keyword</b> <b>dst-port</b> <i>number</i> |
| Tree       | <b>forward-entry</b>  |
| Range      | 1 to 65535  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **ignore-app-profile** *boolean*

|            |  |
|------------|--|
| Synopsis   | Ignore application profile attribute in the RADIUS Access-Accept message   |
| Context    | <b>configure</b> <b>subscriber-mgmt</b> <b>http-redirect-policy</b> <i>string</i> <b>ignore-app-profile</b> <i>boolean</i> |
| Tree       | <b>ignore-app-profile</b>  |
| Default    | false  |
| Introduced | 19.7.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**portal-hold-time** *number*

|            |   |
|------------|---|
| Synopsis   | Time to hold redirect forwarding resources  |
| Context    | <b>configure</b> <b>subscriber-mgmt</b> <b>http-redirect-policy</b> <i>string</i> <b>portal-hold-time</b> <i>number</i> |
| Tree       | <b>portal-hold-time</b>   |
| Range      | 1 to 60   |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**url** *string*

|               |   |
|---------------|---|
| Synopsis      | HTTP URL to which the matching traffic is redirected  |
| Context       | <b>configure</b> <b>subscriber-mgmt</b> <b>http-redirect-policy</b> <i>string</i> <b>url</b> <i>string</i>  |
| Tree          | <b>url</b>  |
| Description   | This command configures the HTTP redirect URL to which the matching traffic is redirected. Use the following variables to insert subscriber session data in the URL: <ul style="list-style-type: none"> <li>• \$URL (Request-URI in the HTTP GET Request received)</li> <li>• \$MAC (a string that represents the MAC address of the subscriber host)</li> <li>• \$IP (a string that represents the IP address of the subscriber host)</li> <li>• \$NASIP (a string that represents the RADIUS IP address of the ISA/ESA-VM)</li> </ul> |
| String Length | 1 to 255  |
| Introduced    | 16.0.R1   |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**igmp-policy** [*name*] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>igmp-policy</b> list instance                               |
| Context    | <b>configure</b> <b>subscriber-mgmt</b> <b>igmp-policy</b> <i>string</i> |
| Tree       | <b>igmp-policy</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                  |

**[name]** *string*

|          |             |
|----------|-------------|
| Synopsis | Policy name |
|----------|-------------|

---

|               |  |
|---------------|--|
| Context       | <b>configure subscriber-mgmt igmp-policy</b> <i>string</i> |
| Tree          | <a href="#">igmp-policy</a>                                |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.                        |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR    |

### **description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure subscriber-mgmt igmp-policy</b> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                     |

### **egress-rate-modify**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>egress-rate-modify</b> context  |
| Context    | <b>configure subscriber-mgmt igmp-policy</b> <i>string</i> <b>egress-rate-modify</b> |
| Tree       | <a href="#">egress-rate-modify</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                              |

### **agg-rate**

|             |  |
|-------------|--|
| Synopsis    | Maximum total rate for all subscriber egress queues  |
| Context     | <b>configure subscriber-mgmt igmp-policy</b> <i>string</i> <b>egress-rate-modify</b> <b>agg-rate</b>                           |
| Tree        | <a href="#">agg-rate</a>   |
| Description | This command specifies the maximum total rate for all subscriber egress queues for each subscriber associated with the policy. |
| Notes       | The following elements are part of a choice: <b>agg-rate</b> or <b>scheduler</b> .   |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |



### **scheduler** *string*

|               |   |
|---------------|---|
| Synopsis      | Scheduler to be applied for rate modification   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <a href="#">egress-rate-modify scheduler</a> <i>string</i> |
| Tree          | <a href="#">scheduler</a>   |
| String Length | 1 to 32   |
| Notes         | The following elements are part of a choice: <b>agg-rate</b> or <b>scheduler</b> .  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **fast-leave** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable fast leave  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <a href="#">fast-leave</a> <i>boolean</i> |
| Tree       | <a href="#">fast-leave</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **import-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | Import policy that filters IGMP packets   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <a href="#">import-policy</a> <i>reference</i> |
| Tree       | <a href="#">import-policy</a>   |
| Reference  | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>                            |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **maximum-number-group-sources** *number*

|             |   |
|-------------|---|
| Synopsis    | Maximum number of group sources for this interface  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <a href="#">maximum-number-group-sources</a> <i>number</i>   |
| Tree        | <a href="#">maximum-number-group-sources</a>  |
| Description | This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than |

the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.

|            |   |
|------------|---|
| Range      | 1 to 32000  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **maximum-number-groups** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum number of groups for this interface   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <b>maximum-number-groups</b> <i>number</i> |
| Tree       | <a href="#">maximum-number-groups</a>   |
| Range      | 1 to 16000  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **maximum-number-sources** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of sources that are allowed per group   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <b>maximum-number-sources</b> <i>number</i> |
| Tree       | <a href="#">maximum-number-sources</a>   |
| Range      | 1 to 1000  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **multicast-reporter**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>multicast-reporter</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <b>multicast-reporter</b> |
| Tree       | <a href="#">multicast-reporter</a>   |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **admin-state** *keyword*

|          |   |
|----------|---|
| Synopsis | Administrative state of the multicast reporter  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <a href="#">multicast-reporter</a> <b>admin-state</b> <i>keyword</i> |

|            |   |
|------------|---|
| Tree       | <a href="#">admin-state</a>                             |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **destination** *reference*

|            |   |
|------------|---|
| Synopsis   | Multicast reporter destination  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <a href="#">multicast-reporter destination reference</a> |
| Tree       | <a href="#">destination</a>   |
| Reference  | <b>configure</b> <a href="#">multicast-management multicast-reporting-destination</a> <i>string</i>                                 |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **optional-fields**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>optional-fields</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <a href="#">multicast-reporter optional-fields</a> |
| Tree       | <a href="#">optional-fields</a>   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **host-mac** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include host mac address  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <a href="#">multicast-reporter optional-fields host-mac</a> <i>boolean</i> |
| Tree       | <a href="#">host-mac</a>  |
| Default    | false   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**pppoe-session-id** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include PPPoE session ID in multicast reporting message   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">igmp-policy</a> <i>string</i> <a href="#">multicast-reporter</a> <a href="#">optional-fields</a> <a href="#">pppoe-session-id</a> <i>boolean</i> |
| Tree       | <a href="#">pppoe-session-id</a>  |
| Default    | false   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**sap-id** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include sap ID  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">igmp-policy</a> <i>string</i> <a href="#">multicast-reporter</a> <a href="#">optional-fields</a> <a href="#">sap-id</a> <i>boolean</i> |
| Tree       | <a href="#">sap-id</a>  |
| Default    | false   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**svc-id** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include service ID  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">igmp-policy</a> <i>string</i> <a href="#">multicast-reporter</a> <a href="#">optional-fields</a> <a href="#">svc-id</a> <i>boolean</i> |
| Tree       | <a href="#">svc-id</a>  |
| Default    | false   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**query-interval** *number*

|            |   |
|------------|---|
| Synopsis   | Time between two consecutive host-query messages  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">igmp-policy</a> <i>string</i> <a href="#">query-interval</a> <i>number</i> |
| Tree       | <a href="#">query-interval</a>  |
| Range      | 2 to 1024   |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-last-member-interval** *number*

Synopsis Time between group-specific query messages  
Context **configure** [subscriber-mgmt igmp-policy](#) *string* [query-last-member-interval](#) *number*  
Tree [query-last-member-interval](#)  
Range 1 to 1023  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-response-interval** *number*

Synopsis Time to wait for a response to the host-query messages  
Context **configure** [subscriber-mgmt igmp-policy](#) *string* [query-response-interval](#) *number*  
Tree [query-response-interval](#)  
Range 1 to 1023  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **redirection-policy** *reference*

Synopsis Multicast redirection action applied to the subscriber  
Context **configure** [subscriber-mgmt igmp-policy](#) *string* [redirection-policy](#) *reference*  
Tree [redirection-policy](#)  
Reference **configure** [policy-options](#) [policy-statement](#) *string*  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **replication** *keyword*

Synopsis Multicast replication mode for subscriber multicast  
Context **configure** [subscriber-mgmt igmp-policy](#) *string* [replication](#) *keyword*  
Tree [replication](#)  
Options per-sap, per-host, per-spi

|            |   |
|------------|---|
| Default    | per-sap   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **router-alert-check** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable router alert checking for IGMP or MLD messages  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <a href="#">router-alert-check</a> <i>boolean</i> |
| Tree       | <a href="#">router-alert-check</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **static**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>static</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <a href="#">static</a> |
| Tree       | <a href="#">static</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **group** [[group-address](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>group</b> list instance  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <a href="#">static group</a> <i>string</i> |
| Tree       | <a href="#">group</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **[group-address]** *string*

|          |   |
|----------|---|
| Synopsis | Group address of static IGMP multicast channel  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <a href="#">static group</a> <i>string</i> |
| Tree     | <a href="#">group</a>   |

|             |   |
|-------------|---|
| Description | This command configures an address that receives data on an interface. The IP address must be unique for each static group. |
| Notes       | This element is part of a list key.   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **source** [[source-address](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Add a list entry for <b>source</b>   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <a href="#">static group</a> <i>string</i> <a href="#">source</a> <i>string</i> |
| Tree       | <a href="#">source</a>   |
| Notes      | The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **[source-address]** *string*

|            |  |
|------------|--|
| Synopsis   | Source IP address of multicast channel sending data  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <a href="#">static group</a> <i>string</i> <a href="#">source</a> <i>string</i> |
| Tree       | <a href="#">source</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R2  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **starg**

|            |   |
|------------|---|
| Synopsis   | any source address (*,G)  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <a href="#">static group</a> <i>string</i> <a href="#">starg</a> |
| Tree       | <a href="#">starg</a>   |
| Notes      | The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .  |
| Introduced | 16.0.R2   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**use-multicast-destination-mac** *boolean*

|            |   |
|------------|---|
| Synopsis   | Use multicast destination mac address for outgoing traffic.   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <a href="#">use-multicast-destination-mac</a> <i>boolean</i> |
| Tree       | <a href="#">use-multicast-destination-mac</a>   |
| Default    | false   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**version** *keyword*

|            |   |
|------------|---|
| Synopsis   | IGMP protocol version   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <a href="#">version</a> <i>keyword</i> |
| Tree       | <a href="#">version</a>   |
| Options    | 1, 2, 3   |
| Default    | 3   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**ipoe-session-policy** [[name](#)] *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>ipoe-session-policy</b> list instance                                 |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt ipoe-session-policy</a> <i>string</i> |
| Tree           | <a href="#">ipoe-session-policy</a>  |
| Max. Instances | 256  |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                            |

**[name]** *string*

|               |  |
|---------------|--|
| Synopsis      | IPoE session policy name   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt ipoe-session-policy</a> <i>string</i> |
| Tree          | <a href="#">ipoe-session-policy</a>  |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |



Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **circuit-id-from-auth** *boolean*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Use circuit ID from authentication server to identify session  
 Context **configure** [subscriber-mgmt ipoe-session-policy](#) *string* [circuit-id-from-auth](#) *boolean*  
 Tree [circuit-id-from-auth](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
 Context **configure** [subscriber-mgmt ipoe-session-policy](#) *string* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **session-key**

Synopsis Enter the **session-key** context  
 Context **configure** [subscriber-mgmt ipoe-session-policy](#) *string* [session-key](#)  
 Tree [session-key](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**cid** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Use the Circuit ID as part of the index   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt ipoe-session-policy</a> <i>string</i> <a href="#">session-key cid</a> <i>boolean</i> |
| Tree       | <a href="#">cid</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**mac** *boolean*

|            |   |
|------------|---|
| Synopsis   | Use the MAC address as part of the index  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt ipoe-session-policy</a> <i>string</i> <a href="#">session-key mac</a> <i>boolean</i> |
| Tree       | <a href="#">mac</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**rid** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Use the remote ID as part of the index  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt ipoe-session-policy</a> <i>string</i> <a href="#">session-key rid</a> <i>boolean</i> |
| Tree       | <a href="#">rid</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**sap** *boolean*

|            |   |
|------------|---|
| Synopsis   | Use the SAP ID as part of the index   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt ipoe-session-policy</a> <i>string</i> <a href="#">session-key sap</a> <i>boolean</i> |
| Tree       | <a href="#">sap</a>   |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **session-timeout** (*number* | *keyword*)

Synopsis Timeout for IPoE sessions

Context **configure** [subscriber-mgmt ipoe-session-policy](#) *string* **session-timeout** (*number* | *keyword*)

Tree [session-timeout](#)

Range 1 to 31104000

Options unlimited

Default unlimited

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **isa-filter** [[name](#)] *string*

Synopsis Enter the **isa-filter** list instance

Context **configure** [subscriber-mgmt isa-filter](#) *string*

Tree [isa-filter](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### [[name](#)] *string*

Synopsis ISA filter name

Context **configure** [subscriber-mgmt isa-filter](#) *string*

Tree [isa-filter](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description

|               |  |
|---------------|--|
| Context       | <b>configure subscriber-mgmt isa-filter</b> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <b>description</b>   |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                    |

## ipv4

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ipv4</b> context   |
| Context    | <b>configure subscriber-mgmt isa-filter</b> <i>string</i> <b>ipv4</b> |
| Tree       | <b>ipv4</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR               |

## default-action *keyword*

|            |   |
|------------|---|
| Synopsis   | Action for non-matching entry   |
| Context    | <b>configure subscriber-mgmt isa-filter</b> <i>string</i> <b>ipv4 default-action</b> <i>keyword</i> |
| Tree       | <b>default-action</b>   |
| Options    | drop, forward   |
| Default    | drop  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## entry [*id*] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>entry</b> list instance  |
| Context    | <b>configure subscriber-mgmt isa-filter</b> <i>string</i> <b>ipv4 entry</b> <i>number</i> |
| Tree       | <b>entry</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                   |

## [*id*] *number*

|          |                     |
|----------|---------------------|
| Synopsis | ISA filter entry ID |
|----------|---------------------|

---

|            |   |
|------------|---|
| Context    | <b>configure subscriber-mgmt isa-filter</b> <i>string ipv4 entry number</i> |
| Tree       | <a href="#">entry</a>   |
| Range      | 1 to 1024   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                     |

## action

|            |  |
|------------|--|
| Synopsis   | Enable the <b>action</b> context   |
| Context    | <b>configure subscriber-mgmt isa-filter</b> <i>string ipv4 entry number action</i> |
| Tree       | <a href="#">action</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                            |

## drop

|            |   |
|------------|---|
| Synopsis   | A packet matching the entry will be dropped   |
| Context    | <b>configure subscriber-mgmt isa-filter</b> <i>string ipv4 entry number action drop</i>                         |
| Tree       | <a href="#">drop</a>  |
| Notes      | The following elements are part of a mandatory choice: <b>drop</b> , <b>forward</b> , or <b>http-redirect</b> . |
| Introduced | 16.0.R5   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## forward

|            |   |
|------------|---|
| Synopsis   | A packet matching the entry will be forwarded   |
| Context    | <b>configure subscriber-mgmt isa-filter</b> <i>string ipv4 entry number action forward</i>                      |
| Tree       | <a href="#">forward</a>   |
| Notes      | The following elements are part of a mandatory choice: <b>drop</b> , <b>forward</b> , or <b>http-redirect</b> . |
| Introduced | 16.0.R5   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## http-redirect

|            |   |
|------------|---|
| Synopsis   | Enable the <b>http-redirect</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt isa-filter string ipv4 entry number action http-redirect</a>       |
| Tree       | <a href="#">http-redirect</a>   |
| Notes      | The following elements are part of a mandatory choice: <b>drop</b> , <b>forward</b> , or <b>http-redirect</b> . |
| Introduced | 20.5.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## url string



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | HTTP URL to which the matching traffic is redirected   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt isa-filter string ipv4 entry number action http-redirect url string</a>   |
| Tree          | <a href="#">url</a>  |
| Description   | This command specifies the URL to which HTTP flows matching the entry are redirected. The URL can be overridden by AAA.<br><br>Only macros \$URL, \$MAC, \$IP are supported. For unsupported macros, the string is not modified. |
| String Length | 1 to 255   |
| Notes         | This element is mandatory.   |
| Introduced    | 20.5.R1  |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## description string

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt isa-filter string ipv4 entry number description string</a> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## match

|            |  |
|------------|--|
| Synopsis   | Enter the <b>match</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt isa-filter string ipv4 entry number match</a> |
| Tree       | <a href="#">match</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                    |

## dst-ip *string*

|            |  |
|------------|--|
| Synopsis   | Destination IPv4 prefix  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt isa-filter string ipv4 entry number match dst-ip string</a> |
| Tree       | <a href="#">dst-ip</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## dst-port

|            |   |
|------------|---|
| Synopsis   | Enter the <b>dst-port</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt isa-filter string ipv4 entry number match dst-port</a> |
| Tree       | <a href="#">dst-port</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## equals *number*

|            |   |
|------------|---|
| Synopsis   | Exact port number   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt isa-filter string ipv4 entry number match dst-port equals number</a> |
| Tree       | <a href="#">equals</a>  |
| Range      | 0   1 to 65535  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**protocol** *keyword*

|            |  |
|------------|--|
| Synopsis   | Protocol   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt isa-filter</a> <i>string</i> <a href="#">ipv4 entry</a> <i>number</i> <a href="#">match protocol</a> <i>keyword</i> |
| Tree       | <a href="#">protocol</a>   |
| Options    | icmp, tcp, udp, gre  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**ipv6**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv6</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt isa-filter</a> <i>string</i> <a href="#">ipv6</a> |
| Tree       | <a href="#">ipv6</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**default-action** *keyword*

|            |  |
|------------|--|
| Synopsis   | Action for non-matching entry  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt isa-filter</a> <i>string</i> <a href="#">ipv6 default-action</a> <i>keyword</i> |
| Tree       | <a href="#">default-action</a>   |
| Options    | drop, forward  |
| Default    | drop   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**entry** [*id*] *number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>entry</b> list instance   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt isa-filter</a> <i>string</i> <a href="#">ipv6 entry</a> <i>number</i> |
| Tree       | <a href="#">entry</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |



**[id] number**

|            |  |
|------------|--|
| Synopsis   | ISA filter entry ID  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt isa-filter string ipv6 entry number</a> |
| Tree       | <a href="#">entry</a>  |
| Range      | 1 to 1024  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                              |

**action**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>action</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt isa-filter string ipv6 entry number action</a> |
| Tree       | <a href="#">action</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                     |

**drop**

|            |   |
|------------|---|
| Synopsis   | A packet matching the entry will be dropped   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt isa-filter string ipv6 entry number action drop</a>                |
| Tree       | <a href="#">drop</a>  |
| Notes      | The following elements are part of a mandatory choice: <b>drop</b> , <b>forward</b> , or <b>http-redirect</b> . |
| Introduced | 16.0.R5   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**forward**

|            |   |
|------------|---|
| Synopsis   | A packet matching the entry will be forwarded   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt isa-filter string ipv6 entry number action forward</a>             |
| Tree       | <a href="#">forward</a>   |
| Notes      | The following elements are part of a mandatory choice: <b>drop</b> , <b>forward</b> , or <b>http-redirect</b> . |
| Introduced | 16.0.R5   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## http-redirect

|            |   |
|------------|---|
| Synopsis   | Enable the <b>http-redirect</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt isa-filter string ipv6 entry number action http-redirect</a>       |
| Tree       | <a href="#">http-redirect</a>   |
| Notes      | The following elements are part of a mandatory choice: <b>drop</b> , <b>forward</b> , or <b>http-redirect</b> . |
| Introduced | 20.5.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## url string

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | HTTP URL to which the matching traffic is redirected   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt isa-filter string ipv6 entry number action http-redirect url string</a>   |
| Tree          | <a href="#">url</a>  |
| Description   | This command specifies the URL to which HTTP flows matching the entry are redirected. The URL can be overridden by AAA.<br><br>Only macros \$URL, \$MAC, \$IP are supported. For unsupported macros, the string is not modified. |
| String Length | 1 to 255   |
| Notes         | This element is mandatory.   |
| Introduced    | 20.5.R1  |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## description string

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt isa-filter string ipv6 entry number description string</a> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## match

|            |  |
|------------|--|
| Synopsis   | Enter the <b>match</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt isa-filter string ipv6 entry number match</a> |
| Tree       | <a href="#">match</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                    |

## dst-ip string

|            |  |
|------------|--|
| Synopsis   | Destination IPv6 prefix  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt isa-filter string ipv6 entry number match dst-ip string</a> |
| Tree       | <a href="#">dst-ip</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## dst-port

|            |   |
|------------|---|
| Synopsis   | Enter the <b>dst-port</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt isa-filter string ipv6 entry number match dst-port</a> |
| Tree       | <a href="#">dst-port</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## equals number

|            |   |
|------------|---|
| Synopsis   | Exact port number   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt isa-filter string ipv6 entry number match dst-port equals number</a> |
| Tree       | <a href="#">equals</a>  |
| Range      | 0   1 to 65535  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**protocol** *keyword*

|            |   |
|------------|---|
| Synopsis   | Protocol  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt isa-filter string ipv6 entry number match protocol keyword</a> |
| Tree       | <a href="#">protocol</a>  |
| Options    | icmp, tcp, udp, gre   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Limit what the ISA filter can be used for                                       |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt isa-filter string type keyword</a> |
| Tree       | <a href="#">type</a>  |
| Options    | dsm   |
| Default    | dsm   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                         |

**isa-policer** [*name*] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>isa-policer</b> list instance                          |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt isa-policer string</a> |
| Tree           | <a href="#">isa-policer</a>   |
| Max. Instances | 128   |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR             |

**[name]** *string*

|          |   |
|----------|---|
| Synopsis | ISA policer name  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt isa-policer string</a> |

---

|               |   |
|---------------|---|
| Tree          | <a href="#">isa-policer</a>                             |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.                     |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **action** *keyword*

|            |   |
|------------|---|
| Synopsis   | Action for in-profile and out-of-profile packets  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-policer</a> <i>string</i> <b>action</b> <i>keyword</i> |
| Tree       | <a href="#">action</a>  |
| Options    | permit-deny, priority-mark  |
| Default    | permit-deny   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **adaptation-rule**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>adaptation-rule</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-policer</a> <i>string</i> <b>adaptation-rule</b> |
| Tree       | <a href="#">adaptation-rule</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **cir** *keyword*

|            |  |
|------------|--|
| Synopsis   | Committed information rate   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-policer</a> <i>string</i> <a href="#">adaptation-rule</a> <b>cir</b> <i>keyword</i> |
| Tree       | <a href="#">cir</a>  |
| Options    | max, min, closest  |
| Default    | closest  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**pir keyword**

|            |   |
|------------|---|
| Synopsis   | Peak Information Rate   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt isa-policer</a> <i>string</i> <a href="#">adaptation-rule</a> <a href="#">pir</a> <i>keyword</i> |
| Tree       | <a href="#">pir</a>   |
| Options    | max, min, closest   |
| Default    | closest   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**cbs number**

|            |  |
|------------|--|
| Synopsis   | Committed burst size   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt isa-policer</a> <i>string</i> <a href="#">cbs</a> <i>number</i> |
| Tree       | <a href="#">cbs</a>  |
| Range      | 0 to 131071  |
| Units      | kilobytes  |
| Default    | 0  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**description string**

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt isa-policer</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**mbs number**

|          |  |
|----------|--|
| Synopsis | Maximum Burst Size   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt isa-policer</a> <i>string</i> <a href="#">mbs</a> <i>number</i> |
| Tree     | <a href="#">mbs</a>  |
| Range    | 0 to 131071  |

|            |   |
|------------|---|
| Units      | kilobytes   |
| Default    | 0   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## rate

|            |  |
|------------|--|
| Synopsis   | Enter the <b>rate</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt isa-policer string rate</a> |
| Tree       | <a href="#">rate</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                  |

## cir (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Committed information rate  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt isa-policer string rate cir (<i>number</i>   <i>keyword</i>)</a> |
| Tree       | <a href="#">cir</a>   |
| Range      | 0 to 100000000  |
| Units      | kilobps   |
| Options    | max   |
| Default    | 0   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## pir (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Peak Information Rate   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt isa-policer string rate pir (<i>number</i>   <i>keyword</i>)</a> |
| Tree       | <a href="#">pir</a>   |
| Range      | 1 to 100000000  |
| Units      | kilobps   |
| Options    | max   |
| Default    | max   |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **type** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Policing technique  
 Context **configure** [subscriber-mgmt](#) [isa-policer](#) *string* **type** *keyword*  
 Tree [type](#)  
 Options single-bucket-bandwidth, dual-bucket-bandwidth  
 Default single-bucket-bandwidth  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **isa-service-chaining**

Synopsis Enter the **isa-service-chaining** context  
 Context **configure** [subscriber-mgmt](#) [isa-service-chaining](#)  
 Tree [isa-service-chaining](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **evpn** [[id](#)] *string*

Synopsis Enter the **evpn** list instance  
 Context **configure** [subscriber-mgmt](#) [isa-service-chaining](#) **evpn** *string*  
 Tree [evpn](#)  
 Max. Instances 1024  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**[id]** *string*

|               |  |
|---------------|--|
| Synopsis      | EVPN service ID  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <i>string</i> |
| Tree          | <a href="#">evpn</a>   |
| String Length | 1 to 64  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R4  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of EVPN   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**bgp**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>bgp</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <i>string</i> <b>bgp</b> |
| Tree       | <a href="#">bgp</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**route-distinguisher**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>route-distinguisher</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <i>string</i> <b>bgp</b> <b>route-distinguisher</b> |
| Tree       | <a href="#">route-distinguisher</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**rd** (*keyword* | *vpn-route-distinguisher*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | RD component for NLRI  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <i>string</i> <a href="#">bgp</a> <a href="#">route-distinguisher</a> <b>rd</b> ( <i>keyword</i>   <i>vpn-route-distinguisher</i> ) |
| Tree       | <a href="#">rd</a>   |
| Options    | auto-rd  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**route-target**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>route-target</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <i>string</i> <a href="#">bgp</a> <a href="#">route-target</a> |
| Tree       | <a href="#">route-target</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**export** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Extended community name for default export policy  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <i>string</i> <a href="#">bgp</a> <a href="#">route-target</a> <a href="#">export</a> <i>string</i> |
| Tree          | <a href="#">export</a>   |
| String Length | 10 to 32   |
| Notes         | This element is mandatory.   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## import *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Extended community name for default import policy  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <i>string</i> <a href="#">bgp</a> <a href="#">route-target</a> <a href="#">import</a> <i>string</i> |
| Tree          | <a href="#">import</a>   |
| String Length | 10 to 32   |
| Notes         | This element is mandatory.   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## description *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## export

|            |   |
|------------|---|
| Synopsis   | Enter the <b>export</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <i>string</i> <a href="#">export</a> |
| Tree       | <a href="#">export</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## advertise-pools

|          |   |
|----------|---|
| Synopsis | Enter the <b>advertise-pools</b> context  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <i>string</i> <a href="#">export</a> <a href="#">advertise-pools</a> |

|            |  |
|------------|--|
| Tree       | <a href="#">advertise-pools</a>              |
| Introduced | 16.0.R4                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of NAT pool route advertisement   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <i>string</i> <a href="#">export</a> <a href="#">advertise-pools</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **pool** [router-instance](#) *string* [name](#) *string*

|            |   |
|------------|---|
| Synopsis   | Add a list entry for <b>pool</b>  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <i>string</i> <a href="#">export</a> <a href="#">advertise-pools</a> <a href="#">pool</a> <a href="#">router-instance</a> <i>string</i> <a href="#">name</a> <i>string</i> |
| Tree       | <a href="#">pool</a>  |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **router-instance** *string*

|            |   |
|------------|---|
| Synopsis   | Router-instance of the NAT pool   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <i>string</i> <a href="#">export</a> <a href="#">advertise-pools</a> <a href="#">pool</a> <a href="#">router-instance</a> <i>string</i> <a href="#">name</a> <i>string</i> |
| Tree       | <a href="#">pool</a>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**name *string***

|               |   |
|---------------|---|
| Synopsis      | NAT pool name   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <i>string</i> <a href="#">export</a> <a href="#">advertise-pools</a> <a href="#">pool</a> <a href="#">router-instance</a> <i>string</i> <a href="#">name</a> <i>string</i> |
| Tree          | <a href="#">pool</a>  |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R4   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**gateway-address-range**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>gateway-address-range</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <i>string</i> <a href="#">export</a> <a href="#">gateway-address-range</a> |
| Tree       | <a href="#">gateway-address-range</a>   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**end *string***

|            |  |
|------------|--|
| Synopsis   | Upper bound of the gateway address range   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <i>string</i> <a href="#">export</a> <a href="#">gateway-address-range</a> <i>end</i> <i>string</i> |
| Tree       | <a href="#">end</a>  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**start *string***

|          |  |
|----------|--|
| Synopsis | Lower bound of the gateway address range   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <i>string</i> <a href="#">export</a> <a href="#">gateway-address-range</a> <i>start</i> <i>string</i> |
| Tree     | <a href="#">start</a>  |
| Notes    | This element is mandatory.   |

|            |  |
|------------|--|
| Introduced | 16.0.R4                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

## vxlan

|            |  |
|------------|--|
| Synopsis   | Enter the <b>vxlan</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt isa-service-chaining evpn string export vxlan</a> |
| Tree       | <a href="#">vxlan</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## vni number



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | VNI of the VXLAN created by the EVPN service  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt isa-service-chaining evpn string export vxlan vni number</a> |
| Tree       | <a href="#">vni</a>   |
| Range      | 1 to 16777215   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## import-mode keyword



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Import mode for the EVPN  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt isa-service-chaining evpn string import-mode keyword</a> |
| Tree       | <a href="#">import-mode</a>   |
| Options    | none, bridged, routed   |
| Default    | none  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**prefix-route-resolution** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | How prefix routes should be resolved   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <i>string</i> <b>prefix-route-resolution</b> <i>keyword</i> |
| Tree       | <a href="#">prefix-route-resolution</a>  |
| Options    | recursive, non-recursive   |
| Default    | recursive  |
| Introduced | 16.0.R6  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**mac-prefix** *string*

|               |  |
|---------------|--|
| Synopsis      | MAC prefix for all NAT groups for Service Chaining   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">mac-prefix</a> <i>string</i> |
| Tree          | <a href="#">mac-prefix</a>   |
| String Length | 8  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**vas-filter** [[name](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>vas-filter</b> list instance  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> |
| Tree       | <a href="#">vas-filter</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**[name]** *string*

|          |  |
|----------|--|
| Synopsis | VAS filter name  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> |

|               |  |
|---------------|--|
| Tree          | <a href="#">vas-filter</a>                   |
| String Length | 1 to 32                                      |
| Notes         | This element is part of a list key.          |
| Introduced    | 16.0.R4                                      |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **entry** [*id*] *number*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>entry</b> list instance   |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> |
| Tree           | <a href="#">entry</a>  |
| Max. Instances | 64   |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **[id]** *number*

|            |  |
|------------|--|
| Synopsis   | VAS filter entry ID  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> |
| Tree       | <a href="#">entry</a>  |
| Range      | 1 to 65535   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |



**action** [*direction*] *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enter the <b>action</b> list instance  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <i>keyword</i> |
| Tree       | <a href="#">action</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**[direction]** *keyword*

|            |  |
|------------|--|
| Synopsis   | Direction for the action in a VAS filter entry   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <i>keyword</i> |
| Tree       | <a href="#">action</a>   |
| Options    | upstream, downstream   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**fail-action** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Action for unresolved SF-IP or ESI  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <i>keyword</i> <a href="#">fail-action</a> <i>keyword</i> |
| Tree       | <a href="#">fail-action</a>   |
| Options    | drop, accept  |
| Default    | accept  |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## forward



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable the **forward** context

Context **configure** [subscriber-mgmt](#) [isa-service-chaining](#) [vas-filter](#) *string entry number action*  
keyword [forward](#)

Tree [forward](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## esi string



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis ESI for the action in the VAS filter entry

Context **configure** [subscriber-mgmt](#) [isa-service-chaining](#) [vas-filter](#) *string entry number action*  
keyword [forward](#) [esi](#) *string*

Tree [esi](#)

Default 00:00:00:00:00:00:00:00:00

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## sf-ip (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Forwarding SF IP address for the action

Context **configure** [subscriber-mgmt](#) [isa-service-chaining](#) [vas-filter](#) *string entry number action*  
keyword [forward](#) [sf-ip](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [sf-ip](#)

|            |  |
|------------|--|
| Notes      | This element is mandatory.                   |
| Introduced | 16.0.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **svc reference**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | EVPN service used for forwarding packets   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <i>entry</i> <i>number</i> <i>action</i><br><i>keyword</i> <a href="#">forward</a> <a href="#">svc</a> <i>reference</i> |
| Tree       | <a href="#">svc</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <i>string</i>   |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **insert-nsh**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enter the <b>insert-nsh</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <i>entry</i> <i>number</i> <i>action</i><br><i>keyword</i> <a href="#">insert-nsh</a> |
| Tree       | <a href="#">insert-nsh</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **meta-data**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enter the <b>meta-data</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a><br><i>keyword</i> <a href="#">insert-nsh</a> <a href="#">meta-data</a> |
| Tree       | <a href="#">meta-data</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## insert-subscriber-id



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Insert the subscriber-id in the NSH   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a><br><i>keyword</i> <a href="#">insert-nsh</a> <a href="#">meta-data</a> <a href="#">insert-subscriber-id</a> |
| Tree       | <a href="#">insert-subscriber-id</a>  |
| Notes      | The following elements are part of a choice: <b>insert-subscriber-id</b> or <b>opaque-data</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## opaque-data *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Opaque meta-data for the NSH   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a><br><i>keyword</i> <a href="#">insert-nsh</a> <a href="#">meta-data</a> <a href="#">opaque-data</a> <i>string</i> |
| Tree          | <a href="#">opaque-data</a>  |
| String Length | 10 18 26 34  |
| Notes         | The following elements are part of a choice: <b>insert-subscriber-id</b> or <b>opaque-data</b> .   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## svc-path

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enable the <b>svc-path</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a><br><i>keyword</i> <a href="#">insert-nsh</a> <a href="#">svc-path</a> |
| Tree       | <a href="#">svc-path</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## path-id *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Path ID in the base part of NSH   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a><br><i>keyword</i> <a href="#">insert-nsh</a> <a href="#">svc-path</a> <a href="#">path-id</a> <i>number</i> |
| Tree       | <a href="#">path-id</a>   |
| Range      | 1 to 16777215   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## svc-index *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Service index inserted in the base part of NSH  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a><br><i>keyword</i> <a href="#">insert-nsh</a> <a href="#">svc-path</a> <a href="#">svc-index</a> <i>number</i> |
| Tree     | <a href="#">svc-index</a>   |
| Range    | 1 to 255  |

|            |  |
|------------|--|
| Notes      | This element is mandatory.                   |
| Introduced | 16.0.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the VAS filter  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <i>entry</i> <i>number</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <i>entry</i> <i>number</i> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **match**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enter the <b>match</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <i>entry</i> <i>number</i> <b>match</b> |
| Tree       | <a href="#">match</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**foreign-ip** (*ipv4-unicast-prefix* | *ipv4-unicast-address*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Foreign IP address or prefix for match criterion   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">foreign-ip</a> ( <i>ipv4-unicast-prefix</i>   <i>ipv4-unicast-address</i> ) |
| Tree       | <a href="#">foreign-ip</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**foreign-port** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Foreign TCP or UDP port as the match criterion  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">foreign-port</a> <i>number</i> |
| Tree       | <a href="#">foreign-port</a>  |
| Range      | 1 to 65535  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**protocol** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | IP protocol to match the VAS filter  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">protocol</a> <i>keyword</i> |
| Tree     | <a href="#">protocol</a>   |
| Options  | tcp-udp, none, icmp, tcp, udp  |

|            |  |
|------------|--|
| Default    | none   |
| Introduced | 16.0.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **local-user-db** *[name]* *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>local-user-db</b> list instance   |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> |
| Tree           | <a href="#">local-user-db</a>  |
| Max. Instances | 127  |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                      |

### **[name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Local user database name   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> |
| Tree          | <a href="#">local-user-db</a>  |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                      |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the local user database   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |



**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**ipoe**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ipoe</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i> <a href="#">ipoe</a> |
| Tree       | <a href="#">ipoe</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**host** [[host-name](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>host</b> list instance  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> |
| Tree       | <a href="#">host</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**[host-name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Host name  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> |
| Tree          | <a href="#">host</a>   |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the host  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string ipoe host string admin-state keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**authentication**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>authentication</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string ipoe host string authentication</i> |
| Tree       | <a href="#">authentication</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**auth-domain-name** *string*

|               |  |
|---------------|--|
| Synopsis      | Domain name appended to the username for the host  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string ipoe host string authentication auth-domain-name string</i> |
| Tree          | <a href="#">auth-domain-name</a>   |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**gx-policy** *string*

|               |   |
|---------------|---|
| Synopsis      | Diameter application policy   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string ipoe host string authentication gx-policy string</i> |
| Tree          | <a href="#">gx-policy</a>   |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **nasreq-auth-policy** *string*

Synopsis Diameter NASREQ application policy for authentication

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [authentication](#) [nasreq-auth-policy](#) *string*

Tree [nasreq-auth-policy](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-auth-policy** *string*

Synopsis Host authentication policy

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [authentication](#) [radius-auth-policy](#) *string*

Tree [radius-auth-policy](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **gtp-interface**

Synopsis Enable the **gtp-interface** context

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [gtp-interface](#)

Tree [gtp-interface](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **name** *string*

Synopsis IP interface name

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [gtp-interface](#) [name](#) *string*

Tree [name](#)

|               |   |
|---------------|---|
| String Length | 1 to 32   |
| Notes         | This element is mandatory.                              |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **service-id** *number*

|            |   |
|------------|---|
| Synopsis   | Service ID  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">gtp-interface</a> <a href="#">service-id</a> <i>number</i>   |
| Tree       | <a href="#">service-id</a>  |
| Range      | 1 to 2147483647   2147483648   2147483649   2147483650   2147483651 to 2147483690   2147483691 to 2148007980   2148007981 to 2148012076   2148012077 to 2148016172   2148016173 to 2148278316   2148278317   2148278318 to 2148278381   2148278382   2148278383 to 2148278386 |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **host-identification**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>host-identification</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> |
| Tree       | <a href="#">host-identification</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **circuit-id**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>circuit-id</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">circuit-id</a> |
| Tree       | <a href="#">circuit-id</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## ascii-string *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Circuit ID as ASCII string  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt local-user-db string ipoe host string host-identification circuit-id ascii-string string</a> |
| Tree          | <a href="#">ascii-string</a>  |
| String Length | 1 to 127  |
| Notes         | The following elements are part of a choice: <b>ascii-string</b> or <b>hex-string</b> .   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## hex-string *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Circuit ID as hexadecimal string  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt local-user-db string ipoe host string host-identification circuit-id hex-string string</a> |
| Tree          | <a href="#">hex-string</a>  |
| String Length | 1 to 256  |
| Notes         | The following elements are part of a choice: <b>ascii-string</b> or <b>hex-string</b> .   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## derived-id *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | Derived ID string  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt local-user-db string ipoe host string host-identification derived-id string</a> |

|               |   |
|---------------|---|
| Tree          | <a href="#">derived-id</a>                              |
| String Length | 1 to 255  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## encap-tag-range

|            |  |
|------------|--|
| Synopsis   | Enable the <b>encap-tag-range</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">encap-tag-range</a> |
| Tree       | <a href="#">encap-tag-range</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## from *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Start tag  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">encap-tag-range</a> <i>from</i> <i>string</i> |
| Tree          | <a href="#">from</a>   |
| String Length | 1 to 11  |
| Notes         | This element is mandatory.   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## to *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | End tag  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">encap-tag-range</a> <i>to</i> <i>string</i> |

|               |   |
|---------------|---|
| Tree          | <a href="#">to</a>                                      |
| String Length | 1 to 11   |
| Notes         | This element is mandatory.                              |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## encap-tag-separate-range

|            |   |
|------------|---|
| Synopsis   | Enter the <b>encap-tag-separate-range</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">encap-tag-separate-range</a> |
| Tree       | <a href="#">encap-tag-separate-range</a>  |
| Introduced | 20.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## inner

|            |   |
|------------|---|
| Synopsis   | Enter the <b>inner</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">encap-tag-separate-range</a> <a href="#">inner</a> |
| Tree       | <a href="#">inner</a>   |
| Introduced | 20.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## end *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Upper bound of the inner encapsulation tag range  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">encap-tag-separate-range</a> <a href="#">inner</a> <a href="#">end</a> <i>number</i> |
| Tree        | <a href="#">end</a>   |
| Description | This command configures an inner end tag for the range of encapsulation tags used for host identification.  |
| Range       | 0 to 4094   |

|            |   |
|------------|---|
| Introduced | 20.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

**start number****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Lower bound of the inner encapsulation tag range  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string ipoe host</a> <a href="#">string host-identification</a> <a href="#">encap-tag-separate-range</a> <a href="#">inner start</a> <i>number</i> |
| Tree        | <a href="#">start</a>   |
| Description | This command configures an inner start tag for the range of encapsulation tags used for host identification.  |
| Range       | 0 to 4094   |
| Introduced  | 20.5.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**outer**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>outer</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string ipoe host</a> <a href="#">string host-identification</a> <a href="#">encap-tag-separate-range</a> <a href="#">outer</a> |
| Tree       | <a href="#">outer</a>   |
| Introduced | 20.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**end number****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Upper bound of the outer encapsulation tag range  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string ipoe host</a> <a href="#">string host-identification</a> <a href="#">encap-tag-separate-range</a> <a href="#">outer end</a> <i>number</i> |
| Tree     | <a href="#">end</a>   |



|             |  |
|-------------|--|
| Description | This command configures an outer end tag for the range of encapsulation tags used for host identification. |
| Range       | 0 to 4094  |
| Introduced  | 20.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**start number****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Lower bound of the outer encapsulation tag range  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string ipoe host string host-identification encap-tag-separate-range outer start number</i> |
| Tree        | <a href="#">start</a>   |
| Description | This command configures an outer start tag for the range of encapsulation tags used for host identification.  |
| Range       | 0 to 4094   |
| Introduced  | 20.5.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**ip-prefix** (*ipv4-prefix-with-host-bits* | *ipv6-prefix-with-host-bits*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | IP interface name   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string ipoe host string host-identification ip-prefix (ipv4-prefix-with-host-bits   ipv6-prefix-with-host-bits)</i> |
| Tree       | <a href="#">ip-prefix</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**mac string****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | MAC address   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">host</a> <a href="#">string</a> <a href="#">host-identification</a> <a href="#">mac</a> <a href="#">string</a> |
| Tree       | <a href="#">mac</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**option60**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>option60</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">host</a> <a href="#">string</a> <a href="#">host-identification</a> <a href="#">option60</a> |
| Tree       | <a href="#">option60</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**ascii-string string****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Option 60 as ASCII string   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">host</a> <a href="#">string</a> <a href="#">host-identification</a> <a href="#">option60</a> <a href="#">ascii-string</a> <a href="#">string</a> |
| Tree          | <a href="#">ascii-string</a>  |
| String Length | 1 to 32   |
| Notes         | The following elements are part of a choice: <b>ascii-string</b> or <b>hex-string</b> .   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## hex-string *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Option as a hexadecimal string   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">host</a> <a href="#">string</a> <a href="#">host-identification</a> <a href="#">option60</a> <b>hex-string</b> <a href="#">string</a> |
| Tree          | <a href="#">hex-string</a>   |
| String Length | 1 to 64  |
| Notes         | The following elements are part of a choice: <b>ascii-string</b> or <b>hex-string</b> .  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## remote-id

|            |   |
|------------|---|
| Synopsis   | Enter the <b>remote-id</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">host</a> <a href="#">string</a> <a href="#">host-identification</a> <b>remote-id</b> |
| Tree       | <a href="#">remote-id</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## ascii-string *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Remote ID as ASCII string   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">host</a> <a href="#">string</a> <a href="#">host-identification</a> <a href="#">remote-id</a> <b>ascii-string</b> <a href="#">string</a> |
| Tree          | <a href="#">ascii-string</a>  |
| String Length | 1 to 255  |
| Notes         | The following elements are part of a choice: <b>ascii-string</b> or <b>hex-string</b> .   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## hex-string *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Remote ID as hexadecimal string   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">host</a> <a href="#">string</a> <a href="#">host-identification</a> <a href="#">remote-id</a> <b>hex-string</b> <a href="#">string</a> |
| Tree          | <a href="#">hex-string</a>  |
| String Length | 1 to 512  |
| Notes         | The following elements are part of a choice: <b>ascii-string</b> or <b>hex-string</b> .   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## sap-id *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | SAP ID   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">host</a> <a href="#">string</a> <a href="#">host-identification</a> <a href="#">sap-id</a> <a href="#">string</a> |
| Tree          | <a href="#">sap-id</a>   |
| String Length | 1 to 255   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## service-id *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | Service ID   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">host</a> <a href="#">string</a> <a href="#">host-identification</a> <a href="#">service-id</a> <a href="#">number</a> |

|            |   |
|------------|---|
| Tree       | <a href="#">service-id</a>  |
| Range      | 1 to 2147483647   2147483648   2147483649   2147483650   2147483651 to 2147483690   2147483691 to 2148007980   2148007981 to 2148012076   2148012077 to 2148016172   2148016173 to 2148278316   2148278317   2148278318 to 2148278381   2148278382   2148278383 to 2148278386 |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **string** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | VSO string   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <i>string</i> <i>string</i> |
| Tree          | <a href="#">string</a>   |
| String Length | 1 to 255   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **system-id** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | System ID  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">system-id</a> <i>string</i> |
| Tree          | <a href="#">system-id</a>  |
| String Length | 1 to 255   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## identification

|            |  |
|------------|--|
| Synopsis   | Enable the <b>identification</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <b>identification</b> |
| Tree       | <a href="#">identification</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## ancp-string *string*

|               |  |
|---------------|--|
| Synopsis      | ANCP string  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <b>identification</b> <a href="#">ancp-string</a> <i>string</i> |
| Tree          | <a href="#">ancp-string</a>  |
| String Length | 1 to 63  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## app-profile-string *string*

|               |   |
|---------------|---|
| Synopsis      | Application profile string  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <b>identification</b> <a href="#">app-profile-string</a> <i>string</i> |
| Tree          | <a href="#">app-profile-string</a>  |
| String Length | 1 to 16   |
| Introduced    | 21.10.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## category-map-name *string*

|               |  |
|---------------|--|
| Synopsis      | Category map name  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <b>identification</b> <a href="#">category-map-name</a> <i>string</i> |
| Tree          | <a href="#">category-map-name</a>  |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**int-dest-id** *string*

|               |   |
|---------------|---|
| Synopsis      | Intermediate destination ID   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">identification</a> <a href="#">int-dest-id</a> <i>string</i> |
| Tree          | <a href="#">int-dest-id</a>   |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**option-number** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Identification strings for the subscriber   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">identification</a> <a href="#">option-number</a> <i>number</i> |
| Tree       | <a href="#">option-number</a>   |
| Range      | 1 to 254  |
| Default    | 254   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**sla-profile-string** *string*

|               |  |
|---------------|--|
| Synopsis      | SLA profile string   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">identification</a> <a href="#">sla-profile-string</a> <i>string</i> |
| Tree          | <a href="#">sla-profile-string</a>   |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**spi-sharing-group-id** *number*

|            |  |
|------------|--|
| Synopsis   | SPI sharing group ID   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">identification</a> <a href="#">spi-sharing-group-id</a> <i>number</i> |
| Tree       | <a href="#">spi-sharing-group-id</a>   |
| Range      | 0 to 65535   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**sub-profile-string** *string*

|               |  |
|---------------|--|
| Synopsis      | Sub profile string   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">identification</a> <a href="#">sub-profile-string</a> <i>string</i> |
| Tree          | <a href="#">sub-profile-string</a>   |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**subscriber-id** *string*

|               |   |
|---------------|---|
| Synopsis      | Subscriber ID   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">identification</a> <a href="#">subscriber-id</a> <i>string</i> |
| Tree          | <a href="#">subscriber-id</a>   |
| String Length | 1 to 64   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**ipv4**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ipv4</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv4</a> |
| Tree       | <a href="#">ipv4</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |



## address

|            |   |
|------------|---|
| Synopsis   | Enter the <b>address</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv4</a> <a href="#">address</a> |
| Tree       | <a href="#">address</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## gi-address *keyword*

|            |   |
|------------|---|
| Synopsis   | Use gi-address to select a pool with the given scope  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv4</a> <a href="#">address</a> <a href="#">gi-address</a> <i>keyword</i> |
| Tree       | <a href="#">gi-address</a>  |
| Options    | subnet-scope, pool-scope  |
| Notes      | The following elements are part of a choice: <b>gi-address</b> , <b>ip-address</b> , <b>pool</b> , or <b>use-pool-from-client</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## ip-address *string*

|            |  |
|------------|--|
| Synopsis   | Fixed IPv4 address of the host   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv4</a> <a href="#">address</a> <a href="#">ip-address</a> <i>string</i> |
| Tree       | <a href="#">ip-address</a>   |
| Notes      | The following elements are part of a choice: <b>gi-address</b> , <b>ip-address</b> , <b>pool</b> , or <b>use-pool-from-client</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## pool

|          |  |
|----------|--|
| Synopsis | Enable the <b>pool</b> context   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv4</a> <a href="#">address</a> <a href="#">pool</a> |
| Tree     | <a href="#">pool</a>   |

---

|            |   |
|------------|---|
| Notes      | The following elements are part of a choice: <b>gi-address</b> , <b>ip-address</b> , <b>pool</b> , or <b>use-pool-from-client</b> . |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **delimiter string**

|               |   |
|---------------|---|
| Synopsis      | Delimiter separating primary and secondary pool names   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">host</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">address</a> <a href="#">pool</a> <a href="#">delimiter</a> <a href="#">string</a> |
| Tree          | <a href="#">delimiter</a>   |
| String Length | 1   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **primary string**

|               |   |
|---------------|---|
| Synopsis      | Primary pool name   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">host</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">address</a> <a href="#">pool</a> <a href="#">primary</a> <a href="#">string</a> |
| Tree          | <a href="#">primary</a>   |
| String Length | 1 to 32   |
| Notes         | This element is mandatory.  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **secondary string**

|               |   |
|---------------|---|
| Synopsis      | Secondary pool name   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">host</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">address</a> <a href="#">pool</a> <a href="#">secondary</a> <a href="#">string</a> |
| Tree          | <a href="#">secondary</a>   |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## use-pool-from-client

|            |   |
|------------|---|
| Synopsis   | Enable the <b>use-pool-from-client</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string ipoe host string ipv4 address use-pool-from-client</i> |
| Tree       | <a href="#">use-pool-from-client</a>  |
| Notes      | The following elements are part of a choice: <b>gi-address</b> , <b>ip-address</b> , <b>pool</b> , or <b>use-pool-from-client</b> .             |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## delimiter *string*

|               |  |
|---------------|--|
| Synopsis      | Delimiter character to combine primary and secondary pool names  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string ipoe host string ipv4 address use-pool-from-client delimiter string</i> |
| Tree          | <a href="#">delimiter</a>  |
| String Length | 1  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## gi-address *string*

|            |  |
|------------|--|
| Synopsis   | GI addresses based on the host entry in the LUDB   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string ipoe host string ipv4 gi-address string</i> |
| Tree       | <a href="#">gi-address</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## option [*number*] (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Enter the <b>option</b> list instance  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string ipoe host string ipv4 option (number   keyword)</i> |
| Tree       | <a href="#">option</a>   |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### [number] (*number* | *keyword*)

Synopsis DHCP option to send identification strings to client

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [ipv4](#) [option](#) (*number* | *keyword*)

Tree [option](#)

Range 1 to 254

Options subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ascii-string** *string*

Synopsis DHCP option specified as an ASCII string

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [ipv4](#) [option](#) (*number* | *keyword*) [ascii-string](#) *string*

Tree [ascii-string](#)

String Length 1 to 127

Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **duration** *number*

Synopsis DHCP option as time duration

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [ipv4](#) [option](#) (*number* | *keyword*) [duration](#) *number*

Tree [duration](#)

Range 10 to 315446399

Units seconds

Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## empty

|            |  |
|------------|--|
| Synopsis   | Empty DHCP option.   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">host</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">option</a> ( <a href="#">number</a>   <a href="#">keyword</a> ) <b>empty</b> |
| Tree       | <a href="#">empty</a>  |
| Notes      | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## hex-string *string*

|               |   |
|---------------|---|
| Synopsis      | DHCP option specified as hexadecimal string   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">host</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">option</a> ( <a href="#">number</a>   <a href="#">keyword</a> ) <b>hex-string</b> <i>string</i> |
| Tree          | <a href="#">hex-string</a>  |
| String Length | 1 to 256  |
| Notes         | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## ipv4-address *string*

|                |   |
|----------------|---|
| Synopsis       | DHCP option as a list of IPv4 addresses   |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">host</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">option</a> ( <a href="#">number</a>   <a href="#">keyword</a> ) <b>ipv4-address</b> <i>string</i> |
| Tree           | <a href="#">ipv4-address</a>  |
| Max. Instances | 4   |
| Notes          | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .<br>This element is ordered by the user.   |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **netbios-node-type** *keyword*

|            |   |
|------------|---|
| Synopsis   | DHCP option as NetBIOS node type  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv4</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> ) <b>netbios-node-type</b> <i>keyword</i> |
| Tree       | <a href="#">netbios-node-type</a>   |
| Options    | b-node, p-node, m-node, h-node  |
| Notes      | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **server** *string*

|            |   |
|------------|---|
| Synopsis   | IPv4 address of the DHCP server   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv4</a> <b>server</b> <i>string</i> |
| Tree       | <a href="#">server</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ipv6**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv6</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <b>ipv6</b> |
| Tree       | <a href="#">ipv6</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **address** *string*

|          |  |
|----------|--|
| Synopsis | Fixed IPv6 address of the host   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv6</a> <b>address</b> <i>string</i> |
| Tree     | <a href="#">address</a>  |

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **address-pool** *string*

Synopsis IPv6 address pool name  
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string ipoe host string ipv6 address-pool string*  
Tree [address-pool](#)  
String Length 1 to 32  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **delegated-prefix** *string*

Synopsis IPv6 delegated prefix of this host  
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string ipoe host string ipv6 delegated-prefix string*  
Tree [delegated-prefix](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **delegated-prefix-length** *number*

Synopsis Delegated prefix length  
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string ipoe host string ipv6 delegated-prefix-length number*  
Tree [delegated-prefix-length](#)  
Range 48 to 64  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **delegated-prefix-pool** *string*

Synopsis Delegated prefix pool  
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string ipoe host string ipv6 delegated-prefix-pool string*

|               |   |
|---------------|---|
| Tree          | <a href="#">delegated-prefix-pool</a>                   |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **link-address** *string*

|            |   |
|------------|---|
| Synopsis   | Link address used for prefix selection at DHCP server   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv6</a> <b>link-address</b> <i>string</i> |
| Tree       | <a href="#">link-address</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **option** [[number](#)] (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Enter the <b>option</b> list instance  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv6</a> <b>option</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">option</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **[number]** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | The number of the DHCPv6 option.   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv6</a> <b>option</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">option</a>   |
| Range      | 23   |
| Options    | dns-server   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |



### hex-string *string*

|               |  |
|---------------|--|
| Synopsis      | DHCP option specified as hexadecimal string  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv6</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">hex-string</a> <i>string</i> |
| Tree          | <a href="#">hex-string</a>   |
| String Length | 1 to 256   |
| Notes         | The following elements are part of a mandatory choice: <b>hex-string</b> or <b>ipv6-address</b> .  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### ipv6-address *string*

|                |  |
|----------------|--|
| Synopsis       | DHCP option specified as a list of IPv6 addresses  |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv6</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">ipv6-address</a> <i>string</i> |
| Tree           | <a href="#">ipv6-address</a>   |
| Max. Instances | 4  |
| Notes          | The following elements are part of a mandatory choice: <b>hex-string</b> or <b>ipv6-address</b> .<br>This element is ordered by the user.  |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### router-advertisement-policy *string*

|               |   |
|---------------|---|
| Synopsis      | IPv6 router advertisement policy  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisement-policy</a> <i>string</i> |
| Tree          | <a href="#">router-advertisement-policy</a>   |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### server *string*

|          |                                 |
|----------|---------------------------------|
| Synopsis | IPv6 address of the DHCP server |
|----------|---------------------------------|

|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv6</a> <a href="#">server</a> <i>string</i> |
| Tree       | <a href="#">server</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **slaac-prefix** *string*

|            |  |
|------------|--|
| Synopsis   | IPv6 SLAAC prefix of this host   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv6</a> <a href="#">slaac-prefix</a> <i>string</i> |
| Tree       | <a href="#">slaac-prefix</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **slaac-prefix-pool** *string*

|               |   |
|---------------|---|
| Synopsis      | IPv6 SLAAC prefix pool of this host   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv6</a> <a href="#">slaac-prefix-pool</a> <i>string</i> |
| Tree          | <a href="#">slaac-prefix-pool</a>   |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **timers**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>timers</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv6</a> <a href="#">timers</a> |
| Tree       | <a href="#">timers</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **preferred-lifetime** (*number* | *keyword*)

|          |  |
|----------|--|
| Synopsis | Time for a lease to remain preferred   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv6</a> <a href="#">timers</a> <a href="#">preferred-lifetime</a> ( <i>number</i>   <i>keyword</i> ) |

|            |   |
|------------|---|
| Tree       | <a href="#">preferred-lifetime</a>                      |
| Range      | 300 to 315446399  |
| Units      | seconds   |
| Options    | infinite  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

**rebind** *number*

|            |   |
|------------|---|
| Synopsis   | Rebind timer (T2)   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv6</a> <a href="#">timers</a> <a href="#">rebind</a> <i>number</i> |
| Tree       | <a href="#">rebind</a>  |
| Range      | 0 to 1209600  |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**renew** *number*

|            |  |
|------------|--|
| Synopsis   | Renew timer (T1)   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv6</a> <a href="#">timers</a> <a href="#">renew</a> <i>number</i> |
| Tree       | <a href="#">renew</a>  |
| Range      | 0 to 604800  |
| Units      | seconds  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**valid-lifetime** (*number* | *keyword*)

|          |  |
|----------|--|
| Synopsis | Time for a lease to remain valid   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv6</a> <a href="#">timers</a> <a href="#">valid-lifetime</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <a href="#">valid-lifetime</a>   |
| Range    | 300 to 315446399   |

|            |   |
|------------|---|
| Units      | seconds   |
| Options    | infinite  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### match-radius-proxy-cache

|            |  |
|------------|--|
| Synopsis   | Enter the <b>match-radius-proxy-cache</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <b>match-radius-proxy-cache</b> |
| Tree       | <a href="#">match-radius-proxy-cache</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### fail-action *keyword*

|            |  |
|------------|--|
| Synopsis   | Action when no match is found  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <b>match-radius-proxy-cache</b> <b>fail-action</b> <i>keyword</i> |
| Tree       | <a href="#">fail-action</a>  |
| Options    | continue, drop   |
| Default    | drop   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### mac-format *string*

|               |  |
|---------------|--|
| Synopsis      | MAC address format   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <b>match-radius-proxy-cache</b> <b>mac-format</b> <i>string</i> |
| Tree          | <a href="#">mac-format</a>   |
| String Length | 2 to 7   |
| Default       | aa:  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## match

|            |  |
|------------|--|
| Synopsis   | Enter the <b>match</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">match-radius-proxy-cache</a> <b>match</b> |
| Tree       | <a href="#">match</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## circuit-id *boolean*

|            |  |
|------------|--|
| Synopsis   | Match circuit ID in DHCP Option 82   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">match-radius-proxy-cache</a> <b>match</b> <a href="#">circuit-id</a> <i>boolean</i> |
| Tree       | <a href="#">circuit-id</a>   |
| Notes      | The following elements are part of a choice: <b>circuit-id</b> , ( <b>ipv4-option</b> and <b>ipv6-option</b> ), <b>mac</b> , or <b>remote-id</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## ipv4-option *number*

|            |  |
|------------|--|
| Synopsis   | DHCP option number   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">match-radius-proxy-cache</a> <b>match</b> <a href="#">ipv4-option</a> <i>number</i> |
| Tree       | <a href="#">ipv4-option</a>  |
| Range      | 1 to 254   |
| Notes      | The following elements are part of a choice: <b>circuit-id</b> , ( <b>ipv4-option</b> and <b>ipv6-option</b> ), <b>mac</b> , or <b>remote-id</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## ipv6-option *number*

|          |  |
|----------|--|
| Synopsis | DHCPv6 option number   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">match-radius-proxy-cache</a> <b>match</b> <a href="#">ipv6-option</a> <i>number</i> |

|            |  |
|------------|--|
| Tree       | <a href="#">ipv6-option</a>  |
| Range      | 1 to 65535   |
| Notes      | The following elements are part of a choice: <b>circuit-id</b> , ( <b>ipv4-option</b> and <b>ipv6-option</b> ), <b>mac</b> , or <b>remote-id</b> . |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **mac** *boolean*

|            |  |
|------------|--|
| Synopsis   | Match MAC address of DHCP client   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string ipoe host string match-radius-proxy-cache match mac</i> <i>boolean</i>    |
| Tree       | <a href="#">mac</a>  |
| Default    | true   |
| Notes      | The following elements are part of a choice: <b>circuit-id</b> , ( <b>ipv4-option</b> and <b>ipv6-option</b> ), <b>mac</b> , or <b>remote-id</b> . |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **remote-id** *boolean*

|            |   |
|------------|---|
| Synopsis   | Match remote ID in DHCP Option 82   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string ipoe host string match-radius-proxy-cache match remote-id</i> <i>boolean</i> |
| Tree       | <a href="#">remote-id</a>   |
| Notes      | The following elements are part of a choice: <b>circuit-id</b> , ( <b>ipv4-option</b> and <b>ipv6-option</b> ), <b>mac</b> , or <b>remote-id</b> .    |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **server**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>server</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string ipoe host string match-radius-proxy-cache server</i> |
| Tree       | <a href="#">server</a>  |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **name** *string*

Synopsis Local user database server name

Context **configure** **subscriber-mgmt** **local-user-db** *string* **ipoe** **host** *string* **match-radius-proxy-cache** **server** **name** *string*

Tree **name**

String Length 1 to 32

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **service** *number*

Synopsis Service ID

Context **configure** **subscriber-mgmt** **local-user-db** *string* **ipoe** **host** *string* **match-radius-proxy-cache** **server** **service** *number*

Tree **service**

Range 1 to 2147483647

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mld-import** [**policy-name**] *string*

Synopsis Add a list entry for **mld-import**

Context **configure** **subscriber-mgmt** **local-user-db** *string* **ipoe** **host** *string* **mld-import** *string*

Tree **mld-import**

Max. Instances 14

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[policy-name]** *string*

Synopsis MLD import policy used to control the multicast group

|               |   |
|---------------|---|
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">mld-import</a> <i>string</i> |
| Tree          | <a href="#">mld-import</a>  |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## msap-defaults

|            |  |
|------------|--|
| Synopsis   | Enter the <b>msap-defaults</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">msap-defaults</a> |
| Tree       | <a href="#">msap-defaults</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## group-interface

|            |  |
|------------|--|
| Synopsis   | Enable the <b>group-interface</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">msap-defaults</a> <a href="#">group-interface</a> |
| Tree       | <a href="#">group-interface</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## name *string*

|               |   |
|---------------|---|
| Synopsis      | IP interface name   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">msap-defaults</a> <a href="#">group-interface</a> <a href="#">name</a> <i>string</i> |
| Tree          | <a href="#">name</a>  |
| String Length | 1 to 32   |
| Notes         | This element is mandatory.  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |



### **prefix** *keyword*

|            |  |
|------------|--|
| Synopsis   | Prefix to the IP interface name  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">msap-defaults</a> <a href="#">group-interface</a> <a href="#">prefix</a> <i>keyword</i> |
| Tree       | <a href="#">prefix</a>   |
| Options    | port-id  |
| Notes      | The following elements are part of a choice: <b>prefix</b> or <b>suffix</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **suffix** *keyword*

|            |  |
|------------|--|
| Synopsis   | Suffix for the group interface   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">msap-defaults</a> <a href="#">group-interface</a> <a href="#">suffix</a> <i>keyword</i> |
| Tree       | <a href="#">suffix</a>   |
| Options    | port-id  |
| Notes      | The following elements are part of a choice: <b>prefix</b> or <b>suffix</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **policy** *string*

|               |   |
|---------------|---|
| Synopsis      | MSAP policy   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">msap-defaults</a> <a href="#">policy</a> <i>string</i> |
| Tree          | <a href="#">policy</a>  |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **service** *number*

|          |  |
|----------|--|
| Synopsis | Service ID   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">msap-defaults</a> <a href="#">service</a> <i>number</i> |

|            |   |
|------------|---|
| Tree       | <a href="#">service</a>   |
| Range      | 1 to 2147483647   2147483648   2147483649   2147483650   2147483651 to 2147483690   2147483691 to 2148007980   2148007981 to 2148012076   2148012077 to 2148016172   2148016173 to 2148278316   2148278317   2148278318 to 2148278381   2148278382   2148278383 to 2148278386 |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### radius-accounting-policy

|            |  |
|------------|--|
| Synopsis   | Enter the <b>radius-accounting-policy</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <b>radius-accounting-policy</b> |
| Tree       | <a href="#">radius-accounting-policy</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### duplicate *string*

|               |   |
|---------------|---|
| Synopsis      | RADIUS accounting policy for generating duplicate accounting information  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <b>radius-accounting-policy</b> <b>duplicate</b> <i>string</i> |
| Tree          | <a href="#">duplicate</a>   |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### name *string*

|               |  |
|---------------|--|
| Synopsis      | RADIUS accounting policy name  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <b>radius-accounting-policy</b> <b>name</b> <i>string</i> |
| Tree          | <a href="#">name</a>   |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**retail-service-id** *number*

|            |   |
|------------|---|
| Synopsis   | Configure the retail service-id   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <b>retail-service-id</b> <i>number</i>   |
| Tree       | <a href="#">retail-service-id</a>   |
| Range      | 1 to 2147483647   2147483648   2147483649   2147483650   2147483651 to 2147483690   2147483691 to 2148007980   2148007981 to 2148012076   2148012077 to 2148016172   2148016173 to 2148278316   2148278317   2148278318 to 2148278381   2148278382   2148278383 to 2148278386 |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**rip-policy** *string*

|               |  |
|---------------|--|
| Synopsis      | RIP policy   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <b>rip-policy</b> <i>string</i> |
| Tree          | <a href="#">rip-policy</a>   |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**to-client-options**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>to-client-options</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <b>to-client-options</b> |
| Tree       | <a href="#">to-client-options</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**ipv4-option** [[number](#)] (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv4-option</b> list instance   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <b>to-client-options</b> <a href="#">ipv4-option</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">ipv4-option</a>  |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### [number] (*number* | *keyword*)

Synopsis DHCP option to send identification strings to client

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [to-client-options](#) [ipv4-option](#) (*number* | *keyword*)

Tree [ipv4-option](#)

Range 1 to 254

Options subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ascii-string** *string*

Synopsis DHCP option specified as an ASCII string

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [to-client-options](#) [ipv4-option](#) (*number* | *keyword*) [ascii-string](#) *string*

Tree [ascii-string](#)

String Length 1 to 127

Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **duration** *number*

Synopsis DHCP option as time duration

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [to-client-options](#) [ipv4-option](#) (*number* | *keyword*) [duration](#) *number*

Tree [duration](#)

Range 10 to 315446399

Units seconds

Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## empty

|            |  |
|------------|--|
| Synopsis   | Empty DHCP option  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">host</a> <a href="#">string</a> <a href="#">to-client-options</a> <a href="#">ipv4-option</a> ( <a href="#">number</a>   <a href="#">keyword</a> ) <b>empty</b> |
| Tree       | <a href="#">empty</a>  |
| Notes      | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## hex-string *string*

|               |   |
|---------------|---|
| Synopsis      | DHCP option specified as hexadecimal string   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">host</a> <a href="#">string</a> <a href="#">to-client-options</a> <a href="#">ipv4-option</a> ( <a href="#">number</a>   <a href="#">keyword</a> ) <a href="#">hex-string</a> <a href="#">string</a> |
| Tree          | <a href="#">hex-string</a>  |
| String Length | 1 to 256  |
| Notes         | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## ipv4-address *string*

|                |   |
|----------------|---|
| Synopsis       | DHCP option as a list of IPv4 addresses   |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">host</a> <a href="#">string</a> <a href="#">to-client-options</a> <a href="#">ipv4-option</a> ( <a href="#">number</a>   <a href="#">keyword</a> ) <a href="#">ipv4-address</a> <a href="#">string</a> |
| Tree           | <a href="#">ipv4-address</a>  |
| Max. Instances | 4   |
| Notes          | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .<br>This element is ordered by the user.   |

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **netbios-node-type** *keyword*

Synopsis DHCP option as NetBIOS node type  
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [to-client-options](#) [ipv4-option](#) (*number* | *keyword*) **netbios-node-type** *keyword*  
 Tree [netbios-node-type](#)  
 Options b-node, p-node, m-node, h-node  
 Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv6-option** [[number](#)] (*number* | *keyword*)

Synopsis Enter the **ipv6-option** list instance  
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [to-client-options](#) [ipv6-option](#) (*number* | *keyword*)  
 Tree [ipv6-option](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[number]** (*number* | *keyword*)

Synopsis DHCP option to send as identification string  
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [to-client-options](#) [ipv6-option](#) (*number* | *keyword*)  
 Tree [ipv6-option](#)  
 Range 1 to 65535  
 Options dns-server, domain-name  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ascii-string** *string*

|               |  |
|---------------|--|
| Synopsis      | DHCP option specified as an ASCII string   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">to-client-options</a> <a href="#">ipv6-option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">ascii-string</a> <i>string</i> |
| Tree          | <a href="#">ascii-string</a>   |
| String Length | 1 to 127   |
| Notes         | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **domain-string** *string*

|               |   |
|---------------|---|
| Synopsis      | DHCP option specified as a domain name  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">to-client-options</a> <a href="#">ipv6-option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">domain-string</a> <i>string</i> |
| Tree          | <a href="#">domain-string</a>   |
| String Length | 1 to 127  |
| Notes         | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **empty**

|            |   |
|------------|---|
| Synopsis   | Empty DHCP option   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">to-client-options</a> <a href="#">ipv6-option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">empty</a> |
| Tree       | <a href="#">empty</a>   |
| Notes      | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**hex-string** *string*

|               |   |
|---------------|---|
| Synopsis      | DHCP option specified as hexadecimal string   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt local-user-db string ipoe host string to-client-options ipv6-option</a> ( <i>number</i>   <i>keyword</i> ) <b>hex-string</b> <i>string</i> |
| Tree          | <a href="#">hex-string</a>  |
| String Length | 1 to 256  |
| Notes         | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .                         |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**ipv6-address** *string*

|                |   |
|----------------|---|
| Synopsis       | DHCP option specified as a list of IPv6 addresses   |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt local-user-db string ipoe host string to-client-options ipv6-option</a> ( <i>number</i>   <i>keyword</i> ) <b>ipv6-address</b> <i>string</i>               |
| Tree           | <a href="#">ipv6-address</a>  |
| Max. Instances | 4   |
| Notes          | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .<br>This element is ordered by the user. |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**to-server-options**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>to-server-options</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt local-user-db string ipoe host string to-server-options</a> |
| Tree       | <a href="#">to-server-options</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**ipv6-option** [[number](#)] (*number* | *keyword*)

|          |  |
|----------|--|
| Synopsis | Enter the <b>ipv6-option</b> list instance |
|----------|--|



|            |   |
|------------|---|
| Context    | <b>configure subscriber-mgmt local-user-db string ipoe host string to-server-options ipv6-option</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">ipv6-option</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **[number]** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | DHCP option to send as identification string  |
| Context    | <b>configure subscriber-mgmt local-user-db string ipoe host string to-server-options ipv6-option</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">ipv6-option</a>   |
| Range      | 1 to 65535  |
| Options    | dns-server, domain-name   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ascii-string** *string*

|               |   |
|---------------|---|
| Synopsis      | DHCP option specified as an ASCII string  |
| Context       | <b>configure subscriber-mgmt local-user-db string ipoe host string to-server-options ipv6-option</b> ( <i>number</i>   <i>keyword</i> ) <b>ascii-string</b> <i>string</i> |
| Tree          | <a href="#">ascii-string</a>  |
| String Length | 1 to 127  |
| Notes         | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .           |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **domain-string** *string*

|          |  |
|----------|--|
| Synopsis | DHCP option specified as a domain name   |
| Context  | <b>configure subscriber-mgmt local-user-db string ipoe host string to-server-options ipv6-option</b> ( <i>number</i>   <i>keyword</i> ) <b>domain-string</b> <i>string</i> |
| Tree     | <a href="#">domain-string</a>  |

|               |   |
|---------------|---|
| String Length | 1 to 127  |
| Notes         | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> . |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## empty

|            |   |
|------------|---|
| Synopsis   | Empty DHCP option   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt local-user-db string ipoe host string to-server-options ipv6-option (number   keyword) empty</a>                   |
| Tree       | <a href="#">empty</a>   |
| Notes      | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> . |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## hex-string *string*

|               |   |
|---------------|---|
| Synopsis      | DHCP option specified as hexadecimal string   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt local-user-db string ipoe host string to-server-options ipv6-option (number   keyword) hex-string string</a>       |
| Tree          | <a href="#">hex-string</a>  |
| String Length | 1 to 256  |
| Notes         | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> . |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## ipv6-address *string*

|                |   |
|----------------|---|
| Synopsis       | DHCP option specified as a list of IPv6 addresses   |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt local-user-db string ipoe host string to-server-options ipv6-option (number   keyword) ipv6-address string</a> |
| Tree           | <a href="#">ipv6-address</a>  |
| Max. Instances | 4   |

|            |   |
|------------|---|
| Notes      | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .<br>This element is ordered by the user. |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## wpp

|            |   |
|------------|---|
| Synopsis   | Enter the <b>wpp</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">host</a> <a href="#">string</a> <b>wpp</b> |
| Tree       | <a href="#">wpp</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## initial

|            |  |
|------------|--|
| Synopsis   | Enter the <b>initial</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">host</a> <a href="#">string</a> <b>wpp</b> <b>initial</b> |
| Tree       | <a href="#">initial</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## app-profile *string*

|               |   |
|---------------|---|
| Synopsis      | Initial application profile name  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">host</a> <a href="#">string</a> <b>wpp</b> <b>initial</b> <b>app-profile</b> <i>string</i> |
| Tree          | <a href="#">app-profile</a>   |
| String Length | 1 to 32   |
| Introduced    | 21.10.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## sla-profile *string*

|          |                     |
|----------|---------------------|
| Synopsis | Initial SLA profile |
|----------|---------------------|

|               |  |
|---------------|--|
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">wpp</a> <a href="#">initial</a> <a href="#">sla-profile</a> <i>string</i> |
| Tree          | <a href="#">sla-profile</a>  |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **sub-profile** *string*

|               |  |
|---------------|--|
| Synopsis      | Initial subscriber profile   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">wpp</a> <a href="#">initial</a> <a href="#">sub-profile</a> <i>string</i> |
| Tree          | <a href="#">sub-profile</a>  |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **portal**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>portal</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">wpp</a> <a href="#">portal</a> |
| Tree       | <a href="#">portal</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **name** *string*

|               |  |
|---------------|--|
| Synopsis      | Web portal server name   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">wpp</a> <a href="#">portal</a> <a href="#">name</a> <i>string</i> |
| Tree          | <a href="#">name</a>   |
| String Length | 1 to 32  |
| Notes         | The following elements are part of a choice: <b>portal-group</b> or ( <b>name</b> and <b>router-instance</b> ).  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**portal-group** *string*

|               |  |
|---------------|--|
| Synopsis      | WPP portal group for this interface  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">wpp</a> <a href="#">portal</a> <a href="#">portal-group</a> <i>string</i> |
| Tree          | <a href="#">portal-group</a>   |
| String Length | 1 to 32  |
| Notes         | The following elements are part of a choice: <b>portal-group</b> or ( <b>name</b> and <b>router-instance</b> ).  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**router-instance** (*keyword* | *number*)

|            |  |
|------------|--|
| Synopsis   | Virtual router instance of the WPP portal for the host   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">wpp</a> <a href="#">portal</a> <a href="#">router-instance</a> ( <i>keyword</i>   <i>number</i> ) |
| Tree       | <a href="#">router-instance</a>  |
| Range      | 1 to 2147483647  |
| Options    | base   |
| Default    | base   |
| Notes      | The following elements are part of a choice: <b>portal-group</b> or ( <b>name</b> and <b>router-instance</b> ).  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**restore-to-initial-on-disconnect** *keyword*

|            |  |
|------------|--|
| Synopsis   | Restore initial profiles after a host has disconnected   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">wpp</a> <a href="#">restore-to-initial-on-disconnect</a> <i>keyword</i> |
| Tree       | <a href="#">restore-to-initial-on-disconnect</a>   |
| Options    | restore, no-restore  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**mask type keyword**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mask</b> list instance  |
| Context    | <b>configure subscriber-mgmt local-user-db string ipoe mask type keyword</b> |
| Tree       | <b>mask</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                      |

**type keyword**

|            |  |
|------------|--|
| Synopsis   | Matching type to identify a host   |
| Context    | <b>configure subscriber-mgmt local-user-db string ipoe mask type keyword</b> |
| Tree       | <b>mask</b>  |
| Options    | circuit-id, remote-id, sap-id, string, system-id, option60                   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                      |

**prefix**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>prefix</b> context  |
| Context    | <b>configure subscriber-mgmt local-user-db string ipoe mask type keyword prefix</b> |
| Tree       | <b>prefix</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                             |

**length number**

|            |   |
|------------|---|
| Synopsis   | PPP mask prefix length  |
| Context    | <b>configure subscriber-mgmt local-user-db string ipoe mask type keyword prefix length number</b> |
| Tree       | <b>length</b>   |
| Range      | 1 to 127  |
| Notes      | The following elements are part of a mandatory choice: <b>length</b> or <b>string</b> .           |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**string** *string*

|               |   |
|---------------|---|
| Synopsis      | Prefix string   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">mask</a> <a href="#">type</a> <a href="#">keyword</a> <a href="#">prefix</a> <a href="#">string</a> <a href="#">string</a> |
| Tree          | <a href="#">string</a>  |
| String Length | 1 to 127  |
| Notes         | The following elements are part of a mandatory choice: <b>length</b> or <b>string</b> .   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**suffix**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>suffix</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">mask</a> <a href="#">type</a> <a href="#">keyword</a> <a href="#">suffix</a> |
| Tree       | <a href="#">suffix</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**length** *number*

|            |   |
|------------|---|
| Synopsis   | PPP mask suffix length  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">mask</a> <a href="#">type</a> <a href="#">keyword</a> <a href="#">suffix</a> <a href="#">length</a> <a href="#">number</a> |
| Tree       | <a href="#">length</a>  |
| Range      | 1 to 127  |
| Notes      | The following elements are part of a mandatory choice: <b>length</b> or <b>string</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**string** *string*

|          |   |
|----------|---|
| Synopsis | Suffix string   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">mask</a> <a href="#">type</a> <a href="#">keyword</a> <a href="#">suffix</a> <a href="#">string</a> <a href="#">string</a> |
| Tree     | <a href="#">string</a>  |

|               |   |
|---------------|---|
| String Length | 1 to 127  |
| Notes         | The following elements are part of a mandatory choice: <b>length</b> or <b>string</b> . |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                 |

### **match-list** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|                |  |
|----------------|--|
| Synopsis       | IPoE host match type   |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <b>match-list</b> <i>keyword</i>           |
| Tree           | <a href="#">match-list</a>   |
| Options        | circuit-id, mac, remote-id, sap-id, service-id, string, system-id, option60, encap-tag-range, dual-stack-remote-id, derived-id, ip, encap-tag-separate-range |
| Max. Instances | 4  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **ppp**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ppp</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <b>ppp</b> |
| Tree       | <a href="#">ppp</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **host** [[host-name](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>host</b> list instance  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <b>host</b> <i>string</i> |
| Tree       | <a href="#">host</a>   |
| Introduced | 16.0.R1  |



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### [host-name] *string*

Synopsis Host name

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string*

Tree [host](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### access-loop-encapsulation

Synopsis Enable the **access-loop-encapsulation** context

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [access-loop-encapsulation](#)

Tree [access-loop-encapsulation](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### encap-offset

Synopsis Enter the **encap-offset** context

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [access-loop-encapsulation](#) [encap-offset](#)

Tree [encap-offset](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### type *keyword*

Synopsis Egress encapsulation type

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [access-loop-encapsulation](#) [encap-offset](#) *type* *keyword*

Tree [type](#)

|            |  |
|------------|--|
| Options    | pppoa-llc, pppoa-null, pppoeoa-llc, pppoeoa-llc-fcs, pppoeoa-llc-tagged, pppoeoa-llc-tagged-fcs, pppoeoa-null, pppoeoa-null-fcs, pppoeoa-null-tagged, pppoeoa-null-tagged-fcs, ipoa-llc, ipoa-null, ipoeoa-llc, ipoeoa-llc-fcs, ipoeoa-llc-tagged, ipoeoa-llc-tagged-fcs, ipoeoa-null, ipoeoa-null-fcs, ipoeoa-null-tagged, ipoeoa-null-tagged-fcs, pppoe, pppoe-tagged, ipoe, ipoe-tagged |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### rate-down *number*

|            |   |
|------------|---|
| Synopsis   | Last mile link downstream rate in the access loop   |
| Context    | <b>configure</b> <b>subscriber-mgmt</b> <b>local-user-db</b> <i>string</i> <b>ppp</b> <b>host</b> <i>string</i> <b>access-loop-encapsulation</b> <b>rate-down</b> <i>number</i> |
| Tree       | <a href="#">rate-down</a>   |
| Range      | 1 to 100000   |
| Units      | kilobps   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### access-loop-information

|            |  |
|------------|--|
| Synopsis   | Enter the <b>access-loop-information</b> context   |
| Context    | <b>configure</b> <b>subscriber-mgmt</b> <b>local-user-db</b> <i>string</i> <b>ppp</b> <b>host</b> <i>string</i> <b>access-loop-information</b> |
| Tree       | <a href="#">access-loop-information</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### circuit-id

|            |  |
|------------|--|
| Synopsis   | Enable the <b>circuit-id</b> context   |
| Context    | <b>configure</b> <b>subscriber-mgmt</b> <b>local-user-db</b> <i>string</i> <b>ppp</b> <b>host</b> <i>string</i> <b>access-loop-information</b> <b>circuit-id</b> |
| Tree       | <a href="#">circuit-id</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **ascii-string** *string*

|               |  |
|---------------|--|
| Synopsis      | Circuit ID as an ASCII string  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">access-loop-information</a> <a href="#">circuit-id</a> <b>ascii-string</b> <i>string</i> |
| Tree          | <a href="#">ascii-string</a>   |
| String Length | 1 to 63  |
| Notes         | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>sap-id</b> , or <b>use-sap-id</b> .  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **use-sap-id**

|            |  |
|------------|--|
| Synopsis   | Use sap-id as circuit-id.  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">access-loop-information</a> <a href="#">circuit-id</a> <b>use-sap-id</b> |
| Tree       | <a href="#">use-sap-id</a>   |
| Notes      | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>sap-id</b> , or <b>use-sap-id</b> .  |
| Introduced | 20.2.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **remote-id**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>remote-id</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">access-loop-information</a> <b>remote-id</b> |
| Tree       | <a href="#">remote-id</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **ascii-string** *string*

|          |   |
|----------|---|
| Synopsis | String format for the remote ID   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">access-loop-information</a> <a href="#">remote-id</a> <b>ascii-string</b> <i>string</i> |
| Tree     | <a href="#">ascii-string</a>  |

---

|               |   |
|---------------|---|
| String Length | 1 to 63   |
| Notes         | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>mac</b> , or <b>use-mac-address</b> . |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## use-mac-address

|            |   |
|------------|---|
| Synopsis   | Use MAC address as remote-id.   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt local-user-db string ppp host string access-loop-information remote-id use-mac-address</a> |
| Tree       | <a href="#">use-mac-address</a>   |
| Notes      | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>mac</b> , or <b>use-mac-address</b> .                   |
| Introduced | 20.2.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## admin-state *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the host  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt local-user-db string ppp host string admin-state keyword</a> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## authentication

|            |  |
|------------|--|
| Synopsis   | Enter the <b>authentication</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt local-user-db string ppp host string authentication</a> |
| Tree       | <a href="#">authentication</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **gx-policy string**

|               |  |
|---------------|--|
| Synopsis      | Diameter application policy  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">authentication</a> <a href="#">gx-policy</a> <i>string</i> |
| Tree          | <a href="#">gx-policy</a>  |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **nasreq-auth-policy string**

|               |   |
|---------------|---|
| Synopsis      | Diameter NASREQ application policy for authentication   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">authentication</a> <a href="#">nasreq-auth-policy</a> <i>string</i> |
| Tree          | <a href="#">nasreq-auth-policy</a>  |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **padi-auth-policy string**

|               |   |
|---------------|---|
| Synopsis      | Authentication policy name  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">authentication</a> <a href="#">padi-auth-policy</a> <i>string</i> |
| Tree          | <a href="#">padi-auth-policy</a>  |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **pre-auth-policy string**

|               |  |
|---------------|--|
| Synopsis      | Pre-authentication policy of this host   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">authentication</a> <a href="#">pre-auth-policy</a> <i>string</i> |
| Tree          | <a href="#">pre-auth-policy</a>  |
| String Length | 1 to 32  |

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-auth-policy** *string*

Synopsis Host authentication policy  
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [authentication](#) [radius-auth-policy](#) *string*  
 Tree [radius-auth-policy](#)  
 String Length 1 to 32  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **user-db** *string*

Synopsis Local user DB to use for PPP PAP/CHAP authentication  
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [authentication](#) [user-db](#) *string*  
 Tree [user-db](#)  
 String Length 1 to 32  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **host-identification**

Synopsis Enter the **host-identification** context  
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [host-identification](#)  
 Tree [host-identification](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **circuit-id**

Synopsis Enter the **circuit-id** context  
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [host-identification](#) [circuit-id](#)

|            |   |
|------------|---|
| Tree       | <a href="#">circuit-id</a>                              |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **ascii-string** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Circuit ID as ASCII string  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">circuit-id</a> <a href="#">ascii-string</a> <i>string</i> |
| Tree          | <a href="#">ascii-string</a>  |
| String Length | 1 to 127  |
| Notes         | The following elements are part of a choice: <b>ascii-string</b> or <b>hex-string</b> .   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **hex-string** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Circuit ID as hexadecimal string  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">circuit-id</a> <a href="#">hex-string</a> <i>string</i> |
| Tree          | <a href="#">hex-string</a>  |
| String Length | 1 to 256  |
| Notes         | The following elements are part of a choice: <b>ascii-string</b> or <b>hex-string</b> .   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**derived-id string****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Derived ID string   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ppp</a> <a href="#">host</a> <a href="#">string</a> <a href="#">host-identification</a> <a href="#">derived-id</a> <a href="#">string</a> |
| Tree          | <a href="#">derived-id</a>  |
| String Length | 1 to 255  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**encap-tag-range**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>encap-tag-range</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ppp</a> <a href="#">host</a> <a href="#">string</a> <a href="#">host-identification</a> <a href="#">encap-tag-range</a> |
| Tree       | <a href="#">encap-tag-range</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**from string****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Start tag   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ppp</a> <a href="#">host</a> <a href="#">string</a> <a href="#">host-identification</a> <a href="#">encap-tag-range</a> <a href="#">from</a> <a href="#">string</a> |
| Tree          | <a href="#">from</a>  |
| String Length | 1 to 11   |
| Notes         | This element is mandatory.  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |



**to string****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | End tag   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">encap-tag-range</a> <b>to</b> <i>string</i> |
| Tree          | <a href="#">to</a>  |
| String Length | 1 to 11   |
| Notes         | This element is mandatory.  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**encap-tag-separate-range**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>encap-tag-separate-range</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">encap-tag-separate-range</a> |
| Tree       | <a href="#">encap-tag-separate-range</a>   |
| Introduced | 20.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**inner**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>inner</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">encap-tag-separate-range</a> <b>inner</b> |
| Tree       | <a href="#">inner</a>   |
| Introduced | 20.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## end number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Upper bound of the inner encapsulation tag range   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">encap-tag-separate-range</a> <i>inner</i> <b>end</b> <i>number</i> |
| Tree        | <a href="#">end</a>  |
| Description | This command configures an inner end tag for the range of encapsulation tags used for host identification.   |
| Range       | 0 to 4094  |
| Introduced  | 20.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## start number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Lower bound of the inner encapsulation tag range   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">encap-tag-separate-range</a> <i>inner</i> <b>start</b> <i>number</i> |
| Tree        | <a href="#">start</a>  |
| Description | This command configures an inner start tag for the range of encapsulation tags used for host identification.   |
| Range       | 0 to 4094  |
| Introduced  | 20.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## outer

|            |   |
|------------|---|
| Synopsis   | Enter the <b>outer</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">encap-tag-separate-range</a> <b>outer</b> |
| Tree       | <a href="#">outer</a>   |
| Introduced | 20.5.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **end number**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Upper bound of the outer encapsulation tag range

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [host-identification](#) [encap-tag-separate-range](#) [outer](#) **end** *number*

Tree [end](#)

Description This command configures an outer end tag for the range of encapsulation tags used for host identification.

Range 0 to 4094

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **start number**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Lower bound of the outer encapsulation tag range

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [host-identification](#) [encap-tag-separate-range](#) [outer](#) **start** *number*

Tree [start](#)

Description This command configures an outer start tag for the range of encapsulation tags used for host identification.

Range 0 to 4094

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mac string****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | MAC address  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ppp</a> <a href="#">host</a> <a href="#">string</a> <a href="#">host-identification</a> <a href="#">mac</a> <a href="#">string</a> |
| Tree       | <a href="#">mac</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**remote-id**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>remote-id</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ppp</a> <a href="#">host</a> <a href="#">string</a> <a href="#">host-identification</a> <a href="#">remote-id</a> |
| Tree       | <a href="#">remote-id</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**ascii-string string****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Remote ID as ASCII string   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ppp</a> <a href="#">host</a> <a href="#">string</a> <a href="#">host-identification</a> <a href="#">remote-id</a> <a href="#">ascii-string</a> <a href="#">string</a> |
| Tree          | <a href="#">ascii-string</a>  |
| String Length | 1 to 255  |
| Notes         | The following elements are part of a choice: <b>ascii-string</b> or <b>hex-string</b> .   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## hex-string *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Remote ID as hexadecimal string   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">remote-id</a> <b>hex-string</b> <i>string</i> |
| Tree          | <a href="#">hex-string</a>  |
| String Length | 1 to 512  |
| Notes         | The following elements are part of a choice: <b>ascii-string</b> or <b>hex-string</b> .   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## sap-id *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | SAP ID  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">host-identification</a> <b>sap-id</b> <i>string</i> |
| Tree          | <a href="#">sap-id</a>  |
| String Length | 1 to 255  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## service-name *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Administrative service name   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">host-identification</a> <b>service-name</b> <i>string</i> |
| Tree     | <a href="#">service-name</a>  |

String Length 1 to 255  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### user-name

Synopsis Enable the **user-name** context  
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [host-identification](#) [user-name](#)  
 Tree [user-name](#)  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### format *keyword*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Username format  
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [host-identification](#) [user-name](#) *format* *keyword*  
 Tree [format](#)  
 Options full, no-domain, domain-only  
 Default full  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### name *string*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Host username  
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [host-identification](#) [user-name](#) *name* *string*  
 Tree [name](#)

|               |   |
|---------------|---|
| String Length | 1 to 253  |
| Notes         | This element is mandatory.                              |
| Introduced    | 16.0.R4   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## identification

|            |   |
|------------|---|
| Synopsis   | Enable the <b>identification</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <b>identification</b> |
| Tree       | <a href="#">identification</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## ancp-string *string*

|               |   |
|---------------|---|
| Synopsis      | ANCP string   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">identification</a> <b>ancp-string</b> <i>string</i> |
| Tree          | <a href="#">ancp-string</a>   |
| String Length | 1 to 63   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## app-profile-string *string*

|               |  |
|---------------|--|
| Synopsis      | Application profile string   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">identification</a> <b>app-profile-string</b> <i>string</i> |
| Tree          | <a href="#">app-profile-string</a>   |
| String Length | 1 to 16  |
| Introduced    | 21.10.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## category-map-name *string*

|          |                   |
|----------|-------------------|
| Synopsis | Category map name |
|----------|-------------------|

|               |  |
|---------------|--|
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">identification</a> <a href="#">category-map-name</a> <i>string</i> |
| Tree          | <a href="#">category-map-name</a>  |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**int-dest-id** *string*

|               |  |
|---------------|--|
| Synopsis      | Intermediate destination ID  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">identification</a> <a href="#">int-dest-id</a> <i>string</i> |
| Tree          | <a href="#">int-dest-id</a>  |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**option-number** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Identification strings for the subscriber  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">identification</a> <a href="#">option-number</a> <i>number</i> |
| Tree       | <a href="#">option-number</a>  |
| Range      | 1 to 254   |
| Default    | 254  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**sla-profile-string** *string*

|          |   |
|----------|---|
| Synopsis | SLA profile string  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">identification</a> <a href="#">sla-profile-string</a> <i>string</i> |



---

|               |   |
|---------------|---|
| Tree          | <a href="#">sla-profile-string</a>                      |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **spi-sharing-group-id** *number*

|            |   |
|------------|---|
| Synopsis   | SPI sharing group ID  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">identification</a> <a href="#">spi-sharing-group-id</a> <i>number</i> |
| Tree       | <a href="#">spi-sharing-group-id</a>  |
| Range      | 0 to 65535  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **sub-profile-string** *string*

|               |   |
|---------------|---|
| Synopsis      | Sub profile string  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">identification</a> <a href="#">sub-profile-string</a> <i>string</i> |
| Tree          | <a href="#">sub-profile-string</a>  |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **subscriber-id** *string*

|               |  |
|---------------|--|
| Synopsis      | Subscriber ID  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">identification</a> <a href="#">subscriber-id</a> <i>string</i> |
| Tree          | <a href="#">subscriber-id</a>  |
| String Length | 1 to 64  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## ipv4

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv4</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">ipv4</a> |
| Tree       | <a href="#">ipv4</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## address

|            |  |
|------------|--|
| Synopsis   | Enter the <b>address</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">ipv4</a> <a href="#">address</a> |
| Tree       | <a href="#">address</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## gi-address *keyword*

|            |  |
|------------|--|
| Synopsis   | Use gi-address to select a pool with the given scope   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">ipv4</a> <a href="#">address</a> <a href="#">gi-address</a> <i>keyword</i> |
| Tree       | <a href="#">gi-address</a>   |
| Options    | subnet-scope, pool-scope   |
| Notes      | The following elements are part of a choice: <b>gi-address</b> , ( <b>ip-address</b> and <b>prefix-length</b> ), <b>pool</b> , or <b>use-pool-from-client</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## ip-address *string*

|            |   |
|------------|---|
| Synopsis   | Fixed IPv4 address of the host  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">ipv4</a> <a href="#">address</a> <a href="#">ip-address</a> <i>string</i> |
| Tree       | <a href="#">ip-address</a>  |
| Notes      | The following elements are part of a choice: <b>gi-address</b> , ( <b>ip-address</b> and <b>prefix-length</b> ), <b>pool</b> , or <b>use-pool-from-client</b> .   |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## pool

Synopsis Enable the **pool** context

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [ipv4](#) [address](#) [pool](#)

Tree [pool](#)

Notes The following elements are part of a choice: **gi-address**, (**ip-address** and **prefix-length**), **pool**, or **use-pool-from-client**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## delimiter *string*

Synopsis Delimiter separating primary and secondary pool names

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [ipv4](#) [address](#) [pool](#) [delimiter](#) *string*

Tree [delimiter](#)

String Length 1

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## primary *string*

Synopsis Primary pool name

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [ipv4](#) [address](#) [pool](#) [primary](#) *string*

Tree [primary](#)

String Length 1 to 32

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## secondary *string*

Synopsis Secondary pool name

|               |  |
|---------------|--|
| Context       | <b>configure</b> <a href="#">subscriber-mgmt local-user-db string</a> <a href="#">ppp host string</a> <a href="#">ipv4 address pool secondary string</a> |
| Tree          | <a href="#">secondary</a>  |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **prefix-length** *number*

|            |   |
|------------|---|
| Synopsis   | IPv4 host address prefix length   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt local-user-db string</a> <a href="#">ppp host string</a> <a href="#">ipv4 address prefix-length number</a>         |
| Tree       | <a href="#">prefix-length</a>   |
| Range      | 1 to 32   |
| Default    | 32  |
| Notes      | The following elements are part of a choice: <b>gi-address</b> , ( <b>ip-address</b> and <b>prefix-length</b> ), <b>pool</b> , or <b>use-pool-from-client</b> . |
| Introduced | 20.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **use-pool-from-client**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>use-pool-from-client</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt local-user-db string</a> <a href="#">ppp host string</a> <a href="#">ipv4 address use-pool-from-client</a>         |
| Tree       | <a href="#">use-pool-from-client</a>  |
| Notes      | The following elements are part of a choice: <b>gi-address</b> , ( <b>ip-address</b> and <b>prefix-length</b> ), <b>pool</b> , or <b>use-pool-from-client</b> . |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **delimiter** *string*

|          |  |
|----------|--|
| Synopsis | Delimiter character to combine primary and secondary pool names  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt local-user-db string</a> <a href="#">ppp host string</a> <a href="#">ipv4 address use-pool-from-client delimiter string</a> |
| Tree     | <a href="#">delimiter</a>  |

|               |   |
|---------------|---|
| String Length | 1   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **ignore-df-bit** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Ignore the DF bit in the IPv4 header when fragmenting  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt local-user-db string ppp host string ipv4 ignore-df-bit boolean</a>   |
| Tree        | <a href="#">ignore-df-bit</a>  |
| Description | <p>When configured to <b>true</b>, this command ignores the DF bit in the IPv4 header for frames egressing the subscriber interface. The frames are fragmented according the applicable egress MTU. The DF bit is reset for frames that are fragmented.</p> <p>This command applies to PPPoE PTA and L2TP LNS frames only. It is not applicable for L2TP LAC frames.</p> <p>When configured to <b>false</b>, this command does not ignore the DF bit in the IPv4 header for frames egressing the subscriber interface.</p> |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **option** [[number](#)] (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Enter the <b>option</b> list instance  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt local-user-db string ppp host string ipv4 option (number   keyword)</a> |
| Tree       | <a href="#">option</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **[number]** (*number* | *keyword*)

|          |  |
|----------|--|
| Synopsis | DHCP option to send identification strings to client   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt local-user-db string ppp host string ipv4 option (number   keyword)</a> |
| Tree     | <a href="#">option</a>   |
| Range    | 1 to 254   |

|            |   |
|------------|---|
| Options    | subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ascii-string** *string*

|               |  |
|---------------|--|
| Synopsis      | DHCP option specified as an ASCII string   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt local-user-db string</a> <a href="#">ppp host string</a> <a href="#">ipv4 option (number   keyword)</a> <b>ascii-string</b> <i>string</i> |
| Tree          | <a href="#">ascii-string</a>   |
| String Length | 1 to 127   |
| Notes         | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **duration** *number*

|            |   |
|------------|---|
| Synopsis   | DHCP option as time duration  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt local-user-db string</a> <a href="#">ppp host string</a> <a href="#">ipv4 option (number   keyword)</a> <b>duration</b> <i>number</i>    |
| Tree       | <a href="#">duration</a>  |
| Range      | 10 to 315446399   |
| Units      | seconds   |
| Notes      | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> . |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **empty**

|          |   |
|----------|---|
| Synopsis | Empty DHCP option.  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt local-user-db string</a> <a href="#">ppp host string</a> <a href="#">ipv4 option (number   keyword)</a> <b>empty</b> |
| Tree     | <a href="#">empty</a>   |

|            |   |
|------------|---|
| Notes      | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> . |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **hex-string** *string*

|               |  |
|---------------|--|
| Synopsis      | DHCP option specified as hexadecimal string  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">ipv4 option</a> ( <i>number</i>   <i>keyword</i> ) <b>hex-string</b> <i>string</i> |
| Tree          | <a href="#">hex-string</a>   |
| String Length | 1 to 256   |
| Notes         | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **ipv4-address** *string*

|                |  |
|----------------|--|
| Synopsis       | DHCP option as a list of IPv4 addresses  |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">ipv4 option</a> ( <i>number</i>   <i>keyword</i> ) <b>ipv4-address</b> <i>string</i> |
| Tree           | <a href="#">ipv4-address</a>   |
| Max. Instances | 4  |
| Notes          | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .<br>This element is ordered by the user.        |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **netbios-node-type** *keyword*

|          |  |
|----------|--|
| Synopsis | DHCP option as NetBIOS node type   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">ipv4 option</a> ( <i>number</i>   <i>keyword</i> ) <b>netbios-node-type</b> <i>keyword</i> |
| Tree     | <a href="#">netbios-node-type</a>  |

|            |   |
|------------|---|
| Options    | b-node, p-node, m-node, h-node  |
| Notes      | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> . |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## ipv6

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv6</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ppp</a> <a href="#">host</a> <a href="#">string</a> <a href="#">ipv6</a> |
| Tree       | <a href="#">ipv6</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## address *string*

|            |   |
|------------|---|
| Synopsis   | Fixed IPv6 address of the host  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ppp</a> <a href="#">host</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">address</a> <a href="#">string</a> |
| Tree       | <a href="#">address</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## address-pool *string*

|               |  |
|---------------|--|
| Synopsis      | IPv6 address pool name   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ppp</a> <a href="#">host</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">address-pool</a> <a href="#">string</a> |
| Tree          | <a href="#">address-pool</a>   |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## delegated-prefix *string*

|          |  |
|----------|--|
| Synopsis | IPv6 delegated prefix of this host   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ppp</a> <a href="#">host</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">delegated-prefix</a> <a href="#">string</a> |



|            |   |
|------------|---|
| Tree       | <a href="#">delegated-prefix</a>                        |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **delegated-prefix-length** *number*

|            |  |
|------------|--|
| Synopsis   | Delegated prefix length  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">ipv6</a> <a href="#">delegated-prefix-length</a> <i>number</i> |
| Tree       | <a href="#">delegated-prefix-length</a>  |
| Range      | 48 to 64   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **delegated-prefix-pool** *string*

|               |  |
|---------------|--|
| Synopsis      | Delegated prefix pool  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">ipv6</a> <a href="#">delegated-prefix-pool</a> <i>string</i> |
| Tree          | <a href="#">delegated-prefix-pool</a>  |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **force-ipv6cp** *boolean*

|            |  |
|------------|--|
| Synopsis   | Force IPv6 control protocol  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">ipv6</a> <a href="#">force-ipv6cp</a> <i>boolean</i> |
| Tree       | <a href="#">force-ipv6cp</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**option** [*number*] (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Enter the <b>option</b> list instance  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt local-user-db string ppp host string ipv6 option</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">option</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**[number]** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | The number of the DHCPv6 option.   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt local-user-db string ppp host string ipv6 option</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">option</a>   |
| Range      | 23   |
| Options    | dns-server   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**hex-string** *string*

|               |  |
|---------------|--|
| Synopsis      | DHCP option specified as hexadecimal string  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt local-user-db string ppp host string ipv6 option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">hex-string string</a> |
| Tree          | <a href="#">hex-string</a>   |
| String Length | 1 to 256   |
| Notes         | The following elements are part of a mandatory choice: <b>hex-string</b> or <b>ipv6-address</b> .  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**ipv6-address** *string*

|          |  |
|----------|--|
| Synopsis | DHCP option specified as a list of IPv6 addresses  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt local-user-db string ppp host string ipv6 option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">ipv6-address string</a> |

|                |   |
|----------------|---|
| Tree           | <a href="#">ipv6-address</a>  |
| Max. Instances | 4   |
| Notes          | The following elements are part of a mandatory choice: <b>hex-string</b> or <b>ipv6-address</b> .<br>This element is ordered by the user. |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **router-advertisement-policy** *string*

|               |  |
|---------------|--|
| Synopsis      | IPv6 router advertisement policy   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">ipv6 router-advertisement-policy</a> <i>string</i> |
| Tree          | <a href="#">router-advertisement-policy</a>  |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **slaac-prefix** *string*

|            |   |
|------------|---|
| Synopsis   | IPv6 SLAAC prefix of this host  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">ipv6 slaac-prefix</a> <i>string</i> |
| Tree       | <a href="#">slaac-prefix</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **slaac-prefix-pool** *string*

|               |  |
|---------------|--|
| Synopsis      | IPv6 SLAAC prefix pool of this host  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">ipv6 slaac-prefix-pool</a> <i>string</i> |
| Tree          | <a href="#">slaac-prefix-pool</a>  |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**timers**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>timers</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">ipv6</a> <a href="#">timers</a> |
| Tree       | <a href="#">timers</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**preferred-lifetime** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Time for a lease to remain preferred  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">ipv6</a> <a href="#">timers</a> <a href="#">preferred-lifetime</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">preferred-lifetime</a>  |
| Range      | 300 to 315446399  |
| Units      | seconds   |
| Options    | infinite  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**rebind** *number*

|            |  |
|------------|--|
| Synopsis   | Rebind timer (T2)  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">ipv6</a> <a href="#">timers</a> <a href="#">rebind</a> <i>number</i> |
| Tree       | <a href="#">rebind</a>   |
| Range      | 0 to 1209600   |
| Units      | seconds  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**renew** *number*

|          |   |
|----------|---|
| Synopsis | Renew timer (T1)  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">ipv6</a> <a href="#">timers</a> <a href="#">renew</a> <i>number</i> |

|            |   |
|------------|---|
| Tree       | <a href="#">renew</a>                                   |
| Range      | 0 to 604800   |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **valid-lifetime** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Time for a lease to remain valid  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt local-user-db string ppp host string ipv6 timers valid-lifetime</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">valid-lifetime</a>  |
| Range      | 300 to 315446399  |
| Units      | seconds   |
| Options    | infinite  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **l2tp**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>l2tp</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt local-user-db string ppp host string l2tp</a> |
| Tree       | <a href="#">l2tp</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                    |

### **group**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>group</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt local-user-db string ppp host string l2tp group</a> |
| Tree       | <a href="#">group</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**name string**

|               |  |
|---------------|--|
| Synopsis      | L2TP tunnel group name   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ppp host</a> <a href="#">string</a> <a href="#">l2tp group name</a> <a href="#">string</a> |
| Tree          | <a href="#">name</a>   |
| String Length | 1 to 63  |
| Notes         | This element is mandatory.   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**service-id number**

|            |  |
|------------|--|
| Synopsis   | Service ID for the L2TP tunnel group   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ppp host</a> <a href="#">string</a> <a href="#">l2tp group</a> <a href="#">service-id number</a> |
| Tree       | <a href="#">service-id</a>   |
| Range      | 1 to 2147483647  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**Ins-interface**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>Ins-interface</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ppp host</a> <a href="#">string</a> <a href="#">Ins-interface</a> |
| Tree       | <a href="#">Ins-interface</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**name string**

|               |   |
|---------------|---|
| Synopsis      | IP interface name   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ppp host</a> <a href="#">string</a> <a href="#">Ins-interface</a> <a href="#">name</a> <a href="#">string</a> |
| Tree          | <a href="#">name</a>  |
| String Length | 1 to 32   |
| Notes         | This element is mandatory.  |
| Introduced    | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **service-id** *number*

Synopsis Service ID

Context **configure** **subscriber-mgmt** **local-user-db** *string* **ppp** **host** *string* **lns-interface** **service-id** *number*

Tree **service-id**

Range 1 to 2147483647 | 2147483648 | 2147483649 | 2147483650 | 2147483651 to 2147483690 | 2147483691 to 2148007980 | 2148007981 to 2148012076 | 2148012077 to 2148016172 | 2148016173 to 2148278316 | 2148278317 | 2148278318 to 2148278381 | 2148278382 | 2148278383 to 2148278386

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mld-import** [**policy-name**] *string*

Synopsis Add a list entry for **mld-import**

Context **configure** **subscriber-mgmt** **local-user-db** *string* **ppp** **host** *string* **mld-import** *string*

Tree **mld-import**

Max. 14

Instances

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[policy-name]** *string*

Synopsis MLD import policy used to control the multicast group

Context **configure** **subscriber-mgmt** **local-user-db** *string* **ppp** **host** *string* **mld-import** *string*

Tree **mld-import**

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## msap-defaults

|            |   |
|------------|---|
| Synopsis   | Enter the <b>msap-defaults</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">msap-defaults</a> |
| Tree       | <a href="#">msap-defaults</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## group-interface

|            |   |
|------------|---|
| Synopsis   | Enable the <b>group-interface</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">msap-defaults</a> <a href="#">group-interface</a> |
| Tree       | <a href="#">group-interface</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## name *string*

|               |  |
|---------------|--|
| Synopsis      | IP interface name  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">msap-defaults</a> <a href="#">group-interface</a> <a href="#">name</a> <i>string</i> |
| Tree          | <a href="#">name</a>   |
| String Length | 1 to 32  |
| Notes         | This element is mandatory.   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## prefix *keyword*

|            |   |
|------------|---|
| Synopsis   | Prefix to the IP interface name   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">msap-defaults</a> <a href="#">group-interface</a> <a href="#">prefix</a> <i>keyword</i> |
| Tree       | <a href="#">prefix</a>  |
| Options    | port-id   |
| Notes      | The following elements are part of a choice: <b>prefix</b> or <b>suffix</b> .   |
| Introduced | 16.0.R1   |



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **suffix** *keyword*

Synopsis Suffix for the group interface

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [msap-defaults](#) [group-interface](#) **suffix** *keyword*

Tree [suffix](#)

Options port-id

Notes The following elements are part of a choice: **prefix** or **suffix**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **policy** *string*

Synopsis MSAP policy

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [msap-defaults](#) [policy](#) *string*

Tree [policy](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **service** *number*

Synopsis Service ID

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [msap-defaults](#) [service](#) *number*

Tree [service](#)

Range 1 to 2147483647 | 2147483648 | 2147483649 | 2147483650 | 2147483651 to 2147483690 | 2147483691 to 2148007980 | 2148007981 to 2148012076 | 2148012077 to 2148016172 | 2148016173 to 2148278316 | 2148278317 | 2148278318 to 2148278381 | 2148278382 | 2148278383 to 2148278386

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pado-delay** *number*

|            |  |
|------------|--|
| Synopsis   | Delay timeout before sending a PADO  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">pado-delay</a> <i>number</i> |
| Tree       | <a href="#">pado-delay</a>   |
| Range      | 1 to 30  |
| Units      | deciseconds  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**password**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>password</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">password</a> |
| Tree       | <a href="#">password</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**chap** *string*

|               |   |
|---------------|---|
| Synopsis      | CHAP protocol   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">password</a> <a href="#">chap</a> <i>string</i> |
| Tree          | <a href="#">chap</a>  |
| String Length | 1 to 115  |
| Notes         | The following elements are part of a choice: <b>chap</b> , <b>ignore</b> , or <b>pap</b> .  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**ignore**

|            |   |
|------------|---|
| Synopsis   | Ignore the PAP and CHAP passwords   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">password</a> <a href="#">ignore</a> |
| Tree       | <a href="#">ignore</a>  |
| Notes      | The following elements are part of a choice: <b>chap</b> , <b>ignore</b> , or <b>pap</b> .  |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pap string**

Synopsis PAP for the password

Context **configure** [subscriber-mgmt local-user-db string](#) [ppp host string](#) [password pap string](#)

Tree [pap](#)

String Length 1 to 115

Notes The following elements are part of a choice: **chap**, **ignore**, or **pap**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ppp-policy-parameters**

Synopsis Enter the **ppp-policy-parameters** context

Context **configure** [subscriber-mgmt local-user-db string](#) [ppp host string](#) [ppp-policy-parameters](#)

Tree [ppp-policy-parameters](#)

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max-sessions-per-mac number**

Synopsis Maximum number of sessions per MAC address

Context **configure** [subscriber-mgmt local-user-db string](#) [ppp host string](#) [ppp-policy-parameters](#) [max-sessions-per-mac number](#)

Tree [max-sessions-per-mac](#)

Description This command sets the maximum PPP sessions that can be opened for a specified MAC address.

Range 1 to 8191

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-accounting-policy**

Synopsis Enter the **radius-accounting-policy** context

Context **configure** [subscriber-mgmt local-user-db string](#) [ppp host string](#) [radius-accounting-policy](#)

|            |   |
|------------|---|
| Tree       | <a href="#">radius-accounting-policy</a>                |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **duplicate** *string*

|               |  |
|---------------|--|
| Synopsis      | RADIUS accounting policy for generating duplicate accounting information   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">radius-accounting-policy</a> <a href="#">duplicate</a> <i>string</i> |
| Tree          | <a href="#">duplicate</a>  |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **name** *string*

|               |   |
|---------------|---|
| Synopsis      | RADIUS accounting policy name   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">radius-accounting-policy</a> <a href="#">name</a> <i>string</i> |
| Tree          | <a href="#">name</a>  |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **retail-service-id** *number*

|            |   |
|------------|---|
| Synopsis   | Configure the retail service-id   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">retail-service-id</a> <i>number</i>   |
| Tree       | <a href="#">retail-service-id</a>   |
| Range      | 1 to 2147483647   2147483648   2147483649   2147483650   2147483651 to 2147483690   2147483691 to 2148007980   2148007981 to 2148012076   2148012077 to 2148016172   2148016173 to 2148278316   2148278317   2148278318 to 2148278381   2148278382   2148278383 to 2148278386 |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### rip-policy *string*

|               |   |
|---------------|---|
| Synopsis      | RIP policy  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt local-user-db string</a> <a href="#">ppp host string</a> <a href="#">rip-policy string</a> |
| Tree          | <a href="#">rip-policy</a>  |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### steering-profile *string*

|               |   |
|---------------|---|
| Synopsis      | Steering profile  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt local-user-db string</a> <a href="#">ppp host string</a> <a href="#">steering-profile string</a> |
| Tree          | <a href="#">steering-profile</a>  |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### to-client-options

|            |   |
|------------|---|
| Synopsis   | Enter the <b>to-client-options</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt local-user-db string</a> <a href="#">ppp host string</a> <a href="#">to-client-options</a> |
| Tree       | <a href="#">to-client-options</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### ipv6-option [[number](#)] (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv6-option</b> list instance   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt local-user-db string</a> <a href="#">ppp host string</a> <a href="#">to-client-options</a> <a href="#">ipv6-option</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">ipv6-option</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**[number]** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | DHCP option to send as identification string   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">to-client-options</a> <a href="#">ipv6-option</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">ipv6-option</a>  |
| Range      | 1 to 65535   |
| Options    | dns-server, domain-name  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**ascii-string** *string*

|               |   |
|---------------|---|
| Synopsis      | DHCP option specified as an ASCII string  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">to-client-options</a> <a href="#">ipv6-option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">ascii-string</a> <i>string</i> |
| Tree          | <a href="#">ascii-string</a>  |
| String Length | 1 to 127  |
| Notes         | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**domain-string** *string*

|               |  |
|---------------|--|
| Synopsis      | DHCP option specified as a domain name   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">to-client-options</a> <a href="#">ipv6-option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">domain-string</a> <i>string</i> |
| Tree          | <a href="#">domain-string</a>  |
| String Length | 1 to 127   |
| Notes         | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**empty**

|            |   |
|------------|---|
| Synopsis   | Empty DHCP option   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">to-client-options</a> <a href="#">ipv6-option</a> ( <i>number</i>   <i>keyword</i> ) <b>empty</b> |
| Tree       | <a href="#">empty</a>   |
| Notes      | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**hex-string** *string*

|               |   |
|---------------|---|
| Synopsis      | DHCP option specified as hexadecimal string   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">to-client-options</a> <a href="#">ipv6-option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">hex-string</a> <i>string</i> |
| Tree          | <a href="#">hex-string</a>  |
| String Length | 1 to 256  |
| Notes         | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**ipv6-address** *string*

|                |   |
|----------------|---|
| Synopsis       | DHCP option specified as a list of IPv6 addresses   |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">to-client-options</a> <a href="#">ipv6-option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">ipv6-address</a> <i>string</i> |
| Tree           | <a href="#">ipv6-address</a>  |
| Max. Instances | 4   |
| Notes          | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .<br>This element is ordered by the user.   |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**mask type keyword**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mask</b> list instance   |
| Context    | <b>configure subscriber-mgmt local-user-db string ppp mask type keyword</b> |
| Tree       | <b>mask</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                     |

**type keyword**

|            |   |
|------------|---|
| Synopsis   | Matching type to identify a host  |
| Context    | <b>configure subscriber-mgmt local-user-db string ppp mask type keyword</b> |
| Tree       | <b>mask</b>   |
| Options    | circuit-id, mac, remote-id, user-name, service-name, sap-id                 |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                     |

**prefix**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>prefix</b> context   |
| Context    | <b>configure subscriber-mgmt local-user-db string ppp mask type keyword prefix</b> |
| Tree       | <b>prefix</b>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                            |

**length number**

|            |  |
|------------|--|
| Synopsis   | PPP mask prefix length   |
| Context    | <b>configure subscriber-mgmt local-user-db string ppp mask type keyword prefix length number</b> |
| Tree       | <b>length</b>  |
| Range      | 1 to 127   |
| Notes      | The following elements are part of a mandatory choice: <b>length</b> or <b>string</b> .          |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |



**string** *string*

|               |  |
|---------------|--|
| Synopsis      | Prefix string  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ppp</a> <a href="#">mask</a> <a href="#">type</a> <a href="#">keyword</a> <a href="#">prefix</a> <a href="#">string</a> <a href="#">string</a> |
| Tree          | <a href="#">string</a>   |
| String Length | 1 to 127   |
| Notes         | The following elements are part of a mandatory choice: <b>length</b> or <b>string</b> .  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**suffix**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>suffix</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ppp</a> <a href="#">mask</a> <a href="#">type</a> <a href="#">keyword</a> <a href="#">suffix</a> |
| Tree       | <a href="#">suffix</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**length** *number*

|            |  |
|------------|--|
| Synopsis   | PPP mask suffix length   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ppp</a> <a href="#">mask</a> <a href="#">type</a> <a href="#">keyword</a> <a href="#">suffix</a> <a href="#">length</a> <a href="#">number</a> |
| Tree       | <a href="#">length</a>   |
| Range      | 1 to 127   |
| Notes      | The following elements are part of a mandatory choice: <b>length</b> or <b>string</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**string** *string*

|          |  |
|----------|--|
| Synopsis | Suffix string  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ppp</a> <a href="#">mask</a> <a href="#">type</a> <a href="#">keyword</a> <a href="#">suffix</a> <a href="#">string</a> <a href="#">string</a> |
| Tree     | <a href="#">string</a>   |

|               |   |
|---------------|---|
| String Length | 1 to 127  |
| Notes         | The following elements are part of a mandatory choice: <b>length</b> or <b>string</b> . |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                 |

### **match-list** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|                |   |
|----------------|---|
| Synopsis       | PPP host match type   |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <b>match-list</b> <i>keyword</i> |
| Tree           | <a href="#">match-list</a>  |
| Options        | circuit-id, mac, remote-id, user-name, service-name, sap-id, encap-tag-range, derived-id, encap-tag-separate-range                                |
| Max. Instances | 3   |
| Notes          | This element is ordered by the user.  |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **mld-policy** [*name*] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mld-policy</b> list instance  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <b>mld-policy</b> <i>string</i> |
| Tree       | <a href="#">mld-policy</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                          |

### **[name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Policy name  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <b>mld-policy</b> <i>string</i> |
| Tree          | <a href="#">mld-policy</a>   |
| String Length | 1 to 32  |

|            |   |
|------------|---|
| Notes      | This element is part of a list key.                     |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">mld-policy</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **egress-rate-modify**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>egress-rate-modify</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">mld-policy</a> <i>string</i> <a href="#">egress-rate-modify</a> |
| Tree       | <a href="#">egress-rate-modify</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **agg-rate**

|             |   |
|-------------|---|
| Synopsis    | Maximum total rate for all subscriber egress queues   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">mld-policy</a> <i>string</i> <a href="#">egress-rate-modify</a> <a href="#">agg-rate</a> |
| Tree        | <a href="#">agg-rate</a>  |
| Description | This command specifies the maximum total rate for all subscriber egress queues for each subscriber associated with the policy.                        |
| Notes       | The following elements are part of a choice: <b>agg-rate</b> or <b>scheduler</b> .  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **scheduler** *string*

|          |   |
|----------|---|
| Synopsis | Scheduler to be applied for rate modification |
|----------|---|

|               |  |
|---------------|--|
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">mld-policy</a> <i>string</i> <a href="#">egress-rate-modify</a> <a href="#">scheduler</a> <i>string</i> |
| Tree          | <a href="#">scheduler</a>  |
| String Length | 1 to 32  |
| Notes         | The following elements are part of a choice: <b>agg-rate</b> or <b>scheduler</b> .   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **fast-leave** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable fast leave   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">mld-policy</a> <i>string</i> <a href="#">fast-leave</a> <i>boolean</i> |
| Tree       | <a href="#">fast-leave</a>  |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **import-policy** *reference*

|            |  |
|------------|--|
| Synopsis   | Import policy to filter MLD packets  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">mld-policy</a> <i>string</i> <a href="#">import-policy</a> <i>reference</i> |
| Tree       | <a href="#">import-policy</a>  |
| Reference  | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **maximum-number-group-sources** *number*

|             |  |
|-------------|--|
| Synopsis    | Maximum number of group sources for this interface   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">mld-policy</a> <i>string</i> <a href="#">maximum-number-group-sources</a> <i>number</i>   |
| Tree        | <a href="#">maximum-number-group-sources</a>   |
| Description | This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed. |
| Range       | 1 to 32000   |

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-groups** *number*

Synopsis Maximum number of groups for this interface  
Context **configure** [subscriber-mgmt](#) [mld-policy](#) *string* [maximum-number-groups](#) *number*  
Tree [maximum-number-groups](#)  
Range 1 to 16000  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-sources** *number*

Synopsis Maximum number of sources that are allowed per group  
Context **configure** [subscriber-mgmt](#) [mld-policy](#) *string* [maximum-number-sources](#) *number*  
Tree [maximum-number-sources](#)  
Range 1 to 1000  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-interval** *number*

Synopsis Time between two consecutive host-query messages  
Context **configure** [subscriber-mgmt](#) [mld-policy](#) *string* [query-interval](#) *number*  
Tree [query-interval](#)  
Range 2 to 1024  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-last-member-interval** *number*

Synopsis Time between group-specific query messages  
Context **configure** [subscriber-mgmt](#) [mld-policy](#) *string* [query-last-member-interval](#) *number*  
Tree [query-last-member-interval](#)

---

|            |   |
|------------|---|
| Range      | 1 to 1023   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **query-response-interval** *number*

|            |   |
|------------|---|
| Synopsis   | Time to wait for a response to the host-query messages  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">mld-policy</a> <i>string</i> <a href="#">query-response-interval</a> <i>number</i> |
| Tree       | <a href="#">query-response-interval</a>   |
| Range      | 1 to 1023   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **redirection-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | Multicast redirection action applied to the subscriber  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">mld-policy</a> <i>string</i> <a href="#">redirection-policy</a> <i>reference</i> |
| Tree       | <a href="#">redirection-policy</a>  |
| Reference  | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **replication** *keyword*

|            |  |
|------------|--|
| Synopsis   | Multicast replication mode for subscriber multicast  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">mld-policy</a> <i>string</i> <a href="#">replication</a> <i>keyword</i> |
| Tree       | <a href="#">replication</a>  |
| Options    | per-sap, per-host, per-spi   |
| Default    | per-sap  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **router-alert-check** *boolean*

|          |   |
|----------|---|
| Synopsis | Enable router alert checking for IGMP or MLD messages |
|----------|---|

|            |  |
|------------|--|
| Context    | <b>configure subscriber-mgmt mld-policy</b> <i>string</i> <b>router-alert-check</b> <i>boolean</i> |
| Tree       | <b>router-alert-check</b>  |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**static**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>static</b> context   |
| Context    | <b>configure subscriber-mgmt mld-policy</b> <i>string</i> <b>static</b> |
| Tree       | <b>static</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                 |

**group** [**group-address**] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>group</b> list instance  |
| Context    | <b>configure subscriber-mgmt mld-policy</b> <i>string</i> <b>static group</b> <i>string</i> |
| Tree       | <b>group</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                     |

**[group-address]** *string*

|            |   |
|------------|---|
| Synopsis   | Group address of multicast channel  |
| Context    | <b>configure subscriber-mgmt mld-policy</b> <i>string</i> <b>static group</b> <i>string</i> |
| Tree       | <b>group</b>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                     |

**source** [**source-address**] *string*

|          |   |
|----------|---|
| Synopsis | Add a list entry for <b>source</b>  |
| Context  | <b>configure subscriber-mgmt mld-policy</b> <i>string</i> <b>static group</b> <i>string</i> <b>source</b> <i>string</i> |

|            |  |
|------------|--|
| Tree       | <a href="#">source</a>   |
| Notes      | The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> . |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                |

### **[source-address]** *string*

|            |   |
|------------|---|
| Synopsis   | Source IP address   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">mld-policy</a> <i>string</i> <a href="#">static</a> <a href="#">group</a> <i>string</i> <a href="#">source</a> <i>string</i> |
| Tree       | <a href="#">source</a>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R2   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **starg**

|            |  |
|------------|--|
| Synopsis   | any source address (*,G)   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">mld-policy</a> <i>string</i> <a href="#">static</a> <a href="#">group</a> <i>string</i> <a href="#">starg</a> |
| Tree       | <a href="#">starg</a>  |
| Notes      | The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .   |
| Introduced | 16.0.R2  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **use-multicast-destination-mac** *boolean*

|            |  |
|------------|--|
| Synopsis   | Use multicast destination mac address for outgoing traffic.  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">mld-policy</a> <i>string</i> <a href="#">use-multicast-destination-mac</a> <i>boolean</i> |
| Tree       | <a href="#">use-multicast-destination-mac</a>  |
| Default    | false  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **version** *keyword*

|          |                      |
|----------|----------------------|
| Synopsis | MLD protocol version |
|----------|----------------------|



|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">mld-policy</a> <i>string</i> <a href="#">version</a> <i>keyword</i> |
| Tree       | <a href="#">version</a>  |
| Options    | 1, 2   |
| Default    | 2  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **msap-policy** [[name](#)] *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>msap-policy</b> list instance   |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> |
| Tree           | <a href="#">msap-policy</a>  |
| Max. Instances | 256  |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                    |

### **[name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Managed SAP policy name  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> |
| Tree          | <a href="#">msap-policy</a>  |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                    |

### **cpu-protection**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>cpu-protection</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">cpu-protection</a> |
| Tree       | <a href="#">cpu-protection</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s   |

## ip-src-monitoring

|            |   |
|------------|---|
| Synopsis   | Apply the IP source monitoring  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">ip-src-monitoring</a> |
| Tree       | <a href="#">ip-src-monitoring</a>   |
| Notes      | The following elements are part of a choice: <b>ip-src-monitoring</b> or <b>mac-monitoring</b> .  |
| Introduced | 16.0.R2   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s   |

## mac-monitoring

|            |  |
|------------|--|
| Synopsis   | Apply the per-source rate limit  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">mac-monitoring</a> |
| Tree       | <a href="#">mac-monitoring</a>   |
| Notes      | The following elements are part of a choice: <b>ip-src-monitoring</b> or <b>mac-monitoring</b> .   |
| Introduced | 16.0.R2  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s  |

## policy-id *reference*

|            |  |
|------------|--|
| Synopsis   | CPM protection policy  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">policy-id</a> <i>reference</i> |
| Tree       | <a href="#">policy-id</a>  |
| Reference  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpu-protection</a> <a href="#">policy</a> <i>number</i>                                 |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s  |

## description *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **dist-cpu-protection** *string*

|               |  |
|---------------|--|
| Synopsis      | Distributed CPU protection policy  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">dist-cpu-protection</a> <i>string</i> |
| Tree          | <a href="#">dist-cpu-protection</a>  |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **ies-vprn-only-sap-parameters**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ies-vprn-only-sap-parameters</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">ies-vprn-only-sap-parameters</a> |
| Tree       | <a href="#">ies-vprn-only-sap-parameters</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **anti-spoof** *keyword*

|            |   |
|------------|---|
| Synopsis   | Anti-spoof filtering for the MSAP   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">ies-vprn-only-sap-parameters</a> <a href="#">anti-spoof</a> <i>keyword</i> |
| Tree       | <a href="#">anti-spoof</a>  |
| Options    | source-ip-and-mac-addr, next-hop-ip-and-mac-addr  |
| Default    | source-ip-and-mac-addr  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **egress**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>egress</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">ies-vprn-only-sap-parameters</a> <a href="#">egress</a> |
| Tree       | <a href="#">egress</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## qos

|            |   |
|------------|---|
| Synopsis   | Enter the <b>qos</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">ies-vprn-only-sap-parameters</a> <a href="#">egress</a> <b>qos</b> |
| Tree       | <a href="#">qos</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## policy-name *reference*

|            |  |
|------------|--|
| Synopsis   | QoS policy ID or name to associate with the MSAPs  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">ies-vprn-only-sap-parameters</a> <a href="#">egress</a> <b>qos</b> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">sap-egress</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## ingress

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ingress</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">ies-vprn-only-sap-parameters</a> <a href="#">ingress</a> |
| Tree       | <a href="#">ingress</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## qos

|            |  |
|------------|--|
| Synopsis   | Enter the <b>qos</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">ies-vprn-only-sap-parameters</a> <a href="#">ingress</a> <b>qos</b> |
| Tree       | <a href="#">qos</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**policy-name** *reference*

|            |  |
|------------|--|
| Synopsis   | QoS policy ID or name to associate with the MSAPs  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt msap-policy</a> <i>string</i> <a href="#">ies-vprn-only-sap-parameters ingress qos policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**queuing-type** *keyword*

|            |   |
|------------|---|
| Synopsis   | Queuing type  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt msap-policy</a> <i>string</i> <a href="#">ies-vprn-only-sap-parameters ingress qos queuing-type</a> <i>keyword</i> |
| Tree       | <a href="#">queuing-type</a>  |
| Options    | shared, service   |
| Default    | shared  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**igmp-host-tracking**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>igmp-host-tracking</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt msap-policy</a> <i>string</i> <a href="#">igmp-host-tracking</a> |
| Tree       | <a href="#">igmp-host-tracking</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**expiry-time** *number*

|          |   |
|----------|---|
| Synopsis | Time that the system continues to track inactive hosts  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt msap-policy</a> <i>string</i> <a href="#">igmp-host-tracking expiry-time</a> <i>number</i> |
| Tree     | <a href="#">expiry-time</a>   |
| Range    | 1 to 65535  |
| Units    | seconds   |

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **import-policy** *reference*

Synopsis Import policy that filters IGMP packets  
Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [igmp-host-tracking](#) [import-policy](#) *reference*  
Tree [import-policy](#)  
Reference **configure** [policy-options](#) [policy-statement](#) *string*  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-group-sources** *number*

Synopsis Maximum number of multicast groups to track per group  
Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [igmp-host-tracking](#) [maximum-number-group-sources](#) *number*  
Tree [maximum-number-group-sources](#)  
Range 1 to 32000  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-groups** *number*

Synopsis Maximum number of multicast groups to be tracked  
Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [igmp-host-tracking](#) [maximum-number-groups](#) *number*  
Tree [maximum-number-groups](#)  
Range 1 to 16000  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-sources** *number*

Synopsis Maximum number of multicast sources to be tracked

|            |   |
|------------|---|
| Context    | <b>configure subscriber-mgmt msap-policy</b> <i>string</i> <b>igmp-host-tracking maximum-number-sources</b> <i>number</i> |
| Tree       | <a href="#">maximum-number-sources</a>  |
| Range      | 1 to 1000   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **lag-link-map-profile** *number*

|            |  |
|------------|--|
| Synopsis   | Map profile for LAG link   |
| Context    | <b>configure subscriber-mgmt msap-policy</b> <i>string</i> <b>lag-link-map-profile</b> <i>number</i> |
| Tree       | <a href="#">lag-link-map-profile</a>   |
| Range      | 1 to 64  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **sticky-msaps** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Prevent MSAPs from being deleted  |
| Context     | <b>configure subscriber-mgmt msap-policy</b> <i>string</i> <b>sticky-msaps</b> <i>boolean</i>   |
| Tree        | <a href="#">sticky-msaps</a>  |
| Description | <p>When configured to <b>true</b>, MSAPs associated with the specified MSAP policy are not removed unless a manual <b>clear</b> command is issued.</p> <p>This feature is useful if historical statistics records on MSAPs need to be retained. It can also reduce host creation time because the MSAP is already created.</p> <p>When configured to <b>false</b>, MSAPs can be automatically removed when a host creation fails or when a subscriber is no longer associated with the MSAP, for example, when a subscriber ends the session.</p> |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **sticky-msaps-idle-timeout** *number*

|          |   |
|----------|---|
| Synopsis | Timeout used for sticky MSAPs   |
| Context  | <b>configure subscriber-mgmt msap-policy</b> <i>string</i> <b>sticky-msaps-idle-timeout</b> <i>number</i> |
| Tree     | <a href="#">sticky-msaps-idle-timeout</a>   |

|             |   |
|-------------|---|
| Description | <p>This command configures the timeout interval which determines when idle sticky MSAPs can be removed.</p> <p>By default, MSAPs are deleted shortly after the subscriber session ends. The system is prevented from automatically deleting sticky MSAPs after the session ends, allowing for a faster subsequent subscriber connection without MSAP creation; however, sticky MSAPs require SAP resources. The configuration of this command allows for the removal of sticky MSAPs that are idle for the specified time period.</p> <p>When unconfigured, no timeout interval is applied.</p> |
| Range       | 5 to 604800   |
| Units       | seconds   |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### sub-sla-mgmt

|            |   |
|------------|---|
| Synopsis   | Enter the <b>sub-sla-mgmt</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">sub-sla-mgmt</a> |
| Tree       | <a href="#">sub-sla-mgmt</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### defaults

|            |  |
|------------|--|
| Synopsis   | Enter the <b>defaults</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">defaults</a> |
| Tree       | <a href="#">defaults</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### app-profile *reference*

|            |   |
|------------|---|
| Synopsis   | Application profile name  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">defaults</a> <a href="#">app-profile</a> <i>reference</i>       |
| Tree       | <a href="#">app-profile</a>   |
| Reference  | <b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i> |
| Introduced | 21.10.R1  |



Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **int-dest-id**

Synopsis Enter the **int-dest-id** context

Context **configure subscriber-mgmt msap-policy string sub-sla-mgmt defaults int-dest-id**

Tree [int-dest-id](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **string string**

Synopsis String to be used as the int-dest-id

Context **configure subscriber-mgmt msap-policy string sub-sla-mgmt defaults int-dest-id string string**

Tree [string](#)

String Length 1 to 32

Notes The following elements are part of a choice: **string** or **top-q-tag**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **top-q-tag**

Synopsis Derive string from top most delineating Dot1Q tag

Context **configure subscriber-mgmt msap-policy string sub-sla-mgmt defaults int-dest-id top-q-tag tag**

Tree [top-q-tag](#)

Notes The following elements are part of a choice: **string** or **top-q-tag**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sla-profile reference**

Synopsis Default SLA profile

Context **configure subscriber-mgmt msap-policy string sub-sla-mgmt defaults sla-profile reference**

|            |  |
|------------|--|
| Tree       | <a href="#">sla-profile</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                    |

### **sub-profile** *reference*

|            |   |
|------------|---|
| Synopsis   | Subscriber profile  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">sub-sla-mgmt</a> defaults <a href="#">sub-profile</a> <i>reference</i> |
| Tree       | <a href="#">sub-profile</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **subscriber-id**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>subscriber-id</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">sub-sla-mgmt</a> defaults <a href="#">subscriber-id</a> |
| Tree       | <a href="#">subscriber-id</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **auto-id**

|            |  |
|------------|--|
| Synopsis   | Autogenerated sub-id as default sub-id   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">sub-sla-mgmt</a> defaults <a href="#">subscriber-id</a> <a href="#">auto-id</a> |
| Tree       | <a href="#">auto-id</a>  |
| Notes      | The following elements are part of a choice: <b>auto-id</b> , <b>sap-id</b> , or <b>string</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **sap-id**

|          |                          |
|----------|--------------------------|
| Synopsis | SAP-id as default sub-id |
|----------|--------------------------|

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">sub-sla-mgmt</a> defaults <a href="#">subscriber-id</a> <a href="#">sap-id</a> |
| Tree       | <a href="#">sap-id</a>  |
| Notes      | The following elements are part of a choice: <b>auto-id</b> , <b>sap-id</b> , or <b>string</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **string** *string*

|               |   |
|---------------|---|
| Synopsis      | String to be used as default sub-id   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">sub-sla-mgmt</a> defaults <a href="#">subscriber-id</a> <a href="#">string</a> <i>string</i> |
| Tree          | <a href="#">string</a>  |
| String Length | 1 to 64   |
| Notes         | The following elements are part of a choice: <b>auto-id</b> , <b>sap-id</b> , or <b>string</b> .  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **single-sub-parameters**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>single-sub-parameters</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">single-sub-parameters</a> |
| Tree       | <a href="#">single-sub-parameters</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **non-sub-traffic-profiles**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>non-sub-traffic-profiles</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">single-sub-parameters</a> <a href="#">non-sub-traffic-profiles</a> |
| Tree       | <a href="#">non-sub-traffic-profiles</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**app-profile** *reference*

|            |   |
|------------|---|
| Synopsis   | Application profile name  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">single-sub-parameters</a> <a href="#">non-sub-traffic-profiles</a> <a href="#">app-profile</a> <i>reference</i> |
| Tree       | <a href="#">app-profile</a>   |
| Reference  | <b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i>   |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**sla-profile** *reference*

|            |   |
|------------|---|
| Synopsis   | SLA profile name  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">single-sub-parameters</a> <a href="#">non-sub-traffic-profiles</a> <a href="#">sla-profile</a> <i>reference</i> |
| Tree       | <a href="#">sla-profile</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i>  |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**sub-profile** *reference*

|            |   |
|------------|---|
| Synopsis   | Subscriber profile  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">single-sub-parameters</a> <a href="#">non-sub-traffic-profiles</a> <a href="#">sub-profile</a> <i>reference</i> |
| Tree       | <a href="#">sub-profile</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i>  |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**subscriber-id** *string*

|          |  |
|----------|--|
| Synopsis | Subscriber identification string   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">single-sub-parameters</a> <a href="#">non-sub-traffic-profiles</a> <a href="#">subscriber-id</a> <i>string</i> |

|               |   |
|---------------|---|
| Tree          | <a href="#">subscriber-id</a>                           |
| String Length | 1 to 64   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **profiled-traffic-only** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable/disable profiled-traffic-only.  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">single-sub-parameters</a> <a href="#">profiled-traffic-only</a> <i>boolean</i> |
| Tree       | <a href="#">profiled-traffic-only</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **sub-ident-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | Configure subscriber identification policy  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">sub-ident-policy</a> <i>reference</i> |
| Tree       | <a href="#">sub-ident-policy</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **subscriber-limit** (*keyword* | *number*)

|            |   |
|------------|---|
| Synopsis   | Maximum subscribers on this SAP   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">subscriber-limit</a> ( <i>keyword</i>   <i>number</i> ) |
| Tree       | <a href="#">subscriber-limit</a>  |
| Range      | 1 to 131071   |
| Options    | no-limit  |
| Default    | 1   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**vpls-only-sap-parameters**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>vpls-only-sap-parameters</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> |
| Tree       | <a href="#">vpls-only-sap-parameters</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**arp-host**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>arp-host</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">arp-host</a> |
| Tree       | <a href="#">arp-host</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**host-limit** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum number of ARP hosts   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">arp-host</a> <a href="#">host-limit</a> <i>number</i> |
| Tree       | <a href="#">host-limit</a>  |
| Range      | 1 to 131071   |
| Default    | 1   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**min-auth-interval** *number*

|          |  |
|----------|--|
| Synopsis | Minimum authentication interval  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">arp-host</a> <a href="#">min-auth-interval</a> <i>number</i> |
| Tree     | <a href="#">min-auth-interval</a>  |
| Range    | 1 to 6000  |
| Units    | minutes  |
| Default  | 15   |

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **arp-reply-agent** *keyword*

Synopsis Enable arp-reply-agent function  
Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [arp-reply-agent](#) *keyword*  
Tree [arp-reply-agent](#)  
Options true, with-subscr-ident  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dhcp**

Synopsis Enter the **dhcp** context  
Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [dhcp](#)  
Tree [dhcp](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lease-populate** *number*

Synopsis Maximum number of DHCPv4 leases per managed SAP  
Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [dhcp](#) [lease-populate](#) *number*  
Tree [lease-populate](#)  
Range 1 to 131071  
Default 1  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **option-82**

Synopsis Enter the **option-82** context  
Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [dhcp](#) [option-82](#)

|            |   |
|------------|---|
| Tree       | <a href="#">option-82</a>                               |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

**action** *keyword*

|            |  |
|------------|--|
| Synopsis   | DHCP relay forwarding policy action  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">action</a> <i>keyword</i> |
| Tree       | <a href="#">action</a>   |
| Options    | replace, drop, keep  |
| Default    | keep   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**circuit-id** *keyword*

|            |  |
|------------|--|
| Synopsis   | Circuit ID suboption of the IPOE relay   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">circuit-id</a> <i>keyword</i> |
| Tree       | <a href="#">circuit-id</a>   |
| Options    | none, ascii-tuple, vlan-ascii-tuple  |
| Default    | ascii-tuple  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**remote-id**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>remote-id</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">remote-id</a> |
| Tree       | <a href="#">remote-id</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |



**mac**

|            |   |
|------------|---|
| Synopsis   | MAC address of the remote end encoded in the sub-option   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">dhcp option-82</a> <a href="#">remote-id</a> <b>mac</b> |
| Tree       | <a href="#">mac</a>   |
| Notes      | The following elements are part of a choice: <b>mac</b> or <b>string</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**string** *string*

|               |  |
|---------------|--|
| Synopsis      | String to encode in the suboption  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">dhcp option-82</a> <a href="#">remote-id</a> <i>string</i> <i>string</i> |
| Tree          | <a href="#">string</a>   |
| String Length | 1 to 32  |
| Notes         | The following elements are part of a choice: <b>mac</b> or <b>string</b> .   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**vendor-specific-option**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>vendor-specific-option</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">dhcp option-82</a> <a href="#">vendor-specific-option</a> |
| Tree       | <a href="#">vendor-specific-option</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**client-mac-address** *boolean*

|          |   |
|----------|---|
| Synopsis | Send MAC address in Nokia vendor-specific sub-option  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">dhcp option-82</a> <a href="#">vendor-specific-option</a> <a href="#">client-mac-address</a> <i>boolean</i> |
| Tree     | <a href="#">client-mac-address</a>  |
| Default  | false   |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **sap-id** *boolean*

|            |  |
|------------|--|
| Synopsis   | Send SAP ID in the Nokia vendor-specific sub-option  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">dhcp option-82</a> <a href="#">vendor-specific-option</a> <b>sap-id</b> <i>boolean</i> |
| Tree       | <a href="#">sap-id</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **service-id** *boolean*

|            |  |
|------------|--|
| Synopsis   | Send service ID in the Nokia vendor-specific sub-option  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">dhcp option-82</a> <a href="#">vendor-specific-option</a> <b>service-id</b> <i>boolean</i> |
| Tree       | <a href="#">service-id</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **string** *string*

|               |   |
|---------------|---|
| Synopsis      | String in the sub-option of the DHCP relay packet   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">dhcp option-82</a> <a href="#">vendor-specific-option</a> <b>string</b> <i>string</i> |
| Tree          | <a href="#">string</a>  |
| Description   | This command specifies the string in the Nokia vendor-specific sub-option of the DHCP relay packet.   |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**system-id** *boolean*

|            |   |
|------------|---|
| Synopsis   | Send system ID in the Nokia vendor-specific sub-option  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt msap-policy string vpls-only-sap-parameters dhcp option-82 vendor-specific-option system-id</a> <i>boolean</i> |
| Tree       | <a href="#">system-id</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**proxy-server**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>proxy-server</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt msap-policy string vpls-only-sap-parameters dhcp proxy-server</a> |
| Tree       | <a href="#">proxy-server</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the DHCP proxy server   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt msap-policy string vpls-only-sap-parameters dhcp proxy-server admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**emulated-server** *string*

|            |  |
|------------|--|
| Synopsis   | IP address used as DHCP server address in SAP context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt msap-policy string vpls-only-sap-parameters dhcp proxy-server emulated-server</a> <i>string</i> |
| Tree       | <a href="#">emulated-server</a>  |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## lease-time

Synopsis Enter the **lease-time** context

Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [dhcp proxy-server](#) **lease-time**

Tree [lease-time](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## radius-override *boolean*

Synopsis Use lease time information provided by RADIUS server

Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [dhcp proxy-server](#) **lease-time** [radius-override](#) *boolean*

Tree [radius-override](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## value *number*

Synopsis DHCP lease time

Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [dhcp proxy-server](#) **lease-time** [value](#) *number*

Tree [value](#)

Range 300 to 315446399

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## egress

Synopsis Enter the **egress** context

Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) **egress**

|            |   |
|------------|---|
| Tree       | <a href="#">egress</a>                                  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## qos

|            |  |
|------------|--|
| Synopsis   | Enter the <b>qos</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">egress</a> <a href="#">qos</a> |
| Tree       | <a href="#">qos</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## policy-name *reference*

|            |   |
|------------|---|
| Synopsis   | QoS policy ID or name to associate with the MSAPs   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">sap-egress</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## igmp-snooping

|            |   |
|------------|---|
| Synopsis   | Enter the <b>igmp-snooping</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">igmp-snooping</a> |
| Tree       | <a href="#">igmp-snooping</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## fast-leave *boolean*

|          |   |
|----------|---|
| Synopsis | Allow IGMP fast leave processing  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">igmp-snooping</a> <a href="#">fast-leave</a> <i>boolean</i> |
| Tree     | <a href="#">fast-leave</a>  |

|            |   |
|------------|---|
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **import-policy** *reference*

|            |  |
|------------|--|
| Synopsis   | Import policy that filters IGMP packets  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">igmp-snooping</a> <a href="#">import-policy</a> <i>reference</i> |
| Tree       | <a href="#">import-policy</a>  |
| Reference  | <b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **maximum-number-groups** (*keyword* | *number*)

|            |  |
|------------|--|
| Synopsis   | Maximum number of multicast groups   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">igmp-snooping</a> <a href="#">maximum-number-groups</a> ( <i>keyword</i>   <i>number</i> ) |
| Tree       | <a href="#">maximum-number-groups</a>  |
| Range      | 1 to 16000   |
| Options    | unlimited  |
| Default    | unlimited  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **mcac**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mcac</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">igmp-snooping</a> <a href="#">mcac</a> |
| Tree       | <a href="#">mcac</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**bandwidth**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>bandwidth</b> context  |
| Context    | <b>configure</b> <b>subscriber-mgmt</b> <b>msap-policy</b> <i>string</i> <b>vpls-only-sap-parameters</b> <b>igmp-snooping</b><br><b>mcac</b> <b>bandwidth</b> |
| Tree       | <b>bandwidth</b>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**mandatory** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Pre-reserved bandwidth for all mandatory channels   |
| Context    | <b>configure</b> <b>subscriber-mgmt</b> <b>msap-policy</b> <i>string</i> <b>vpls-only-sap-parameters</b> <b>igmp-snooping</b><br><b>mcac</b> <b>bandwidth</b> <b>mandatory</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <b>mandatory</b>  |
| Range      | 0 to 2147483647   |
| Options    | unlimited   |
| Default    | unlimited   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**total** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Maximum allowed bandwidth   |
| Context    | <b>configure</b> <b>subscriber-mgmt</b> <b>msap-policy</b> <i>string</i> <b>vpls-only-sap-parameters</b> <b>igmp-snooping</b><br><b>mcac</b> <b>bandwidth</b> <b>total</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <b>total</b>  |
| Range      | 0 to 2147483647   |
| Options    | unlimited   |
| Default    | unlimited   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**interface-policy** *reference*

|          |                            |
|----------|----------------------------|
| Synopsis | MCAC interface policy name |
|----------|----------------------------|

|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt msap-policy string</a> <a href="#">vpls-only-sap-parameters igmp-snooping mcac interface-policy reference</a> |
| Tree       | <a href="#">interface-policy</a>   |
| Reference  | <b>configure</b> <a href="#">mcac interface-policy string</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## mc-constraints

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mc-constraints</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt msap-policy string</a> <a href="#">vpls-only-sap-parameters igmp-snooping mcac mc-constraints</a> |
| Tree       | <a href="#">mc-constraints</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## level [[level-id](#)] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>level</b> list instance  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt msap-policy string</a> <a href="#">vpls-only-sap-parameters igmp-snooping mcac mc-constraints level number</a> |
| Tree       | <a href="#">level</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## [[level-id](#)] *number*

|            |   |
|------------|---|
| Synopsis   | Bandwidth level ID for an MCAC constraint   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt msap-policy string</a> <a href="#">vpls-only-sap-parameters igmp-snooping mcac mc-constraints level number</a> |
| Tree       | <a href="#">level</a>   |
| Range      | 1 to 8  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |



**bandwidth** *number*

|            |   |
|------------|---|
| Synopsis   | Bandwidth available for this level  |
| Context    | <b>configure</b> <b>subscriber-mgmt</b> <b>msap-policy</b> <i>string</i> <b>vpls-only-sap-parameters</b> <b>igmp-snooping</b> <b>mcac</b> <b>mc-constraints</b> <b>level</b> <i>number</i> <b>bandwidth</b> <i>number</i> |
| Tree       | <b>bandwidth</b>  |
| Max. Range | 0 to 4294967295   |
| Units      | kilobps   |
| Default    | 1   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**number-down** [**number-lag-port-down**] *number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>number-down</b> list instance   |
| Context    | <b>configure</b> <b>subscriber-mgmt</b> <b>msap-policy</b> <i>string</i> <b>vpls-only-sap-parameters</b> <b>igmp-snooping</b> <b>mcac</b> <b>mc-constraints</b> <b>number-down</b> <i>number</i> |
| Tree       | <b>number-down</b>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**[number-lag-port-down]** *number*

|            |  |
|------------|--|
| Synopsis   | Number of lag ports down   |
| Context    | <b>configure</b> <b>subscriber-mgmt</b> <b>msap-policy</b> <i>string</i> <b>vpls-only-sap-parameters</b> <b>igmp-snooping</b> <b>mcac</b> <b>mc-constraints</b> <b>number-down</b> <i>number</i> |
| Tree       | <b>number-down</b>   |
| Range      | 1 to 64  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**level** *number*

|          |  |
|----------|--|
| Synopsis | Level to be associated with this number of lag ports that are down |
|----------|--|

|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">igmp-snooping</a> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">number-down</a> <i>number level number</i> |
| Tree       | <a href="#">level</a>  |
| Range      | 1 to 8   |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **use-lag-port-weight** *boolean*

|            |  |
|------------|--|
| Synopsis   | Use LAG port weight to calculate MCAC constraints  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">igmp-snooping</a> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">use-lag-port-weight</a> <i>boolean</i> |
| Tree       | <a href="#">use-lag-port-weight</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **policy** *reference*

|            |  |
|------------|--|
| Synopsis   | Multicast CAC policy name  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">igmp-snooping</a> <a href="#">mcac</a> <a href="#">policy</a> <i>reference</i> |
| Tree       | <a href="#">policy</a>   |
| Reference  | <b>configure</b> <a href="#">mcac</a> <a href="#">policy</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **mvr**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mvr</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">igmp-snooping</a> <a href="#">mvr</a> |
| Tree       | <a href="#">mvr</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **from-vpls** *reference*

|            |   |
|------------|---|
| Synopsis   | MVR VPLS from which the multicast channels are taken  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">igmp-snooping</a> <a href="#">mvr</a> <b>from-vpls</b> <i>reference</i> |
| Tree       | <a href="#">from-vpls</a>   |
| Reference  | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **query-interval** *number*

|            |  |
|------------|--|
| Synopsis   | Time between two consecutive host-query messages   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">igmp-snooping</a> <a href="#">query-interval</a> <i>number</i> |
| Tree       | <a href="#">query-interval</a>   |
| Range      | 2 to 1024  |
| Units      | seconds  |
| Default    | 125  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **query-last-member-interval** *number*

|            |  |
|------------|--|
| Synopsis   | Time between group-specific query messages   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">igmp-snooping</a> <a href="#">query-last-member-interval</a> <i>number</i> |
| Tree       | <a href="#">query-last-member-interval</a>   |
| Range      | 1 to 50  |
| Units      | deciseconds  |
| Default    | 10   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**query-response-interval** *number*

|            |  |
|------------|--|
| Synopsis   | Time to wait for a response to the host-query messages   |
| Context    | <b>configure</b> <b>subscriber-mgmt</b> <b>msap-policy</b> <i>string</i> <b>vpls-only-sap-parameters</b> <b>igmp-snooping</b> <b>query-response-interval</b> <i>number</i> |
| Tree       | <b>query-response-interval</b>   |
| Range      | 1 to 1023  |
| Units      | seconds  |
| Default    | 10   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**robust-count** *number*

|            |   |
|------------|---|
| Synopsis   | Number of retries after expected message loss   |
| Context    | <b>configure</b> <b>subscriber-mgmt</b> <b>msap-policy</b> <i>string</i> <b>vpls-only-sap-parameters</b> <b>igmp-snooping</b> <b>robust-count</b> <i>number</i> |
| Tree       | <b>robust-count</b>   |
| Range      | 2 to 7  |
| Default    | 2   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**send-queries** *boolean*

|            |  |
|------------|--|
| Synopsis   | Generate IGMP general queries  |
| Context    | <b>configure</b> <b>subscriber-mgmt</b> <b>msap-policy</b> <i>string</i> <b>vpls-only-sap-parameters</b> <b>igmp-snooping</b> <b>send-queries</b> <i>boolean</i> |
| Tree       | <b>send-queries</b>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**version** *keyword*

|          |              |
|----------|--------------|
| Synopsis | IGMP version |
|----------|--------------|

|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">igmp-snooping</a> <a href="#">version</a> <i>keyword</i> |
| Tree       | <a href="#">version</a>  |
| Options    | 1, 2, 3  |
| Default    | 3  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## ingress

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ingress</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">ingress</a> |
| Tree       | <a href="#">ingress</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## qos

|            |   |
|------------|---|
| Synopsis   | Enter the <b>qos</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">ingress</a> <a href="#">qos</a> |
| Tree       | <a href="#">qos</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## policy-name *reference*

|            |  |
|------------|--|
| Synopsis   | QoS policy ID or name to associate with the MSAPs  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>  |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">sap-ingress</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**queuing-type** *keyword*

|            |   |
|------------|---|
| Synopsis   | Queuing type  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">ingress qos</a> <a href="#">queuing-type</a> <i>keyword</i> |
| Tree       | <a href="#">queuing-type</a>  |
| Options    | multipoint-shared, service  |
| Default    | multipoint-shared   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**mac-da-hashing** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include hashing on MAC DA ISO subscriber ID   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">mac-da-hashing</a> <i>boolean</i> |
| Tree       | <a href="#">mac-da-hashing</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**split-horizon-group** *string*

|               |   |
|---------------|---|
| Synopsis      | Name of the split horizon group for the MSAP  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">split-horizon-group</a> <i>string</i> |
| Tree          | <a href="#">split-horizon-group</a>   |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**pfcp**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>pfcp</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">pfcp</a> |
| Tree       | <a href="#">pfcp</a>  |
| Introduced | 20.5.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **association** *[name] string*

Synopsis Enter the **association** list instance

Context **configure subscriber-mgmt pfcf association string**

Tree [association](#)

Description Commands in this context configure a PFCP association towards a BNG CUPS CPF.

Max. Instances 1

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[name] string**

Synopsis PFCP association name

Context **configure subscriber-mgmt pfcf association string**

Tree [association](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the PFCP association

Context **configure subscriber-mgmt pfcf association string admin-state keyword**

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**association-release-timeout** (*keyword | number*)

|             |   |
|-------------|---|
| Synopsis    | Time to wait for a response to a release request  |
| Context     | <b>configure subscriber-mgmt pfcg association</b> <i>string</i> <b>association-release-timeout</b> ( <i>keyword   number</i> )  |
| Tree        | <a href="#">association-release-timeout</a>   |
| Description | <p>This command configures the time to wait to clean up the PFCP association after it has been disabled. After administratively disabling a PFCP association, the system requests a shutdown to the BNG CPF. If the BNG CPF does not gracefully remove the association before expiry of the timer, the full association and all related sessions are forcefully removed.</p> <p>The PFCP protocol encoding does not allow the full range of configured values. The system automatically rounds up the configured value to the nearest value allowed by the protocol. For more information about the protocol encoding, see 3GPP TS 29.244 8.2.78.1.</p> |
| Range       | 30 to 3600  |
| Units       | seconds   |
| Options     | none  |
| Default     | 3600  |
| Introduced  | 20.5.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**association-setup-retry** *number*

|             |  |
|-------------|--|
| Synopsis    | Time to wait between successive association attempts   |
| Context     | <b>configure subscriber-mgmt pfcg association</b> <i>string</i> <b>association-setup-retry</b> <i>number</i> |
| Tree        | <a href="#">association-setup-retry</a>  |
| Description | This command configures the time to wait before attempting a retry after a PFCP association setup fails.     |
| Range       | 1 to 36000   |
| Units       | seconds  |
| Default     | 10   |
| Introduced  | 20.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**bfd-expedited-path-down** *boolean*

|          |   |
|----------|---|
| Synopsis | Track BFD sessions to expedite PFCP path down detection |
|----------|---|



|             |  |
|-------------|--|
| Context     | <b>configure subscriber-mgmt pfcf association</b> <i>string</i> <b>bfd-expedited-path-down</b> <i>boolean</i>  |
| Tree        | <b>bfd-expedited-path-down</b>   |
| Description | When configured to <b>true</b> , the system tracks BFD sessions to expedite PFCF path down detection on BFD down events. This requires the configuration of <b>path-restoration-time</b> . |
| Default     | false  |
| Introduced  | 22.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure subscriber-mgmt pfcf association</b> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <b>description</b>   |
| String Length | 1 to 80  |
| Introduced    | 20.5.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **heartbeat**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>heartbeat</b> context   |
| Context     | <b>configure subscriber-mgmt pfcf association</b> <i>string</i> <b>heartbeat</b>                                   |
| Tree        | <b>heartbeat</b>   |
| Description | Commands in this context configure the parameters for transmitting PFCF Heartbeat Request messages to a PFCF peer. |
| Introduced  | 20.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **interval** *number*

|          |   |
|----------|---|
| Synopsis | Time between two successful heartbeat request messages  |
| Context  | <b>configure subscriber-mgmt pfcf association</b> <i>string</i> <b>heartbeat interval</b> <i>number</i> |
| Tree     | <b>interval</b>   |
| Range    | 5 to 180  |
| Units    | seconds   |
| Default  | 60  |

|            |   |
|------------|---|
| Introduced | 20.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **retries** *number*

|             |   |
|-------------|---|
| Synopsis    | Number of retries after the heartbeat timeout expires   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt pfcg association</a> <i>string</i> <a href="#">heartbeat retries</a> <i>number</i>     |
| Tree        | <a href="#">retries</a>   |
| Description | This command configures the number of times the same Heartbeat Request is sent before the PFCP path to the peer is considered down. |
| Range       | 0 to 15   |
| Default     | 4   |
| Introduced  | 20.5.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **timeout** *number*

|             |   |
|-------------|---|
| Synopsis    | Time the system waits for a heartbeat response message  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt pfcg association</a> <i>string</i> <a href="#">heartbeat timeout</a> <i>number</i> |
| Tree        | <a href="#">timeout</a>   |
| Description | This command configures the timeout after which a Heartbeat Request is considered unanswered.                                   |
| Range       | 1 to 20   |
| Units       | seconds   |
| Default     | 5   |
| Introduced  | 20.5.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **interface**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>interface</b> context  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt pfcg association</a> <i>string</i> <a href="#">interface</a>                           |
| Tree        | <a href="#">interface</a>   |
| Description | Commands in this context configure the interface from which PFCP messages will be sent and on which PFCP messages will be received. |
| Introduced  | 20.5.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### name *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Name of the interface to use for the association

Context **configure subscriber-mgmt pfcg association string interface name string**

Tree **name**

String Length 1 to 32

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### router-instance *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Router context for the PFCP association

Context **configure subscriber-mgmt pfcg association string interface router-instance string**

Tree **router-instance**

Description This command configures the name of the interface, along with its routing instance, used as binding interface for PFCP.

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### nat

Synopsis Enter the **nat** context

Context **configure subscriber-mgmt pfcg association string nat**

Tree **nat**

Description Commands in this context configure NAT or WLAN-GW groups for BNG CUPS PFCP association.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nat-group** *reference*

Synopsis NAT group used for CUPS NAT functionality

Context **configure** [subscriber-mgmt pfcf association](#) *string* [nat nat-group](#) *reference*

Tree [nat-group](#)

Reference **configure** [isa nat-group](#) *number*

Notes The following elements are part of a choice: **nat-group** or **wlan-gw-group**.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **wlan-gw-group** *reference*

Synopsis WLAN gateway group used for CUPS NAT functionality

Context **configure** [subscriber-mgmt pfcf association](#) *string* [nat wlan-gw-group](#) *reference*

Tree [wlan-gw-group](#)

Reference **configure** [isa wlan-gw-group](#) *number*

Notes The following elements are part of a choice: **nat-group** or **wlan-gw-group**.

Introduced 20.10.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **node-id**

Synopsis Enter the **node-id** context

Context **configure** [subscriber-mgmt pfcf association](#) *string* [node-id](#)

Tree [node-id](#)

Description Commands in this context configure the UPF Node Identifier as sent in PFCP. It can either be configured to use the linked interface source IP or a preconfigured FQDN.

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## fqdn string

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | FQDN that identifies the local system for PFCP   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt pfcp association</a> <i>string</i> <a href="#">node-id</a> <a href="#">fqdn</a> <i>string</i> |
| Tree          | <a href="#">fqdn</a>   |
| String Length | 1 to 255   |
| Notes         | The following elements are part of a choice: <b>fqdn</b> or <b>use-ip-address</b> .  |
| Introduced    | 20.5.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## use-ip-address

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Use the IP address of interface for the association  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt pfcp association</a> <i>string</i> <a href="#">node-id</a> <a href="#">use-ip-address</a> |
| Tree        | <a href="#">use-ip-address</a>   |
| Description | When configured, the binding interface address is used as identification of the local system for PFCP.                                 |
| Notes       | The following elements are part of a choice: <b>fqdn</b> or <b>use-ip-address</b> .  |
| Introduced  | 20.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## path-restoration-time number

|             |  |
|-------------|--|
| Synopsis    | Time to wait before declaring the path down  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt pfcp association</a> <i>string</i> <a href="#">path-restoration-time</a> <i>number</i>  |
| Tree        | <a href="#">path-restoration-time</a>  |
| Description | This command configures the time for which sessions are kept after a PFCP path failure is detected. If the path recovers without a restart before this time expires, the sessions are kept. Otherwise, they are removed. |
| Range       | 5 to 1440  |

|            |   |
|------------|---|
| Units      | minutes   |
| Introduced | 20.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## peer

|            |  |
|------------|--|
| Synopsis   | Enter the <b>peer</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt pfcg association</a> <i>string</i> <a href="#">peer</a> |
| Tree       | <a href="#">peer</a>   |
| Introduced | 20.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | PFCP peer IP address  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt pfcg association</a> <i>string</i> <a href="#">peer ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <a href="#">ip-address</a>  |
| Introduced | 20.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## python-policy *reference*

|            |  |
|------------|--|
| Synopsis   | Python policy to process PFCP messages   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt pfcg association</a> <i>string</i> <a href="#">python-policy</a> <i>reference</i> |
| Tree       | <a href="#">python-policy</a>  |
| Reference  | <b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i>  |
| Introduced | 22.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**tx**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>tx</b> context                                    |
| Context     | <b>configure subscriber-mgmt pfcg association string tx</b>    |
| Tree        | <b>tx</b>  |
| Description | Commands in this context configure how PFCP messages are sent. |
| Introduced  | 20.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR        |

**retries number**

|             |  |
|-------------|--|
| Synopsis    | Number of retries  |
| Context     | <b>configure subscriber-mgmt pfcg association string tx retries number</b>                                       |
| Tree        | <b>retries</b>   |
| Description | This command configures the number of times a message is retried before it is considered lost, also known as N1. |
| Range       | 0 to 7   |
| Default     | 3  |
| Introduced  | 20.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**timeout number**

|             |  |
|-------------|--|
| Synopsis    | Retransmission timer   |
| Context     | <b>configure subscriber-mgmt pfcg association string tx timeout number</b>                         |
| Tree        | <b>timeout</b>   |
| Description | This command configures the time after which a message is considered unanswered, also known as T1. |
| Range       | 1 to 30  |
| Units       | seconds  |
| Default     | 5  |
| Introduced  | 20.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**ttl number**

|            |   |
|------------|---|
| Synopsis   | TTL value in the IP header of egress PFCP packets   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt pfcg association</a> <i>string tx ttl number</i> |
| Tree       | <a href="#">ttl</a>   |
| Range      | 1 to 255  |
| Default    | 255   |
| Introduced | 20.5.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                       |

**up-resiliency**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>up-resiliency</b> context                              |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt pfcg up-resiliency</a> |
| Tree       | <a href="#">up-resiliency</a>                                       |
| Introduced | 22.2.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR             |

**pim-policy [name] string**

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>pim-policy</b> list instance                                 |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt pim-policy</a> <i>string</i> |
| Tree           | <a href="#">pim-policy</a>  |
| Max. Instances | 1   |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                   |

**[name] string**

|               |   |
|---------------|---|
| Synopsis      | Policy name   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt pim-policy</a> <i>string</i> |
| Tree          | <a href="#">pim-policy</a>  |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.                                       |
| Introduced    | 16.0.R1   |



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
Context **configure** [subscriber-mgmt pim-policy](#) *string* [description](#) *string*  
Tree [description](#)  
String Length 1 to 80  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ppp-policy** [[name](#)] *string*

Synopsis Enter the **ppp-policy** list instance  
Context **configure** [subscriber-mgmt ppp-policy](#) *string*  
Tree [ppp-policy](#)  
Max. Instances 256  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis PPP policy name  
Context **configure** [subscriber-mgmt ppp-policy](#) *string*  
Tree [ppp-policy](#)  
String Length 1 to 32  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **allow-same-circuit-id-for-dhcp** *boolean*

Synopsis Enable support for IPv4 address allocation on a SAP  
Context **configure** [subscriber-mgmt ppp-policy](#) *string* [allow-same-circuit-id-for-dhcp](#) *boolean*

|            |   |
|------------|---|
| Tree       | <a href="#">allow-same-circuit-id-for-dhcp</a>          |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **cookies** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable/disable the use of AC-Cookie tags.  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">cookies</a> <i>boolean</i> |
| Tree       | <a href="#">cookies</a>  |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **default-pap-password** *string*

|               |  |
|---------------|--|
| Synopsis      | Default PAP password when no password from PPP client  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">default-pap-password</a> <i>string</i> |
| Tree          | <a href="#">default-pap-password</a>   |
| String Length | 1 to 115   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **default-user-name** *string*

|               |   |
|---------------|---|
| Synopsis      | Default username used for authentication  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">default-user-name</a> <i>string</i>   |
| Tree          | <a href="#">default-user-name</a>   |
| Description   | This command configures the default username for authentication when not provided in PAP/CHAP authentication (no Name field in CHAP Response message or PeerOld-Length=0 in PAP Authenticate-Request).<br><br>The PPP session terminates when no username is provided in the PAP/CHAP authentication and no default username is configured. |
| String Length | 1 to 253  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**description string**

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**force-ppp-mtu-gt-1492 boolean**

|             |  |
|-------------|--|
| Synopsis    | Enable PPPoE MRU negotiations greater than 1492 bytes  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">force-ppp-mtu-gt-1492</a> <i>boolean</i>   |
| Tree        | <a href="#">force-ppp-mtu-gt-1492</a>  |
| Description | <p>When configured to <b>true</b>, this command enables PPPoE MRU negotiations greater than 1492 bytes without the need to receive a “PPP-Max-Payload” tag in PADI/PADR from the client as defined in RFC 4638, <i>Accommodating a Maximum Transit Unit/Maximum Receive Unit (MTU/MRU) Greater Than 1492 in the Point-to-Point Protocol over Ethernet (PPPoE)</i>.</p> <p>When configured to <b>false</b>, this command disables PPPoE MRU negotiations greater than 1492 bytes.</p> |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**ipcp-subnet-negotiation boolean**

|            |  |
|------------|--|
| Synopsis   | Allow IPCP subnet negotiation for PPPoE hosts  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">ipcp-subnet-negotiation</a> <i>boolean</i> |
| Tree       | <a href="#">ipcp-subnet-negotiation</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**keepalive**

|          |                                    |
|----------|------------------------------------|
| Synopsis | Enter the <b>keepalive</b> context |
|----------|------------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">keepalive</a> |
| Tree       | <a href="#">keepalive</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **hold-up-multiplier** *number*

|            |  |
|------------|--|
| Synopsis   | PPP keepalive multiplier   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">keepalive</a> <a href="#">hold-up-multiplier</a> <i>number</i> |
| Tree       | <a href="#">hold-up-multiplier</a>   |
| Range      | 1 to 5   |
| Default    | 3  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **interval** *number*

|            |  |
|------------|--|
| Synopsis   | PPP keepalive interval   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">keepalive</a> <a href="#">interval</a> <i>number</i> |
| Tree       | <a href="#">interval</a>   |
| Range      | 4 to 300   |
| Units      | seconds  |
| Default    | 30   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **lcp-ignore-identifier** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Ignore identifier values in the LCP Echo Reply  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">lcp-ignore-identifier</a> <i>boolean</i>  |
| Tree        | <a href="#">lcp-ignore-identifier</a>   |
| Description | When configured to <b>true</b> , BNG ignores the Identifier field of the Echo-Reply message and keeps the PPP session up.<br>When configured to <b>false</b> , BNG does not ignore the identifier value, discards any incorrect messages, and the PPP session terminates because of the echo timeout. |
| Default     | false   |

Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lcp-ignore-magic-numbers** *boolean*

Synopsis Ignore LCP peer magic number mismatch  
 Context **configure** [subscriber-mgmt](#) [ppp-policy](#) *string* [lcp-ignore-magic-numbers](#) *boolean*  
 Tree [lcp-ignore-magic-numbers](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max-sessions-per-cid**

Synopsis Enable the **max-sessions-per-cid** context  
 Context **configure** [subscriber-mgmt](#) [ppp-policy](#) *string* [max-sessions-per-cid](#)  
 Tree [max-sessions-per-cid](#)  
 Introduced 20.5.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **allow-sessions-without-cid** *boolean*

Synopsis Allow PPPoE sessions without an Agent Circuit ID  
 Context **configure** [subscriber-mgmt](#) [ppp-policy](#) *string* [max-sessions-per-cid](#) [allow-sessions-without-cid](#) *boolean*  
 Tree [allow-sessions-without-cid](#)  
 Description When configured to **true**, PPPoE sessions without an Agent Circuit ID can be established on a SAP. The limit configured for the maximum number of sessions allowed per Agent Circuit ID does not apply to these sessions.  
 When configured to **false**, PPPoE sessions without an Agent Circuit ID are denied.  
 The command is valid only when a limit is configured for the maximum sessions per Agent Circuit ID on a SAP.  
 Default false  
 Introduced 20.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**limit number**

|             |  |
|-------------|--|
| Synopsis    | Maximum sessions per Agent Circuit ID and per SAP  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">max-sessions-per-cid</a> <a href="#">limit</a> <i>number</i>   |
| Tree        | <a href="#">limit</a>  |
| Description | <p>This command configures the maximum number of PPPoE sessions that can be active with the same Agent Circuit ID on the same SAP or MSAP. This limit is enforced in the discovery phase, prior to PAP or CHAP authentication, based on the Agent Circuit ID sub-option present in the vendor-specific PPPoE access loop identification tag added in PADI and PADR messages by a PPPoE intermediate agent.</p> <p>PPPoE sessions without an Agent Circuit ID are not subject to the configured limit; however, sessions without an Agent Circuit ID can only be established when the <b>allow-sessions-without-cid</b> command is configured to <b>true</b>.</p> |
| Range       | 1 to 8190  |
| Notes       | This element is mandatory.   |
| Introduced  | 20.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**max-sessions-per-mac number**

|             |  |
|-------------|--|
| Synopsis    | Maximum number of sessions per MAC address   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">max-sessions-per-mac</a> <i>number</i>   |
| Tree        | <a href="#">max-sessions-per-mac</a>   |
| Description | <p>This command sets the maximum PPP sessions that can be opened for a specified MAC address.</p> <p>To enable IPv4 address allocation using the internal DHCPv4 client for multiple PPPoE sessions on a single SAP and having the same MAC address and circuit-ID, the optional CLI parameter <b>allow-same-circuit-id-for-dhcp</b> should be added. The SR OS local DHCP server detects the additional vendor-specific options inserted by the internal DHCPv4 client and use an extended unique key for lease allocation.</p> |
| Range       | 1 to 8191  |
| Default     | 1  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**mlppp**

|          |   |
|----------|---|
| Synopsis | Enter the <b>mlppp</b> context  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">mlppp</a> |

|            |  |
|------------|--|
| Tree       | <a href="#">mlppp</a>                              |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

### **accept-mrru** *boolean*

|            |  |
|------------|--|
| Synopsis   | Accept multilink MRRU LCP option   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">mlppp</a> <a href="#">accept-mrru</a> <i>boolean</i> |
| Tree       | <a href="#">accept-mrru</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

### **endpoint**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>endpoint</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">mlppp</a> <a href="#">endpoint</a> |
| Tree       | <a href="#">endpoint</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

### **ip** (*ipv4-address* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Endpoint ID as an IP address   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">mlppp</a> <a href="#">endpoint</a> <a href="#">ip</a> ( <i>ipv4-address</i>   <i>keyword</i> ) |
| Tree       | <a href="#">ip</a>   |
| Options    | system   |
| Notes      | The following elements are part of a choice: <b>ip</b> or <b>mac</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

### **mac** (*mac-address* | *keyword*)

|          |                              |
|----------|------------------------------|
| Synopsis | Endpoint ID as a MAC address |
|----------|------------------------------|

|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">mlppp</a> <a href="#">endpoint</a> <a href="#">mac</a> ( <i>mac-address</i>   <i>keyword</i> ) |
| Tree       | <a href="#">mac</a>  |
| Options    | system   |
| Notes      | The following elements are part of a choice: <b>ip</b> or <b>mac</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

### **short-sequence-numbers** *boolean*

|            |   |
|------------|---|
| Synopsis   | Request a peer to send short sequence numbers   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">mlppp</a> <a href="#">short-sequence-numbers</a> <i>boolean</i> |
| Tree       | <a href="#">short-sequence-numbers</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s  |

### **ncp-renegotiation** *keyword*

|            |  |
|------------|--|
| Synopsis   | Behavior for subsequent NCP renegotiation messages   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">ncp-renegotiation</a> <i>keyword</i> |
| Tree       | <a href="#">ncp-renegotiation</a>  |
| Options    | ignore, terminate-session  |
| Default    | terminate-session  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **pado-ac-name** *string*

|               |  |
|---------------|--|
| Synopsis      | Access Concentrator name used in PPPoE PADO message  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">pado-ac-name</a> <i>string</i> |
| Tree          | <a href="#">pado-ac-name</a>   |
| String Length | 1 to 128   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |



### **pado-delay** *number*

|            |  |
|------------|--|
| Synopsis   | Delay timeout before sending a PADO  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">pado-delay</a> <i>number</i> |
| Tree       | <a href="#">pado-delay</a>   |
| Range      | 1 to 30  |
| Units      | deciseconds  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **ppp-authentication** *keyword*

|            |   |
|------------|---|
| Synopsis   | PPP authentication protocol to negotiate  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">ppp-authentication</a> <i>keyword</i> |
| Tree       | <a href="#">ppp-authentication</a>  |
| Options    | pap, chap, pref-chap, pref-pap  |
| Default    | pref-chap   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ppp-chap-challenge-length**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ppp-chap-challenge-length</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">ppp-chap-challenge-length</a> |
| Tree       | <a href="#">ppp-chap-challenge-length</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **max** *number*

|          |   |
|----------|---|
| Synopsis | Maximum length for the PPP CHAP challenge   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">ppp-chap-challenge-length</a> <a href="#">max</a> <i>number</i> |
| Tree     | <a href="#">max</a>   |
| Range    | 8 to 64   |
| Default  | 64  |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **min** *number*

|            |  |
|------------|--|
| Synopsis   | Minimum length for the PPP CHAP challenge  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">ppp-chap-challenge-length</a> <i>min</i> <i>number</i> |
| Tree       | <a href="#">min</a>  |
| Range      | 8 to 64  |
| Default    | 32   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **ppp-initial-delay** *boolean*

|            |  |
|------------|--|
| Synopsis   | Select delay timeout before starting the PPP stack   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">ppp-initial-delay</a> <i>boolean</i> |
| Tree       | <a href="#">ppp-initial-delay</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **ppp-mtu** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum PPP MTU size  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">ppp-mtu</a> <i>number</i> |
| Tree       | <a href="#">ppp-mtu</a>   |
| Range      | 512 to 9212   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ppp-options**

|          |   |
|----------|---|
| Synopsis | Enter the <b>ppp-options</b> context  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">ppp-options</a> |

|            |   |
|------------|---|
| Tree       | <a href="#">ppp-options</a>                             |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **custom-option** [protocol](#) *keyword* [option-number](#) *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>custom-option</b> list instance  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">ppp-options</a> <a href="#">custom-option</a> <a href="#">protocol</a> <i>keyword</i> <a href="#">option-number</a> <i>number</i> |
| Tree       | <a href="#">custom-option</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **protocol** *keyword*

|            |   |
|------------|---|
| Synopsis   | Protocol for the custom PPP option  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">ppp-options</a> <a href="#">custom-option</a> <a href="#">protocol</a> <i>keyword</i> <a href="#">option-number</a> <i>number</i> |
| Tree       | <a href="#">custom-option</a>   |
| Options    | lcp, ipcp, ipv6cp   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **option-number** *number*

|            |   |
|------------|---|
| Synopsis   | PPP option number   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">ppp-options</a> <a href="#">custom-option</a> <a href="#">protocol</a> <i>keyword</i> <a href="#">option-number</a> <i>number</i> |
| Tree       | <a href="#">custom-option</a>   |
| Range      | 0 to 255  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**address string**

|            |  |
|------------|--|
| Synopsis   | IP address of the custom PPP option  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">ppp-options</a> <a href="#">custom-option</a> <a href="#">protocol</a><br><i>keyword</i> <a href="#">option-number</a> <i>number</i> <a href="#">address</a> <i>string</i> |
| Tree       | <a href="#">address</a>  |
| Notes      | The following elements are part of a mandatory choice: <b>address</b> , <b>ascii-string</b> , <b>empty</b> , or <b>hex-string</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**ascii-string string**

|               |   |
|---------------|---|
| Synopsis      | ASCII string for the customer PPP option  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">ppp-options</a> <a href="#">custom-option</a> <a href="#">protocol</a><br><i>keyword</i> <a href="#">option-number</a> <i>number</i> <a href="#">ascii-string</a> <i>string</i> |
| Tree          | <a href="#">ascii-string</a>  |
| String Length | 1 to 127  |
| Notes         | The following elements are part of a mandatory choice: <b>address</b> , <b>ascii-string</b> , <b>empty</b> , or <b>hex-string</b> .   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**empty**

|            |  |
|------------|--|
| Synopsis   | Configure an empty PPP option.   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">ppp-options</a> <a href="#">custom-option</a> <a href="#">protocol</a><br><i>keyword</i> <a href="#">option-number</a> <i>number</i> <a href="#">empty</a> |
| Tree       | <a href="#">empty</a>  |
| Notes      | The following elements are part of a mandatory choice: <b>address</b> , <b>ascii-string</b> , <b>empty</b> , or <b>hex-string</b> .  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**hex-string string**

|          |  |
|----------|--|
| Synopsis | Hexadecimal string for the custom PPP option |
|----------|--|

|               |   |
|---------------|---|
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">ppp-options</a> <a href="#">custom-option</a> <a href="#">protocol keyword</a> <a href="#">option-number</a> <i>number</i> <a href="#">hex-string</a> <i>string</i> |
| Tree          | <a href="#">hex-string</a>  |
| String Length | 1 to 256  |
| Notes         | The following elements are part of a mandatory choice: <b>address</b> , <b>ascii-string</b> , <b>empty</b> , or <b>hex-string</b> .   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **re-establish-session** *boolean*

|            |   |
|------------|---|
| Synopsis   | Reconnect and override an existing session  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">re-establish-session</a> <i>boolean</i> |
| Tree       | <a href="#">re-establish-session</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **reject-unconfigured-ncp** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable/disable reject unconfigured NCP.  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">reject-unconfigured-ncp</a> <i>boolean</i> |
| Tree       | <a href="#">reject-unconfigured-ncp</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **reply-on-padt** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable/disable reply on PADT packets.  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">reply-on-padt</a> <i>boolean</i> |
| Tree       | <a href="#">reply-on-padt</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**session-timeout** *number*

|            |  |
|------------|--|
| Synopsis   | Session timeout interval   |
| Context    | <b>configure</b> <b>subscriber-mgmt</b> <b>ppp-policy</b> <i>string</i> <b>session-timeout</b> <i>number</i> |
| Tree       | <b>session-timeout</b>   |
| Range      | 1 to 31104000  |
| Units      | seconds  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**sid-allocation** *keyword*

|             |   |
|-------------|---|
| Synopsis    | PPPoE session ID allocation method  |
| Context     | <b>configure</b> <b>subscriber-mgmt</b> <b>ppp-policy</b> <i>string</i> <b>sid-allocation</b> <i>keyword</i>                      |
| Tree        | <b>sid-allocation</b>   |
| Description | This command determines the allocation of session IDs for a PPPoE session with a given MAC address that is active on a given SAP. |
| Options     | sequential, random  |
| Default     | sequential  |
| Introduced  | 20.2.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**unique-sid** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Mode in which a unique session ID is allocated  |
| Context     | <b>configure</b> <b>subscriber-mgmt</b> <b>ppp-policy</b> <i>string</i> <b>unique-sid</b> <i>keyword</i>  |
| Tree        | <b>unique-sid</b>   |
| Description | This command specifies how unique session IDs are assigned to PPPoE sessions that are active on a single SAP.<br><br>This command is used with the <b>sid-allocation</b> command to determine the assignment of session IDs to subsequent PPPoE sessions. |
| Options     | per-sap, per-sap-mac, per-msap  |
| Default     | per-sap-mac   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**pppoe-client-policy** [*name*] *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>pppoe-client-policy</b> list instance   |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">pppoe-client-policy</a> <i>string</i> |
| Tree           | <a href="#">pppoe-client-policy</a>  |
| Max. Instances | 256  |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**[name]** *string*

|               |  |
|---------------|--|
| Synopsis      | PPPoE client policy name   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">pppoe-client-policy</a> <i>string</i> |
| Tree          | <a href="#">pppoe-client-policy</a>  |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">pppoe-client-policy</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**keepalive**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>keepalive</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">pppoe-client-policy</a> <i>string</i> <a href="#">keepalive</a> |
| Tree       | <a href="#">keepalive</a>  |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **hold-up-multiplier** *number*

Synopsis PPPoE keepalive multiplier

Context **configure** [subscriber-mgmt](#) [pppoe-client-policy](#) *string* [keepalive](#) **hold-up-multiplier** *number*

Tree [hold-up-multiplier](#)

Range 1 to 5

Default 3

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **interval** *number*

Synopsis PPPoE keepalive interval

Context **configure** [subscriber-mgmt](#) [pppoe-client-policy](#) *string* [keepalive](#) **interval** *number*

Tree [interval](#)

Range 10 to 300

Units seconds

Default 30

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mru** *number*

Synopsis PPPoE MRU

Context **configure** [subscriber-mgmt](#) [pppoe-client-policy](#) *string* **mru** *number*

Tree [mru](#)

Range 512 to 9154

Default 1492

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



### **mtu number**

|            |  |
|------------|--|
| Synopsis   | PPPoE MTU  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">pppoe-client-policy</a> <i>string</i> <a href="#">mtu</a> <i>number</i> |
| Tree       | <a href="#">mtu</a>  |
| Range      | 512 to 9154  |
| Default    | 1492   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **python-policy reference**

|            |   |
|------------|---|
| Synopsis   | Python policy for all messages to and from PPPoE client   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">pppoe-client-policy</a> <i>string</i> <a href="#">python-policy</a> <i>reference</i> |
| Tree       | <a href="#">python-policy</a>   |
| Reference  | <b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **restart-backoff**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>restart-backoff</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">pppoe-client-policy</a> <i>string</i> <a href="#">restart-backoff</a> |
| Tree       | <a href="#">restart-backoff</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **initial-time number**

|            |   |
|------------|---|
| Synopsis   | Initial backoff time  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">pppoe-client-policy</a> <i>string</i> <a href="#">restart-backoff</a> <a href="#">initial-time</a> <i>number</i> |
| Tree       | <a href="#">initial-time</a>  |
| Range      | 10 to 3600  |
| Units      | seconds   |
| Default    | 30  |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max-time** *number*

Synopsis Maximum backoff time

Context **configure** [subscriber-mgmt pppoe-client-policy](#) *string* [restart-backoff max-time](#) *number*

Tree [max-time](#)

Range 10 to 3600

Units seconds

Default 600

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **stack**

Synopsis Enter the **stack** context

Context **configure** [subscriber-mgmt pppoe-client-policy](#) *string* [stack](#)

Tree [stack](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv4** *boolean*

Synopsis Start IPCP to retrieve an IPv4 address

Context **configure** [subscriber-mgmt pppoe-client-policy](#) *string* [stack ipv4](#) *boolean*

Tree [ipv4](#)

Default true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv6-slaac** *boolean*

Synopsis Start IPv6CP and use SLAAC to retrieve an IPv6 prefix

Context **configure** [subscriber-mgmt pppoe-client-policy](#) *string* [stack ipv6-slaac](#) *boolean*

Tree [ipv6-slaac](#)

|            |   |
|------------|---|
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **radius-accounting-policy** [*name*] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>radius-accounting-policy</b> list instance                                 |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> |
| Tree           | <a href="#">radius-accounting-policy</a>  |
| Max. Instances | 32  |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                 |

### **[name]** *string*

|               |   |
|---------------|---|
| Synopsis      | RADIUS-based accounting policy name   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> |
| Tree          | <a href="#">radius-accounting-policy</a>  |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                 |

### **acct-tunnel-connection-fmt** *string*

|               |  |
|---------------|--|
| Synopsis      | String sent in the accounting message  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">acct-tunnel-connection-fmt</a> <i>string</i> |
| Tree          | <a href="#">acct-tunnel-connection-fmt</a>   |
| String Length | 1 to 253   |
| Default       | %n   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**custom-record**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>custom-record</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> |
| Tree       | <a href="#">custom-record</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**queue [id] number**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>queue</b> list instance  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i> |
| Tree       | <a href="#">queue</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**[id] number**

|            |   |
|------------|---|
| Synopsis   | Queue ID for which counters are collected in the record   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i> |
| Tree       | <a href="#">queue</a>   |
| Range      | 1 to 32   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**e-counters**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>e-counters</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i> <a href="#">e-counters</a> |
| Tree       | <a href="#">e-counters</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**in-profile-octets-discarded-count** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include the in-profile octets discarded count   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i> <a href="#">e-counters</a> <a href="#">in-profile-octets-discarded-count</a> <i>boolean</i> |
| Tree       | <a href="#">in-profile-octets-discarded-count</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**in-profile-octets-forwarded-count** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include the in-profile octets forwarded count   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i> <a href="#">e-counters</a> <a href="#">in-profile-octets-forwarded-count</a> <i>boolean</i> |
| Tree       | <a href="#">in-profile-octets-forwarded-count</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**in-profile-packets-discarded-count** *boolean*

|            |  |
|------------|--|
| Synopsis   | Include the in-profile packets discarded count   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i> <a href="#">e-counters</a> <a href="#">in-profile-packets-discarded-count</a> <i>boolean</i> |
| Tree       | <a href="#">in-profile-packets-discarded-count</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**in-profile-packets-forwarded-count** *boolean*

|          |  |
|----------|--|
| Synopsis | Include the in-profile packets forwarded count   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i> <a href="#">e-counters</a> <a href="#">in-profile-packets-forwarded-count</a> <i>boolean</i> |
| Tree     | <a href="#">in-profile-packets-forwarded-count</a>   |

---

|            |   |
|------------|---|
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **out-profile-octets-discarded-count** *boolean*

|            |  |
|------------|--|
| Synopsis   | Include the out-profile octets discarded count   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <a href="#">number</a> <a href="#">e-counters</a> <b>out-profile-octets-discarded-count</b> <i>boolean</i> |
| Tree       | <a href="#">out-profile-octets-discarded-count</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **out-profile-octets-forwarded-count** *boolean*

|            |  |
|------------|--|
| Synopsis   | Include the out-of-profile octets forwarded count  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <a href="#">number</a> <a href="#">e-counters</a> <b>out-profile-octets-forwarded-count</b> <i>boolean</i> |
| Tree       | <a href="#">out-profile-octets-forwarded-count</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **out-profile-packets-discarded-count** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include the out-profile packets discarded count   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <a href="#">number</a> <a href="#">e-counters</a> <b>out-profile-packets-discarded-count</b> <i>boolean</i> |
| Tree       | <a href="#">out-profile-packets-discarded-count</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **out-profile-packets-forwarded-count** *boolean*

|            |  |
|------------|--|
| Synopsis   | Include the out-of-profile packets forwarded count   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <a href="#">number</a> <a href="#">e-counters</a> <a href="#">out-profile-packets-forwarded-count</a> <i>boolean</i> |
| Tree       | <a href="#">out-profile-packets-forwarded-count</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **i-counters**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>i-counters</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <a href="#">number</a> <a href="#">i-counters</a> |
| Tree       | <a href="#">i-counters</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **all-octets-offered-count** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include the all octets offered count  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <a href="#">number</a> <a href="#">i-counters</a> <a href="#">all-octets-offered-count</a> <i>boolean</i> |
| Tree       | <a href="#">all-octets-offered-count</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **all-packets-offered-count** *boolean*

|            |  |
|------------|--|
| Synopsis   | Include all packets offered count  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <a href="#">number</a> <a href="#">i-counters</a> <a href="#">all-packets-offered-count</a> <i>boolean</i> |
| Tree       | <a href="#">all-packets-offered-count</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **high-octets-discarded-count** *boolean*

Synopsis Include the high octets discarded count

Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [queue](#) *number* [i-counters](#) [high-octets-discarded-count](#) *boolean*

Tree [high-octets-discarded-count](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **high-octets-offered-count** *boolean*

Synopsis Include the high octets offered count

Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [queue](#) *number* [i-counters](#) [high-octets-offered-count](#) *boolean*

Tree [high-octets-offered-count](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **high-packets-discarded-count** *boolean*

Synopsis Include the high packets discarded count

Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [queue](#) *number* [i-counters](#) [high-packets-discarded-count](#) *boolean*

Tree [high-packets-discarded-count](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **high-packets-offered-count** *boolean*

Synopsis Include the high packets offered count

Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [queue](#) *number* [i-counters](#) [high-packets-offered-count](#) *boolean*



|            |   |
|------------|---|
| Tree       | <a href="#">high-packets-offered-count</a>              |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **in-profile-octets-forwarded-count** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include the in-profile octets forwarded count   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">in-profile-octets-forwarded-count</a> <i>boolean</i> |
| Tree       | <a href="#">in-profile-octets-forwarded-count</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **in-profile-packets-forwarded-count** *boolean*

|            |  |
|------------|--|
| Synopsis   | Include the in-profile packets forwarded count   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">in-profile-packets-forwarded-count</a> <i>boolean</i> |
| Tree       | <a href="#">in-profile-packets-forwarded-count</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **low-octets-discarded-count** *boolean*

|            |  |
|------------|--|
| Synopsis   | Include the low octets discarded count   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">low-octets-discarded-count</a> <i>boolean</i> |
| Tree       | <a href="#">low-octets-discarded-count</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **low-octets-offered-count** *boolean*

|            |  |
|------------|--|
| Synopsis   | Include the low octets offered count   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <a href="#">number</a> <a href="#">i-counters</a> <b>low-octets-offered-count</b> <i>boolean</i> |
| Tree       | <a href="#">low-octets-offered-count</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **low-packets-discarded-count** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include the low packets discarded count   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <a href="#">number</a> <a href="#">i-counters</a> <b>low-packets-discarded-count</b> <i>boolean</i> |
| Tree       | <a href="#">low-packets-discarded-count</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **low-packets-offered-count** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include the low packets offered count   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <a href="#">number</a> <a href="#">i-counters</a> <b>low-packets-offered-count</b> <i>boolean</i> |
| Tree       | <a href="#">low-packets-offered-count</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **out-profile-octets-forwarded-count** *boolean*

|          |  |
|----------|--|
| Synopsis | Include the out-of-profile octets forwarded count  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <a href="#">number</a> <a href="#">i-counters</a> <b>out-profile-octets-forwarded-count</b> <i>boolean</i> |
| Tree     | <a href="#">out-profile-octets-forwarded-count</a>   |
| Default  | false  |

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **out-profile-packets-forwarded-count** *boolean*

Synopsis Include the out-of-profile packets forwarded count  
 Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [queue](#) [number](#) [i-counters](#) [out-profile-packets-forwarded-count](#) *boolean*  
 Tree [out-profile-packets-forwarded-count](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **uncoloured-octets-offered-count** *boolean*

Synopsis Include the uncolored octets offered count  
 Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [queue](#) [number](#) [i-counters](#) [uncoloured-octets-offered-count](#) *boolean*  
 Tree [uncoloured-octets-offered-count](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **uncoloured-packets-offered-count** *boolean*

Synopsis Include the uncolored packets offered count  
 Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [queue](#) [number](#) [i-counters](#) [uncoloured-packets-offered-count](#) *boolean*  
 Tree [uncoloured-packets-offered-count](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ref-queue**

Synopsis Enter the **ref-queue** context

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> |
| Tree       | <a href="#">ref-queue</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**all**

|            |  |
|------------|--|
| Synopsis   | Apply significant change to counters for all queues  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <b>all</b> |
| Tree       | <a href="#">all</a>  |
| Notes      | The following elements are part of a choice: <b>all</b> or <b>id</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**e-counters**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>e-counters</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">e-counters</a> |
| Tree       | <a href="#">e-counters</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**in-profile-octets-discarded-count** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include the in-profile octets discarded count   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">e-counters</a> <a href="#">in-profile-octets-discarded-count</a> <i>boolean</i> |
| Tree       | <a href="#">in-profile-octets-discarded-count</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**in-profile-octets-forwarded-count** *boolean*

|          |   |
|----------|---|
| Synopsis | Include the in-profile octets forwarded count |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">e-counters</a> <a href="#">in-profile-octets-forwarded-count</a> <i>boolean</i> |
| Tree       | <a href="#">in-profile-octets-forwarded-count</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **in-profile-packets-discarded-count** *boolean*

|            |  |
|------------|--|
| Synopsis   | Include the in-profile packets discarded count   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">e-counters</a> <a href="#">in-profile-packets-discarded-count</a> <i>boolean</i> |
| Tree       | <a href="#">in-profile-packets-discarded-count</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **in-profile-packets-forwarded-count** *boolean*

|            |  |
|------------|--|
| Synopsis   | Include the in-profile packets forwarded count   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">e-counters</a> <a href="#">in-profile-packets-forwarded-count</a> <i>boolean</i> |
| Tree       | <a href="#">in-profile-packets-forwarded-count</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **out-profile-octets-discarded-count** *boolean*

|            |  |
|------------|--|
| Synopsis   | Include the out-profile octets discarded count   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">e-counters</a> <a href="#">out-profile-octets-discarded-count</a> <i>boolean</i> |
| Tree       | <a href="#">out-profile-octets-discarded-count</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**out-profile-octets-forwarded-count** *boolean*

|            |  |
|------------|--|
| Synopsis   | Include the out-of-profile octets forwarded count  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">e-counters</a> <a href="#">out-profile-octets-forwarded-count</a> <i>boolean</i> |
| Tree       | <a href="#">out-profile-octets-forwarded-count</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**out-profile-packets-discarded-count** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include the out-profile packets discarded count   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">e-counters</a> <a href="#">out-profile-packets-discarded-count</a> <i>boolean</i> |
| Tree       | <a href="#">out-profile-packets-discarded-count</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**out-profile-packets-forwarded-count** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include the out-of-profile packets forwarded count  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">e-counters</a> <a href="#">out-profile-packets-forwarded-count</a> <i>boolean</i> |
| Tree       | <a href="#">out-profile-packets-forwarded-count</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**i-counters**

|          |  |
|----------|--|
| Synopsis | Enter the <b>i-counters</b> context  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> |
| Tree     | <a href="#">i-counters</a>   |

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **all-octets-offered-count** *boolean*

Synopsis Include the all octets offered count  
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [ref-queue](#) [i-counters](#) [all-octets-offered-count](#) *boolean*  
Tree [all-octets-offered-count](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **all-packets-offered-count** *boolean*

Synopsis Include all packets offered count  
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [ref-queue](#) [i-counters](#) [all-packets-offered-count](#) *boolean*  
Tree [all-packets-offered-count](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **high-octets-discarded-count** *boolean*

Synopsis Include the high octets discarded count  
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [ref-queue](#) [i-counters](#) [high-octets-discarded-count](#) *boolean*  
Tree [high-octets-discarded-count](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **high-octets-offered-count** *boolean*

Synopsis Include the high octets offered count

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">high-octets-offered-count</a> <i>boolean</i> |
| Tree       | <a href="#">high-octets-offered-count</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **high-packets-discarded-count** *boolean*

|            |  |
|------------|--|
| Synopsis   | Include the high packets discarded count   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">high-packets-discarded-count</a> <i>boolean</i> |
| Tree       | <a href="#">high-packets-discarded-count</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **high-packets-offered-count** *boolean*

|            |  |
|------------|--|
| Synopsis   | Include the high packets offered count   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">high-packets-offered-count</a> <i>boolean</i> |
| Tree       | <a href="#">high-packets-offered-count</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **in-profile-octets-forwarded-count** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include the in-profile octets forwarded count   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">in-profile-octets-forwarded-count</a> <i>boolean</i> |
| Tree       | <a href="#">in-profile-octets-forwarded-count</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |



**in-profile-packets-forwarded-count** *boolean*

|            |  |
|------------|--|
| Synopsis   | Include the in-profile packets forwarded count   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">in-profile-packets-forwarded-count</a> <i>boolean</i> |
| Tree       | <a href="#">in-profile-packets-forwarded-count</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**low-octets-discarded-count** *boolean*

|            |  |
|------------|--|
| Synopsis   | Include the low octets discarded count   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">low-octets-discarded-count</a> <i>boolean</i> |
| Tree       | <a href="#">low-octets-discarded-count</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**low-octets-offered-count** *boolean*

|            |  |
|------------|--|
| Synopsis   | Include the low octets offered count   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">low-octets-offered-count</a> <i>boolean</i> |
| Tree       | <a href="#">low-octets-offered-count</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**low-packets-discarded-count** *boolean*

|          |   |
|----------|---|
| Synopsis | Include the low packets discarded count   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">low-packets-discarded-count</a> <i>boolean</i> |
| Tree     | <a href="#">low-packets-discarded-count</a>   |

---

|            |   |
|------------|---|
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **low-packets-offered-count** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include the low packets offered count   |
| Context    | <b>configure</b> <b>subscriber-mgmt</b> <b>radius-accounting-policy</b> <i>string</i> <b>custom-record</b> <b>ref-queue</b> <b>i-counters</b> <b>low-packets-offered-count</b> <i>boolean</i> |
| Tree       | <a href="#">low-packets-offered-count</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **out-profile-octets-forwarded-count** *boolean*

|            |  |
|------------|--|
| Synopsis   | Include the out-of-profile octets forwarded count  |
| Context    | <b>configure</b> <b>subscriber-mgmt</b> <b>radius-accounting-policy</b> <i>string</i> <b>custom-record</b> <b>ref-queue</b> <b>i-counters</b> <b>out-profile-octets-forwarded-count</b> <i>boolean</i> |
| Tree       | <a href="#">out-profile-octets-forwarded-count</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **out-profile-packets-forwarded-count** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include the out-of-profile packets forwarded count  |
| Context    | <b>configure</b> <b>subscriber-mgmt</b> <b>radius-accounting-policy</b> <i>string</i> <b>custom-record</b> <b>ref-queue</b> <b>i-counters</b> <b>out-profile-packets-forwarded-count</b> <i>boolean</i> |
| Tree       | <a href="#">out-profile-packets-forwarded-count</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**uncoloured-octets-offered-count** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include the uncolored octets offered count  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">uncoloured-octets-offered-count</a> <i>boolean</i> |
| Tree       | <a href="#">uncoloured-octets-offered-count</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**uncoloured-packets-offered-count** *boolean*

|            |  |
|------------|--|
| Synopsis   | Include the uncolored packets offered count  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">uncoloured-packets-offered-count</a> <i>boolean</i> |
| Tree       | <a href="#">uncoloured-packets-offered-count</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**id** *reference*

|            |   |
|------------|---|
| Synopsis   | Queue ID  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">id</a> <i>reference</i> |
| Tree       | <a href="#">id</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i>                           |
| Notes      | The following elements are part of a choice: <b>all</b> or <b>id</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**significant-change** *number*

|          |  |
|----------|--|
| Synopsis | Significant change required to generate the record   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">significant-change</a> <i>number</i> |

|            |   |
|------------|---|
| Tree       | <a href="#">significant-change</a>                      |
| Range      | 0 to 4294967295   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **delay-start-time** *number*

|            |  |
|------------|--|
| Synopsis   | Accounting start delay   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">delay-start-time</a> <i>number</i> |
| Tree       | <a href="#">delay-start-time</a>   |
| Range      | 1 to 10  |
| Units      | seconds  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **host-accounting**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>host-accounting</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">host-accounting</a> |
| Tree       | <a href="#">host-accounting</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **admin-state** *keyword*

|          |   |
|----------|---|
| Synopsis | Administrative state of per-host accounting |
|----------|---|

|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">host-accounting</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **interim-update** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow interim-update accounting messages to be sent   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">host-accounting</a> <a href="#">interim-update</a> <i>boolean</i> |
| Tree       | <a href="#">interim-update</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **include-radius-attribute**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>include-radius-attribute</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> |
| Tree       | <a href="#">include-radius-attribute</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **access-loop-options** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include access loop information   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">access-loop-options</a> <i>boolean</i> |
| Tree       | <a href="#">access-loop-options</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**acct-authentic** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable/disable include of the acct-authentic attribute.  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute acct-authentic</a> <i>boolean</i> |
| Tree       | <a href="#">acct-authentic</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**acct-delay-time** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include the acct-delay-time RADIUS attribute  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute acct-delay-time</a> <i>boolean</i> |
| Tree       | <a href="#">acct-delay-time</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**acct-triggered-reason** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include Alc-Acct-Triggered-Reason attribute   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute acct-triggered-reason</a> <i>boolean</i> |
| Tree       | <a href="#">acct-triggered-reason</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**all-authorized-session-addresses** *boolean*

|          |  |
|----------|--|
| Synopsis | Include all address/prefix attributes  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute all-authorized-session-addresses</a> <i>boolean</i> |
| Tree     | <a href="#">all-authorized-session-addresses</a>   |

|            |   |
|------------|---|
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

**apn boolean**

|            |   |
|------------|---|
| Synopsis   | Enable/disable include of the APN attribute.  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">apn</a> <i>boolean</i> |
| Tree       | <a href="#">apn</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**bearer-fteid boolean**

|            |  |
|------------|--|
| Synopsis   | Include bearer-fteid attribute   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">bearer-fteid</a> <i>boolean</i> |
| Tree       | <a href="#">bearer-fteid</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**bonding-active-connections boolean**

|            |  |
|------------|--|
| Synopsis   | Include the RADIUS Alc-Bonding-Active-Connection VSA   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">bonding-active-connections</a> <i>boolean</i> |
| Tree       | <a href="#">bonding-active-connections</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**bonding-id** *boolean*

|            |  |
|------------|--|
| Synopsis   | Include the Alc-Bonding-Id VSA   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">bonding-id</a> <i>boolean</i> |
| Tree       | <a href="#">bonding-id</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**brg-num-active-sessions** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include the RADIUS Alc-BRG-Num-Active-Sessions VSA  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">brg-num-active-sessions</a> <i>boolean</i> |
| Tree       | <a href="#">brg-num-active-sessions</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**called-station-id** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include called-station-id attribute   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">called-station-id</a> <i>boolean</i> |
| Tree       | <a href="#">called-station-id</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**calling-station-id**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>calling-station-id</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">calling-station-id</a> |
| Tree       | <a href="#">calling-station-id</a>  |
| Introduced | 16.0.R1   |



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **type** *keyword*

Synopsis Format of the Calling-Station-ID attribute

Context **configure** **subscriber-mgmt** **radius-accounting-policy** *string* **include-radius-attribute** **calling-station-id** *type* *keyword*

Tree **type**

Options sap-string, mac, sap-id, remote-id, llid

Default sap-string

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **circuit-id** *boolean*

Synopsis Include circuit-id attribute

Context **configure** **subscriber-mgmt** **radius-accounting-policy** *string* **include-radius-attribute** **circuit-id** *boolean*

Tree **circuit-id**

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **delegated-ipv6-prefix** *boolean*

Synopsis Include delegated-ipv6-prefix attribute

Context **configure** **subscriber-mgmt** **radius-accounting-policy** *string* **include-radius-attribute** **delegated-ipv6-prefix** *boolean*

Tree **delegated-ipv6-prefix**

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **detailed-acct-attributes** *boolean*

Synopsis Include more detailed accounting attributes

---

|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute detailed-acct-attributes</a> <i>boolean</i> |
| Tree       | <a href="#">detailed-acct-attributes</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **dhcp-vendor-class-id** *boolean*

|            |  |
|------------|--|
| Synopsis   | Include the RADIUS Alc-DHCP-Vendor-Class-Id VSA  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute dhcp-vendor-class-id</a> <i>boolean</i> |
| Tree       | <a href="#">dhcp-vendor-class-id</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **error-code** *boolean*

|            |  |
|------------|--|
| Synopsis   | Include detailed error codes   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute error-code</a> <i>boolean</i> |
| Tree       | <a href="#">error-code</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **firewall-info** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include the Firewall Information VSA in AAA protocols   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute firewall-info</a> <i>boolean</i> |
| Tree       | <a href="#">firewall-info</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**framed-interface-id** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include framed-interface-id attribute   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">framed-interface-id</a> <i>boolean</i> |
| Tree       | <a href="#">framed-interface-id</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**framed-ip-address** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include framed-ip-address attribute   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">framed-ip-address</a> <i>boolean</i> |
| Tree       | <a href="#">framed-ip-address</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**framed-ip-netmask** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include framed-ip-netmask attribute   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">framed-ip-netmask</a> <i>boolean</i> |
| Tree       | <a href="#">framed-ip-netmask</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**framed-ipv6-prefix** *boolean*

|          |  |
|----------|--|
| Synopsis | Include framed-ipv6-prefix attribute   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">framed-ipv6-prefix</a> <i>boolean</i> |
| Tree     | <a href="#">framed-ipv6-prefix</a>   |

---

|            |   |
|------------|---|
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

**framed-ipv6-route** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include framed-ipv6-route attribute   |
| Context    | <b>configure</b> <b>subscriber-mgmt</b> <b>radius-accounting-policy</b> <i>string</i> <b>include-radius-attribute</b> <b>framed-ipv6-route</b> <i>boolean</i> |
| Tree       | <b>framed-ipv6-route</b>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**framed-route** *boolean*

|            |  |
|------------|--|
| Synopsis   | Include framed-route attribute   |
| Context    | <b>configure</b> <b>subscriber-mgmt</b> <b>radius-accounting-policy</b> <i>string</i> <b>include-radius-attribute</b> <b>framed-route</b> <i>boolean</i> |
| Tree       | <b>framed-route</b>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**imei** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable/disable include of the IMEI attribute.  |
| Context    | <b>configure</b> <b>subscriber-mgmt</b> <b>radius-accounting-policy</b> <i>string</i> <b>include-radius-attribute</b> <b>imei</b> <i>boolean</i> |
| Tree       | <b>imei</b>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**imsi *boolean***

|            |  |
|------------|--|
| Synopsis   | Include the IMSI attribute for FWA sessions  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">imsi</a> <i>boolean</i> |
| Tree       | <a href="#">imsi</a>   |
| Default    | false  |
| Introduced | 22.2.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**ipv6-address *boolean***

|            |  |
|------------|--|
| Synopsis   | Include the IPv6 address attribute   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">ipv6-address</a> <i>boolean</i> |
| Tree       | <a href="#">ipv6-address</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**lanext-bridge-id *boolean***

|            |  |
|------------|--|
| Synopsis   | Include Alc-Bridge-Id in RADIUS accounting packets   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">lanext-bridge-id</a> <i>boolean</i> |
| Tree       | <a href="#">lanext-bridge-id</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**lanext-device-type *boolean***

|          |  |
|----------|--|
| Synopsis | Include Alc-HLE-Device-type in accounting packets  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">lanext-device-type</a> <i>boolean</i> |
| Tree     | <a href="#">lanext-device-type</a>   |
| Default  | false  |

Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **lanext-route-distinguisher** *boolean*

Synopsis Include route distinguisher (Alc-RD) in RADIUS packets  
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [lanext-route-distinguisher](#) *boolean*  
Tree [lanext-route-distinguisher](#)  
Default false  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **lanext-route-target** *boolean*

Synopsis Include route target (Alc-RT) in RADIUS packets  
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [lanext-route-target](#) *boolean*  
Tree [lanext-route-target](#)  
Default false  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **lanext-vni** *boolean*

Synopsis Enable/disable include of the lanext-vni attribute.  
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [lanext-vni](#) *boolean*  
Tree [lanext-vni](#)  
Default false  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mac-address** *boolean*

Synopsis Include the client MAC address in the RADIUS message

|            |  |
|------------|--|
| Context    | <b>configure subscriber-mgmt radius-accounting-policy</b> <i>string</i> <b>include-radius-attribute mac-address</b> <i>boolean</i> |
| Tree       | <a href="#">mac-address</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**msisdn** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable/disable include of the MSISDN attribute.   |
| Context    | <b>configure subscriber-mgmt radius-accounting-policy</b> <i>string</i> <b>include-radius-attribute msisdn</b> <i>boolean</i> |
| Tree       | <a href="#">msisdn</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**nas-identifier** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable/disable include of the NAS-Identifier attribute.   |
| Context    | <b>configure subscriber-mgmt radius-accounting-policy</b> <i>string</i> <b>include-radius-attribute nas-identifier</b> <i>boolean</i> |
| Tree       | <a href="#">nas-identifier</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**nas-port**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>nas-port</b> context   |
| Context    | <b>configure subscriber-mgmt radius-accounting-policy</b> <i>string</i> <b>include-radius-attribute nas-port</b> |
| Tree       | <a href="#">nas-port</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **bit-spec** *string*

|               |   |
|---------------|---|
| Synopsis      | RADIUS NAS-Port attribute   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">nas-port</a> <b>bit-spec</b> <i>string</i> |
| Tree          | <a href="#">bit-spec</a>  |
| String Length | 1 to 255  |
| Notes         | This element is mandatory.  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **nas-port-id**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>nas-port-id</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">nas-port-id</a> |
| Tree       | <a href="#">nas-port-id</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **prefix-string** *string*

|               |   |
|---------------|---|
| Synopsis      | String to be prefixed to the NAS-Port-Id attribute  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">nas-port-id</a> <b>prefix-string</b> <i>string</i> |
| Tree          | <a href="#">prefix-string</a>   |
| String Length | 1 to 8  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **suffix** *keyword*

|          |   |
|----------|---|
| Synopsis | String to be suffixed to the NAS-Port-Id attribute  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">nas-port-id</a> <b>suffix</b> <i>keyword</i> |
| Tree     | <a href="#">suffix</a>  |
| Options  | circuit-id, remote-id   |



|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **nas-port-type**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>nas-port-type</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">nas-port-type</a> |
| Tree       | <a href="#">nas-port-type</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **type** (*keyword* | *number*)

|            |  |
|------------|--|
| Synopsis   | Value for RADIUS NAS-Port-Type attribute   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">nas-port-type</a> <a href="#">type</a> ( <i>keyword</i>   <i>number</i> ) |
| Tree       | <a href="#">type</a>   |
| Range      | 0 to 255   |
| Options    | rfc-aligned  |
| Default    | rfc-aligned  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **nat-port-range** *boolean*

|            |  |
|------------|--|
| Synopsis   | Include NAT port range attribute   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">nat-port-range</a> <i>boolean</i> |
| Tree       | <a href="#">nat-port-range</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**remote-id** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include remote-id attribute   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">remote-id</a> <i>boolean</i> |
| Tree       | <a href="#">remote-id</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**sla-profile** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include sla-profile attribute   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">sla-profile</a> <i>boolean</i> |
| Tree       | <a href="#">sla-profile</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**spi-sharing-id** *boolean*

|            |  |
|------------|--|
| Synopsis   | Include spi-sharing-id attribute   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">spi-sharing-id</a> <i>boolean</i> |
| Tree       | <a href="#">spi-sharing-id</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**std-acct-attributes** *boolean*

|          |   |
|----------|---|
| Synopsis | Include standard accounting attributes  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">std-acct-attributes</a> <i>boolean</i> |
| Tree     | <a href="#">std-acct-attributes</a>   |
| Default  | false   |

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **steering-profile** *boolean*

Synopsis Include the RADIUS Alc-Steering-Profile VSA  
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute steering-profile](#) *boolean*  
Tree [steering-profile](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sub-profile** *boolean*

Synopsis Include sub-profile attribute  
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute sub-profile](#) *boolean*  
Tree [sub-profile](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **subscriber-id** *boolean*

Synopsis Include subscriber-id attribute  
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute subscriber-id](#) *boolean*  
Tree [subscriber-id](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **tunnel-client-attrs** *boolean*

Synopsis Enable/disable include of tunnel-client attributes.

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">tunnel-client-attrs</a> <i>boolean</i> |
| Tree       | <a href="#">tunnel-client-attrs</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**tunnel-server-attrs** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable/disable include of tunnel-server attributes.   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">tunnel-server-attrs</a> <i>boolean</i> |
| Tree       | <a href="#">tunnel-server-attrs</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**uli** *boolean*

|            |   |
|------------|---|
| Synopsis   | Generate the ULI RADIUS attribute   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">uli</a> <i>boolean</i> |
| Tree       | <a href="#">uli</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**user-name** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include the user-name attribute   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">user-name</a> <i>boolean</i> |
| Tree       | <a href="#">user-name</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**v6-aggregate-stats** *boolean*

|            |  |
|------------|--|
| Synopsis   | Report IPv6 aggregated forwarded octet and packet counters   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute v6-aggregate-stats</a> <i>boolean</i> |
| Tree       | <a href="#">v6-aggregate-stats</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**wifi-num-attached-ues** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include the RADIUS Alc-Num-Attached-UEs VSA   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute wifi-num-attached-ues</a> <i>boolean</i> |
| Tree       | <a href="#">wifi-num-attached-ues</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**wifi-rssi** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include 802.11 received signal strength indicator   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute wifi-rssi</a> <i>boolean</i> |
| Tree       | <a href="#">wifi-rssi</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**wifi-ssid-vlan** *boolean*

|          |  |
|----------|--|
| Synopsis | Include per-SSID VLAN ID in the Alc-Wlan-SSID-VLAN VSA   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute wifi-ssid-vlan</a> <i>boolean</i> |
| Tree     | <a href="#">wifi-ssid-vlan</a>   |

|            |                                    |
|------------|------------------------------------|
| Default    | false                              |
| Introduced | 16.0.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **xconnect-tunnel-home-address** *boolean*

|            |  |
|------------|--|
| Synopsis   | Include the Alc-Xconnect-Tunnel-Home-Ipv6 attribute  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute xconnect-tunnel-home-address</a> <i>boolean</i> |
| Tree       | <a href="#">xconnect-tunnel-home-address</a>   |
| Default    | false  |
| Introduced | 16.0.R3  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **mcs-interval**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mcs-interval</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">mcs-interval</a> |
| Tree       | <a href="#">mcs-interval</a>   |
| Introduced | 19.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **interval** (*keyword* | *number*)

|             |  |
|-------------|--|
| Synopsis    | MCS synchronization interval of usage counters   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">mcs-interval interval</a> ( <i>keyword</i>   <i>number</i> )   |
| Tree        | <a href="#">interval</a>   |
| Description | This command specifies the interval at which the active BNG in a dual-homed deployment synchronizes subscriber accounting data using MCS to the standby BNG. The MCS interval is a statically configured value or equal to the configured RADIUS accounting update-interval. |
| Range       | 5 to 60  |
| Units       | minutes  |
| Options     | none, use-update-interval  |
| Introduced  | 19.10.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## queue-instance-accounting

Synopsis Enter the **queue-instance-accounting** context

Context **configure subscriber-mgmt radius-accounting-policy** *string* **queue-instance-accounting**

Tree [queue-instance-accounting](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis Administrative state of per-queue instance accounting

Context **configure subscriber-mgmt radius-accounting-policy** *string* **queue-instance-accounting** **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## interim-update *boolean*

Synopsis Send accounting messages for the queue instance

Context **configure subscriber-mgmt radius-accounting-policy** *string* **queue-instance-accounting** **interim-update** *boolean*

Tree [interim-update](#)

Default true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## radius-server-policy *reference*

Synopsis Referenced RADIUS server policy

Context **configure subscriber-mgmt radius-accounting-policy** *string* **radius-server-policy** *reference*

|            |   |
|------------|---|
| Tree       | <a href="#">radius-server-policy</a>                                    |
| Reference  | <b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                 |

## session-accounting

|            |  |
|------------|--|
| Synopsis   | Enter the <b>session-accounting</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">session-accounting</a> |
| Tree       | <a href="#">session-accounting</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## admin-state *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of per-session accounting  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">session-accounting admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## host-update *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow host updates  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">session-accounting host-update</a> <i>boolean</i> |
| Tree       | <a href="#">host-update</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |



**interim-update** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow interim-update accounting messages to be sent  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">session-accounting</a> <a href="#">interim-update</a> <i>boolean</i> |
| Tree       | <a href="#">interim-update</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**session-id-format** *keyword*

|            |  |
|------------|--|
| Synopsis   | Format used in accounting session ID attributes  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">session-id-format</a> <i>keyword</i> |
| Tree       | <a href="#">session-id-format</a>  |
| Options    | description, number  |
| Default    | description  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**triggered-updates**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>triggered-updates</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">triggered-updates</a> |
| Tree       | <a href="#">triggered-updates</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**gtp-mobility** *boolean*

|            |   |
|------------|---|
| Synopsis   | Send updates for mobility events  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">triggered-updates</a> <a href="#">gtp-mobility</a> <i>boolean</i> |
| Tree       | <a href="#">gtp-mobility</a>  |
| Default    | false   |
| Introduced | 16.0.R5   |

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## update-interval

Synopsis Enter the **update-interval** context

Context **configure subscriber-mgmt radius-accounting-policy** *string* **update-interval**

Tree **update-interval**

Description Commands in this context configure the attributes of the intermediate update interval.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## interval *number*

Synopsis Intermediate update interval

Context **configure subscriber-mgmt radius-accounting-policy** *string* **update-interval** *interval number*

Tree **interval**

Description This command specifies the interval at which accounting data of subscriber hosts is updated in a RADIUS Accounting Interim-Update message. The **interim-update** option must be enabled when specifying the accounting mode in the RADIUS accounting policy.

A RADIUS-specified interim interval (attribute [85] Acct-Interim-Interval) overrides the CLI configured value.

Range 5 to 259200

Units minutes

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **jitter** (*keyword* | *number*)

Synopsis Maximum random delay for intermediate update interval

Context **configure subscriber-mgmt radius-accounting-policy** *string* **update-interval** **jitter** (*keyword* | *number*)

Tree **jitter**

Description This command specifies the absolute maximum random delay introduced on the update interval between two accounting interim update messages. The effective maximum random delay value is the minimum of the configured absolute jitter value and 10% of the configured update-interval.

A value of zero sends the accounting interim update message without introducing an additional random delay.

|            |   |
|------------|---|
| Range      | 0 to 3600   |
| Units      | seconds   |
| Options    | auto  |
| Default    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **radius-authentication-policy** *[name]* *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>radius-authentication-policy</b> list instance  |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt</a> <b>radius-authentication-policy</b> <i>string</i> |
| Tree           | <a href="#">radius-authentication-policy</a>   |
| Max. Instances | 32   |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **[name]** *string*

|               |  |
|---------------|--|
| Synopsis      | RADIUS authentication policy name  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <b>radius-authentication-policy</b> <i>string</i> |
| Tree          | <a href="#">radius-authentication-policy</a>   |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <b>radius-authentication-policy</b> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## fallback

Synopsis Enter the **fallback** context

Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* **fallback**

Tree [fallback](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## action

Synopsis Enter the **action** context

Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* **fallback** **action**

Tree [action](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## accept

Synopsis Automatically accept all authentication requests

Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* **fallback** **action** **accept**

Tree [accept](#)

Notes The following elements are part of a choice: **accept** or **user-db**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## user-db *string*

Synopsis Local user database used to authenticate to the server

Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* **fallback** **action** **user-db** *string*

Tree [user-db](#)

String Length 1 to 32

Notes The following elements are part of a choice: **accept** or **user-db**.

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **force-probing** *boolean*

Synopsis Enable force probing  
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [fallback](#) [force-probing](#) *boolean*  
Tree [force-probing](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **include-radius-attribute**

Synopsis Enter the **include-radius-attribute** context  
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [include-radius-attribute](#)  
Tree [include-radius-attribute](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **access-loop-options** *boolean*

Synopsis Include access loop information  
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [include-radius-attribute](#) [access-loop-options](#) *boolean*  
Tree [access-loop-options](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **acct-session-id**

Synopsis Enable the **acct-session-id** context  
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [include-radius-attribute](#) [acct-session-id](#)

|            |   |
|------------|---|
| Tree       | <a href="#">acct-session-id</a>                         |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

**type keyword**

|            |  |
|------------|--|
| Synopsis   | Format of the accounting session ID attribute  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">acct-session-id</a> <i>type keyword</i> |
| Tree       | <a href="#">type</a>   |
| Options    | host, session  |
| Default    | host   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**apn boolean**

|            |   |
|------------|---|
| Synopsis   | Enable/disable include of the APN attribute.  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">apn</a> <i>boolean</i> |
| Tree       | <a href="#">apn</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**called-station-id boolean**

|            |   |
|------------|---|
| Synopsis   | Include called-station-id attribute   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">called-station-id</a> <i>boolean</i> |
| Tree       | <a href="#">called-station-id</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## calling-station-id

|            |   |
|------------|---|
| Synopsis   | Enable the <b>calling-station-id</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">calling-station-id</a> |
| Tree       | <a href="#">calling-station-id</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## type *keyword*

|            |  |
|------------|--|
| Synopsis   | Format of the Calling-Station-ID attribute   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">calling-station-id</a> <i>type</i> <i>keyword</i> |
| Tree       | <a href="#">type</a>   |
| Options    | sap-string, mac, sap-id, remote-id, llid   |
| Default    | sap-string   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## circuit-id *boolean*

|            |  |
|------------|--|
| Synopsis   | Include circuit-id attribute   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">circuit-id</a> <i>boolean</i> |
| Tree       | <a href="#">circuit-id</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## dhcp-options *boolean*

|          |  |
|----------|--|
| Synopsis | Generate the DHCP options RADIUS attribute   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">dhcp-options</a> <i>boolean</i> |
| Tree     | <a href="#">dhcp-options</a>   |
| Default  | false  |

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dhcp-vendor-class-id** *boolean*

Synopsis Include the RADIUS Alc-DHCP-Vendor-Class-Id VSA  
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [include-radius-attribute](#) [dhcp-vendor-class-id](#) *boolean*  
Tree [dhcp-vendor-class-id](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dhcp6-options** *boolean*

Synopsis Generate the DHCPv6 options RADIUS attribute  
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [include-radius-attribute](#) [dhcp6-options](#) *boolean*  
Tree [dhcp6-options](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **gprs-negotiated-qos-profile** *boolean*

Synopsis Generate GPRS negotiated QoS profile RADIUS attribute  
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [include-radius-attribute](#) [gprs-negotiated-qos-profile](#) *boolean*  
Tree [gprs-negotiated-qos-profile](#)  
Default false  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **imei** *boolean*

Synopsis Enable/disable include of the IMEI attribute.



---

|            |   |
|------------|---|
| Context    | <b>configure subscriber-mgmt radius-authentication-policy</b> <i>string</i> <b>include-radius-attribute imei</b> <i>boolean</i> |
| Tree       | <b>imei</b>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **imsi** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include the IMSI attribute for FWA sessions   |
| Context    | <b>configure subscriber-mgmt radius-authentication-policy</b> <i>string</i> <b>include-radius-attribute imsi</b> <i>boolean</i> |
| Tree       | <b>imsi</b>   |
| Default    | false   |
| Introduced | 22.2.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **mac-address** *boolean*

|            |  |
|------------|--|
| Synopsis   | Include the client MAC address in the RADIUS message   |
| Context    | <b>configure subscriber-mgmt radius-authentication-policy</b> <i>string</i> <b>include-radius-attribute mac-address</b> <i>boolean</i> |
| Tree       | <b>mac-address</b>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **msisdn** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable/disable include of the MSISDN attribute.   |
| Context    | <b>configure subscriber-mgmt radius-authentication-policy</b> <i>string</i> <b>include-radius-attribute msisdn</b> <i>boolean</i> |
| Tree       | <b>msisdn</b>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**nas-identifier** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable/disable include of the NAS-Identifier attribute.  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">nas-identifier</a> <i>boolean</i> |
| Tree       | <a href="#">nas-identifier</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**nas-port**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>nas-port</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">nas-port</a> |
| Tree       | <a href="#">nas-port</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**bit-spec** *string*

|               |  |
|---------------|--|
| Synopsis      | RADIUS NAS-Port attribute  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">nas-port</a> <a href="#">bit-spec</a> <i>string</i> |
| Tree          | <a href="#">bit-spec</a>   |
| String Length | 1 to 255   |
| Notes         | This element is mandatory.   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**nas-port-id**

|          |  |
|----------|--|
| Synopsis | Enable the <b>nas-port-id</b> context  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">nas-port-id</a> |
| Tree     | <a href="#">nas-port-id</a>  |

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **prefix-string** *string*

Synopsis String to be prefixed to the NAS-Port-Id attribute  
 Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [include-radius-attribute](#) [nas-port-id](#) **prefix-string** *string*  
 Tree [prefix-string](#)  
 String Length 1 to 8  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **suffix** *keyword*

Synopsis String to be suffixed to the NAS-Port-Id attribute  
 Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [include-radius-attribute](#) [nas-port-id](#) **suffix** *keyword*  
 Tree [suffix](#)  
 Options circuit-id, remote-id  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **nas-port-type**

Synopsis Enable the **nas-port-type** context  
 Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [include-radius-attribute](#) [nas-port-type](#)  
 Tree [nas-port-type](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **type** (*keyword* | *number*)

Synopsis Value for RADIUS NAS-Port-Type attribute  
 Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [include-radius-attribute](#) [nas-port-type](#) **type** (*keyword* | *number*)

---

|            |   |
|------------|---|
| Tree       | <a href="#">type</a>                                    |
| Range      | 0 to 255  |
| Options    | rfc-aligned   |
| Default    | rfc-aligned   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **pppoe-service-name** *boolean*

|            |  |
|------------|--|
| Synopsis   | Generate the pppoe-service-name RADIUS attribute   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">pppoe-service-name</a> <i>boolean</i> |
| Tree       | <a href="#">pppoe-service-name</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **rat-type** *boolean*

|            |  |
|------------|--|
| Synopsis   | Generate the RAT type RADIUS attribute   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">rat-type</a> <i>boolean</i> |
| Tree       | <a href="#">rat-type</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **remote-id** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include remote-id attribute   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">remote-id</a> <i>boolean</i> |
| Tree       | <a href="#">remote-id</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**sap-session-index** *boolean*

|            |   |
|------------|---|
| Synopsis   | Generate the per-SAP unique session index   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">sap-session-index</a> <i>boolean</i> |
| Tree       | <a href="#">sap-session-index</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**tunnel-server-attribs** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable/disable include of tunnel-server attributes.   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">tunnel-server-attribs</a> <i>boolean</i> |
| Tree       | <a href="#">tunnel-server-attribs</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**uli** *boolean*

|            |   |
|------------|---|
| Synopsis   | Generate the ULI RADIUS attribute   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">uli</a> <i>boolean</i> |
| Tree       | <a href="#">uli</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**wifi-num-attached-ues** *boolean*

|          |   |
|----------|---|
| Synopsis | Include the RADIUS Alc-Num-Attached-UEs VSA   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">wifi-num-attached-ues</a> <i>boolean</i> |
| Tree     | <a href="#">wifi-num-attached-ues</a>   |

|            |   |
|------------|---|
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### wifi-ssid-vlan *boolean*

|            |  |
|------------|--|
| Synopsis   | Include per-SSID VLAN ID in the Alc-Wlan-SSID-VLAN VSA   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt radius-authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute wifi-ssid-vlan</a> <i>boolean</i> |
| Tree       | <a href="#">wifi-ssid-vlan</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### xconnect-tunnel-home-address *boolean*

|            |  |
|------------|--|
| Synopsis   | Include the Alc-Xconnect-Tunnel-Home-Ipv6 attribute  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt radius-authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute xconnect-tunnel-home-address</a> <i>boolean</i> |
| Tree       | <a href="#">xconnect-tunnel-home-address</a>   |
| Default    | false  |
| Introduced | 16.0.R5  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### password *string*

|               |  |
|---------------|--|
| Synopsis      | RADIUS request password  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt radius-authentication-policy</a> <i>string</i> <a href="#">password</a> <i>string</i> |
| Tree          | <a href="#">password</a>   |
| String Length | 1 to 115   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### ppp-user-name

|          |  |
|----------|--|
| Synopsis | Enter the <b>ppp-user-name</b> context |
|----------|--|

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt radius-authentication-policy</a> <i>string</i> <a href="#">ppp-user-name</a> |
| Tree       | <a href="#">ppp-user-name</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **domain-name** *string*

|               |   |
|---------------|---|
| Synopsis      | Domain name   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt radius-authentication-policy</a> <i>string</i> <a href="#">ppp-user-name</a> <a href="#">domain-name</a> <i>string</i> |
| Tree          | <a href="#">domain-name</a>   |
| String Length | 1 to 128  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **domain-operation** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Operation to perform on the PAP or CHAP username  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt radius-authentication-policy</a> <i>string</i> <a href="#">ppp-user-name</a> <a href="#">domain-operation</a> <i>keyword</i> |
| Tree        | <a href="#">domain-operation</a>  |
| Description | This command specifies the operation to perform on the PAP or CHAP username.<br>When unconfigured, there is no operation and the PAP or CHAP username is not changed.     |
| Options     | append, strip, replace, default   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **pppoe-access-method** *keyword*

|          |  |
|----------|--|
| Synopsis | PPPoE access method  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt radius-authentication-policy</a> <i>string</i> <a href="#">pppoe-access-method</a> <i>keyword</i> |
| Tree     | <a href="#">pppoe-access-method</a>  |
| Options  | none, padi, pap-chap   |
| Default  | padi   |

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-server-policy** *reference*

Synopsis Referenced RADIUS server policy  
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [radius-server-policy](#) *reference*  
Tree [radius-server-policy](#)  
Reference **configure** [aaa](#) [radius](#) [server-policy](#) *string*  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **re-authentication** *boolean*

Synopsis Enable re-authentication on IPOE renewal  
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [re-authentication](#) *boolean*  
Tree [re-authentication](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **send-acct-stop-on-fail**

Synopsis Enter the **send-acct-stop-on-fail** context  
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [send-acct-stop-on-fail](#)  
Tree [send-acct-stop-on-fail](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **on-accept-failure** *boolean*

Synopsis Send an accounting stop message when a failure occurs  
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [send-acct-stop-on-fail](#) [on-accept-failure](#) *boolean*  
Tree [on-accept-failure](#)



|             |  |
|-------------|--|
| Description | When configured to <b>true</b> , the system sends an accounting stop message when a failure occurs after the reception of a RADIUS Access-Accept message (such as a duplicate IP address). |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **on-reject** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Send an accounting stop message for Access-Reject   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">send-acct-stop-on-fail on-reject</a> <i>boolean</i> |
| Tree        | <a href="#">on-reject</a>   |
| Description | When configured to <b>true</b> , the system sends an accounting stop message when an Access-Reject message is received.   |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **on-request-failure** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Send an accounting stop message for failures   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">send-acct-stop-on-fail on-request-failure</a> <i>boolean</i>       |
| Tree        | <a href="#">on-request-failure</a>   |
| Description | When configured to <b>true</b> , the system sends an accounting stop message when a RADIUS Access-Request message cannot be sent (for example, there is no server configured, or timeout). |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **user-name**

|          |   |
|----------|---|
| Synopsis | Enter the <b>user-name</b> context  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">user-name</a> |
| Tree     | <a href="#">user-name</a>   |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **domain-name** *string*

|               |   |
|---------------|---|
| Synopsis      | Domain name   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">user-name</a> <a href="#">domain-name</a> <i>string</i> |
| Tree          | <a href="#">domain-name</a>   |
| String Length | 1 to 128  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **domain-operation** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Operation to perform on the username  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">user-name</a> <a href="#">domain-operation</a> <i>keyword</i> |
| Tree        | <a href="#">domain-operation</a>  |
| Description | This command specifies the operation to perform on the username.<br>When unconfigured, there is no operation and the username is not changed.   |
| Options     | append, strip, replace, default   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **format** *keyword*

|            |   |
|------------|---|
| Synopsis   | User name format in the RADIUS message  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">user-name</a> <a href="#">format</a> <i>keyword</i> |
| Tree       | <a href="#">format</a>  |
| Options    | mac, circuit-id, tuple, ascii-converted-circuit-id, ascii-converted-tuple, dhcp-client-vendor-opts, mac-giaddr, ppp-user-name   |
| Default    | mac   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**gtp-format** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Username format used for FWA sessions   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">user-name</a> <a href="#">gtp-format</a> <i>keyword</i>   |
| Tree        | <a href="#">gtp-format</a>  |
| Description | This command specifies the username format to use for FWA sessions. If a PAP message is present in the PCO IE of the Create Session request, the system uses that for authentication instead of the format specified for this command. If you specify a format that includes APN, the separator is an @ character; for example, msisdn@apn. |
| Options     | imsi, imsi-apn, msisdn, msisdn-apn  |
| Default     | imsi  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**mac-format** *string*

|               |  |
|---------------|--|
| Synopsis      | MAC address format when contacting a RADIUS server   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">user-name</a> <a href="#">mac-format</a> <i>string</i> |
| Tree          | <a href="#">mac-format</a>   |
| String Length | 2 to 7   |
| Default       | aa:  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**rip-policy** [*name*] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>rip-policy</b> list instance   |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">rip-policy</a> <i>string</i> |
| Tree           | <a href="#">rip-policy</a>  |
| Max. Instances | 255   |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                   |

**[name]** *string*

|               |   |
|---------------|---|
| Synopsis      | RIP policy name   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt rip-policy</a> <i>string</i> |
| Tree          | <a href="#">rip-policy</a>  |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.                                       |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                   |

**authentication-key** *string*

|               |  |
|---------------|--|
| Synopsis      | Authentication key   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt rip-policy</a> <i>string</i> <a href="#">authentication-key</a> <i>string</i> |
| Tree          | <a href="#">authentication-key</a>   |
| String Length | 1 to 51  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**authentication-type** *keyword*

|            |  |
|------------|--|
| Synopsis   | Authentication type used between RIP neighbors   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt rip-policy</a> <i>string</i> <a href="#">authentication-type</a> <i>keyword</i> |
| Tree       | <a href="#">authentication-type</a>  |
| Options    | password, message-digest, message-digest-20  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt rip-policy</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**router-advertisement-policy** [*name*] *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>router-advertisement-policy</b> list instance   |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> |
| Tree           | <a href="#">router-advertisement-policy</a>  |
| Max. Instances | 16   |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**[name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Router advertisement policy name   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> |
| Tree          | <a href="#">router-advertisement-policy</a>  |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**force-mcast** *keyword*

|            |  |
|------------|--|
| Synopsis   | Protocol with forced multicast   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> <b>force-mcast</b> <i>keyword</i> |
| Tree       | <a href="#">force-mcast</a>  |
| Options    | ip, ip-mac   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**max-advertisement-interval** *number*

|          |  |
|----------|--|
| Synopsis | Maximum advertisement interval   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> <b>max-advertisement-interval</b> <i>number</i> |
| Tree     | <a href="#">max-advertisement-interval</a>   |
| Range    | 900 to 1800  |

---

|            |   |
|------------|---|
| Units      | seconds   |
| Default    | 1800  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **min-advertisement-interval** *number*

|            |  |
|------------|--|
| Synopsis   | Minimum advertisement interval   |
| Context    | <b>configure</b> <b>subscriber-mgmt</b> <b>router-advertisement-policy</b> <i>string</i> <b>min-advertisement-interval</b> <i>number</i> |
| Tree       | <a href="#">min-advertisement-interval</a>   |
| Range      | 900 to 1350  |
| Units      | seconds  |
| Default    | 900  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **options**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>options</b> context  |
| Context    | <b>configure</b> <b>subscriber-mgmt</b> <b>router-advertisement-policy</b> <i>string</i> <b>options</b> |
| Tree       | <a href="#">options</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **current-hop-limit** *number*

|            |  |
|------------|--|
| Synopsis   | Hop limit to be advertised   |
| Context    | <b>configure</b> <b>subscriber-mgmt</b> <b>router-advertisement-policy</b> <i>string</i> <b>options</b> <b>current-hop-limit</b> <i>number</i> |
| Tree       | <a href="#">current-hop-limit</a>  |
| Range      | 0 to 255   |
| Default    | 64   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**dns**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>dns</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> <a href="#">options</a> <a href="#">dns</a> |
| Tree       | <a href="#">dns</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**include-rdnss** *boolean*

|            |   |
|------------|---|
| Synopsis   | Include the RDNSS server option 25  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> <a href="#">options</a> <a href="#">dns</a> <a href="#">include-rdnss</a> <i>boolean</i> |
| Tree       | <a href="#">include-rdnss</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**rdnss-lifetime** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Maximum time for the RDNSS address to remain valid   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> <a href="#">options</a> <a href="#">dns</a> <a href="#">rdnss-lifetime</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">rdnss-lifetime</a>   |
| Range      | 900 to 3600  |
| Units      | seconds  |
| Options    | infinite   |
| Default    | 3600   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**managed-configuration** *boolean*

|          |   |
|----------|---|
| Synopsis | Managed address configuration flag  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> <a href="#">options</a> <a href="#">managed-configuration</a> <i>boolean</i> |

|            |   |
|------------|---|
| Tree       | <a href="#">managed-configuration</a>                   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **mtu** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Advertised MTU value   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> <a href="#">options</a> <b>mtu</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">mtu</a>  |
| Range      | 1280 to 9212   |
| Units      | bytes  |
| Options    | not-included   |
| Default    | not-included   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **other-stateful-configuration** *boolean*

|            |   |
|------------|---|
| Synopsis   | Other stateful configuration flag   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> <a href="#">options</a> <b>other-stateful-configuration</b> <i>boolean</i> |
| Tree       | <a href="#">other-stateful-configuration</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **reachable-time** *number*

|          |  |
|----------|--|
| Synopsis | Reachable time for advertisements  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> <a href="#">options</a> <b>reachable-time</b> <i>number</i> |
| Tree     | <a href="#">reachable-time</a>   |
| Range    | 0 to 3600000   |
| Units    | milliseconds   |



|            |   |
|------------|---|
| Default    | 0   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **retransmit-timer** *number*

|            |   |
|------------|---|
| Synopsis   | Retransmit time in router advertisements from interface   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> <a href="#">options</a> <a href="#">retransmit-timer</a> <i>number</i> |
| Tree       | <a href="#">retransmit-timer</a>  |
| Range      | 0 to 1800000  |
| Units      | seconds   |
| Default    | 0   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **router-lifetime** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Router lifetime   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> <a href="#">options</a> <a href="#">router-lifetime</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">router-lifetime</a>   |
| Range      | 2700 to 9000  |
| Units      | seconds   |
| Options    | no-default-router   |
| Default    | 4500  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **prefix-options**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>prefix-options</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> <a href="#">prefix-options</a> |
| Tree       | <a href="#">prefix-options</a>  |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## stateful

Synopsis Enter the **stateful** context

Context **configure** [subscriber-mgmt](#) [router-advertisement-policy](#) *string* [prefix-options](#) [stateful](#)

Tree [stateful](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## auto-lifetimes *boolean*

Synopsis Use automatic lifetimes for stateful prefixes

Context **configure** [subscriber-mgmt](#) [router-advertisement-policy](#) *string* [prefix-options](#) [stateful](#) [auto-lifetimes](#) *boolean*

Tree [auto-lifetimes](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## on-link *boolean*

Synopsis Assign the prefix to an interface on the specified link

Context **configure** [subscriber-mgmt](#) [router-advertisement-policy](#) *string* [prefix-options](#) [stateful](#) [on-link](#) *boolean*

Tree [on-link](#)

Default true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## preferred-lifetime (*number* | *keyword*)

Synopsis Time for a prefix to remain preferred

Context **configure** [subscriber-mgmt](#) [router-advertisement-policy](#) *string* [prefix-options](#) [stateful](#) [preferred-lifetime](#) (*number* | *keyword*)

Tree [preferred-lifetime](#)

|            |   |
|------------|---|
| Range      | 0 to 4294967294   |
| Units      | seconds   |
| Options    | infinite  |
| Default    | 3600  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **valid-lifetime** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Time for a prefix to remain valid   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> <a href="#">prefix-options</a> <a href="#">stateful</a> <b>valid-lifetime</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">valid-lifetime</a>  |
| Range      | 0 to 4294967294   |
| Units      | seconds   |
| Options    | infinite  |
| Default    | 86400   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **stateless**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>stateless</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> <a href="#">prefix-options</a> <a href="#">stateless</a> |
| Tree       | <a href="#">stateless</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **on-link** *boolean*

|            |   |
|------------|---|
| Synopsis   | Assign the prefix to an interface on the specified link   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> <a href="#">prefix-options</a> <a href="#">stateless</a> <b>on-link</b> <i>boolean</i> |
| Tree       | <a href="#">on-link</a>   |
| Default    | true  |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **preferred-lifetime** (*number* | *keyword*)

Synopsis Time for a prefix to remain preferred

Context **configure** [subscriber-mgmt](#) [router-advertisement-policy](#) *string* [prefix-options](#) [stateless](#) [preferred-lifetime](#) (*number* | *keyword*)

Tree [preferred-lifetime](#)

Range 0 to 4294967294

Units seconds

Options infinite

Default 3600

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **valid-lifetime** (*number* | *keyword*)

Synopsis Time for a prefix to remain valid

Context **configure** [subscriber-mgmt](#) [router-advertisement-policy](#) *string* [prefix-options](#) [stateless](#) [valid-lifetime](#) (*number* | *keyword*)

Tree [valid-lifetime](#)

Range 0 to 4294967294

Units seconds

Options infinite

Default 86400

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sap-template** [[name](#)] *string*

Synopsis Enter the **sap-template** list instance

Context **configure** [subscriber-mgmt](#) [sap-template](#) *string*

Tree [sap-template](#)

Description Commands in this context configure a template for automatically-generated subscriber SAPs that is used when creating CUPS sessions. A template with name "default"

is used when no other instance is created, however, the "default" template must be explicitly provisioned.

|                |   |
|----------------|---|
| Max. Instances | 256   |
| Introduced     | 20.5.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### [name] *string*

|               |   |
|---------------|---|
| Synopsis      | SAP template name   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt sap-template</a> <i>string</i> |
| Tree          | <a href="#">sap-template</a>  |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 20.5.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                     |

### cpu-protection

|            |  |
|------------|--|
| Synopsis   | Enter the <b>cpu-protection</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sap-template</a> <i>string</i> <a href="#">cpu-protection</a> |
| Tree       | <a href="#">cpu-protection</a>   |
| Introduced | 20.5.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s  |

### ip-src-monitoring

|            |  |
|------------|--|
| Synopsis   | Apply CPU protection policy on IP sources  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sap-template</a> <i>string</i> <a href="#">cpu-protection ip-src-monitoring</a> |
| Tree       | <a href="#">ip-src-monitoring</a>  |
| Notes      | The following elements are part of a choice: <b>ip-src-monitoring</b> or <b>mac-monitoring</b> .                             |
| Introduced | 20.5.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s  |

## mac-monitoring

|            |  |
|------------|--|
| Synopsis   | Apply CPU protection policy on MAC sources   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sap-template string</a> <a href="#">cpu-protection mac-monitoring</a> |
| Tree       | <a href="#">mac-monitoring</a>   |
| Notes      | The following elements are part of a choice: <b>ip-src-monitoring</b> or <b>mac-monitoring</b> .                   |
| Introduced | 20.5.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s  |

## policy-id *reference*

|            |   |
|------------|---|
| Synopsis   | CPU protection policy ID  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sap-template string</a> <a href="#">cpu-protection policy-id reference</a> |
| Tree       | <a href="#">policy-id</a>   |
| Reference  | <b>configure</b> <a href="#">system security cpu-protection policy number</a>   |
| Introduced | 20.5.R1   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s   |

## description *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt sap-template string</a> <a href="#">description string</a> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 20.5.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## dist-cpu-protection *reference*

|            |  |
|------------|--|
| Synopsis   | Distributed CPU protection policy name   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sap-template string</a> <a href="#">dist-cpu-protection reference</a> |
| Tree       | <a href="#">dist-cpu-protection</a>  |
| Reference  | <b>configure</b> <a href="#">system security dist-cpu-protection policy string</a>                                 |
| Introduced | 20.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**hold-time** (*number* | *keyword*)

|             |  |
|-------------|--|
| Synopsis    | Time to hold a SAP after last PFCP session is removed  |
| Context     | <b>configure</b> <b>subscriber-mgmt sap-template</b> <i>string</i> <b>hold-time</b> ( <i>number</i>   <i>keyword</i> )   |
| Tree        | <b>hold-time</b>   |
| Description | This command configures the time for which an SAP will be kept after the last session has been removed. Idle SAPs can be forcefully removed by the command <b>clear subscriber-mgmt sap-template template-name idle-saps</b> . |
| Range       | 0   30 to 2592000  |
| Units       | seconds  |
| Options     | infinite   |
| Default     | 30   |
| Introduced  | 20.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**shcv-policy** [*name*] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>shcv-policy</b> list instance                        |
| Context        | <b>configure</b> <b>subscriber-mgmt shcv-policy</b> <i>string</i> |
| Tree           | <b>shcv-policy</b>  |
| Max. Instances | 64  |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR           |

**[name]** *string*

|               |   |
|---------------|---|
| Synopsis      | SHCV policy name  |
| Context       | <b>configure</b> <b>subscriber-mgmt shcv-policy</b> <i>string</i> |
| Tree          | <b>shcv-policy</b>  |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.                               |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR           |

### **description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">shcv-policy</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **layer-3**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>layer-3</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">shcv-policy</a> <i>string</i> <a href="#">layer-3</a> |
| Tree       | <a href="#">layer-3</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **source-ip-origin** *keyword*

|            |  |
|------------|--|
| Synopsis   | Source IP address to be used for SHCV messages   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">shcv-policy</a> <i>string</i> <a href="#">layer-3</a> <a href="#">source-ip-origin</a> <i>keyword</i> |
| Tree       | <a href="#">source-ip-origin</a>   |
| Options    | interface, vrrp  |
| Default    | interface  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **unnumbered-source-ip** *string*

|             |   |
|-------------|---|
| Synopsis    | Source IPv4 address for unnumbered subscriber hosts   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">shcv-policy</a> <i>string</i> <a href="#">layer-3</a> <a href="#">unnumbered-source-ip</a> <i>string</i>   |
| Tree        | <a href="#">unnumbered-source-ip</a>  |
| Description | This command configures the source IPv4 address (also known as the sender IP address) used in SHCV ARP requests for unnumbered hosts. When unconfigured, 0.0.0.0 is used as the source IPv4 address in SHCV ARP requests. |
| Introduced  | 21.10.R1  |



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **periodic**

Synopsis Enter the **periodic** context

Context **configure** [subscriber-mgmt shcv-policy](#) *string* **periodic**

Tree [periodic](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **action** *keyword*

Synopsis Action when periodic connectivity verification fails

Context **configure** [subscriber-mgmt shcv-policy](#) *string* **periodic** [action](#) *keyword*

Tree [action](#)

Options alarm, remove

Default alarm

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **admin-state** *keyword*

Synopsis Administrative state of periodic connectivity check

Context **configure** [subscriber-mgmt shcv-policy](#) *string* **periodic** [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **interval** *number*

Synopsis Time interval which all known sources are verified

Context **configure** [subscriber-mgmt shcv-policy](#) *string* **periodic** [interval](#) *number*

Tree [interval](#)

|             |   |
|-------------|---|
| Description | This command specifies the time interval which all known sources are verified. The actual rate is dependent on the number of known hosts and intervals. |
| Range       | 1 to 6000   |
| Units       | minutes   |
| Default     | 30  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **retry-count** *number*

|            |  |
|------------|--|
| Synopsis   | Number of retransmissions in connectivity verification   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt shcv-policy</a> <i>string</i> <a href="#">periodic</a> <b>retry-count</b> <i>number</i> |
| Tree       | <a href="#">retry-count</a>  |
| Range      | 1 to 29  |
| Default    | 2  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **timeout** *number*

|            |  |
|------------|--|
| Synopsis   | Timeout before connectivity verification retransmitted   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt shcv-policy</a> <i>string</i> <a href="#">periodic</a> <b>timeout</b> <i>number</i> |
| Tree       | <a href="#">timeout</a>  |
| Range      | 1 to 60  |
| Units      | seconds  |
| Default    | 10   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **trigger**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>trigger</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt shcv-policy</a> <i>string</i> <b>trigger</b> |
| Tree       | <a href="#">trigger</a>   |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### host-limit-exceeded

Synopsis Enter the **host-limit-exceeded** context

Context **configure** [subscriber-mgmt shcv-policy](#) *string* [trigger host-limit-exceeded](#)

Tree [host-limit-exceeded](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### admin-state *keyword*

Synopsis Administrative state of trigger for host-limit exceeded

Context **configure** [subscriber-mgmt shcv-policy](#) *string* [trigger host-limit-exceeded admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### retry-count *number*

Synopsis Number of retransmissions in periodic connectivity test

Context **configure** [subscriber-mgmt shcv-policy](#) *string* [trigger host-limit-exceeded retry-count](#) *number*

Tree [retry-count](#)

Range 1 to 29

Default 1

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### timeout *number*

Synopsis Timeout before a retransmission

|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt shcv-policy</a> <i>string</i> <a href="#">trigger host-limit-exceeded</a> <i>timeout number</i> |
| Tree       | <a href="#">timeout</a>  |
| Range      | 1 to 60  |
| Units      | seconds  |
| Default    | 1  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## inactivity

|            |   |
|------------|---|
| Synopsis   | Enter the <b>inactivity</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt shcv-policy</a> <i>string</i> <a href="#">trigger inactivity</a> |
| Tree       | <a href="#">inactivity</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## admin-state *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the trigger for inactive hosts  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt shcv-policy</a> <i>string</i> <a href="#">trigger inactivity</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## retry-count *number*

|            |  |
|------------|--|
| Synopsis   | Number of retransmissions in periodic connectivity test  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt shcv-policy</a> <i>string</i> <a href="#">trigger inactivity</a> <b>retry-count</b> <i>number</i> |
| Tree       | <a href="#">retry-count</a>  |
| Range      | 1 to 29  |
| Default    | 2  |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **timeout** *number*

Synopsis Timeout before a retransmission

Context **configure** [subscriber-mgmt shcv-policy](#) *string* [trigger inactivity](#) *timeout number*

Tree [timeout](#)

Range 1 to 60

Units seconds

Default 10

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ip-conflict**

Synopsis Enter the **ip-conflict** context

Context **configure** [subscriber-mgmt shcv-policy](#) *string* [trigger ip-conflict](#)

Tree [ip-conflict](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the trigger for IP conflict

Context **configure** [subscriber-mgmt shcv-policy](#) *string* [trigger ip-conflict](#) *admin-state keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **retry-count** *number*

Synopsis Number of retransmissions in periodic connectivity test

Context **configure** [subscriber-mgmt shcv-policy](#) *string* [trigger ip-conflict](#) *retry-count number*

|            |   |
|------------|---|
| Tree       | <a href="#">retry-count</a>                             |
| Range      | 1 to 29   |
| Default    | 1   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **timeout** *number*

|            |   |
|------------|---|
| Synopsis   | Timeout before a retransmission   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt shcv-policy</a> <i>string</i> <a href="#">trigger ip-conflict</a> <b>timeout</b> <i>number</i> |
| Tree       | <a href="#">timeout</a>   |
| Range      | 1 to 60   |
| Units      | seconds   |
| Default    | 1   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **mac-learning**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mac-learning</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt shcv-policy</a> <i>string</i> <a href="#">trigger mac-learning</a> |
| Tree       | <a href="#">mac-learning</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of trigger for MAC learning  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt shcv-policy</a> <i>string</i> <a href="#">trigger mac-learning</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **retry-count** *number*

|            |  |
|------------|--|
| Synopsis   | Number of retransmissions in periodic connectivity test  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt shcv-policy</a> <i>string</i> <a href="#">trigger mac-learning</a> <b>retry-count</b> <i>number</i> |
| Tree       | <a href="#">retry-count</a>  |
| Range      | 1 to 29  |
| Default    | 2  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **timeout** *number*

|            |  |
|------------|--|
| Synopsis   | Timeout before a retransmission  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt shcv-policy</a> <i>string</i> <a href="#">trigger mac-learning</a> <b>timeout</b> <i>number</i> |
| Tree       | <a href="#">timeout</a>  |
| Range      | 1 to 60  |
| Units      | seconds  |
| Default    | 10   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **mobility**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mobility</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt shcv-policy</a> <i>string</i> <a href="#">trigger</a> <b>mobility</b> |
| Tree       | <a href="#">mobility</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **admin-state** *keyword*

|          |   |
|----------|---|
| Synopsis | Administrative state of trigger for SAP IP/MAC conflict   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt shcv-policy</a> <i>string</i> <a href="#">trigger</a> <a href="#">mobility</a> <b>admin-state</b> <i>keyword</i> |
| Tree     | <a href="#">admin-state</a>   |
| Options  | enable, disable   |

|            |   |
|------------|---|
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **retry-count** *number*

|            |  |
|------------|--|
| Synopsis   | Number of retransmissions in periodic connectivity test  |
| Context    | <b>configure</b> <b>subscriber-mgmt shcv-policy</b> <i>string</i> <b>trigger mobility</b> <b>retry-count</b> <i>number</i> |
| Tree       | <b>retry-count</b>   |
| Range      | 1 to 29  |
| Default    | 1  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **timeout** *number*

|            |  |
|------------|--|
| Synopsis   | Timeout before a retransmission  |
| Context    | <b>configure</b> <b>subscriber-mgmt shcv-policy</b> <i>string</i> <b>trigger mobility</b> <b>timeout</b> <i>number</i> |
| Tree       | <b>timeout</b>   |
| Range      | 1 to 60  |
| Units      | seconds  |
| Default    | 1  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **vpls**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>vpls</b> context   |
| Context    | <b>configure</b> <b>subscriber-mgmt shcv-policy</b> <i>string</i> <b>vpls</b> |
| Tree       | <b>vpls</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                       |



**source-ip** *string*

|            |   |
|------------|---|
| Synopsis   | Source IPv4 address for connectivity verification   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">shcv-policy</a> <i>string</i> <a href="#">vpls</a> <a href="#">source-ip</a> <i>string</i> |
| Tree       | <a href="#">source-ip</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**source-mac** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Source MAC address for connectivity verification   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">shcv-policy</a> <i>string</i> <a href="#">vpls</a> <a href="#">source-mac</a> <i>string</i> |
| Tree       | <a href="#">source-mac</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**sla-profile** [[name](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>sla-profile</b> list instance   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> |
| Tree       | <a href="#">sla-profile</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                    |

**[name]** *string*

|               |  |
|---------------|--|
| Synopsis      | SLA profile name   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> |
| Tree          | <a href="#">sla-profile</a>  |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## control

Synopsis Enter the **control** context

Context **configure** [subscriber-mgmt sla-profile](#) *string* **control**

Tree [control](#)

Description Commands in this context determine which sessions can use the SLA profile.  
By default, only sessions set up by the local system can use the SLA profile, but the SLA profile can also be enabled for sessions set up by a BNG CUPS Control Plane Function (CPF).

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## cups *boolean*

Synopsis Allow the CUPS control plane to use the profile

Context **configure** [subscriber-mgmt sla-profile](#) *string* **control cups** *boolean*

Tree [cups](#)

Description When configured to **true**, the profile can be used by sessions set up by a BNG CUPS Control Plane Function (CPF).

Default false

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## local *boolean*

Synopsis Allow the local control plane to use the profile

Context **configure** [subscriber-mgmt sla-profile](#) *string* **control local** *boolean*

Tree [local](#)

Description When configured to **true**, the profile can be used by sessions set up by the local system.

Default true

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**credit-control-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | Credit policy for this SLA profile  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">credit-control-policy</a> <i>reference</i> |
| Tree       | <a href="#">credit-control-policy</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">credit-control-policy</a> <i>string</i>                              |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**def-instance-sharing** *keyword*

|            |  |
|------------|--|
| Synopsis   | Default SPI sharing method for IPoE or PPPoE sessions  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">def-instance-sharing</a> <i>keyword</i> |
| Tree       | <a href="#">def-instance-sharing</a>   |
| Options    | per-sap, per-session   |
| Default    | per-sap  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**egress**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>egress</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress</a> |
| Tree       | <a href="#">egress</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## **bonding-selection**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>bonding-selection</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress bonding-selection</a> |
| Tree       | <a href="#">bonding-selection</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## **rate-thresholds**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>rate-thresholds</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress bonding-selection rate-thresholds</a> |
| Tree       | <a href="#">rate-thresholds</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## **high number**

|            |  |
|------------|--|
| Synopsis   | High threshold rate percentage   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress bonding-selection rate-thresholds</a><br><a href="#">high number</a> |
| Tree       | <a href="#">high</a>   |
| Range      | 56 to 99   |
| Units      | percent  |
| Default    | 90   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## **low number**

|          |   |
|----------|---|
| Synopsis | Low threshold rate percentage   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress bonding-selection rate-thresholds</a><br><a href="#">low number</a> |
| Tree     | <a href="#">low</a>   |
| Range    | 55 to 98  |
| Units    | percent   |

|            |  |
|------------|--|
| Default    | 80   |
| Introduced | 16.0.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

## weight

|            |  |
|------------|--|
| Synopsis   | Enter the <b>weight</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress bonding-selection weight</a> |
| Tree       | <a href="#">weight</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## change number

|            |  |
|------------|--|
| Synopsis   | Weight change of the preferred connection  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress bonding-selection weight change number</a> |
| Tree       | <a href="#">change</a>   |
| Range      | 0 to 10  |
| Units      | percent  |
| Default    | 5  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## initial number

|            |   |
|------------|---|
| Synopsis   | Initial weight of the preferred connection  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress bonding-selection weight initial number</a> |
| Tree       | <a href="#">initial</a>   |
| Range      | 1 to 100  |
| Units      | percent   |
| Default    | 100   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **ip-filter** *reference*

|            |  |
|------------|--|
| Synopsis   | IPv4 filter policy name  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress ip-filter</a> <i>reference</i> |
| Tree       | <a href="#">ip-filter</a>  |
| Reference  | <b>configure</b> <a href="#">filter ip-filter</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **ipv6-filter** *reference*

|            |  |
|------------|--|
| Synopsis   | IPv6 filter policy name  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress ipv6-filter</a> <i>reference</i> |
| Tree       | <a href="#">ipv6-filter</a>  |
| Reference  | <b>configure</b> <a href="#">filter ipv6-filter</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **qos**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>qos</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos</a> |
| Tree       | <a href="#">qos</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **hs-agg-rate** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum rate for expanded egress HS queues  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos hs-agg-rate</a> <i>number</i> |
| Tree       | <a href="#">hs-agg-rate</a>   |
| Range      | 1 to 100000000  |
| Units      | kilobps   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR-7/12/12e  |

### **qos-marking-from-sap** *boolean*

|            |   |
|------------|---|
| Synopsis   | Set policy where egress QoS marking rules are applied   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos qos-marking-from-sap</a> <i>boolean</i> |
| Tree       | <a href="#">qos-marking-from-sap</a>  |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **sap-egress**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>sap-egress</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress</a> |
| Tree       | <a href="#">sap-egress</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **overrides**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>overrides</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress overrides</a> |
| Tree       | <a href="#">overrides</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **hs-queue-stat-mode** *keyword*

|            |  |
|------------|--|
| Synopsis   | Egress HS queue stats mode   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress overrides hs-queue-stat-mode</a> <i>keyword</i> |
| Tree       | <a href="#">hs-queue-stat-mode</a>   |
| Options    | v4-v6  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR-7/12/12e   |

**hs-wrr-group** [*id*] *reference*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>hs-wrr-group</b> list instance  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress</a> <a href="#">overrides hs-wrr-group</a> <i>reference</i> |
| Tree       | <a href="#">hs-wrr-group</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR-7/12/12e   |

**[id]** *reference*

|            |  |
|------------|--|
| Synopsis   | HS WRR group ID to override in the QoS policy table  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress</a> <a href="#">overrides hs-wrr-group</a> <i>reference</i> |
| Tree       | <a href="#">hs-wrr-group</a>   |
| Reference  | <b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">hs-wrr-group</a> <i>number</i>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR-7/12/12e   |

**hs-class-weight** *number*

|            |  |
|------------|--|
| Synopsis   | Class weight override for WRR group  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress</a> <a href="#">overrides hs-wrr-group</a> <i>reference</i> <a href="#">hs-class-weight</a> <i>number</i> |
| Tree       | <a href="#">hs-class-weight</a>  |
| Range      | 1   2   4   8  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR-7/12/12e   |

**rate** (*number* | *keyword*)

|          |  |
|----------|--|
| Synopsis | PIR rate override for WRR group  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress</a> <a href="#">overrides hs-wrr-group</a> <i>reference</i> <a href="#">rate</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <a href="#">rate</a>   |
| Range    | 1 to 2000000000  |



|            |                  |
|------------|------------------|
| Units      | kilobps          |
| Options    | max              |
| Introduced | 16.0.R1          |
| Platforms  | 7750 SR-7/12/12e |

### **policer** [*id*] *reference*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>policer</b> list instance   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress overrides</a> <a href="#">policer reference</a> |
| Tree       | <a href="#">policer</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **[id]** *reference*

|            |  |
|------------|--|
| Synopsis   | Policer ID   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress overrides</a> <a href="#">policer reference</a> |
| Tree       | <a href="#">policer</a>  |
| Reference  | <b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">policer</a> <i>number</i>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **cbs** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | CBS   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress overrides</a> <a href="#">policer reference</a> <a href="#">cbs</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cbs</a>   |
| Range      | 0 to 268435456  |
| Units      | bytes   |
| Options    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**mbs** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | MBS   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress overrides policer</a><br><i>reference</i> <a href="#">mbs</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">mbs</a>   |
| Range      | 0 to 268435456  |
| Units      | bytes   |
| Options    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**packet-byte-offset** *number*

|            |   |
|------------|---|
| Synopsis   | Packet byte offset  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress overrides policer</a><br><i>reference</i> <a href="#">packet-byte-offset</a> <i>number</i> |
| Tree       | <a href="#">packet-byte-offset</a>  |
| Range      | -64 to 31   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**rate**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>rate</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress overrides policer</a><br><i>reference</i> <a href="#">rate</a> |
| Tree       | <a href="#">rate</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**cir** (*number* | *keyword*)

|          |  |
|----------|--|
| Synopsis | CIR override for the packet byte offset  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress overrides policer</a><br><i>reference</i> <a href="#">rate cir</a> ( <i>number</i>   <i>keyword</i> ) |

|            |  |
|------------|--|
| Tree       | <a href="#">cir</a>                          |
| Range      | 0 to 2000000000                              |
| Units      | kilobps                                      |
| Options    | max  |
| Introduced | 16.0.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **pir** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | PIR override for the packet byte offset  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>rate</b> <b>pir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">pir</a>  |
| Range      | 1 to 2000000000  |
| Units      | kilobps  |
| Options    | max  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **stat-mode** *keyword*

|            |  |
|------------|--|
| Synopsis   | Stat mode for the policer  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>stat-mode</b> <i>keyword</i> |
| Tree       | <a href="#">stat-mode</a>  |
| Options    | no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, v4-v6, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile                                      |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **queue** [*id*] *reference*

|          |  |
|----------|--|
| Synopsis | Enter the <b>queue</b> list instance   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> |
| Tree     | <a href="#">queue</a>  |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

**[id] reference**

|            |  |
|------------|--|
| Synopsis   | Queue ID   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress overrides queue reference</a> |
| Tree       | <a href="#">queue</a>  |
| Reference  | <b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">queue number</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**avg-frame-overhead decimal-number**

|            |  |
|------------|--|
| Synopsis   | Average frame overhead   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress overrides queue reference avg-frame-overhead decimal-number</a> |
| Tree       | <a href="#">avg-frame-overhead</a>   |
| Range      | 0.00 to 100.00   |
| Units      | percent  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**cbs (number | keyword)**

|            |   |
|------------|---|
| Synopsis   | CBS   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress overrides queue reference cbs (number   keyword)</a> |
| Tree       | <a href="#">cbs</a>   |
| Range      | 0 to 1048576  |
| Units      | kilobytes   |
| Options    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**high-prio-only** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | High priority burst size  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>high-prio-only</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">high-prio-only</a>  |
| Range      | 0 to 100  |
| Units      | percent   |
| Options    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**hs-class-weight** *number*

|            |   |
|------------|---|
| Synopsis   | Class-weight override for expanded egress HS queues   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>hs-class-weight</b> <i>number</i> |
| Tree       | <a href="#">hs-class-weight</a>   |
| Range      | 1   2   4   8   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR-7/12/12e  |

**hs-wred-queue**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>hs-wred-queue</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>hs-wred-queue</b> |
| Tree       | <a href="#">hs-wred-queue</a>   |
| Introduced | 16.0.R4   |
| Platforms  | 7750 SR-7/12/12e  |

**policy** *reference*

|          |   |
|----------|---|
| Synopsis | Name of the slope-policy override applied to HS queue   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>hs-wred-queue</b> <a href="#">policy</a> <i>reference</i> |

|            |   |
|------------|---|
| Tree       | <a href="#">policy</a>  |
| Reference  | <b>configure</b> <a href="#">qos slope-policy</a> <i>string</i> |
| Introduced | 16.0.R4   |
| Platforms  | 7750 SR-7/12/12e  |

### **hs-wrr-weight** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum rate for expanded egress HS queues   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress overrides queue reference</a> <a href="#">hs-wrr-weight</a> <i>number</i> |
| Tree       | <a href="#">hs-wrr-weight</a>  |
| Range      | 1 to 127   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR-7/12/12e   |

### **mbs** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | MBS   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress overrides queue reference</a> <a href="#">mbs</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">mbs</a>   |
| Range      | 0 to 1073741824   |
| Units      | bytes   |
| Options    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **rate**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>rate</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress overrides queue reference</a> <a href="#">rate</a> |
| Tree       | <a href="#">rate</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**cir** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | CIR for the queue   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">rate</a> <b>cir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cir</a>   |
| Range      | 0 to 2000000000   |
| Units      | kilobps   |
| Options    | max   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**pir** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | PIR for the queue   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">rate</a> <b>pir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">pir</a>   |
| Range      | 1 to 2000000000   |
| Units      | kilobps   |
| Options    | max   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**stat-mode** *keyword*

|            |   |
|------------|---|
| Synopsis   | Stat mode for the policer   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">stat-mode</a> <i>keyword</i> |
| Tree       | <a href="#">stat-mode</a>   |
| Options    | v4-v6   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **policy-name** *reference*

|            |   |
|------------|---|
| Synopsis   | SAP-egress QoS policy   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos sap-egress</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **port-parent-location** *keyword*

|            |  |
|------------|--|
| Synopsis   | Scheduling type for queued traffic   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress port-parent-location</a> <i>keyword</i> |
| Tree       | <a href="#">port-parent-location</a>   |
| Options    | port, vport  |
| Default    | port   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **scheduler-policy**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>scheduler-policy</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos scheduler-policy</a> |
| Tree       | <a href="#">scheduler-policy</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **overrides**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>overrides</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos scheduler-policy overrides</a> |
| Tree       | <a href="#">overrides</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |



**scheduler** [[scheduler-name](#)] *reference*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>scheduler</b> list instance  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>reference</i> |
| Tree       | <a href="#">scheduler</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**[scheduler-name]** *reference*

|            |   |
|------------|---|
| Synopsis   | Scheduler policy name   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>reference</i> |
| Tree       | <a href="#">scheduler</a>   |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">scheduler-policy</a> <i>string</i> <a href="#">tier</a> <i>number</i> <a href="#">scheduler</a> <i>string</i>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**rate**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>rate</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>reference</i> <a href="#">rate</a> |
| Tree       | <a href="#">rate</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**cir** (*number* | *keyword*)

|          |   |
|----------|---|
| Synopsis | Administrative CIR  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>reference</i> <a href="#">rate</a> <a href="#">cir</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <a href="#">cir</a>   |
| Range    | 0 to 3200000000   |

|            |   |
|------------|---|
| Units      | kilobps   |
| Options    | sum, max  |
| Default    | sum   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

**pir** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Administrative PIR  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <a href="#">reference</a> <a href="#">rate</a> <b>pir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">pir</a>   |
| Range      | 1 to 3200000000   |
| Units      | kilobps   |
| Options    | max   |
| Default    | max   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**policy-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Scheduler policy name   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos</a> <a href="#">scheduler-policy</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**use-ingress-l2tp-dscp** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Use outer L2TP header for LAC sessions   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">use-ingress-l2tp-dscp</a> <i>boolean</i> |
| Tree        | <a href="#">use-ingress-l2tp-dscp</a>  |
| Description | When configured to <b>true</b> , egress classification is based on the outer L2TP header DSCP instead of the inner IP header for LAC sessions.   |

This command is ignored for non-LAC sessions.

|            |   |
|------------|---|
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## report-rate

|            |   |
|------------|---|
| Synopsis   | Enter the <b>report-rate</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress report-rate</a> |
| Tree       | <a href="#">report-rate</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## agg-rate

|            |   |
|------------|---|
| Synopsis   | Report the aggregate rate   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress report-rate</a> <a href="#">agg-rate</a>                        |
| Tree       | <a href="#">agg-rate</a>  |
| Notes      | The following elements are part of a choice: <b>agg-rate</b> , <b>policer</b> , <b>pppoe-actual-rate</b> , <b>rfc5515-actual-rate</b> , or <b>scheduler</b> . |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## policer *number*

|            |   |
|------------|---|
| Synopsis   | Report the rate of the specified policer  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress report-rate</a> <a href="#">policer</a> <i>number</i>           |
| Tree       | <a href="#">policer</a>   |
| Range      | 1 to 63   |
| Notes      | The following elements are part of a choice: <b>agg-rate</b> , <b>policer</b> , <b>pppoe-actual-rate</b> , <b>rfc5515-actual-rate</b> , or <b>scheduler</b> . |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## pppoe-actual-rate

|            |   |
|------------|---|
| Synopsis   | Report rate from the DSL characteristics PPPoE tags   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress report-rate</a> <a href="#">pppoe-actual-rate</a>               |
| Tree       | <a href="#">pppoe-actual-rate</a>   |
| Notes      | The following elements are part of a choice: <b>agg-rate</b> , <b>policer</b> , <b>pppoe-actual-rate</b> , <b>rfc5515-actual-rate</b> , or <b>scheduler</b> . |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## rfc5515-actual-rate

|            |   |
|------------|---|
| Synopsis   | Report the rate as specified in RFC5515   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress report-rate</a> <a href="#">rfc5515-actual-rate</a>             |
| Tree       | <a href="#">rfc5515-actual-rate</a>   |
| Notes      | The following elements are part of a choice: <b>agg-rate</b> , <b>policer</b> , <b>pppoe-actual-rate</b> , <b>rfc5515-actual-rate</b> , or <b>scheduler</b> . |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## scheduler *string*

|               |   |
|---------------|---|
| Synopsis      | Report the rate of the specified scheduler  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress report-rate</a> <a href="#">scheduler</a> <i>string</i>         |
| Tree          | <a href="#">scheduler</a>   |
| String Length | 1 to 32   |
| Notes         | The following elements are part of a choice: <b>agg-rate</b> , <b>policer</b> , <b>pppoe-actual-rate</b> , <b>rfc5515-actual-rate</b> , or <b>scheduler</b> . |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## host-limits

|          |  |
|----------|--|
| Synopsis | Enter the <b>host-limits</b> context   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">host-limits</a> |
| Tree     | <a href="#">host-limits</a>  |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## ipv4

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ipv4</b> context  |
| Context    | <b>configure subscriber-mgmt sla-profile</b> <i>string</i> <b>host-limits ipv4</b> |
| Tree       | <a href="#">ipv4</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                            |

## arp *number*

|             |   |
|-------------|---|
| Synopsis    | Maximum number of IPv4 ARP hosts  |
| Context     | <b>configure subscriber-mgmt sla-profile</b> <i>string</i> <b>host-limits ipv4 arp</b> <i>number</i>  |
| Tree        | <a href="#">arp</a>   |
| Description | This command configures the maximum number of IPv4 ARP hosts per SLA profile instance.<br><br>The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range       | 0 to 131071   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## dhcp *number*

|             |  |
|-------------|--|
| Synopsis    | Maximum number of IPv4 DHCP hosts  |
| Context     | <b>configure subscriber-mgmt sla-profile</b> <i>string</i> <b>host-limits ipv4 dhcp</b> <i>number</i>  |
| Tree        | <a href="#">dhcp</a>   |
| Description | This command configures the maximum number of IPv4 DHCP hosts per SLA profile instance.<br><br>The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range       | 0 to 131071  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**overall number**

|             |   |
|-------------|---|
| Synopsis    | Maximum number of IPv4 hosts  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">host-limits ipv4 overall</a> <i>number</i>   |
| Tree        | <a href="#">overall</a>   |
| Description | This command configures the maximum number of IPv4 hosts per SLA profile instance.<br>The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range       | 0 to 131071   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**ppp number**

|             |   |
|-------------|---|
| Synopsis    | Maximum number of IPv4 PPP hosts  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">host-limits ipv4 ppp</a> <i>number</i>   |
| Tree        | <a href="#">ppp</a>   |
| Description | This command configures the maximum number of IPv4 PPP hosts per SLA profile instance.<br>The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range       | 0 to 131071   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**ipv6**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ipv6</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">host-limits ipv6</a> |
| Tree       | <a href="#">ipv6</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**overall number**

|          |                              |
|----------|------------------------------|
| Synopsis | Maximum number of IPv6 hosts |
|----------|------------------------------|

|             |   |
|-------------|---|
| Context     | <b>configure subscriber-mgmt sla-profile</b> <i>string</i> <b>host-limits ipv6 overall</b> <i>number</i>  |
| Tree        | <b>overall</b>  |
| Description | This command configures the maximum number of IPv6 hosts per SLA profile instance.<br>The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range       | 0 to 131071   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **pd-ipoe-dhcp** *number*

|             |   |
|-------------|---|
| Synopsis    | Maximum number of IPv6 IPoE DHCP PD hosts   |
| Context     | <b>configure subscriber-mgmt sla-profile</b> <i>string</i> <b>host-limits ipv6 pd-ipoe-dhcp</b> <i>number</i>   |
| Tree        | <b>pd-ipoe-dhcp</b>   |
| Description | This command configures the maximum number of IPv6 IPoE DHCP Prefix Delegation hosts (IA-PD) per SLA profile instance.<br>The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range       | 0 to 131071   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **pd-overall** *number*

|             |   |
|-------------|---|
| Synopsis    | Maximum number of IPv6 DHCP PD hosts  |
| Context     | <b>configure subscriber-mgmt sla-profile</b> <i>string</i> <b>host-limits ipv6 pd-overall</b> <i>number</i>   |
| Tree        | <b>pd-overall</b>   |
| Description | The command configures the maximum number of IPv6 DHCP Prefix Delegation hosts (IA-PD) per SLA profile instance.<br>The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range       | 0 to 131071   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**pd-ppp-dhcp** *number*

|             |  |
|-------------|--|
| Synopsis    | Maximum number of IPv6 PPPoE DHCP PD hosts   |
| Context     | <b>configure</b> <b>subscriber-mgmt sla-profile</b> <i>string</i> <b>host-limits</b> <b>ipv6 pd-ppp-dhcp</b> <i>number</i>   |
| Tree        | <a href="#">pd-ppp-dhcp</a>  |
| Description | This command configures the maximum number of IPv6 PPPoE DHCP Prefix Delegation hosts (IA-PD) per SLA profile instance.<br><br>The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range       | 0 to 131071  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**wan-ipoe-dhcp** *number*

|             |   |
|-------------|---|
| Synopsis    | Maximum number of IPv6 IPoE DHCP WAN hosts  |
| Context     | <b>configure</b> <b>subscriber-mgmt sla-profile</b> <i>string</i> <b>host-limits</b> <b>ipv6 wan-ipoe-dhcp</b> <i>number</i>  |
| Tree        | <a href="#">wan-ipoe-dhcp</a>   |
| Description | This command configures the maximum number of IPv6 IPoE DHCP WAN hosts (IA-NA) per SLA profile instance.<br><br>The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range       | 0 to 131071   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**wan-ipoe-slaac** *number*

|             |  |
|-------------|--|
| Synopsis    | Maximum number of IPv6 IPoE SLAAC WAN hosts  |
| Context     | <b>configure</b> <b>subscriber-mgmt sla-profile</b> <i>string</i> <b>host-limits</b> <b>ipv6 wan-ipoe-slaac</b> <i>number</i>  |
| Tree        | <a href="#">wan-ipoe-slaac</a>   |
| Description | This command configures the maximum number of IPv6 IPoE SLAAC WAN hosts per SLA profile instance.<br><br>The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range       | 0 to 131071  |
| Introduced  | 16.0.R1  |



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **wan-overall** *number*

Synopsis Maximum number of IPv6 WAN hosts

Context **configure** **subscriber-mgmt sla-profile** *string* **host-limits ipv6 wan-overall** *number*

Tree [wan-overall](#)

Description This command configures the maximum number of IPv6 WAN hosts per SLA profile instance.  
The operational maximum value may be smaller due to equipped hardware dependencies.

Range 0 to 131071

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **wan-ppp-dhcp** *number*

Synopsis Maximum number IPv6 PPPoE DHCP WAN hosts

Context **configure** **subscriber-mgmt sla-profile** *string* **host-limits ipv6 wan-ppp-dhcp** *number*

Tree [wan-ppp-dhcp](#)

Description This command configures the maximum number of IPv6 PPPoE DHCP WAN hosts (IANA) per SLA profile instance.  
The operational maximum value may be smaller due to equipped hardware dependencies.

Range 0 to 131071

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **wan-ppp-slaac** *number*

Synopsis Maximum number of IPv6 PPPoE SLAAC WAN hosts

Context **configure** **subscriber-mgmt sla-profile** *string* **host-limits ipv6 wan-ppp-slaac** *number*

Tree [wan-ppp-slaac](#)

Description This command configures the maximum number of IPv6 PPPoE DHCP WAN hosts per SLA profile instance.  
The operational maximum value may be smaller due to equipped hardware dependencies.

|            |   |
|------------|---|
| Range      | 0 to 131071   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **lac-overall** *number*

|             |   |
|-------------|---|
| Synopsis    | Maximum number of L2TP LAC hosts  |
| Context     | <b>configure</b> <b>subscriber-mgmt sla-profile</b> <i>string</i> <b>host-limits lac-overall</b> <i>number</i>  |
| Tree        | <a href="#">lac-overall</a>   |
| Description | This command configures the maximum number of L2TP LAC hosts per SLA profile instance.<br><br>The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range       | 0 to 131071   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **overall** *number*

|             |   |
|-------------|---|
| Synopsis    | Maximum number of subscriber hosts  |
| Context     | <b>configure</b> <b>subscriber-mgmt sla-profile</b> <i>string</i> <b>host-limits overall</b> <i>number</i>  |
| Tree        | <a href="#">overall</a>   |
| Description | This command configures the maximum number of subscriber hosts per SLA profile instance.<br><br>The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range       | 1 to 131071   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **remove-oldest** *boolean*

|          |   |
|----------|---|
| Synopsis | Remove oldest   |
| Context  | <b>configure</b> <b>subscriber-mgmt sla-profile</b> <i>string</i> <b>host-limits remove-oldest</b> <i>boolean</i> |
| Tree     | <a href="#">remove-oldest</a>   |
| Default  | false   |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## idle-timeout

|            |   |
|------------|---|
| Synopsis   | Enable the <b>idle-timeout</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">idle-timeout</a> |
| Tree       | <a href="#">idle-timeout</a>  |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## category [[category-name](#)] *reference*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>category</b> list instance   |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">idle-timeout</a> <a href="#">category</a> <i>reference</i> |
| Tree           | <a href="#">category</a>  |
| Max. Instances | 16  |
| Introduced     | 16.0.R4   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## [[category-name](#)] *reference*

|             |   |
|-------------|---|
| Synopsis    | Category name   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">idle-timeout</a> <a href="#">category</a> <i>reference</i> |
| Tree        | <a href="#">category</a>  |
| Description | This command specifies the category name where the queues and policers are defined for the idle-timeout monitoring for subscriber hosts.          |
| Reference   | <b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i>                                |
| Notes       | This element is part of a list key.   |
| Introduced  | 16.0.R4   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## action *keyword*

|          |   |
|----------|---|
| Synopsis | Action when the idle-timeout is reached |
|----------|---|

|             |  |
|-------------|--|
| Context     | <b>configure subscriber-mgmt sla-profile</b> <i>string</i> <i>idle-timeout</i> <i>category</i> <i>reference</i> <i>action</i> <i>keyword</i>                       |
| Tree        | <a href="#">action</a>   |
| Description | This command specifies the action to be executed when the idle-timeout is reached. The action is performed for all hosts associated with the SLA profile instance. |
| Options     | terminate, shcv  |
| Default     | terminate  |
| Introduced  | 16.0.R4  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **timeout** *number*

|            |  |
|------------|--|
| Synopsis   | Time the category can stay below its activity threshold  |
| Context    | <b>configure subscriber-mgmt sla-profile</b> <i>string</i> <i>idle-timeout</i> <i>category</i> <i>reference</i> <i>timeout</i> <i>number</i> |
| Tree       | <a href="#">timeout</a>  |
| Range      | 60 to 15552000   |
| Units      | seconds  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **category-map-name** *reference*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Category map name  |
| Context    | <b>configure subscriber-mgmt sla-profile</b> <i>string</i> <i>idle-timeout</i> <i>category-map-name</i> <i>reference</i> |
| Tree       | <a href="#">category-map-name</a>  |
| Reference  | <b>configure subscriber-mgmt category-map</b> <i>string</i>  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## ingress

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ingress</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress</a> |
| Tree       | <a href="#">ingress</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## ip-filter reference

|            |   |
|------------|---|
| Synopsis   | IPv4 filter policy name   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress ip-filter</a> <i>reference</i> |
| Tree       | <a href="#">ip-filter</a>   |
| Reference  | <b>configure</b> <a href="#">filter ip-filter</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## ipv6-filter reference

|            |   |
|------------|---|
| Synopsis   | IPv6 filter policy name   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress ipv6-filter</a> <i>reference</i> |
| Tree       | <a href="#">ipv6-filter</a>   |
| Reference  | <b>configure</b> <a href="#">filter ipv6-filter</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## qos

|            |  |
|------------|--|
| Synopsis   | Enter the <b>qos</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress qos</a> |
| Tree       | <a href="#">qos</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## sap-ingress

|            |  |
|------------|--|
| Synopsis   | Enter the <b>sap-ingress</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress qos sap-ingress</a> |
| Tree       | <a href="#">sap-ingress</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## overrides

|            |  |
|------------|--|
| Synopsis   | Enter the <b>overrides</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress qos sap-ingress overrides</a> |
| Tree       | <a href="#">overrides</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## policer [*id*] *reference*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>policer</b> list instance  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress qos sap-ingress overrides policer</a> <i>reference</i> |
| Tree       | <a href="#">policer</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## [*id*] *reference*

|            |   |
|------------|---|
| Synopsis   | Policer ID  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress qos sap-ingress overrides policer</a> <i>reference</i> |
| Tree       | <a href="#">policer</a>   |
| Reference  | <b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">policer</a> <i>number</i>  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**cbs** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | CBS   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress qos sap-ingress overrides policer</a><br><i>reference</i> <a href="#">cbs</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cbs</a>   |
| Range      | 0 to 268435456  |
| Units      | bytes   |
| Options    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**mbs** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | MBS   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress qos sap-ingress overrides policer</a><br><i>reference</i> <a href="#">mbs</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">mbs</a>   |
| Range      | 0 to 268435456  |
| Units      | bytes   |
| Options    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**packet-byte-offset** *number*

|            |   |
|------------|---|
| Synopsis   | Packet byte offset  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress qos sap-ingress overrides policer</a><br><i>reference</i> <a href="#">packet-byte-offset</a> <i>number</i> |
| Tree       | <a href="#">packet-byte-offset</a>  |
| Range      | -32 to 31   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**rate**

|          |                               |
|----------|-------------------------------|
| Synopsis | Enter the <b>rate</b> context |
|----------|-------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress qos sap-ingress overrides policer</a> <a href="#">reference rate</a> |
| Tree       | <a href="#">rate</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**cir** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | CIR override for the packet byte offset  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress qos sap-ingress overrides policer</a> <a href="#">reference rate</a> <a href="#">cir</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cir</a>  |
| Range      | 0 to 2000000000  |
| Units      | kilobps  |
| Options    | max  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**pir** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | PIR override for the packet byte offset  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress qos sap-ingress overrides policer</a> <a href="#">reference rate</a> <a href="#">pir</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">pir</a>  |
| Range      | 1 to 2000000000  |
| Units      | kilobps  |
| Options    | max  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**stat-mode** *keyword*

|          |   |
|----------|---|
| Synopsis | Stat mode for the policer   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress qos sap-ingress overrides policer</a> <a href="#">reference</a> <a href="#">stat-mode</a> <i>keyword</i> |
| Tree     | <a href="#">stat-mode</a>   |



|            |  |
|------------|--|
| Options    | no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir, v4-v6 |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **queue** [*id*] *reference*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>queue</b> list instance   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress qos sap-ingress overrides queue reference</a> |
| Tree       | <a href="#">queue</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **[id]** *reference*

|            |  |
|------------|--|
| Synopsis   | Queue ID   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress qos sap-ingress overrides queue reference</a> |
| Tree       | <a href="#">queue</a>  |
| Reference  | <b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">queue number</a>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **cbs** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | CBS   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress qos sap-ingress overrides queue reference</a> <a href="#">cbs</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cbs</a>   |
| Range      | 0 to 1048576  |
| Units      | kilobytes   |
| Options    | auto  |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **high-prio-only** (*number* | *keyword*)

Synopsis High priority burst size

Context **configure** **subscriber-mgmt sla-profile** *string* [ingress qos sap-ingress overrides queue reference](#) [high-prio-only](#) (*number* | *keyword*)

Tree [high-prio-only](#)

Range 0 to 100

Units percent

Options auto

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mbs** (*number* | *keyword*)

Synopsis MBS

Context **configure** **subscriber-mgmt sla-profile** *string* [ingress qos sap-ingress overrides queue reference](#) [mbs](#) (*number* | *keyword*)

Tree [mbs](#)

Range 0 to 1073741824

Units bytes

Options auto

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **rate**

Synopsis Enter the **rate** context

Context **configure** **subscriber-mgmt sla-profile** *string* [ingress qos sap-ingress overrides queue reference](#) [rate](#)

Tree [rate](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**cir** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | CIR for the queue   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress qos sap-ingress overrides queue reference rate</a> <b>cir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">cir</a>   |
| Range      | 0 to 2000000000   |
| Units      | kilobps   |
| Options    | max   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**pir** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | PIR for the queue   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress qos sap-ingress overrides queue reference rate</a> <b>pir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">pir</a>   |
| Range      | 1 to 2000000000   |
| Units      | kilobps   |
| Options    | max   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**stat-mode** *keyword*

|            |  |
|------------|--|
| Synopsis   | Stat mode for the policer  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress qos sap-ingress overrides queue reference</a> <b>stat-mode</b> <i>keyword</i> |
| Tree       | <a href="#">stat-mode</a>  |
| Options    | v4-v6  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**policy-name** *reference*

|          |                        |
|----------|------------------------|
| Synopsis | SAP-ingress QoS policy |
|----------|------------------------|

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress qos sap-ingress</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### queuing-type *keyword*

|            |  |
|------------|--|
| Synopsis   | Queuing type   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress qos sap-ingress</a> <a href="#">queuing-type</a> <i>keyword</i> |
| Tree       | <a href="#">queuing-type</a>   |
| Options    | service, shared, multipoint-shared   |
| Default    | service  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### report-rate

|            |  |
|------------|--|
| Synopsis   | Enter the <b>report-rate</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress</a> <a href="#">report-rate</a> |
| Tree       | <a href="#">report-rate</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### agg-rate

|            |   |
|------------|---|
| Synopsis   | Report the aggregate rate   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress</a> <a href="#">report-rate</a> <a href="#">agg-rate</a>       |
| Tree       | <a href="#">agg-rate</a>  |
| Notes      | The following elements are part of a choice: <b>agg-rate</b> , <b>policer</b> , <b>pppoe-actual-rate</b> , <b>rfc5515-actual-rate</b> , or <b>scheduler</b> . |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **policer** *number*

|            |  |
|------------|--|
| Synopsis   | Report the rate of the specified policer   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress</a> <a href="#">report-rate</a> <a href="#">policer</a> <i>number</i> |
| Tree       | <a href="#">policer</a>  |
| Range      | 1 to 63  |
| Notes      | The following elements are part of a choice: <b>agg-rate</b> , <b>policer</b> , <b>pppoe-actual-rate</b> , <b>rfc5515-actual-rate</b> , or <b>scheduler</b> .        |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **pppoe-actual-rate**

|            |  |
|------------|--|
| Synopsis   | Report rate from the DSL characteristics PPPoE tags  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress</a> <a href="#">report-rate</a> <a href="#">pppoe-actual-rate</a> |
| Tree       | <a href="#">pppoe-actual-rate</a>  |
| Notes      | The following elements are part of a choice: <b>agg-rate</b> , <b>policer</b> , <b>pppoe-actual-rate</b> , <b>rfc5515-actual-rate</b> , or <b>scheduler</b> .    |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **rfc5515-actual-rate**

|            |  |
|------------|--|
| Synopsis   | Report the rate as specified in RFC5515  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress</a> <a href="#">report-rate</a> <a href="#">rfc5515-actual-rate</a> |
| Tree       | <a href="#">rfc5515-actual-rate</a>  |
| Notes      | The following elements are part of a choice: <b>agg-rate</b> , <b>policer</b> , <b>pppoe-actual-rate</b> , <b>rfc5515-actual-rate</b> , or <b>scheduler</b> .      |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **scheduler** *string*

|          |  |
|----------|--|
| Synopsis | Report the rate of the specified scheduler   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress</a> <a href="#">report-rate</a> <a href="#">scheduler</a> <i>string</i> |
| Tree     | <a href="#">scheduler</a>  |

|               |   |
|---------------|---|
| String Length | 1 to 32   |
| Notes         | The following elements are part of a choice: <b>agg-rate</b> , <b>policer</b> , <b>pppoe-actual-rate</b> , <b>rfc5515-actual-rate</b> , or <b>scheduler</b> . |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## one-time-http-redirection

|            |  |
|------------|--|
| Synopsis   | Enter the <b>one-time-http-redirection</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">one-time-http-redirection</a> |
| Tree       | <a href="#">one-time-http-redirection</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## ip-filter reference

|            |   |
|------------|---|
| Synopsis   | IPv4 filter policy name   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">one-time-http-redirection ip-filter</a> <i>reference</i> |
| Tree       | <a href="#">ip-filter</a>   |
| Reference  | <b>configure</b> <a href="#">filter ip-filter</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## pfc-p mappings

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>pfc-p mappings</b> context   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">pfc-p mappings</a>   |
| Tree        | <a href="#">pfc-p mappings</a>  |
| Description | Commands in this context configure the mapping of packet forwarding control protocol (PFCP) QoS IEs (such as QoS enforcement rule (QER) GBR/MBR IEs), to local QoS overrides (such as queue and policer rates). |
| Introduced  | 21.10.R1  |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## session-qer

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>session-qer</b> context   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">pfc-mappings session-qer</a>  |
| Tree        | <a href="#">session-qer</a>  |
| Description | <p>Commands in this context configure the mapping of the PFCP session QER rate to the local QoS rate.</p> <p>If a signaled PFCP QER rate applies to all data-plane rules, it is interpreted as the session QER rate and is mapped to the QoS overrides in the configuration. Examples of such QER rates are APN-AMBR for 4G FWA sessions and session-AMBR for 5G FWA sessions.</p> <p>A QER that contains a QER correlation ID does not use the QER mapping because it is assumed not to be a per-session construct.</p> |
| Introduced  | 21.10.R1   |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## downlink

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>downlink</b> context  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">pfc-mappings session-qer downlink</a> |
| Tree        | <a href="#">downlink</a>   |
| Description | Commands in this context configure the downlink MBR/GBR to QoS override mapping.   |
| Introduced  | 21.10.R1   |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## aggregate-rate

|            |   |
|------------|---|
| Synopsis   | Map MBR/GBR to a rate override for the aggregate rate   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">pfc-mappings session-qer downlink aggregate-rate</a> |
| Tree       | <a href="#">aggregate-rate</a>  |
| Notes      | The following elements are part of a choice: <b>aggregate-rate</b> , <b>arbiter</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> . |
| Introduced | 21.10.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **arbiter string**

|               |   |
|---------------|---|
| Synopsis      | Arbiter target of MBR/GBR override  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">pfc-mappings</a> <a href="#">session-qer</a> <a href="#">downlink</a> <b>arbiter</b> <i>string</i> |
| Tree          | <a href="#">arbiter</a>   |
| String Length | 1 to 32   |
| Notes         | The following elements are part of a choice: <b>aggregate-rate</b> , <b>arbiter</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .   |
| Introduced    | 21.10.R1  |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **policer number**

|            |   |
|------------|---|
| Synopsis   | Policer target of MBR/GBR override  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">pfc-mappings</a> <a href="#">session-qer</a> <a href="#">downlink</a> <b>policer</b> <i>number</i> |
| Tree       | <a href="#">policer</a>   |
| Range      | 1 to 8  |
| Notes      | The following elements are part of a choice: <b>aggregate-rate</b> , <b>arbiter</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .   |
| Introduced | 21.10.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **queue number**

|            |   |
|------------|---|
| Synopsis   | Queue target of MBR/GBR override  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">pfc-mappings</a> <a href="#">session-qer</a> <a href="#">downlink</a> <b>queue</b> <i>number</i> |
| Tree       | <a href="#">queue</a>   |
| Range      | 1 to 8  |
| Notes      | The following elements are part of a choice: <b>aggregate-rate</b> , <b>arbiter</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .   |
| Introduced | 21.10.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |



**scheduler** *string*

|               |  |
|---------------|--|
| Synopsis      | Scheduler target of MBR/GBR override   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">pfc-mappings session-qer downlink scheduler</a> <i>string</i> |
| Tree          | <a href="#">scheduler</a>  |
| String Length | 1 to 32  |
| Notes         | The following elements are part of a choice: <b>aggregate-rate</b> , <b>arbiter</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .          |
| Introduced    | 21.10.R1   |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**uplink**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>uplink</b> context  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">pfc-mappings session-qer uplink</a> |
| Tree        | <a href="#">uplink</a>   |
| Description | Commands in this context configure the uplink MBR/GBR to QoS override mapping.   |
| Introduced  | 21.10.R1   |
| Platforms   | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**arbiter** *string*

|               |  |
|---------------|--|
| Synopsis      | Arbiter target of MBR/GBR override   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">pfc-mappings session-qer uplink arbiter</a> <i>string</i> |
| Tree          | <a href="#">arbiter</a>  |
| String Length | 1 to 32  |
| Notes         | The following elements are part of a choice: <b>arbiter</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .                              |
| Introduced    | 21.10.R1   |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**policer** *number*

|          |  |
|----------|--|
| Synopsis | Policer target of MBR/GBR override   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">pfc-mappings session-qer uplink policer</a> <i>number</i> |

|            |   |
|------------|---|
| Tree       | <a href="#">policer</a>   |
| Range      | 1 to 63   |
| Notes      | The following elements are part of a choice: <b>arbiter</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> . |
| Introduced | 21.10.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **queue number**

|            |   |
|------------|---|
| Synopsis   | Queue target of MBR/GBR override  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">pfc-p-mappings</a> <a href="#">session-qer</a> <a href="#">uplink</a> <a href="#">queue number</a> |
| Tree       | <a href="#">queue</a>   |
| Range      | 1 to 32   |
| Notes      | The following elements are part of a choice: <b>arbiter</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .   |
| Introduced | 21.10.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **scheduler string**

|               |   |
|---------------|---|
| Synopsis      | Scheduler target of MBR/GBR override  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">pfc-p-mappings</a> <a href="#">session-qer</a> <a href="#">uplink scheduler string</a> |
| Tree          | <a href="#">scheduler</a>   |
| String Length | 1 to 32   |
| Notes         | The following elements are part of a choice: <b>arbiter</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .   |
| Introduced    | 21.10.R1  |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **session-limits**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>session-limits</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">session-limits</a> |
| Tree       | <a href="#">session-limits</a>  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ipoe number**

|             |   |
|-------------|---|
| Synopsis    | Maximum number of IPoE sessions   |
| Context     | <b>configure subscriber-mgmt sla-profile string session-limits ipoe number</b>        |
| Tree        | <a href="#">ipoe</a>  |
| Description | This command configures the maximum number of IPoE sessions per SLA profile instance. |
| Range       | 0 to 131071   |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                               |

### **l2tp**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>l2tp</b> context   |
| Context    | <b>configure subscriber-mgmt sla-profile string session-limits l2tp</b> |
| Tree       | <a href="#">l2tp</a>  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                 |

### **lns number**

|             |   |
|-------------|---|
| Synopsis    | Maximum number of L2TP LNS sessions   |
| Context     | <b>configure subscriber-mgmt sla-profile string session-limits l2tp lns number</b>        |
| Tree        | <a href="#">lns</a>   |
| Description | This command configures the maximum number of L2TP LNS sessions per SLA profile instance. |
| Range       | 0 to 131071   |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                   |

### **lts number**

|          |  |
|----------|--|
| Synopsis | Maximum number of L2TP LTS sessions  |
| Context  | <b>configure subscriber-mgmt sla-profile string session-limits l2tp lts number</b> |
| Tree     | <a href="#">lts</a>  |

|             |   |
|-------------|---|
| Description | This command configures the maximum number of L2TP LTS sessions per SLA profile instance. |
| Range       | 0 to 131071   |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                   |

### **overall number**

|             |   |
|-------------|---|
| Synopsis    | Maximum number of L2TP sessions   |
| Context     | <b>configure subscriber-mgmt sla-profile</b> <i>string session-limits l2tp overall number</i> |
| Tree        | <a href="#">overall</a>   |
| Description | This command configures the maximum number of L2TP sessions per SLA profile instance.         |
| Range       | 0 to 131071   |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                       |

### **overall number**

|            |  |
|------------|--|
| Synopsis   | Maximum number of subscriber sessions  |
| Context    | <b>configure subscriber-mgmt sla-profile</b> <i>string session-limits overall number</i> |
| Tree       | <a href="#">overall</a>  |
| Range      | 0 to 131071  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                  |

### **pppoe**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>pppoe</b> context  |
| Context    | <b>configure subscriber-mgmt sla-profile</b> <i>string session-limits pppoe</i> |
| Tree       | <a href="#">pppoe</a>   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                         |

**lac number**

|             |  |
|-------------|--|
| Synopsis    | Maximum number of PPPoE L2TP LAC sessions  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">session-limits pppoe lac number</a> |
| Tree        | <a href="#">lac</a>  |
| Description | This command configures the maximum number of PPPoE L2TP LAC sessions per SLA profile instance.                            |
| Range       | 0 to 131071  |
| Introduced  | 20.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**local number**

|             |  |
|-------------|--|
| Synopsis    | Maximum number of PPPoE local terminated sessions  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">session-limits pppoe local number</a> |
| Tree        | <a href="#">local</a>  |
| Description | This command configures the maximum number of PPPoE local terminated sessions (PTA) per SLA profile instance.                |
| Range       | 0 to 131071  |
| Introduced  | 20.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**overall number**

|             |  |
|-------------|--|
| Synopsis    | Maximum number of PPPoE sessions   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">session-limits pppoe overall number</a> |
| Tree        | <a href="#">overall</a>  |
| Description | This command configures the maximum number of PPPoE sessions per SLA profile instance.   |
| Range       | 0 to 131071  |
| Introduced  | 20.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**steering-profile [name] string**

|          |   |
|----------|---|
| Synopsis | Enter the <b>steering-profile</b> list instance |
|----------|---|

|                |   |
|----------------|---|
| Context        | <b>configure subscriber-mgmt steering-profile</b> <i>string</i> |
| Tree           | <a href="#">steering-profile</a>                                |
| Max. Instances | 32  |
| Introduced     | 16.0.R1   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR         |

**[name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Steering profile name   |
| Context       | <b>configure subscriber-mgmt steering-profile</b> <i>string</i> |
| Tree          | <a href="#">steering-profile</a>                                |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.                             |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR         |

**access**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>access</b> context   |
| Context    | <b>configure subscriber-mgmt steering-profile</b> <i>string</i> <b>access</b> |
| Tree       | <a href="#">access</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                       |

**router-instance** *string*

|            |   |
|------------|---|
| Synopsis   | Router instance to be used as an access VAS router  |
| Context    | <b>configure subscriber-mgmt steering-profile</b> <i>string</i> <b>access router-instance</b> <i>string</i> |
| Tree       | <a href="#">router-instance</a>   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt steering-profile</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**network**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>network</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt steering-profile</a> <i>string</i> <a href="#">network</a> |
| Tree       | <a href="#">network</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**next-hop** *string*

|            |  |
|------------|--|
| Synopsis   | Next-hop IP address used for network next-hop  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt steering-profile</a> <i>string</i> <a href="#">network</a> <a href="#">next-hop</a> <i>string</i> |
| Tree       | <a href="#">next-hop</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**router-instance** *string*

|            |   |
|------------|---|
| Synopsis   | Router instance to be used as an access VAS router  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt steering-profile</a> <i>string</i> <a href="#">network</a> <a href="#">router-instance</a> <i>string</i> |
| Tree       | <a href="#">router-instance</a>   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**sub-ident-policy** [[name](#)] *string*

|          |   |
|----------|---|
| Synopsis | Enter the <b>sub-ident-policy</b> list instance |
|----------|---|

---

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-ident-policy</a> <i>string</i> |
| Tree       | <a href="#">sub-ident-policy</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                         |

### **[name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Subscriber identification policy name   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt sub-ident-policy</a> <i>string</i> |
| Tree          | <a href="#">sub-ident-policy</a>  |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                         |

### **app-profile-map**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>app-profile-map</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-ident-policy</a> <i>string</i> <a href="#">app-profile-map</a> |
| Tree       | <a href="#">app-profile-map</a>   |
| Introduced | 21.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **entry** [[app-profile-string](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>entry</b> list instance   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-ident-policy</a> <i>string</i> <a href="#">app-profile-map</a> <b>entry</b> <i>string</i> |
| Tree       | <a href="#">entry</a>  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **[app-profile-string]** *string*

|          |  |
|----------|--|
| Synopsis | Application profile string   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt sub-ident-policy</a> <i>string</i> <a href="#">app-profile-map</a> <b>entry</b> <i>string</i> |



|               |  |
|---------------|--|
| Tree          | <a href="#">entry</a>                        |
| String Length | 1 to 16                                      |
| Notes         | This element is part of a list key.          |
| Introduced    | 21.10.R1                                     |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **app-profile** *reference*

|            |  |
|------------|--|
| Synopsis   | Application profile name   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">app-profile-map</a> <a href="#">entry</a> <i>string</i> <a href="#">app-profile</a> <i>reference</i> |
| Tree       | <a href="#">app-profile</a>  |
| Reference  | <b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i>              |
| Notes      | This element is mandatory.   |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **use-direct-map-as-default** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable direct mapping of application profile as default  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">app-profile-map</a> <a href="#">use-direct-map-as-default</a> <i>boolean</i> |
| Tree       | <a href="#">use-direct-map-as-default</a>  |
| Default    | false  |
| Introduced | 21.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## primary

|            |   |
|------------|---|
| Synopsis   | Enter the <b>primary</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">primary</a> |
| Tree       | <a href="#">primary</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of script execution   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">primary</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## script-url *string*

|               |  |
|---------------|--|
| Synopsis      | Identification script URL  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">primary</a> <a href="#">script-url</a> <i>string</i> |
| Tree          | <a href="#">script-url</a>   |
| String Length | 1 to 180   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## secondary

|            |   |
|------------|---|
| Synopsis   | Enter the <b>secondary</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">secondary</a> |
| Tree       | <a href="#">secondary</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of script execution  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">secondary</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**script-url** *string*

|               |   |
|---------------|---|
| Synopsis      | Identification script URL   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">secondary</a> <b>script-url</b> <i>string</i> |
| Tree          | <a href="#">script-url</a>  |
| String Length | 1 to 180  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**sla-profile-map**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>sla-profile-map</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <b>sla-profile-map</b> |
| Tree       | <a href="#">sla-profile-map</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**entry** [[sla-profile-string](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>entry</b> list instance   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">sla-profile-map</a> <b>entry</b> <i>string</i> |
| Tree       | <a href="#">entry</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**[sla-profile-string]** *string*

|               |   |
|---------------|---|
| Synopsis      | SLA profile string  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">sla-profile-map</a> <a href="#">entry</a> <i>string</i> |
| Tree          | <a href="#">entry</a>   |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**sla-profile** *reference*

|            |  |
|------------|--|
| Synopsis   | SLA profile  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">sla-profile-map</a> <a href="#">entry</a> <i>string</i> <a href="#">sla-profile</a> <i>reference</i> |
| Tree       | <a href="#">sla-profile</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i>   |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**use-direct-map-as-default** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow direct mapping of SLA profile as default   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">sla-profile-map</a> <a href="#">use-direct-map-as-default</a> <i>boolean</i> |
| Tree       | <a href="#">use-direct-map-as-default</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**strings-from-option** *number*

|          |   |
|----------|---|
| Synopsis | IPOE option to get the identification strings   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">strings-from-option</a> <i>number</i> |

|            |   |
|------------|---|
| Tree       | <a href="#">strings-from-option</a>                     |
| Range      | 1 to 254  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## sub-profile-map

|            |   |
|------------|---|
| Synopsis   | Enter the <b>sub-profile-map</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">sub-profile-map</a> |
| Tree       | <a href="#">sub-profile-map</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## entry [[sub-profile-string](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>entry</b> list instance   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">sub-profile-map</a> <b>entry</b> <i>string</i> |
| Tree       | <a href="#">entry</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## [[sub-profile-string](#)] *string*

|               |  |
|---------------|--|
| Synopsis      | Subscriber identification string   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">sub-profile-map</a> <b>entry</b> <i>string</i> |
| Tree          | <a href="#">entry</a>  |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## sub-profile *reference*

|          |                    |
|----------|--------------------|
| Synopsis | Subscriber profile |
|----------|--------------------|

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-ident-policy string sub-profile-map entry string sub-profile reference</a> |
| Tree       | <a href="#">sub-profile</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a>   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **use-direct-map-as-default** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow direct mapping of subscriber profile as default  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-ident-policy string sub-profile-map use-direct-map-as-default boolean</a> |
| Tree       | <a href="#">use-direct-map-as-default</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **tertiary**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>tertiary</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-ident-policy string tertiary</a> |
| Tree       | <a href="#">tertiary</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                           |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of script execution  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-ident-policy string tertiary admin-state keyword</a> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**script-url** *string*

|               |   |
|---------------|---|
| Synopsis      | Identification script URL   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">tertiary</a> <a href="#">script-url</a> <i>string</i> |
| Tree          | <a href="#">script-url</a>  |
| String Length | 1 to 180  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**sub-mcac-policy** [[name](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>sub-mcac-policy</b> list instance   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-mcac-policy</a> <i>string</i> |
| Tree       | <a href="#">sub-mcac-policy</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

**[name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Policy name  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-mcac-policy</a> <i>string</i> |
| Tree          | <a href="#">sub-mcac-policy</a>  |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the subscriber MCAC policy  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-mcac-policy</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

## bandwidth

Synopsis Enter the **bandwidth** context

Context **configure** [subscriber-mgmt sub-mcac-policy](#) *string* [bandwidth](#)

Tree [bandwidth](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

## mandatory (*number* | *keyword*)

Synopsis Pre-reserved bandwidth for all mandatory channels

Context **configure** [subscriber-mgmt sub-mcac-policy](#) *string* [bandwidth mandatory](#) (*number* | *keyword*)

Tree [mandatory](#)

Range 0 to 2147483647

Options unlimited

Default unlimited

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

## total (*number* | *keyword*)

Synopsis Maximum allowed bandwidth

Context **configure** [subscriber-mgmt sub-mcac-policy](#) *string* [bandwidth total](#) (*number* | *keyword*)

Tree [total](#)

Range 0 to 2147483647

Options unlimited

Default unlimited

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

## description *string*

Synopsis Text description



|               |  |
|---------------|--|
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-mcac-policy</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s   |

### **sub-profile** [[name](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>sub-profile</b> list instance   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i> |
| Tree       | <a href="#">sub-profile</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                    |

### **[name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Subscriber profile name  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i> |
| Tree          | <a href="#">sub-profile</a>  |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                    |

### **accounting-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | Accounting policy   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i> <a href="#">accounting-policy</a> <i>reference</i> |
| Tree       | <a href="#">accounting-policy</a>   |
| Reference  | <b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **accu-stats-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | Accumulated statistics policy   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">accu-stats-policy</a> <i>reference</i> |
| Tree       | <a href="#">accu-stats-policy</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">accu-stats-policy</a> <i>string</i>                              |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ancp**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ancp</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">ancp</a> |
| Tree       | <a href="#">ancp</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ancp-policy** *reference*

|            |  |
|------------|--|
| Synopsis   | ANCP policy for this subscriber profile  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">ancp</a> <a href="#">ancp-policy</a> <i>reference</i> |
| Tree       | <a href="#">ancp-policy</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-policy</a> <i>string</i>                              |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **collect-stats** *boolean*

|            |   |
|------------|---|
| Synopsis   | Collect statistics  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">collect-stats</a> <i>boolean</i> |
| Tree       | <a href="#">collect-stats</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## control

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>control</b> context   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <b>control</b>   |
| Tree        | <a href="#">control</a>  |
| Description | Commands in this context determine which sessions can use the subscriber profile.<br>By default, only sessions set up by the local system can use the profile, however, the profile can also be enabled for sessions set up by a BNG CUPS CPF. |
| Introduced  | 20.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## cups *boolean*

|             |   |
|-------------|---|
| Synopsis    | Allow the CUPS control plane to use the profile   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <b>control cups</b> <i>boolean</i>                  |
| Tree        | <a href="#">cups</a>  |
| Description | When configured to <b>true</b> , the profile can be used by sessions set up by a BNG CUPS Control Plane Function (CPF). |
| Default     | false   |
| Introduced  | 20.5.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## local *boolean*

|             |   |
|-------------|---|
| Synopsis    | Allow the local control plane to use the profile  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <b>control local</b> <i>boolean</i> |
| Tree        | <a href="#">local</a>   |
| Description | When configured to <b>true</b> , the profile can be used by sessions set up by the local system.        |
| Default     | true  |
| Introduced  | 20.5.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## description *string*

|          |  |
|----------|--|
| Synopsis | Text description   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <b>description</b> <i>string</i> |

---

|               |   |
|---------------|---|
| Tree          | <a href="#">description</a>                             |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## **egress**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>egress</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">egress</a> |
| Tree       | <a href="#">egress</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## **lag-per-link-hash**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>lag-per-link-hash</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">egress lag-per-link-hash</a> |
| Tree       | <a href="#">lag-per-link-hash</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## **class *number***

|            |   |
|------------|---|
| Synopsis   | Class used to select a LAG link   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">egress lag-per-link-hash class</a> <i>number</i> |
| Tree       | <a href="#">class</a>   |
| Range      | 1 to 3  |
| Default    | 1   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## **weight *number***

|          |  |
|----------|--|
| Synopsis | Weight associated with SAP when selecting a LAG link   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">egress lag-per-link-hash weight</a> <i>number</i> |

|            |   |
|------------|---|
| Tree       | <a href="#">weight</a>                                  |
| Range      | 1 to 1024   |
| Default    | 1   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## qos

|            |  |
|------------|--|
| Synopsis   | Enter the <b>qos</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile string egress qos</a> |
| Tree       | <a href="#">qos</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                        |

## agg-rate

|            |   |
|------------|---|
| Synopsis   | Enter the <b>agg-rate</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile string egress qos agg-rate</a> |
| Tree       | <a href="#">agg-rate</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                 |

## adaptation-rule *keyword*

|             |  |
|-------------|--|
| Synopsis    | Adaptation rule for operational PIR value of subscriber  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt sub-profile string egress qos agg-rate adaptation-rule keyword</a>  |
| Tree        | <a href="#">adaptation-rule</a>  |
| Description | This command configures the adaptation rule for the PIR value of the subscriber aggregate rate. This rule determines which configured value is adapted to <b>oper-agg-rate</b> based on hardware capabilities. |
| Options     | max, min, closest  |
| Default     | closest  |
| Introduced  | 21.7.R1  |
| Platforms   | 7750 SR-1, 7750 SR-s   |

**burst-limit** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Burst limit of the subscriber aggregate rate   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">agg-rate</a> <b>burst-limit</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">burst-limit</a>  |
| Range      | 1 to 14000000  |
| Units      | bytes  |
| Options    | auto   |
| Default    | auto   |
| Introduced | 21.7.R1  |
| Platforms  | 7750 SR-1, 7750 SR-s   |

**min-resv-bw** *number*

|            |   |
|------------|---|
| Synopsis   | Reserved minimum total rate of all egress queues  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">agg-rate</a> <b>min-resv-bw</b> <i>number</i> |
| Tree       | <a href="#">min-resv-bw</a>   |
| Range      | 0 to 8000000000   |
| Units      | kilobps   |
| Default    | 1   |
| Introduced | 19.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**queue-frame-based-accounting** *boolean*

|            |   |
|------------|---|
| Synopsis   | Use frame-based accounting to evaluate rate limit   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">agg-rate</a> <b>queue-frame-based-accounting</b> <i>boolean</i> |
| Tree       | <a href="#">queue-frame-based-accounting</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**rate number**

|            |   |
|------------|---|
| Synopsis   | Maximum total rate of all egress queues   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <a href="#">egress qos agg-rate rate number</a> |
| Tree       | <a href="#">rate</a>  |
| Range      | 1 to 800000000  |
| Units      | kilobps   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**encap-offset**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>encap-offset</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <a href="#">egress qos encap-offset</a> |
| Tree       | <a href="#">encap-offset</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**type keyword**

|            |  |
|------------|--|
| Synopsis   | Offset type  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <a href="#">egress qos encap-offset type keyword</a>   |
| Tree       | <a href="#">type</a>   |
| Options    | pppoa-llc, pppoa-null, pppoeoa-llc, pppoeoa-llc-fcs, pppoeoa-llc-tagged, pppoeoa-llc-tagged-fcs, pppoeoa-null, pppoeoa-null-fcs, pppoeoa-null-tagged, pppoeoa-null-tagged-fcs, ipoa-llc, ipoa-null, ipoeoa-llc, ipoeoa-llc-fcs, ipoeoa-llc-tagged, ipoeoa-llc-tagged-fcs, ipoeoa-null, ipoeoa-null-fcs, ipoeoa-null-tagged, ipoeoa-null-tagged-fcs, pppoe, pppoe-tagged, ipoe, ipoe-tagged |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**hs-agg-rate number**

|          |   |
|----------|---|
| Synopsis | Maximum rate for single egress HS queues  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <a href="#">egress qos hs-agg-rate number</a> |
| Tree     | <a href="#">hs-agg-rate</a>   |
| Range    | 1 to 100000000  |

|            |                  |
|------------|------------------|
| Units      | kilobps          |
| Introduced | 16.0.R1          |
| Platforms  | 7750 SR-7/12/12e |

### **hs-low-burst-max-class** *number*

|            |   |
|------------|---|
| Synopsis   | Scheduling classes to map the low burst limit threshold   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">egress qos</a> <b>hs-low-burst-max-class</b> <i>number</i> |
| Tree       | <a href="#">hs-low-burst-max-class</a>  |
| Range      | 1 to 6  |
| Default    | 6   |
| Introduced | 16.0.R4   |
| Platforms  | 7750 SR-7/12/12e  |

### **hs-min-resv-bw** *number*

|            |   |
|------------|---|
| Synopsis   | Reserved minimum total rate of all egress queues  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">egress qos</a> <b>hs-min-resv-bw</b> <i>number</i> |
| Tree       | <a href="#">hs-min-resv-bw</a>  |
| Range      | 0 to 100000000  |
| Units      | kilobps   |
| Default    | 1   |
| Introduced | 19.10.R1  |
| Platforms  | 7750 SR-7/12/12e  |

### **policer-control-policy**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>policer-control-policy</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">egress qos</a> <b>policer-control-policy</b> |
| Tree       | <a href="#">policer-control-policy</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |



## overrides

|            |  |
|------------|--|
| Synopsis   | Enter the <b>overrides</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">egress qos policer-control-policy overrides</a> |
| Tree       | <a href="#">overrides</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## root

|            |  |
|------------|--|
| Synopsis   | Enable the <b>root</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">egress qos policer-control-policy overrides</a><br><a href="#">root</a> |
| Tree       | <a href="#">root</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## max-rate (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Maximum rate   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">egress qos policer-control-policy overrides</a><br><a href="#">root max-rate</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">max-rate</a>   |
| Range      | 1 to 2000000000  |
| Units      | kilobps  |
| Options    | max  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## priority-mbs-thresholds

|            |  |
|------------|--|
| Synopsis   | Enter the <b>priority-mbs-thresholds</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">egress qos policer-control-policy overrides</a><br><a href="#">root priority-mbs-thresholds</a> |
| Tree       | <a href="#">priority-mbs-thresholds</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**min-thresh-separation** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Minimum threshold separation  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <b>min-thresh-separation</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">min-thresh-separation</a>   |
| Range      | 0 to 16777216   |
| Units      | bytes   |
| Options    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**priority** [[level](#)] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>priority</b> list instance   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <b>priority</b> <i>number</i> |
| Tree       | <a href="#">priority</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**[level]** *number*

|            |   |
|------------|---|
| Synopsis   | Strict priority level   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <b>priority</b> <i>number</i> |
| Tree       | <a href="#">priority</a>  |
| Range      | 1 to 8  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**mbs-contribution** (*number* | *keyword*)

|          |          |
|----------|----------|
| Synopsis | MBS size |
|----------|----------|

|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">egress qos policer-control-policy overrides</a> <a href="#">root priority-mbs-thresholds priority</a> <i>number</i> <a href="#">mbs-contribution</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">mbs-contribution</a>   |
| Range      | 0 to 16777216  |
| Units      | bytes  |
| Options    | auto   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **policy-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Policer control policy name   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">egress qos policer-control-policy</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos policer-control-policy</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **scheduler-policy**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>scheduler-policy</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">egress qos scheduler-policy</a> |
| Tree       | <a href="#">scheduler-policy</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **overrides**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>overrides</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">egress qos scheduler-policy overrides</a> |
| Tree       | <a href="#">overrides</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**scheduler** [[scheduler-name](#)] *reference*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>scheduler</b> list instance  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <a href="#">egress qos scheduler-policy overrides scheduler reference</a> |
| Tree       | <a href="#">scheduler</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**[scheduler-name]** *reference*

|            |   |
|------------|---|
| Synopsis   | Scheduler policy name   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <a href="#">egress qos scheduler-policy overrides scheduler reference</a> |
| Tree       | <a href="#">scheduler</a>   |
| Reference  | <b>configure</b> <a href="#">qos scheduler-policy string tier number scheduler string</a>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**rate**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>rate</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <a href="#">egress qos scheduler-policy overrides scheduler reference rate</a> |
| Tree       | <a href="#">rate</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**cir** (*number* | *keyword*)

|          |   |
|----------|---|
| Synopsis | CIR to override administrative CIR used by scheduler  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <a href="#">egress qos scheduler-policy overrides scheduler reference rate cir (number   keyword)</a> |
| Tree     | <a href="#">cir</a>   |
| Range    | 0 to 3200000000   |
| Units    | kilobps   |

|            |   |
|------------|---|
| Options    | sum, max  |
| Default    | sum   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **pir** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | PIR to override administrative PIR used by scheduler   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <a href="#">egress qos scheduler-policy overrides scheduler reference rate</a> <b>pir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">pir</a>  |
| Range      | 1 to 3200000000  |
| Units      | kilobps  |
| Options    | max  |
| Default    | max  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **policy-name** *reference*

|            |   |
|------------|---|
| Synopsis   | Scheduler policy name   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <a href="#">egress qos scheduler-policy policy-name reference</a> |
| Tree       | <a href="#">policy-name</a>   |
| Reference  | <b>configure</b> <a href="#">qos scheduler-policy string</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **firewall-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | Firewall policy   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <a href="#">firewall-policy reference</a> |
| Tree       | <a href="#">firewall-policy</a>   |
| Reference  | <b>configure</b> <a href="#">service nat firewall-policy string</a>   |
| Introduced | 16.0.R1   |

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## host-limits

Synopsis Enter the **host-limits** context

Context **configure** [subscriber-mgmt sub-profile string](#) **host-limits**

Tree [host-limits](#)

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv4

Synopsis Enter the **ipv4** context

Context **configure** [subscriber-mgmt sub-profile string](#) **host-limits ipv4**

Tree [ipv4](#)

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## arp number

Synopsis Maximum number of IPv4 ARP hosts

Context **configure** [subscriber-mgmt sub-profile string](#) **host-limits ipv4 arp number**

Tree [arp](#)

Description This command configures the maximum number of IPv4 ARP hosts per subscriber instance.

The operational maximum value may be smaller due to equipped hardware dependencies.

Range 0 to 131071

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## dhcp number

Synopsis Maximum number of IPv4 DHCP hosts

Context **configure** [subscriber-mgmt sub-profile string](#) **host-limits ipv4 dhcp number**

Tree [dhcp](#)

|             |   |
|-------------|---|
| Description | This command configures the maximum number of IPv4 DHCP hosts per subscriber instance.<br>The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range       | 0 to 131071   |
| Introduced  | 20.5.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **overall number**

|             |  |
|-------------|--|
| Synopsis    | Maximum number of IPv4 hosts   |
| Context     | <b>configure subscriber-mgmt sub-profile string host-limits ipv4 overall number</b>  |
| Tree        | <b>overall</b>   |
| Description | This command configures the maximum number of IPv4 hosts per subscriber instance.<br>The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range       | 0 to 131071  |
| Introduced  | 20.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **ppp number**

|             |  |
|-------------|--|
| Synopsis    | Maximum number of IPv4 PPP hosts   |
| Context     | <b>configure subscriber-mgmt sub-profile string host-limits ipv4 ppp number</b>  |
| Tree        | <b>ppp</b>   |
| Description | This command configures the maximum number of IPv4 PPP hosts per subscriber instance.<br>The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range       | 0 to 131071  |
| Introduced  | 20.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **ipv6**

|          |                               |
|----------|-------------------------------|
| Synopsis | Enter the <b>ipv6</b> context |
|----------|-------------------------------|

|            |  |
|------------|--|
| Context    | <b>configure subscriber-mgmt sub-profile</b> <i>string</i> <b>host-limits ipv6</b> |
| Tree       | <a href="#">ipv6</a>   |
| Introduced | 20.5.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                            |

### **overall** *number*

|             |  |
|-------------|--|
| Synopsis    | Maximum number of IPv6 hosts   |
| Context     | <b>configure subscriber-mgmt sub-profile</b> <i>string</i> <b>host-limits ipv6 overall</b> <i>number</i>   |
| Tree        | <a href="#">overall</a>  |
| Description | This command configures the maximum number of IPv6 hosts per subscriber instance.<br>The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range       | 0 to 131071  |
| Introduced  | 20.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **pd-ipoe-dhcp** *number*

|             |  |
|-------------|--|
| Synopsis    | Maximum number of IPv6 IPoE DHCP PD hosts  |
| Context     | <b>configure subscriber-mgmt sub-profile</b> <i>string</i> <b>host-limits ipv6 pd-ipoe-dhcp</b> <i>number</i>  |
| Tree        | <a href="#">pd-ipoe-dhcp</a>   |
| Description | This command configures the maximum number of IPv6 IPoE DHCP Prefix Delegation hosts (IA-PD) per subscriber instance.<br>The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range       | 0 to 131071  |
| Introduced  | 20.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **pd-overall** *number*

|          |   |
|----------|---|
| Synopsis | Maximum number of IPv6 DHCP PD hosts  |
| Context  | <b>configure subscriber-mgmt sub-profile</b> <i>string</i> <b>host-limits ipv6 pd-overall</b> <i>number</i> |
| Tree     | <a href="#">pd-overall</a>  |



|             |  |
|-------------|--|
| Description | The command configures the maximum number of IPv6 DHCP Prefix Delegation hosts (IA-PD) per subscriber instance.<br>The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range       | 0 to 131071  |
| Introduced  | 20.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **pd-ppp-dhcp** *number*

|             |   |
|-------------|---|
| Synopsis    | Maximum number of IPv6 PPPoE DHCP PD hosts  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">host-limits ipv6 pd-ppp-dhcp</a> <i>number</i>   |
| Tree        | <a href="#">pd-ppp-dhcp</a>   |
| Description | This command configures the maximum number of IPv6 PPPoE DHCP Prefix Delegation hosts (IA-PD) per subscriber instance.<br>The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range       | 0 to 131071   |
| Introduced  | 20.5.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **wan-ipoe-dhcp** *number*

|             |  |
|-------------|--|
| Synopsis    | Maximum number of IPv6 IPoE DHCP WAN hosts   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">host-limits ipv6 wan-ipoe-dhcp</a> <i>number</i>  |
| Tree        | <a href="#">wan-ipoe-dhcp</a>  |
| Description | This command configures the maximum number of IPv6 IPoE DHCP WAN hosts (IA-NA) per subscriber instance.<br>The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range       | 0 to 131071  |
| Introduced  | 20.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **wan-ipoe-slaac** *number*

|          |   |
|----------|---|
| Synopsis | Maximum number of IPv6 IPoE SLAAC WAN hosts |
|----------|---|

|             |   |
|-------------|---|
| Context     | <b>configure subscriber-mgmt sub-profile</b> <i>string</i> <b>host-limits ipv6 wan-ipoe-slaac</b> <i>number</i>   |
| Tree        | <a href="#">wan-ipoe-slaac</a>  |
| Description | This command configures the maximum number of IPv6 IPoE SLAAC WAN hosts per subscriber instance.<br><br>The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range       | 0 to 131071   |
| Introduced  | 20.5.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **wan-overall** *number*

|             |  |
|-------------|--|
| Synopsis    | Maximum number of IPv6 WAN hosts   |
| Context     | <b>configure subscriber-mgmt sub-profile</b> <i>string</i> <b>host-limits ipv6 wan-overall</b> <i>number</i>   |
| Tree        | <a href="#">wan-overall</a>  |
| Description | This command configures the maximum number of IPv6 WAN hosts per subscriber instance.<br><br>The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range       | 0 to 131071  |
| Introduced  | 20.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **wan-ppp-dhcp** *number*

|             |   |
|-------------|---|
| Synopsis    | Maximum number of IPv6 PPPoE DHCP WAN hosts   |
| Context     | <b>configure subscriber-mgmt sub-profile</b> <i>string</i> <b>host-limits ipv6 wan-ppp-dhcp</b> <i>number</i>   |
| Tree        | <a href="#">wan-ppp-dhcp</a>  |
| Description | This command configures the maximum number of IPv6 PPPoE DHCP WAN hosts per subscriber instance.<br><br>The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range       | 0 to 131071   |
| Introduced  | 20.5.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**wan-ppp-slaac** *number*

|             |  |
|-------------|--|
| Synopsis    | Maximum number of IPv6 PPPoE SLAAC WAN hosts   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">host-limits ipv6 wan-ppp-slaac</a> <i>number</i>  |
| Tree        | <a href="#">wan-ppp-slaac</a>  |
| Description | This command configures the maximum number of IPv6 PPPoE SLAAC WAN hosts per subscriber instance.<br><br>The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range       | 0 to 131071  |
| Introduced  | 20.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**lac-overall** *number*

|             |  |
|-------------|--|
| Synopsis    | Maximum number of L2TP LAC hosts   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">host-limits lac-overall</a> <i>number</i>   |
| Tree        | <a href="#">lac-overall</a>  |
| Description | This command configures the maximum number of L2TP LAC hosts per subscriber instance.<br><br>The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range       | 0 to 131071  |
| Introduced  | 20.5.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**overall** *number*

|             |  |
|-------------|--|
| Synopsis    | Maximum number of subscriber hosts   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">host-limits overall</a> <i>number</i>   |
| Tree        | <a href="#">overall</a>  |
| Description | This command configures the maximum number of subscriber hosts per subscriber instance.<br><br>The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range       | 1 to 131071  |
| Introduced  | 20.5.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **host-tracking-policy** *reference*

Synopsis Host tracking policy  
 Context **configure** [subscriber-mgmt sub-profile](#) *string* [host-tracking-policy reference](#)  
 Tree [host-tracking-policy](#)  
 Reference **configure** [subscriber-mgmt](#) [host-tracking-policy](#) *string*  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **hs-sla-mode** *keyword*

Synopsis HS board subscriber SLA mode  
 Context **configure** [subscriber-mgmt sub-profile](#) *string* [hs-sla-mode keyword](#)  
 Tree [hs-sla-mode](#)  
 Options expanded, single  
 Default expanded  
 Introduced 16.0.R1  
 Platforms 7750 SR-7/12/12e

### **igmp-policy** *reference*

Synopsis IGMP policy  
 Context **configure** [subscriber-mgmt sub-profile](#) *string* [igmp-policy reference](#)  
 Tree [igmp-policy](#)  
 Reference **configure** [subscriber-mgmt](#) [igmp-policy](#) *string*  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ingress**

Synopsis Enter the **ingress** context  
 Context **configure** [subscriber-mgmt sub-profile](#) *string* [ingress](#)  
 Tree [ingress](#)

---

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## qos

|            |  |
|------------|--|
| Synopsis   | Enter the <b>qos</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> |
| Tree       | <a href="#">qos</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## policer-control-policy

|            |   |
|------------|---|
| Synopsis   | Enter the <b>policer-control-policy</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> |
| Tree       | <a href="#">policer-control-policy</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## overrides

|            |   |
|------------|---|
| Synopsis   | Enter the <b>overrides</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> |
| Tree       | <a href="#">overrides</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## root

|            |  |
|------------|--|
| Synopsis   | Enable the <b>root</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> |
| Tree       | <a href="#">root</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**max-rate** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Maximum rate   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">ingress qos policer-control-policy overrides root max-rate</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">max-rate</a>   |
| Range      | 1 to 2000000000  |
| Units      | kilobps  |
| Options    | max  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**priority-mbs-thresholds**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>priority-mbs-thresholds</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">ingress qos policer-control-policy overrides root priority-mbs-thresholds</a> |
| Tree       | <a href="#">priority-mbs-thresholds</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**min-thresh-separation** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Minimum threshold separation  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">ingress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">min-thresh-separation</a>   |
| Range      | 0 to 16777216   |
| Units      | bytes   |
| Options    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**priority** [[level](#)] *number*

|          |   |
|----------|---|
| Synopsis | Enter the <b>priority</b> list instance |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">ingress qos policer-control-policy overrides root priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i> |
| Tree       | <a href="#">priority</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**[level]** *number*

|            |   |
|------------|---|
| Synopsis   | Strict priority level   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">ingress qos policer-control-policy overrides root priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i> |
| Tree       | <a href="#">priority</a>  |
| Range      | 1 to 8  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**mbs-contribution** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | MBS size  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">ingress qos policer-control-policy overrides root priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i> <a href="#">mbs-contribution</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">mbs-contribution</a>  |
| Range      | 0 to 16777216   |
| Units      | bytes   |
| Options    | auto  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**policy-name** *reference*

|          |  |
|----------|--|
| Synopsis | Policer control policy name  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">ingress qos policer-control-policy</a> <a href="#">policy-name</a> <i>reference</i> |
| Tree     | <a href="#">policy-name</a>  |

|            |   |
|------------|---|
| Reference  | <b>configure qos policer-control-policy</b> <i>string</i> |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR              |

## **scheduler-policy**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>scheduler-policy</b> context   |
| Context    | <b>configure subscriber-mgmt sub-profile</b> <i>string</i> ingress qos scheduler-policy |
| Tree       | <a href="#">scheduler-policy</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                 |

## **overrides**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>overrides</b> context  |
| Context    | <b>configure subscriber-mgmt sub-profile</b> <i>string</i> ingress qos scheduler-policy overrides |
| Tree       | <a href="#">overrides</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## **scheduler** [[scheduler-name](#)] *reference*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>scheduler</b> list instance   |
| Context    | <b>configure subscriber-mgmt sub-profile</b> <i>string</i> ingress qos scheduler-policy overrides <a href="#">scheduler</a> <i>reference</i> |
| Tree       | <a href="#">scheduler</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## **[scheduler-name]** *reference*

|           |  |
|-----------|--|
| Synopsis  | Scheduler policy name  |
| Context   | <b>configure subscriber-mgmt sub-profile</b> <i>string</i> ingress qos scheduler-policy overrides <a href="#">scheduler</a> <i>reference</i> |
| Tree      | <a href="#">scheduler</a>  |
| Reference | <b>configure qos scheduler-policy</b> <i>string</i> tier number scheduler <i>string</i>  |



|            |   |
|------------|---|
| Notes      | This element is part of a list key.                     |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## rate

|            |   |
|------------|---|
| Synopsis   | Enter the <b>rate</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile string ingress qos scheduler-policy overrides scheduler reference rate</a> |
| Tree       | <a href="#">rate</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## cir (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | CIR to override administrative CIR used by scheduler   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile string ingress qos scheduler-policy overrides scheduler reference rate cir (<i>number</i>   <i>keyword</i>)</a> |
| Tree       | <a href="#">cir</a>  |
| Range      | 0 to 3200000000  |
| Units      | kilobps  |
| Options    | sum, max   |
| Default    | sum  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## pir (*number* | *keyword*)

|          |  |
|----------|--|
| Synopsis | PIR to override administrative PIR used by scheduler   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt sub-profile string ingress qos scheduler-policy overrides scheduler reference rate pir (<i>number</i>   <i>keyword</i>)</a> |
| Tree     | <a href="#">pir</a>  |
| Range    | 1 to 3200000000  |
| Units    | kilobps  |
| Options  | max  |
| Default  | max  |

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **policy-name** *reference*

Synopsis Scheduler policy name  
 Context **configure** [subscriber-mgmt sub-profile](#) *string* [ingress qos scheduler-policy policy-name reference](#)  
 Tree [policy-name](#)  
 Reference **configure** [qos scheduler-policy](#) *string*  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mld-policy** *reference*

Synopsis MLD policy  
 Context **configure** [subscriber-mgmt sub-profile](#) *string* [mld-policy reference](#)  
 Tree [mld-policy](#)  
 Reference **configure** [subscriber-mgmt mld-policy](#) *string*  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **nat**

Synopsis Enter the **nat** context  
 Context **configure** [subscriber-mgmt sub-profile](#) *string* [nat](#)  
 Tree [nat](#)  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **access-mode** *keyword*

Synopsis The subscriber NAT access mode  
 Context **configure** [subscriber-mgmt sub-profile](#) *string* [nat access-mode keyword](#)  
 Tree [access-mode](#)

|            |  |
|------------|--|
| Options    | auto, bridged                                |
| Default    | auto   |
| Introduced | 19.10.R1                                     |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **allow-bypass** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Allow traffic to bypass NAT   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt sub-profile string nat allow-bypass</a> <i>boolean</i>   |
| Tree        | <a href="#">allow-bypass</a>  |
| Description | When configured to <b>true</b> , the system enables L2-Aware NAT subscribers for NAT bypass. When enabled, the IP filter configuration applied in the subscriber profile determines whether the traffic is bypassed.<br><br>When configured to <b>false</b> , traffic is subject to L2-Aware NAT operation. |
| Default     | false   |
| Introduced  | 20.5.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **policy** *reference*

|            |   |
|------------|---|
| Synopsis   | NAT policy associated with the subscriber profile   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile string nat policy</a> <i>reference</i> |
| Tree       | <a href="#">policy</a>  |
| Reference  | <b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i>                           |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **prefix-list** *reference*

|            |  |
|------------|--|
| Synopsis   | NAT prefix list name   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile string nat prefix-list</a> <i>reference</i> |
| Tree       | <a href="#">prefix-list</a>  |
| Reference  | <b>configure</b> <a href="#">service nat prefix-list</a> <i>string</i>                               |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **pim-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | Protocol Independent Multicast (PIM) policy   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">pim-policy reference</a> |
| Tree       | <a href="#">pim-policy</a>  |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt pim-policy</a> <i>string</i>                                       |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **preference** *number*

|            |  |
|------------|--|
| Synopsis   | Relative preference value for the subscriber profile   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">preference number</a> |
| Tree       | <a href="#">preference</a>   |
| Range      | 1 to 10  |
| Default    | 5  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **radius-accounting**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>radius-accounting</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">radius-accounting</a> |
| Tree       | <a href="#">radius-accounting</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **policy** *reference*

|                |   |
|----------------|---|
| Synopsis       | RADIUS accounting policies  |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">radius-accounting policy reference</a> |
| Tree           | <a href="#">policy</a>  |
| Reference      | <b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i>                                       |
| Max. Instances | 5   |

|            |   |
|------------|---|
| Notes      | This element is ordered by the user.                    |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **session-optimized-stop** *boolean*

|            |  |
|------------|--|
| Synopsis   | Optimize PPPoE session accounting stop behavior  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">radius-accounting session-optimized-stop</a> <i>boolean</i> |
| Tree       | <a href="#">session-optimized-stop</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **secondary-shaper-hashing** *boolean*

|            |  |
|------------|--|
| Synopsis   | Include LAG hashing on secondary shaper  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">secondary-shaper-hashing</a> <i>boolean</i> |
| Tree       | <a href="#">secondary-shaper-hashing</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **session-limits**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>session-limits</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">session-limits</a> |
| Tree       | <a href="#">session-limits</a>  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ipoe** *number*

|          |  |
|----------|--|
| Synopsis | Maximum number of IPoE sessions  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">session-limits ipoe</a> <i>number</i> |

|             |  |
|-------------|--|
| Tree        | <a href="#">ipoe</a>   |
| Description | This command configures the maximum number of IPoE sessions per subscriber instance. |
| Range       | 0 to 131071  |
| Introduced  | 20.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                              |

## **I2tp**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>I2tp</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <a href="#">session-limits I2tp</a> |
| Tree       | <a href="#">I2tp</a>  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## **Ins number**

|             |   |
|-------------|---|
| Synopsis    | Maximum number of L2TP LNS sessions   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <a href="#">session-limits I2tp Ins</a> <i>number</i> |
| Tree        | <a href="#">Ins</a>   |
| Description | This command configures the maximum number of L2TP LNS sessions per subscriber instance.                                  |
| Range       | 0 to 131071   |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## **Its number**

|             |   |
|-------------|---|
| Synopsis    | Maximum number of L2TP LTS sessions   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <a href="#">session-limits I2tp Its</a> <i>number</i> |
| Tree        | <a href="#">Its</a>   |
| Description | This command configures the maximum number of L2TP LTS sessions per subscriber instance.                                  |
| Range       | 0 to 131071   |
| Introduced  | 20.10.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **overall number**

Synopsis Maximum number of L2TP sessions

Context **configure** [subscriber-mgmt sub-profile](#) *string* [session-limits l2tp overall](#) *number*

Tree [overall](#)

Description This command configures the maximum number of L2TP sessions per subscriber instance.

Range 0 to 131071

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **overall number**

Synopsis Maximum number of subscriber sessions

Context **configure** [subscriber-mgmt sub-profile](#) *string* [session-limits overall](#) *number*

Tree [overall](#)

Description This command configures the maximum number of subscriber sessions per subscriber instance.

Range 0 to 131071

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pppoe**

Synopsis Enter the **pppoe** context

Context **configure** [subscriber-mgmt sub-profile](#) *string* [session-limits pppoe](#)

Tree [pppoe](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lac number**

Synopsis Maximum number of PPPoE L2TP LAC sessions

Context **configure** [subscriber-mgmt sub-profile](#) *string* [session-limits pppoe lac](#) *number*

|             |  |
|-------------|--|
| Tree        | <a href="#">lac</a>  |
| Description | This command configures the maximum number of PPPoE L2TP LAC sessions per subscriber instance. |
| Range       | 0 to 131071  |
| Introduced  | 20.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **local number**

|             |   |
|-------------|---|
| Synopsis    | Maximum number of PPPoE local-terminated sessions   |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <a href="#">session-limits</a> <a href="#">pppoe local number</a> |
| Tree        | <a href="#">local</a>   |
| Description | This command configures the maximum number of PPPoE local-terminated sessions (PTA) per subscriber instance.                          |
| Range       | 0 to 131071   |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **overall number**

|             |   |
|-------------|---|
| Synopsis    | Maximum number of PPPoE sessions  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <a href="#">session-limits</a> <a href="#">pppoe overall number</a> |
| Tree        | <a href="#">overall</a>   |
| Description | This command configures the maximum number of PPPoE sessions per subscriber instance.   |
| Range       | 0 to 131071   |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **sla-profile-map**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>sla-profile-map</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <a href="#">sla-profile-map</a> |
| Tree       | <a href="#">sla-profile-map</a>   |
| Introduced | 16.0.R1   |



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **entry** [sla-profile-string] *string*

Synopsis Enter the **entry** list instance

Context **configure** subscriber-mgmt sub-profile *string* sla-profile-map entry *string*

Tree [entry](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[sla-profile-string]** *string*

Synopsis SLA profile string

Context **configure** subscriber-mgmt sub-profile *string* sla-profile-map entry *string*

Tree [entry](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sla-profile** *reference*

Synopsis SLA profile

Context **configure** subscriber-mgmt sub-profile *string* sla-profile-map entry *string* sla-profile *reference*

Tree [sla-profile](#)

Reference **configure** subscriber-mgmt sla-profile *string*

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **use-direct-map-as-default** *boolean*

Synopsis Allow direct mapping of SLA profile as default

Context **configure** subscriber-mgmt sub-profile *string* sla-profile-map use-direct-map-as-default *boolean*

|            |   |
|------------|---|
| Tree       | <a href="#">use-direct-map-as-default</a>               |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **sub-mcac-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | Subscriber MCAC policy  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">sub-mcac-policy</a> <i>reference</i> |
| Tree       | <a href="#">sub-mcac-policy</a>   |
| Reference  | <b>configure</b> <a href="#">subscriber-mgmt sub-mcac-policy</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s  |

### **upnp-policy** *reference*

|             |   |
|-------------|---|
| Synopsis    | UPnP policy for the subscriber profile  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">upnp-policy</a> <i>reference</i>   |
| Tree        | <a href="#">upnp-policy</a>   |
| Description | This command specifies the Universal Plug 'n Play policy (UPnP) IGD service for the subscriber profile. All ESM hosts of the subscriber can use the UPnP protocol to create port mapping. This feature only supports L2-Aware NAT hosts. The UPnP parameters are defined in the referenced UPnP policy configured in the <b>configure service upnp</b> context. |
| Reference   | <b>configure</b> <a href="#">service upnp policy</a> <i>string</i>  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **volume-stats-type** *keyword*

|            |   |
|------------|---|
| Synopsis   | Include non-IP headers in the accounting statistics   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">volume-stats-type</a> <i>keyword</i> |
| Tree       | <a href="#">volume-stats-type</a>   |
| Options    | l2, ip  |
| Default    | l2  |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **vport-hashing** *boolean*

Synopsis Include LAG hashing on Vport  
Context **configure** [subscriber-mgmt sub-profile string vport-hashing boolean](#)  
Tree [vport-hashing](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **subscriber-interface-statistics**

Synopsis Enter the **subscriber-interface-statistics** context  
Context **configure** [subscriber-mgmt subscriber-interface-statistics](#)  
Tree [subscriber-interface-statistics](#)  
Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state for statistics collection  
Context **configure** [subscriber-mgmt subscriber-interface-statistics admin-state keyword](#)  
Tree [admin-state](#)  
Options enable, disable  
Default disable  
Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **svlan-statistics**

Synopsis Enter the **svlan-statistics** context  
Context **configure** [subscriber-mgmt svlan-statistics](#)  
Tree [svlan-statistics](#)  
Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of statistics collection

Context **configure** [subscriber-mgmt](#) [svlan-statistics](#) **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **system-behavior**

Synopsis Enter the **system-behavior** context

Context **configure** [subscriber-mgmt](#) [system-behavior](#)

Tree [system-behavior](#)

Description Commands in this context configure the attributes of system-wide subscriber management behavior.

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **legacy-dns-nbns** *boolean*

Synopsis Restrict authentication origins for name servers

Context **configure** [subscriber-mgmt](#) [system-behavior](#) **legacy-dns-nbns** *boolean*

Tree [legacy-dns-nbns](#)

Description When configured to **true**, this command enables legacy DNS NBNS behavior, which restricts the supported default extended authentication origins for DNS and NBNS name servers. The main differences include:

- only support DHCP server as origin for DHCP relay: IPoE DHCPv4/DHCPv6 and PPPoE DHCPv6
- Local Address Assignment (LAA) is highest priority origin: IPoE and PPPoE SLAAC DNSv6 and PPPoE DNSv4
- no default DNS for IPoE DHCPv4 proxy

When configured to **false**, this command reverts to the recommended default extended DNS and NBNS name server origin priorities.

|            |   |
|------------|---|
| Default    | false   |
| Introduced | 21.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## up-resiliency

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>up-resiliency</b> context  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt up-resiliency</a>                |
| Tree        | <a href="#">up-resiliency</a>   |
| Description | Commands in this context configure the inter-UPF resiliency in a CUPS system. |
| Introduced  | 22.2.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                       |

## fate-sharing-group-template [[name](#)] *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>fate-sharing-group-template</b> list instance   |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt up-resiliency fate-sharing-group-template</a> <i>string</i> |
| Tree           | <a href="#">fate-sharing-group-template</a>  |
| Description    | Commands in this context configure resiliency parameters per FSG.  |
| Max. Instances | 256  |
| Introduced     | 22.2.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## [\[name\]](#) *string*

|               |  |
|---------------|--|
| Synopsis      | FSG template ID  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt up-resiliency fate-sharing-group-template</a> <i>string</i> |
| Tree          | <a href="#">fate-sharing-group-template</a>  |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 22.2.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">up-resiliency</a> <a href="#">fate-sharing-group-template</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 22.2.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**gratuitous-arp** *keyword*

|            |  |
|------------|--|
| Synopsis   | Granularity for sending GARP packets on switchover   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">up-resiliency</a> <a href="#">fate-sharing-group-template</a> <i>string</i> <a href="#">gratuitous-arp</a> <i>keyword</i> |
| Tree       | <a href="#">gratuitous-arp</a>   |
| Options    | one-per-outer-tag, one-per-sap   |
| Default    | one-per-sap  |
| Introduced | 22.2.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**redundant-interface**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>redundant-interface</b> context  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">up-resiliency</a> <a href="#">fate-sharing-group-template</a> <i>string</i> <a href="#">redundant-interface</a>  |
| Tree        | <a href="#">redundant-interface</a>   |
| Description | Commands in this context configure downstream traffic shunting from a standby BNG UPF to an active BNG UPF. Downstream traffic that is received for standby sessions is sent over the redundant interface to the active BNG UPF. This requires the configuration of the <b>multi-chassis-shunt-id</b> in the service that receives the session traffic. |
| Introduced  | 22.2.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**name** *string*

|          |                          |
|----------|--------------------------|
| Synopsis | Redundant interface name |
|----------|--------------------------|

---

|               |  |
|---------------|--|
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">up-resiliency</a> <a href="#">fate-sharing-group-template</a> <i>string</i> <a href="#">redundant-interface</a> <i>name</i> <i>string</i> |
| Tree          | <a href="#">name</a>   |
| Description   | This command configures the name of the redundant interface. It must exist in the service that contains the redundant interface.   |
| String Length | 1 to 32  |
| Introduced    | 22.2.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **service** *string*

|               |   |
|---------------|---|
| Synopsis      | Service that contains the redundant interface   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">up-resiliency</a> <a href="#">fate-sharing-group-template</a> <i>string</i> <a href="#">redundant-interface</a> <i>service</i> <i>string</i> |
| Tree          | <a href="#">service</a>   |
| Description   | This command configures the service that contains the redundant interface. It can be different from the service where the session traffic is terminated.  |
| String Length | 1 to 64   |
| Introduced    | 22.2.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **uplink-forwarding-while-standby** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Allows a standby BNG UPF to forward packets  |
| Context     | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">up-resiliency</a> <a href="#">fate-sharing-group-template</a> <i>string</i> <a href="#">uplink-forwarding-while-standby</a> <i>boolean</i>  |
| Tree        | <a href="#">uplink-forwarding-while-standby</a>  |
| Description | This command allows a standby BNG UPF to forward uplink traffic. To prevent the possibility of packet replication towards the network, this command should only be enabled if the access network is provisioned not to replicate unicast packets to the BNG UPF. |
| Default     | false  |
| Introduced  | 22.2.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## vrgw

|            |   |
|------------|---|
| Synopsis   | Enter the <b>vrgw</b> context                           |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt vrgw</a>   |
| Tree       | <a href="#">vrgw</a>                                    |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## brg-profile [[brg-profile-name](#)] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>brg-profile</b> list instance                                      |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> |
| Tree           | <a href="#">brg-profile</a>   |
| Max. Instances | 16  |
| Introduced     | 16.0.R4   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                         |

## [[brg-profile-name](#)] *string*

|               |   |
|---------------|---|
| Synopsis      | BRG profile name  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> |
| Tree          | <a href="#">brg-profile</a>   |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R4   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                         |

## connectivity-verification

|            |   |
|------------|---|
| Synopsis   | Enter the <b>connectivity-verification</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">connectivity-verification</a> |
| Tree       | <a href="#">connectivity-verification</a>   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |



**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of BRG connectivity verification  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">vrgw</a> <a href="#">brg-profile</a> <i>string</i> <a href="#">connectivity-verification</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**count** *number*

|            |   |
|------------|---|
| Synopsis   | Connection attempts before BRG is considered down   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">vrgw</a> <a href="#">brg-profile</a> <i>string</i> <a href="#">connectivity-verification</a> <a href="#">count</a> <i>number</i> |
| Tree       | <a href="#">count</a>   |
| Range      | 1 to 5  |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**retry-time** *number*

|            |  |
|------------|--|
| Synopsis   | Wait time before a new connectivity verification cycle   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">vrgw</a> <a href="#">brg-profile</a> <i>string</i> <a href="#">connectivity-verification</a> <a href="#">retry-time</a> <i>number</i> |
| Tree       | <a href="#">retry-time</a>   |
| Range      | 300 to 3600  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**timeout** *number*

|          |   |
|----------|---|
| Synopsis | Timeout after which a message is considered unanswered  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">vrgw</a> <a href="#">brg-profile</a> <i>string</i> <a href="#">connectivity-verification</a> <a href="#">timeout</a> <i>number</i> |

|            |   |
|------------|---|
| Tree       | <a href="#">timeout</a>                                 |
| Range      | 5 to 60   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R4   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **hold-time** *number*

|            |   |
|------------|---|
| Synopsis   | The time to hold on to a BRG after it went down   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">hold-time</a> <i>number</i> |
| Tree       | <a href="#">hold-time</a>   |
| Range      | 0   30 to 2592000   |
| Units      | seconds   |
| Default    | 0   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **home-pool**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>home-pool</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">home-pool</a> |
| Tree       | <a href="#">home-pool</a>   |
| Introduced | 16.0.R7   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**lease-time** *number*

|            |  |
|------------|--|
| Synopsis   | Lease time used when allocating addresses from the pool  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">home-pool lease-time</a> <i>number</i> |
| Tree       | <a href="#">lease-time</a>   |
| Range      | 300 to 315446399   |
| Units      | seconds  |
| Default    | 21600  |
| Introduced | 16.0.R7  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**option** [[number](#)] (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Enter the <b>option</b> list instance   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">home-pool option</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">option</a>  |
| Introduced | 16.0.R7   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**[number]** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | DHCP option to send identification strings to client  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">home-pool option</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">option</a>  |
| Range      | 1 to 254  |
| Options    | subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time       |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R7   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**ascii-string** *string*

|          |   |
|----------|---|
| Synopsis | ASCII string of the DHCP option   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">home-pool option</a> ( <i>number</i>   <i>keyword</i> )<br><a href="#">ascii-string</a> <i>string</i> |

|               |   |
|---------------|---|
| Tree          | <a href="#">ascii-string</a>  |
| String Length | 1 to 127  |
| Notes         | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> . |
| Introduced    | 16.0.R7   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **duration** *number*

|            |   |
|------------|---|
| Synopsis   | DHCP option as time duration.   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">home-pool option</a> ( <i>number</i>   <i>keyword</i> )<br><a href="#">duration</a> <i>number</i> |
| Tree       | <a href="#">duration</a>  |
| Range      | 10 to 315446399   |
| Units      | seconds   |
| Notes      | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .         |
| Introduced | 16.0.R7   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **empty**

|            |   |
|------------|---|
| Synopsis   | Empty DHCP option.  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">home-pool option</a> ( <i>number</i>   <i>keyword</i> )<br><a href="#">empty</a>          |
| Tree       | <a href="#">empty</a>   |
| Notes      | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> . |
| Introduced | 16.0.R7   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **hex-string** *string*

|          |   |
|----------|---|
| Synopsis | DHCP option as a hexadecimal string   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">home-pool option</a> ( <i>number</i>   <i>keyword</i> )<br><a href="#">hex-string</a> <i>string</i> |
| Tree     | <a href="#">hex-string</a>  |

|               |   |
|---------------|---|
| String Length | 1 to 256  |
| Notes         | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> . |
| Introduced    | 16.0.R7   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **ipv4-address** *string*

|                |   |
|----------------|---|
| Synopsis       | DHCP option as a list of IPv4 addresses   |
| Context        | <b>configure</b> <b>subscriber-mgmt</b> <b>vrgw</b> <b>brg-profile</b> <i>string</i> <b>home-pool</b> <b>option</b> ( <i>number</i>   <i>keyword</i> ) <b>ipv4-address</b> <i>string</i>                                      |
| Tree           | <a href="#">ipv4-address</a>  |
| Max. Instances | 4   |
| Notes          | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .<br>This element is ordered by the user. |
| Introduced     | 16.0.R7   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

### **netbios-node-type** *keyword*

|            |  |
|------------|--|
| Synopsis   | DHCP option as NetBIOS node type.  |
| Context    | <b>configure</b> <b>subscriber-mgmt</b> <b>vrgw</b> <b>brg-profile</b> <i>string</i> <b>home-pool</b> <b>option</b> ( <i>number</i>   <i>keyword</i> ) <b>netbios-node-type</b> <i>keyword</i> |
| Tree       | <a href="#">netbios-node-type</a>  |
| Options    | b-node, p-node, m-node, h-node   |
| Notes      | The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .          |
| Introduced | 16.0.R7  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **standby-ip-lifetime** *number*

|          |  |
|----------|--|
| Synopsis | The lifetime of the standby IP addresses   |
| Context  | <b>configure</b> <b>subscriber-mgmt</b> <b>vrgw</b> <b>brg-profile</b> <i>string</i> <b>home-pool</b> <b>standby-ip-lifetime</b> <i>number</i> |

---

|            |   |
|------------|---|
| Tree       | <a href="#">standby-ip-lifetime</a>                     |
| Range      | 300 to 315446399  |
| Units      | seconds   |
| Default    | 21600   |
| Introduced | 16.0.R7   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## subnet

|            |  |
|------------|--|
| Synopsis   | Enter the <b>subnet</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">home-pool subnet</a> |
| Tree       | <a href="#">subnet</a>   |
| Introduced | 16.0.R7  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## end string

|            |  |
|------------|--|
| Synopsis   | Upper bound of the IP address range  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">home-pool subnet end</a> <i>string</i> |
| Tree       | <a href="#">end</a>  |
| Default    | 192.168.0.254  |
| Introduced | 16.0.R7  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

## prefix string

|            |   |
|------------|---|
| Synopsis   | Prefix and default-gateway to be used inside the home   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">home-pool subnet prefix</a> <i>string</i> |
| Tree       | <a href="#">prefix</a>  |
| Default    | 192.168.0.1/24  |
| Introduced | 16.0.R7   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**start string**

|            |  |
|------------|--|
| Synopsis   | Lower bound of the IP address range  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">home-pool subnet start</a> <i>string</i> |
| Tree       | <a href="#">start</a>  |
| Default    | 192.168.0.2  |
| Introduced | 16.0.R7  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**initial-hold-time number**

|            |   |
|------------|---|
| Synopsis   | Hold time for BRG instances created without any hosts   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">initial-hold-time</a> <i>number</i> |
| Tree       | <a href="#">initial-hold-time</a>   |
| Range      | 0 to 900  |
| Units      | seconds   |
| Default    | 300   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**radius-authentication**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>radius-authentication</b> context  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">radius-authentication</a> |
| Tree       | <a href="#">radius-authentication</a>   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**password string**

|               |  |
|---------------|--|
| Synopsis      | Password used for authentication   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">radius-authentication password</a> <i>string</i> |
| Tree          | <a href="#">password</a>   |
| String Length | 1 to 115   |
| Introduced    | 16.0.R4  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

**server-policy** *reference*

|            |   |
|------------|---|
| Synopsis   | Radius servers to be used for authentication  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">radius-authentication server-policy reference</a> |
| Tree       | <a href="#">server-policy</a>   |
| Reference  | <b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i>   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**radius-proxy-server** [[router-instance](#)] *string name string*

|                |   |
|----------------|---|
| Synopsis       | Add a list entry for <b>radius-proxy-server</b>   |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">radius-proxy-server</a> <i>string name string</i> |
| Tree           | <a href="#">radius-proxy-server</a>   |
| Max. Instances | 4   |
| Introduced     | 16.0.R4   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**[router-instance]** *string*

|            |   |
|------------|---|
| Synopsis   | router-instance   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">radius-proxy-server</a> <i>string name string</i> |
| Tree       | <a href="#">radius-proxy-server</a>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

**name** *string*

|          |   |
|----------|---|
| Synopsis | RADIUS proxy server name  |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">radius-proxy-server</a> <i>string name string</i> |



|               |   |
|---------------|---|
| Tree          | <a href="#">radius-proxy-server</a>                     |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.                     |
| Introduced    | 16.0.R4   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **sla-profile-string** *string*

|               |  |
|---------------|--|
| Synopsis      | Default for SLA-profile lookup   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">vrgw</a> <a href="#">brg-profile</a> <i>string</i> <a href="#">sla-profile-string</a> <i>string</i> |
| Tree          | <a href="#">sla-profile-string</a>   |
| String Length | 0 to 32  |
| Introduced    | 16.0.R4  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **sub-profile-string** *string*

|               |  |
|---------------|--|
| Synopsis      | Default for subscriber-profile lookup  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">vrgw</a> <a href="#">brg-profile</a> <i>string</i> <a href="#">sub-profile-string</a> <i>string</i> |
| Tree          | <a href="#">sub-profile-string</a>   |
| String Length | 0 to 32  |
| Introduced    | 16.0.R4  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR  |

### **uplink-initial-wait** *number*

|            |   |
|------------|---|
| Synopsis   | Wait time for non-routed uplink to become operational   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">vrgw</a> <a href="#">brg-profile</a> <i>string</i> <a href="#">uplink-initial-wait</a> <i>number</i> |
| Tree       | <a href="#">uplink-initial-wait</a>   |
| Range      | 10 to 300   |
| Units      | seconds   |
| Default    | 30  |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR   |

## lanext

|            |  |
|------------|--|
| Synopsis   | Enter the <b>lanext</b> context                              |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt vrgw lanext</a> |
| Tree       | <a href="#">lanext</a>                                       |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR                           |

## router-target-as-number *number*

|            |  |
|------------|--|
| Synopsis   | AS number to derive RT and RD for the HLE service  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt vrgw lanext router-target-as-number</a> <i>number</i> |
| Tree       | <a href="#">router-target-as-number</a>  |
| Range      | 1 to 65535   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## wlan-gw

|            |  |
|------------|--|
| Synopsis   | Enter the <b>wlan-gw</b> context                         |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt wlan-gw</a> |
| Tree       | <a href="#">wlan-gw</a>                                  |
| Introduced | 16.0.R4  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR                       |

## queries

|            |  |
|------------|--|
| Synopsis   | Enter the <b>queries</b> context                                 |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries</a> |
| Tree       | <a href="#">queries</a>  |
| Introduced | 19.5.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR                               |

**tunnel** [*name*] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>tunnel</b> list instance   |
| Context        | <b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries tunnel</a> <i>string</i> |
| Tree           | <a href="#">tunnel</a>  |
| Max. Instances | 1024  |
| Introduced     | 19.5.R1   |
| Platforms      | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**[name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Tunnel query name   |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries tunnel</a> <i>string</i> |
| Tree          | <a href="#">tunnel</a>  |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 19.5.R1   |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**access-point-mac-address-learning-status** *keyword*

|            |   |
|------------|---|
| Synopsis   | Matching criteria of tunnels based on learning status   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries tunnel</a> <i>string</i> <a href="#">access-point-mac-address-learning-status</a> <i>keyword</i> |
| Tree       | <a href="#">access-point-mac-address-learning-status</a>  |
| Options    | failed, succeeded   |
| Introduced | 19.5.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**calculate-counts** *boolean*

|          |   |
|----------|---|
| Synopsis | Count the number of tunnels matching the criteria   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries tunnel</a> <i>string</i> <a href="#">calculate-counts</a> <i>boolean</i> |
| Tree     | <a href="#">calculate-counts</a>  |
| Default  | false   |

Introduced 19.5.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## encapsulation

Synopsis Enable the **encapsulation** context  
Context **configure** [subscriber-mgmt wlan-gw queries tunnel](#) *string* [encapsulation](#)  
Tree [encapsulation](#)  
Introduced 19.5.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## gre *boolean*

Synopsis Controls whether the query returns Soft GRE tunnels  
Context **configure** [subscriber-mgmt wlan-gw queries tunnel](#) *string* [encapsulation gre](#) *boolean*  
Tree [gre](#)  
Default true  
Introduced 19.5.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## l2 *boolean*

Synopsis Enable matching on Layer 2 tunnels  
Context **configure** [subscriber-mgmt wlan-gw queries tunnel](#) *string* [encapsulation l2](#) *boolean*  
Tree [l2](#)  
Default true  
Introduced 19.5.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## l2tp *boolean*

Synopsis Controls whether the query returns Soft L2TPv3 tunnels  
Context **configure** [subscriber-mgmt wlan-gw queries tunnel](#) *string* [encapsulation l2tp](#) *boolean*  
Tree [l2tp](#)  
Default true

Introduced 19.5.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **vxlan boolean**

Synopsis Controls whether the query returns VXLAN tunnels  
Context **configure subscriber-mgmt wlan-gw queries tunnel** *string encapsulation vxlan boolean*  
Tree [vxlan](#)  
Default true  
Introduced 19.5.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **I2**

Synopsis Enter the **I2** context  
Context **configure subscriber-mgmt wlan-gw queries tunnel** *string I2*  
Tree [I2](#)  
Introduced 19.5.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **inner-vlan number**

Synopsis Value to match the Layer 2 access point of the tunnel  
Context **configure subscriber-mgmt wlan-gw queries tunnel** *string I2 inner-vlan number*  
Tree [inner-vlan](#)  
Range 0 to 4095  
Introduced 19.5.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **outer-vlan number**

Synopsis Layer 2 access point matching with a specified S-VLAN  
Context **configure subscriber-mgmt wlan-gw queries tunnel** *string I2 outer-vlan number*  
Tree [outer-vlan](#)  
Range 0 to 4095

|            |                                    |
|------------|------------------------------------|
| Introduced | 19.5.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **sap string**

|               |  |
|---------------|--|
| Synopsis      | Value to match the L2-AP Access Point of the tunnel  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries tunnel string l2 sap string</a> |
| Tree          | <a href="#">sap</a>  |
| String Length | 1 to 45  |
| Introduced    | 19.5.R1  |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **l3**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>l3</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries tunnel string l3</a> |
| Tree       | <a href="#">l3</a>  |
| Introduced | 19.5.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **address-type keyword**

|            |  |
|------------|--|
| Synopsis   | Address type to match  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries tunnel string l3 address-type keyword</a> |
| Tree       | <a href="#">address-type</a>   |
| Options    | ipv4, ipv6   |
| Introduced | 19.5.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **local-address (ipv4-address-no-zone | ipv6-address-no-zone)**

|            |   |
|------------|---|
| Synopsis   | IP address as local endpoint to match   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries tunnel string l3 local-address (ipv4-address-no-zone   ipv6-address-no-zone)</a> |
| Tree       | <a href="#">local-address</a>   |
| Introduced | 19.5.R1   |

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **remote-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP address as remote endpoint to match

Context **configure** [subscriber-mgmt](#) [wlan-gw](#) [queries](#) [tunnel](#) *string* [l3](#) **remote-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [remote-address](#)

Introduced 19.5.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **router-instance** *string*

Synopsis Router instance to match

Context **configure** [subscriber-mgmt](#) [wlan-gw](#) [queries](#) [tunnel](#) *string* [l3](#) **router-instance** *string*

Tree [router-instance](#)

Introduced 19.5.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ues**

Synopsis Enter the **ues** context

Context **configure** [subscriber-mgmt](#) [wlan-gw](#) [queries](#) [tunnel](#) *string* **ues**

Tree [ues](#)

Introduced 19.5.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **maximum** *number*

Synopsis Maximum number of UEs

Context **configure** [subscriber-mgmt](#) [wlan-gw](#) [queries](#) [tunnel](#) *string* **ues** **maximum** *number*

Tree [maximum](#)

Max. Range 0 to 4294967295

Introduced 19.5.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**minimum number**

|            |  |
|------------|--|
| Synopsis   | Minimum number of UEs  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries tunnel</a> <i>string ues minimum number</i> |
| Tree       | <a href="#">minimum</a>  |
| Max. Range | 0 to 4294967295  |
| Default    | 1  |
| Introduced | 19.5.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**state**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>state</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries tunnel</a> <i>string ues state</i> |
| Tree       | <a href="#">state</a>   |
| Introduced | 19.5.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**cross-connect boolean**

|            |   |
|------------|---|
| Synopsis   | Match on tunnels with cross-connect UEs   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries tunnel</a> <i>string ues state cross-connect boolean</i> |
| Tree       | <a href="#">cross-connect</a>   |
| Default    | true  |
| Introduced | 19.5.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**dsm boolean**

|            |   |
|------------|---|
| Synopsis   | Match on DSM UEs  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries tunnel</a> <i>string ues state dsm boolean</i> |
| Tree       | <a href="#">dsm</a>   |
| Default    | true  |
| Introduced | 19.5.R1   |



Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **esm** *boolean*

Synopsis Match on ESM UEs  
Context **configure** [subscriber-mgmt](#) [wlan-gw](#) [queries](#) [tunnel](#) *string* [ues](#) [state](#) **esm** *boolean*  
Tree [esm](#)  
Default true  
Introduced 19.5.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **l2** *boolean*

Synopsis Match on tunnels with L2W UEs  
Context **configure** [subscriber-mgmt](#) [wlan-gw](#) [queries](#) [tunnel](#) *string* [ues](#) [state](#) **l2** *boolean*  
Tree [l2](#)  
Default true  
Introduced 19.5.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **migrant** *boolean*

Synopsis Match on tunnels with migrant UEs  
Context **configure** [subscriber-mgmt](#) [wlan-gw](#) [queries](#) [tunnel](#) *string* [ues](#) [state](#) **migrant** *boolean*  
Tree [migrant](#)  
Default true  
Introduced 19.5.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ue** [[name](#)] *string*

Synopsis Enter the **ue** list instance  
Context **configure** [subscriber-mgmt](#) [wlan-gw](#) [queries](#) **ue** *string*  
Tree [ue](#)  
Max. Instances 1024

Introduced 19.5.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis UE query name  
Context **configure** [subscriber-mgmt wlan-gw queries ue](#) *string*  
Tree [ue](#)  
String Length 1 to 32  
Notes This element is part of a list key.  
Introduced 19.5.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **address**

Synopsis Enter the **address** context  
Context **configure** [subscriber-mgmt wlan-gw queries ue](#) *string* **address**  
Tree [address](#)  
Introduced 19.5.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dhcp6-na** *string*

Synopsis DHCPv6 IA-NA address to match for UEs  
Context **configure** [subscriber-mgmt wlan-gw queries ue](#) *string* **address dhcp6-na** *string*  
Tree [dhcp6-na](#)  
Introduced 19.5.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipv4** *string*

Synopsis IPv4 address to match for UEs  
Context **configure** [subscriber-mgmt wlan-gw queries ue](#) *string* **address ipv4** *string*  
Tree [ipv4](#)  
Introduced 19.5.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **slaac string**

Synopsis SLAAC prefix to match for UEs  
 Context **configure subscriber-mgmt wlan-gw queries ue string address slaac string**  
 Tree [slaac](#)  
 Introduced 19.5.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **type keyword**

Synopsis Address type to match for UEs  
 Context **configure subscriber-mgmt wlan-gw queries ue string address type keyword**  
 Tree [type](#)  
 Options ipv4, ipv6, ipv4-only, ipv6-only, ipv4v6  
 Introduced 19.5.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **bridge-domain number**

Synopsis Bridge Domain to match for UEs  
 Context **configure subscriber-mgmt wlan-gw queries ue string bridge-domain number**  
 Tree [bridge-domain](#)  
 Range 0 to 4294967294  
 Introduced 19.5.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **connection-state**

Synopsis Enable the **connection-state** context  
 Context **configure subscriber-mgmt wlan-gw queries ue string connection-state**  
 Tree [connection-state](#)  
 Introduced 19.5.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**already-signed-in** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable matching on UEs that are already signed in   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries ue</a> <i>string</i> <a href="#">connection-state already-signed-in</a> <i>boolean</i> |
| Tree       | <a href="#">already-signed-in</a>   |
| Default    | true  |
| Introduced | 19.5.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**authorized-only** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable matching on UEs in an authorized state   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries ue</a> <i>string</i> <a href="#">connection-state authorized-only</a> <i>boolean</i> |
| Tree       | <a href="#">authorized-only</a>   |
| Default    | true  |
| Introduced | 19.5.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**cross-connect** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable matching on cross-connected UEs  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries ue</a> <i>string</i> <a href="#">connection-state cross-connect</a> <i>boolean</i> |
| Tree       | <a href="#">cross-connect</a>   |
| Default    | true  |
| Introduced | 19.5.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**data-triggered** *boolean*

|          |  |
|----------|--|
| Synopsis | Enable matching on UEs in a data-triggered state   |
| Context  | <b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries ue</a> <i>string</i> <a href="#">connection-state data-triggered</a> <i>boolean</i> |
| Tree     | <a href="#">data-triggered</a>   |

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|            |                                    |
|------------|------------------------------------|
| Default    | true                               |
| Introduced | 19.5.R1                            |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

**delete-pending** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable matching on UEs in a delete-pending state   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries ue</a> <i>string</i> <a href="#">connection-state delete-pending</a> <i>boolean</i> |
| Tree       | <a href="#">delete-pending</a>   |
| Default    | true   |
| Introduced | 19.5.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**dhcp-triggered** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable matching on UEs in DHCP-triggered state   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries ue</a> <i>string</i> <a href="#">connection-state dhcp-triggered</a> <i>boolean</i> |
| Tree       | <a href="#">dhcp-triggered</a>   |
| Default    | true   |
| Introduced | 19.5.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**dsm** *boolean*

|            |   |
|------------|---|
| Synopsis   | Controls whether the query returns UEs in DSM state   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries ue</a> <i>string</i> <a href="#">connection-state dsm</a> <i>boolean</i> |
| Tree       | <a href="#">dsm</a>   |
| Default    | true  |
| Introduced | 19.5.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**esm** *boolean*

|          |   |
|----------|---|
| Synopsis | Controls whether the query returns UEs in ESM state |
|----------|---|

---

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">wlan-gw</a> <a href="#">queries</a> <a href="#">ue</a> <i>string</i> <a href="#">connection-state</a> <a href="#">esm</a> <i>boolean</i> |
| Tree       | <a href="#">esm</a>   |
| Default    | true  |
| Introduced | 19.5.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **gtp-authorized** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable matching on UEs in GTP-authorized state   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">wlan-gw</a> <a href="#">queries</a> <a href="#">ue</a> <i>string</i> <a href="#">connection-state</a> <a href="#">gtp-authorized</a> <i>boolean</i> |
| Tree       | <a href="#">gtp-authorized</a>   |
| Default    | true   |
| Introduced | 19.5.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **ip-assigned** *boolean*

|            |   |
|------------|---|
| Synopsis   | Match on UEs in an IP-assigned state  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">wlan-gw</a> <a href="#">queries</a> <a href="#">ue</a> <i>string</i> <a href="#">connection-state</a> <a href="#">ip-assigned</a> <i>boolean</i> |
| Tree       | <a href="#">ip-assigned</a>   |
| Default    | true  |
| Introduced | 19.5.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **ip-assigned-authorized** *boolean*

|            |  |
|------------|--|
| Synopsis   | Match on UEs in an IP-assigned and authorized state  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">wlan-gw</a> <a href="#">queries</a> <a href="#">ue</a> <i>string</i> <a href="#">connection-state</a> <a href="#">ip-assigned-authorized</a> <i>boolean</i> |
| Tree       | <a href="#">ip-assigned-authorized</a>   |
| Default    | true   |
| Introduced | 19.5.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## ***l2 boolean***

|            |   |
|------------|---|
| Synopsis   | Match on Layer-2 wholesale state for UEs  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries ue</a> <i>string</i> <a href="#">connection-state l2 boolean</a> |
| Tree       | <a href="#">l2</a>  |
| Default    | true  |
| Introduced | 19.5.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## ***portal boolean***

|            |   |
|------------|---|
| Synopsis   | Controls whether the query returns UEs in portal state  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries ue</a> <i>string</i> <a href="#">connection-state portal boolean</a> |
| Tree       | <a href="#">portal</a>  |
| Default    | true  |
| Introduced | 19.5.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## ***mac-address string***

|            |  |
|------------|--|
| Synopsis   | MAC address to use for matching on UEs   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries ue</a> <i>string</i> <a href="#">mac-address string</a> |
| Tree       | <a href="#">mac-address</a>  |
| Introduced | 19.5.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## ***soft-quota-exhausted boolean***

|            |  |
|------------|--|
| Synopsis   | Send interim update message when the quota is reached  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries ue</a> <i>string</i> <a href="#">soft-quota-exhausted boolean</a> |
| Tree       | <a href="#">soft-quota-exhausted</a>   |
| Default    | false  |
| Introduced | 21.7.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## tunnel

|            |   |
|------------|---|
| Synopsis   | Enter the <b>tunnel</b> context                                   |
| Context    | <b>configure subscriber-mgmt wlan-gw queries ue string tunnel</b> |
| Tree       | <b>tunnel</b>   |
| Introduced | 19.5.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR                                |

## encapsulation *keyword*

|            |   |
|------------|---|
| Synopsis   | Tunnel type to match for active UEs   |
| Context    | <b>configure subscriber-mgmt wlan-gw queries ue string tunnel encapsulation keyword</b> |
| Tree       | <b>encapsulation</b>  |
| Options    | gre, l2tp, l2, vxlan  |
| Introduced | 19.5.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## local-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

|            |  |
|------------|--|
| Synopsis   | IP address as local tunnel endpoint to match for UEs   |
| Context    | <b>configure subscriber-mgmt wlan-gw queries ue string tunnel local-address (<i>ipv4-address-no-zone   ipv6-address-no-zone</i>)</b> |
| Tree       | <b>local-address</b>   |
| Introduced | 19.5.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

## remote-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

|            |   |
|------------|---|
| Synopsis   | IP address as remote tunnel endpoint to match for UEs   |
| Context    | <b>configure subscriber-mgmt wlan-gw queries ue string tunnel remote-address (<i>ipv4-address-no-zone   ipv6-address-no-zone</i>)</b> |
| Tree       | <b>remote-address</b>   |
| Introduced | 19.5.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |



### **router-instance** *string*

|            |  |
|------------|--|
| Synopsis   | Router instance of tunnels to match for UEs  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries ue</a> <i>string</i> <a href="#">tunnel router-instance</a> <i>string</i> |
| Tree       | <a href="#">router-instance</a>  |
| Introduced | 19.5.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **vlan** *number*

|            |  |
|------------|--|
| Synopsis   | VLAN tag within the tunnel to match for UEs  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries ue</a> <i>string</i> <a href="#">vlan</a> <i>number</i> |
| Tree       | <a href="#">vlan</a>   |
| Range      | 0 to 4095  |
| Introduced | 19.5.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

### **wlan-gw-group**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>wlan-gw-group</b> context   |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries ue</a> <i>string</i> <a href="#">wlan-gw-group</a> |
| Tree       | <a href="#">wlan-gw-group</a>   |
| Introduced | 19.5.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **id** *number*

|            |   |
|------------|---|
| Synopsis   | WLAN-GW ISA group ID  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries ue</a> <i>string</i> <a href="#">wlan-gw-group</a> <i>id</i> <i>number</i> |
| Tree       | <a href="#">id</a>  |
| Range      | 1 to 4  |
| Notes      | This element is mandatory.  |
| Introduced | 19.5.R1   |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**member number**

|            |  |
|------------|--|
| Synopsis   | The member of the WLAN-GW ISA group  |
| Context    | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">wlan-gw</a> <a href="#">queries</a> <a href="#">ue</a> <i>string</i> <a href="#">wlan-gw-group</a> <a href="#">member</a> <i>number</i> |
| Tree       | <a href="#">member</a>   |
| Range      | 1 to 1024  |
| Introduced | 19.5.R1  |
| Platforms  | 7750 SR, 7750 SR-e, 7750 SR-s, VSR   |

**virtual-chassis-identifier string**

|               |   |
|---------------|---|
| Synopsis      | WLAN Gateway virtual chassis ID or dual homing key  |
| Context       | <b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">wlan-gw</a> <a href="#">virtual-chassis-identifier</a> <i>string</i> |
| Tree          | <a href="#">virtual-chassis-identifier</a>  |
| String Length | 1 to 16   |
| Introduced    | 16.0.R4   |
| Platforms     | 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

## 3.46 system commands

```

configure
- system
- alarm-contact-in-power boolean
- alarm-contact-input number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-message string
- description string
- normal-state keyword
- trigger-message string
- alarms
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- max-cleared number
- allow-boot-license-violations boolean
- apply-groups reference
- apply-groups-exclude reference
- bluetooth
- admin-state keyword
- advertising-timeout number
- apply-groups reference
- apply-groups-exclude reference
- device string
- apply-groups reference
- apply-groups-exclude reference
- description string
- module string
- apply-groups reference
- apply-groups-exclude reference
- provisioned-identifier string
- pairing-button boolean
- passkey string
- power-mode keyword
- boot-bad-exec string
- boot-good-exec string
- central-frequency-clock
- apply-groups reference
- apply-groups-exclude reference
- bits
- input
- admin-state keyword
- interface-type keyword
- output
- admin-state keyword
- line-length keyword
- ql-minimum keyword
- source keyword
- sqlch boolean
- ql-override keyword
- ssm-bit number
- gnss
- admin-state keyword
- ql-override keyword
- ptp
- admin-state keyword
- ql-override keyword
- ql-minimum keyword

```

## configure system central-frequency-clock ql-selection

- **ql-selection** *boolean*
- **ref-order**
  - **fifth** *keyword*
  - **first** *keyword*
  - **fourth** *keyword*
  - **second** *keyword*
  - **sixth** *keyword*
  - **third** *keyword*
- **ref1**
  - **admin-state** *keyword*
  - **ql-override** *keyword*
  - **source-port** *string*
- **ref2**
  - **admin-state** *keyword*
  - **ql-override** *keyword*
  - **source-port** *string*
- **revert** *boolean*
- **synce**
  - **admin-state** *keyword*
  - **ql-override** *keyword*
- **wait-to-restore** *number*
- **cli-code** *string*
- **congestion-management** *boolean*
- **contact** *string*
- **coordinates** *string*
- **cpm-http-redirect**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **optimized-mode** *boolean*
- **cron**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **schedule** *string* **owner** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **count** *number*
    - **day-of-month** *number*
    - **description** *string*
    - **end-time**
      - **date-and-time** *string*
      - **day** *keyword*
      - **time** *string*
    - **hour** *number*
    - **interval** *number*
    - **minute** *number*
    - **month** (*keyword* | *number*)
    - **script-policy**
      - **name** *string*
      - **owner** *string*
    - **type** *keyword*
    - **weekday** (*keyword* | *number*)
- **dhcp6**
  - **adv-noaddrs-global** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **dns**
  - **address-pref** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **dnssec**
    - **ad-validation** *keyword*
- **efm-oam**
  - **apply-groups** *reference*

configure system efm-oam apply-groups-exclude

- **apply-groups-exclude** *reference*
- **dying-gasp-tx-on-reset** *boolean*
- **grace-tx** *boolean*
- **eth-cfm**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **grace** *boolean*
  - **md-auto-id**
    - **ma-index-range**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **end** *number*
      - **start** *number*
    - **md-index-range**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **end** *number*
      - **start** *number*
  - **redundancy**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **mc-lag**
    - **propagate-hold-time** (*number* | *keyword*)
    - **standby-mep** *boolean*
  - **sender-id**
    - **local-name** *string*
    - **type** *keyword*
  - **slm**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **inactivity-timer** *number*
- **grpc**
  - **admin-state** *keyword*
  - **allow-unsecure-connection**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **gnmi**
    - **admin-state** *keyword*
    - **auto-config-save** *boolean*
  - **gnoi**
    - **cert-mgmt**
      - **admin-state** *keyword*
    - **file**
      - **admin-state** *keyword*
    - **system**
      - **admin-state** *keyword*
  - **max-msg-size** *number*
  - **md-cli**
    - **admin-state** *keyword*
  - **rib-api**
    - **admin-state** *keyword*
    - **purge-timeout** *number*
  - **tcp-keepalive**
    - **admin-state** *keyword*
    - **idle-time** *number*
    - **interval** *number*
    - **retries** *number*
  - **tls-server-profile** *reference*
- **grpc-tunnel**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **destination-group** *string*
    - **allow-unsecure-connection**
    - **apply-groups** *reference*

configure system grpc-tunnel destination-group apply-groups-exclude

```

- apply-groups-exclude reference
- description string
- destination (ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-domain-name) port number
  - apply-groups reference
  - apply-groups-exclude reference
  - local-source-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - originated-qos-marking keyword
  - router-instance string
- tcp-keepalive
  - admin-state keyword
  - idle-time number
  - interval number
  - retries number
- tls-client-profile reference
- tunnel string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - destination-group reference
  - handler string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - port number
    - target-type
      - custom-type string
      - grpc-server
      - ssh-server
  - target-name
    - custom-string string
    - node-name
    - user-agent
- icmp-vse boolean
- ip
  - allow-qinq-network-interface boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - enforce-unique-if-index boolean
  - forward-6in4 boolean
  - forward-ip-over-gre boolean
  - ipv6-eh keyword
  - mpls
    - label-stack-statistics-count number
- l2tp
  - apply-groups reference
  - apply-groups-exclude reference
  - non-multi-chassis-tunnel-id-range
    - end number
    - start number
- lacp
  - apply-groups reference
  - apply-groups-exclude reference
  - system-priority number
- lldp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - message-fast-tx number
  - message-fast-tx-init number
  - notification-interval number
  - reinit-delay number
  - tx-credit-max number

```

## configure system lldp tx-hold-multiplier

- **tx-hold-multiplier** *number*
- **tx-interval** *number*
- **load-balancing**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **l2tp-load-balancing** *boolean*
  - **l4-load-balancing** *boolean*
  - **lsr-load-balancing** *keyword*
  - **mc-enh-load-balancing** *boolean*
  - **service-id-lag-hashing** *boolean*
  - **system-ip-load-balancing** *boolean*
- **location** *string*
- **login-control**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **exponential-backoff** *boolean*
  - **ftp**
    - **inbound-max-sessions** *number*
  - **idle-timeout** (*keyword* | *number*)
  - **login-banner** *boolean*
  - **login-scripts**
    - **global-script** *string*
    - **per-user-script**
      - **file-name** *string*
      - **user-directory** *string*
- **motd**
  - **text** *string*
  - **url** *string*
- **pre-login-message**
  - **message** *string*
  - **name** *boolean*
- **ssh**
  - **graceful-shutdown** *boolean*
  - **inbound-max-sessions** *number*
  - **outbound-max-sessions** *number*
  - **ttl-security** *number*
- **telnet**
  - **graceful-shutdown** *boolean*
  - **inbound-max-sessions** *number*
  - **outbound-max-sessions** *number*
  - **ttl-security** *number*
- **management-interface**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **cli**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **classic-cli**
      - **allow-immediate** *boolean*
    - **rollback**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **local-checkpoints** *number*
      - **location** *string*
      - **remote-checkpoints** *number*
      - **rescue**
        - **location** *string*
    - **cli-engine** *keyword*
  - **md-cli**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **auto-config-save** *boolean*
    - **environment**
      - **command-alias**

configure system management-interface cli md-cli environment command-alias alias

- **alias** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **cli-command** *string*
  - **description** *string*
  - **mount-point** (*keyword* | *string*)
  - **python-script** *reference*
- **command-completion**
  - **enter** *boolean*
  - **space** *boolean*
  - **tab** *boolean*
- **console**
  - **length** *number*
  - **width** *number*
- **info-output**
  - **always-display**
    - **admin-state** *boolean*
- **message-severity-level**
  - **cli** *keyword*
- **more** *boolean*
- **progress-indicator**
  - **admin-state** *keyword*
  - **delay** *number*
  - **type** *keyword*
- **prompt**
  - **context** *boolean*
  - **newline** *boolean*
  - **timestamp** *boolean*
  - **uncommitted-changes-indicator** *boolean*
- **python**
  - **memory-reservation** *number*
  - **minimum-available-memory** *number*
  - **timeout** *number*
  - **time-display** *keyword*
  - **time-format** *keyword*
- **commit-history** *number*
- **configuration-mode** *keyword*
- **configuration-save**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **configuration-backups** *number*
  - **incremental-saves** *boolean*
- **netconf**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **auto-config-save** *boolean*
  - **capabilities**
    - **candidate** *boolean*
    - **writable-running** *boolean*
  - **port** *number*
- **operations**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **global-timeouts**
    - **asynchronous-execution** (*number* | *keyword*)
    - **asynchronous-retention** (*number* | *keyword*)
    - **synchronous-execution** (*number* | *keyword*)
- **remote-management**
  - **admin-state** *keyword*
  - **allow-unsecure-connection**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*



configure system management-interface remote-management client-tls-profile

```

- client-tls-profile reference
- connection-timeout number
- device-label string
- device-name string
- hello-interval number
- manager string
  - admin-state keyword
  - allow-unsecure-connection
  - apply-groups reference
  - apply-groups-exclude reference
  - client-tls-profile reference
  - connection-timeout number
  - description string
  - device-label string
  - device-name string
  - manager-address (ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-domain-name)
  - manager-port number
  - router-instance string
  - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - source-port (number | keyword)
- router-instance string
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- source-port (number | keyword)
- schema-path string
- snmp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - engine-id string
  - general-port number
  - packet-size number
  - streaming
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
- yang-modules
  - apply-groups reference
  - apply-groups-exclude reference
  - base-r13-modules boolean
  - nmda
    - nmda-support boolean
  - nokia-combined-modules boolean
  - nokia-submodules boolean
  - openconfig-modules boolean
- name string
- network-element-discovery
  - apply-groups reference
  - apply-groups-exclude reference
  - generate-traps boolean
  - profile string
    - apply-groups reference
    - apply-groups-exclude reference
  - neid string
  - neip
    - apply-groups reference
    - apply-groups-exclude reference
    - auto-generate
      - ipv4
        - vendor-id-value number
      - ipv6
        - vendor-id-value number
    - ipv4 string
    - ipv6 string

```

## configure system network-element-discovery profile platform-type

- **platform-type** *string*
- **system-mac** *string*
- **vendor-id** *string*
- **ospf-dynamic-hostnames** *boolean*
- **persistence**
  - **ancp**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **location** *keyword*
  - **application-assurance**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **location** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **dhcp-server**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **location** *keyword*
- **nat-port-forwarding**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **location** *keyword*
- **options**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **dhcp-lease-time-threshold** *number*
- **python-policy-cache**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **location** *keyword*
- **subscriber-mgmt**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **location** *keyword*
- **power-management power-zone** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **mode** *keyword*
  - **power-safety-alert** *number*
  - **power-safety-level** *number*
- **ptp**
  - **admin-state** *keyword*
  - **alternate-profile** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **domain** *number*
    - **log-announce-interval** *number*
    - **profile** *keyword*
  - **announce-receipt-timeout** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **clock-type** *keyword*
  - **domain** *number*
  - **local-priority** *number*
  - **log-announce-interval** *number*
  - **network-type** *keyword*

## configure system ptp port

- **port** *reference*
  - **address** *string*
  - **admin-state** *keyword*
  - **alternate-profile** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **local-priority** *number*
  - **log-delay-interval** *number*
  - **log-sync-interval** *number*
  - **master-only** *boolean*
- **priority1** *number*
- **priority2** *number*
- **profile** *keyword*
- **ptsf**
  - **monitor-ptsf-unusable**
    - **admin-state** *keyword*
- **router** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **peer** (*ipv4-address-no-zone | ipv6-address-no-zone*)
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **local-priority** *number*
    - **log-sync-interval** *number*
    - **peer-limit** *number*
  - **tx-while-sync-uncertain** *boolean*
- **script-control**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **script** *string* **owner** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **location** *string*
  - **script-policy** *string* **owner** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **expire-time** (*number | keyword*)
    - **lifetime** (*number | keyword*)
    - **lock-override** *boolean*
    - **max-completed** *number*
    - **python-lifetime** *number*
    - **python-script**
      - **name** *reference*
    - **results** *string*
    - **script**
      - **name** *string*
      - **owner** *string*
- **security**
  - **aaa**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **cli-session-group** *string*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **combined-max-sessions** *number*
      - **description** *string*
      - **ssh-max-sessions** *number*
      - **telnet-max-sessions** *number*
    - **health-check** (*number | keyword*)

configure system security aaa local-profiles

- **local-profiles**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **profile** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **cli-session-group** *reference*
    - **combined-max-sessions** *number*
    - **default-action** *keyword*
    - **entry** *number*
      - **action** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **description** *string*
      - **match** *string*
  - **grpc**
    - **rpc-authorization**
      - **gnmi-capabilities** *keyword*
      - **gnmi-get** *keyword*
      - **gnmi-set** *keyword*
      - **gnmi-subscribe** *keyword*
      - **gnoi-cert-mgmt-cangenerate** *keyword*
      - **gnoi-cert-mgmt-getcert** *keyword*
      - **gnoi-cert-mgmt-install** *keyword*
      - **gnoi-cert-mgmt-revoke** *keyword*
      - **gnoi-cert-mgmt-rotate** *keyword*
      - **gnoi-file-get** *keyword*
      - **gnoi-file-put** *keyword*
      - **gnoi-file-remove** *keyword*
      - **gnoi-file-stat** *keyword*
      - **gnoi-file-transfertoremote** *keyword*
      - **gnoi-system-cancelreboot** *keyword*
      - **gnoi-system-ping** *keyword*
      - **gnoi-system-reboot** *keyword*
      - **gnoi-system-rebootstatus** *keyword*
      - **gnoi-system-setpackage** *keyword*
      - **gnoi-system-switchcontrolprocessor** *keyword*
      - **gnoi-system-time** *keyword*
      - **gnoi-system-traceroute** *keyword*
      - **md-cli-session** *keyword*
      - **rib-api-getversion** *keyword*
      - **rib-api-modify** *keyword*
  - **li** *boolean*
  - **netconf**
    - **base-op-authorization**
      - **action** *boolean*
      - **cancel-commit** *boolean*
      - **close-session** *boolean*
      - **commit** *boolean*
      - **copy-config** *boolean*
      - **create-subscription** *boolean*
      - **delete-config** *boolean*
      - **discard-changes** *boolean*
      - **edit-config** *boolean*
      - **get** *boolean*
      - **get-config** *boolean*
      - **get-data** *boolean*
      - **get-schema** *boolean*
      - **kill-session** *boolean*
      - **lock** *boolean*
      - **validate** *boolean*
    - **ssh-max-sessions** *number*
    - **telnet-max-sessions** *number*
- **management-interface**

configure system security aaa management-interface apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **md-cli**
  - **command-accounting-during-load** *boolean*
- **output-authorization**
  - **md-interfaces** *boolean*
  - **telemetry-data** *boolean*
- **remote-servers**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **ldap**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **public-key-authentication** *boolean*
    - **route-preference** *keyword*
    - **server** *number*
      - **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **port** *number*
      - **admin-state** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **bind-authentication**
        - **password** *string*
        - **root-dn** *string*
      - **search**
        - **base-dn** *string*
      - **server-name** *string*
      - **tls-profile** *reference*
    - **server-retry** *number*
    - **server-timeout** *number*
    - **use-default-template** *boolean*
  - **radius**
    - **access-algorithm** *keyword*
    - **accounting** *boolean*
    - **accounting-port** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **authorization** *boolean*
    - **interactive-authentication** *boolean*
    - **port** *number*
    - **route-preference** *keyword*
    - **server** *number*
      - **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
      - **authenticator** *keyword*
      - **secret** *string*
      - **tls-client-profile** *reference*
    - **server-retry** *number*
    - **server-timeout** *number*
    - **use-default-template** *boolean*
  - **tacplus**
    - **accounting**
      - **record-type** *keyword*
    - **admin-control**
      - **tacplus-map-to-priv-lvl** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **authorization**

configure system security aaa remote-servers tacplus authorization request-format

- **request-format**
  - **access-operation-cmd** *keyword*
  - **use-priv-lvl** *boolean*
- **interactive-authentication** *boolean*
- **priv-lvl-map**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **priv-lvl** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **user-profile-name** *reference*
- **route-preference** *keyword*
- **server** *number*
  - **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **port** *number*
  - **secret** *string*
  - **server-timeout** *number*
  - **use-default-template** *boolean*
- **vprn-server**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **inband** *reference*
  - **outband** *reference*
  - **vprn** *reference*
- **user-template** *keyword*
  - **access**
    - **console** *boolean*
    - **ftp** *boolean*
    - **grpc** *boolean*
    - **li** *boolean*
    - **netconf** *boolean*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **console**
    - **login-exec** *string*
  - **home-directory** (*sat-url* | *cflash-without-slot-url*)
  - **profile** *string*
  - **restricted-to-home** *boolean*
  - **save-when-restricted** *boolean*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **cli-script**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **authorization**
  - **cron**
    - **cli-user** *reference*
  - **event-handler**
    - **cli-user** *reference*
  - **vsd**
    - **cli-user** *reference*
- **cpm-filter**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **default-action** *keyword*
  - **ip-filter**
    - **admin-state** *keyword*
    - **entry** *number*
      - **action**
        - **accept**
        - **default**
        - **drop**

configure system security cpm-filter ip-filter entry action queue

- **queue** *reference*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **log** *reference*
- **match**
  - **dscp** *keyword*
  - **dst-ip**
    - **address** (*ipv4-address* | *ipv4-prefix-with-host-bits*)
    - **ip-prefix-list** *reference*
    - **mask** *string*
  - **dst-port**
    - **eq** *number*
    - **mask** *number*
    - **port-list** *reference*
    - **range**
      - **end** *number*
      - **start** *number*
  - **fragment** *keyword*
  - **icmp**
    - **code** *number*
    - **type** *number*
  - **ip-option**
    - **mask** *number*
    - **type** *number*
  - **multiple-option** *boolean*
  - **option-present** *boolean*
  - **port**
    - **eq** *number*
    - **mask** *number*
    - **port-list** *reference*
    - **range**
      - **end** *number*
      - **start** *number*
  - **protocol** (*number* | *keyword*)
  - **router-instance** *string*
  - **src-ip**
    - **address** (*ipv4-address* | *ipv4-prefix-with-host-bits*)
    - **ip-prefix-list** *reference*
    - **mask** *string*
  - **src-port**
    - **eq** *number*
    - **mask** *number*
    - **port-list** *reference*
    - **range**
      - **end** *number*
      - **start** *number*
  - **tcp-flags**
    - **ack** *boolean*
    - **syn** *boolean*
- **ipv6-filter**
  - **admin-state** *keyword*
  - **entry** *number*
  - **action**
    - **accept**
    - **default**
    - **drop**
    - **queue** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **log** *reference*
  - **match**
    - **dscp** *keyword*

configure system security cpm-filter ipv6-filter entry match dst-ip

```

- dst-ip
  - address (ipv6-address | ipv6-prefix-with-host-bits)
  - ipv6-prefix-list reference
  - mask string
- dst-port
  - eq number
  - mask number
  - port-list reference
  - range
    - end number
    - start number
- extension-header
  - hop-by-hop boolean
- flow-label number
- fragment keyword
- icmp
  - code number
  - type number
- next-header (number | keyword)
- port
  - eq number
  - mask number
  - port-list reference
  - range
    - end number
    - start number
- router-instance string
- src-ip
  - address (ipv6-address | ipv6-prefix-with-host-bits)
  - ipv6-prefix-list reference
  - mask string
- src-port
  - eq number
  - mask number
  - port-list reference
  - range
    - end number
    - start number
- tcp-flags
  - ack boolean
  - syn boolean
- mac-filter
  - admin-state keyword
  - entry number
  - action
    - accept
    - default
    - drop
    - queue reference
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - log reference
  - match
    - cfm-opcode
      - eq number
      - gt number
      - lt number
      - range
        - end number
        - start number
    - dst-mac
      - address string
      - mask string

```



configure system security cpm-filter mac-filter entry match etype

- **etype** *string*
- **frame-type** *keyword*
- **llc-dsap**
  - **dsap** *number*
  - **mask** *number*
- **llc-ssap**
  - **mask** *number*
  - **ssap** *number*
- **service** *reference*
- **src-mac**
  - **address** *string*
  - **mask** *string*
- **cpm-queue**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **queue** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **cbs** *number*
    - **mbs** *number*
    - **rate**
      - **cir** (*number* | *keyword*)
      - **pir** (*number* | *keyword*)
- **cpu-protection**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **ip-src-monitoring**
    - **included-protocols**
      - **dhcp** *boolean*
      - **gtp** *boolean*
      - **icmp** *boolean*
      - **igmp** *boolean*
  - **link-specific-rate** (*number* | *keyword*)
  - **policy** *number*
    - **alarm** *boolean*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **eth-cfm**
      - **entry** *number*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **level start** *number end* *number*
        - **opcode start** *number end* *number*
        - **pir** (*number* | *keyword*)
    - **out-profile-rate**
      - **log-events** *boolean*
      - **pir** (*number* | *keyword*)
    - **overall-rate** (*number* | *keyword*)
    - **per-source-parameters**
      - **ip-src-monitoring**
        - **limit-dhcp-ci-addr-zero** *boolean*
      - **per-source-rate** (*number* | *keyword*)
    - **port-overall-rate**
      - **action-low-priority** *boolean*
      - **pir** (*number* | *keyword*)
    - **protocol-protection**
      - **allow-sham-links** *boolean*
      - **block-pim-tunneled** *boolean*
  - **dist-cpu-protection**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **policy** *string*
    - **apply-groups** *reference*

configure system security dist-cpu-protection policy apply-groups-exclude

- **apply-groups-exclude** *reference*
- **description** *string*
- **local-monitoring-policer** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **exceed-action** *keyword*
  - **log-events** *keyword*
  - **rate**
    - **kbps**
      - **limit** (*keyword | number*)
      - **mbs** *number*
    - **packets**
      - **initial-delay** *number*
      - **limit** (*keyword | number*)
      - **within** *number*
- **protocol** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **dynamic-parameters**
    - **detection-time** *number*
    - **exceed-action**
      - **action** *keyword*
      - **hold-down** (*keyword | number*)
    - **log-events** *keyword*
    - **rate**
      - **kbps**
        - **limit** (*keyword | number*)
        - **mbs** *number*
      - **packets**
        - **initial-delay** *number*
        - **limit** (*keyword | number*)
        - **within** *number*
  - **enforcement**
    - **dynamic**
      - **mon-policer-name** *reference*
    - **dynamic-local-mon-bypass**
    - **static**
      - **policer-name** *reference*
- **static-policer** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **detection-time** *number*
  - **exceed-action**
    - **action** *keyword*
    - **hold-down** (*keyword | number*)
  - **log-events** *keyword*
  - **rate**
    - **kbps**
      - **limit** (*keyword | number*)
      - **mbs** *number*
    - **packets**
      - **initial-delay** *number*
      - **limit** (*keyword | number*)
      - **within** *number*
  - **type** *keyword*
- **dot1x**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **radius-policy** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*

configure system security dot1x radius-policy apply-groups-exclude

- **apply-groups-exclude** *reference*
- **retry** *number*
- **server** *number*
  - **accounting-port** *number*
  - **address** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **authentication-port** *number*
  - **secret** *string*
  - **type** *keyword*
- **source-address** *string*
- **timeout** *number*
- **ftp-server** *boolean*
- **hash-control**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **management-interface**
  - **classic-cli**
    - **read-algorithm** *keyword*
    - **write-algorithm** *keyword*
  - **grpc**
    - **hash-algorithm** *keyword*
  - **md-cli**
    - **hash-algorithm** *keyword*
  - **netconf**
    - **hash-algorithm** *keyword*
- **keychains**
  - **keychain** *string*
    - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **bidirectional**
    - **entry** *number*
      - **admin-state** *keyword*
      - **algorithm** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **authentication-key** *string*
      - **begin-time** *string*
      - **option** *keyword*
      - **tolerance** (*number* | *keyword*)
  - **description** *string*
  - **receive**
    - **entry** *number*
      - **admin-state** *keyword*
      - **algorithm** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **authentication-key** *string*
      - **begin-time** *string*
      - **end-time** *string*
      - **tolerance** (*number* | *keyword*)
  - **send**
    - **entry** *number*
      - **admin-state** *keyword*
      - **algorithm** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **authentication-key** *string*
      - **begin-time** *string*
  - **tcp-option-number**
    - **receive** *keyword*
    - **send** *keyword*
- **management**

## configure system security management allow-ftp

- **allow-ftp** *boolean*
- **allow-grpc** *boolean*
- **allow-netconf** *boolean*
- **allow-ssh** *boolean*
- **allow-telnet** *boolean*
- **allow-telnet6** *boolean*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **management-access-filter**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **ip-filter**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **default-action** *keyword*
  - **entry** *number*
    - **action** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **log-events** *boolean*
    - **match**
      - **dst-port**
        - **mask** *number*
        - **port** *number*
      - **mgmt-port**
        - **cpm**
        - **lag** *string*
        - **port-id** *string*
      - **protocol** (*number* | *keyword*)
      - **router-instance** *string*
      - **src-ip**
        - **address** (*ipv4-prefix* | *ipv4-address*)
        - **ip-prefix-list** *reference*
        - **mask** *string*
      - **src-port**
        - **mask** *number*
        - **port** *number*
- **ipv6-filter**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **default-action** *keyword*
  - **entry** *number*
    - **action** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **log-events** *boolean*
    - **match**
      - **dst-port**
        - **mask** *number*
        - **port** *number*
      - **flow-label** *number*
      - **mgmt-port**
        - **cpm**
        - **lag** *string*
        - **port-id** *string*
      - **next-header** (*number* | *keyword*)
      - **router-instance** *string*
      - **src-ip**
        - **address** (*ipv6-prefix* | *ipv6-address*)
        - **ipv6-prefix-list** *reference*

configure system security management-access-filter ipv6-filter entry match src-ip mask

```

    - mask string
    - src-port
      - mask number
      - port number
- mac-filter
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - default-action keyword
  - entry number
    - action keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - log-events boolean
    - match
      - cfm-opcode
        - eq number
        - gt number
        - lt number
        - range
          - end number
          - start number
      - dot1p
        - mask number
        - priority number
      - dst-mac
        - address string
        - mask string
      - etype string
      - frame-type keyword
      - llc-dsap
        - dsap number
        - mask number
      - llc-ssap
        - mask number
        - ssap number
      - service string
      - snap-oui keyword
      - snap-pid number
      - src-mac
        - address string
        - mask string
- per-peer-queuing boolean
- pki
  - apply-groups reference
  - apply-groups-exclude reference
  - ca-profile string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - auto-crl-update
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - crl-urls
    - url-entry number
      - apply-groups reference
      - apply-groups-exclude reference
      - transmission-profile reference
      - url http-url-path-loose
  - periodic-update-interval number
  - pre-update-time number
  - retry-interval number

```

configure system security pki ca-profile auto-crl-update schedule-type

- **schedule-type** *keyword*
- **cert-file** *string*
- **cmpv2**
  - **accept-unprotected-message**
    - **error-message** *boolean*
    - **pkiconf-message** *boolean*
  - **always-set-sender-for-ir** *boolean*
  - **http**
    - **response-timeout** *number*
    - **version** *keyword*
  - **key-list**
    - **key** *string*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **password** *string*
  - **recipient-subject** *string*
  - **response-signing-cert** *string*
  - **response-signing-use-extracert**
  - **same-recipient-nonce-for-poll-request** *boolean*
  - **url**
    - **service-name** *string*
    - **url-string** *http-optional-url-loose*
  - **use-ca-subject**
- **crl-file** *string*
- **description** *string*
- **ocsp**
  - **responder-url** *http-optional-url-loose*
  - **service-name** *string*
  - **transmission-profile** *reference*
- **revocation-check** *keyword*
- **certificate-auto-update** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **key-file-name** *string*
  - **profile** *reference*
- **certificate-display-format** *keyword*
- **certificate-expiration-warning**
  - **hours** *number*
  - **repeat-hours** *number*
- **certificate-update-profile** *string*
  - **after-issue** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **before-expiry** *number*
- **cmpv2**
  - **ca-profile** *reference*
- **dsa**
  - **key-size** *number*
- **ecdsa**
  - **curve** *keyword*
- **est**
  - **est-profile** *reference*
- **hash-algorithm** *keyword*
- **retry-interval** *number*
- **rsa**
  - **key-size** *number*
- **same-as-existing-key**
- **common-name-list** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **common-name** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **cn-type** *keyword*

configure system security pki common-name-list common-name cn-value

```

    - cn-value string
  - crl-expiration-warning
    - hours number
    - repeat-hours number
  - est-profile string
    - apply-groups reference
    - apply-groups-exclude reference
    - check-id-kp-cmra-only boolean
    - client-tls-profile string
    - http-authentication
      - password string
      - username string
    - server
      - fqdn string
      - ipv4 string
      - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
      - port number
    - transmission-profile string
  - imported-format keyword
  - maximum-cert-chain-depth number
  - python-script
    - apply-groups reference
    - apply-groups-exclude reference
    - authorization
      - cron
        - cli-user reference
      - event-handler
        - cli-user reference
  - snmp
    - access string context string security-model keyword security-level keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - notify string
    - prefix-match keyword
    - read string
    - write string
    - apply-groups reference
    - apply-groups-exclude reference
    - attempts
      - apply-groups reference
      - apply-groups-exclude reference
      - count number
      - lockout number
      - time number
    - community string
      - access-permissions keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - source-access-list reference
      - version keyword
    - source-access-list string
      - apply-groups reference
      - apply-groups-exclude reference
      - source-host string
        - address (ipv4-address-no-zone | ipv6-address-no-zone)
        - apply-groups reference
        - apply-groups-exclude reference
    - usm-community string
      - apply-groups reference
      - apply-groups-exclude reference
      - group string
      - source-access-list reference
    - view string subtree string
      - apply-groups reference

```

configure system security snmp view apply-groups-exclude

- **apply-groups-exclude** *reference*
- **mask** *string*
- **type** *keyword*
- **source-address**
  - **ipv4** *keyword*
    - **address** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **interface-name** *string*
  - **ipv6** *keyword*
    - **address** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
- **ssh**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **client-cipher-list-v2**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **cipher** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **name** *keyword*
  - **client-kex-list-v2**
    - **kex** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **name** *keyword*
  - **client-mac-list-v2**
    - **mac** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **name** *keyword*
  - **key-re-exchange**
    - **client**
      - **admin-state** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **mbytes** (*number* | *keyword*)
      - **minutes** (*number* | *keyword*)
    - **server**
      - **admin-state** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **mbytes** (*number* | *keyword*)
      - **minutes** (*number* | *keyword*)
  - **permit-empty-passwords** *boolean*
  - **preserve-key** *boolean*
  - **server-admin-state** *keyword*
  - **server-cipher-list-v2**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **cipher** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **name** *keyword*
  - **server-kex-list-v2**
    - **kex** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **name** *keyword*
  - **server-mac-list-v2**
    - **mac** *number*
      - **apply-groups** *reference*



configure system security ssh server-mac-list-v2 mac apply-groups-exclude

```

    - apply-groups-exclude reference
      - name keyword
- system-passwords
  - admin-password string
  - apply-groups reference
  - apply-groups-exclude reference
  - vsd-password string
- tech-support
  - apply-groups reference
  - apply-groups-exclude reference
  - ts-location (ts-sat-url | cflash-url | string)
- telnet-server boolean
- telnet6-server boolean
- tls
  - apply-groups reference
  - apply-groups-exclude reference
  - cert-profile string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - entry number
      - apply-groups reference
      - apply-groups-exclude reference
      - certificate-file string
      - key-file string
      - send-chain
        - ca-profile reference
  - client-cipher-list string
    - apply-groups reference
    - apply-groups-exclude reference
    - tls12-cipher number
      - apply-groups reference
      - apply-groups-exclude reference
      - name keyword
    - tls13-cipher number
      - apply-groups reference
      - apply-groups-exclude reference
      - name keyword
  - client-group-list string
    - apply-groups reference
    - apply-groups-exclude reference
    - tls13-group number
      - apply-groups reference
      - apply-groups-exclude reference
      - name keyword
  - client-signature-list string
    - apply-groups reference
    - apply-groups-exclude reference
    - tls13-signature number
      - apply-groups reference
      - apply-groups-exclude reference
      - name keyword
  - client-tls-profile string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - cert-profile reference
    - cipher-list reference
    - group-list reference
    - protocol-version keyword
    - signature-list reference
    - trust-anchor-profile reference
  - server-cipher-list string
    - apply-groups reference

```

configure system security tls server-cipher-list apply-groups-exclude

- **apply-groups-exclude** *reference*
- **tls12-cipher** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **name** *keyword*
- **tls13-cipher** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **name** *keyword*
- **server-group-list** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **tls13-group** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **name** *keyword*
- **server-signature-list** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **tls13-signature** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **name** *keyword*
- **server-tls-profile** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **authenticate-client**
    - **common-name-list** *reference*
    - **trust-anchor-profile** *reference*
  - **cert-profile** *reference*
  - **cipher-list** *reference*
  - **group-list** *reference*
  - **protocol-version** *keyword*
  - **signature-list** *reference*
  - **tls-re-negotiate-timer** *number*
- **trust-anchor-profile** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **trust-anchor** *reference*
- **user-params**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **attempts**
    - **count** *number*
    - **lockout** *number*
    - **time** *number*
  - **authentication-order**
    - **exit-on-reject** *boolean*
    - **order** *keyword*
  - **local-user**
    - **password**
      - **aging** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **complexity-rules**
        - **allow-user-name** *boolean*
        - **credits**
          - **lowercase** *number*
          - **numeric** *number*
          - **special-character** *number*
          - **uppercase** *number*
        - **minimum-classes** *number*
        - **minimum-length** *number*

configure system security user-params local-user password complexity-rules repeated-characters

```

    - repeated-characters number
    - required
      - lowercase number
      - numeric number
      - special-character number
      - uppercase number
    - hashing keyword
    - history-size number
    - minimum-age number
    - minimum-change number
  - user string
    - access
      - console boolean
      - ftp boolean
      - grpc boolean
      - li boolean
      - netconf boolean
      - snmp boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - cli-engine keyword
    - console
      - cannot-change-password boolean
      - login-exec (sat-url | cflash-url | ftp-tftp-url | filename)
      - member reference
      - new-password-at-login boolean
    - home-directory (sat-url | cflash-without-slot-url)
    - password string
    - public-keys
      - ecdsa
        - ecdsa-key number
        - apply-groups reference
        - apply-groups-exclude reference
        - description string
        - key-value string
      - rsa
        - rsa-key number
        - apply-groups reference
        - apply-groups-exclude reference
        - description string
        - key-value string
    - restricted-to-home boolean
    - save-when-restricted boolean
    - snmp
      - apply-groups reference
      - apply-groups-exclude reference
      - authentication
        - authentication-key string
        - authentication-protocol keyword
      - privacy
        - privacy-key string
        - privacy-protocol keyword
      - group string
  - vprn-network-exceptions
    - count number
    - window number
  - selective-fib boolean
  - software-repository string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - primary-location string
    - secondary-location string
    - tertiary-location string

```

## configure system switch-fabric

```

- switch-fabric
  - apply-groups reference
  - apply-groups-exclude reference
  - failure-recovery
    - admin-state keyword
  - sfm-loss-threshold number
- telemetry
  - apply-groups reference
  - apply-groups-exclude reference
  - destination-group string
    - allow-unsecure-connection
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - destination (ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-
domain-name) port number
    - apply-groups reference
    - apply-groups-exclude reference
    - router-instance string
  - tcp-keepalive
    - admin-state keyword
    - idle-time number
    - interval number
    - retries number
  - tls-client-profile reference
- notification-bundling
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - max-msg-count number
  - max-time-granularity number
- persistent-subscriptions
  - subscription string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - destination-group reference
    - encoding keyword
    - local-source-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - mode keyword
    - originated-qos-marking keyword
    - sample-interval number
    - sensor-group reference
- sensor-groups
  - sensor-group string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - path string
- thresholds
  - cflash-cap-alarm-percent string
    - apply-groups reference
    - apply-groups-exclude reference
    - falling-threshold number
    - interval number
    - rising-threshold number
    - rmon-event-type keyword
    - startup-alarm keyword
  - cflash-cap-warn-percent string
    - apply-groups reference
    - apply-groups-exclude reference
    - falling-threshold number
    - interval number

```

configure system thresholds cflash-cap-warn-percent rising-threshold

- **rising-threshold** *number*
- **rmon-event-type** *keyword*
- **startup-alarm** *keyword*
- **kb-memory-use-alarm**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **falling-threshold** *number*
  - **interval** *number*
  - **rising-threshold** *number*
  - **rmon-event-type** *keyword*
  - **startup-alarm** *keyword*
- **kb-memory-use-warn**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **falling-threshold** *number*
  - **interval** *number*
  - **rising-threshold** *number*
  - **rmon-event-type** *keyword*
  - **startup-alarm** *keyword*
- **rmon**
  - **alarm** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **falling-event** *number*
    - **falling-threshold** *number*
    - **interval** *number*
    - **owner** *string*
    - **rising-event** *number*
    - **rising-threshold** *number*
    - **sample-type** *keyword*
    - **startup-alarm** *keyword*
    - **variable-oid** *string*
  - **event** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **event-type** *keyword*
    - **owner** *string*
- **time**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **dst-zone** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **end**
    - **day** *keyword*
    - **hours-minutes** *string*
    - **month** *keyword*
    - **week** *keyword*
  - **offset** *number*
  - **start**
    - **day** *keyword*
    - **hours-minutes** *string*
    - **month** *keyword*
    - **week** *keyword*
- **ntp**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **authentication-check** *boolean*
  - **authentication-key** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **key** *string*

configure system time ntp authentication-key type

```

- type keyword
- broadcast reference interface-name string
- apply-groups reference
- apply-groups-exclude reference
- key-id reference
- ttl number
- version number
- broadcast-client string interface-name string
- apply-groups reference
- apply-groups-exclude reference
- authenticate boolean
- multicast
- apply-groups reference
- apply-groups-exclude reference
- key-id reference
- version number
- multicast-client
- apply-groups reference
- apply-groups-exclude reference
- authenticate boolean
- ntp-server
- authenticate boolean
- peer (ipv4-address-no-zone | ipv6-address-no-zone) router-instance string
- apply-groups reference
- apply-groups-exclude reference
- key-id reference
- prefer boolean
- version number
- server (ipv4-address-no-zone | ipv6-address-no-zone | keyword) router-
instance string
- apply-groups reference
- apply-groups-exclude reference
- key-id reference
- prefer boolean
- version number
- prefer-local-time boolean
- sntp
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- server (ipv4-address-no-zone | ipv6-address-no-zone)
- apply-groups reference
- apply-groups-exclude reference
- interval number
- prefer boolean
- version number
- sntp-state keyword
- zone
- non-standard
- name string
- offset string
- standard
- name keyword
- transmission-profile string
- apply-groups reference
- apply-groups-exclude reference
- ipv4-source-address string
- ipv6-source-address string
- redirection number
- retry number
- router-instance string
- timeout number
- usb keyword
- admin-state keyword

```

---

configure system usb apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*

### 3.46.1 system command descriptions

#### system

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>system</b> context  |
| Context     | <b>configure system</b>  |
| Tree        | <a href="#">system</a>   |
| Description | Commands in this context enable configuring of general system level functions and router management protocols. |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

#### alarm-contact-in-power *boolean*

|            |   |
|------------|---|
| Synopsis   | Power the output pin on the CPM alarm interface port          |
| Context    | <b>configure system alarm-contact-in-power <i>boolean</i></b> |
| Tree       | <a href="#">alarm-contact-in-power</a>                        |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR-a   |

#### alarm-contact-input [[input-pin-number](#)] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>alarm-contact-input</b> list instance        |
| Context    | <b>configure system alarm-contact-input <i>number</i></b> |
| Tree       | <a href="#">alarm-contact-input</a>                       |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR-a   |

#### [[input-pin-number](#)] *number*

|          |   |
|----------|---|
| Synopsis | Alarm contact input pin                                   |
| Context  | <b>configure system alarm-contact-input <i>number</i></b> |
| Tree     | <a href="#">alarm-contact-input</a>                       |
| Range    | 1 to 4  |



|            |                                     |
|------------|-------------------------------------|
| Notes      | This element is part of a list key. |
| Introduced | 16.0.R1                             |
| Platforms  | 7750 SR-a                           |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the alarm contact input  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">alarm-contact-input</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR-a  |

### **clear-message** *string*

|               |  |
|---------------|--|
| Synopsis      | Text message sent in the log event when an alarm clears  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">alarm-contact-input</a> <i>number</i> <a href="#">clear-message</a> <i>string</i>  |
| Tree          | <a href="#">clear-message</a>  |
| Description   | This command configures a text message to be included in the log event that is sent when the system clears an alarm.<br><br>The system generates the default "Alarm Input Cleared" message if no message is configured. The <b>clear-message</b> string is included in the log event when the pin changes to the normal state. |
| String Length | 1 to 80  |
| Default       | Alarm Input Cleared  |
| Introduced    | 16.0.R1  |
| Platforms     | 7750 SR-a  |

### **description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">alarm-contact-input</a> <i>number</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 160  |
| Introduced    | 16.0.R1   |

Platforms 7750 SR-a

### **normal-state** *keyword*

Synopsis Normal state associated with the alarm contact input

Context **configure** [system](#) [alarm-contact-input](#) *number* [normal-state](#) *keyword*

Tree [normal-state](#)

Options open, closed

Default open

Introduced 16.0.R1

Platforms 7750 SR-a

### **trigger-message** *string*

Synopsis Text message sent in the log event when input changes

Context **configure** [system](#) [alarm-contact-input](#) *number* [trigger-message](#) *string*

Tree [trigger-message](#)

Description This command configures a text message to be included in the log event that is sent when the system generates an alarm.

The system generates the default message "Alarm Input Triggered" if no message is configured. This command's message string is included in the log event when the pin changes from the normal state.

String Length 1 to 80

Default Alarm Input Triggered

Introduced 16.0.R1

Platforms 7750 SR-a

### **alarms**

Synopsis Enter the **alarms** context

Context **configure** [system](#) [alarms](#)

Tree [alarms](#)

Introduced 16.0.R4

Platforms All

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the system alarm   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">alarms</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**max-cleared** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum number of cleared alarms  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">alarms</a> <b>max-cleared</b> <i>number</i> |
| Tree       | <a href="#">max-cleared</a>   |
| Range      | 0 to 500  |
| Default    | 500   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**allow-boot-license-violations** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow boot license violations in boot-up configuration                                      |
| Context    | <b>configure</b> <a href="#">system</a> <b>allow-boot-license-violations</b> <i>boolean</i> |
| Tree       | <a href="#">allow-boot-license-violations</a>   |
| Default    | true  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**bluetooth**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>bluetooth</b> context                       |
| Context    | <b>configure</b> <a href="#">system</a> <b>bluetooth</b> |
| Tree       | <a href="#">bluetooth</a>                                |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR-1, 7750 SR-s, 7950 XRS-20e                       |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the Bluetooth module  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">bluetooth</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 20.2.R1   |
| Platforms  | 7750 SR-1, 7750 SR-s, 7950 XRS-20e  |

**advertising-timeout** *number*

|            |  |
|------------|--|
| Synopsis   | Bluetooth advertising timeout  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">bluetooth</a> <b>advertising-timeout</b> <i>number</i> |
| Tree       | <a href="#">advertising-timeout</a>  |
| Range      | 30 to 3600   |
| Units      | seconds  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR-1, 7750 SR-s, 7950 XRS-20e   |

**device** [[mac-address](#)] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>device</b> list instance   |
| Context        | <b>configure</b> <a href="#">system</a> <a href="#">bluetooth</a> <b>device</b> <i>string</i> |
| Tree           | <a href="#">device</a>  |
| Max. Instances | 5   |
| Introduced     | 16.0.R1   |
| Platforms      | 7750 SR-1, 7750 SR-s, 7950 XRS-20e  |

**[mac-address]** *string*

|          |   |
|----------|---|
| Synopsis | Bluetooth client device MAC address   |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">bluetooth</a> <b>device</b> <i>string</i> |
| Tree     | <a href="#">device</a>  |

|            |                                     |
|------------|-------------------------------------|
| Notes      | This element is part of a list key. |
| Introduced | 16.0.R1                             |
| Platforms  | 7750 SR-1, 7750 SR-s, 7950 XRS-20e  |

### **description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">bluetooth</a> <a href="#">device</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7750 SR-1, 7750 SR-s, 7950 XRS-20e   |

### **module** [[cpm-slot](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>module</b> list instance  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">bluetooth</a> <a href="#">module</a> <i>string</i> |
| Tree       | <a href="#">module</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR-1, 7750 SR-s, 7950 XRS-20e   |

### **[cpm-slot]** *string*

|               |  |
|---------------|--|
| Synopsis      | CPM slot on which the module resides   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">bluetooth</a> <a href="#">module</a> <i>string</i> |
| Tree          | <a href="#">module</a>   |
| String Length | 1  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | 7750 SR-1, 7750 SR-s, 7950 XRS-20e   |

### **provisioned-identifier** *string*

|          |   |
|----------|---|
| Synopsis | Bluetooth module ID   |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">bluetooth</a> <a href="#">module</a> <i>string</i> <a href="#">provisioned-identifier</a> <i>string</i> |

---

|               |  |
|---------------|--|
| Tree          | <a href="#">provisioned-identifier</a> |
| String Length | 1 to 32                                |
| Introduced    | 16.0.R1                                |
| Platforms     | 7750 SR-1, 7750 SR-s, 7950 XRS-20e     |

### **pairing-button** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable the pairing button   |
| Context    | <b>configure</b> <a href="#">system bluetooth pairing-button</a> <i>boolean</i> |
| Tree       | <a href="#">pairing-button</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR-1, 7750 SR-s, 7950 XRS-20e  |

### **passkey** *string*

|               |   |
|---------------|---|
| Synopsis      | Bluetooth passkey   |
| Context       | <b>configure</b> <a href="#">system bluetooth passkey</a> <i>string</i> |
| Tree          | <a href="#">passkey</a>   |
| String Length | 6   |
| Default       | 123456  |
| Introduced    | 16.0.R1   |
| Platforms     | 7750 SR-1, 7750 SR-s, 7950 XRS-20e                                      |

### **power-mode** *keyword*

|            |   |
|------------|---|
| Synopsis   | Bluetooth module power mode   |
| Context    | <b>configure</b> <a href="#">system bluetooth power-mode</a> <i>keyword</i> |
| Tree       | <a href="#">power-mode</a>  |
| Options    | manual, automatic   |
| Default    | automatic   |
| Introduced | 20.2.R1   |
| Platforms  | 7750 SR-1, 7750 SR-s, 7950 XRS-20e  |

### **boot-bad-exec** *string*

|               |  |
|---------------|--|
| Synopsis      | CLI script file to execute following a failed boot-up  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">boot-bad-exec</a> <i>string</i>  |
| Tree          | <a href="#">boot-bad-exec</a>  |
| Description   | This command configures the name of the CLI script file to be run following the failure of a boot-up configuration.<br><b>Note:</b> This command has no effect in model-driven mode. |
| String Length | 1 to 180   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

### **boot-good-exec** *string*

|               |  |
|---------------|--|
| Synopsis      | CLI script file to execute following successful boot-up                              |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">boot-good-exec</a> <i>string</i> |
| Tree          | <a href="#">boot-good-exec</a>   |
| String Length | 1 to 180   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

### **central-frequency-clock**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>central-frequency-clock</b> context                                |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> |
| Tree       | <a href="#">central-frequency-clock</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                    |

### **bits**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>bits</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">bits</a> |
| Tree       | <a href="#">bits</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## input

|            |  |
|------------|--|
| Synopsis   | Enter the <b>input</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">bits</a> <a href="#">input</a> |
| Tree       | <a href="#">input</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## admin-state *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the BITS input timing reference   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">bits</a> <a href="#">input</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## interface-type *keyword*

|            |  |
|------------|--|
| Synopsis   | Interface type of the BITS timing reference  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">bits</a> <a href="#">interface-type</a> <i>keyword</i> |
| Tree       | <a href="#">interface-type</a>   |
| Options    | ds1-esf, ds1-sf, e1-pcm30crc, e1-pcm31crc, g703-2048khz  |
| Default    | ds1-esf  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## output

|            |   |
|------------|---|
| Synopsis   | Enter the <b>output</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">bits</a> <a href="#">output</a> |
| Tree       | <a href="#">output</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |



**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of BITS output timing reference   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">bits</a> <a href="#">output</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**line-length** *keyword*

|            |  |
|------------|--|
| Synopsis   | Line length for the BITS output timing reference   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">bits</a> <a href="#">output</a> <a href="#">line-length</a> <i>keyword</i> |
| Tree       | <a href="#">line-length</a>  |
| Options    | length-not-applicable, 110, 220, 330, 440, 550, 660  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**ql-minimum** *keyword*

|            |   |
|------------|---|
| Synopsis   | Minimum signal quality level for BITSout port   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">bits</a> <a href="#">output</a> <a href="#">ql-minimum</a> <i>keyword</i> |
| Tree       | <a href="#">ql-minimum</a>  |
| Options    | unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec, eec1, eec2   |
| Default    | unused  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**source** *keyword*

|          |   |
|----------|---|
| Synopsis | Source of the BITS output timing reference  |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">bits</a> <a href="#">output</a> <a href="#">source</a> <i>keyword</i> |
| Tree     | <a href="#">source</a>  |
| Options  | line-ref, internal-clock  |
| Default  | line-ref  |

|            |  |
|------------|--|
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **squelch** *boolean*

|            |  |
|------------|--|
| Synopsis   | Squelch the signal of the BITS output timing reference   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">bits</a> <a href="#">output</a> <a href="#">squelch</a> <i>boolean</i> |
| Tree       | <a href="#">squelch</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **ql-override** *keyword*

|            |   |
|------------|---|
| Synopsis   | Override for the quality level of the timing reference  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">bits</a> <a href="#">ql-override</a> <i>keyword</i> |
| Tree       | <a href="#">ql-override</a>   |
| Options    | unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec   |
| Default    | unused  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **ssm-bit** *number*

|            |  |
|------------|--|
| Synopsis   | Sa bit to convey SSM information   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">bits</a> <a href="#">ssm-bit</a> <i>number</i> |
| Tree       | <a href="#">ssm-bit</a>  |
| Range      | 4 to 8   |
| Default    | 8  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **gnss**

|          |                               |
|----------|-------------------------------|
| Synopsis | Enter the <b>gnss</b> context |
|----------|-------------------------------|

|            |  |
|------------|--|
| Context    | <b>configure system central-frequency-clock gnss</b>   |
| Tree       | <a href="#">gnss</a>   |
| Introduced | 22.10.R1   |
| Platforms  | 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the gnss timing reference  |
| Context    | <b>configure system central-frequency-clock gnss admin-state</b> <i>keyword</i>                                      |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 22.10.R1   |
| Platforms  | 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se |

### **ql-override** *keyword*

|            |  |
|------------|--|
| Synopsis   | Quality level override for a timing reference  |
| Context    | <b>configure system central-frequency-clock gnss ql-override</b> <i>keyword</i>                                      |
| Tree       | <a href="#">ql-override</a>  |
| Options    | unused, prs, stu, st2, tnc, st3e, st3  |
| Default    | unused   |
| Introduced | 22.10.R1   |
| Platforms  | 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se |

### **ptp**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ptp</b> context                                 |
| Context    | <b>configure system central-frequency-clock ptp</b>          |
| Tree       | <a href="#">ptp</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the PTP timing reference   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">ptp</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**ql-override** *keyword*

|            |  |
|------------|--|
| Synopsis   | Quality level of a timing reference that overrides any value provided by the reference's SSM process   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">ptp</a> <a href="#">ql-override</a> <i>keyword</i> |
| Tree       | <a href="#">ql-override</a>  |
| Options    | unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec  |
| Default    | unused   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**ql-minimum** *keyword*

|            |   |
|------------|---|
| Synopsis   | Minimum signal quality level for system timing module   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">ql-minimum</a> <i>keyword</i> |
| Tree       | <a href="#">ql-minimum</a>  |
| Options    | unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec, eec1, eec2   |
| Default    | unused  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**ql-selection** *boolean*

|          |   |
|----------|---|
| Synopsis | Consider quality level in system and BITS output timing   |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">ql-selection</a> <i>boolean</i> |

|            |  |
|------------|--|
| Tree       | <a href="#">ql-selection</a>                                 |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

## ref-order

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>ref-order</b> context  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">ref-order</a>   |
| Tree        | <a href="#">ref-order</a>   |
| Description | <p>Commands in this context specify the priority order of the synchronous equipment timing subsystem.</p> <p>If a reference source is disabled, this command defines the next reference source for the clock. If all reference sources are disabled, clocking is derived from a local oscillator.</p> <p>If a timing reference is linked to a source port that is operationally down, the port is no longer a qualified, valid reference.</p> |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## fifth keyword

|            |  |
|------------|--|
| Synopsis   | Fifth preferred timing reference source  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">ref-order</a> <i>fifth keyword</i> |
| Tree       | <a href="#">fifth</a>  |
| Options    | ref1, ref2, bits, ptp, none, synce, gnss   |
| Introduced | 19.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## first keyword

|            |  |
|------------|--|
| Synopsis   | First preferred timing reference source  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">ref-order</a> <i>first keyword</i> |
| Tree       | <a href="#">first</a>  |
| Options    | ref1, ref2, bits, ptp, none, synce, gnss   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **fourth keyword**

|            |  |
|------------|--|
| Synopsis   | Fourth preferred timing reference source                                 |
| Context    | <b>configure system central-frequency-clock ref-order fourth keyword</b> |
| Tree       | <a href="#">fourth</a>   |
| Options    | ref1, ref2, bits, ptp, none, synce, gnss                                 |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS             |

### **second keyword**

|            |  |
|------------|--|
| Synopsis   | Second preferred timing reference source                                 |
| Context    | <b>configure system central-frequency-clock ref-order second keyword</b> |
| Tree       | <a href="#">second</a>   |
| Options    | ref1, ref2, bits, ptp, none, synce, gnss                                 |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS             |

### **sixth keyword**

|            |  |
|------------|--|
| Synopsis   | Sixth preferred timing reference source  |
| Context    | <b>configure system central-frequency-clock ref-order sixth keyword</b>  |
| Tree       | <a href="#">sixth</a>  |
| Options    | ref1, ref2, bits, ptp, none, synce, gnss   |
| Introduced | 22.10.R1   |
| Platforms  | 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se |

### **third keyword**

|            |   |
|------------|---|
| Synopsis   | Third preferred timing reference source                                 |
| Context    | <b>configure system central-frequency-clock ref-order third keyword</b> |
| Tree       | <a href="#">third</a>   |
| Options    | ref1, ref2, bits, ptp, none, synce, gnss                                |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ref1

Synopsis Enter the **ref1** context

Context **configure** system central-frequency-clock ref1

Tree [ref1](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## admin-state *keyword*

Synopsis Administrative state of the first timing reference

Context **configure** system central-frequency-clock ref1 admin-state *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ql-override *keyword*

Synopsis Quality level override of a timing reference

Context **configure** system central-frequency-clock ref1 ql-override *keyword*

Tree [ql-override](#)

Options unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec, eec1, eec2

Default unused

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## source-port *string*

Synopsis Source port for the first timing reference

Context **configure** system central-frequency-clock ref1 source-port *string*

Tree [source-port](#)

|            |  |
|------------|--|
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

**ref2**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ref2</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <b>ref2</b> |
| Tree       | <a href="#">ref2</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                                |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the second timing reference  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">ref2</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**ql-override** *keyword*

|            |  |
|------------|--|
| Synopsis   | Quality level override of a timing reference   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">ref2</a> <b>ql-override</b> <i>keyword</i> |
| Tree       | <a href="#">ql-override</a>  |
| Options    | unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec, eec1, eec2  |
| Default    | unused   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**source-port** *string*

|          |   |
|----------|---|
| Synopsis | Source port for the second timing reference   |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">ref2</a> <b>source-port</b> <i>string</i> |



|            |  |
|------------|--|
| Tree       | <a href="#">source-port</a>                                  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

**revert *boolean***

|            |  |
|------------|--|
| Synopsis   | Revert to higher-priority reference source   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <b>revert</b> <i>boolean</i> |
| Tree       | <a href="#">revert</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**synce**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>synce</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <b>synce</b> |
| Tree       | <a href="#">synce</a>  |
| Introduced | 19.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                                 |

**admin-state *keyword***

|            |  |
|------------|--|
| Synopsis   | Administrative state of the SyncE timing reference   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <b>synce</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 19.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**ql-override *keyword***

|          |  |
|----------|--|
| Synopsis | Override the quality level of a timing reference   |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <b>synce</b> <b>ql-override</b> <i>keyword</i> |

|            |   |
|------------|---|
| Tree       | <a href="#">ql-override</a>   |
| Options    | unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec, eec1, eec2 |
| Default    | unused  |
| Introduced | 19.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS            |

### **wait-to-restore** *number*

|            |   |
|------------|---|
| Synopsis   | Time to re-validate a previously failed input reference   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">wait-to-restore</a> <i>number</i> |
| Tree       | <a href="#">wait-to-restore</a>   |
| Range      | 1 to 12   |
| Units      | minutes   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **cli-code** *string*

|               |  |
|---------------|--|
| Synopsis      | CLLI code value for the system   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">cli-code</a> <i>string</i> |
| Tree          | <a href="#">cli-code</a>   |
| String Length | 11   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

### **congestion-management** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable Virtual Service Router congestion management  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">congestion-management</a> <i>boolean</i> |
| Tree       | <a href="#">congestion-management</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | VSR  |

**contact string**

|               |  |
|---------------|--|
| Synopsis      | Contact information for the managed node |
| Context       | <b>configure system contact string</b>   |
| Tree          | <a href="#">contact</a>                  |
| String Length | 1 to 80                                  |
| Introduced    | 16.0.R1                                  |
| Platforms     | All                                      |

**coordinates string**

|               |  |
|---------------|--|
| Synopsis      | GPS coordinates for the system location    |
| Context       | <b>configure system coordinates string</b> |
| Tree          | <a href="#">coordinates</a>                |
| String Length | 1 to 80                                    |
| Introduced    | 16.0.R1                                    |
| Platforms     | All  |

**cpm-http-redirect**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>cpm-http-redirect</b> context |
| Context    | <b>configure system cpm-http-redirect</b>  |
| Tree       | <a href="#">cpm-http-redirect</a>          |
| Introduced | 16.0.R4                                    |
| Platforms  | All  |

**optimized-mode boolean**

|            |  |
|------------|--|
| Synopsis   | Enable optimized mode for CPM HTTP redirect messages             |
| Context    | <b>configure system cpm-http-redirect optimized-mode boolean</b> |
| Tree       | <a href="#">optimized-mode</a>                                   |
| Default    | true   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**cron**

|            |                               |
|------------|-------------------------------|
| Synopsis   | Enter the <b>cron</b> context |
| Context    | <b>configure system cron</b>  |
| Tree       | <a href="#">cron</a>          |
| Introduced | 16.0.R1                       |
| Platforms  | All                           |

**schedule** [[schedule-name](#)] *string owner string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>schedule</b> list instance                          |
| Context        | <b>configure system cron schedule</b> <i>string owner string</i> |
| Tree           | <a href="#">schedule</a>   |
| Max. Instances | 255  |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

**[schedule-name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Schedule name  |
| Context       | <b>configure system cron schedule</b> <i>string owner string</i> |
| Tree          | <a href="#">schedule</a>   |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.                              |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**owner** *string*

|               |  |
|---------------|--|
| Synopsis      | Schedule owner   |
| Context       | <b>configure system cron schedule</b> <i>string owner string</i> |
| Tree          | <a href="#">schedule</a>   |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.                              |
| Introduced    | 16.0.R1  |

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the CRON schedule  
 Context **configure** [system cron schedule](#) *string* [owner](#) *string* **admin-state** *keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 16.0.R1  
 Platforms All

### **count** *number*

Synopsis Number of times to repeat a periodic schedule run  
 Context **configure** [system cron schedule](#) *string* [owner](#) *string* **count** *number*  
 Tree [count](#)  
 Range 1 to 65535  
 Introduced 16.0.R1  
 Platforms All

### **day-of-month** *number*

Synopsis Days in a month when a schedule runs  
 Context **configure** [system cron schedule](#) *string* [owner](#) *string* **day-of-month** *number*  
 Tree [day-of-month](#)  
 Range -31 to -1 | 1 to 31  
 Max. 62  
 Instances  
 Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [system cron schedule](#) *string* [owner](#) *string* **description** *string*

|               |                             |
|---------------|-----------------------------|
| Tree          | <a href="#">description</a> |
| String Length | 1 to 80                     |
| Introduced    | 16.0.R1                     |
| Platforms     | All                         |

## **end-time**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>end-time</b> context   |
| Context    | <b>configure</b> <a href="#">system cron schedule</a> <i>string</i> <a href="#">owner</a> <i>string</i> <b>end-time</b> |
| Tree       | <a href="#">end-time</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## **date-and-time** *string*

|            |   |
|------------|---|
| Synopsis   | Date and time to stop triggering the schedule   |
| Context    | <b>configure</b> <a href="#">system cron schedule</a> <i>string</i> <a href="#">owner</a> <i>string</i> <a href="#">end-time</a> <b>date-and-time</b> <i>string</i> |
| Tree       | <a href="#">date-and-time</a>   |
| Notes      | The following elements are part of a choice: <b>date-and-time</b> or ( <b>day</b> and <b>time</b> ).  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## **day** *keyword*

|            |  |
|------------|--|
| Synopsis   | Day to stop triggering the schedule  |
| Context    | <b>configure</b> <a href="#">system cron schedule</a> <i>string</i> <a href="#">owner</a> <i>string</i> <a href="#">end-time</a> <b>day</b> <i>keyword</i> |
| Tree       | <a href="#">day</a>  |
| Options    | sunday, monday, tuesday, wednesday, thursday, friday, saturday   |
| Notes      | The following elements are part of a choice: <b>date-and-time</b> or ( <b>day</b> and <b>time</b> ).   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## **time** *string*

|          |                                      |
|----------|--------------------------------------|
| Synopsis | Time to stop triggering the schedule |
|----------|--------------------------------------|

|               |  |
|---------------|--|
| Context       | <b>configure system cron schedule</b> <i>string owner string end-time time string</i>                |
| Tree          | <b>time</b>  |
| String Length | 5  |
| Notes         | The following elements are part of a choice: <b>date-and-time</b> or ( <b>day</b> and <b>time</b> ). |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

### **hour** *number*

|            |  |
|------------|--|
| Synopsis   | Hours within a day when the schedule runs                                    |
| Context    | <b>configure system cron schedule</b> <i>string owner string hour number</i> |
| Tree       | <b>hour</b>  |
| Range      | 0 to 23  |
| Max.       | 24   |
| Instances  |  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **interval** *number*

|            |  |
|------------|--|
| Synopsis   | Time between each periodic schedule run  |
| Context    | <b>configure system cron schedule</b> <i>string owner string interval number</i> |
| Tree       | <b>interval</b>  |
| Range      | 30 to 42949672   |
| Units      | seconds  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **minute** *number*

|          |  |
|----------|--|
| Synopsis | Minutes in an hour when the schedule runs                                      |
| Context  | <b>configure system cron schedule</b> <i>string owner string minute number</i> |
| Tree     | <b>minute</b>  |
| Range    | 0 to 59  |

|                |         |
|----------------|---------|
| Max. Instances | 60      |
| Introduced     | 16.0.R1 |
| Platforms      | All     |

### **month** (*keyword | number*)

|                |   |
|----------------|---|
| Synopsis       | Months when the schedule runs   |
| Context        | <b>configure</b> <a href="#">system cron schedule</a> <i>string</i> <b>owner</b> <i>string</i> <b>month</b> ( <i>keyword   number</i> ) |
| Tree           | <a href="#">month</a>   |
| Range          | 1 to 12   |
| Options        | january, february, march, april, may, june, july, august, september, october, november, december  |
| Max. Instances | 12  |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

### **script-policy**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>script-policy</b> context  |
| Context    | <b>configure</b> <a href="#">system cron schedule</a> <i>string</i> <b>owner</b> <i>string</i> <b>script-policy</b> |
| Tree       | <a href="#">script-policy</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **name** *string*

|               |   |
|---------------|---|
| Synopsis      | CLI script policy name  |
| Context       | <b>configure</b> <a href="#">system cron schedule</a> <i>string</i> <b>owner</b> <i>string</i> <b>script-policy</b> <b>name</b> <i>string</i> |
| Tree          | <a href="#">name</a>  |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |



**owner string**

|               |   |
|---------------|---|
| Synopsis      | Script policy owner   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">cron</a> <a href="#">schedule</a> <i>string</i> <a href="#">owner</a> <i>string</i> <a href="#">script-policy</a> <a href="#">owner</a> <i>string</i> |
| Tree          | <a href="#">owner</a>   |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**type keyword**

|            |   |
|------------|---|
| Synopsis   | Schedule type   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">cron</a> <a href="#">schedule</a> <i>string</i> <a href="#">owner</a> <i>string</i> <a href="#">type</a> <i>keyword</i> |
| Tree       | <a href="#">type</a>  |
| Options    | periodic, calendar, oneshot   |
| Default    | periodic  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**weekday (keyword | number)**

|                |   |
|----------------|---|
| Synopsis       | Weekdays when the schedule runs   |
| Context        | <b>configure</b> <a href="#">system</a> <a href="#">cron</a> <a href="#">schedule</a> <i>string</i> <a href="#">owner</a> <i>string</i> <a href="#">weekday</a> ( <i>keyword   number</i> ) |
| Tree           | <a href="#">weekday</a>   |
| Range          | 1 to 7  |
| Options        | sunday, monday, tuesday, wednesday, thursday, friday, saturday  |
| Max. Instances | 7   |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

**dhcp6**

|          |   |
|----------|---|
| Synopsis | Enter the <b>dhcp6</b> context                                |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">dhcp6</a> |
| Tree     | <a href="#">dhcp6</a>   |

|            |         |
|------------|---------|
| Introduced | 16.0.R4 |
| Platforms  | All     |

### **adv-noaddrs-global** *keyword*

|                |   |
|----------------|---|
| Synopsis       | Applications to send NoAddrsAvail in Advertise messages   |
| Context        | <b>configure</b> <a href="#">system</a> <a href="#">dhcp6</a> <a href="#">adv-noaddrs-global</a> <i>keyword</i> |
| Tree           | <a href="#">adv-noaddrs-global</a>  |
| Options        | esm-relay, server   |
| Max. Instances | 2   |
| Introduced     | 16.0.R4   |
| Platforms      | All   |

### **dns**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>dns</b> context                                |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">dns</a> |
| Tree       | <a href="#">dns</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **address-pref** *keyword*

|            |   |
|------------|---|
| Synopsis   | Preference in DNS address resolving order   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">dns</a> <a href="#">address-pref</a> <i>keyword</i> |
| Tree       | <a href="#">address-pref</a>  |
| Options    | ipv4-only, ipv6-first   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **dnssec**

|          |  |
|----------|--|
| Synopsis | Enter the <b>dnssec</b> context  |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">dns</a> <a href="#">dnssec</a> |
| Tree     | <a href="#">dnssec</a>   |

Introduced 16.0.R1  
Platforms All

### **ad-validation** *keyword*

Synopsis Validation of AD-bit presence in DNS server responses  
Context **configure** [system dns dnssec ad-validation](#) *keyword*  
Tree [ad-validation](#)  
Options fall-through, drop  
Introduced 16.0.R1  
Platforms All

### **efm-oam**

Synopsis Enter the **efm-oam** context  
Context **configure** [system efm-oam](#)  
Tree [efm-oam](#)  
Introduced 16.0.R1  
Platforms All

### **dying-gasp-tx-on-reset** *boolean*

Synopsis Generate Information OAM PDU on soft reset notification  
Context **configure** [system efm-oam dying-gasp-tx-on-reset](#) *boolean*  
Tree [dying-gasp-tx-on-reset](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **grace-tx** *boolean*

Synopsis Send Grace TLVs for soft reset graceful recovery events  
Context **configure** [system efm-oam grace-tx](#) *boolean*  
Tree [grace-tx](#)

|             |   |
|-------------|---|
| Description | <p>When configured to <b>true</b>, the system sends the Nokia Vendor specific Grace TLV in the information PDU after an ISSU or a soft reset. The Grace TLV informs a remote peer to ignore the negotiated interval and multiplier and instead use the new timeout interval.</p> <p>By default, the command is disabled at the system level and enabled at the port level. Both the system and port level must be enabled to support grace on a specific port. When configured to <b>true</b>, the EFM-OAM protocol does not enter a non-operational state when both nodes acknowledge the grace function. This feature minimizes service interruption by giving the restarting router time to become operationally and administratively up within the grace period.</p> <p>The peer receiving the Grace TLV must be able to parse and process the vendor-specific messaging. Do not configure grace if the Nokia Vendor Specific Grace TLV is not supported on the remote peer.</p> <p>When configured to <b>false</b>, the Nokia Vendor Specific Grace TLV is not sent.</p> |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

## eth-cfm

|            |  |
|------------|--|
| Synopsis   | Enter the <b>eth-cfm</b> context                             |
| Context    | <b>configure system eth-cfm</b>                              |
| Tree       | <a href="#">eth-cfm</a>                                      |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

## grace *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow system level capability of grace messaging             |
| Context    | <b>configure system eth-cfm grace <i>boolean</i></b>         |
| Tree       | <a href="#">grace</a>  |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

## md-auto-id

|          |  |
|----------|--|
| Synopsis | Enter the <b>md-auto-id</b> context        |
| Context  | <b>configure system eth-cfm md-auto-id</b> |

|            |  |
|------------|--|
| Tree       | <a href="#">md-auto-id</a>                                   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

## ma-index-range

|            |   |
|------------|---|
| Synopsis   | Enable the <b>ma-index-range</b> context                                  |
| Context    | <b>configure</b> <a href="#">system eth-cfm md-auto-id ma-index-range</a> |
| Tree       | <a href="#">ma-index-range</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS              |

## end number



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Upper bound of the range   |
| Context    | <b>configure</b> <a href="#">system eth-cfm md-auto-id ma-index-range end number</a> |
| Tree       | <a href="#">end</a>  |
| Range      | 1 to 4294967295  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                         |

## start number



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | Lower bound of the range   |
| Context  | <b>configure</b> <a href="#">system eth-cfm md-auto-id ma-index-range start number</a> |
| Tree     | <a href="#">start</a>  |
| Range    | 1 to 4294967295  |

|            |  |
|------------|--|
| Notes      | This element is mandatory.                                   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

## md-index-range

|            |   |
|------------|---|
| Synopsis   | Enable the <b>md-index-range</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">eth-cfm</a> <a href="#">md-auto-id</a> <a href="#">md-index-range</a> |
| Tree       | <a href="#">md-index-range</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## end number



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Upper bound of the range  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">eth-cfm</a> <a href="#">md-auto-id</a> <a href="#">md-index-range</a> <i>end number</i> |
| Tree       | <a href="#">end</a>   |
| Range      | 1 to 4294967295   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## start number



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Lower bound of the range  |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">eth-cfm</a> <a href="#">md-auto-id</a> <a href="#">md-index-range</a> <i>start number</i> |
| Tree     | <a href="#">start</a>   |
| Range    | 1 to 4294967295   |

|            |  |
|------------|--|
| Notes      | This element is mandatory.                                   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

## redundancy

|            |  |
|------------|--|
| Synopsis   | Enter the <b>redundancy</b> context                          |
| Context    | <b>configure system eth-cfm redundancy</b>                   |
| Tree       | <a href="#">redundancy</a>                                   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

## mc-lag

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mc-lag</b> context                              |
| Context    | <b>configure system eth-cfm redundancy mc-lag</b>            |
| Tree       | <a href="#">mc-lag</a>                                       |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

## propagate-hold-time (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Delay timer value for the fault propagation  |
| Context    | <b>configure system eth-cfm redundancy mc-lag propagate-hold-time</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">propagate-hold-time</a>  |
| Range      | 1 to 60  |
| Units      | seconds  |
| Options    | none   |
| Default    | 1  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## standby-mep *boolean*

|          |  |
|----------|--|
| Synopsis | Allow standby MC-LAG MEPs to act administratively down |
|----------|--|

|            |  |
|------------|--|
| Context    | <b>configure system eth-cfm redundancy mc-lag standby-mep</b> <i>boolean</i> |
| Tree       | <a href="#">standby-mep</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                 |

### **sender-id**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>sender-id</b> context                           |
| Context    | <b>configure system eth-cfm sender-id</b>                    |
| Tree       | <a href="#">sender-id</a>                                    |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **local-name** *string*

|               |  |
|---------------|--|
| Synopsis      | Local name used in CFM PDUs  |
| Context       | <b>configure system eth-cfm sender-id local-name</b> <i>string</i> |
| Tree          | <a href="#">local-name</a>   |
| String Length | 1 to 45  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS       |

### **type** *keyword*

|            |   |
|------------|---|
| Synopsis   | ETH-CFM sender ID to be used in CFM PDUs                      |
| Context    | <b>configure system eth-cfm sender-id type</b> <i>keyword</i> |
| Tree       | <a href="#">type</a>  |
| Options    | system, local   |
| Default    | system  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |



## slm

|            |  |
|------------|--|
| Synopsis   | Enter the <b>slm</b> context                                 |
| Context    | <b>configure system eth-cfm slm</b>                          |
| Tree       | <a href="#">slm</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

## inactivity-timer *number*

|            |  |
|------------|--|
| Synopsis   | SLR inactivity timer to maintain the stale test data               |
| Context    | <b>configure system eth-cfm slm inactivity-timer <i>number</i></b> |
| Tree       | <a href="#">inactivity-timer</a>                                   |
| Range      | 10 to 100  |
| Units      | seconds  |
| Default    | 100  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS       |

## grpc

|            |                               |
|------------|-------------------------------|
| Synopsis   | Enter the <b>grpc</b> context |
| Context    | <b>configure system grpc</b>  |
| Tree       | <a href="#">grpc</a>          |
| Introduced | 16.0.R1                       |
| Platforms  | All                           |

## admin-state *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the gRPC server                 |
| Context    | <b>configure system grpc admin-state <i>keyword</i></b> |
| Tree       | <a href="#">admin-state</a>                             |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## allow-unsecure-connection

|             |  |
|-------------|--|
| Synopsis    | Allow connection without secured transport protocol  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">grpc</a> <a href="#">allow-unsecure-connection</a>   |
| Tree        | <a href="#">allow-unsecure-connection</a>  |
| Description | When configured, this command allows an unsecured connection to remote managers; TCP connections are not encrypted, including username and password information. |
| Notes       | The following elements are part of a choice: <b>allow-unsecure-connection</b> or <b>tls-server-profile</b> .   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

## gnmi

|            |   |
|------------|---|
| Synopsis   | Enter the <b>gnmi</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">grpc</a> <a href="#">gnmi</a> |
| Tree       | <a href="#">gnmi</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the gNMI service   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">grpc</a> <a href="#">gnmi</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## auto-config-save *boolean*

|          |   |
|----------|---|
| Synopsis | Automatically save configuration as part of commit  |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">grpc</a> <a href="#">gnmi</a> <a href="#">auto-config-save</a> <i>boolean</i> |
| Tree     | <a href="#">auto-config-save</a>  |

|             |   |
|-------------|---|
| Description | When configured to <b>true</b> , the system automatically writes the running configuration to the save configuration file as part of a successful commit operation. |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

## gnoi

|            |                                   |
|------------|-----------------------------------|
| Synopsis   | Enter the <b>gnoi</b> context     |
| Context    | <b>configure system grpc gnoi</b> |
| Tree       | <a href="#">gnoi</a>              |
| Introduced | 19.10.R1                          |
| Platforms  | All                               |

## cert-mgmt

|            |   |
|------------|---|
| Synopsis   | Enter the <b>cert-mgmt</b> context          |
| Context    | <b>configure system grpc gnoi cert-mgmt</b> |
| Tree       | <a href="#">cert-mgmt</a>                   |
| Introduced | 19.10.R1                                    |
| Platforms  | All   |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of gNOI CertificateManagement                     |
| Context    | <b>configure system grpc gnoi cert-mgmt admin-state <i>keyword</i></b> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 19.10.R1   |
| Platforms  | All  |

## file

|          |                               |
|----------|-------------------------------|
| Synopsis | Enter the <b>file</b> context |
|----------|-------------------------------|

---

|            |  |
|------------|--|
| Context    | <b>configure system grpc gnoi file</b> |
| Tree       | <a href="#">file</a>                   |
| Introduced | 21.2.R1                                |
| Platforms  | All                                    |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the gNOI File service                     |
| Context    | <b>configure system grpc gnoi file admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>                                       |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 21.2.R1   |
| Platforms  | All   |

### **system**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>system</b> context          |
| Context    | <b>configure system grpc gnoi system</b> |
| Tree       | <a href="#">system</a>                   |
| Introduced | 20.5.R1                                  |
| Platforms  | All                                      |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the gNOI System service                     |
| Context    | <b>configure system grpc gnoi system admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 20.5.R1   |
| Platforms  | All   |

**max-msg-size** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum size of received message  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">grpc</a> <a href="#">max-msg-size</a> <i>number</i> |
| Tree       | <a href="#">max-msg-size</a>  |
| Range      | 1 to 1024   |
| Units      | megabytes   |
| Default    | 512   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**md-cli**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>md-cli</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">grpc</a> <a href="#">md-cli</a> |
| Tree       | <a href="#">md-cli</a>  |
| Introduced | 20.5.R1   |
| Platforms  | All   |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the MD-CLI service   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">grpc</a> <a href="#">md-cli</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 20.5.R1  |
| Platforms  | All  |

**rib-api**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>rib-api</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">grpc</a> <a href="#">rib-api</a> |
| Tree       | <a href="#">rib-api</a>  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the RIB API service  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">grpc</a> <a href="#">rib-api</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**purge-timeout** *number*

|            |   |
|------------|---|
| Synopsis   | Time until stale entries are purged   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">grpc</a> <a href="#">rib-api</a> <b>purge-timeout</b> <i>number</i> |
| Tree       | <a href="#">purge-timeout</a>   |
| Range      | 1 to 100000   |
| Units      | seconds   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**tcp-keepalive**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>tcp-keepalive</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">grpc</a> <b>tcp-keepalive</b> |
| Tree       | <a href="#">tcp-keepalive</a>   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**admin-state** *keyword*

|          |  |
|----------|--|
| Synopsis | Administrative state of the TCP keepalive algorithm  |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">grpc</a> <a href="#">tcp-keepalive</a> <b>admin-state</b> <i>keyword</i> |
| Tree     | <a href="#">admin-state</a>  |
| Options  | enable, disable  |
| Default  | disable  |

|            |         |
|------------|---------|
| Introduced | 16.0.R4 |
| Platforms  | All     |

### **idle-time** *number*

|             |   |
|-------------|---|
| Synopsis    | Time until the first TCP keepalive probe is sent  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">grpc tcp-keepalive</a> <i>idle-time</i> <i>number</i> |
| Tree        | <a href="#">idle-time</a>   |
| Description | This command configures the amount of time the connection must be idle before TCP keepalives are sent.    |
| Range       | 1 to 100000   |
| Units       | seconds   |
| Default     | 600   |
| Introduced  | 16.0.R4   |
| Platforms   | All   |

### **interval** *number*

|            |  |
|------------|--|
| Synopsis   | Time between TCP keep-alive probes   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">grpc tcp-keepalive</a> <i>interval</i> <i>number</i> |
| Tree       | <a href="#">interval</a>   |
| Range      | 1 to 100000  |
| Units      | seconds  |
| Default    | 15   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **retries** *number*

|             |   |
|-------------|---|
| Synopsis    | Number of probe retries before closing the connection   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">grpc tcp-keepalive</a> <i>retries</i> <i>number</i>   |
| Tree        | <a href="#">retries</a>   |
| Description | This command configures the number of missed TCP keepalive probes before closing the TCP connection and attempting to reach the other destinations within the same destination group. |
| Range       | 3 to 100  |

|            |         |
|------------|---------|
| Default    | 4       |
| Introduced | 16.0.R4 |
| Platforms  | All     |

### **tls-server-profile** *reference*

|            |  |
|------------|--|
| Synopsis   | Preferred TLS server profile   |
| Context    | <b>configure</b> <a href="#">system grpc tls-server-profile</a> <i>reference</i>                             |
| Tree       | <a href="#">tls-server-profile</a>   |
| Reference  | <b>configure</b> <a href="#">system security tls server-tls-profile</a> <i>string</i>                        |
| Notes      | The following elements are part of a choice: <b>allow-unsecure-connection</b> or <b>tls-server-profile</b> . |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **grpc-tunnel**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>grpc-tunnel</b> context                |
| Context    | <b>configure</b> <a href="#">system grpc-tunnel</a> |
| Tree       | <a href="#">grpc-tunnel</a>                         |
| Introduced | 22.2.R1   |
| Platforms  | All   |

### **destination-group** [[name](#)] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>destination-group</b> list instance                                    |
| Context        | <b>configure</b> <a href="#">system grpc-tunnel destination-group</a> <i>string</i> |
| Tree           | <a href="#">destination-group</a>   |
| Description    | Commands in this context configure parameters for destination groups.               |
| Max. Instances | 4   |
| Introduced     | 22.2.R1   |
| Platforms      | All   |



**[name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Destination group name   |
| Context       | <b>configure</b> <b>system</b> <b>grpc-tunnel</b> <b>destination-group</b> <i>string</i> |
| Tree          | <b>destination-group</b>   |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 22.2.R1  |
| Platforms     | All  |

**allow-unsecure-connection**

|             |   |
|-------------|---|
| Synopsis    | Allow unsecured operation of gRPC connections   |
| Context     | <b>configure</b> <b>system</b> <b>grpc-tunnel</b> <b>destination-group</b> <i>string</i> <b>allow-unsecure-connection</b> |
| Tree        | <b>allow-unsecure-connection</b>  |
| Description | This command allows a gRPC tunnel to run without a secured transport protocol. Data is transferred in unencrypted form.   |
| Notes       | The following elements are part of a choice: <b>allow-unsecure-connection</b> or <b>tls-client-profile</b> .              |
| Introduced  | 22.2.R1   |
| Platforms   | All   |

**description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <b>system</b> <b>grpc-tunnel</b> <b>destination-group</b> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <b>description</b>  |
| String Length | 1 to 80   |
| Introduced    | 22.2.R1   |
| Platforms     | All   |

**destination** [**address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *fully-qualified-domain-name*) **port** *number*

|          |  |
|----------|--|
| Synopsis | Enter the <b>destination</b> list instance   |
| Context  | <b>configure</b> <b>system</b> <b>grpc-tunnel</b> <b>destination-group</b> <i>string</i> <b>destination</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>   <i>fully-qualified-domain-name</i> ) <b>port</b> <i>number</i> |

|                |                                      |
|----------------|--------------------------------------|
| Tree           | <a href="#">destination</a>          |
| Max. Instances | 4                                    |
| Notes          | This element is ordered by the user. |
| Introduced     | 22.2.R1                              |
| Platforms      | All                                  |

### **[address]** (*ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-domain-name*)

|               |  |
|---------------|--|
| Synopsis      | Address of the destination within the destination group  |
| Context       | <b>configure</b> <b>system</b> <b>grpc-tunnel</b> <b>destination-group</b> <i>string</i> <b>destination</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone   fully-qualified-domain-name</i> ) <b>port</b> <i>number</i> |
| Tree          | <a href="#">destination</a>  |
| String Length | 1 to 255   |
| Notes         | This element is part of a list key.  |
| Introduced    | 22.2.R1  |
| Platforms     | All  |

### **port number**

|            |  |
|------------|--|
| Synopsis   | TCP port number for the destination  |
| Context    | <b>configure</b> <b>system</b> <b>grpc-tunnel</b> <b>destination-group</b> <i>string</i> <b>destination</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone   fully-qualified-domain-name</i> ) <b>port</b> <i>number</i> |
| Tree       | <a href="#">destination</a>  |
| Range      | 1 to 65535   |
| Notes      | This element is part of a list key.  |
| Introduced | 22.2.R1  |
| Platforms  | All  |

### **local-source-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)

|          |   |
|----------|---|
| Synopsis | Local IP address of packets sent from the source  |
| Context  | <b>configure</b> <b>system</b> <b>grpc-tunnel</b> <b>destination-group</b> <i>string</i> <b>destination</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone   fully-qualified-domain-name</i> ) <b>port</b> <i>number</i> <b>local-source-address</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) |
| Tree     | <a href="#">local-source-address</a>  |

Introduced 22.2.R1  
 Platforms All

### **originated-qos-marking** *keyword*

Synopsis QoS marking used for gRPC tunnel packets

Context **configure** **system** **grpc-tunnel** **destination-group** *string* **destination** (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *fully-qualified-domain-name*) **port** *number* **originated-qos-marking** *keyword*

Tree **originated-qos-marking**

Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Introduced 22.2.R1  
 Platforms All

### **router-instance** *string*

Synopsis Router instance for the destination group

Context **configure** **system** **grpc-tunnel** **destination-group** *string* **destination** (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *fully-qualified-domain-name*) **port** *number* **router-instance** *string*

Tree **router-instance**

Introduced 22.2.R1  
 Platforms All

### **tcp-keepalive**

Synopsis Enter the **tcp-keepalive** context

Context **configure** **system** **grpc-tunnel** **destination-group** *string* **tcp-keepalive**

Tree **tcp-keepalive**

Introduced 22.2.R1  
 Platforms All

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the TCP keepalive algorithm   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">destination-group</a> <i>string</i> <a href="#">tcp-keepalive</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 22.2.R1   |
| Platforms  | All   |

**idle-time** *number*

|             |  |
|-------------|--|
| Synopsis    | Time until the first TCP keepalive probe is sent   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">destination-group</a> <i>string</i> <a href="#">tcp-keepalive</a> <b>idle-time</b> <i>number</i> |
| Tree        | <a href="#">idle-time</a>  |
| Description | This command configures the amount of time the connection must be idle before TCP keepalives are sent.   |
| Range       | 1 to 100000  |
| Units       | seconds  |
| Default     | 600  |
| Introduced  | 22.2.R1  |
| Platforms   | All  |

**interval** *number*

|            |   |
|------------|---|
| Synopsis   | Time between TCP keep-alive probes  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">destination-group</a> <i>string</i> <a href="#">tcp-keepalive</a> <b>interval</b> <i>number</i> |
| Tree       | <a href="#">interval</a>  |
| Range      | 1 to 100000   |
| Units      | seconds   |
| Default    | 15  |
| Introduced | 22.2.R1   |
| Platforms  | All   |

**retries** *number*

|             |   |
|-------------|---|
| Synopsis    | Number of probe retries before closing the connection   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">destination-group</a> <i>string</i> <a href="#">tcp-keepalive</a> <a href="#">retries</a> <i>number</i> |
| Tree        | <a href="#">retries</a>   |
| Description | This command configures the number of missed TCP keepalive probes before closing the TCP connection and attempting to reach the other destinations within the same destination group.   |
| Range       | 3 to 100  |
| Default     | 4   |
| Introduced  | 22.2.R1   |
| Platforms   | All   |

**tls-client-profile** *reference*

|            |   |
|------------|---|
| Synopsis   | TLS client profile assigned to the destination group  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">destination-group</a> <i>string</i> <a href="#">tls-client-profile</a> <i>reference</i> |
| Tree       | <a href="#">tls-client-profile</a>  |
| Reference  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-tls-profile</a> <i>string</i>                                   |
| Notes      | The following elements are part of a choice: <b>allow-unsecure-connection</b> or <b>tls-client-profile</b> .  |
| Introduced | 22.2.R1   |
| Platforms  | All   |

**tunnel** [[name](#)] *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>tunnel</b> list instance  |
| Context        | <b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">tunnel</a> <i>string</i> |
| Tree           | <a href="#">tunnel</a>   |
| Description    | Commands in this context configure gRPC-tunnel-related parameters.                                       |
| Max. Instances | 4  |
| Introduced     | 22.2.R1  |
| Platforms      | All  |

**[name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Tunnel name  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">tunnel</a> <i>string</i> |
| Tree          | <a href="#">tunnel</a>   |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 22.2.R1  |
| Platforms     | All  |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the tunnel  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">tunnel</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 22.2.R1   |
| Platforms  | All   |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">tunnel</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 22.2.R1  |
| Platforms     | All  |

**destination-group** *reference*

|            |   |
|------------|---|
| Synopsis   | Destination group used in the tunnel  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">tunnel</a> <i>string</i> <a href="#">destination-group</a> <i>reference</i> |
| Tree       | <a href="#">destination-group</a>   |
| Reference  | <b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">destination-group</a> <i>string</i>   |
| Introduced | 22.2.R1   |

Platforms All

### **handler** [*name*] *string*

Synopsis Enter the **handler** list instance

Context **configure** [system](#) [grpc-tunnel](#) [tunnel](#) *string* [handler](#) *string*

Tree [handler](#)

Description Commands in this context configure handler parameters for this instance. Multiple handlers can be created for any tunnel.

Max. Instances 8

Introduced 22.2.R1

Platforms All

### **[name]** *string*

Synopsis Handler name

Context **configure** [system](#) [grpc-tunnel](#) [tunnel](#) *string* [handler](#) *string*

Tree [handler](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 22.2.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the handler

Context **configure** [system](#) [grpc-tunnel](#) [tunnel](#) *string* [handler](#) *string* [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 22.2.R1

Platforms All

**port number**

|            |   |
|------------|---|
| Synopsis   | TCP port number the handler listens to internally   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">tunnel</a> <i>string</i> <a href="#">handler</a> <i>string</i> <a href="#">port</a> <i>number</i> |
| Tree       | <a href="#">port</a>  |
| Range      | 1 to 65535  |
| Introduced | 22.2.R1   |
| Platforms  | All   |

**target-type**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>target-type</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">tunnel</a> <i>string</i> <a href="#">handler</a> <i>string</i> <a href="#">target-type</a> |
| Tree       | <a href="#">target-type</a>  |
| Introduced | 22.2.R1  |
| Platforms  | All  |

**custom-type** *string*

|               |  |
|---------------|--|
| Synopsis      | Custom string for target type  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">tunnel</a> <i>string</i> <a href="#">handler</a> <i>string</i> <a href="#">target-type</a> <a href="#">custom-type</a> <i>string</i>   |
| Tree          | <a href="#">custom-type</a>  |
| Description   | This command configures a custom string for the target type. This string can correspond to specific values used by the gRPC tunnel protocol, such as GNMI_GNOI or SSH. If a custom string is defined, the gRPC tunnel client must specify the string to request a session for that handler. The string must be unique within a tunnel. |
| String Length | 1 to 64  |
| Notes         | The following elements are part of a choice: <b>custom-type</b> , <b>grpc-server</b> , or <b>ssh-server</b> .  |
| Introduced    | 22.2.R1  |
| Platforms     | All  |

**grpc-server**

|          |  |
|----------|--|
| Synopsis | Target type set to GNMI_GNOI   |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">tunnel</a> <i>string</i> <a href="#">handler</a> <i>string</i> <a href="#">target-type</a> <a href="#">grpc-server</a> |
| Tree     | <a href="#">grpc-server</a>  |



|             |   |
|-------------|---|
| Description | When configured, this command assigns the gRPC server as a handler for all tunnels sessions. At the gRPC tunnel protocol level, this corresponds to a value of GNMI_GNOI. |
| Notes       | The following elements are part of a choice: <b>custom-type</b> , <b>grpc-server</b> , or <b>ssh-server</b> .   |
| Introduced  | 22.2.R1   |
| Platforms   | All   |

### ssh-server

|             |   |
|-------------|---|
| Synopsis    | Target type is SSH  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">tunnel</a> <i>string</i> <a href="#">handler</a> <i>string</i> <a href="#">target-type</a> <a href="#">ssh-server</a> |
| Tree        | <a href="#">ssh-server</a>  |
| Description | When configured, this command assigns the SSH server as a handler for all tunnels sessions. At the gRPC tunnel protocol level, this corresponds to a value of SSH.                                    |
| Notes       | The following elements are part of a choice: <b>custom-type</b> , <b>grpc-server</b> , or <b>ssh-server</b> .   |
| Introduced  | 22.2.R1   |
| Platforms   | All   |

### target-name

|            |  |
|------------|--|
| Synopsis   | Enter the <b>target-name</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">tunnel</a> <i>string</i> <a href="#">target-name</a> |
| Tree       | <a href="#">target-name</a>  |
| Introduced | 22.2.R1  |
| Platforms  | All  |

### custom-string *string*

|               |  |
|---------------|--|
| Synopsis      | Custom target name   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">tunnel</a> <i>string</i> <a href="#">target-name</a> <a href="#">custom-string</a> <i>string</i> |
| Tree          | <a href="#">custom-string</a>  |
| String Length | 1 to 64  |
| Notes         | The following elements are part of a choice: <b>custom-string</b> , <b>node-name</b> , or <b>user-agent</b> .  |
| Introduced    | 22.2.R1  |
| Platforms     | All  |

## node-name

|             |  |
|-------------|--|
| Synopsis    | Set the node name as target name   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">tunnel</a> <i>string</i> <a href="#">target-name</a> <a href="#">node-name</a> |
| Tree        | <a href="#">node-name</a>  |
| Description | When configured, this command uses the node name as the target name. The node name is configured by the <b>configure system name</b> command.                  |
| Notes       | The following elements are part of a choice: <b>custom-string</b> , <b>node-name</b> , or <b>user-agent</b> .  |
| Introduced  | 22.2.R1  |
| Platforms   | All  |

## user-agent

|             |   |
|-------------|---|
| Synopsis    | Set the user agent as the target name   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">tunnel</a> <i>string</i> <a href="#">target-name</a> <a href="#">user-agent</a> |
| Tree        | <a href="#">user-agent</a>  |
| Description | When configured, this command uses the user agent as the target name. The agent is a string consisting of <i>node-name:vendor:model:software-version</i> .      |
| Notes       | The following elements are part of a choice: <b>custom-string</b> , <b>node-name</b> , or <b>user-agent</b> .   |
| Introduced  | 22.2.R1   |
| Platforms   | All   |

## icmp-vse *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable vendor-specific extensions to ICMP                                       |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">icmp-vse</a> <i>boolean</i> |
| Tree       | <a href="#">icmp-vse</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## ip

|          |                             |
|----------|-----------------------------|
| Synopsis | Enter the <b>ip</b> context |
|----------|-----------------------------|

---

|            |                            |
|------------|----------------------------|
| Context    | <b>configure system ip</b> |
| Tree       | <a href="#">ip</a>         |
| Introduced | 16.0.R1                    |
| Platforms  | All                        |

### **allow-qinq-network-interface** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow QinQ encapsulation for network interfaces                        |
| Context    | <b>configure system ip allow-qinq-network-interface</b> <i>boolean</i> |
| Tree       | <a href="#">allow-qinq-network-interface</a>                           |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS           |

### **enforce-unique-if-index** *boolean*

|            |   |
|------------|---|
| Synopsis   | Force creation of globally unique IP interface indexes            |
| Context    | <b>configure system ip enforce-unique-if-index</b> <i>boolean</i> |
| Tree       | <a href="#">enforce-unique-if-index</a>                           |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **forward-6in4** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow forwarding of IPv6 over IPv4 to system IP address |
| Context    | <b>configure system ip forward-6in4</b> <i>boolean</i>  |
| Tree       | <a href="#">forward-6in4</a>                            |
| Default    | false   |
| Introduced | 19.10.R1  |
| Platforms  | All   |

### **forward-ip-over-gre** *boolean*

|          |  |
|----------|--|
| Synopsis | Allow forwarding of IP over GRE to system IP address |
|----------|--|

|            |   |
|------------|---|
| Context    | <b>configure system ip forward-ip-over-gre</b> <i>boolean</i> |
| Tree       | <a href="#">forward-ip-over-gre</a>                           |
| Default    | false   |
| Introduced | 19.10.R1  |
| Platforms  | All   |

### **ipv6-eh** *keyword*

|            |   |
|------------|---|
| Synopsis   | Number of IPv6 extension headers parsed in line cards |
| Context    | <b>configure system ip ipv6-eh</b> <i>keyword</i>     |
| Tree       | <a href="#">ipv6-eh</a>                               |
| Options    | max, limited  |
| Default    | max   |
| Introduced | 20.5.R1   |
| Platforms  | All   |

### **mpls**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mpls</b> context                                |
| Context    | <b>configure system ip mpls</b>                              |
| Tree       | <a href="#">mpls</a>   |
| Introduced | 19.10.R3   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **label-stack-statistics-count** *number*

|            |  |
|------------|--|
| Synopsis   | Collect traffic statistics on labels of the MPLS stack                     |
| Context    | <b>configure system ip mpls label-stack-statistics-count</b> <i>number</i> |
| Tree       | <a href="#">label-stack-statistics-count</a>                               |
| Range      | 1 to 2   |
| Default    | 1  |
| Introduced | 19.10.R3   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS               |

## **l2tp**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>l2tp</b> context                           |
| Context    | <b>configure system l2tp</b>                            |
| Tree       | <a href="#">l2tp</a>                                    |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

## **non-multi-chassis-tunnel-id-range**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>non-multi-chassis-tunnel-id-range</b> context     |
| Context    | <b>configure system l2tp non-multi-chassis-tunnel-id-range</b> |
| Tree       | <a href="#">non-multi-chassis-tunnel-id-range</a>              |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR        |

## **end number**

|            |   |
|------------|---|
| Synopsis   | Upper bound of the range  |
| Context    | <b>configure system l2tp non-multi-chassis-tunnel-id-range end number</b> |
| Tree       | <a href="#">end</a>   |
| Range      | 0 to 16383  |
| Default    | 16383   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                   |

## **start number**

|            |   |
|------------|---|
| Synopsis   | Lower bound of the range  |
| Context    | <b>configure system l2tp non-multi-chassis-tunnel-id-range start number</b> |
| Tree       | <a href="#">start</a>   |
| Range      | 0 to 16383  |
| Default    | 1   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                     |

## lACP

|            |                               |
|------------|-------------------------------|
| Synopsis   | Enter the <b>lACP</b> context |
| Context    | <b>configure system lACP</b>  |
| Tree       | <a href="#">lACP</a>          |
| Introduced | 16.0.R1                       |
| Platforms  | All                           |

## system-priority *number*

|            |  |
|------------|--|
| Synopsis   | LACP system priority on aggregated Ethernet interfaces     |
| Context    | <b>configure system lACP system-priority <i>number</i></b> |
| Tree       | <a href="#">system-priority</a>                            |
| Range      | 1 to 65535   |
| Default    | 32768  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## lldp

|            |                               |
|------------|-------------------------------|
| Synopsis   | Enter the <b>lldp</b> context |
| Context    | <b>configure system lldp</b>  |
| Tree       | <a href="#">lldp</a>          |
| Introduced | 16.0.R1                       |
| Platforms  | All                           |

## admin-state *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of LLDP                            |
| Context    | <b>configure system lldp admin-state <i>keyword</i></b> |
| Tree       | <a href="#">admin-state</a>                             |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**message-fast-tx** *number*

|             |  |
|-------------|--|
| Synopsis    | Interval at which LLDP frames are transmitted  |
| Context     | <b>configure</b> <a href="#">system lldp message-fast-tx</a> <i>number</i>   |
| Tree        | <a href="#">message-fast-tx</a>  |
| Description | This command configures the interval at which LLDP frames are transmitted on behalf of the LLDP during a fast transmission period. |
| Range       | 1 to 3600  |
| Units       | seconds  |
| Default     | 1  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**message-fast-tx-init** *number*

|            |   |
|------------|---|
| Synopsis   | PDU's to transmit during the fast transmission period                           |
| Context    | <b>configure</b> <a href="#">system lldp message-fast-tx-init</a> <i>number</i> |
| Tree       | <a href="#">message-fast-tx-init</a>  |
| Range      | 1 to 8  |
| Default    | 4   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**notification-interval** *number*

|            |  |
|------------|--|
| Synopsis   | Minimum interval between change notifications                                    |
| Context    | <b>configure</b> <a href="#">system lldp notification-interval</a> <i>number</i> |
| Tree       | <a href="#">notification-interval</a>  |
| Range      | 5 to 3600  |
| Units      | seconds  |
| Default    | 5  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**reinit-delay** *number*

|            |   |
|------------|---|
| Synopsis   | Time required before re-initializing LLDP on a port                     |
| Context    | <b>configure</b> <a href="#">system lldp reinit-delay</a> <i>number</i> |
| Tree       | <a href="#">reinit-delay</a>  |
| Range      | 1 to 10   |
| Units      | seconds   |
| Default    | 2   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**tx-credit-max** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum consecutive LLDPDUs that can be transmitted                      |
| Context    | <b>configure</b> <a href="#">system lldp tx-credit-max</a> <i>number</i> |
| Tree       | <a href="#">tx-credit-max</a>  |
| Range      | 1 to 100   |
| Default    | 5  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**tx-hold-multiplier** *number*

|            |   |
|------------|---|
| Synopsis   | Transmit interval multiplier  |
| Context    | <b>configure</b> <a href="#">system lldp tx-hold-multiplier</a> <i>number</i> |
| Tree       | <a href="#">tx-hold-multiplier</a>  |
| Range      | 2 to 10   |
| Default    | 4   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**tx-interval** *number*

|          |  |
|----------|--|
| Synopsis | LLDP transmit interval   |
| Context  | <b>configure</b> <a href="#">system lldp tx-interval</a> <i>number</i> |
| Tree     | <a href="#">tx-interval</a>  |



---

|            |            |
|------------|------------|
| Range      | 5 to 32768 |
| Units      | seconds    |
| Default    | 30         |
| Introduced | 16.0.R1    |
| Platforms  | All        |

## load-balancing

|            |  |
|------------|--|
| Synopsis   | Enter the <b>load-balancing</b> context                |
| Context    | <b>configure</b> <a href="#">system load-balancing</a> |
| Tree       | <a href="#">load-balancing</a>                         |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## l2tp-load-balancing *boolean*

|            |   |
|------------|---|
| Synopsis   | Include L2TP header information for load balancing  |
| Context    | <b>configure</b> <a href="#">system load-balancing l2tp-load-balancing</a> <i>boolean</i> |
| Tree       | <a href="#">l2tp-load-balancing</a>   |
| Default    | false   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

## l4-load-balancing *boolean*

|            |   |
|------------|---|
| Synopsis   | Use load balancing based on Layer 4 fields  |
| Context    | <b>configure</b> <a href="#">system load-balancing l4-load-balancing</a> <i>boolean</i> |
| Tree       | <a href="#">l4-load-balancing</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## lsr-load-balancing *keyword*

|          |  |
|----------|--|
| Synopsis | Algorithm for system-wide LSR load balancing   |
| Context  | <b>configure</b> <a href="#">system load-balancing lsr-load-balancing</a> <i>keyword</i> |

---

|            |   |
|------------|---|
| Tree       | <a href="#">lsr-load-balancing</a>                                      |
| Options    | lbl-only, lbl-ip, ip-only, eth-encap-ip, lbl-ip-l4-teid, lbl-ip-or-teid |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **mc-enh-load-balancing** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable enhanced egress multicast load balancing   |
| Context    | <b>configure</b> <a href="#">system load-balancing mc-enh-load-balancing</a> <i>boolean</i> |
| Tree       | <a href="#">mc-enh-load-balancing</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **service-id-lag-hashing** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable enhanced VLL LAG service ID hashing   |
| Context    | <b>configure</b> <a href="#">system load-balancing service-id-lag-hashing</a> <i>boolean</i> |
| Tree       | <a href="#">service-id-lag-hashing</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **system-ip-load-balancing** *boolean*

|            |  |
|------------|--|
| Synopsis   | Use system IP address for ECMP and LAG load balancing  |
| Context    | <b>configure</b> <a href="#">system load-balancing system-ip-load-balancing</a> <i>boolean</i> |
| Tree       | <a href="#">system-ip-load-balancing</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **location** *string*

|          |  |
|----------|--|
| Synopsis | Site location of the system                                    |
| Context  | <b>configure</b> <a href="#">system location</a> <i>string</i> |

---

|               |                          |
|---------------|--------------------------|
| Tree          | <a href="#">location</a> |
| String Length | 1 to 80                  |
| Introduced    | 16.0.R1                  |
| Platforms     | All                      |

## **login-control**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>login-control</b> context                |
| Context    | <b>configure</b> <a href="#">system login-control</a> |
| Tree       | <a href="#">login-control</a>                         |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## **exponential-backoff** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable exponential-backoff of the login prompt   |
| Context    | <b>configure</b> <a href="#">system login-control exponential-backoff</a> <i>boolean</i> |
| Tree       | <a href="#">exponential-backoff</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## **ftp**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ftp</b> context                              |
| Context    | <b>configure</b> <a href="#">system login-control ftp</a> |
| Tree       | <a href="#">ftp</a>                                       |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## **inbound-max-sessions** *number*

|          |  |
|----------|--|
| Synopsis | Maximum number of concurrent inbound FTP sessions  |
| Context  | <b>configure</b> <a href="#">system login-control ftp inbound-max-sessions</a> <i>number</i> |
| Tree     | <a href="#">inbound-max-sessions</a>   |

---

|            |         |
|------------|---------|
| Range      | 0 to 5  |
| Default    | 3       |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **idle-timeout** (*keyword* | *number*)

|            |   |
|------------|---|
| Synopsis   | Idle timeout for FTP, console, or Telnet sessions   |
| Context    | <b>configure</b> <a href="#">system login-control idle-timeout</a> ( <i>keyword</i>   <i>number</i> ) |
| Tree       | <a href="#">idle-timeout</a>  |
| Range      | 1 to 1440   |
| Units      | minutes   |
| Options    | none  |
| Default    | 30  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **login-banner** *boolean*

|            |   |
|------------|---|
| Synopsis   | Display login banner  |
| Context    | <b>configure</b> <a href="#">system login-control login-banner</a> <i>boolean</i> |
| Tree       | <a href="#">login-banner</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **login-scripts**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>login-scripts</b> context                              |
| Context    | <b>configure</b> <a href="#">system login-control login-scripts</a> |
| Tree       | <a href="#">login-scripts</a>                                       |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**global-script** *string*

|               |   |
|---------------|---|
| Synopsis      | URL of the global CLI login script  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">login-control</a> <a href="#">login-scripts</a> <a href="#">global-script</a> <i>string</i> |
| Tree          | <a href="#">global-script</a>   |
| String Length | 1 to 180  |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**per-user-script**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>per-user-script</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">login-control</a> <a href="#">login-scripts</a> <a href="#">per-user-script</a> |
| Tree       | <a href="#">per-user-script</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**file-name** *string*

|               |   |
|---------------|---|
| Synopsis      | File name of the per-user login script  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">login-control</a> <a href="#">login-scripts</a> <a href="#">per-user-script</a> <a href="#">file-name</a> <i>string</i> |
| Tree          | <a href="#">file-name</a>   |
| String Length | 1 to 180  |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**user-directory** *string*

|               |  |
|---------------|--|
| Synopsis      | Directory name of user-defined login script  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">login-control</a> <a href="#">login-scripts</a> <a href="#">per-user-script</a> <a href="#">user-directory</a> <i>string</i> |
| Tree          | <a href="#">user-directory</a>   |
| String Length | 1 to 180   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

## motd

|            |  |
|------------|--|
| Synopsis   | Enter the <b>motd</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">login-control</a> <a href="#">motd</a> |
| Tree       | <a href="#">motd</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## text *string*

|               |   |
|---------------|---|
| Synopsis      | Message of the day displayed after console login  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">login-control</a> <a href="#">motd</a> <a href="#">text</a> <i>string</i> |
| Tree          | <a href="#">text</a>  |
| String Length | 1 to 900  |
| Notes         | The following elements are part of a choice: <b>text</b> or <b>url</b> .  |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

## url *string*

|               |  |
|---------------|--|
| Synopsis      | URL of the location of message of the day  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">login-control</a> <a href="#">motd</a> <a href="#">url</a> <i>string</i> |
| Tree          | <a href="#">url</a>  |
| String Length | 1 to 180   |
| Notes         | The following elements are part of a choice: <b>text</b> or <b>url</b> .   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

## pre-login-message

|            |   |
|------------|---|
| Synopsis   | Enter the <b>pre-login-message</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">login-control</a> <a href="#">pre-login-message</a> |
| Tree       | <a href="#">pre-login-message</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**message** *string*

|               |   |
|---------------|---|
| Synopsis      | Message displayed prior to the login prompt   |
| Context       | <b>configure</b> <a href="#">system login-control pre-login-message message</a> <i>string</i> |
| Tree          | <a href="#">message</a>   |
| String Length | 1 to 900  |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**name** *boolean*

|            |   |
|------------|---|
| Synopsis   | Display the system name before the pre-login message  |
| Context    | <b>configure</b> <a href="#">system login-control pre-login-message name</a> <i>boolean</i> |
| Tree       | <a href="#">name</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**ssh**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ssh</b> context                              |
| Context    | <b>configure</b> <a href="#">system login-control ssh</a> |
| Tree       | <a href="#">ssh</a>                                       |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**graceful-shutdown** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow graceful shutdown of SSH sessions  |
| Context    | <b>configure</b> <a href="#">system login-control ssh graceful-shutdown</a> <i>boolean</i> |
| Tree       | <a href="#">graceful-shutdown</a>  |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**inbound-max-sessions** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of concurrent inbound sessions  |
| Context    | <b>configure</b> <a href="#">system login-control ssh inbound-max-sessions</a> <i>number</i> |
| Tree       | <a href="#">inbound-max-sessions</a>   |
| Range      | 0 to 50  |
| Default    | 5  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**outbound-max-sessions** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum number of concurrent outbound sessions  |
| Context    | <b>configure</b> <a href="#">system login-control ssh outbound-max-sessions</a> <i>number</i> |
| Tree       | <a href="#">outbound-max-sessions</a>   |
| Range      | 0 to 15   |
| Default    | 5   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**tll-security** *number*

|            |  |
|------------|--|
| Synopsis   | Minimum TTL value for incoming packets   |
| Context    | <b>configure</b> <a href="#">system login-control ssh tll-security</a> <i>number</i> |
| Tree       | <a href="#">tll-security</a>   |
| Range      | 1 to 255   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**telnet**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>telnet</b> context                              |
| Context    | <b>configure</b> <a href="#">system login-control telnet</a> |
| Tree       | <a href="#">telnet</a>                                       |
| Introduced | 16.0.R1  |



Platforms All

### **graceful-shutdown** *boolean*

Synopsis Allow graceful shutdown of Telnet sessions  
Context **configure** [system login-control telnet graceful-shutdown](#) *boolean*  
Tree [graceful-shutdown](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **inbound-max-sessions** *number*

Synopsis Maximum number of concurrent inbound sessions  
Context **configure** [system login-control telnet inbound-max-sessions](#) *number*  
Tree [inbound-max-sessions](#)  
Range 0 to 50  
Default 5  
Introduced 16.0.R1  
Platforms All

### **outbound-max-sessions** *number*

Synopsis Maximum number of concurrent outbound sessions  
Context **configure** [system login-control telnet outbound-max-sessions](#) *number*  
Tree [outbound-max-sessions](#)  
Range 0 to 15  
Default 5  
Introduced 16.0.R1  
Platforms All

### **ttl-security** *number*

Synopsis Minimum TTL value for incoming packets  
Context **configure** [system login-control telnet ttl-security](#) *number*

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|            |                              |
|------------|------------------------------|
| Tree       | <a href="#">ttl-security</a> |
| Range      | 1 to 255                     |
| Introduced | 16.0.R1                      |
| Platforms  | All                          |

## management-interface

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>management-interface</b> context  |
| Context     | <b>configure</b> <a href="#">system management-interface</a>   |
| Tree        | <a href="#">management-interface</a>   |
| Description | Commands in this context configure the capabilities of router management interfaces such as CLI and NETCONF. |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

## cli

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>cli</b> context                                      |
| Context     | <b>configure</b> <a href="#">system management-interface cli</a>  |
| Tree        | <a href="#">cli</a>   |
| Description | Commands in this context configure the CLI management interfaces. |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

## classic-cli

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>classic-cli</b> context   |
| Context     | <b>configure</b> <a href="#">system management-interface cli classic-cli</a> |
| Tree        | <a href="#">classic-cli</a>  |
| Description | Commands in this context configure the classic CLI management interface.     |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**allow-immediate** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Allow writable access in classic CLI configure branch  |
| Context     | <b>configure</b> <a href="#">system management-interface cli classic-cli allow-immediate</a> <i>boolean</i>  |
| Tree        | <a href="#">allow-immediate</a>  |
| Description | When configured to <b>true</b> , this command enables write access in the classic CLI configuration branch without having to use the classic CLI <b>candidate edit</b> functionality.<br>When configured to <b>false</b> , this command blocks write access and configuration changes in the classic CLI configuration branch, and the classic CLI configuration branch is read-only. This enforces using the classic CLI <b>candidate edit</b> functionality, including <b>candidate commit</b> , to modify the router configuration, instead of allowing immediate line-by-line configuration changes. |
| Default     | true   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**rollback**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>rollback</b> context  |
| Context     | <b>configure</b> <a href="#">system management-interface cli classic-cli rollback</a>  |
| Tree        | <a href="#">rollback</a>   |
| Description | Commands in this context control classic CLI configuration rollback functionality, such as the maximum number of rollback checkpoints the system maintains. Configuration rollback allows the operator to revert to previous router configuration states while minimizing impacts to services. |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**local-checkpoints** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum number of rollback files on local storage   |
| Context    | <b>configure</b> <a href="#">system management-interface cli classic-cli rollback local-checkpoints</a> <i>number</i> |
| Tree       | <a href="#">local-checkpoints</a>   |
| Range      | 1 to 50   |
| Default    | 10  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**location string**

|               |   |
|---------------|---|
| Synopsis      | Path and filename prefix for rollback checkpoint files  |
| Context       | <b>configure</b> <a href="#">system management-interface cli classic-cli rollback location string</a>   |
| Tree          | <a href="#">location</a>  |
| Description   | This command configures the local (for example, compact flash) or remote location and name of the classic CLI rollback checkpoint files. The filename must not contain a suffix. The suffixes for rollback checkpoint files are, for example, .rb, .rb.1, .rb.2, and so on. The suffixes are automatically appended to rollback checkpoint files. |
| String Length | 1 to 180  |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**remote-checkpoints number**

|            |   |
|------------|---|
| Synopsis   | Maximum rollback files saved at a remote location   |
| Context    | <b>configure</b> <a href="#">system management-interface cli classic-cli rollback remote-checkpoints number</a> |
| Tree       | <a href="#">remote-checkpoints</a>  |
| Range      | 1 to 200  |
| Default    | 10  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**rescue**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>rescue</b> context  |
| Context    | <b>configure</b> <a href="#">system management-interface cli classic-cli rollback rescue</a> |
| Tree       | <a href="#">rescue</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**location string**

|          |  |
|----------|--|
| Synopsis | Location of the rescue configuration file  |
| Context  | <b>configure</b> <a href="#">system management-interface cli classic-cli rollback rescue location string</a> |

|               |   |
|---------------|---|
| Tree          | <a href="#">location</a>  |
| Description   | This command configures the local or remote location and filename of the classic CLI rescue configuration file. The suffix (.rc) is automatically appended to the filename when a rescue configuration file is saved. Trivial FTP (TFTP) is not supported for remote locations. |
| String Length | 1 to 180  |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

### **cli-engine** *keyword*

|                |  |
|----------------|--|
| Synopsis       | System-wide CLI engine access  |
| Context        | <b>configure</b> <a href="#">system management-interface cli cli-engine</a> <i>keyword</i>   |
| Tree           | <a href="#">cli-engine</a>   |
| Description    | This command configures the system-wide CLI engine. The operator can configure one or both engines. For the configuration to take effect, exit the running CLI session and start a new session after committing the new value. |
| Options        | classic-cli, md-cli  |
| Default        | md-cli   |
| Max. Instances | 2  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

### **md-cli**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>md-cli</b> context   |
| Context     | <b>configure</b> <a href="#">system management-interface cli md-cli</a> |
| Tree        | <a href="#">md-cli</a>  |
| Description | Commands in this context configure the MD-CLI management interface.     |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**auto-config-save** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Automatically save configuration as part of commit  |
| Context     | <b>configure</b> <a href="#">system management-interface cli md-cli auto-config-save</a> <i>boolean</i>   |
| Tree        | <a href="#">auto-config-save</a>  |
| Description | When configured to <b>true</b> , the system automatically writes the running configuration to the save configuration file as part of a successful commit operation. |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**environment**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>environment</b> context  |
| Context    | <b>configure</b> <a href="#">system management-interface cli md-cli environment</a> |
| Tree       | <a href="#">environment</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**command-alias**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>command-alias</b> context  |
| Context    | <b>configure</b> <a href="#">system management-interface cli md-cli environment command-alias</a> |
| Tree       | <a href="#">command-alias</a>   |
| Introduced | 21.7.R1   |
| Platforms  | All   |

**alias** [*alias-name*] *string*

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>alias</b> list instance  |
| Context     | <b>configure</b> <a href="#">system management-interface cli md-cli environment command-alias</a> <i>alias string</i>   |
| Tree        | <a href="#">alias</a>   |
| Description | <p>Commands in this context create aliases to existing MD-CLI commands or to Python applications.</p> <p>Aliases may be mounted for use globally or for selected context paths. Arguments and output modifiers may be provided to aliases at configuration or run time.</p> |

Introduced 21.7.R1  
 Platforms All

### **[alias-name]** *string*

Synopsis Alias name  
 Context **configure** [system](#) [management-interface](#) [cli](#) [md-cli](#) [environment](#) [command-alias](#) [alias](#)  
*string*  
 Tree [alias](#)  
 String Length 1 to 64  
 Notes This element is part of a list key.  
 Introduced 21.7.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the alias  
 Context **configure** [system](#) [management-interface](#) [cli](#) [md-cli](#) [environment](#) [command-alias](#) [alias](#)  
*string* [admin-state](#) *keyword*  
 Tree [admin-state](#)  
 Description This command controls the administrative state of the MD-CLI alias.  
 MD-CLI aliases that are administratively disabled cannot be executed, are not displayed in command completion, and do not appear in ? help.  
 Options enable, disable  
 Default disable  
 Introduced 21.10.R1  
 Platforms All

### **cli-command** *string*

Synopsis CLI command to run when executing the alias  
 Context **configure** [system](#) [management-interface](#) [cli](#) [md-cli](#) [environment](#) [command-alias](#) [alias](#)  
*string* [cli-command](#) *string*  
 Tree [cli-command](#)  
 String Length 1 to 255  
 Notes The following elements are part of a mandatory choice: **cli-command** or **python-script**.

Introduced 21.7.R1  
 Platforms All

### **description** *string*

Synopsis Alias description  
 Context **configure** [system](#) [management-interface cli](#) [md-cli](#) [environment](#) [command-alias](#) [alias](#)  
*string* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 110  
 Introduced 21.7.R1  
 Platforms All

### **mount-point** [[path](#)] (*keyword* | *string*)

Synopsis Add a list entry for **mount-point**  
 Context **configure** [system](#) [management-interface cli](#) [md-cli](#) [environment](#) [command-alias](#) [alias](#)  
*string* [mount-point](#) (*keyword* | *string*)  
 Tree [mount-point](#)  
 Min. 1  
 Instances  
 Introduced 21.7.R1  
 Platforms All

### **[path]** (*keyword* | *string*)

Synopsis Mount point where the alias is available  
 Context **configure** [system](#) [management-interface cli](#) [md-cli](#) [environment](#) [command-alias](#) [alias](#)  
*string* [mount-point](#) (*keyword* | *string*)  
 Tree [mount-point](#)  
 String Length 1 to 255  
 Options global  
 Notes This element is part of a list key.  
 Introduced 21.7.R1  
 Platforms All



### **python-script** *reference*

|            |  |
|------------|--|
| Synopsis   | Python script to run when executing the alias  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">command-alias</a> <a href="#">alias</a> <a href="#">string</a> <b>python-script</b> <i>reference</i> |
| Tree       | <a href="#">python-script</a>  |
| Reference  | <b>configure</b> <a href="#">python</a> <a href="#">python-script</a> <i>string</i>  |
| Notes      | The following elements are part of a mandatory choice: <b>cli-command</b> or <b>python-script</b> .  |
| Introduced | 21.7.R1  |
| Platforms  | All  |

### **command-completion**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>command-completion</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">command-completion</a> |
| Tree       | <a href="#">command-completion</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **enter** *boolean*

|            |   |
|------------|---|
| Synopsis   | Complete the command when the Enter key is pressed  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">command-completion</a> <a href="#">enter</a> <i>boolean</i> |
| Tree       | <a href="#">enter</a>   |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **space** *boolean*

|            |   |
|------------|---|
| Synopsis   | Complete the command when the Space key is pressed  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">command-completion</a> <a href="#">space</a> <i>boolean</i> |
| Tree       | <a href="#">space</a>   |
| Default    | true  |
| Introduced | 16.0.R1   |

---

Platforms All

### **tab** *boolean*

Synopsis Complete the command when the Tab key is pressed

Context **configure** [system management-interface cli md-cli environment command-completion](#) *tab boolean*

Tree [tab](#)

Default true

Introduced 16.0.R1

Platforms All

### **console**

Synopsis Enter the **console** context

Context **configure** [system management-interface cli md-cli environment console](#)

Tree [console](#)

Introduced 16.0.R1

Platforms All

### **length** *number*

Synopsis Number of lines displayed on the console

Context **configure** [system management-interface cli md-cli environment console length](#) *number*

Tree [length](#)

Range 24 to 512

Default 24

Introduced 16.0.R1

Platforms All

### **width** *number*

Synopsis Number of columns displayed on the console

Context **configure** [system management-interface cli md-cli environment console width](#) *number*

Tree [width](#)

Range 80 to 512

---

|            |         |
|------------|---------|
| Default    | 80      |
| Introduced | 16.0.R1 |
| Platforms  | All     |

## info-output

|            |   |
|------------|---|
| Synopsis   | Enter the <b>info-output</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">management-interface cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">info-output</a> |
| Tree       | <a href="#">info-output</a>   |
| Introduced | 22.2.R1   |
| Platforms  | All   |

## always-display

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>always-display</b> context  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">management-interface cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">info-output</a> <a href="#">always-display</a> |
| Tree        | <a href="#">always-display</a>   |
| Description | Commands in this context specify elements that are always displayed in the <b>info</b> output, regardless of whether the <b>detail</b> option is used.   |
| Introduced  | 22.2.R1  |
| Platforms   | All  |

## admin-state *boolean*

|             |   |
|-------------|---|
| Synopsis    | Always display admin-state elements   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">management-interface cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">info-output</a> <a href="#">always-display</a> <a href="#">admin-state</a> <i>boolean</i> |
| Tree        | <a href="#">admin-state</a>   |
| Description | When configured to <b>true</b> , the values of the <b>admin-state</b> elements in <b>info</b> output (without the <b>detail</b> option) are always displayed, even if they are the default values.  |
| Default     | false   |
| Introduced  | 22.2.R1   |
| Platforms   | All   |

## message-severity-level

|            |  |
|------------|--|
| Synopsis   | Enter the <b>message-severity-level</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">management-interface cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">message-severity-level</a> |
| Tree       | <a href="#">message-severity-level</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## cli keyword

|            |   |
|------------|---|
| Synopsis   | Message severity threshold for CLI messages   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">management-interface cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">message-severity-level</a><br><a href="#">cli keyword</a> |
| Tree       | <a href="#">cli</a>   |
| Options    | warning, info   |
| Default    | info  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## more boolean

|            |   |
|------------|---|
| Synopsis   | Activate the pager when output is longer than a screen  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">management-interface cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">more</a> <i>boolean</i> |
| Tree       | <a href="#">more</a>  |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## progress-indicator

|            |  |
|------------|--|
| Synopsis   | Enter the <b>progress-indicator</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">management-interface cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">progress-indicator</a> |
| Tree       | <a href="#">progress-indicator</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the progress indicator   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">management-interface cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">progress-indicator</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**delay** *number*

|            |   |
|------------|---|
| Synopsis   | Delay before the progress indicator is displayed  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">management-interface cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">progress-indicator</a> <b>delay</b> <i>number</i> |
| Tree       | <a href="#">delay</a>   |
| Range      | 0 to 10000  |
| Units      | milliseconds  |
| Default    | 1000  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**type** *keyword*

|            |   |
|------------|---|
| Synopsis   | Progress indicator output style   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">management-interface cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">progress-indicator</a> <b>type</b> <i>keyword</i> |
| Tree       | <a href="#">type</a>  |
| Options    | dots  |
| Default    | dots  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**prompt**

|          |                                 |
|----------|---------------------------------|
| Synopsis | Enter the <b>prompt</b> context |
|----------|---------------------------------|

---

|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">prompt</a> |
| Tree       | <a href="#">prompt</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **context** *boolean*

|            |   |
|------------|---|
| Synopsis   | Show the current command context in the prompt  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">prompt</a> <a href="#">context</a> <i>boolean</i> |
| Tree       | <a href="#">context</a>   |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **newline** *boolean*

|            |   |
|------------|---|
| Synopsis   | Add a new line before every prompt line   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">prompt</a> <a href="#">newline</a> <i>boolean</i> |
| Tree       | <a href="#">newline</a>   |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **timestamp** *boolean*

|            |   |
|------------|---|
| Synopsis   | Show the timestamp before the first prompt line   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">prompt</a> <a href="#">timestamp</a> <i>boolean</i> |
| Tree       | <a href="#">timestamp</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **uncommitted-changes-indicator** *boolean*

|          |   |
|----------|---|
| Synopsis | Show an asterisk (*) when uncommitted changes exist |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">prompt</a> <a href="#">uncommitted-changes-indicator</a> <i>boolean</i> |
| Tree       | <a href="#">uncommitted-changes-indicator</a>   |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## python

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>python</b> context  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">python</a> |
| Tree        | <a href="#">python</a>   |
| Description | Commands in this context customize Python settings used with the Python 3 interpreter in MD-CLI applications such as pyexec, command aliases, EHS, and CRON.               |
| Introduced  | 21.10.R1   |
| Platforms   | All  |

## memory-reservation *number*

|            |   |
|------------|---|
| Synopsis   | Memory reserved per Python interpreter  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">python</a> <a href="#">memory-reservation</a> <i>number</i> |
| Tree       | <a href="#">memory-reservation</a>  |
| Range      | 1 to 500  |
| Units      | megabytes   |
| Introduced | 21.10.R1  |
| Platforms  | All   |

## minimum-available-memory *number*

|          |   |
|----------|---|
| Synopsis | Minimum memory requirement to run a Python interpreter  |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">python</a> <a href="#">minimum-available-memory</a> <i>number</i> |
| Tree     | <a href="#">minimum-available-memory</a>  |
| Range    | 5 to 50   |
| Units    | percent   |

|            |          |
|------------|----------|
| Introduced | 21.10.R1 |
| Platforms  | All      |

### **timeout** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum run time before a Python application is stopped   |
| Context    | <b>configure</b> <a href="#">system management-interface cli md-cli environment python timeout number</a> |
| Tree       | <a href="#">timeout</a>   |
| Range      | 30 to 86400   |
| Units      | seconds   |
| Default    | 3600  |
| Introduced | 21.10.R1  |
| Platforms  | All   |

### **time-display** *keyword*

|             |  |
|-------------|--|
| Synopsis    | Time zone to display time  |
| Context     | <b>configure</b> <a href="#">system management-interface cli md-cli environment time-display keyword</a>   |
| Tree        | <a href="#">time-display</a>   |
| Description | <p>This command configures the time zone for a timestamp displayed in outputs, such as event logs and <b>show</b> commands for the current CLI session.</p> <p>In event logs, the selected time is used to control the timestamps in the CLI output of <b>show log log-id</b> and in YANG state in the /state/log/log-id branch (for logs such as session, cli, memory, SNMP, and NETCONF).</p> <p>Also see the <b>configure log log-id time-format</b> command.</p> |
| Options     | local, utc   |
| Default     | local  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **time-format** *keyword*

|          |   |
|----------|---|
| Synopsis | Format to display the date and time   |
| Context  | <b>configure</b> <a href="#">system management-interface cli md-cli environment time-format keyword</a> |
| Tree     | <a href="#">time-format</a>   |



|             |   |
|-------------|---|
| Description | This command specifies the format of the time display in configuration, state, and certain <b>show</b> command output in the current CLI session. |
| Options     | iso-8601, rfc-1123, rfc-3339  |
| Default     | rfc-3339  |
| Introduced  | 20.5.R1   |
| Platforms   | All   |

### **commit-history** *number*

|             |   |
|-------------|---|
| Synopsis    | Number of commit history IDs to store   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <b>commit-history</b> <i>number</i>        |
| Tree        | <a href="#">commit-history</a>  |
| Description | This command sets the number of IDs to store in the commit history. Setting the value to 0 disables the commit history. |
| Range       | 0 to 200  |
| Default     | 50  |
| Introduced  | 21.10.R1  |
| Platforms   | All   |

### **configuration-mode** *keyword*

|             |  |
|-------------|--|
| Synopsis    | Management interfaces allowed to edit the configuration  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <b>configuration-mode</b> <i>keyword</i>  |
| Tree        | <a href="#">configuration-mode</a>   |
| Description | <p>This command controls which of the classic or model-driven management interfaces can modify the configuration of the router.</p> <p>Any management interface can be used in any configuration mode (to gather state information or perform operations, for example), but only specific management interfaces (CLI, NETCONF, and so on) are allowed to edit the configuration of the router in different modes. For example, only classic CLI and SNMP can be used to edit the configuration when in classic mode.</p> |
| Options     | classic, model-driven, mixed   |
| Default     | classic  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

## configuration-save

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>configuration-save</b> context                                      |
| Context     | <b>configure</b> <a href="#">system management-interface configuration-save</a>  |
| Tree        | <a href="#">configuration-save</a>   |
| Description | Commands in this context configure the attributes for saved configuration files. |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

## configuration-backups *number*

|             |   |
|-------------|---|
| Synopsis    | Maximum number of configuration versions maintained   |
| Context     | <b>configure</b> <a href="#">system management-interface configuration-save configuration-backups</a> <i>number</i>   |
| Tree        | <a href="#">configuration-backups</a>   |
| Description | <p>This command configures the maximum number of saved configuration file versions the router maintains.</p> <p>When the configuration is saved, configuration file names are appended with a numeric extension. Each subsequent configuration save creates a new configuration file version with an incremented numeric extension until the maximum count is reached, after which the next configuration save overwrites the oldest file version.</p> <p>Each persistent index file is updated at the same time as the associated configuration file. The system synchronizes the active and standby CPM for all configurations and their associated persistent index files.</p> |
| Range       | 1 to 200  |
| Default     | 5   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

## incremental-saves *boolean*

|             |  |
|-------------|--|
| Synopsis    | Use incremental saved configuration files  |
| Context     | <b>configure</b> <a href="#">system management-interface configuration-save incremental-saves</a> <i>boolean</i>   |
| Tree        | <a href="#">incremental-saves</a>  |
| Description | When configured to <b>true</b> , the system saves each commit to the <b>configure</b> configuration region in a separate incremental saved configuration file, which allows for faster commits, instead of saving a complete saved configuration file each time. |
| Default     | false  |

---

|            |         |
|------------|---------|
| Introduced | 22.7.R1 |
| Platforms  | All     |

## netconf

|            |  |
|------------|--|
| Synopsis   | Enter the <b>netconf</b> context                                     |
| Context    | <b>configure</b> <a href="#">system management-interface netconf</a> |
| Tree       | <a href="#">netconf</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## admin-state *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of NETCONF   |
| Context    | <b>configure</b> <a href="#">system management-interface netconf admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## auto-config-save *boolean*

|             |   |
|-------------|---|
| Synopsis    | Automatically save configuration as part of commit  |
| Context     | <b>configure</b> <a href="#">system management-interface netconf auto-config-save</a> <i>boolean</i>  |
| Tree        | <a href="#">auto-config-save</a>  |
| Description | When configured to <b>true</b> , the system automatically writes the running configuration to the save configuration file as part of a successful commit operation. |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

## capabilities

|          |                                       |
|----------|---------------------------------------|
| Synopsis | Enter the <b>capabilities</b> context |
|----------|---------------------------------------|

|             |  |
|-------------|--|
| Context     | <b>configure system management-interface netconf capabilities</b>                |
| Tree        | <a href="#">capabilities</a>   |
| Description | Commands in this context configure explicit capabilities for the NETCONF server. |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **candidate** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Allow the NETCONF server to access candidate datastore   |
| Context     | <b>configure system management-interface netconf capabilities candidate</b> <i>boolean</i>   |
| Tree        | <a href="#">candidate</a>  |
| Description | <p>When configured to <b>true</b>, this command allows the SR OS NETCONF server to access the candidate configuration datastore. Configuring this command to <b>true</b> also enables using <b>commit</b> and <b>discard-changes</b>.</p> <p>When <b>configure system management-interface configuration-mode</b> is set to <b>classic</b>, the candidate capability is disabled, even if this command is configured to <b>true</b>.</p> <p>When configured to <b>false</b>, this command disables the SR OS NETCONF server from accessing the candidate datastore. If the candidate is disabled, requests that reference the candidate datastore return an error, and when a NETCONF client establishes a new session, the candidate capability is not advertised in the SR OS NETCONF Hello message.</p> |
| Default     | true   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **writable-running** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Allow NETCONF server to access the running datastore  |
| Context     | <b>configure system management-interface netconf capabilities writable-running</b> <i>boolean</i>   |
| Tree        | <a href="#">writable-running</a>  |
| Description | <p>When configured to <b>true</b>, this command allows the SR OS NETCONF server to access the running configuration datastore.</p> <p>When <b>configure system management-interface configuration-mode</b> is set to <b>model-driven</b>, the writable-running capability is disabled, even if this command is configured to <b>true</b>.</p> <p>When configured to <b>false</b>, this command disables the SR OS NETCONF server from accessing the running datastore. Requests that reference the running datastore as a</p> |

target return an error. When a NETCONF client establishes a new session, the writable-running capability is not advertised in the SR OS NETCONF Hello message.

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **port number**

|             |   |
|-------------|---|
| Synopsis    | Port on which NETCONF server listens for connections  |
| Context     | <b>configure</b> <a href="#">system management-interface netconf port number</a>  |
| Tree        | <a href="#">port</a>  |
| Description | <p>This command specifies the port on which the SR OS NETCONF server listens for new connections. One port can be configured for NETCONF management.</p> <p>The configured port applies to both non-VPRN and VPRN management. New NETCONF connections are able to use the configured port.</p> <p>For NETCONF connections not using VPRN management, active NETCONF connections are not disconnected if the connection port changes. For NETCONF connections using VPRN management, active NETCONF connections are disconnected if the connection port changes.</p> |
| Range       | 22   830  |
| Default     | 830   |
| Introduced  | 19.10.R1  |
| Platforms   | All   |

### **operations**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>operations</b> context  |
| Context     | <b>configure</b> <a href="#">system management-interface operations</a>  |
| Tree        | <a href="#">operations</a>   |
| Description | Commands in this context configure parameters associated with operational commands in model-driven interfaces. |
| Introduced  | 21.5.R1  |
| Platforms   | All  |

### **global-timeouts**

|          |  |
|----------|--|
| Synopsis | Enter the <b>global-timeouts</b> context |
|----------|--|

|             |   |
|-------------|---|
| Context     | <b>configure system management-interface operations global-timeouts</b>   |
| Tree        | <a href="#">global-timeouts</a>   |
| Description | <p>Commands in this context configure system timeout parameters for operational commands.</p> <p>Timeout parameters provide default system-level control for various types of operational commands in model-driven interfaces. The timeout values are used when specific execution and retention timeouts are not requested for a specific operation.</p> |
| Introduced  | 21.5.R1   |
| Platforms   | All   |

### **asynchronous-execution** (*number* | *keyword*)

|             |  |
|-------------|--|
| Synopsis    | Timeout for asynchronous operation execution   |
| Context     | <b>configure system management-interface operations global-timeouts asynchronous-execution</b> ( <i>number</i>   <i>keyword</i> )  |
| Tree        | <a href="#">asynchronous-execution</a>   |
| Description | <p>This command configures the period of time that operations launched as “asynchronous” are allowed to execute before being automatically stopped by the SR OS.</p> <p>An asynchronous operation is not deleted from the system when it is stopped. See the <b>asynchronous-retention</b> command.</p> <p>If a specific execution timeout is not included in the request for a particular asynchronous operation, this system-level timeout applies.</p> <p><b>Note:</b> This execution timeout is part of the general global operations infrastructure and is separate and independent from any operation-specific timeouts (for example, the <b>ping</b> operation also has its own timeout parameter).</p> |
| Range       | 1 to 604800  |
| Units       | seconds  |
| Options     | never  |
| Default     | 3600   |
| Introduced  | 21.5.R1  |
| Platforms   | All  |

### **asynchronous-retention** (*number* | *keyword*)

|          |   |
|----------|---|
| Synopsis | Timeout for asynchronous operation data retention   |
| Context  | <b>configure system management-interface operations global-timeouts asynchronous-retention</b> ( <i>number</i>   <i>keyword</i> ) |

|             |   |
|-------------|---|
| Tree        | <a href="#">asynchronous-retention</a>  |
| Description | <p>This command configures the period of time that data related to operations launched as “asynchronous” is retained in the system. After the retention timeout expires, all information related to the operation is deleted, including any status information and result data.</p> <p>If a specific retention timeout is not included in the request for a particular asynchronous operation, this system-level timeout applies.</p> |
| Range       | 1 to 604800   |
| Units       | seconds   |
| Options     | never   |
| Default     | 86400   |
| Introduced  | 21.5.R1   |
| Platforms   | All   |

### **synchronous-execution** (*number* | *keyword*)

|             |  |
|-------------|--|
| Synopsis    | Timeout for synchronous operation execution  |
| Context     | <b>configure</b> <a href="#">system management-interface operations global-timeouts synchronous-execution</a> ( <i>number</i>   <i>keyword</i> )   |
| Tree        | <a href="#">synchronous-execution</a>  |
| Description | <p>This command configures the period of time that operations launched as “synchronous” (the default method for all operations) are allowed to execute before they are automatically stopped, and their associated data is deleted.</p> <p>If a specific execution timeout is not included in the request for a particular synchronous operation, this system-level timeout applies.</p> <p><b>Note:</b> This execution timeout is part of the general global operations infrastructure and is separate and independent from any operation-specific timeouts (for example, the <b>ping</b> operation also has its own timeout parameter).</p> <p><b>Caution:</b> If this command is set with a specific time value, MD-CLI operations are subject to the timeout and are interrupted if they execute longer than the time value. This situation can arise because the timeout also applies to operations requested in the MD-CLI interface (for example, <b>ping</b>, <b>file dir</b>, and so on).</p> |
| Range       | 1 to 604800  |
| Units       | seconds  |
| Options     | never  |
| Default     | never  |
| Introduced  | 21.5.R1  |
| Platforms   | All  |

## remote-management

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>remote-management</b> context  |
| Context     | <b>configure</b> <a href="#">system management-interface remote-management</a>  |
| Tree        | <a href="#">remote-management</a>   |
| Description | Commands in this context configure the SR OS node to use the remote management service. Configuring remote management enables the SR OS node to report itself to a remote manager service running on a remote server, so that it is included in the dynamic list of available nodes. The manager service streamlines the management of multiple SR OS nodes running different SR OS versions using the same client application providing a similar shell to the MD-CLI. |
| Introduced  | 20.5.R1   |
| Platforms   | All   |

## admin-state *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of remote management registration  |
| Context    | <b>configure</b> <a href="#">system management-interface remote-management admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 20.5.R1   |
| Platforms  | All   |

## allow-unsecure-connection

|             |  |
|-------------|--|
| Synopsis    | Allow connection without secured transport protocol  |
| Context     | <b>configure</b> <a href="#">system management-interface remote-management allow-unsecure-connection</a>   |
| Tree        | <a href="#">allow-unsecure-connection</a>  |
| Description | When configured, this command allows an unsecured connection to remote managers; TCP connections are not encrypted, including username and password information. |
| Notes       | The following elements are part of a choice: <b>allow-unsecure-connection</b> or <b>client-tls-profile</b> .   |
| Introduced  | 20.5.R1  |
| Platforms   | All  |



### **client-tls-profile** *reference*

|             |  |
|-------------|--|
| Synopsis    | TLS client profile name  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">remote-management</a> <a href="#">client-tls-profile</a> <i>reference</i> |
| Tree        | <a href="#">client-tls-profile</a>   |
| Description | This command specifies the client TLS profile to all remote managers.  |
| Reference   | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-tls-profile</a> <i>string</i>                              |
| Notes       | The following elements are part of a choice: <b>allow-unsecure-connection</b> or <b>client-tls-profile</b> .   |
| Introduced  | 20.5.R1  |
| Platforms   | All  |

### **connection-timeout** *number*

|            |   |
|------------|---|
| Synopsis   | Time without a response before manager declared down  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">remote-management</a> <a href="#">connection-timeout</a> <i>number</i> |
| Tree       | <a href="#">connection-timeout</a>  |
| Range      | 1 to 3600   |
| Units      | seconds   |
| Default    | 60  |
| Introduced | 20.5.R1   |
| Platforms  | All   |

### **device-label** *string*

|               |  |
|---------------|--|
| Synopsis      | Device label supplied to the remote manager  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">remote-management</a> <a href="#">device-label</a> <i>string</i>    |
| Tree          | <a href="#">device-label</a>   |
| Description   | This command specifies a metadata label that is supplied to the manager. This label is used to group devices or network nodes with a common purpose or goal. |
| String Length | 1 to 64  |
| Introduced    | 20.5.R1  |
| Platforms     | All  |

**device-name** *string*

|               |  |
|---------------|--|
| Synopsis      | Device name supplied to the remote manager   |
| Context       | <b>configure</b> <a href="#">system management-interface remote-management device-name</a> <i>string</i>   |
| Tree          | <a href="#">device-name</a>  |
| Description   | This command specifies a device name that is supplied to the manager. The name identifies a specific SR OS node in the network.<br><br>When unconfigured, the default system name is used. |
| String Length | 1 to 64  |
| Introduced    | 20.5.R1  |
| Platforms     | All  |

**hello-interval** *number*

|            |   |
|------------|---|
| Synopsis   | Time between hello messages from SR OS node to manager  |
| Context    | <b>configure</b> <a href="#">system management-interface remote-management hello-interval</a> <i>number</i> |
| Tree       | <a href="#">hello-interval</a>  |
| Range      | 10 to 216000  |
| Units      | seconds   |
| Default    | 600   |
| Introduced | 20.5.R1   |
| Platforms  | All   |

**manager** [[manager-name](#)] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>manager</b> list instance  |
| Context        | <b>configure</b> <a href="#">system management-interface remote-management manager</a> <i>string</i>  |
| Tree           | <a href="#">manager</a>   |
| Description    | Commands in this context configure options for a specific manager.<br><br>Commands configured in this context take precedence over command values specified directly in the <b>configure management-interface remote-management</b> context.<br><br>If a command is not configured in this context, the command setting is inherited from the higher level context. |
| Max. Instances | 2   |
| Introduced     | 20.5.R1   |

Platforms All

### **[manager-name]** *string*

Synopsis Remote management manager name

Context **configure** [system](#) [management-interface](#) [remote-management](#) [manager](#) *string*

Tree [manager](#)

String Length 1 to 64

Notes This element is part of a list key.

Introduced 20.5.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of remote management registration

Context **configure** [system](#) [management-interface](#) [remote-management](#) [manager](#) *string* [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 20.5.R1

Platforms All

### **allow-unsecure-connection**

Synopsis Allow connection without secured transport protocol

Context **configure** [system](#) [management-interface](#) [remote-management](#) [manager](#) *string* [allow-unsecure-connection](#)

Tree [allow-unsecure-connection](#)

Description When configured, this command allows an unsecured connection to the remote managers; the TCP connection is not encrypted. This includes username and password information.

Notes The following elements are part of a choice: **allow-unsecure-connection** or **client-tls-profile**.

Introduced 20.5.R1

Platforms All

**client-tls-profile** *reference*

|             |  |
|-------------|--|
| Synopsis    | TLS client profile name  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">remote-management</a> <a href="#">manager</a> <i>string</i> <a href="#">client-tls-profile</a> <i>reference</i> |
| Tree        | <a href="#">client-tls-profile</a>   |
| Description | This command assigns a TLS profile name to a remote manager.   |
| Reference   | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-tls-profile</a> <i>string</i>  |
| Notes       | The following elements are part of a choice: <b>allow-unsecure-connection</b> or <b>client-tls-profile</b> .   |
| Introduced  | 20.5.R1  |
| Platforms   | All  |

**connection-timeout** *number*

|            |   |
|------------|---|
| Synopsis   | Time without response before manager is declared down   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">remote-management</a> <a href="#">manager</a> <i>string</i> <a href="#">connection-timeout</a> <i>number</i> |
| Tree       | <a href="#">connection-timeout</a>  |
| Range      | 1 to 3600   |
| Units      | seconds   |
| Introduced | 20.5.R1   |
| Platforms  | All   |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">remote-management</a> <a href="#">manager</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 20.5.R1  |
| Platforms     | All  |

**device-label** *string*

|               |   |
|---------------|---|
| Synopsis      | Device label supplied to the remote manager   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">remote-management</a> <a href="#">manager</a> <i>string</i> <a href="#">device-label</a> <i>string</i> |
| Tree          | <a href="#">device-label</a>  |
| Description   | This command specifies a metadata label that is supplied to the manager. This label is used to group devices or network nodes with a common purpose or goal.                                    |
| String Length | 1 to 64   |
| Introduced    | 20.5.R1   |
| Platforms     | All   |

**device-name** *string*

|               |  |
|---------------|--|
| Synopsis      | Device name supplied to the remote manager   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">remote-management</a> <a href="#">manager</a> <i>string</i> <a href="#">device-name</a> <i>string</i> |
| Tree          | <a href="#">device-name</a>  |
| Description   | This command specifies a device name that is supplied to the manager. The name identifies a specific SR OS node in the network.<br><br>When unconfigured, the default system name is used.     |
| String Length | 1 to 64  |
| Introduced    | 20.5.R1  |
| Platforms     | All  |

**manager-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *fully-qualified-domain-name*)

|               |   |
|---------------|---|
| Synopsis      | Destination IP address of the manager   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">remote-management</a> <a href="#">manager</a> <i>string</i> <a href="#">manager-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>   <i>fully-qualified-domain-name</i> ) |
| Tree          | <a href="#">manager-address</a>   |
| String Length | 1 to 255  |
| Introduced    | 20.5.R1   |
| Platforms     | All   |

**manager-port** *number*

|            |   |
|------------|---|
| Synopsis   | Destination TCP port for gRPC connections to manager  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">remote-management</a> <a href="#">manager</a> <i>string</i> <a href="#">manager-port</a> <i>number</i> |
| Tree       | <a href="#">manager-port</a>  |
| Range      | 1 to 65535  |
| Default    | 57400   |
| Introduced | 20.5.R1   |
| Platforms  | All   |

**router-instance** *string*

|            |  |
|------------|--|
| Synopsis   | Reference to a router or VPRN service name   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">remote-management</a> <a href="#">manager</a> <i>string</i> <a href="#">router-instance</a> <i>string</i> |
| Tree       | <a href="#">router-instance</a>  |
| Introduced | 20.5.R1  |
| Platforms  | All  |

**source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

|            |   |
|------------|---|
| Synopsis   | Source IP address for connection to the manager   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">remote-management</a> <a href="#">manager</a> <i>string</i> <a href="#">source-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <a href="#">source-address</a>  |
| Introduced | 20.5.R1   |
| Platforms  | All   |

**source-port** (*number* | *keyword*)

|          |   |
|----------|---|
| Synopsis | Source TCP destination port number  |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">remote-management</a> <a href="#">manager</a> <i>string</i> <a href="#">source-port</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <a href="#">source-port</a>   |
| Range    | 1 to 65535  |
| Options  | grpc-default  |

Introduced 20.5.R1  
 Platforms All

### **router-instance** *string*

Synopsis Router name or VPRN service name  
 Context **configure** [system](#) [management-interface](#) [remote-management](#) [router-instance](#) *string*  
 Tree [router-instance](#)  
 Default management  
 Introduced 20.5.R1  
 Platforms All

### **source-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis Source IP address for connection to the manager  
 Context **configure** [system](#) [management-interface](#) [remote-management](#) [source-address](#) (*ipv4-address-no-zone | ipv6-address-no-zone*)  
 Tree [source-address](#)  
 Introduced 20.5.R1  
 Platforms All

### **source-port** (*number | keyword*)

Synopsis Source TCP port number to connection to the manager  
 Context **configure** [system](#) [management-interface](#) [remote-management](#) [source-port](#) (*number | keyword*)  
 Tree [source-port](#)  
 Range 1 to 65535  
 Options grpc-default  
 Default grpc-default  
 Introduced 20.5.R1  
 Platforms All

### **schema-path** *string*

Synopsis Schema path URL

|               |  |
|---------------|--|
| Context       | <b>configure</b> <a href="#">system management-interface schema-path</a> <i>string</i>   |
| Tree          | <a href="#">schema-path</a>  |
| Description   | <p>This command specifies the schema path where the SR OS YANG modules can be placed by the user before using a &lt;get-schema&gt; request. Nokia recommends that the URL string not exceed 135 characters for the &lt;get-schema&gt; request to work correctly with all schema files.</p> <p>If this command is not configured, the software upgrade process manages the YANG schema files to ensure the schema files are synchronized with the software image on both the primary and standby CPM.</p> |
| String Length | 1 to 180   |
| Introduced    | 16.0.R4  |
| Platforms     | All  |

## snmp

|            |   |
|------------|---|
| Synopsis   | Enter the <b>snmp</b> context                                     |
| Context    | <b>configure</b> <a href="#">system management-interface snmp</a> |
| Tree       | <a href="#">snmp</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## admin-state *keyword*

|             |   |
|-------------|---|
| Synopsis    | Administrative state of the SNMP agent  |
| Context     | <b>configure</b> <a href="#">system management-interface snmp admin-state</a> <i>keyword</i>  |
| Tree        | <a href="#">admin-state</a>   |
| Description | <p>This command administratively enables or disables SNMP agent operations. Disabling SNMP does not prevent the agent from sending SNMP notifications to configured SNMP trap destinations.</p> <p>In classic and mixed configuration mode, the agent is administratively disabled in the event of a reboot when the processing of the configuration file fails to complete or when an SNMP persistent index file fails while the <b>bof system persistent-indices</b> command is set to <b>true</b>. This prevents an SNMP-based management system from accessing and possibly synchronizing with a partially booted or incomplete network element. This auto-disable behavior is not applicable to model-driven configuration mode.</p> |
| Options     | enable, disable   |
| Default     | enable  |
| Introduced  | 16.0.R1   |



Platforms All

### **engine-id** *string*

**Synopsis** SNMP engine ID that identifies the SNMPv3 node

**Context** **configure** [system management-interface snmp engine-id](#) *string*

**Tree** [engine-id](#)

**Description** This command sets the SNMP engine ID that uniquely identifies the SNMPv3 node. If unconfigured, the system uses an engine ID based on the information from the system backplane.

If the SNMP engine ID is changed, the current configuration must be saved and a reboot must be executed. Otherwise, the previously configured SNMP communities and logger trap-target notify communities will not be valid for the new engine ID.

**Note:** Changing the SNMP engine ID invalidates all SNMPv3 MD5 and SHA security digest keys, which may render the node unmanageable.

When replacing a chassis, configure the new router to use the same engine ID as the previous router. This preserves SNMPv3 security keys and allows management stations to use their existing authentication keys for the new router.

Ensure that the engine ID of each router is unique. A management domain can only maintain one instance of a specific engine ID.

**String Length** 10 to 64

**Introduced** 16.0.R1

**Platforms** All

### **general-port** *number*

**Synopsis** Port number used to send general SNMP messages

**Context** **configure** [system management-interface snmp general-port](#) *number*

**Tree** [general-port](#)

**Description** This command configures the port number used to receive SNMP request messages and send replies.

For the port used for SNMP notifications, configure the **configure log snmp-trap-group trap-target port** command.

**Range** 0 | 1 to 65535

**Default** 161

**Introduced** 16.0.R1

**Platforms** All

### **packet-size** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum SNMP packet size generated by the node  |
| Context    | <b>configure</b> <a href="#">system management-interface snmp packet-size</a> <i>number</i> |
| Tree       | <a href="#">packet-size</a>   |
| Range      | 484 to 9216   |
| Default    | 1500  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **streaming**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>streaming</b> context  |
| Context    | <b>configure</b> <a href="#">system management-interface snmp streaming</a> |
| Tree       | <a href="#">streaming</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **admin-state** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Administrative state of SNMP streaming  |
| Context     | <b>configure</b> <a href="#">system management-interface snmp streaming admin-state</a> <i>keyword</i>  |
| Tree        | <a href="#">admin-state</a>   |
| Description | This command enables or disables the proprietary SNMP request and response bundling as well as the TCP-based transport mechanism for optimizing network management of the router nodes. In higher latency networks, synchronizing router MIBs from network management using streaming takes less time than synchronizing using classic SNMP UDP requests. Streaming operates on TCP port 1491 and runs over IPv4 or IPv6. |
| Options     | enable, disable   |
| Default     | disable   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **yang-modules**

|          |                                       |
|----------|---------------------------------------|
| Synopsis | Enter the <b>yang-modules</b> context |
|----------|---------------------------------------|

|             |   |
|-------------|---|
| Context     | <b>configure system management-interface yang-modules</b>   |
| Tree        | <a href="#">yang-modules</a>  |
| Description | <p>Commands in this context determine the system support of the Nokia YANG models. The settings affect the data sent in a NETCONF &lt;hello&gt;, data populated in the RFC 6022 /netconf-state/schemas list, data returned in a &lt;get-schema&gt; request, and data populated in the RFC 8525 /yang-library.</p> <p>See "NETCONF monitoring" and "YANG library" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR System Management Guide</i> for more information.</p> |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **base-r13-modules** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Support Base-R13 YANG models  |
| Context     | <b>configure system management-interface yang-modules base-r13-modules boolean</b>  |
| Tree        | <a href="#">base-r13-modules</a>  |
| Description | <p>When configured to <b>true</b>, this command enables support of the Base-R13 YANG modules in the SR OS NETCONF server.</p> <p>When the <b>configure system management-interface configuration-mode</b> command is set to <b>model-driven</b>, the configuration cannot be modified using Base-R13 modules in NETCONF, even if the <b>base-r13-modules</b> command is configured to <b>true</b>.</p> <p>When configured to <b>false</b>, this command disables Base-R13 YANG modules, and any NETCONF request that references the Base-R13 modules results in an error.</p> |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **nmda**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>nmda</b> context  |
| Context     | <b>configure system management-interface yang-modules nmda</b>   |
| Tree        | <a href="#">nmda</a>   |
| Description | Commands in this context configure the attributes for the Network Management Datastores Architecture (NMDA). |
| Introduced  | 21.7.R1  |
| Platforms   | All  |

**nmda-support** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Advertise NMDA support over NETCONF  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">yang-modules</a> <a href="#">nmda</a> <a href="#">nmda-support</a> <i>boolean</i>   |
| Tree        | <a href="#">nmda-support</a>   |
| Description | When configured to <b>true</b> , this command enables the advertisement of NMDA support over NETCONF through the use of YANG library 1.1.<br>When configured to <b>false</b> , this command disables NMDA advertisement over NETCONF and YANG library 1.0 is used. |
| Default     | false  |
| Introduced  | 21.7.R1  |
| Platforms   | All  |

**nokia-combined-modules** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Support access to combined Nokia YANG models   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">yang-modules</a> <a href="#">nokia-combined-modules</a> <i>boolean</i>  |
| Tree        | <a href="#">nokia-combined-modules</a>   |
| Description | When configured to <b>true</b> , the system supports the combined Nokia YANG files for both configuration and state data in the NETCONF server.<br>When the system is operating in classic configuration mode, attempts to access (read or write) the configuration using the Nokia configuration modules or namespace via NETCONF result in errors, even if this command is set to <b>true</b> .<br>When configured to <b>false</b> , access to the combined Nokia YANG files is not supported.<br>This command and the <b>nokia-submodules</b> command cannot both be set to <b>true</b> at the same time. |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

**nokia-submodules** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Support submodule-based packaging of Nokia YANG models  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">yang-modules</a> <a href="#">nokia-submodules</a> <i>boolean</i>                           |
| Tree        | <a href="#">nokia-submodules</a>  |
| Description | When configured to <b>true</b> , the system supports the alternative submodule-based packaging of the Nokia YANG files for both configuration and state data in the NETCONF server. |

When the system is operating in classic configuration mode, attempts to access (read or write) the configuration using the Nokia configuration modules or namespace via NETCONF result in errors, even if this command is set to **true**.

When configured to **false**, access to the submodule-based packaging of the Nokia YANG files is not supported.

This command and the **nokia-combined-modules** command cannot both be set to **true** at the same time.

|            |         |
|------------|---------|
| Introduced | 21.2.R1 |
| Platforms  | All     |

### **openconfig-modules** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Support access to OpenConfig YANG models  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">yang-modules</a> <a href="#">openconfig-modules</a> <i>boolean</i> |
| Tree        | <a href="#">openconfig-modules</a>  |
| Description | When configured to <b>true</b> , this command allows access to OpenConfig YANG models in all model-driven interfaces.                                       |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **name** *string*

|               |  |
|---------------|--|
| Synopsis      | Administrative name assigned to the system                                 |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">name</a> <i>string</i> |
| Tree          | <a href="#">name</a>   |
| String Length | 1 to 64  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

### **network-element-discovery**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>network-element-discovery</b> context                                |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">network-element-discovery</a> |
| Tree       | <a href="#">network-element-discovery</a>   |
| Introduced | 19.5.R1   |
| Platforms  | All   |

**generate-traps** *boolean*

|            |   |
|------------|---|
| Synopsis   | Generate NE discovery traps   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">network-element-discovery</a> <a href="#">generate-traps</a> <i>boolean</i> |
| Tree       | <a href="#">generate-traps</a>  |
| Default    | false   |
| Introduced | 19.5.R1   |
| Platforms  | All   |

**profile** [[name](#)] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>profile</b> list instance  |
| Context        | <b>configure</b> <a href="#">system</a> <a href="#">network-element-discovery</a> <a href="#">profile</a> <i>string</i> |
| Tree           | <a href="#">profile</a>   |
| Max. Instances | 1   |
| Introduced     | 19.5.R1   |
| Platforms      | All   |

**[name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Profile name  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">network-element-discovery</a> <a href="#">profile</a> <i>string</i> |
| Tree          | <a href="#">profile</a>   |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 19.5.R1   |
| Platforms     | All   |

**neid** *string*

|               |  |
|---------------|--|
| Synopsis      | Network element ID of the advertised node  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">network-element-discovery</a> <a href="#">profile</a> <i>string</i> <a href="#">neid</a> <i>string</i> |
| Tree          | <a href="#">neid</a>   |
| String Length | 7 to 8   |

|            |         |
|------------|---------|
| Introduced | 19.5.R1 |
| Platforms  | All     |

## neip

|            |   |
|------------|---|
| Synopsis   | Enter the <b>neip</b> context   |
| Context    | <b>configure</b> <a href="#">system network-element-discovery profile</a> <i>string</i> <b>neip</b> |
| Tree       | <a href="#">neip</a>  |
| Introduced | 19.5.R1   |
| Platforms  | All   |

## auto-generate

|            |   |
|------------|---|
| Synopsis   | Enter the <b>auto-generate</b> context  |
| Context    | <b>configure</b> <a href="#">system network-element-discovery profile</a> <i>string</i> <b>neip auto-generate</b> |
| Tree       | <a href="#">auto-generate</a>   |
| Introduced | 21.2.R1   |
| Platforms  | All   |

## ipv4

|            |  |
|------------|--|
| Synopsis   | Enable the <b>ipv4</b> context   |
| Context    | <b>configure</b> <a href="#">system network-element-discovery profile</a> <i>string</i> <b>neip auto-generate ipv4</b> |
| Tree       | <a href="#">ipv4</a>   |
| Introduced | 21.2.R1  |
| Platforms  | All  |

## vendor-id-value *number*

|            |   |
|------------|---|
| Synopsis   | Most significant byte if the NE IPv4 address  |
| Context    | <b>configure</b> <a href="#">system network-element-discovery profile</a> <i>string</i> <b>neip auto-generate ipv4</b><br><a href="#">vendor-id-value</a> <i>number</i> |
| Tree       | <a href="#">vendor-id-value</a>   |
| Range      | 1 to 255  |
| Default    | 140   |
| Introduced | 21.2.R1   |

Platforms All

## ipv6

Synopsis Enable the **ipv6** context

Context **configure** [system network-element-discovery profile](#) *string* [neip auto-generate ipv6](#)

Tree [ipv6](#)

Introduced 21.2.R1

Platforms All

## vendor-id-value *number*

Synopsis Most significant byte of the NE IPv6 address

Context **configure** [system network-element-discovery profile](#) *string* [neip auto-generate ipv6](#)  
[vendor-id-value](#) *number*

Tree [vendor-id-value](#)

Range 1 to 255

Default 140

Introduced 21.2.R1

Platforms All

## ipv4 *string*

Synopsis NEIP IPv4 address

Context **configure** [system network-element-discovery profile](#) *string* [neip ipv4](#) *string*

Tree [ipv4](#)

Introduced 19.5.R1

Platforms All

## ipv6 *string*

Synopsis NEIP IPv6 address

Context **configure** [system network-element-discovery profile](#) *string* [neip ipv6](#) *string*

Tree [ipv6](#)

Introduced 19.5.R1



Platforms All

### **platform-type** *string*

Synopsis Platform name and chassis type to be advertised  
Context **configure** [system](#) [network-element-discovery](#) [profile](#) *string* [platform-type](#) *string*  
Tree [platform-type](#)  
String Length 1 to 255  
Introduced 19.5.R1  
Platforms All

### **system-mac** *string*

Synopsis MAC address of the advertised node  
Context **configure** [system](#) [network-element-discovery](#) [profile](#) *string* [system-mac](#) *string*  
Tree [system-mac](#)  
Introduced 19.5.R1  
Platforms All

### **vendor-id** *string*

Synopsis Vendor ID to be advertised  
Context **configure** [system](#) [network-element-discovery](#) [profile](#) *string* [vendor-id](#) *string*  
Tree [vendor-id](#)  
String Length 1 to 255  
Default Nokia  
Introduced 19.5.R1  
Platforms All

### **ospf-dynamic-hostnames** *boolean*

Synopsis Process received OSPF dynamic hostname information  
Context **configure** [system](#) [ospf-dynamic-hostnames](#) *boolean*  
Tree [ospf-dynamic-hostnames](#)

|             |  |
|-------------|--|
| Description | When configured to <b>true</b> , OSPF dynamic hostnames are enabled. The router receiving the new dynamic hostname within the OSPF Router Information (RI) LSA is instructed to process the received dynamic hostname information.<br>When configured to <b>false</b> , dynamic hostname information is not processed. |
| Default     | false  |
| Introduced  | 20.2.R1  |
| Platforms   | All  |

## **persistence**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>persistence</b> context   |
| Context     | <b>configure</b> <a href="#">system persistence</a>  |
| Tree        | <a href="#">persistence</a>  |
| Description | Commands in this context configure persistence on the system.<br><br>The persistence feature enables the system to retain state information learned through DHCP snooping across reboots. This information includes data such as the IP address and MAC binding information, lease-length information, and ingress SAP information (required for VPLS snooping to identify the ingress interface).<br><br>If persistence is enabled when there are no DHCP relay or snooping commands enabled, the system creates an empty file. |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

## **ancp**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ancp</b> context                            |
| Context    | <b>configure</b> <a href="#">system persistence ancp</a> |
| Tree       | <a href="#">ancp</a>                                     |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## **description string**

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">system persistence ancp description string</a> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |

Introduced 16.0.R1  
Platforms All

### **location** *keyword*

Synopsis CPM flash card where the information is stored  
Context **configure** [system](#) [persistence](#) [ancp](#) [location](#) *keyword*  
Tree [location](#)  
Options cf1, cf2, cf3  
Introduced 16.0.R1  
Platforms All

### **application-assurance**

Synopsis Enter the **application-assurance** context  
Context **configure** [system](#) [persistence](#) [application-assurance](#)  
Tree [application-assurance](#)  
Description Commands in this context configure AA persistence on the system.  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
Context **configure** [system](#) [persistence](#) [application-assurance](#) [description](#) *string*  
Tree [description](#)  
String Length 1 to 80  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **location** *keyword*

Synopsis CPM flash card where the information is stored  
Context **configure** [system](#) [persistence](#) [application-assurance](#) [location](#) *keyword*  
Tree [location](#)

|            |  |
|------------|--|
| Options    | cf1, cf2, cf3                                |
| Introduced | 16.0.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

## dhcp-server

|            |   |
|------------|---|
| Synopsis   | Enter the <b>dhcp-server</b> context                            |
| Context    | <b>configure</b> <a href="#">system persistence dhcp-server</a> |
| Tree       | <a href="#">dhcp-server</a>                                     |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR         |

## description *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">system persistence dhcp-server description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                   |

## location *keyword*

|            |   |
|------------|---|
| Synopsis   | CPM flash card where the information is stored  |
| Context    | <b>configure</b> <a href="#">system persistence dhcp-server location</a> <i>keyword</i> |
| Tree       | <a href="#">location</a>  |
| Options    | cf1, cf2, cf3   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                 |

## nat-port-forwarding

|          |   |
|----------|---|
| Synopsis | Enter the <b>nat-port-forwarding</b> context                            |
| Context  | <b>configure</b> <a href="#">system persistence nat-port-forwarding</a> |
| Tree     | <a href="#">nat-port-forwarding</a>                                     |

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
Context **configure** [system persistence nat-port-forwarding description](#) *string*  
Tree [description](#)  
String Length 1 to 80  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **location** *keyword*

Synopsis CPM flash card where the information is stored  
Context **configure** [system persistence nat-port-forwarding location](#) *keyword*  
Tree [location](#)  
Options cf1, cf2, cf3  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **options**

Synopsis Enter the **options** context  
Context **configure** [system persistence options](#)  
Tree [options](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dhcp-lease-time-threshold** *number*

Synopsis DHCP lease time limit to be eligible for persistence  
Context **configure** [system persistence options dhcp-lease-time-threshold](#) *number*  
Tree [dhcp-lease-time-threshold](#)  
Range 1 to 631152000

|            |   |
|------------|---|
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **python-policy-cache**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>python-policy-cache</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">persistence</a> <a href="#">python-policy-cache</a> |
| Tree       | <a href="#">python-policy-cache</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">persistence</a> <a href="#">python-policy-cache</a> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

### **location** *keyword*

|            |   |
|------------|---|
| Synopsis   | CPM flash card where the information is stored  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">persistence</a> <a href="#">python-policy-cache</a> <a href="#">location</a> <i>keyword</i> |
| Tree       | <a href="#">location</a>  |
| Options    | cf1, cf2, cf3   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **subscriber-mgmt**

|          |   |
|----------|---|
| Synopsis | Enter the <b>subscriber-mgmt</b> context  |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">persistence</a> <a href="#">subscriber-mgmt</a> |
| Tree     | <a href="#">subscriber-mgmt</a>   |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

### **description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">system persistence subscriber-mgmt description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                       |

### **location** *keyword*

|            |   |
|------------|---|
| Synopsis   | CPM flash card where the information is stored  |
| Context    | <b>configure</b> <a href="#">system persistence subscriber-mgmt location</a> <i>keyword</i> |
| Tree       | <a href="#">location</a>  |
| Options    | cf1, cf2, cf3   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR                                     |

### **power-management** [power-zone](#) *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>power-management</b> list instance                                   |
| Context    | <b>configure</b> <a href="#">system power-management power-zone</a> <i>number</i> |
| Tree       | <a href="#">power-management</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS            |

### **power-zone** *number*

|          |   |
|----------|---|
| Synopsis | Power zone  |
| Context  | <b>configure</b> <a href="#">system power-management power-zone</a> <i>number</i> |
| Tree     | <a href="#">power-management</a>  |
| Range    | 1 to 2  |

---

|            |  |
|------------|--|
| Notes      | This element is part of a list key.                                    |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

### **mode** *keyword*

|            |   |
|------------|---|
| Synopsis   | Power capacity mode algorithm   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">power-management</a> <a href="#">power-zone</a> <i>number</i> <a href="#">mode</a> <i>keyword</i> |
| Tree       | <a href="#">mode</a>  |
| Options    | none, basic, advanced   |
| Default    | basic   |
| Introduced | 16.0.R1   |
| Platforms  | 7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS  |

### **power-safety-alert** *number*

|            |  |
|------------|--|
| Synopsis   | Power capacity to trigger a safety alert event   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">power-management</a> <a href="#">power-zone</a> <i>number</i> <a href="#">power-safety-alert</a> <i>number</i> |
| Tree       | <a href="#">power-safety-alert</a>   |
| Range      | 0 to 120000  |
| Units      | watts  |
| Default    | 0  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS   |

### **power-safety-level** *number*

|            |  |
|------------|--|
| Synopsis   | Minimum threshold to power off devices   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">power-management</a> <a href="#">power-zone</a> <i>number</i> <a href="#">power-safety-level</a> <i>number</i> |
| Tree       | <a href="#">power-safety-level</a>   |
| Range      | 0 to 100   |
| Units      | percent  |
| Default    | 100  |
| Introduced | 16.0.R1  |
| Platforms  | 7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS   |



**ptp**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>ptp</b> context   |
| Context     | <b>configure system ptp</b>  |
| Tree        | <a href="#">ptp</a>  |
| Description | Commands in this context configure Precision Time Control (PTP) parameters based on <i>IEEE 1588-2008, Precision Time Protocol</i> .<br><br>The context is only supported on control assemblies that support 1588. |
| Introduced  | 21.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of PTP                                  |
| Context    | <b>configure system ptp admin-state</b> <i>keyword</i>       |
| Tree       | <a href="#">admin-state</a>                                  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 21.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

**alternate-profile** [[name](#)] *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>alternate-profile</b> list instance   |
| Context        | <b>configure system ptp alternate-profile</b> <i>string</i>  |
| Tree           | <a href="#">alternate-profile</a>  |
| Description    | Commands in this context create an alternate profile configuration for use in PTP messaging.<br><br>The alternate profile can be used at the edge of a network to provide PTP time or frequency distribution outward to external PTP clocks.<br><br>The alternate profile cannot be deleted if it is configured as the profile under a PTP port. |
| Max. Instances | 6  |
| Introduced     | 22.7.R1  |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**[name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Alternate profile name   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">ptp</a> <a href="#">alternate-profile</a> <i>string</i>                              |
| Tree          | <a href="#">alternate-profile</a>  |
| Description   | This command configures an alternate profile name.<br>The strings "Primary" and "primary" cannot be used for the alternate-profile name. |
| String Length | 1 to 64  |
| Notes         | This element is part of a list key.  |
| Introduced    | 22.7.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the alternate PTP profile   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">ptp</a> <a href="#">alternate-profile</a> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 22.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**domain** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Alternate profile PTP domain number   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">ptp</a> <a href="#">alternate-profile</a> <i>string</i> <b>domain</b> <i>number</i>                       |
| Tree        | <a href="#">domain</a>  |
| Description | This command configures the domain number of the alternate profile. This value can only be changed when the alternate profile is <b>admin-state disable</b> . |
| Range       | 0 to 255  |
| Default     | 24  |
| Introduced  | 22.7.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## log-announce-interval *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | PTP announce message interval in log form  |
| Context     | <b>configure system ptp alternate-profile</b> <i>string</i> <b>log-announce-interval</b> <i>number</i>   |
| Tree        | <b>log-announce-interval</b>   |
| Description | <p>This command configures the announce message interval used for multicast messages within the alternate profile.</p> <p>For multicast messages used on PTP Ethernet ports, this command configures the message interval used for announce messages transmitted by the local node.</p> <p>This value has no impact on the interval used for the BTCA, which is controlled by the value defined for the primary profile.</p> |
| Range       | -3 to 4  |
| Default     | -3   |
| Introduced  | 22.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## profile *keyword*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Standard based profile used within an alternate profile   |
| Context     | <b>configure system ptp alternate-profile</b> <i>string</i> <b>profile</b> <i>keyword</i>   |
| Tree        | <b>profile</b>  |
| Description | <p>This command specifies the standard based profile that is used as the basis for the alternate profile.</p> <p>This setting controls the contents of PTP messages sent on ports and peers using this alternate profile.</p> <p>This value can only be changed when the alternate profile is <b>admin-state disable</b>.</p> |
| Options     | g8265dot1-2010, ieee1588-2008, g8275dot1-2014, g8275dot2-2016   |
| Default     | g8275dot1-2014  |

|            |  |
|------------|--|
| Introduced | 22.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **announce-receipt-timeout** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | Expired intervals count before timeout event declared  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">ptp</a> <a href="#">announce-receipt-timeout</a> <i>number</i>   |
| Tree        | <a href="#">announce-receipt-timeout</a>   |
| Description | This command configures the number of Announce message intervals that must expire with no received Announce messages before declaring an ANNOUNCE_RECEIPT_TIMEOUT event. |
| Range       | 2 to 10  |
| Default     | 3  |
| Introduced  | 21.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **clock-type** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Clock type  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">ptp</a> <a href="#">clock-type</a> <i>keyword</i> |
| Tree       | <a href="#">clock-type</a>  |
| Options    | slave-only, master-only, boundary   |
| Introduced | 21.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**domain** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | PTP domain  |
| Context     | <b>configure system ptp domain</b> <i>number</i>  |
| Tree        | <a href="#">domain</a>  |
| Description | <p>This command configures the PTP domain. The default and valid range of the domain depend on the configured PTP profile.</p> <ul style="list-style-type: none"> <li>• IEEE 1588-2008 - domain range of 0 to 255 (default 0)</li> <li>• G.8265.1 - domain range of 0 to 255 (default 4)</li> <li>• G.8275.1 - domain range of 24 to 43 (default 24)</li> <li>• G.8275.2 - domain range of 0 to 255 (default 44)</li> </ul> |
| Range       | 0 to 255  |
| Introduced  | 21.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**local-priority** *number*

|             |  |
|-------------|--|
| Synopsis    | PTP clock local priority   |
| Context     | <b>configure system ptp local-priority</b> <i>number</i>   |
| Tree        | <a href="#">local-priority</a>   |
| Description | <p>This command configures the local priority used to choose between PTP time Transmitters in the best timeTransmitter clock algorithm (BTCA). This setting applies when the PTP profile is either configured for G.8275.1 or G.8275.2 and is ignored for any other profile.</p> <p>For G.8275.1 or G.8275.2, this command configures the localPriority parameter associated with the local clock (<b>ptp</b> context). See G.8275.1 or G.8275.2 for detailed information.</p> |
| Range       | 1 to 255   |
| Default     | 128  |
| Introduced  | 21.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**log-announce-interval** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | Announce message interval in log form   |
| Context     | <b>configure system ptp log-announce-interval</b> <i>number</i>   |
| Tree        | <a href="#">log-announce-interval</a>   |
| Description | <p>This command configures the Announce message interval used for both unicast and multicast messages.</p> <p>For unicast messages, the Announce message interval is requested during unicast negotiation to any peer. This controls the Announce message rate sent from remote peers to the local node. It does not affect the announce message rate that may be sent from the local node to remote peers. Remote peers may request an Announce message rate within the acceptable grant range.</p> <p>For multicast messages used on PTP Ethernet ports, this command specifies the message interval used for Announce messages transmitted by the local node.</p> <p>This value also defines the interval between executions of the BTCA within the node.</p> <p>To minimize BTCA driven reconfigurations, IEEE recommends that the announce interval should be consistent across the entire 1588 network.</p> |
| Range       | -3 to 4   |
| Introduced  | 21.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**network-type** *keyword*

|             |   |
|-------------|---|
| Synopsis    | PTP network type  |
| Context     | <b>configure system ptp network-type</b> <i>keyword</i>   |
| Tree        | <a href="#">network-type</a>  |
| Description | <p>This command configures the codeset to be used for the encoding of QL values into PTP clockClass values and vice versa when the profile is configured for G.8265.1 or G.8275.2.</p> <p>This setting only applies to the range of values observed in the clockClass values transmitted out of the node in Announce messages. The router supports the reception of any valid value in Table 1/G.8265.1 and Table 2/G.8275.2.</p> |
| Options     | sonet, sdh  |
| Default     | sdh   |
| Introduced  | 21.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**port [port-id] reference**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>port</b> list instance  |
| Context     | <b>configure system ptp port reference</b>   |
| Tree        | <b>port</b>  |
| Description | <p>Commands in this context configure PTP over Ethernet on the physical port. The PTP process transmits and receives PTP messages through the port using Ethernet encapsulation (as opposed to UDP/IPv4 encapsulation).</p> <p>Frames are transmitted with no VLAN tags, even if the port is configured for dot1q or qinq modes for encap-type. The received frames from the external PTP clock must also be untagged.</p> <p>Two reserved multicast addresses are allocated for PTP messages (see Annex F IEEE Std 1588-2008). Either address can be configured for the PTP messages sent through the port.</p> <p>A PTP port cannot be created if the PTP profile is configured for G.8265.1.</p> <p>If the port supports 1588 port-based timestamping, Synchronous Ethernet must be enabled on the MDA when PTP over Ethernet is enabled.</p> <p>De-provisioning of the card or MDA containing the specified port is not permitted while the port is configured within PTP.</p> <p>Changing the encapsulation or the port type of the Ethernet port is not permitted when PTP Ethernet Multicast operation is configured on the port.</p> <p>To allocate an Ethernet satellite client port as a PTP port, the Ethernet satellite must first be enabled for the transparent clock function. For more information, see the <b>configure satellite ethernet-satellite ptp-tc</b> command.</p> <p>The SyncE/1588 ports of the CPM and CCMs can be specified as PTP ports. These use the 'A/3' and 'B/3' designation and both must be specified as two PTP ports if both are used. The active CPM sends and receives messages on both ports if they are specified and enabled.</p> |
| Introduced  | 21.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**[port-id] reference**

|            |  |
|------------|--|
| Synopsis   | Ethernet PTP port ID                       |
| Context    | <b>configure system ptp port reference</b> |
| Tree       | <b>port</b>                                |
| Reference  | <b>configure port string</b>               |
| Notes      | This element is part of a list key.        |
| Introduced | 21.7.R1                                    |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **address string**

Synopsis Destination MAC address of the transmitted PTP messages

Context **configure system ptp port reference address string**

Tree [address](#)

Description This command specifies the destination MAC address of the transmitted PTP messages. IEEE Std 1588-2008 Annex F defines two reserved addresses for 1588 messages, which include:

- **01-1B-19-00-00-00** — all except the peer delay mechanism messages
- **01-80-C2-00-00-0E** — peer delay mechanism messages

Both addresses are supported for reception, independent of the address configured by this command.

Default 01:1B:19:00:00:00

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **admin-state keyword**

Synopsis Administrative state of the PTP port

Context **configure system ptp port reference admin-state keyword**

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **alternate-profile reference**

Synopsis Alternate profile for the PTP port

Context **configure system ptp port reference alternate-profile reference**

Tree [alternate-profile](#)

Description This command creates the alternate profile that is used in communications with the port or peer. If no alternate profile is specified, the primary profile is used.

Reference **configure system ptp alternate-profile string**



|            |  |
|------------|--|
| Introduced | 22.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **local-priority** *number*

|             |   |
|-------------|---|
| Synopsis    | PTP port local priority   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">ptp port</a> <i>reference</i> <a href="#">local-priority</a> <i>number</i>  |
| Tree        | <a href="#">local-priority</a>  |
| Description | <p>This command configures the local priority used to choose between PTP time Transmitters in the best timeTransmitter clock algorithm (BTCA). This setting applies when the PTP profile is either configured for G.8275.1 or G.8275.2 and is ignored for any other profile.</p> <p>For G.8275.1 or G.8275.2, this command configures the localPriority parameter associated with the Announce messages received from the external clocks (<b>ptp port</b> context). See G.8275.1 or G.8275.2 for detailed information.</p> |
| Range       | 1 to 255  |
| Default     | 128   |
| Introduced  | 21.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **log-delay-interval** *number*

|             |  |
|-------------|--|
| Synopsis    | Minimum interval for Delay_Req messages in log form  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">ptp port</a> <i>reference</i> <a href="#">log-delay-interval</a> <i>number</i>   |
| Tree        | <a href="#">log-delay-interval</a>   |
| Description | <p>This command configures the minimum interval used for multicast Delay_Req messages for the port. For ports in a slave state, the interval is used, unless the parent port indicates a longer interval. For a port in master state, the interval is advertised to external slave ports as the minimum acceptable interval for Delay_Req messages from the slave ports.</p> <p>The router supports the 1588 standard requirement for a port in slave state to check the logMessageInterval field of received multicast Delay_Resp messages. If the value of the logMessageInterval field of the messages is greater than the value configured locally for the generation of Delay_Req messages, the slave must use the longer interval for the generation of Delay_Req messages.</p> <p>The interval value is specified as the logarithm to the base 2.</p> |
| Range       | -6 to 0  |
| Introduced  | 21.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **log-sync-interval** *number*

|             |  |
|-------------|--|
| Synopsis    | Interval for transmission of Sync messages in log form   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">ptp</a> <a href="#">port</a> <i>reference</i> <a href="#">log-sync-interval</a> <i>number</i>  |
| Tree        | <a href="#">log-sync-interval</a>  |
| Description | This command configures the interval used for Sync messages transmitted by the local node when the port is in master state.<br><br>The interval value is specified as the logarithm to the base 2. |
| Range       | -6 to 0  |
| Introduced  | 21.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **master-only** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Restrict the local port to master state  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">ptp</a> <a href="#">port</a> <i>reference</i> <a href="#">master-only</a> <i>boolean</i>   |
| Tree        | <a href="#">master-only</a>  |
| Description | When configured to <b>true</b> , the local port is restricted to master state only, ensuring that the system does not obtain synchronization from attached external devices.<br><br>This command is supported only when the PTP profile is set for G.8275.1 or G.8275.2. |
| Introduced  | 21.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **priority1** *number*

|             |  |
|-------------|--|
| Synopsis    | Priority1 of the local clock   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">ptp</a> <a href="#">priority1</a> <i>number</i>  |
| Tree        | <a href="#">priority1</a>  |
| Description | This command configures the priority1 parameter of the local clock. The setting is used when the profile is configured for IEEE 1588-2008.<br><br>This value is used by the Best Master Clock Algorithm to determine which clock should provide timing for the network and is advertised in Announce messages. |
| Range       | 0 to 255   |
| Default     | 128  |
| Introduced  | 21.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**priority2** *number*

|             |   |
|-------------|---|
| Synopsis    | Priority2 of the local clock  |
| Context     | <b>configure system ptp priority2</b> <i>number</i>   |
| Tree        | <a href="#">priority2</a>   |
| Description | This command configures the priority2 parameter of the local clock. The setting is used when the profile is configured for IEEE 1588-2008, G.8275.1, or G.8275.2.<br><br>This value is used by the Best Master Clock algorithm to determine which clock should provide timing for the network and is advertised in Announce messages. |
| Range       | 0 to 255  |
| Default     | 128   |
| Introduced  | 21.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**profile** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|             |   |
|-------------|---|
| Synopsis    | PTP profile   |
| Context     | <b>configure system ptp profile</b> <i>keyword</i>  |
| Tree        | <a href="#">profile</a>   |
| Description | This command configures the profile to be used for the internal PTP clock. It defines the Best timeTransmitter Clock Algorithm (BTCA) behavior.<br><br>Profile changes may affect the settings of other configuration elements, such as the clock type and default settings for the delay interval, announce interval, and the Sync interval.<br><br>The following clock types are supported for the indicated profiles: <ul style="list-style-type: none"> <li>• G.8265.1: slave only, master only</li> <li>• IEEE 1588 2008: slave only, master only, boundary</li> <li>• G.8275.1: slave only, boundary, master only (master only, only if the platform includes an embedded GNSS receiver)</li> <li>• G.8275.2: slave only, boundary, master only (master only, only if the platform includes an embedded GNSS receiver)</li> </ul> |

|            |   |
|------------|---|
| Options    | g8265dot1-2010, ieee1588-2008, g8275dot1-2014, g8275dot2-2016 |
| Introduced | 21.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## ptsf

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>ptsf</b> context  |
| Context     | <b>configure system ptp ptsf</b>   |
| Tree        | <a href="#">ptsf</a>   |
| Description | Commands in this context configure the attributes of Packet Timing Signal Fail (PTSF). |
| Introduced  | 21.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                           |

## monitor-ptsf-unusable

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>monitor-ptsf-unusable</b> context   |
| Context     | <b>configure system ptp ptsf monitor-ptsf-unusable</b>   |
| Tree        | <a href="#">monitor-ptsf-unusable</a>  |
| Description | <p>Commands in this context configure monitoring of neighbor clocks for the PTSF-unusable state (condition) when the profile is set to g8275dot1-2014.</p> <p>When administratively enabled, the local clock monitors the noise level of PTP event messages between external neighbor PTP ports and the local clock. If it detects a high variation in the network path between the external neighbor port and the local port, it considers the neighbor port unusable. Announce messages from the neighbor are discarded and excluded from the BTCA and the port cannot be selected as the parent clock. The unusable condition must be manually cleared.</p> <p>When administratively disabled, the monitor PTSF function of the PTP clock clears PTSF-unusable states from all neighbor PTP ports. If no PTP messages are received from a neighbor for 15 minutes, the neighbor information is purged and the PTSF-unusable state is cleared.</p> |
| Introduced  | 21.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## admin-state *keyword*

|          |   |
|----------|---|
| Synopsis | Administrative state of PTSF unusable monitoring                                  |
| Context  | <b>configure system ptp ptsf monitor-ptsf-unusable admin-state <i>keyword</i></b> |
| Tree     | <a href="#">admin-state</a>   |

|            |  |
|------------|--|
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 21.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **router** [[router-instance](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>router</b> list instance  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">ptp</a> <a href="#">router</a> <i>string</i> |
| Tree       | <a href="#">router</a>   |
| Introduced | 21.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                                     |

### **[router-instance]** *string*

|            |  |
|------------|--|
| Synopsis   | Router name or VPRN service name   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">ptp</a> <a href="#">router</a> <i>string</i> |
| Tree       | <a href="#">router</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 21.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                                     |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of PTP on the router instance  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">ptp</a> <a href="#">router</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 21.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **peer** [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

|          |                                     |
|----------|-------------------------------------|
| Synopsis | Enter the <b>peer</b> list instance |
|----------|-------------------------------------|

|             |   |
|-------------|---|
| Context     | <b>configure system ptp router</b> <i>string peer</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree        | <a href="#">peer</a>  |
| Description | Commands in this context configure a remote PTP peer.   |
| Introduced  | 21.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

|             |   |
|-------------|---|
| Synopsis    | IP address of the remote PTP peer   |
| Context     | <b>configure system ptp router</b> <i>string peer</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )               |
| Tree        | <a href="#">peer</a>  |
| Description | This command specifies the IP address of the remote PTP peer.<br>In the current release, the system supports PTP using IPv4 only. |
| Notes       | This element is part of a list key.   |
| Introduced  | 21.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the PTP peer  |
| Context    | <b>configure system ptp router</b> <i>string peer</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )<br><a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 21.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **local-priority** *number*

|             |  |
|-------------|--|
| Synopsis    | PTP peer local priority  |
| Context     | <b>configure system ptp router</b> <i>string peer</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )<br><a href="#">local-priority</a> <i>number</i>    |
| Tree        | <a href="#">local-priority</a>   |
| Description | This command configures the local priority for the peer, which is used to choose between PTP timeTransmitters in the best timeTransmitter clock algorithm (BTCA). This |

setting applies when the PTP profile is configured for G.8265.1, G.8275.1, or G.8275.2 and is ignored for any other profile.

For G.8265.1, this command configures the priority used to choose between time Transmitter clocks with the same quality (see G.8265.1 for more details).

For G.8275.1 or G.8275.2, this command configures the localPriority parameter associated with the Announce messages received from the external clocks (**ptp router peer** context). See G.8275.1 or G.8275.2 for detailed information.

|            |  |
|------------|--|
| Range      | 1 to 255   |
| Default    | 128  |
| Introduced | 21.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### log-sync-interval *number*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|             |  |
|-------------|--|
| Synopsis    | PTP peer interval for Sync messages in log form  |
| Context     | <b>configure system ptp router</b> <i>string peer (ipv4-address-no-zone   ipv6-address-no-zone) log-sync-interval number</i>   |
| Tree        | <a href="#">log-sync-interval</a>  |
| Description | This command configures the message interval used for Sync and Delay_Resp messages that are requested during unicast negotiation to the peer. The setting controls messages sent from remote peers to the local node but the packet rate from the local node to remote peers is not affected. Remote peers may request a packet rate within the acceptable range.<br><br>The interval value is specified as the logarithm to the base 2. |
| Range       | -6 to 0  |
| Introduced  | 21.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### peer-limit *number*

|             |   |
|-------------|---|
| Synopsis    | Number of discovered peers allowed for routing instance   |
| Context     | <b>configure system ptp router</b> <i>string peer-limit number</i>  |
| Tree        | <a href="#">peer-limit</a>  |
| Description | This command specifies the maximum number of discovered peers permitted within the routing instance. This ensures that a routing instance does not consume all the possible |

discovered peers and prevents the routing instance from blocking discovered peers in other routing instances.

The sum of all peer limit values for all routing instances cannot exceed the maximum number of discovered peers supported by the system.

|            |  |
|------------|--|
| Range      | 0 to 512   |
| Introduced | 21.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **tx-while-sync-uncertain** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Send Announce messages while clock is unsynchronized   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">ptp</a> <b>tx-while-sync-uncertain</b> <i>boolean</i>  |
| Tree        | <a href="#">tx-while-sync-uncertain</a>  |
| Description | <p>When configured to <b>true</b>, the local PTP clock transmits Announce messages to downstream clocks to indicate it has not yet stabilized on the recovered synchronization source (upstream clocks or GM clock). While the PTP clock is unsynchronized, the Sync Uncertain state is true.</p> <p>When configured to <b>false</b>, the local PTP clock does not send Announce messages to downstream clocks to indicate it is not synchronized to a valid timing source. If the Sync Uncertain state of the clock is true while this command is configured to <b>false</b>, unicast negotiation grant requests are not granted and current grants are canceled.</p> |
| Default     | true   |
| Introduced  | 22.2.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **script-control**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>script-control</b> context                                |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">script-control</a> |
| Tree       | <a href="#">script-control</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **script** [[script-name](#)] *string* **owner** *string*

|          |  |
|----------|--|
| Synopsis | Enter the <b>script</b> list instance  |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">script-control</a> <a href="#">script</a> <i>string</i> <b>owner</b> <i>string</i> |
| Tree     | <a href="#">script</a>   |



|                |         |
|----------------|---------|
| Max. Instances | 1500    |
| Introduced     | 16.0.R1 |
| Platforms      | All     |

**[script-name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Script name   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">script-control</a> <a href="#">script</a> <i>string</i> <a href="#">owner</a> <i>string</i> |
| Tree          | <a href="#">script</a>  |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**owner** *string*

|               |   |
|---------------|---|
| Synopsis      | Script owner  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">script-control</a> <a href="#">script</a> <i>string</i> <a href="#">owner</a> <i>string</i>   |
| Tree          | <a href="#">script</a>  |
| Description   | This command configures the owner to be associated with the script. The owner is optional and "TIMOS CLI" is used if an owner is not specified.<br><br>The owner is an arbitrary name and not necessarily a user name. Commands in the scripts are not authorized against the owner. The <b>configure system security cli-script authorization x cli-user</b> command determines the user context against which commands in the scripts are authorized. |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**admin-state** *keyword*

|          |  |
|----------|--|
| Synopsis | Administrative state of the script   |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">script-control</a> <a href="#">script</a> <i>string</i> <a href="#">owner</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree     | <a href="#">admin-state</a>  |

|            |                 |
|------------|-----------------|
| Options    | enable, disable |
| Default    | disable         |
| Introduced | 16.0.R1         |
| Platforms  | All             |

### **description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">script-control</a> <a href="#">script</a> <i>string</i> <a href="#">owner</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

### **location** *string*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Script location  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">script-control</a> <a href="#">script</a> <i>string</i> <a href="#">owner</a> <i>string</i> <a href="#">location</a> <i>string</i> |
| Tree          | <a href="#">location</a>   |
| String Length | 1 to 255   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

### **script-policy** [[policy-name](#)] *string* [owner](#) *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>script-policy</b> list instance   |
| Context        | <b>configure</b> <a href="#">system</a> <a href="#">script-control</a> <a href="#">script-policy</a> <i>string</i> <a href="#">owner</a> <i>string</i> |
| Tree           | <a href="#">script-policy</a>  |
| Max. Instances | 1500   |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

**[policy-name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Script policy name  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">script-control</a> <a href="#">script-policy</a> <i>string</i> <b>owner</b> <i>string</i> |
| Tree          | <a href="#">script-policy</a>   |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**owner** *string*

|               |   |
|---------------|---|
| Synopsis      | Script policy owner   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">script-control</a> <a href="#">script-policy</a> <i>string</i> <b>owner</b> <i>string</i>   |
| Tree          | <a href="#">script-policy</a>   |
| Description   | <p>This command configures the owner to be associated with the script policy. The owner is optional and "TiMOS CLI" is used if an owner is not specified.</p> <p>The owner is an arbitrary name and not necessarily a user name. Commands in the scripts are not authorized against the owner. The <b>configure system security cli-script authorization x cli-user</b> command determines the user context against which commands in the scripts are authorized.</p> |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the script policy   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">script-control</a> <a href="#">script-policy</a> <i>string</i> <b>owner</b> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**expire-time** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Maximum amount of time to keep a run history status  |
| Context    | <b>configure</b> <b>system</b> <b>script-control</b> <b>script-policy</b> <i>string</i> <b>owner</b> <i>string</i> <b>expire-time</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <b>expire-time</b>   |
| Range      | 0 to 21474836  |
| Units      | seconds  |
| Options    | forever  |
| Default    | 3600   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**lifetime** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Maximum amount of time the script may run   |
| Context    | <b>configure</b> <b>system</b> <b>script-control</b> <b>script-policy</b> <i>string</i> <b>owner</b> <i>string</i> <b>lifetime</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <b>lifetime</b>   |
| Range      | 0 to 21474836   |
| Units      | seconds   |
| Options    | forever   |
| Default    | 3600  |
| Notes      | The following elements are part of a choice: ( <b>lifetime</b> and <b>script</b> ) or ( <b>python-lifetime</b> and <b>python-script</b> ).                            |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**lock-override** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow EHS/CRON script to break database explicit lock  |
| Context    | <b>configure</b> <b>system</b> <b>script-control</b> <b>script-policy</b> <i>string</i> <b>owner</b> <i>string</i> <b>lock-override</b> <i>boolean</i> |
| Tree       | <b>lock-override</b>   |
| Default    | false  |
| Introduced | 19.10.R1   |

Platforms All

### **max-completed** *number*

Synopsis Maximum number of script history status entries kept

Context **configure** [system](#) [script-control](#) [script-policy](#) *string* [owner](#) *string* **max-completed** *number*

Tree [max-completed](#)

Range 1 to 1500

Default 1

Introduced 16.0.R1

Platforms All

### **python-lifetime** *number*

Synopsis Maximum time the Python application can run

Context **configure** [system](#) [script-control](#) [script-policy](#) *string* [owner](#) *string* **python-lifetime** *number*

Tree [python-lifetime](#)

Range 30 to 86400

Units seconds

Notes The following elements are part of a choice: (**lifetime** and **script**) or (**python-lifetime** and **python-script**).

Introduced 21.10.R1

Platforms All

### **python-script**

Synopsis Enter the **python-script** context

Context **configure** [system](#) [script-control](#) [script-policy](#) *string* [owner](#) *string* **python-script**

Tree [python-script](#)

Notes The following elements are part of a choice: (**lifetime** and **script**) or (**python-lifetime** and **python-script**).

Introduced 21.10.R1

Platforms All

## name *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Python application name   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">script-control</a> <a href="#">script-policy</a> <i>string</i> <b>owner</b> <i>string</i> <a href="#">python-script</a> <i>name reference</i> |
| Tree       | <a href="#">name</a>  |
| Reference  | <b>configure</b> <a href="#">python</a> <a href="#">python-script</a> <i>string</i>   |
| Introduced | 21.10.R1  |
| Platforms  | All   |

## results *string*

|               |   |
|---------------|---|
| Synopsis      | Location to receive CLI output of a script run  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">script-control</a> <a href="#">script-policy</a> <i>string</i> <b>owner</b> <i>string</i> <a href="#">results</a> <i>string</i> |
| Tree          | <a href="#">results</a>   |
| String Length | 1 to 255  |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

## script

|            |  |
|------------|--|
| Synopsis   | Enter the <b>script</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">script-control</a> <a href="#">script-policy</a> <i>string</i> <b>owner</b> <i>string</i> <a href="#">script</a> |
| Tree       | <a href="#">script</a>   |
| Notes      | The following elements are part of a choice: ( <b>lifetime</b> and <b>script</b> ) or ( <b>python-lifetime</b> and <b>python-script</b> ).                           |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**name** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Script name  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">script-control</a> <a href="#">script-policy</a> <i>string</i> <a href="#">owner</a> <i>string</i> <a href="#">script</a> <a href="#">name</a> <i>string</i> |
| Tree          | <a href="#">name</a>   |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**owner** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Script owner  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">script-control</a> <a href="#">script-policy</a> <i>string</i> <a href="#">owner</a> <i>string</i> <a href="#">script</a> <a href="#">owner</a> <i>string</i> |
| Tree          | <a href="#">owner</a>   |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**security**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>security</b> context   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a>  |
| Tree        | <a href="#">security</a>  |
| Description | <p>Commands in this context configure central security settings such as DDoS protection, users, authorization profiles, and certificates.</p> <p>Access to these commands should be restricted to highly trusted users and device administrators.</p> |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**aaa**

|            |                                      |
|------------|--------------------------------------|
| Synopsis   | Enter the <b>aaa</b> context         |
| Context    | <b>configure system security aaa</b> |
| Tree       | <b>aaa</b>                           |
| Introduced | 16.0.R1                              |
| Platforms  | All                                  |

**cli-session-group** [**cli-session-group-name**] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>cli-session-group</b> list instance              |
| Context        | <b>configure system security aaa cli-session-group string</b> |
| Tree           | <b>cli-session-group</b>                                      |
| Max. Instances | 16  |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

**[cli-session-group-name]** *string*

|               |   |
|---------------|---|
| Synopsis      | CLI session group name  |
| Context       | <b>configure system security aaa cli-session-group string</b> |
| Tree          | <b>cli-session-group</b>                                      |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.                           |
| Introduced    | 16.0.R2   |
| Platforms     | All   |

**combined-max-sessions** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of concurrent SSH and Telnet sessions                                       |
| Context    | <b>configure system security aaa cli-session-group string combined-max-sessions number</b> |
| Tree       | <b>combined-max-sessions</b>   |
| Range      | 0 to 50  |
| Introduced | 16.0.R1  |



Platforms All

### **description** *string*

Synopsis Text description  
Context **configure** [system](#) [security](#) [aaa](#) [cli-session-group](#) *string* [description](#) *string*  
Tree [description](#)  
String Length 1 to 80  
Introduced 16.0.R1  
Platforms All

### **ssh-max-sessions** *number*

Synopsis Maximum number of concurrent SSH sessions  
Context **configure** [system](#) [security](#) [aaa](#) [cli-session-group](#) *string* [ssh-max-sessions](#) *number*  
Tree [ssh-max-sessions](#)  
Range 0 to 50  
Introduced 16.0.R1  
Platforms All

### **telnet-max-sessions** *number*

Synopsis Maximum number of concurrent Telnet sessions  
Context **configure** [system](#) [security](#) [aaa](#) [cli-session-group](#) *string* [telnet-max-sessions](#) *number*  
Tree [telnet-max-sessions](#)  
Range 0 to 50  
Introduced 16.0.R1  
Platforms All

### **health-check** (*number* | *keyword*)

Synopsis Polling interval of RADIUS, TACACS+, and LDAP servers  
Context **configure** [system](#) [security](#) [aaa](#) [health-check](#) (*number* | *keyword*)  
Tree [health-check](#)  
Range 6 to 1500

---

|            |         |
|------------|---------|
| Units      | seconds |
| Options    | none    |
| Default    | 30      |
| Introduced | 16.0.R1 |
| Platforms  | All     |

## local-profiles

|            |   |
|------------|---|
| Synopsis   | Enter the <b>local-profiles</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> |
| Tree       | <a href="#">local-profiles</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## profile [[user-profile-name](#)] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>profile</b> list instance  |
| Context        | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> |
| Tree           | <a href="#">profile</a>   |
| Max. Instances | 128   |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

## [\[user-profile-name\]](#) *string*

|               |   |
|---------------|---|
| Synopsis      | User profile name   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> |
| Tree          | <a href="#">profile</a>   |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**cli-session-group** *reference*

|            |  |
|------------|--|
| Synopsis   | CLI session group to which the profile belongs   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">cli-session-group</a> <i>reference</i> |
| Tree       | <a href="#">cli-session-group</a>  |
| Reference  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">cli-session-group</a> <i>string</i>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**combined-max-sessions** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum number of concurrent SSH and Telnet sessions  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">combined-max-sessions</a> <i>number</i> |
| Tree       | <a href="#">combined-max-sessions</a>   |
| Range      | 0 to 50   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**default-action** *keyword*

|            |   |
|------------|---|
| Synopsis   | Action for non-matching entry   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">default-action</a> <i>keyword</i> |
| Tree       | <a href="#">default-action</a>  |
| Options    | deny-all, permit-all, none, read-only-all   |
| Default    | none  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**entry** [[entry-id](#)] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>entry</b> list instance  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">entry</a> <i>number</i> |
| Tree       | <a href="#">entry</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[entry-id]** *number*

|            |  |
|------------|--|
| Synopsis   | User profile entry ID  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <i>entry</i> <i>number</i> |
| Tree       | <a href="#">entry</a>  |
| Range      | 1 to 9999  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**action** *keyword*

|            |   |
|------------|---|
| Synopsis   | Action when a user command matches the entry  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <i>entry</i> <i>number</i> <i>action</i> <i>keyword</i> |
| Tree       | <a href="#">action</a>  |
| Options    | deny, permit, none, read-only   |
| Default    | none  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <i>entry</i> <i>number</i> <i>description</i> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**match** *string*

|          |   |
|----------|---|
| Synopsis | Command to match the entry  |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <i>entry</i> <i>number</i> <i>match</i> <i>string</i> |
| Tree     | <a href="#">match</a>   |

|               |          |
|---------------|----------|
| String Length | 1 to 255 |
| Introduced    | 16.0.R1  |
| Platforms     | All      |

## grpc

|            |   |
|------------|---|
| Synopsis   | Enter the <b>grpc</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <b>grpc</b> |
| Tree       | <a href="#">grpc</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## rpc-authorization

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>rpc-authorization</b> context   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <b>grpc</b> <b>rpc-authorization</b> |
| Tree        | <a href="#">rpc-authorization</a>  |
| Description | Commands in this context control the authorization of each RPC in gRPC interfaces.   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

## gnmi-capabilities *keyword*

|            |  |
|------------|--|
| Synopsis   | gNMI Capabilities RPC authorization  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <b>grpc</b> <b>rpc-authorization</b> <b>gnmi-capabilities</b> <i>keyword</i> |
| Tree       | <a href="#">gnmi-capabilities</a>  |
| Options    | permit, deny   |
| Default    | permit   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## gnmi-get *keyword*

|          |                            |
|----------|----------------------------|
| Synopsis | gNMI Get RPC authorization |
|----------|----------------------------|

|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">system security aaa local-profiles profile</a> <i>string</i> <a href="#">grpc rpc-authorization gnmi-get</a> <i>keyword</i> |
| Tree       | <a href="#">gnmi-get</a>   |
| Options    | permit, deny   |
| Default    | permit   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **gnmi-set** *keyword*

|            |  |
|------------|--|
| Synopsis   | gNMI Set RPC authorization   |
| Context    | <b>configure</b> <a href="#">system security aaa local-profiles profile</a> <i>string</i> <a href="#">grpc rpc-authorization gnmi-set</a> <i>keyword</i> |
| Tree       | <a href="#">gnmi-set</a>   |
| Options    | permit, deny   |
| Default    | permit   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **gnmi-subscribe** *keyword*

|            |  |
|------------|--|
| Synopsis   | gNMI Subscribe RPC authorization   |
| Context    | <b>configure</b> <a href="#">system security aaa local-profiles profile</a> <i>string</i> <a href="#">grpc rpc-authorization gnmi-subscribe</a> <i>keyword</i> |
| Tree       | <a href="#">gnmi-subscribe</a>   |
| Options    | permit, deny   |
| Default    | permit   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **gnoi-cert-mgmt-cangenerate** *keyword*

|          |  |
|----------|--|
| Synopsis | gNOI CanGenerateCSR RPC authorization  |
| Context  | <b>configure</b> <a href="#">system security aaa local-profiles profile</a> <i>string</i> <a href="#">grpc rpc-authorization gnoi-cert-mgmt-cangenerate</a> <i>keyword</i> |
| Tree     | <a href="#">gnoi-cert-mgmt-cangenerate</a>   |

---

|            |              |
|------------|--------------|
| Options    | permit, deny |
| Default    | deny         |
| Introduced | 19.10.R1     |
| Platforms  | All          |

### **gnoi-cert-mgmt-getcert** *keyword*

|            |  |
|------------|--|
| Synopsis   | gNOI GetCertificates RPC authorization   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">grpc</a> <a href="#">rpc-authorization</a> <a href="#">gnoi-cert-mgmt-getcert</a> <i>keyword</i> |
| Tree       | <a href="#">gnoi-cert-mgmt-getcert</a>   |
| Options    | permit, deny   |
| Default    | deny   |
| Introduced | 19.10.R1   |
| Platforms  | All  |

### **gnoi-cert-mgmt-install** *keyword*

|            |  |
|------------|--|
| Synopsis   | gNOI Install RPC authorization   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">grpc</a> <a href="#">rpc-authorization</a> <a href="#">gnoi-cert-mgmt-install</a> <i>keyword</i> |
| Tree       | <a href="#">gnoi-cert-mgmt-install</a>   |
| Options    | permit, deny   |
| Default    | deny   |
| Introduced | 19.10.R1   |
| Platforms  | All  |

### **gnoi-cert-mgmt-revoke** *keyword*

|            |   |
|------------|---|
| Synopsis   | gNOI RevokeCertificates RPC authorization   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">grpc</a> <a href="#">rpc-authorization</a> <a href="#">gnoi-cert-mgmt-revoke</a> <i>keyword</i> |
| Tree       | <a href="#">gnoi-cert-mgmt-revoke</a>   |
| Options    | permit, deny  |
| Default    | deny  |
| Introduced | 20.2.R1   |

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Platforms All

### **gnoi-cert-mgmt-rotate** *keyword*

Synopsis gNOI Rotate RPC authorization

Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [grpc](#) [rpc-authorization](#) [gnoi-cert-mgmt-rotate](#) *keyword*

Tree [gnoi-cert-mgmt-rotate](#)

Options permit, deny

Default deny

Introduced 19.10.R1

Platforms All

### **gnoi-file-get** *keyword*

Synopsis gNOI File Get RPC authorization

Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [grpc](#) [rpc-authorization](#) [gnoi-file-get](#) *keyword*

Tree [gnoi-file-get](#)

Options permit, deny

Default permit

Introduced 21.2.R1

Platforms All

### **gnoi-file-put** *keyword*

Synopsis gNOI File Put RPC authorization

Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [grpc](#) [rpc-authorization](#) [gnoi-file-put](#) *keyword*

Tree [gnoi-file-put](#)

Options permit, deny

Default permit

Introduced 21.2.R1

Platforms All



**gnoi-file-remove** *keyword*

|            |  |
|------------|--|
| Synopsis   | gNOI File Remove RPC authorization   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">grpc</a> <a href="#">rpc-authorization</a> <a href="#">gnoi-file-remove</a> <i>keyword</i> |
| Tree       | <a href="#">gnoi-file-remove</a>   |
| Options    | permit, deny   |
| Default    | permit   |
| Introduced | 21.2.R1  |
| Platforms  | All  |

**gnoi-file-stat** *keyword*

|            |  |
|------------|--|
| Synopsis   | gNOI File Stat RPC authorization   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">grpc</a> <a href="#">rpc-authorization</a> <a href="#">gnoi-file-stat</a> <i>keyword</i> |
| Tree       | <a href="#">gnoi-file-stat</a>   |
| Options    | permit, deny   |
| Default    | permit   |
| Introduced | 21.2.R1  |
| Platforms  | All  |

**gnoi-file-transfertoremove** *keyword*

|            |  |
|------------|--|
| Synopsis   | gNOI File TransferToRemote RPC authorization   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">grpc</a> <a href="#">rpc-authorization</a> <a href="#">gnoi-file-transfertoremove</a> <i>keyword</i> |
| Tree       | <a href="#">gnoi-file-transfertoremove</a>   |
| Options    | permit, deny   |
| Default    | permit   |
| Introduced | 21.7.R1  |
| Platforms  | All  |

**gnoi-system-cancelreboot** *keyword*

|          |  |
|----------|--|
| Synopsis | gNOI System CancelReboot RPC authorization |
|----------|--|

|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">system security aaa local-profiles profile</a> <i>string</i> <a href="#">grpc rpc-authorization gnoi-system-cancelreboot</a> <i>keyword</i> |
| Tree       | <a href="#">gnoi-system-cancelreboot</a>   |
| Options    | permit, deny   |
| Default    | deny   |
| Introduced | 20.5.R1  |
| Platforms  | All  |

### **gnoi-system-ping** *keyword*

|            |  |
|------------|--|
| Synopsis   | gNOI System Ping RPC authorization   |
| Context    | <b>configure</b> <a href="#">system security aaa local-profiles profile</a> <i>string</i> <a href="#">grpc rpc-authorization gnoi-system-ping</a> <i>keyword</i> |
| Tree       | <a href="#">gnoi-system-ping</a>   |
| Options    | permit, deny   |
| Default    | permit   |
| Introduced | 21.7.R1  |
| Platforms  | All  |

### **gnoi-system-reboot** *keyword*

|            |  |
|------------|--|
| Synopsis   | gNOI System Reboot RPC authorization   |
| Context    | <b>configure</b> <a href="#">system security aaa local-profiles profile</a> <i>string</i> <a href="#">grpc rpc-authorization gnoi-system-reboot</a> <i>keyword</i> |
| Tree       | <a href="#">gnoi-system-reboot</a>   |
| Options    | permit, deny   |
| Default    | deny   |
| Introduced | 20.5.R1  |
| Platforms  | All  |

### **gnoi-system-rebootstatus** *keyword*

|          |  |
|----------|--|
| Synopsis | gNOI System RebootStatus RPC authorization   |
| Context  | <b>configure</b> <a href="#">system security aaa local-profiles profile</a> <i>string</i> <a href="#">grpc rpc-authorization gnoi-system-rebootstatus</a> <i>keyword</i> |
| Tree     | <a href="#">gnoi-system-rebootstatus</a>   |

---

|            |              |
|------------|--------------|
| Options    | permit, deny |
| Default    | deny         |
| Introduced | 20.5.R1      |
| Platforms  | All          |

### **gnoi-system-setpackage** *keyword*

|            |  |
|------------|--|
| Synopsis   | gNOI System SetPackage RPC authorization   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">grpc</a> <a href="#">rpc-authorization</a> <a href="#">gnoi-system-setpackage</a> <i>keyword</i> |
| Tree       | <a href="#">gnoi-system-setpackage</a>   |
| Options    | permit, deny   |
| Default    | deny   |
| Introduced | 20.5.R1  |
| Platforms  | All  |

### **gnoi-system-switchcontrolprocessor** *keyword*

|            |  |
|------------|--|
| Synopsis   | gNOI System SwitchControlProcessor RPC authorization   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">grpc</a> <a href="#">rpc-authorization</a> <a href="#">gnoi-system-switchcontrolprocessor</a> <i>keyword</i> |
| Tree       | <a href="#">gnoi-system-switchcontrolprocessor</a>   |
| Options    | permit, deny   |
| Default    | deny   |
| Introduced | 20.5.R1  |
| Platforms  | All  |

### **gnoi-system-time** *keyword*

|            |  |
|------------|--|
| Synopsis   | gNOI System Time RPC authorization   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">grpc</a> <a href="#">rpc-authorization</a> <a href="#">gnoi-system-time</a> <i>keyword</i> |
| Tree       | <a href="#">gnoi-system-time</a>   |
| Options    | permit, deny   |
| Default    | permit   |
| Introduced | 21.7.R1  |

Platforms All

### **gnoi-system-traceroute** *keyword*

Synopsis gNOI System Traceroute RPC authorization

Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [grpc](#) [rpc-authorization](#) [gnoi-system-traceroute](#) *keyword*

Tree [gnoi-system-traceroute](#)

Options permit, deny

Default permit

Introduced 21.7.R1

Platforms All

### **md-cli-session** *keyword*

Synopsis gNOI MdCli Session RPC authorization

Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [grpc](#) [rpc-authorization](#) [md-cli-session](#) *keyword*

Tree [md-cli-session](#)

Options permit, deny

Default permit

Introduced 20.5.R1

Platforms All

### **rib-api-getversion** *keyword*

Synopsis RibApi GetVersion RPC authorization

Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [grpc](#) [rpc-authorization](#) [rib-api-getversion](#) *keyword*

Tree [rib-api-getversion](#)

Options permit, deny

Default permit

Introduced 16.0.R4

Platforms All

**rib-api-modify** *keyword*

|            |  |
|------------|--|
| Synopsis   | RibApi Modify RPC authorization  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">grpc</a> <a href="#">rpc-authorization</a> <a href="#">rib-api-modify</a> <i>keyword</i> |
| Tree       | <a href="#">rib-api-modify</a>   |
| Options    | permit, deny   |
| Default    | permit   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**li** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow lawful intercept profile ID   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">li</a> <i>boolean</i> |
| Tree       | <a href="#">li</a>  |
| Default    | false   |
| Introduced | 19.10.R1  |
| Platforms  | All   |

**netconf**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>netconf</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">netconf</a> |
| Tree       | <a href="#">netconf</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**base-op-authorization**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>base-op-authorization</b> context   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">netconf</a> <a href="#">base-op-authorization</a>                                    |
| Tree        | <a href="#">base-op-authorization</a>  |
| Description | <p>Commands in this context configure the permission to use NETCONF operations at the base operation level for the specified profile.</p> <p>The NETCONF operations are authorized by default in the built-in system-generated administrative profile.</p> |

Introduced 16.0.R1  
Platforms All

### **action** *boolean*

Synopsis Allow NETCONF action operation  
Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [netconf](#) [base-op-authorization](#) [action](#) *boolean*  
Tree [action](#)  
Default false  
Introduced 21.7.R1  
Platforms All

### **cancel-commit** *boolean*

Synopsis Allow NETCONF cancel-commit operation  
Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [netconf](#) [base-op-authorization](#) [cancel-commit](#) *boolean*  
Tree [cancel-commit](#)  
Default false  
Introduced 21.7.R1  
Platforms All

### **close-session** *boolean*

Synopsis Allow NETCONF close-session operation  
Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [netconf](#) [base-op-authorization](#) [close-session](#) *boolean*  
Tree [close-session](#)  
Default false  
Introduced 21.7.R1  
Platforms All

### **commit** *boolean*

Synopsis Allow NETCONF commit operation

|            |  |
|------------|--|
| Context    | <b>configure system security aaa local-profiles profile</b> <i>string</i> <b>netconf base-op-authorization</b><br><b>commit</b> <i>boolean</i> |
| Tree       | <b>commit</b>  |
| Default    | false  |
| Introduced | 21.7.R1  |
| Platforms  | All  |

**copy-config** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow NETCONF copy-config operation   |
| Context    | <b>configure system security aaa local-profiles profile</b> <i>string</i> <b>netconf base-op-authorization</b><br><b>copy-config</b> <i>boolean</i> |
| Tree       | <b>copy-config</b>  |
| Default    | false   |
| Introduced | 21.7.R1   |
| Platforms  | All   |

**create-subscription** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Allow NETCONF create-subscription operation  |
| Context     | <b>configure system security aaa local-profiles profile</b> <i>string</i> <b>netconf base-op-authorization</b><br><b>create-subscription</b> <i>boolean</i>  |
| Tree        | <b>create-subscription</b>   |
| Description | <p>When configured to <b>true</b>, this command enables the NETCONF create-subscription operation in the default profile.</p> <p>The <b>base-op-authorization create-subscription</b> configuration is not pre-emptive, which means that it is checked only at the time of the initial subscription. Configuration changes to <b>base-op-authorization</b> do not cancel any in-progress subscriptions and operators who successfully subscribed continue to receive messages.</p> <p>When configured to <b>false</b>, this command disables the NETCONF create-subscription operation in the default profile.</p> <p>The operation is enabled by default in the built-in system-generated administrative profile.</p> |
| Default     | false  |
| Introduced  | 21.7.R1  |
| Platforms   | All  |

**delete-config** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow NETCONF delete-config operation   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">netconf</a> <a href="#">base-op-authorization</a><br><a href="#">delete-config</a> <i>boolean</i> |
| Tree       | <a href="#">delete-config</a>   |
| Default    | false   |
| Introduced | 21.7.R1   |
| Platforms  | All   |

**discard-changes** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow NETCONF discard-changes operation   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">netconf</a> <a href="#">base-op-authorization</a><br><a href="#">discard-changes</a> <i>boolean</i> |
| Tree       | <a href="#">discard-changes</a>   |
| Default    | false   |
| Introduced | 21.7.R1   |
| Platforms  | All   |

**edit-config** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow NETCONF edit-config operation   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">netconf</a> <a href="#">base-op-authorization</a><br><a href="#">edit-config</a> <i>boolean</i> |
| Tree       | <a href="#">edit-config</a>   |
| Default    | false   |
| Introduced | 21.7.R1   |
| Platforms  | All   |

**get** *boolean*

|          |   |
|----------|---|
| Synopsis | Allow NETCONF get operation   |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">netconf</a> <a href="#">base-op-authorization</a><br><a href="#">get</a> <i>boolean</i> |
| Tree     | <a href="#">get</a>   |
| Default  | false   |



Introduced 21.7.R1  
Platforms All

### **get-config** *boolean*

Synopsis Allow NETCONF get-config operation  
Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [netconf](#) [base-op-authorization](#)  
[get-config](#) *boolean*  
Tree [get-config](#)  
Default false  
Introduced 21.7.R1  
Platforms All

### **get-data** *boolean*

Synopsis Allow NETCONF get-data operation  
Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [netconf](#) [base-op-authorization](#)  
[get-data](#) *boolean*  
Tree [get-data](#)  
Default false  
Introduced 21.7.R1  
Platforms All

### **get-schema** *boolean*

Synopsis Allow NETCONF get-schema operation  
Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [netconf](#) [base-op-authorization](#)  
[get-schema](#) *boolean*  
Tree [get-schema](#)  
Default false  
Introduced 21.7.R1  
Platforms All

### **kill-session** *boolean*

Synopsis Allow NETCONF kill-session operation

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">netconf</a> <a href="#">base-op-authorization</a> <a href="#">kill-session</a> <i>boolean</i> |
| Tree       | <a href="#">kill-session</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**lock** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow NETCONF lock and unlock operations  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">netconf</a> <a href="#">base-op-authorization</a> <a href="#">lock</a> <i>boolean</i> |
| Tree       | <a href="#">lock</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**validate** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow NETCONF validate operation  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">netconf</a> <a href="#">base-op-authorization</a> <a href="#">validate</a> <i>boolean</i> |
| Tree       | <a href="#">validate</a>  |
| Default    | false   |
| Introduced | 21.7.R1   |
| Platforms  | All   |

**ssh-max-sessions** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of concurrent SSH sessions  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">ssh-max-sessions</a> <i>number</i> |
| Tree       | <a href="#">ssh-max-sessions</a>   |
| Range      | 0 to 50  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**telnet-max-sessions** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum number of concurrent Telnet sessions   |
| Context    | <b>configure</b> <a href="#">system security aaa local-profiles profile</a> <i>string</i> <b>telnet-max-sessions</b> <i>number</i> |
| Tree       | <a href="#">telnet-max-sessions</a>  |
| Range      | 0 to 50  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**management-interface**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>management-interface</b> context                             |
| Context    | <b>configure</b> <a href="#">system security aaa management-interface</a> |
| Tree       | <a href="#">management-interface</a>                                      |
| Introduced | 20.10.R1  |
| Platforms  | All   |

**md-cli**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>md-cli</b> context  |
| Context    | <b>configure</b> <a href="#">system security aaa management-interface md-cli</a> |
| Tree       | <a href="#">md-cli</a>   |
| Introduced | 20.10.R1   |
| Platforms  | All  |

**command-accounting-during-load** *boolean*

|            |  |
|------------|--|
| Synopsis   | Perform file command accounting for load or rollback   |
| Context    | <b>configure</b> <a href="#">system security aaa management-interface md-cli command-accounting-during-load</a> <i>boolean</i> |
| Tree       | <a href="#">command-accounting-during-load</a>   |
| Default    | true   |
| Introduced | 20.10.R1   |
| Platforms  | All  |

## output-authorization

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>output-authorization</b> context   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">management-interface</a> <a href="#">output-authorization</a>  |
| Tree        | <a href="#">output-authorization</a>  |
| Description | <p>Commands in this context configure output authorization for model-driven interfaces and telemetry.</p> <p>When output authorization is performed, commands that display configuration or state output must authorize every element in the output. If a remote AAA server is configured, there may be delays in displaying output while the output is authorized. The remote AAA server may receive a large volume of authorization requests when substantial output displays are needed, such as for system configuration details.</p> <p>Input to edit the configuration is always authorized, and is not affected by commands in this context.</p> |
| Introduced  | 20.10.R1  |
| Platforms   | All   |

## md-interfaces *boolean*

|             |   |
|-------------|---|
| Synopsis    | Authorize output in model-driven interfaces   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">management-interface</a> <a href="#">output-authorization</a> <a href="#">md-interfaces</a> <i>boolean</i>   |
| Tree        | <a href="#">md-interfaces</a>   |
| Description | <p>When configured to <b>true</b>, output is authorized for the following:</p> <ul style="list-style-type: none"> <li>• MD-CLI <b>info</b> and <b>compare</b> commands</li> <li>• MD-CLI command completion of list key values</li> <li>• NETCONF &lt;get&gt; and &lt;get-config&gt; RPC</li> <li>• gRPC/gNMI Get RPCs</li> </ul> |
| Default     | true  |
| Introduced  | 20.10.R1  |
| Platforms   | All   |

## telemetry-data *boolean*

|          |  |
|----------|--|
| Synopsis | Authorize telemetry data in gNMI Subscribe RPC response  |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">management-interface</a> <a href="#">output-authorization</a> <a href="#">telemetry-data</a> <i>boolean</i> |
| Tree     | <a href="#">telemetry-data</a>   |

---

|            |          |
|------------|----------|
| Default    | false    |
| Introduced | 20.10.R1 |
| Platforms  | All      |

### **remote-servers**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>remote-servers</b> context                             |
| Context    | <b>configure</b> <a href="#">system security aaa remote-servers</a> |
| Tree       | <a href="#">remote-servers</a>                                      |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **ldap**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ldap</b> context  |
| Context    | <b>configure</b> <a href="#">system security aaa remote-servers ldap</a> |
| Tree       | <a href="#">ldap</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the LDAP operation protocol   |
| Context    | <b>configure</b> <a href="#">system security aaa remote-servers ldap admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **public-key-authentication** *boolean*

|          |   |
|----------|---|
| Synopsis | Allow SSH public key authentication from LDAP server  |
| Context  | <b>configure</b> <a href="#">system security aaa remote-servers ldap public-key-authentication</a> <i>boolean</i> |
| Tree     | <a href="#">public-key-authentication</a>   |

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **route-preference** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Route preference to reach the AAA server  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">ldap</a> <b>route-preference</b> <i>keyword</i>   |
| Tree        | <a href="#">route-preference</a>  |
| Description | This command specifies the routing preference to reach the AAA server. If the configured option is to use both in-band and out-of-band routes, the out-of-band routes in the Base routing instance are used to reach the server before the in-band routes in the management routing instance. |
| Options     | both, inband, outband   |
| Default     | both  |
| Introduced  | 21.5.R1   |
| Platforms   | All   |

### **server** [[index](#)] *number*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>server</b> list instance  |
| Context        | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">ldap</a> <b>server</b> <i>number</i> |
| Tree           | <a href="#">server</a>   |
| Max. Instances | 5  |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

### **[index]** *number*

|            |  |
|------------|--|
| Synopsis   | LDAP server ID   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">ldap</a> <b>server</b> <i>number</i> |
| Tree       | <a href="#">server</a>   |
| Range      | 1 to 5   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |

Platforms All

### **address** [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Enter the **address** list instance

Context **configure** [system](#) [security](#) [aaa](#) [remote-servers](#) [ldap](#) [server](#) *number* [address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [address](#)

Max. Instances 1

Introduced 16.0.R1

Platforms All

### **[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis LDAP server address

Context **configure** [system](#) [security](#) [aaa](#) [remote-servers](#) [ldap](#) [server](#) *number* [address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [address](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **port number**

Synopsis Port number on which to contact the LDAP server

Context **configure** [system](#) [security](#) [aaa](#) [remote-servers](#) [ldap](#) [server](#) *number* [address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [port](#) *number*

Tree [port](#)

Range 1 to 65535

Default 389

Introduced 16.0.R1

Platforms All

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the LDAP server   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">ldap server</a> <i>number</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**bind-authentication**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>bind-authentication</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">ldap server</a> <i>number</i> <b>bind-authentication</b> |
| Tree       | <a href="#">bind-authentication</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**password** *string*

|               |  |
|---------------|--|
| Synopsis      | Password used for authentication with the LDAP server  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">ldap server</a> <i>number</i> <b>bind-authentication</b> <b>password</b> <i>string</i> |
| Tree          | <a href="#">password</a>   |
| String Length | 1 to 199   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**root-dn** *string*

|               |   |
|---------------|---|
| Synopsis      | Root domain used for authentication with LDAP server  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">ldap server</a> <i>number</i> <b>bind-authentication</b> <b>root-dn</b> <i>string</i> |
| Tree          | <a href="#">root-dn</a>   |
| String Length | 1 to 512  |
| Introduced    | 16.0.R1   |



Platforms All

## search

Synopsis Enter the **search** context

Context **configure** [system](#) [security](#) [aaa](#) [remote-servers](#) [ldap](#) [server](#) *number* [search](#)

Tree [search](#)

Introduced 16.0.R1

Platforms All

## base-dn *string*

Synopsis LDAP server search base domain name

Context **configure** [system](#) [security](#) [aaa](#) [remote-servers](#) [ldap](#) [server](#) *number* [search](#) [base-dn](#) *string*

Tree [base-dn](#)

String Length 1 to 512

Introduced 16.0.R1

Platforms All

## server-name *string*

Synopsis LDAP server name

Context **configure** [system](#) [security](#) [aaa](#) [remote-servers](#) [ldap](#) [server](#) *number* [server-name](#) *string*

Tree [server-name](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms All

## tls-profile *reference*

Synopsis TLS client profile used to encrypt the LDAP connection

Context **configure** [system](#) [security](#) [aaa](#) [remote-servers](#) [ldap](#) [server](#) *number* [tls-profile](#) *reference*

Tree [tls-profile](#)

Reference **configure** [system](#) [security](#) [tls](#) [client-tls-profile](#) *string*

---

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **server-retry** *number*

|            |   |
|------------|---|
| Synopsis   | Number of attempts to retry contacting the LDAP server  |
| Context    | <b>configure</b> <a href="#">system security aaa remote-servers ldap server-retry</a> <i>number</i> |
| Tree       | <a href="#">server-retry</a>  |
| Range      | 1 to 10   |
| Default    | 3   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **server-timeout** *number*

|            |   |
|------------|---|
| Synopsis   | Timeout for a response from the LDAP server   |
| Context    | <b>configure</b> <a href="#">system security aaa remote-servers ldap server-timeout</a> <i>number</i> |
| Tree       | <a href="#">server-timeout</a>  |
| Range      | 1 to 90   |
| Units      | seconds   |
| Default    | 3   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **use-default-template** *boolean*

|            |  |
|------------|--|
| Synopsis   | Apply the default template to LDAP   |
| Context    | <b>configure</b> <a href="#">system security aaa remote-servers ldap use-default-template</a> <i>boolean</i> |
| Tree       | <a href="#">use-default-template</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## radius

|            |  |
|------------|--|
| Synopsis   | Enter the <b>radius</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">radius</a> |
| Tree       | <a href="#">radius</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## access-algorithm *keyword*

|            |  |
|------------|--|
| Synopsis   | Algorithm used to access the set of RADIUS servers   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">radius</a> <a href="#">access-algorithm</a> <i>keyword</i> |
| Tree       | <a href="#">access-algorithm</a>   |
| Options    | direct, round-robin  |
| Default    | direct   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## accounting *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable RADIUS command accounting   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">radius</a> <a href="#">accounting</a> <i>boolean</i> |
| Tree       | <a href="#">accounting</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## accounting-port *number*

|            |  |
|------------|--|
| Synopsis   | Port number on RADIUS server for accounting requests   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">radius</a> <a href="#">accounting-port</a> <i>number</i> |
| Tree       | <a href="#">accounting-port</a>  |
| Range      | 1 to 65535   |
| Default    | 1813   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the authentication server  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">radius</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**authorization** *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable RADIUS authorization  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">radius</a> <b>authorization</b> <i>boolean</i> |
| Tree       | <a href="#">authorization</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**interactive-authentication** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enable RADIUS interactive authentication  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">radius</a> <b>interactive-authentication</b> <i>boolean</i> |
| Tree       | <a href="#">interactive-authentication</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**port** *number*

|          |  |
|----------|--|
| Synopsis | UDP port number on which to contact RADIUS server  |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">radius</a> <b>port</b> <i>number</i> |
| Tree     | <a href="#">port</a>   |
| Range    | 1 to 65535   |
| Default  | 1812   |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **route-preference** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Route preference to reach the AAA server  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">radius</a> <b>route-preference</b> <i>keyword</i>   |
| Tree        | <a href="#">route-preference</a>  |
| Description | This command specifies the routing preference to reach the AAA server. If the configured option is to use both in-band and out-of-band routes, the out-of-band routes in the Base routing instance are used to reach the server before the in-band routes in the management routing instance. |
| Options     | both, inband, outband   |
| Default     | both  |
| Introduced  | 21.5.R1   |
| Platforms   | All   |

### **server** [[index](#)] *number*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>server</b> list instance   |
| Context        | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">radius</a> <a href="#">server</a> <i>number</i> |
| Tree           | <a href="#">server</a>  |
| Max. Instances | 5   |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

### **[index]** *number*

|            |   |
|------------|---|
| Synopsis   | RADIUS server ID  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">radius</a> <a href="#">server</a> <i>number</i> |
| Tree       | <a href="#">server</a>  |
| Range      | 1 to 5  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

|            |   |
|------------|---|
| Synopsis   | IP address of the RADIUS server   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">radius</a> <a href="#">server</a> <i>number</i> <a href="#">address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <a href="#">address</a>   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**authenticator** *keyword*

|             |  |
|-------------|--|
| Synopsis    | Authenticator hash algorithm for the RADIUS server   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">radius</a> <a href="#">server</a> <i>number</i> <a href="#">authenticator</a> <i>keyword</i> |
| Tree        | <a href="#">authenticator</a>  |
| Description | This command specifies the hash algorithm used to authenticate RADIUS Access-Request, Access-Accept, Access-Reject, Access-Challenge, Accounting-Request, and Accounting-Response packets.                                   |
| Options     | md5, sm3   |
| Default     | md5  |
| Introduced  | 22.10.R1   |
| Platforms   | All  |

**secret** *string*

|               |  |
|---------------|--|
| Synopsis      | Secret key to access the RADIUS server   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">radius</a> <a href="#">server</a> <i>number</i> <a href="#">secret</a> <i>string</i> |
| Tree          | <a href="#">secret</a>   |
| String Length | 1 to 115   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**tls-client-profile** *reference*

|          |  |
|----------|--|
| Synopsis | TLS client profile for the RADIUS server |
|----------|--|

|             |  |
|-------------|--|
| Context     | <b>configure system security aaa remote-servers radius server <i>number</i> tls-client-profile <i>reference</i></b>                      |
| Tree        | <a href="#">tls-client-profile</a>   |
| Description | This command specifies the TLS client profile used to encrypt RADIUS communication. When configured, RADIUS messages are sent using TLS. |
| Reference   | <b>configure system security tls client-tls-profile <i>string</i></b>  |
| Introduced  | 21.10.R1   |
| Platforms   | All  |

### **server-retry *number***

|            |   |
|------------|---|
| Synopsis   | Number of attempts to retry contacting RADIUS server                                  |
| Context    | <b>configure system security aaa remote-servers radius server-retry <i>number</i></b> |
| Tree       | <a href="#">server-retry</a>  |
| Range      | 1 to 10   |
| Default    | 3   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **server-timeout *number***

|            |   |
|------------|---|
| Synopsis   | Time to wait for a response from the RADIUS server                                      |
| Context    | <b>configure system security aaa remote-servers radius server-timeout <i>number</i></b> |
| Tree       | <a href="#">server-timeout</a>  |
| Range      | 1 to 90   |
| Units      | seconds   |
| Default    | 3   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **use-default-template *boolean***

|          |  |
|----------|--|
| Synopsis | Apply the RADIUS default user template to RADIUS user  |
| Context  | <b>configure system security aaa remote-servers radius use-default-template <i>boolean</i></b> |
| Tree     | <a href="#">use-default-template</a>   |

---

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

## **tacplus**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>tacplus</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">tacplus</a> |
| Tree       | <a href="#">tacplus</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## **accounting**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>accounting</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">tacplus</a> <a href="#">accounting</a> |
| Tree       | <a href="#">accounting</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## **record-type** *keyword*

|            |   |
|------------|---|
| Synopsis   | Type of accounting record packet sent to TACACS+ server   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">tacplus</a> <a href="#">accounting</a> <a href="#">record-type</a> <i>keyword</i> |
| Tree       | <a href="#">record-type</a>   |
| Options    | start-stop, stop-only   |
| Default    | stop-only   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## **admin-control**

|          |   |
|----------|---|
| Synopsis | Enter the <b>admin-control</b> context  |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">tacplus</a> <a href="#">admin-control</a> |
| Tree     | <a href="#">admin-control</a>   |



Introduced 16.0.R1  
Platforms All

### **tacplus-map-to-priv-lvl** *number*

Synopsis Interactive authentication from node to TACACS+ server  
Context **configure** [system security aaa remote-servers tacplus admin-control tacplus-map-to-priv-lvl number](#)  
Tree [tacplus-map-to-priv-lvl](#)  
Range 0 to 15  
Introduced 16.0.R1  
Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the TACACS+ protocol  
Context **configure** [system security aaa remote-servers tacplus admin-state keyword](#)  
Tree [admin-state](#)  
Options enable, disable  
Default enable  
Introduced 16.0.R1  
Platforms All

### **authorization**

Synopsis Enable the **authorization** context  
Context **configure** [system security aaa remote-servers tacplus authorization](#)  
Tree [authorization](#)  
Introduced 16.0.R1  
Platforms All

### **request-format**

Synopsis Enter the **request-format** context  
Context **configure** [system security aaa remote-servers tacplus authorization request-format](#)  
Tree [request-format](#)

|             |  |
|-------------|--|
| Description | Commands in this context configure access operations that are sent to the TACACS+ server during authorization. |
| Introduced  | 21.10.R3   |
| Platforms   | All  |

### **access-operation-cmd** *keyword*

|                |   |
|----------------|---|
| Synopsis       | Access operations sent in authorization requests  |
| Context        | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">tacplus</a> <a href="#">authorization</a> <a href="#">request-format</a> <b>access-operation-cmd</b> <i>keyword</i>   |
| Tree           | <a href="#">access-operation-cmd</a>  |
| Description    | This command sends an operation argument in authorization requests.<br><br>In model-driven interfaces, this command configures the system to send the operation in the cmd argument, and the path in the cmd-args argument, in TACACS+ authorization requests. This command does not apply to authorization requests in classic interfaces. |
| Options        | delete  |
| Max. Instances | 1   |
| Introduced     | 21.10.R3  |
| Platforms      | All   |

### **use-priv-lvl** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Allow privilege level mapping  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">tacplus</a> <a href="#">authorization</a> <b>use-priv-lvl</b> <i>boolean</i>   |
| Tree        | <a href="#">use-priv-lvl</a>   |
| Description | When configured to <b>true</b> , this command automatically performs a single authorization request to the TACACS+ server for cmd* (all commands) immediately after login, and then uses the local profile associated (via the <b>priv-lvl-map</b> ) with the priv-lvl returned by the TACACS+ server for all subsequent authorization (except <b>enable-admin</b> ). After the initial authorization for cmd*, no further authorization requests are sent to the TACACS+ server (except <b>enable-admin</b> ).<br><br>When configured to <b>false</b> , each command is sent to the TACACS+ server for authorization (this is true regardless of whether the <b>tacplus use-default-template</b> setting is enabled). |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**interactive-authentication** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allows TACACS+ interactive authentication   |
| Context    | <b>configure</b> <a href="#">system security aaa remote-servers tacplus interactive-authentication</a> <i>boolean</i> |
| Tree       | <a href="#">interactive-authentication</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**priv-lvl-map**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>priv-lvl-map</b> context  |
| Context    | <b>configure</b> <a href="#">system security aaa remote-servers tacplus priv-lvl-map</a> |
| Tree       | <a href="#">priv-lvl-map</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**priv-lvl** [[level](#)] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>priv-lvl</b> list instance   |
| Context    | <b>configure</b> <a href="#">system security aaa remote-servers tacplus priv-lvl-map priv-lvl</a> <i>number</i> |
| Tree       | <a href="#">priv-lvl</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[level]** *number*

|            |   |
|------------|---|
| Synopsis   | Privilege level for the mapping   |
| Context    | <b>configure</b> <a href="#">system security aaa remote-servers tacplus priv-lvl-map priv-lvl</a> <i>number</i> |
| Tree       | <a href="#">priv-lvl</a>  |
| Range      | 0 to 15   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**user-profile-name** *reference*

|            |  |
|------------|--|
| Synopsis   | User profile for the mapping   |
| Context    | <b>configure</b> <a href="#">system security aaa remote-servers tacplus priv-lvl-map priv-lvl</a> <i>number</i> <a href="#">user-profile-name</a> <i>reference</i> |
| Tree       | <a href="#">user-profile-name</a>  |
| Reference  | <b>configure</b> <a href="#">system security aaa local-profiles profile</a> <i>string</i>  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**route-preference** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Route preference to reach the AAA server  |
| Context     | <b>configure</b> <a href="#">system security aaa remote-servers tacplus</a> <a href="#">route-preference</a> <i>keyword</i>   |
| Tree        | <a href="#">route-preference</a>  |
| Description | This command specifies the routing preference to reach the AAA server. If the configured option is to use both in-band and out-of-band routes, the out-of-band routes in the Base routing instance are used to reach the server before the in-band routes in the management routing instance. |
| Options     | both, inband, outband   |
| Default     | both  |
| Introduced  | 21.5.R1   |
| Platforms   | All   |

**server** [[index](#)] *number*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>server</b> list instance  |
| Context        | <b>configure</b> <a href="#">system security aaa remote-servers tacplus</a> <a href="#">server</a> <i>number</i> |
| Tree           | <a href="#">server</a>   |
| Max. Instances | 5  |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

**[index] number**

|            |  |
|------------|--|
| Synopsis   | TACACS+ server ID  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">tacplus</a> <a href="#">server</a> <i>number</i> |
| Tree       | <a href="#">server</a>   |
| Range      | 1 to 5   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

|            |  |
|------------|--|
| Synopsis   | IP address of the TACACS+ server   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">tacplus</a> <a href="#">server</a> <i>number</i> <a href="#">address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <a href="#">address</a>  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**port number**

|            |   |
|------------|---|
| Synopsis   | TCP port ID on which to contact TACACS+ server  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">tacplus</a> <a href="#">server</a> <i>number</i> <a href="#">port</a> <i>number</i> |
| Tree       | <a href="#">port</a>  |
| Range      | 0   1 to 65535  |
| Default    | 49  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**secret string**

|               |   |
|---------------|---|
| Synopsis      | Secret key to access the TACACS+ server   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">tacplus</a> <a href="#">server</a> <i>number</i> <a href="#">secret</a> <i>string</i> |
| Tree          | <a href="#">secret</a>  |
| String Length | 1 to 199  |

|            |                            |
|------------|----------------------------|
| Notes      | This element is mandatory. |
| Introduced | 16.0.R1                    |
| Platforms  | All                        |

### **server-timeout** *number*

|            |   |
|------------|---|
| Synopsis   | Time to wait for a response from the TACACS+ server   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">tacplus</a> <b>server-timeout</b> <i>number</i> |
| Tree       | <a href="#">server-timeout</a>  |
| Range      | 1 to 90   |
| Units      | seconds   |
| Default    | 3   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **use-default-template** *boolean*

|            |  |
|------------|--|
| Synopsis   | Apply TACACS+ default user-template to TACACS+ user  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">tacplus</a> <b>use-default-template</b> <i>boolean</i> |
| Tree       | <a href="#">use-default-template</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **vprn-server**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>vprn-server</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <b>vprn-server</b> |
| Tree       | <a href="#">vprn-server</a>  |
| Introduced | 22.2.R1  |
| Platforms  | All  |

### **inband** *reference*

|          |   |
|----------|---|
| Synopsis | VPRN service used for AAA by in-band sessions |
|----------|---|

|             |   |
|-------------|---|
| Context     | <b>configure system security aaa remote-servers vprn-server inband</b> <i>reference</i>   |
| Tree        | <a href="#">inband</a>  |
| Description | This command configures TACACS+ or RADIUS servers in a VPRN to be used for AAA by that VPRN and by sessions in the Base routing instance. |
| Reference   | <b>configure service vprn</b> <i>string</i>   |
| Introduced  | 22.2.R1   |
| Platforms   | All   |

### **outband** *reference*

|             |  |
|-------------|--|
| Synopsis    | VPRN service used for AAA by out-of-band sessions  |
| Context     | <b>configure system security aaa remote-servers vprn-server outband</b> <i>reference</i>   |
| Tree        | <a href="#">outband</a>  |
| Description | This command configures TACACS+ and RADIUS servers in a VPRN to be used for AAA by that VPRN and by sessions on the console or out-of-band (OOB) Ethernet ports. |
| Reference   | <b>configure service vprn</b> <i>string</i>  |
| Introduced  | 22.2.R1  |
| Platforms   | All  |

### **vprn** *reference*

|             |   |
|-------------|---|
| Synopsis    | VPRN used for AAA in VPRNs without a AAA server   |
| Context     | <b>configure system security aaa remote-servers vprn-server vprn</b> <i>reference</i>   |
| Tree        | <a href="#">vprn</a>  |
| Description | This command configures TACACS+ or RADIUS servers in a VPRN to be used for AAA by that VPRN and by sessions in VPRNs without a AAA server configured. |
| Reference   | <b>configure service vprn</b> <i>string</i>   |
| Introduced  | 22.2.R1   |
| Platforms   | All   |

### **user-template** [[user-template-name](#)] *keyword*

|          |   |
|----------|---|
| Synopsis | Enter the <b>user-template</b> list instance                      |
| Context  | <b>configure system security aaa user-template</b> <i>keyword</i> |
| Tree     | <a href="#">user-template</a>                                     |

Introduced 16.0.R1  
Platforms All

### **[user-template-name]** *keyword*

Synopsis Default user template applied to the system user  
Context **configure** [system](#) [security](#) [aaa](#) [user-template](#) *keyword*  
Tree [user-template](#)  
Options ldap-default, radius-default, tacplus-default  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms All

### **access**

Synopsis Enter the **access** context  
Context **configure** [system](#) [security](#) [aaa](#) [user-template](#) *keyword* **access**  
Tree [access](#)  
Introduced 16.0.R1  
Platforms All

### **console** *boolean*

Synopsis Allow console access (serial port or Telnet)  
Context **configure** [system](#) [security](#) [aaa](#) [user-template](#) *keyword* **access** [console](#) *boolean*  
Tree [console](#)  
Default true  
Introduced 16.0.R1  
Platforms All

### **ftp** *boolean*

Synopsis Allow FTP access  
Context **configure** [system](#) [security](#) [aaa](#) [user-template](#) *keyword* **access** [ftp](#) *boolean*  
Tree [ftp](#)



---

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **grpc** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow gRPC access  |
| Context    | <b>configure</b> <a href="#">system security aaa user-template</a> <i>keyword</i> <a href="#">access grpc</a> <i>boolean</i> |
| Tree       | <a href="#">grpc</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **li** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow access to lawful intercept   |
| Context    | <b>configure</b> <a href="#">system security aaa user-template</a> <i>keyword</i> <a href="#">access li</a> <i>boolean</i> |
| Tree       | <a href="#">li</a>   |
| Default    | false  |
| Introduced | 19.10.R1   |
| Platforms  | All  |

### **netconf** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow NETCONF session access  |
| Context    | <b>configure</b> <a href="#">system security aaa user-template</a> <i>keyword</i> <a href="#">access netconf</a> <i>boolean</i> |
| Tree       | <a href="#">netconf</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **console**

|          |   |
|----------|---|
| Synopsis | Enter the <b>console</b> context  |
| Context  | <b>configure</b> <a href="#">system security aaa user-template</a> <i>keyword</i> <a href="#">console</a> |

|            |                         |
|------------|-------------------------|
| Tree       | <a href="#">console</a> |
| Introduced | 16.0.R1                 |
| Platforms  | All                     |

### **login-exec** *string*

|               |  |
|---------------|--|
| Synopsis      | File to execute for a successful user login via console  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">user-template</a> <i>keyword</i> <a href="#">console</a> <a href="#">login-exec</a> <i>string</i> |
| Tree          | <a href="#">login-exec</a>   |
| String Length | 1 to 200   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

### **home-directory** (*sat-url* | *cflash-without-slot-url*)

|               |  |
|---------------|--|
| Synopsis      | User local home directory based on the template  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">user-template</a> <i>keyword</i> <a href="#">home-directory</a> ( <i>sat-url</i>   <i>cflash-without-slot-url</i> ) |
| Tree          | <a href="#">home-directory</a>   |
| String Length | 1 to 200   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

### **profile** *string*

|               |   |
|---------------|---|
| Synopsis      | User profile based on the template  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">user-template</a> <i>keyword</i> <a href="#">profile</a> <i>string</i> |
| Tree          | <a href="#">profile</a>   |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

### **restricted-to-home** *boolean*

|          |   |
|----------|---|
| Synopsis | Restrict file access to the home directory of the user  |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">user-template</a> <i>keyword</i> <a href="#">restricted-to-home</a> <i>boolean</i> |

---

|            |                                    |
|------------|------------------------------------|
| Tree       | <a href="#">restricted-to-home</a> |
| Default    | false                              |
| Introduced | 16.0.R1                            |
| Platforms  | All                                |

### **save-when-restricted** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Save configurations when the user is restricted to home  |
| Context     | <b>configure</b> <a href="#">system security aaa user-template</a> <i>keyword</i> <a href="#">save-when-restricted</a> <i>boolean</i>  |
| Tree        | <a href="#">save-when-restricted</a>   |
| Description | When configured to <b>true</b> , the system permits all configuration save operations (such as <b>admin save</b> ) via any management interface (such as CLI and NETCONF) even if <b>restricted-to-home</b> is set to <b>true</b> . The home directory does not need to be configured. |
| Default     | false  |
| Introduced  | 22.10.R1   |
| Platforms   | All  |

### **cli-script**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>cli-script</b> context                         |
| Context    | <b>configure</b> <a href="#">system security cli-script</a> |
| Tree       | <a href="#">cli-script</a>                                  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **authorization**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>authorization</b> context                                    |
| Context    | <b>configure</b> <a href="#">system security cli-script authorization</a> |
| Tree       | <a href="#">authorization</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **cron**

|          |                               |
|----------|-------------------------------|
| Synopsis | Enter the <b>cron</b> context |
|----------|-------------------------------|

|             |  |
|-------------|--|
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cli-script</a> <a href="#">authorization</a> <a href="#">cron</a> |
| Tree        | <a href="#">cron</a>   |
| Description | Commands in this context configure authorization for the cron job scheduler.   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **cli-user** *reference*

|            |  |
|------------|--|
| Synopsis   | User profile name for CLI command script authorization   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cli-script</a> <a href="#">authorization</a> <a href="#">cron</a> <a href="#">cli-user</a> <i>reference</i> |
| Tree       | <a href="#">cli-user</a>   |
| Reference  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i>                               |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **event-handler**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>event-handler</b> context  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cli-script</a> <a href="#">authorization</a> <a href="#">event-handler</a>   |
| Tree        | <a href="#">event-handler</a>   |
| Description | Commands in this context configure authorization for the Event Handling System (EHS). EHS allows user-controlled programmatic exception handling by allowing a CLI script to be executed upon the detection of a log event. |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **cli-user** *reference*

|            |   |
|------------|---|
| Synopsis   | User profile name for CLI command script authorization  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cli-script</a> <a href="#">authorization</a> <a href="#">event-handler</a> <a href="#">cli-user</a> <i>reference</i> |
| Tree       | <a href="#">cli-user</a>  |
| Reference  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## **vsd**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>vsd</b> context  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cli-script</a> <a href="#">authorization</a> <a href="#">vsd</a> |
| Tree        | <a href="#">vsd</a>   |
| Description | Commands in this context configure authorization for the VSD server.  |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

## **cli-user** *reference*

|            |   |
|------------|---|
| Synopsis   | User profile name for CLI command script authorization  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cli-script</a> <a href="#">authorization</a> <a href="#">vsd</a> <a href="#">cli-user</a> <i>reference</i> |
| Tree       | <a href="#">cli-user</a>  |
| Reference  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i>                              |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## **cpm-filter**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>cpm-filter</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> |
| Tree       | <a href="#">cpm-filter</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                                |

## **default-action** *keyword*

|            |   |
|------------|---|
| Synopsis   | Action for packets that do not match any filter entries   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">default-action</a> <i>keyword</i> |
| Tree       | <a href="#">default-action</a>  |
| Options    | drop, accept  |
| Default    | accept  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## ip-filter

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ip-filter</b> context                                    |
| Context    | <b>configure</b> <a href="#">system security cpm-filter ip-filter</a> |
| Tree       | <a href="#">ip-filter</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS          |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the CPM filter   |
| Context    | <b>configure</b> <a href="#">system security cpm-filter ip-filter admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                                     |

## entry [[entry-id](#)] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>entry</b> list instance  |
| Context    | <b>configure</b> <a href="#">system security cpm-filter ip-filter entry</a> <i>number</i> |
| Tree       | <a href="#">entry</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                              |

## [[entry-id](#)] *number*

|            |   |
|------------|---|
| Synopsis   | Filter entry ID   |
| Context    | <b>configure</b> <a href="#">system security cpm-filter ip-filter entry</a> <i>number</i> |
| Tree       | <a href="#">entry</a>   |
| Range      | 1 to 131072   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                              |

## action

|            |   |
|------------|---|
| Synopsis   | Enter the <b>action</b> context   |
| Context    | <b>configure system security cpm-filter ip-filter entry</b> <i>number</i> <b>action</b> |
| Tree       | <b>action</b>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                            |

## accept

|            |   |
|------------|---|
| Synopsis   | Forward matching packets  |
| Context    | <b>configure system security cpm-filter ip-filter entry</b> <i>number</i> <b>action accept</b>                |
| Tree       | <b>accept</b>   |
| Notes      | The following elements are part of a choice: <b>accept</b> , <b>default</b> , <b>drop</b> , or <b>queue</b> . |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## default

|            |   |
|------------|---|
| Synopsis   | Use default action for matching packets   |
| Context    | <b>configure system security cpm-filter ip-filter entry</b> <i>number</i> <b>action default</b>               |
| Tree       | <b>default</b>  |
| Notes      | The following elements are part of a choice: <b>accept</b> , <b>default</b> , <b>drop</b> , or <b>queue</b> . |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## drop

|            |   |
|------------|---|
| Synopsis   | Drop matching packets   |
| Context    | <b>configure system security cpm-filter ip-filter entry</b> <i>number</i> <b>action drop</b>                  |
| Tree       | <b>drop</b>   |
| Notes      | The following elements are part of a choice: <b>accept</b> , <b>default</b> , <b>drop</b> , or <b>queue</b> . |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### queue reference

|            |  |
|------------|--|
| Synopsis   | Forward matching packets to the CPM hardware queue   |
| Context    | <b>configure</b> <a href="#">system security cpm-filter ip-filter entry</a> <i>number</i> <a href="#">action queue reference</a> |
| Tree       | <a href="#">queue</a>  |
| Reference  | <b>configure</b> <a href="#">system security cpm-queue queue</a> <i>number</i>   |
| Notes      | The following elements are part of a choice: <b>accept</b> , <b>default</b> , <b>drop</b> , or <b>queue</b> .                    |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### description string

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">system security cpm-filter ip-filter entry</a> <i>number</i> <a href="#">description string</a> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### log reference

|            |   |
|------------|---|
| Synopsis   | Log ID where matching packets are entered   |
| Context    | <b>configure</b> <a href="#">system security cpm-filter ip-filter entry</a> <i>number</i> <a href="#">log reference</a> |
| Tree       | <a href="#">log</a>   |
| Reference  | <b>configure</b> <a href="#">filter log</a> <i>number</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### match

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>match</b> context  |
| Context     | <b>configure</b> <a href="#">system security cpm-filter ip-filter entry</a> <i>number</i> <a href="#">match</a>   |
| Tree        | <a href="#">match</a>   |
| Description | Commands in this context specify match criteria for the entry. When the match criteria have been satisfied, the action associated with the entry is executed. |



If more than one match criterion is configured, all criteria must be met before the action associated with the entry is executed.

|            |  |
|------------|--|
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **dscp keyword**

|            |   |
|------------|---|
| Synopsis   | DSCP used as the match criterion on the packet  |
| Context    | <b>configure system security cpm-filter ip-filter entry number match dscp keyword</b>   |
| Tree       | <a href="#">dscp</a>  |
| Options    | be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63 |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **dst-ip**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>dst-ip</b> context   |
| Context    | <b>configure system security cpm-filter ip-filter entry number match dst-ip</b> |
| Tree       | <a href="#">dst-ip</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                    |

### **address (ipv4-address | ipv4-prefix-with-host-bits)**

|            |   |
|------------|---|
| Synopsis   | IPv4 address used as the match criterion  |
| Context    | <b>configure system security cpm-filter ip-filter entry number match dst-ip address (ipv4-address   ipv4-prefix-with-host-bits)</b> |
| Tree       | <a href="#">address</a>   |
| Notes      | The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .                          |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**ip-prefix-list** *reference*

|            |  |
|------------|--|
| Synopsis   | IPv4 address prefix list used as match criterion   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-ip</a> <a href="#">ip-prefix-list</a> <i>reference</i> |
| Tree       | <a href="#">ip-prefix-list</a>   |
| Reference  | <b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">ip-prefix-list</a> <i>string</i>  |
| Notes      | The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**mask** *string*

|            |   |
|------------|---|
| Synopsis   | IPv4 address mask used as the match criterion   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-ip</a> <a href="#">mask</a> <i>string</i> |
| Tree       | <a href="#">mask</a>  |
| Notes      | The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**dst-port**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>dst-port</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> |
| Tree       | <a href="#">dst-port</a>   |
| Notes      | The following elements are part of a choice: <b>port</b> or ( <b>dst-port</b> and <b>src-port</b> ).   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**eq** *number*

|          |   |
|----------|---|
| Synopsis | Port number as the match criterion  |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <a href="#">eq</a> <i>number</i> |
| Tree     | <a href="#">eq</a>  |
| Range    | 0 to 65535  |
| Notes    | The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .  |

|            |  |
|------------|--|
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **mask** *number*

|            |  |
|------------|--|
| Synopsis   | Port mask as the match criterion   |
| Context    | <b>configure</b> <a href="#">system security cpm-filter ip-filter entry</a> <i>number match dst-port mask number</i> |
| Tree       | <a href="#">mask</a>   |
| Range      | 1 to 65535   |
| Default    | 65535  |
| Notes      | The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .     |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **port-list** *reference*

|            |  |
|------------|--|
| Synopsis   | Port list as the match criterion   |
| Context    | <b>configure</b> <a href="#">system security cpm-filter ip-filter entry</a> <i>number match dst-port port-list reference</i> |
| Tree       | <a href="#">port-list</a>  |
| Reference  | <b>configure</b> <a href="#">filter match-list port-list string</a>  |
| Notes      | The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .             |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **range**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>range</b> context  |
| Context    | <b>configure</b> <a href="#">system security cpm-filter ip-filter entry</a> <i>number match dst-port range</i>   |
| Tree       | <a href="#">range</a>  |
| Notes      | The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> . |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**end number**

|            |  |
|------------|--|
| Synopsis   | Upper bound of the port number to match  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <a href="#">range</a> <a href="#">end</a> <i>number</i> |
| Tree       | <a href="#">end</a>  |
| Range      | 0 to 65535   |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**start number**

|            |  |
|------------|--|
| Synopsis   | Lower bound of the port number to match  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <a href="#">range</a> <a href="#">start</a> <i>number</i> |
| Tree       | <a href="#">start</a>  |
| Range      | 0 to 65535   |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**fragment keyword**

|             |  |
|-------------|--|
| Synopsis    | Match criterion based on presence of fragmented packets  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">fragment</a> <i>keyword</i>  |
| Tree        | <a href="#">fragment</a>   |
| Description | <p>This command specifies the match criterion based on the existence or absence of fragmented IP packets.</p> <p>Matching on fragmented IPv4 packets occurs when all packets have either the MF (more fragment) bit set or have the Fragment Offset field of the IP header set to a non-zero value. For IPv6, the existence of the IPv6 Fragmentation Extension Header results in a fragmented packet match.</p> <p>Matching on non-fragmented IPv4 packets occurs when all packets have the MF bit set to zero and the Fragment Offset field is also set to zero. For IPv6, the absence of an IPv6 Fragmentation Extension Header results in a non-fragmented packet match.</p> |
| Options     | false, true  |
| Introduced  | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## icmp

Synopsis Enter the **icmp** context

Context **configure** [system security cpm-filter ip-filter entry](#) *number match icmp*

Tree [icmp](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## code number

Synopsis ICMP code to match

Context **configure** [system security cpm-filter ip-filter entry](#) *number match icmp code number*

Tree [code](#)

Range 0 to 255

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## type number

Synopsis ICMP type to match

Context **configure** [system security cpm-filter ip-filter entry](#) *number match icmp type number*

Tree [type](#)

Range 0 to 255

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ip-option

Synopsis Enable the **ip-option** context

Context **configure** [system security cpm-filter ip-filter entry](#) *number match ip-option*

Tree [ip-option](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mask** *number*

|            |   |
|------------|---|
| Synopsis   | Range of option numbers for the mask match criterion  |
| Context    | <b>configure</b> <a href="#">system security cpm-filter ip-filter entry</a> <i>number match ip-option mask number</i> |
| Tree       | <a href="#">mask</a>  |
| Range      | 1 to 255  |
| Default    | 255   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **type** *number*

|            |   |
|------------|---|
| Synopsis   | Specific IP option to match   |
| Context    | <b>configure</b> <a href="#">system security cpm-filter ip-filter entry</a> <i>number match ip-option type number</i> |
| Tree       | <a href="#">type</a>  |
| Range      | 0 to 255  |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **multiple-option** *boolean*

|            |   |
|------------|---|
| Synopsis   | Match on packets containing multiple option fields  |
| Context    | <b>configure</b> <a href="#">system security cpm-filter ip-filter entry</a> <i>number match multiple-option boolean</i> |
| Tree       | <a href="#">multiple-option</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **option-present** *boolean*

|            |  |
|------------|--|
| Synopsis   | Match on packets with option field present   |
| Context    | <b>configure</b> <a href="#">system security cpm-filter ip-filter entry</a> <i>number match option-present boolean</i> |
| Tree       | <a href="#">option-present</a>   |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## port

Synopsis Enter the **port** context

Context **configure system security cpm-filter ip-filter entry number match port**

Tree [port](#)

Notes The following elements are part of a choice: **port** or (**dst-port** and **src-port**).

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## eq number

Synopsis Port number as the match criterion

Context **configure system security cpm-filter ip-filter entry number match port eq number**

Tree [eq](#)

Range 0 to 65535

Notes The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## mask number

Synopsis Port mask as the match criterion

Context **configure system security cpm-filter ip-filter entry number match port mask number**

Tree [mask](#)

Range 1 to 65535

Default 65535

Notes The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## port-list reference

Synopsis Port list as the match criterion

|            |  |
|------------|--|
| Context    | <b>configure system security cpm-filter ip-filter entry</b> <i>number match port port-list reference</i>         |
| Tree       | <a href="#">port-list</a>  |
| Reference  | <b>configure filter match-list port-list</b> <i>string</i>   |
| Notes      | The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> . |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## range

|            |  |
|------------|--|
| Synopsis   | Enable the <b>range</b> context  |
| Context    | <b>configure system security cpm-filter ip-filter entry</b> <i>number match port range</i>                       |
| Tree       | <a href="#">range</a>  |
| Notes      | The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> . |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## end number

|            |   |
|------------|---|
| Synopsis   | Upper bound of the port number to match   |
| Context    | <b>configure system security cpm-filter ip-filter entry</b> <i>number match port range end number</i> |
| Tree       | <a href="#">end</a>   |
| Range      | 0 to 65535  |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## start number

|            |   |
|------------|---|
| Synopsis   | Lower bound of the port number to match   |
| Context    | <b>configure system security cpm-filter ip-filter entry</b> <i>number match port range start number</i> |
| Tree       | <a href="#">start</a>   |
| Range      | 0 to 65535  |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **protocol** (*number* | *keyword*)

Synopsis IP protocol as the match criterion

Context **configure system security cpm-filter ip-filter entry** *number match protocol* (*number* | *keyword*)

Tree [protocol](#)

Range 0 to 255

Options tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **router-instance** *string*

Synopsis Router instance as the match criteria

Context **configure system security cpm-filter ip-filter entry** *number match router-instance* *string*

Tree [router-instance](#)

String Length 1 to 64

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **src-ip**

Synopsis Enter the **src-ip** context

Context **configure system security cpm-filter ip-filter entry** *number match src-ip*

Tree [src-ip](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **address** (*ipv4-address* | *ipv4-prefix-with-host-bits*)

Synopsis IPv4 address used as the match criterion

Context **configure system security cpm-filter ip-filter entry** *number match src-ip address* (*ipv4-address* | *ipv4-prefix-with-host-bits*)

|            |  |
|------------|--|
| Tree       | <a href="#">address</a>  |
| Notes      | The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> . |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **ip-prefix-list** *reference*

|            |  |
|------------|--|
| Synopsis   | IP4 address prefix list used as match criterion  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-ip</a> <a href="#">ip-prefix-list</a> <i>reference</i> |
| Tree       | <a href="#">ip-prefix-list</a>   |
| Reference  | <b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">ip-prefix-list</a> <i>string</i>  |
| Notes      | The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **mask** *string*

|            |   |
|------------|---|
| Synopsis   | IPv4 address mask used as the match criterion   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-ip</a> <a href="#">mask</a> <i>string</i> |
| Tree       | <a href="#">mask</a>  |
| Notes      | The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **src-port**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>src-port</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> |
| Tree       | <a href="#">src-port</a>   |
| Notes      | The following elements are part of a choice: <b>port</b> or ( <b>dst-port</b> and <b>src-port</b> ).   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**eq number**

|            |   |
|------------|---|
| Synopsis   | Port number as the match criterion  |
| Context    | <b>configure</b> <a href="#">system security cpm-filter ip-filter entry</a> <i>number</i> <a href="#">match src-port eq</a> <i>number</i> |
| Tree       | <a href="#">eq</a>  |
| Range      | 0 to 65535  |
| Notes      | The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .                          |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**mask number**

|            |   |
|------------|---|
| Synopsis   | Port mask as the match criterion  |
| Context    | <b>configure</b> <a href="#">system security cpm-filter ip-filter entry</a> <i>number</i> <a href="#">match src-port mask</a> <i>number</i> |
| Tree       | <a href="#">mask</a>  |
| Range      | 1 to 65535  |
| Default    | 65535   |
| Notes      | The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .                            |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**port-list reference**

|            |  |
|------------|--|
| Synopsis   | Port list as the match criterion   |
| Context    | <b>configure</b> <a href="#">system security cpm-filter ip-filter entry</a> <i>number</i> <a href="#">match src-port port-list reference</a> |
| Tree       | <a href="#">port-list</a>  |
| Reference  | <b>configure</b> <a href="#">filter match-list port-list</a> <i>string</i>   |
| Notes      | The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .                             |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**range**

|          |  |
|----------|--|
| Synopsis | Enable the <b>range</b> context  |
| Context  | <b>configure</b> <a href="#">system security cpm-filter ip-filter entry</a> <i>number</i> <a href="#">match src-port range</a> |

|            |  |
|------------|--|
| Tree       | <a href="#">range</a>  |
| Notes      | The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> . |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **end number**

|            |  |
|------------|--|
| Synopsis   | Upper bound of the port number to match  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">range</a> <a href="#">end</a> <i>number</i> |
| Tree       | <a href="#">end</a>  |
| Range      | 0 to 65535   |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **start number**

|            |  |
|------------|--|
| Synopsis   | Lower bound of the port number to match  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">range</a> <a href="#">start</a> <i>number</i> |
| Tree       | <a href="#">start</a>  |
| Range      | 0 to 65535   |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **tcp-flags**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>tcp-flags</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">tcp-flags</a> |
| Tree       | <a href="#">tcp-flags</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**ack *boolean***

|            |  |
|------------|--|
| Synopsis   | ACK bit in TCP header control bits as match criterion  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">tcp-flags</a> <a href="#">ack</a> <i>boolean</i> |
| Tree       | <a href="#">ack</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**syn *boolean***

|            |  |
|------------|--|
| Synopsis   | SYN bit in TCP header control bits as match criterion  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">tcp-flags</a> <a href="#">syn</a> <i>boolean</i> |
| Tree       | <a href="#">syn</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**ipv6-filter**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ipv6-filter</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> |
| Tree       | <a href="#">ipv6-filter</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**admin-state *keyword***

|            |  |
|------------|--|
| Synopsis   | Administrative state of the CPM filter   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**entry** [*entry-id*] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>entry</b> list instance  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> |
| Tree       | <a href="#">entry</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**[entry-id]** *number*

|            |   |
|------------|---|
| Synopsis   | Filter entry ID   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> |
| Tree       | <a href="#">entry</a>   |
| Range      | 1 to 131072   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**action**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>action</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">action</a> |
| Tree       | <a href="#">action</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**accept**

|            |   |
|------------|---|
| Synopsis   | Forward matching packets  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">accept</a> |
| Tree       | <a href="#">accept</a>  |
| Notes      | The following elements are part of a choice: <b>accept</b> , <b>default</b> , <b>drop</b> , or <b>queue</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**default**

|            |  |
|------------|--|
| Synopsis   | Use default action for matching packets  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">default</a> |
| Tree       | <a href="#">default</a>  |
| Notes      | The following elements are part of a choice: <b>accept</b> , <b>default</b> , <b>drop</b> , or <b>queue</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**drop**

|            |   |
|------------|---|
| Synopsis   | Drop matching packets   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">drop</a> |
| Tree       | <a href="#">drop</a>  |
| Notes      | The following elements are part of a choice: <b>accept</b> , <b>default</b> , <b>drop</b> , or <b>queue</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**queue reference**

|            |  |
|------------|--|
| Synopsis   | Forward matching packets to the CPM hardware queue   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">queue</a> <a href="#">reference</a> |
| Tree       | <a href="#">queue</a>  |
| Reference  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-queue</a> <a href="#">queue</a> <i>number</i>   |
| Notes      | The following elements are part of a choice: <b>accept</b> , <b>default</b> , <b>drop</b> , or <b>queue</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**description string**

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">description</a> <a href="#">string</a> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### log reference

Synopsis Log ID where matching packets are entered

Context **configure system security cpm-filter ipv6-filter entry number log reference**

Tree [log](#)

Reference **configure filter log number**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### match

Synopsis Enter the **match** context

Context **configure system security cpm-filter ipv6-filter entry number match**

Tree [match](#)

Description Commands in this context specify match criteria for the entry. When the match criteria have been satisfied, the action associated with the entry is executed.

If more than one match criterion is configured, all criteria must be met before the action associated with the entry is executed.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### dscp keyword

Synopsis DSCP used as the match criterion on the packet

Context **configure system security cpm-filter ipv6-filter entry number match dscp keyword**

Tree [dscp](#)

Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS



## dst-ip

|            |   |
|------------|---|
| Synopsis   | Enter the <b>dst-ip</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <b>dst-ip</b> |
| Tree       | <a href="#">dst-ip</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## address (*ipv6-address* | *ipv6-prefix-with-host-bits*)

|            |  |
|------------|--|
| Synopsis   | IPv6 address used as the match criterion   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <b>dst-ip</b> <b>address</b> ( <i>ipv6-address</i>   <i>ipv6-prefix-with-host-bits</i> ) |
| Tree       | <a href="#">address</a>  |
| Notes      | The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## ipv6-prefix-list *reference*

|            |  |
|------------|--|
| Synopsis   | IPv6 address prefix list used as match criterion   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <b>dst-ip</b> <b>ipv6-prefix-list</b> <i>reference</i> |
| Tree       | <a href="#">ipv6-prefix-list</a>   |
| Reference  | <b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <b>ipv6-prefix-list</b> <i>string</i>   |
| Notes      | The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## mask *string*

|            |   |
|------------|---|
| Synopsis   | IPv6 address mask used as the match criterion   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <b>dst-ip</b> <b>mask</b> <i>string</i> |
| Tree       | <a href="#">mask</a>  |
| Notes      | The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .  |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## **dst-port**

Synopsis Enter the **dst-port** context

Context **configure** [system security cpm-filter ipv6-filter entry](#) *number* [match dst-port](#)

Tree [dst-port](#)

Notes The following elements are part of a choice: **port** or (**dst-port** and **src-port**).

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## **eq number**

Synopsis Port number as the match criterion

Context **configure** [system security cpm-filter ipv6-filter entry](#) *number* [match dst-port eq](#) *number*

Tree [eq](#)

Range 0 to 65535

Notes The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## **mask number**

Synopsis Port mask as the match criterion

Context **configure** [system security cpm-filter ipv6-filter entry](#) *number* [match dst-port mask](#) *number*

Tree [mask](#)

Range 1 to 65535

Default 65535

Notes The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**port-list** *reference*

|            |  |
|------------|--|
| Synopsis   | Port list as the match criterion   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <a href="#">port-list</a> <a href="#">reference</a> |
| Tree       | <a href="#">port-list</a>  |
| Reference  | <b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">port-list</a> <i>string</i>   |
| Notes      | The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**range**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>range</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <a href="#">range</a> |
| Tree       | <a href="#">range</a>  |
| Notes      | The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**end** *number*

|            |   |
|------------|---|
| Synopsis   | Upper bound of the port number to match   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <a href="#">range</a> <a href="#">end</a> <a href="#">number</a> |
| Tree       | <a href="#">end</a>   |
| Range      | 0 to 65535  |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**start** *number*

|          |   |
|----------|---|
| Synopsis | Lower bound of the port number to match   |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <a href="#">range</a> <a href="#">start</a> <a href="#">number</a> |

|            |  |
|------------|--|
| Tree       | <a href="#">start</a>  |
| Range      | 0 to 65535   |
| Notes      | This element is mandatory.                                   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

## extension-header

|            |  |
|------------|--|
| Synopsis   | Enter the <b>extension-header</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">extension-header</a> |
| Tree       | <a href="#">extension-header</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## hop-by-hop *boolean*

|             |  |
|-------------|--|
| Synopsis    | Match on existence of Hop-By-Hop Options Header  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">extension-header</a> <a href="#">hop-by-hop</a> <i>boolean</i> |
| Tree        | <a href="#">hop-by-hop</a>   |
| Description | When configured to <b>true</b> , a match occurs when the Hop-by-Hop Options Extension Header is present.<br>When configured to <b>false</b> , a match occurs when the Hop-by-Hop Options Extension Header is not present.                                    |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## flow-label *number*

|            |  |
|------------|--|
| Synopsis   | Flow label in the IPv6 header as the match criterion   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">flow-label</a> <i>number</i> |
| Tree       | <a href="#">flow-label</a>   |
| Range      | 0 to 1048575   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**fragment keyword**

|             |  |
|-------------|--|
| Synopsis    | Match criterion based on presence of fragmented packets  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <b>fragment</b> <i>keyword</i>   |
| Tree        | <a href="#">fragment</a>   |
| Description | <p>This command specifies the match criterion based on the existence or absence of fragmented IP packets.</p> <p>Matching on fragmented IPv4 packets occurs when all packets have either the MF (more fragment) bit set or have the Fragment Offset field of the IP header set to a non-zero value. For IPv6, the existence of the IPv6 Fragmentation Extension Header results in a fragmented packet match.</p> <p>Matching on non-fragmented IPv4 packets occurs when all packets have the MF bit set to zero and the Fragment Offset field is also set to zero. For IPv6, the absence of an IPv6 Fragmentation Extension Header results in a non-fragmented packet match.</p> |
| Options     | false, true  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**icmp**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>icmp</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <b>icmp</b> |
| Tree       | <a href="#">icmp</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**code number**

|            |   |
|------------|---|
| Synopsis   | ICMP code as the match criterion  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <b>icmp</b> <i>code</i> <i>number</i> |
| Tree       | <a href="#">code</a>  |
| Range      | 0 to 255  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**type number**

|            |   |
|------------|---|
| Synopsis   | ICMP type as the match criterion  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">icmp</a> <a href="#">type</a> <i>number</i> |
| Tree       | <a href="#">type</a>  |
| Range      | 0 to 255  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**next-header (number | keyword)**

|            |  |
|------------|--|
| Synopsis   | IP protocol to match   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">next-header</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">next-header</a>  |
| Range      | 0 to 255   |
| Options    | tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp            |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**port**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>port</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">port</a> |
| Tree       | <a href="#">port</a>   |
| Notes      | The following elements are part of a choice: <b>port</b> or ( <b>dst-port</b> and <b>src-port</b> ).   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**eq number**

|          |   |
|----------|---|
| Synopsis | Port number as the match criterion  |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">port</a> <a href="#">eq</a> <i>number</i> |
| Tree     | <a href="#">eq</a>  |
| Range    | 0 to 65535  |

|            |  |
|------------|--|
| Notes      | The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> . |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **mask number**

|            |   |
|------------|---|
| Synopsis   | Port mask as the match criterion  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">port</a> <a href="#">mask</a> <i>number</i> |
| Tree       | <a href="#">mask</a>  |
| Range      | 1 to 65535  |
| Default    | 65535   |
| Notes      | The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **port-list reference**

|            |  |
|------------|--|
| Synopsis   | Port list as the match criterion   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">port</a> <a href="#">port-list</a> <a href="#">reference</a> |
| Tree       | <a href="#">port-list</a>  |
| Reference  | <b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">port-list</a> <i>string</i>   |
| Notes      | The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **range**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>range</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">port</a> <a href="#">range</a> |
| Tree       | <a href="#">range</a>  |
| Notes      | The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**end number**

|            |  |
|------------|--|
| Synopsis   | Upper bound of the port number to match  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">port</a> <a href="#">range</a> <a href="#">end</a> <i>number</i> |
| Tree       | <a href="#">end</a>  |
| Range      | 0 to 65535   |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**start number**

|            |  |
|------------|--|
| Synopsis   | Lower bound of the port number to match  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">port</a> <a href="#">range</a> <a href="#">start</a> <i>number</i> |
| Tree       | <a href="#">start</a>  |
| Range      | 0 to 65535   |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**router-instance string**

|               |   |
|---------------|---|
| Synopsis      | Router instance as the match criteria   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">router-instance</a> <i>string</i> |
| Tree          | <a href="#">router-instance</a>   |
| String Length | 1 to 64   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**src-ip**

|          |  |
|----------|--|
| Synopsis | Enter the <b>src-ip</b> context  |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-ip</a> |



|            |  |
|------------|--|
| Tree       | <a href="#">src-ip</a>                                       |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **address** (*ipv6-address* | *ipv6-prefix-with-host-bits*)

|            |  |
|------------|--|
| Synopsis   | IPv6 address used as the match criterion   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-ip</a> <a href="#">address</a> ( <i>ipv6-address</i>   <i>ipv6-prefix-with-host-bits</i> ) |
| Tree       | <a href="#">address</a>  |
| Notes      | The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **ipv6-prefix-list** *reference*

|            |  |
|------------|--|
| Synopsis   | IPv6 address prefix list used as match criterion   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-ip</a> <a href="#">ipv6-prefix-list</a> <i>reference</i> |
| Tree       | <a href="#">ipv6-prefix-list</a>   |
| Reference  | <b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">ipv6-prefix-list</a> <i>string</i>  |
| Notes      | The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **mask** *string*

|            |   |
|------------|---|
| Synopsis   | IPv6 address mask used as the match criterion   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-ip</a> <a href="#">mask</a> <i>string</i> |
| Tree       | <a href="#">mask</a>  |
| Notes      | The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## src-port

|            |  |
|------------|--|
| Synopsis   | Enter the <b>src-port</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> |
| Tree       | <a href="#">src-port</a>   |
| Notes      | The following elements are part of a choice: <b>port</b> or ( <b>dst-port</b> and <b>src-port</b> ).   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## eq *number*

|            |   |
|------------|---|
| Synopsis   | Port number as the match criterion  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">eq</a> <i>number</i> |
| Tree       | <a href="#">eq</a>  |
| Range      | 0 to 65535  |
| Notes      | The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## mask *number*

|            |   |
|------------|---|
| Synopsis   | Port mask as the match criterion  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">mask</a> <i>number</i> |
| Tree       | <a href="#">mask</a>  |
| Range      | 1 to 65535  |
| Default    | 65535   |
| Notes      | The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## port-list *reference*

|          |  |
|----------|--|
| Synopsis | Port list as the match criterion   |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">port-list</a> <a href="#">reference</a> |

|            |  |
|------------|--|
| Tree       | <a href="#">port-list</a>  |
| Reference  | <b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">port-list</a> <i>string</i>       |
| Notes      | The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> . |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## range

|            |  |
|------------|--|
| Synopsis   | Enable the <b>range</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">range</a> |
| Tree       | <a href="#">range</a>  |
| Notes      | The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## end number

|            |  |
|------------|--|
| Synopsis   | Upper bound of the port number to match  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">range</a> <a href="#">end</a> <i>number</i> |
| Tree       | <a href="#">end</a>  |
| Range      | 0 to 65535   |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## start number

|            |  |
|------------|--|
| Synopsis   | Lower bound of the port number to match  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">range</a> <a href="#">start</a> <i>number</i> |
| Tree       | <a href="#">start</a>  |
| Range      | 0 to 65535   |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## tcp-flags

Synopsis Enter the **tcp-flags** context  
Context **configure system security cpm-filter ipv6-filter entry number match tcp-flags**  
Tree [tcp-flags](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ack boolean

Synopsis ACK bit in TCP header control bits as match criterion  
Context **configure system security cpm-filter ipv6-filter entry number match tcp-flags ack boolean**  
Tree [ack](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## syn boolean

Synopsis SYN bit in TCP header control bits as match criterion  
Context **configure system security cpm-filter ipv6-filter entry number match tcp-flags syn boolean**  
Tree [syn](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## mac-filter

Synopsis Enter the **mac-filter** context  
Context **configure system security cpm-filter mac-filter**  
Tree [mac-filter](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the CPM filter   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">mac-filter</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**entry** [[entry-id](#)] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>entry</b> list instance  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">mac-filter</a> <b>entry</b> <i>number</i> |
| Tree       | <a href="#">entry</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**[entry-id]** *number*

|            |   |
|------------|---|
| Synopsis   | Filter entry ID   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">mac-filter</a> <b>entry</b> <i>number</i> |
| Tree       | <a href="#">entry</a>   |
| Range      | 1 to 131072   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**action**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>action</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">mac-filter</a> <b>entry</b> <i>number</i> <b>action</b> |
| Tree       | <a href="#">action</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## accept

|            |  |
|------------|--|
| Synopsis   | Forward matching packets   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">accept</a> |
| Tree       | <a href="#">accept</a>   |
| Notes      | The following elements are part of a choice: <b>accept</b> , <b>default</b> , <b>drop</b> , or <b>queue</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## default

|            |   |
|------------|---|
| Synopsis   | Use default action for matching packets   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">default</a> |
| Tree       | <a href="#">default</a>   |
| Notes      | The following elements are part of a choice: <b>accept</b> , <b>default</b> , <b>drop</b> , or <b>queue</b> .   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## drop

|            |  |
|------------|--|
| Synopsis   | Drop matching packets  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">drop</a> |
| Tree       | <a href="#">drop</a>   |
| Notes      | The following elements are part of a choice: <b>accept</b> , <b>default</b> , <b>drop</b> , or <b>queue</b> .  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## queue reference

|           |  |
|-----------|--|
| Synopsis  | Forward matching packets to the CPM hardware queue   |
| Context   | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">queue</a> <i>reference</i> |
| Tree      | <a href="#">queue</a>  |
| Reference | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-queue</a> <a href="#">queue</a> <i>number</i>   |
| Notes     | The following elements are part of a choice: <b>accept</b> , <b>default</b> , <b>drop</b> , or <b>queue</b> .  |

|            |  |
|------------|--|
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **log** *reference*

|            |   |
|------------|---|
| Synopsis   | Log ID where matching packets are entered   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">log</a> <i>reference</i> |
| Tree       | <a href="#">log</a>   |
| Reference  | <b>configure</b> <a href="#">filter</a> <a href="#">log</a> <i>number</i>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **match**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>match</b> context  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a>  |
| Tree        | <a href="#">match</a>   |
| Description | <p>Commands in this context specify match criteria for the entry. When the match criteria have been satisfied, the action associated with the entry is executed.</p> <p>If more than one match criterion is configured, all criteria must be met before the action associated with the entry is executed.</p> |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **cfm-opcode**

|          |                                     |
|----------|-------------------------------------|
| Synopsis | Enter the <b>cfm-opcode</b> context |
|----------|-------------------------------------|

|             |   |
|-------------|---|
| Context     | <b>configure system security cpm-filter mac-filter entry</b> <i>number match cfm-opcode</i> |
| Tree        | <a href="#">cfm-opcode</a>  |
| Description | Commands in this context specify match criteria based on the CFM opcode.                    |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                                |

### **eq** *number*

|            |   |
|------------|---|
| Synopsis   | Equal to comparison operator for the CFM opcode   |
| Context    | <b>configure system security cpm-filter mac-filter entry</b> <i>number match cfm-opcode eq number</i> |
| Tree       | <a href="#">eq</a>  |
| Range      | 0 to 255  |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .    |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **gt** *number*

|            |   |
|------------|---|
| Synopsis   | Greater than comparison operator for the CFM opcode   |
| Context    | <b>configure system security cpm-filter mac-filter entry</b> <i>number match cfm-opcode gt number</i> |
| Tree       | <a href="#">gt</a>  |
| Range      | 0 to 254  |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .    |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **lt** *number*

|          |   |
|----------|---|
| Synopsis | Less than comparison operator for the CFM opcode  |
| Context  | <b>configure system security cpm-filter mac-filter entry</b> <i>number match cfm-opcode lt number</i> |
| Tree     | <a href="#">lt</a>  |
| Range    | 1 to 255  |



|            |  |
|------------|--|
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> . |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                                       |

## range

|            |  |
|------------|--|
| Synopsis   | Enable the <b>range</b> context  |
| Context    | <b>configure system security cpm-filter mac-filter entry number match cfm-opcode range</b>         |
| Tree       | <b>range</b>   |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> . |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                                       |

## end number

|            |   |
|------------|---|
| Synopsis   | Upper bound of the Opcode range to match  |
| Context    | <b>configure system security cpm-filter mac-filter entry number match cfm-opcode range end number</b> |
| Tree       | <b>end</b>  |
| Range      | 1 to 255  |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## start number

|            |   |
|------------|---|
| Synopsis   | Lower bound of the OpCode range to match  |
| Context    | <b>configure system security cpm-filter mac-filter entry number match cfm-opcode range start number</b> |
| Tree       | <b>start</b>  |
| Range      | 0 to 254  |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**dst-mac**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>dst-mac</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-mac</a> |
| Tree       | <a href="#">dst-mac</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**address string**

|            |   |
|------------|---|
| Synopsis   | MAC address used as the match criterion   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-mac</a> <a href="#">address</a> <a href="#">string</a> |
| Tree       | <a href="#">address</a>   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**mask string**

|            |  |
|------------|--|
| Synopsis   | MAC address mask as the match criterion  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-mac</a> <a href="#">mask</a> <a href="#">string</a> |
| Tree       | <a href="#">mask</a>   |
| Default    | ff:ff:ff:ff:ff   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**etype string**

|               |   |
|---------------|---|
| Synopsis      | Ethernet type as the match criterion  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">etype</a> <a href="#">string</a>     |
| Tree          | <a href="#">etype</a>   |
| Description   | This command specifies an Ethernet type II Ethertype value to be used as a MAC filter match criterion.<br><br>The Ethernet type field is used by the Ethernet version-II frames and does not apply to IEEE 802.3 Ethernet frames. |
| String Length | 5 to 6  |

|            |  |
|------------|--|
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **frame-type** *keyword*

|            |  |
|------------|--|
| Synopsis   | MAC frame type as the match criterion  |
| Context    | <b>configure</b> <a href="#">system security cpm-filter mac-filter entry number match frame-type keyword</a> |
| Tree       | <a href="#">frame-type</a>   |
| Options    | 802dot2-llc, ethernet-ii   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **llc-dsap**

|             |   |
|-------------|---|
| Synopsis    | Enable the <b>llc-dsap</b> context  |
| Context     | <b>configure</b> <a href="#">system security cpm-filter mac-filter entry number match llc-dsap</a>    |
| Tree        | <a href="#">llc-dsap</a>  |
| Description | Commands in this context specify match criteria based on the Destination Service Access Point (DSAP). |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **dsap** *number*

|            |  |
|------------|--|
| Synopsis   | 8-bit DSAP as the match criterion  |
| Context    | <b>configure</b> <a href="#">system security cpm-filter mac-filter entry number match llc-dsap dsap number</a> |
| Tree       | <a href="#">dsap</a>   |
| Range      | 0 to 255   |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **mask** *number*

|          |  |
|----------|--|
| Synopsis | Mask for DSAP value as the match criterion |
|----------|--|

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">system security cpm-filter mac-filter entry</a> <i>number</i> <a href="#">match llc-dsap mask</a><br><i>number</i> |
| Tree       | <a href="#">mask</a>  |
| Range      | 1 to 255  |
| Default    | 255   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## llc-ssap

|             |   |
|-------------|---|
| Synopsis    | Enable the <b>llc-ssap</b> context  |
| Context     | <b>configure</b> <a href="#">system security cpm-filter mac-filter entry</a> <i>number</i> <a href="#">match llc-ssap</a> |
| Tree        | <a href="#">llc-ssap</a>  |
| Description | Commands in this context specify match criteria based on the Source Service Access Point (SSAP).                          |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## mask *number*

|            |   |
|------------|---|
| Synopsis   | Mask for SSAP value as the match criterion  |
| Context    | <b>configure</b> <a href="#">system security cpm-filter mac-filter entry</a> <i>number</i> <a href="#">match llc-ssap mask</a><br><i>number</i> |
| Tree       | <a href="#">mask</a>  |
| Range      | 1 to 255  |
| Default    | 255   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## ssap *number*

|          |   |
|----------|---|
| Synopsis | 8-bit SSAP as the match criterion   |
| Context  | <b>configure</b> <a href="#">system security cpm-filter mac-filter entry</a> <i>number</i> <a href="#">match llc-ssap ssap</a><br><i>number</i> |
| Tree     | <a href="#">ssap</a>  |
| Range    | 0 to 255  |

---

|            |  |
|------------|--|
| Notes      | This element is mandatory.                                   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **service reference**

|            |   |
|------------|---|
| Synopsis   | Service ID used as the match condition  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">service</a> <i>reference</i> |
| Tree       | <a href="#">service</a>   |
| Reference  | <b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i>   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **src-mac**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>src-mac</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-mac</a> |
| Tree       | <a href="#">src-mac</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **address string**

|            |  |
|------------|--|
| Synopsis   | MAC address used as the match criterion  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-mac</a> <a href="#">address</a> <i>string</i> |
| Tree       | <a href="#">address</a>  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **mask string**

|          |   |
|----------|---|
| Synopsis | MAC address mask as the match criterion   |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-mac</a> <a href="#">mask</a> <i>string</i> |

|            |  |
|------------|--|
| Tree       | <a href="#">mask</a>   |
| Default    | ff:ff:ff:ff:ff:ff  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

## cpm-queue

|            |  |
|------------|--|
| Synopsis   | Enter the <b>cpm-queue</b> context                           |
| Context    | <b>configure</b> <a href="#">system security cpm-queue</a>   |
| Tree       | <a href="#">cpm-queue</a>                                    |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

## queue [[queue-id](#)] *number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>queue</b> list instance   |
| Context    | <b>configure</b> <a href="#">system security cpm-queue queue</a> <i>number</i> |
| Tree       | <a href="#">queue</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                   |

## [[queue-id](#)] *number*

|            |  |
|------------|--|
| Synopsis   | CPM queue ID   |
| Context    | <b>configure</b> <a href="#">system security cpm-queue queue</a> <i>number</i> |
| Tree       | <a href="#">queue</a>  |
| Range      | 33 to 2000   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                   |

## **cbs** *number*

|          |   |
|----------|---|
| Synopsis | Buffer size that can be drawn from queue buffer pool  |
| Context  | <b>configure</b> <a href="#">system security cpm-queue queue</a> <i>number</i> <b>cbs</b> <i>number</i> |

|             |   |
|-------------|---|
| Tree        | <a href="#">cbs</a>   |
| Description | This command specifies the amount of buffer that can be drawn from the reserved buffer portion of the buffer pool of the queue. |
| Range       | 0 to 131072   |
| Units       | kilobps   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **mbs** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum queue depth to which the queue can grow   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-queue</a> <a href="#">queue</a> <i>number</i> <b>mbs</b> <i>number</i> |
| Tree       | <a href="#">mbs</a>   |
| Range      | 0 to 131072   |
| Units      | kilobps   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **rate**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>rate</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-queue</a> <a href="#">queue</a> <i>number</i> <b>rate</b> |
| Tree       | <a href="#">rate</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **cir** (*number* | *keyword*)

|          |   |
|----------|---|
| Synopsis | Amount of bandwidth committed to the queue  |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-queue</a> <a href="#">queue</a> <i>number</i> <a href="#">rate</a> <b>cir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <a href="#">cir</a>   |
| Range    | 0 to 100000000  |
| Units    | kilobps   |
| Options  | max   |
| Default  | max   |

|            |  |
|------------|--|
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **pir** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Peak Information Rate for the queue   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-queue</a> <a href="#">queue</a> <i>number</i> <a href="#">rate</a> <b>pir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">pir</a>   |
| Range      | 1 to 100000000  |
| Units      | kilobps   |
| Options    | max   |
| Default    | max   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **cpu-protection**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>cpu-protection</b> context   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpu-protection</a> |
| Tree        | <a href="#">cpu-protection</a>  |
| Description | Commands in this context configure CPU protection policies.                                     |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS                                   |

### **ip-src-monitoring**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ip-src-monitoring</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpu-protection</a> <a href="#">ip-src-monitoring</a> |
| Tree       | <a href="#">ip-src-monitoring</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS   |

### **included-protocols**

|          |   |
|----------|---|
| Synopsis | Enter the <b>included-protocols</b> context |
|----------|---|



---

|             |  |
|-------------|--|
| Context     | <b>configure system security cpu-protection ip-src-monitoring included-protocols</b>   |
| Tree        | <a href="#">included-protocols</a>   |
| Description | Commands in this context specify the protocols included in IP source monitoring. The protocol packets will be subject to the per-source-rate of CPU protection policies.<br>This configuration applies system wide and applies to CPU protection globally. |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS  |

### **dhcp boolean**

|            |   |
|------------|---|
| Synopsis   | Include extracted DHCP packets for IP source monitoring   |
| Context    | <b>configure system security cpu-protection ip-src-monitoring included-protocols dhcp boolean</b> |
| Tree       | <a href="#">dhcp</a>  |
| Default    | true  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS                                     |

### **gtp boolean**

|            |  |
|------------|--|
| Synopsis   | Include extracted GTP packets for IP source monitoring   |
| Context    | <b>configure system security cpu-protection ip-src-monitoring included-protocols gtp boolean</b> |
| Tree       | <a href="#">gtp</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS                                    |

### **icmp boolean**

|            |   |
|------------|---|
| Synopsis   | Include extracted ICMP packets for IP source monitoring   |
| Context    | <b>configure system security cpu-protection ip-src-monitoring included-protocols icmp boolean</b> |
| Tree       | <a href="#">icmp</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **igmp boolean**

Synopsis Include extracted IGMP packets for IP source monitoring

Context **configure system security cpu-protection ip-src-monitoring included-protocols igmp boolean**

Tree [igmp](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **link-specific-rate (number | keyword)**

Synopsis Packet arrival rate limit for link level protocols

Context **configure system security cpu-protection link-specific-rate (number | keyword)**

Tree [link-specific-rate](#)

Description This command configures a link-specific rate for CPU protection. The limit is applied to all ports within the system. The CPU receives no more than the configured packet rate for all link level protocols, such as LACP, from any one port.  
The measurement is cleared each second and is based on the ingress port.

Range 1 to 65535

Units packets per second

Options max

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **policy [policy-id] number**

Synopsis Enter the **policy** list instance

Context **configure system security cpu-protection policy number**

Tree [policy](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**[policy-id] number**

|            |   |
|------------|---|
| Synopsis   | Policy ID   |
| Context    | <b>configure</b> <a href="#">system security cpu-protection policy number</a> |
| Tree       | <a href="#">policy</a>  |
| Range      | 1 to 255  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS                 |

**alarm boolean**

|             |   |
|-------------|---|
| Synopsis    | Generate an event when the rate is exceeded   |
| Context     | <b>configure</b> <a href="#">system security cpu-protection policy number alarm boolean</a>   |
| Tree        | <a href="#">alarm</a>   |
| Description | When configured to <b>true</b> , an event is generated when the rate is exceeded. The event includes information about the offending source. Only one event is generated per monitor period.<br><br>When configured to <b>false</b> , notifications are disabled. |
| Default     | true  |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS   |

**description string**

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">system security cpu-protection policy number description string</a> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS                                    |

**eth-cfm**

|          |   |
|----------|---|
| Synopsis | Enter the <b>eth-cfm</b> context  |
| Context  | <b>configure</b> <a href="#">system security cpu-protection policy number eth-cfm</a> |

|             |  |
|-------------|--|
| Tree        | <a href="#">eth-cfm</a>  |
| Description | Commands in this context configure CPU policy entries that determine match criteria and overall arrival rate of the Ethernet Connectivity and Fault Management (ETH-CFM) packets at the CPU. |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS  |

### **entry** [*id*] *number*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>entry</b> list instance   |
| Context        | <b>configure</b> <a href="#">system security cpu-protection policy</a> <i>number</i> <a href="#">eth-cfm entry</a> <i>number</i> |
| Tree           | <a href="#">entry</a>  |
| Max. Instances | 10   |
| Introduced     | 16.0.R1  |
| Platforms      | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS  |

### **[id]** *number*

|            |  |
|------------|--|
| Synopsis   | Entry ID   |
| Context    | <b>configure</b> <a href="#">system security cpu-protection policy</a> <i>number</i> <a href="#">eth-cfm entry</a> <i>number</i> |
| Tree       | <a href="#">entry</a>  |
| Range      | 1 to 100   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS  |

### **level** [start](#) *number* [end](#) *number*

|                |   |
|----------------|---|
| Synopsis       | Add a list entry for <b>level</b>   |
| Context        | <b>configure</b> <a href="#">system security cpu-protection policy</a> <i>number</i> <a href="#">eth-cfm entry</a> <i>number</i> <b>level</b> <a href="#">start</a> <i>number</i> <a href="#">end</a> <i>number</i> |
| Tree           | <a href="#">level</a>   |
| Description    | Commands in this context specify the range of domain levels for the match criterion.  |
| Min. Instances | 1   |

|            |   |
|------------|---|
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

**start number**

|            |  |
|------------|--|
| Synopsis   | Lower bound of the level range   |
| Context    | <b>configure</b> <a href="#">system security cpu-protection policy number eth-cfm entry number level start number end number</a> |
| Tree       | <a href="#">level</a>  |
| Range      | 0 to 7   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS  |

**end number**

|            |  |
|------------|--|
| Synopsis   | Upper bound of the level range   |
| Context    | <b>configure</b> <a href="#">system security cpu-protection policy number eth-cfm entry number level start number end number</a> |
| Tree       | <a href="#">level</a>  |
| Range      | 0 to 7   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS  |

**opcode start number end number**

|                |   |
|----------------|---|
| Synopsis       | Add a list entry for <b>opcode</b>  |
| Context        | <b>configure</b> <a href="#">system security cpu-protection policy number eth-cfm entry number opcode start number end number</a> |
| Tree           | <a href="#">opcode</a>  |
| Description    | Commands in this context specify the range of operational codes (that identify the application) for the match criterion.          |
| Min. Instances | 1   |
| Introduced     | 16.0.R1   |

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **start number**

Synopsis Lower bound of the OpCode range

Context **configure system security cpu-protection policy number eth-cfm entry number opcode start number end number**

Tree [opcode](#)

Range 0 to 255

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **end number**

Synopsis Upper bound of the OpCode range

Context **configure system security cpu-protection policy number eth-cfm entry number opcode start number end number**

Tree [opcode](#)

Range 0 to 255

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **pir (number | keyword)**

Synopsis Packet arrival rate limit

Context **configure system security cpu-protection policy number eth-cfm entry number pir (number | keyword)**

Tree [pir](#)

Range 0 to 65534

Units packets per second

Options max

Default max

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## out-profile-rate

|            |  |
|------------|--|
| Synopsis   | Enter the <b>out-profile-rate</b> context  |
| Context    | <b>configure</b> <a href="#">system security cpu-protection policy</a> <i>number</i> <b>out-profile-rate</b> |
| Tree       | <a href="#">out-profile-rate</a>   |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS  |

## log-events *boolean*

|            |  |
|------------|--|
| Synopsis   | Generate a log event when the packet rate is exceeded  |
| Context    | <b>configure</b> <a href="#">system security cpu-protection policy</a> <i>number</i> <a href="#">out-profile-rate</a> <b>log-events</b> <i>boolean</i> |
| Tree       | <a href="#">log-events</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS  |

## pir (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Packet arrival rate limit   |
| Context    | <b>configure</b> <a href="#">system security cpu-protection policy</a> <i>number</i> <a href="#">out-profile-rate</a> <b>pir</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">pir</a>   |
| Range      | 1 to 65534  |
| Units      | packets per second  |
| Options    | max   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS   |

## overall-rate (*number* | *keyword*)

|          |   |
|----------|---|
| Synopsis | Packet arrival rate limit for all packets   |
| Context  | <b>configure</b> <a href="#">system security cpu-protection policy</a> <i>number</i> <b>overall-rate</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <a href="#">overall-rate</a>  |
| Range    | 1 to 65534  |

|            |   |
|------------|---|
| Units      | packets per second  |
| Options    | max   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

### per-source-parameters

|            |  |
|------------|--|
| Synopsis   | Enter the <b>per-source-parameters</b> context   |
| Context    | <b>configure</b> <a href="#">system security cpu-protection policy</a> <i>number</i> <a href="#">per-source-parameters</a> |
| Tree       | <a href="#">per-source-parameters</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS  |

### ip-src-monitoring

|            |  |
|------------|--|
| Synopsis   | Enter the <b>ip-src-monitoring</b> context   |
| Context    | <b>configure</b> <a href="#">system security cpu-protection policy</a> <i>number</i> <a href="#">per-source-parameters ip-src-monitoring</a> |
| Tree       | <a href="#">ip-src-monitoring</a>  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS  |

### limit-dhcp-ci-addr-zero *boolean*

|            |   |
|------------|---|
| Synopsis   | Apply rate limiting to packets with client IP address 0   |
| Context    | <b>configure</b> <a href="#">system security cpu-protection policy</a> <i>number</i> <a href="#">per-source-parameters ip-src-monitoring limit-dhcp-ci-addr-zero</a> <i>boolean</i> |
| Tree       | <a href="#">limit-dhcp-ci-addr-zero</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS   |

### per-source-rate (*number* | *keyword*)

|          |                                      |
|----------|--------------------------------------|
| Synopsis | Per-source packet arrival rate limit |
|----------|--------------------------------------|



|             |  |
|-------------|--|
| Context     | <b>configure system security cpu-protection policy number per-source-rate</b> ( <i>number   keyword</i> )  |
| Tree        | <a href="#">per-source-rate</a>  |
| Description | <p>This command configures the per-source packet arrival rate limit.</p> <p>A source is defined as a unique combination of SAP and MAC source address or SAP and source IP address. The CPU receives no more than the specified packet rate from each source. The measurement is cleared every second.</p> <p>This configuration is applicable only if the policy is assigned to an interface (such as SAPs, subscriber interfaces, and spoke SDPs), and MAC monitoring or IP source monitoring is specified in the CPU protection configuration of the interface.</p> |
| Range       | 1 to 65534   |
| Units       | packets per second   |
| Options     | max  |
| Default     | max  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS  |

### port-overall-rate

|            |   |
|------------|---|
| Synopsis   | Enter the <b>port-overall-rate</b> context                        |
| Context    | <b>configure system security cpu-protection port-overall-rate</b> |
| Tree       | <a href="#">port-overall-rate</a>                                 |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS     |

### action-low-priority *boolean*

|             |  |
|-------------|--|
| Synopsis    | Mark packets that exceed the rate as low-priority  |
| Context     | <b>configure system security cpu-protection port-overall-rate action-low-priority</b> <i>boolean</i>   |
| Tree        | <a href="#">action-low-priority</a>  |
| Description | When configured to <b>true</b> , packets that exceed the per-port packet arrival rate limit are marked as low priority for preferential discard later (if there is congestion in the control plane) rather than discarded immediately. |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS  |

**pir** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Per-port packet arrival rate limit   |
| Context    | <b>configure</b> <a href="#">system security cpu-protection port-overall-rate pir</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">pir</a>  |
| Range      | 1 to 65535   |
| Units      | packets per second   |
| Options    | max  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS  |

**protocol-protection**

|             |   |
|-------------|---|
| Synopsis    | Enable the <b>protocol-protection</b> context   |
| Context     | <b>configure</b> <a href="#">system security cpu-protection protocol-protection</a>   |
| Tree        | <a href="#">protocol-protection</a>   |
| Description | <p>When enabled, the network processor on the CPM discards all packets received for protocols that are not configured on the interface. This action helps to mitigate DoS attacks by filtering invalid control traffic before it ingresses the CPU. For example, if IS-IS is not configured on an interface, protocol protection discards any IS-IS packets received on the interface.</p> <p>Commands in this context further define the action when the context is enabled.</p> |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS   |

**allow-sham-links** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Allow OSPF sham link traffic  |
| Context     | <b>configure</b> <a href="#">system security cpu-protection protocol-protection allow-sham-links</a> <i>boolean</i>   |
| Tree        | <a href="#">allow-sham-links</a>  |
| Description | When configured to <b>true</b> , tunneled OSPF packets received over the backbone network must be explicitly allowed when OSPF sham links form an adjacency over the MPLS-VP RN backbone network. |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS   |

**block-pim-tunneled** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Block extraction and processing of PIM packets   |
| Context     | <b>configure</b> <a href="#">system security cpu-protection protocol-protection block-pim-tunneled</a> <i>boolean</i>  |
| Tree        | <a href="#">block-pim-tunneled</a>   |
| Description | When configured to <b>true</b> , PIM packets arriving at the SR OS node inside a tunnel (for example, MPLS or GRE) on a network interface are blocked and not processed. PIM in an mVPN on the egress DR will not switch traffic from the (*,G) to the (S,G) tree. |
| Default     | false  |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS  |

**dist-cpu-protection**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>dist-cpu-protection</b> context                                    |
| Context     | <b>configure</b> <a href="#">system security dist-cpu-protection</a>            |
| Tree        | <a href="#">dist-cpu-protection</a>   |
| Description | Commands in this context configure distributed CPU protection (DCP) attributes. |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**policy** [[policy-name](#)] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>policy</b> list instance   |
| Context        | <b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i>   |
| Tree           | <a href="#">policy</a>  |
| Description    | Commands in this context configure the attributes of DCP policies. These policies can be applied to objects such as SAPs, network interfaces or ports |
| Max. Instances | 130   |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

**[policy-name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Policy name   |
| Context       | <b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> |
| Tree          | <a href="#">policy</a>  |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**local-monitoring-policer** [[policer-name](#)] *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>local-monitoring-policer</b> list instance  |
| Context        | <b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">local-monitoring-policer</a> <i>string</i> |
| Tree           | <a href="#">local-monitoring-policer</a>   |
| Max. Instances | 1  |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

**[policer-name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Local monitoring policer name  |
| Context       | <b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">local-monitoring-policer</a> <i>string</i> |
| Tree          | <a href="#">local-monitoring-policer</a>   |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

**description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">local-monitoring-policer</a> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**exceed-action** *keyword*

|             |  |
|-------------|--|
| Synopsis    | Action taken when policer rates are exceeded   |
| Context     | <b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">local-monitoring-policer</a> <i>string</i> <b>exceed-action</b> <i>keyword</i> |
| Tree        | <a href="#">exceed-action</a>  |
| Description | This command specifies the action taken on the extracted control packets when the configured policer rates are exceeded.   |
| Options     | discard, low-priority, none  |
| Default     | none   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**log-events** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Control of log events creation for status and activity  |
| Context     | <b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">local-monitoring-policer</a> <i>string</i> <b>log-events</b> <i>keyword</i> |
| Tree        | <a href="#">log-events</a>  |
| Description | This command controls the creation of log events related to the status and activity of the local monitoring policer.  |
| Options     | false, true, verbose  |
| Default     | true  |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

## rate

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>rate</b> context  |
| Context     | <b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">local-monitoring-policer</a> <i>string</i> <a href="#">rate</a>  |
| Tree        | <a href="#">rate</a>   |
| Description | Commands in this context specify the rate and burst tolerance for the policer.<br>The actual hardware may not be able to perfectly rate limit to the exact configured parameters. In this case, the configured parameters will be adapted to the closest supported rate. |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

## kbps

|            |  |
|------------|--|
| Synopsis   | Enter the <b>kbps</b> context  |
| Context    | <b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">local-monitoring-policer</a> <i>string</i> <a href="#">rate</a> <a href="#">kbps</a> |
| Tree       | <a href="#">kbps</a>   |
| Notes      | The following elements are part of a choice: <b>kbps</b> or <b>packets</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## limit (*keyword* | *number*)

|          |   |
|----------|---|
| Synopsis | Rate limit  |
| Context  | <b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">local-monitoring-policer</a> <i>string</i> <a href="#">rate</a> <a href="#">kbps</a> <a href="#">limit</a> ( <i>keyword</i>   <i>number</i> ) |
| Tree     | <a href="#">limit</a>   |
| Range    | 1 to 20000000   |
| Units    | kilobps   |
| Options  | max   |
| Default  | max   |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

**mbs** *number*

|            |  |
|------------|--|
| Synopsis   | Tolerance for the rate   |
| Context    | <b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">local-monitoring-policer</a> <i>string</i> <a href="#">rate</a> <a href="#">kbps</a> <a href="#">mbs</a> <i>number</i> |
| Tree       | <a href="#">mbs</a>  |
| Range      | 0 to 4194304   |
| Units      | bytes  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**packets**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>packets</b> context  |
| Context    | <b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">local-monitoring-policer</a> <i>string</i> <a href="#">rate</a> <a href="#">packets</a> |
| Tree       | <a href="#">packets</a>   |
| Notes      | The following elements are part of a choice: <b>kbps</b> or <b>packets</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**initial-delay** *number*

|             |  |
|-------------|--|
| Synopsis    | Additional packets allowed in an initial burst   |
| Context     | <b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">local-monitoring-policer</a> <i>string</i> <a href="#">rate</a> <a href="#">packets</a> <a href="#">initial-delay</a> <i>number</i>  |
| Tree        | <a href="#">initial-delay</a>  |
| Description | This command specifies the number of packets allowed in an initial burst (or a burst after the policer bucket has drained to zero) in addition to the packets per interval limit. The typical setting would be a value equal to the number of received packets in several full handshakes or negotiations of the protocol. |
| Range       | 0 to 255   |
| Units       | packets  |
| Default     | 0  |

Introduced 16.0.R1  
 Platforms All

### **limit** (*keyword* | *number*)

Synopsis Packets per interval limit  
 Context **configure** [system](#) [security](#) [dist-cpu-protection](#) [policy](#) *string* [local-monitoring-policer](#) *string* [rate](#) [packets](#) **limit** (*keyword* | *number*)  
 Tree [limit](#)  
 Range 0 to 8000  
 Units packets per interval  
 Options max  
 Default max  
 Introduced 16.0.R1  
 Platforms All

### **within** *number*

Synopsis Measurement interval for packets rate  
 Context **configure** [system](#) [security](#) [dist-cpu-protection](#) [policy](#) *string* [local-monitoring-policer](#) *string* [rate](#) [packets](#) **within** *number*  
 Tree [within](#)  
 Range 1 to 32767  
 Units seconds  
 Default 1  
 Introduced 16.0.R1  
 Platforms All

### **protocol** [[protocol-name](#)] *keyword*

Synopsis Enter the **protocol** list instance  
 Context **configure** [system](#) [security](#) [dist-cpu-protection](#) [policy](#) *string* [protocol](#) *keyword*  
 Tree [protocol](#)  
 Introduced 16.0.R1  
 Platforms All



**[protocol-name] keyword**

|            |  |
|------------|--|
| Synopsis   | Protocol name  |
| Context    | <b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">protocol</a> <i>keyword</i>  |
| Tree       | <a href="#">protocol</a>   |
| Options    | arp, dhcp, http-redirect, icmp, igmp, mld, ndis, pppoe-pppoa, all-undefined, mpls-ttl, bfd-cpm, bgp, eth-cfm, isis, ldp, ospf, pim, rsvp, icmp-ping-check, lacp, vrrp, multi-chassis, multi-chassis-sync, bfd, ftp, icmp-v4, icmp-v6, l3-to-my-ipv4, l3-to-my-ipv6, lsp-ping, mc-lag, mcast-snooping, radius, rip, sbfd-reflector, snmp, ssh, stp, tacacs, telnet, tftp, twamp |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**dynamic-parameters**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>dynamic-parameters</b> context  |
| Context    | <b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">protocol</a> <i>keyword</i> <a href="#">dynamic-parameters</a> |
| Tree       | <a href="#">dynamic-parameters</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**detection-time number**

|            |   |
|------------|---|
| Synopsis   | Minimum time the dynamic policer remains allocated  |
| Context    | <b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">protocol</a> <i>keyword</i> <a href="#">dynamic-parameters</a> <a href="#">detection-time</a> <i>number</i> |
| Tree       | <a href="#">detection-time</a>  |
| Range      | 1 to 128000   |
| Units      | seconds   |
| Default    | 30  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## exceed-action

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>exceed-action</b> context   |
| Context     | <b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">protocol</a> <i>keyword</i> <a href="#">dynamic-parameters</a> <a href="#">exceed-action</a> |
| Tree        | <a href="#">exceed-action</a>  |
| Description | Commands in this context specify the settings for the scenario when the configured policer rates are exceeded.   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

## action *keyword*

|            |  |
|------------|--|
| Synopsis   | Action taken on control packets when rates are exceeded  |
| Context    | <b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">protocol</a> <i>keyword</i> <a href="#">dynamic-parameters</a> <a href="#">exceed-action</a> <a href="#">action</a> <i>keyword</i> |
| Tree       | <a href="#">action</a>   |
| Options    | discard, low-priority, none  |
| Default    | none   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## hold-down (*keyword* | *number*)

|             |   |
|-------------|---|
| Synopsis    | Hold down behavior  |
| Context     | <b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">protocol</a> <i>keyword</i> <a href="#">dynamic-parameters</a> <a href="#">exceed-action</a> <a href="#">hold-down</a> ( <i>keyword</i>   <i>number</i> )   |
| Tree        | <a href="#">hold-down</a>   |
| Description | <p>This command specifies the behavior when the system detects that an enforcement policer has marked or discarded one or more packets and there is no action specified for the scenario when the rates are exceeded.</p> <p>The hold time condition is cleared after the specified time has expired. The detection time (the minimum time that the policer remains allocated) begins after the hold down is complete. The hold down behavior is not applicable to a local monitoring policer.</p> <p>An indefinite hold down behavior must be cleared using the <b>tools perform security dist-cpu-protection release-hold-down</b> command.</p> |
| Range       | 1 to 10080  |
| Units       | seconds   |

|            |                  |
|------------|------------------|
| Options    | indefinite, none |
| Default    | none             |
| Introduced | 16.0.R1          |
| Platforms  | All              |

### **log-events** *keyword*

|             |  |
|-------------|--|
| Synopsis    | Control of log events creation for status and activity   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dist-cpu-protection</a> <a href="#">policy</a> <i>string</i> <a href="#">protocol</a> <i>keyword</i> <a href="#">dynamic-parameters</a> <a href="#">log-events</a> <i>keyword</i> |
| Tree        | <a href="#">log-events</a>   |
| Description | This command controls the creation of log events related to the status and activity of the local monitoring policer.   |
| Options     | false, true, verbose   |
| Default     | true   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **rate**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>rate</b> context  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dist-cpu-protection</a> <a href="#">policy</a> <i>string</i> <a href="#">protocol</a> <i>keyword</i> <a href="#">dynamic-parameters</a> <a href="#">rate</a>                                    |
| Tree        | <a href="#">rate</a>   |
| Description | Commands in this context specify the rate and burst tolerance for the policer.<br><br>The actual hardware may not be able to perfectly rate limit to the exact configured parameters. In this case, the configured parameters will be adapted to the closest supported rate. |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **kbps**

|          |  |
|----------|--|
| Synopsis | Enter the <b>kbps</b> context  |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dist-cpu-protection</a> <a href="#">policy</a> <i>string</i> <a href="#">protocol</a> <i>keyword</i> <a href="#">dynamic-parameters</a> <a href="#">rate</a> <a href="#">kbps</a> |
| Tree     | <a href="#">kbps</a>   |

|            |  |
|------------|--|
| Notes      | The following elements are part of a choice: <b>kbps</b> or <b>packets</b> . |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **limit** (*keyword* | *number*)

|            |   |
|------------|---|
| Synopsis   | Rate limit  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dist-cpu-protection</a> <a href="#">policy</a> <i>string</i> <a href="#">protocol</a> <i>keyword</i> <a href="#">dynamic-parameters</a> <a href="#">rate</a> <a href="#">kbps</a> <a href="#">limit</a> ( <i>keyword</i>   <i>number</i> ) |
| Tree       | <a href="#">limit</a>   |
| Range      | 1 to 20000000   |
| Units      | kilobps   |
| Options    | max   |
| Default    | max   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **mbs** *number*

|            |  |
|------------|--|
| Synopsis   | Tolerance for the rate   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dist-cpu-protection</a> <a href="#">policy</a> <i>string</i> <a href="#">protocol</a> <i>keyword</i> <a href="#">dynamic-parameters</a> <a href="#">rate</a> <a href="#">kbps</a> <a href="#">mbs</a> <i>number</i> |
| Tree       | <a href="#">mbs</a>  |
| Range      | 0 to 4194304   |
| Units      | bytes  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **packets**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>packets</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dist-cpu-protection</a> <a href="#">policy</a> <i>string</i> <a href="#">protocol</a> <i>keyword</i> <a href="#">dynamic-parameters</a> <a href="#">rate</a> <a href="#">packets</a> |
| Tree       | <a href="#">packets</a>   |
| Notes      | The following elements are part of a choice: <b>kbps</b> or <b>packets</b> .  |
| Introduced | 16.0.R1   |

Platforms All

### **initial-delay** *number*

Synopsis Additional packets allowed in an initial burst

Context **configure** [system security dist-cpu-protection policy](#) *string* [protocol](#) *keyword* [dynamic-parameters rate packets initial-delay](#) *number*

Tree [initial-delay](#)

Description This command specifies the number of packets allowed in an initial burst (or a burst after the policer bucket has drained to zero) in addition to the packets per interval limit. The typical setting would be a value equal to the number of received packets in several full handshakes or negotiations of the protocol.

Range 0 to 255

Units packets

Default 0

Introduced 16.0.R1

Platforms All

### **limit** (*keyword* | *number*)

Synopsis Packets per interval limit

Context **configure** [system security dist-cpu-protection policy](#) *string* [protocol](#) *keyword* [dynamic-parameters rate packets limit](#) (*keyword* | *number*)

Tree [limit](#)

Range 0 to 8000

Units packets per interval

Options max

Default max

Introduced 16.0.R1

Platforms All

### **within** *number*

Synopsis Measurement interval for packets rate

Context **configure** [system security dist-cpu-protection policy](#) *string* [protocol](#) *keyword* [dynamic-parameters rate packets within](#) *number*

Tree [within](#)

|            |            |
|------------|------------|
| Range      | 1 to 32767 |
| Units      | seconds    |
| Default    | 1          |
| Introduced | 16.0.R1    |
| Platforms  | All        |

## enforcement

|            |  |
|------------|--|
| Synopsis   | Enter the <b>enforcement</b> context   |
| Context    | <b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">protocol</a> <i>keyword</i><br><a href="#">enforcement</a> |
| Tree       | <a href="#">enforcement</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## dynamic

|            |  |
|------------|--|
| Synopsis   | Enter the <b>dynamic</b> context   |
| Context    | <b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">protocol</a> <i>keyword</i><br><a href="#">enforcement dynamic</a> |
| Tree       | <a href="#">dynamic</a>  |
| Notes      | The following elements are part of a choice: <b>dynamic</b> , <b>dynamic-local-mon-bypass</b> , <b>shared</b> , or <b>static</b> .                                       |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## mon-policer-name *reference*

|             |  |
|-------------|--|
| Synopsis    | Dynamic enforcement policer for the protocol   |
| Context     | <b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">protocol</a> <i>keyword</i><br><a href="#">enforcement dynamic mon-policer-name</a> <i>reference</i>   |
| Tree        | <a href="#">mon-policer-name</a>   |
| Description | This command specifies the dynamic enforcement policer that is instantiated when the associated local monitoring policer is determined to be in a nonconforming state (at the end of a minimum monitoring time of 60 seconds to reduce thrashing). |
| Reference   | <b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">local-monitoring-policer</a> <i>string</i>   |
| Introduced  | 16.0.R1  |

Platforms All

### dynamic-local-mon-bypass

Synopsis Do not include packets in the local monitoring function

Context **configure** [system security dist-cpu-protection policy](#) *string* [protocol](#) *keyword*  
[enforcement dynamic-local-mon-bypass](#)

Tree [dynamic-local-mon-bypass](#)

Description When configured, packets from the protocol are not included in the local monitoring function and the dynamic enforcement policer is not instantiated for the protocol.

Notes The following elements are part of a choice: **dynamic**, **dynamic-local-mon-bypass**, **shared**, or **static**.

Introduced 16.0.R1

Platforms All

### static

Synopsis Enter the **static** context

Context **configure** [system security dist-cpu-protection policy](#) *string* [protocol](#) *keyword*  
[enforcement static](#)

Tree [static](#)

Notes The following elements are part of a choice: **dynamic**, **dynamic-local-mon-bypass**, **shared**, or **static**.

Introduced 16.0.R1

Platforms All

### policer-name *reference*

Synopsis Static policer enforced by the protocol

Context **configure** [system security dist-cpu-protection policy](#) *string* [protocol](#) *keyword*  
[enforcement static policer-name](#) *reference*

Tree [policer-name](#)

Reference **configure** [system security dist-cpu-protection policy](#) *string* [static-policer](#) *string*

Introduced 16.0.R1

Platforms All

**static-policer** [*policer-name*] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>static-policer</b> list instance   |
| Context        | <b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">static-policer</a> <i>string</i>  |
| Tree           | <a href="#">static-policer</a>  |
| Description    | <p>Commands in this context configure a static enforcement policer that can be referenced by one or more protocols in the policy. When a policer is referenced by a protocol, the policer is instantiated for each object (for example, a SAP or network interface) that is created and references the policer.</p> <p>If no policer resources are available on the associated card or FP, the object is not created.</p> |
| Max. Instances | 18  |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

**[policer-name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Static policer name  |
| Context       | <b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">static-policer</a> <i>string</i> |
| Tree          | <a href="#">static-policer</a>   |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">static-policer</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |



**detection-time** *number*

|            |   |
|------------|---|
| Synopsis   | Minimum time the dynamic policer remains allocated  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dist-cpu-protection</a> <a href="#">policy</a> <i>string</i> <a href="#">static-policer</a> <i>string</i> <a href="#">detection-time</a> <i>number</i> |
| Tree       | <a href="#">detection-time</a>  |
| Range      | 1 to 128000   |
| Units      | seconds   |
| Default    | 30  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**exceed-action**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>exceed-action</b> context   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dist-cpu-protection</a> <a href="#">policy</a> <i>string</i> <a href="#">static-policer</a> <i>string</i> <a href="#">exceed-action</a> |
| Tree        | <a href="#">exceed-action</a>  |
| Description | Commands in this context specify the settings for the scenario when the configured policer rates are exceeded.   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**action** *keyword*

|            |  |
|------------|--|
| Synopsis   | Action taken on control packets when rates are exceeded  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dist-cpu-protection</a> <a href="#">policy</a> <i>string</i> <a href="#">static-policer</a> <i>string</i> <a href="#">exceed-action</a> <a href="#">action</a> <i>keyword</i> |
| Tree       | <a href="#">action</a>   |
| Options    | discard, low-priority, none  |
| Default    | none   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**hold-down** (*keyword* | *number*)

|          |                    |
|----------|--------------------|
| Synopsis | Hold down behavior |
|----------|--------------------|

|             |   |
|-------------|---|
| Context     | <b>configure system security dist-cpu-protection policy</b> <i>string</i> <b>static-policer</b> <i>string</i> <b>exceed-action hold-down</b> ( <i>keyword</i>   <i>number</i> )   |
| Tree        | <b>hold-down</b>  |
| Description | <p>This command specifies the behavior when the system detects that an enforcement policer has marked or discarded one or more packets and there is no action specified for the scenario when the rates are exceeded.</p> <p>The hold time condition is cleared after the specified time has expired. The detection time (the minimum time that the policer remains allocated) begins after the hold down is complete. The hold down behavior is not applicable to a local monitoring policer.</p> <p>An indefinite hold down behavior must be cleared using the <b>tools perform security dist-cpu-protection release-hold-down</b> command.</p> |
| Range       | 1 to 10080  |
| Units       | seconds   |
| Options     | indefinite, none  |
| Default     | none  |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **log-events** *keyword*

|             |  |
|-------------|--|
| Synopsis    | Control of log events creation for status and activity   |
| Context     | <b>configure system security dist-cpu-protection policy</b> <i>string</i> <b>static-policer</b> <i>string</i> <b>log-events</b> <i>keyword</i> |
| Tree        | <b>log-events</b>  |
| Description | This command controls the creation of log events related to the status and activity of the local monitoring policer.                           |
| Options     | false, true, verbose   |
| Default     | true   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **rate**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>rate</b> context   |
| Context     | <b>configure system security dist-cpu-protection policy</b> <i>string</i> <b>static-policer</b> <i>string</i> <b>rate</b> |
| Tree        | <b>rate</b>   |
| Description | Commands in this context specify the rate and burst tolerance for the policer.  |

The actual hardware may not be able to perfectly rate limit to the exact configured parameters. In this case, the configured parameters will be adapted to the closest supported rate.

Introduced 16.0.R1

Platforms All

## kbps

Synopsis Enter the **kbps** context

Context **configure** [system](#) [security](#) [dist-cpu-protection](#) [policy](#) *string* [static-policer](#) *string* [rate](#) [kbps](#)

Tree [kbps](#)

Notes The following elements are part of a choice: **kbps** or **packets**.

Introduced 16.0.R1

Platforms All

## limit (*keyword* | *number*)

Synopsis Rate limit

Context **configure** [system](#) [security](#) [dist-cpu-protection](#) [policy](#) *string* [static-policer](#) *string* [rate](#) [kbps](#)  
[limit](#) (*keyword* | *number*)

Tree [limit](#)

Range 1 to 20000000

Units kilobps

Options max

Default max

Introduced 16.0.R1

Platforms All

## mbs *number*

Synopsis Tolerance for the rate

Context **configure** [system](#) [security](#) [dist-cpu-protection](#) [policy](#) *string* [static-policer](#) *string* [rate](#) [kbps](#)  
[mbs](#) *number*

Tree [mbs](#)

Range 0 to 4194304

Units bytes

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

## packets

|            |   |
|------------|---|
| Synopsis   | Enter the <b>packets</b> context  |
| Context    | <b>configure</b> <a href="#">system security dist-cpu-protection policy string static-policer string rate packets</a> |
| Tree       | <a href="#">packets</a>   |
| Notes      | The following elements are part of a choice: <b>kbps</b> or <b>packets</b> .  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## initial-delay *number*

|             |  |
|-------------|--|
| Synopsis    | Additional packets allowed in an initial burst   |
| Context     | <b>configure</b> <a href="#">system security dist-cpu-protection policy string static-policer string rate packets initial-delay number</a>   |
| Tree        | <a href="#">initial-delay</a>  |
| Description | This command specifies the number of packets allowed in an initial burst (or a burst after the policer bucket has drained to zero) in addition to the packets per interval limit. The typical setting would be a value equal to the number of received packets in several full handshakes or negotiations of the protocol. |
| Range       | 0 to 255   |
| Units       | packets  |
| Default     | 0  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

## limit (*keyword* | *number*)

|          |  |
|----------|--|
| Synopsis | Packets per interval limit   |
| Context  | <b>configure</b> <a href="#">system security dist-cpu-protection policy string static-policer string rate packets limit (keyword   number)</a> |
| Tree     | <a href="#">limit</a>  |
| Range    | 0 to 8000  |
| Units    | packets per interval   |

|            |         |
|------------|---------|
| Options    | max     |
| Default    | max     |
| Introduced | 16.0.R1 |
| Platforms  | All     |

**within** *number*

|            |   |
|------------|---|
| Synopsis   | Measurement interval for packets rate   |
| Context    | <b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">static-policer</a> <i>string</i> <a href="#">rate</a> <a href="#">packets</a> <i>within</i> <i>number</i> |
| Tree       | <a href="#">within</a>  |
| Range      | 1 to 32767  |
| Units      | seconds   |
| Default    | 1   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Policy type   |
| Context    | <b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">type</a> <i>keyword</i> |
| Tree       | <a href="#">type</a>  |
| Options    | access-network, port  |
| Introduced | 21.5.R1   |
| Platforms  | All   |

**dot1x**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>dot1x</b> context                         |
| Context    | <b>configure</b> <a href="#">system security dot1x</a> |
| Tree       | <a href="#">dot1x</a>                                  |
| Introduced | 16.0.R1  |

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of 802.1x network access control  
Context **configure** [system](#) [security](#) [dot1x](#) **admin-state** *keyword*  
Tree [admin-state](#)  
Options enable, disable  
Default disable  
Introduced 16.0.R1  
Platforms All

### **radius-policy** [[policy-name](#)] *string*

Synopsis Enter the **radius-policy** list instance  
Context **configure** [system](#) [security](#) [dot1x](#) **radius-policy** *string*  
Tree [radius-policy](#)  
Introduced 16.0.R1  
Platforms All

### **[policy-name]** *string*

Synopsis RADIUS server policy name for 802.1X authentication  
Context **configure** [system](#) [security](#) [dot1x](#) **radius-policy** *string*  
Tree [radius-policy](#)  
String Length 1 to 32  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the server for authentication  
Context **configure** [system](#) [security](#) [dot1x](#) **radius-policy** *string* **admin-state** *keyword*  
Tree [admin-state](#)

---

|            |                 |
|------------|-----------------|
| Options    | enable, disable |
| Default    | disable         |
| Introduced | 16.0.R1         |
| Platforms  | All             |

### **retry** *number*

|            |   |
|------------|---|
| Synopsis   | Number of RADIUS requests toward the same RADIUS server   |
| Context    | <b>configure</b> <a href="#">system security dot1x radius-policy</a> <i>string</i> <b>retry</b> <i>number</i> |
| Tree       | <a href="#">retry</a>   |
| Range      | 1 to 10   |
| Default    | 3   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **server** [[server-index](#)] *number*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>server</b> list instance  |
| Context        | <b>configure</b> <a href="#">system security dot1x radius-policy</a> <i>string</i> <b>server</b> <i>number</i> |
| Tree           | <a href="#">server</a>   |
| Max. Instances | 5  |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

### **[server-index]** *number*

|            |  |
|------------|--|
| Synopsis   | RADIUS server index  |
| Context    | <b>configure</b> <a href="#">system security dot1x radius-policy</a> <i>string</i> <b>server</b> <i>number</i> |
| Tree       | <a href="#">server</a>   |
| Range      | 1 to 5   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**accounting-port** *number*

|            |   |
|------------|---|
| Synopsis   | UDP port to contact the RADIUS server for accounting  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dot1x</a> <a href="#">radius-policy</a> <i>string</i> <a href="#">server</a> <i>number</i> <a href="#">accounting-port</a> <i>number</i> |
| Tree       | <a href="#">accounting-port</a>   |
| Range      | 1 to 65535  |
| Default    | 1813  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**address** *string*

|            |   |
|------------|---|
| Synopsis   | IP address of the RADIUS dot1x server   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dot1x</a> <a href="#">radius-policy</a> <i>string</i> <a href="#">server</a> <i>number</i> <a href="#">address</a> <i>string</i> |
| Tree       | <a href="#">address</a>   |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**authentication-port** *number*

|            |   |
|------------|---|
| Synopsis   | UDP port to contact RADIUS server for authentication  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dot1x</a> <a href="#">radius-policy</a> <i>string</i> <a href="#">server</a> <i>number</i> <a href="#">authentication-port</a> <i>number</i> |
| Tree       | <a href="#">authentication-port</a>   |
| Range      | 1 to 65535  |
| Default    | 1812  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**secret** *string*

|          |  |
|----------|--|
| Synopsis | Secret key associated with the RADIUS server   |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dot1x</a> <a href="#">radius-policy</a> <i>string</i> <a href="#">server</a> <i>number</i> <a href="#">secret</a> <i>string</i> |
| Tree     | <a href="#">secret</a>   |



---

|               |                            |
|---------------|----------------------------|
| String Length | 1 to 54                    |
| Notes         | This element is mandatory. |
| Introduced    | 16.0.R1                    |
| Platforms     | All                        |

**type** *keyword*

|            |  |
|------------|--|
| Synopsis   | RADIUS server type   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security dot1x radius-policy</a> <i>string</i> <a href="#">server</a> <i>number</i> <b>type</b> <i>keyword</i> |
| Tree       | <a href="#">type</a>   |
| Options    | authorization, accounting, combined  |
| Default    | authorization  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**source-address** *string*

|            |   |
|------------|---|
| Synopsis   | Source address of the RADIUS packet   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security dot1x radius-policy</a> <i>string</i> <a href="#">source-address</a> <i>string</i> |
| Tree       | <a href="#">source-address</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**timeout** *number*

|            |  |
|------------|--|
| Synopsis   | Time to wait for a response from the RADIUS server   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security dot1x radius-policy</a> <i>string</i> <a href="#">timeout</a> <i>number</i> |
| Tree       | <a href="#">timeout</a>  |
| Range      | 1 to 90  |
| Units      | seconds  |
| Default    | 5  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## ftp-server *boolean*

|            |  |
|------------|--|
| Synopsis   | Enable FTP servers running on the system   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ftp-server</a> <i>boolean</i> |
| Tree       | <a href="#">ftp-server</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## hash-control

|            |   |
|------------|---|
| Synopsis   | Enter the <b>hash-control</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">hash-control</a> |
| Tree       | <a href="#">hash-control</a>  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

## management-interface

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>management-interface</b> context  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">hash-control</a> <a href="#">management-interface</a> |
| Tree        | <a href="#">management-interface</a>   |
| Description | Commands in this context configure encryption parameters for different management interfaces.                                      |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

## classic-cli

|            |  |
|------------|--|
| Synopsis   | Enter the <b>classic-cli</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">hash-control</a> <a href="#">management-interface</a> <a href="#">classic-cli</a> |
| Tree       | <a href="#">classic-cli</a>  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**read-algorithm** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Input encryption algorithm for configuration secrets  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">hash-control</a> <a href="#">management-interface</a> <a href="#">classic-cli</a> <a href="#">read-algorithm</a> <i>keyword</i>                      |
| Tree        | <a href="#">read-algorithm</a>  |
| Description | This command specifies how encrypted configuration secrets are interpreted and which encryption types are accepted when secrets are input into the system or read from a configuration file (for example, at system bootup time). |
| Options     | all-hash, hash, hash2, custom   |
| Default     | all-hash  |
| Introduced  | 16.0.R4   |
| Platforms   | All   |

**write-algorithm** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Output encryption algorithm for configuration secrets   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">hash-control</a> <a href="#">management-interface</a> <a href="#">classic-cli</a> <a href="#">write-algorithm</a> <i>keyword</i> |
| Tree        | <a href="#">write-algorithm</a>   |
| Description | This command specifies the format of the output for encrypted configuration secrets (for example, in the saved configuration file, or in the output of the <b>info</b> or <b>show</b> commands).              |
| Options     | cleartext, hash, hash2, custom  |
| Default     | hash2   |
| Introduced  | 16.0.R4   |
| Platforms   | All   |

**grpc**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>grpc</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">hash-control</a> <a href="#">management-interface</a> <a href="#">grpc</a> |
| Tree       | <a href="#">grpc</a>  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**hash-algorithm** *keyword*

|             |  |
|-------------|--|
| Synopsis    | Encryption algorithm for configuration secrets   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">hash-control</a> <a href="#">management-interface</a> <a href="#">grpc</a> <b>hash-algorithm</b> <i>keyword</i> |
| Tree        | <a href="#">hash-algorithm</a>   |
| Description | This command specifies the format of the input and output for encrypted configuration secrets.   |
| Options     | cleartext, hash, hash2, custom   |
| Default     | hash2  |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

**md-cli**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>md-cli</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">hash-control</a> <a href="#">management-interface</a> <b>md-cli</b> |
| Tree       | <a href="#">md-cli</a>   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**hash-algorithm** *keyword*

|             |  |
|-------------|--|
| Synopsis    | Encryption algorithm for configuration secrets   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">hash-control</a> <a href="#">management-interface</a> <a href="#">md-cli</a> <b>hash-algorithm</b> <i>keyword</i> |
| Tree        | <a href="#">hash-algorithm</a>   |
| Description | This command specifies the format of the input and output for encrypted configuration secrets.   |
| Options     | cleartext, hash, hash2, custom   |
| Default     | hash2  |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

**netconf**

|          |                                  |
|----------|----------------------------------|
| Synopsis | Enter the <b>netconf</b> context |
|----------|----------------------------------|

|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">hash-control</a> <a href="#">management-interface</a> <a href="#">netconf</a> |
| Tree       | <a href="#">netconf</a>  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **hash-algorithm** *keyword*

|             |  |
|-------------|--|
| Synopsis    | Encryption algorithm for configuration secrets   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">hash-control</a> <a href="#">management-interface</a> <a href="#">netconf</a> <a href="#">hash-algorithm</a> <i>keyword</i> |
| Tree        | <a href="#">hash-algorithm</a>   |
| Description | This command specifies the format of the input and output for encrypted configuration secrets.   |
| Options     | cleartext, hash, hash2, custom   |
| Default     | hash2  |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

### **keychains**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>keychains</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> |
| Tree       | <a href="#">keychains</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **keychain** [[keychain-name](#)] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>keychain</b> list instance   |
| Context        | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> |
| Tree           | <a href="#">keychain</a>  |
| Max. Instances | 256   |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

**[keychain-name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Keychain name   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> |
| Tree          | <a href="#">keychain</a>  |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the keychain  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**bidirectional**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>bidirectional</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <b>bidirectional</b> |
| Tree       | <a href="#">bidirectional</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**entry** [[keychain-entry-index](#)] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>entry</b> list instance  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <b>bidirectional</b> <b>entry</b> <i>number</i> |
| Tree       | <a href="#">entry</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[keychain-entry-index]** *number*

|            |   |
|------------|---|
| Synopsis   | Keychain identifier   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">bidirectional</a> <a href="#">entry</a> <i>number</i> |
| Tree       | <a href="#">entry</a>   |
| Range      | 0 to 63   255   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the keychain entry   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">bidirectional</a> <a href="#">entry</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**algorithm** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Encryption algorithm used by the keychain key  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">bidirectional</a> <a href="#">entry</a> <i>number</i> <a href="#">algorithm</a> <i>keyword</i> |
| Tree       | <a href="#">algorithm</a>  |
| Options    | aes-128-cmac-96, hmac-sha-1-96, password, message-digest, hmac-md5, hmac-sha-1, hmac-sha-256, aes-128-gcm-16   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**authentication-key *string*****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | Authentication key used by the encryption algorithm   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">bidirectional</a> <a href="#">entry</a> <i>number</i> <b>authentication-key</b> <i>string</i> |
| Tree          | <a href="#">authentication-key</a>  |
| String Length | 1 to 54   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**begin-time *string***

|            |   |
|------------|---|
| Synopsis   | Calendar date and time to start using the key   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">bidirectional</a> <a href="#">entry</a> <i>number</i> <b>begin-time</b> <i>string</i> |
| Tree       | <a href="#">begin-time</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**option *keyword***

|            |  |
|------------|--|
| Synopsis   | Keychain key option  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">bidirectional</a> <a href="#">entry</a> <i>number</i> <b>option</b> <i>keyword</i> |
| Tree       | <a href="#">option</a>   |
| Options    | none, basic, isis-enhanced   |
| Default    | none   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**tolerance (*number* | *keyword*)**

|          |   |
|----------|---|
| Synopsis | Time eligible receive key overlaps with active send key |
|----------|---|



|            |   |
|------------|---|
| Context    | <b>configure system security keychains keychain</b> <i>string</i> <b>bidirectional entry</b> <i>number tolerance</i> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <b>tolerance</b>  |
| Range      | 0 to 4294967294   |
| Units      | seconds   |
| Options    | infinite  |
| Default    | 300   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure system security keychains keychain</b> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <b>description</b>   |
| String Length | 1 to 80  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

### **receive**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>receive</b> context   |
| Context    | <b>configure system security keychains keychain</b> <i>string</i> <b>receive</b> |
| Tree       | <b>receive</b>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **entry** [**keychain-entry-index**] *number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>entry</b> list instance   |
| Context    | <b>configure system security keychains keychain</b> <i>string</i> <b>receive entry</b> <i>number</i> |
| Tree       | <b>entry</b>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[keychain-entry-index] number**

|            |   |
|------------|---|
| Synopsis   | Keychain identifier   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">receive</a> <a href="#">entry</a> <i>number</i> |
| Tree       | <a href="#">entry</a>   |
| Range      | 0 to 63   255   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**admin-state keyword**

|            |   |
|------------|---|
| Synopsis   | Administrative state of the keychain entry  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">receive</a> <a href="#">entry</a> <i>number</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**algorithm keyword****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Encryption algorithm used by the keychain key   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">receive</a> <a href="#">entry</a> <i>number</i> <b>algorithm</b> <i>keyword</i> |
| Tree       | <a href="#">algorithm</a>   |
| Options    | aes-128-cmac-96, hmac-sha-1-96, password, message-digest, hmac-md5, hmac-sha-1, hmac-sha-256, aes-128-gcm-16  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**authentication-key *string*****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Authentication key used by the encryption algorithm  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">receive</a> <a href="#">entry</a> <a href="#">number</a> <b>authentication-key</b> <i>string</i> |
| Tree          | <a href="#">authentication-key</a>   |
| String Length | 1 to 54  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**begin-time *string***

|            |  |
|------------|--|
| Synopsis   | Calendar date and time to start using the key  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">receive</a> <a href="#">entry</a> <a href="#">number</a> <b>begin-time</b> <i>string</i> |
| Tree       | <a href="#">begin-time</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**end-time *string***

|            |  |
|------------|--|
| Synopsis   | Calendar date and time when system stops using the key   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">receive</a> <a href="#">entry</a> <a href="#">number</a> <b>end-time</b> <i>string</i> |
| Tree       | <a href="#">end-time</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**tolerance (*number* | *keyword*)**

|          |  |
|----------|--|
| Synopsis | Time eligible receive key overlaps with active send key  |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">receive</a> <a href="#">entry</a> <a href="#">number</a> <b>tolerance</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <a href="#">tolerance</a>  |

|            |                 |
|------------|-----------------|
| Range      | 0 to 4294967294 |
| Units      | seconds         |
| Options    | infinite        |
| Default    | 300             |
| Introduced | 16.0.R1         |
| Platforms  | All             |

## send

|            |   |
|------------|---|
| Synopsis   | Enter the <b>send</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <b>send</b> |
| Tree       | <a href="#">send</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## entry [[keychain-entry-index](#)] *number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>entry</b> list instance   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <b>send</b> <b>entry</b> <i>number</i> |
| Tree       | <a href="#">entry</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## [[keychain-entry-index](#)] *number*

|            |  |
|------------|--|
| Synopsis   | Keychain identifier  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <b>send</b> <b>entry</b> <i>number</i> |
| Tree       | <a href="#">entry</a>  |
| Range      | 0 to 63   255  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the keychain entry   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">send</a> <a href="#">entry</a> <i>number</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**algorithm** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Encryption algorithm used by the keychain key  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">send</a> <a href="#">entry</a> <i>number</i> <b>algorithm</b> <i>keyword</i> |
| Tree       | <a href="#">algorithm</a>  |
| Options    | aes-128-cmac-96, hmac-sha-1-96, password, message-digest, hmac-md5, hmac-sha-1, hmac-sha-256, aes-128-gcm-16   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**authentication-key** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Authentication key used by the encryption algorithm  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">send</a> <a href="#">entry</a> <i>number</i> <b>authentication-key</b> <i>string</i> |
| Tree          | <a href="#">authentication-key</a>   |
| String Length | 1 to 54  |
| Introduced    | 16.0.R1  |

Platforms All

### **begin-time** *string*

Synopsis Calendar date and time to start using the key

Context **configure** [system](#) [security](#) [keychains](#) [keychain](#) *string* [send](#) [entry](#) *number* [begin-time](#) *string*

Tree [begin-time](#)

Introduced 16.0.R1

Platforms All

### **tcp-option-number**

Synopsis Enter the **tcp-option-number** context

Context **configure** [system](#) [security](#) [keychains](#) [keychain](#) *string* [tcp-option-number](#)

Tree [tcp-option-number](#)

Introduced 16.0.R1

Platforms All

### **receive** *keyword*

Synopsis TCP option accepted in received TCP packets

Context **configure** [system](#) [security](#) [keychains](#) [keychain](#) *string* [tcp-option-number](#) [receive](#) *keyword*

Tree [receive](#)

Options option-253, option-254, both, tcp-ao

Default option-254

Introduced 16.0.R1

Platforms All

### **send** *keyword*

Synopsis TCP option accepted in sent TCP packets

Context **configure** [system](#) [security](#) [keychains](#) [keychain](#) *string* [tcp-option-number](#) [send](#) *keyword*

Tree [send](#)

Options option-253, option-254, tcp-ao

|            |            |
|------------|------------|
| Default    | option-254 |
| Introduced | 16.0.R1    |
| Platforms  | All        |

## management

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>management</b> context  |
| Context     | <b>configure system security management</b>  |
| Tree        | <a href="#">management</a>   |
| Description | Commands in this context control which management protocols can be used to access the SR OS router via the 'Base' and 'management' router instances. |
| Introduced  | 16.0.R5  |
| Platforms   | All  |

## allow-ftp *boolean*

|             |   |
|-------------|---|
| Synopsis    | Allow access to the FTP server  |
| Context     | <b>configure system security management allow-ftp <i>boolean</i></b>  |
| Tree        | <a href="#">allow-ftp</a>   |
| Description | When configured to <b>true</b> , this command allows FTP access to the SR OS router via the 'Base' and 'management' router instances.<br>When configured to <b>false</b> , this command disallows access to the SR OS FTP server. |
| Default     | true  |
| Introduced  | 16.0.R6   |
| Platforms   | All   |

## allow-grpc *boolean*

|             |  |
|-------------|--|
| Synopsis    | Allow access to the gRPC server  |
| Context     | <b>configure system security management allow-grpc <i>boolean</i></b>  |
| Tree        | <a href="#">allow-grpc</a>   |
| Description | When configured to <b>true</b> , the system allows access to the gRPC server via the 'Base' and 'management' router instances. |
| Default     | true   |
| Introduced  | 19.5.R1  |
| Platforms   | All  |

### **allow-netconf** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Allow access to the NETCONF server   |
| Context     | <b>configure</b> <a href="#">system security management allow-netconf</a> <i>boolean</i>   |
| Tree        | <a href="#">allow-netconf</a>  |
| Description | When configured to <b>true</b> , the system allows NETCONF server access to the SR OS router via the 'Base' and 'management' router instances. |
| Default     | true   |
| Introduced  | 19.5.R1  |
| Platforms   | All  |

### **allow-ssh** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Allow access to the SSH server  |
| Context     | <b>configure</b> <a href="#">system security management allow-ssh</a> <i>boolean</i>  |
| Tree        | <a href="#">allow-ssh</a>   |
| Description | When configured to <b>true</b> , this command allows SSH server access to the SR OS router via the 'Base' and 'management' router instances.<br>When configured to <b>false</b> , this command disallows SSH server access. |
| Default     | true  |
| Introduced  | 16.0.R5   |
| Platforms   | All   |

### **allow-telnet** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Allow access to the IPv4 Telnet server   |
| Context     | <b>configure</b> <a href="#">system security management allow-telnet</a> <i>boolean</i>  |
| Tree        | <a href="#">allow-telnet</a>   |
| Description | When configured to <b>true</b> , this command allows IPv4 Telnet server access to the SR OS router via the 'Base' and 'management' router instances.<br>When configured to <b>false</b> , this command disallows access to the IPv4 Telnet server. |
| Default     | true   |
| Introduced  | 16.0.R5  |
| Platforms   | All  |



**allow-telnet6** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Allow access to the Telnet IPv6 server   |
| Context     | <b>configure</b> <a href="#">system security management allow-telnet6</a> <i>boolean</i>   |
| Tree        | <a href="#">allow-telnet6</a>  |
| Description | When configured to <b>true</b> , this command allows IPv6 Telnet server access to the SR OS router via the 'Base' and 'management' router instances.<br>When configured to <b>false</b> , this command disallows access to the IPv6 Telnet server. |
| Default     | true   |
| Introduced  | 16.0.R5  |
| Platforms   | All  |

**management-access-filter**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>management-access-filter</b> context   |
| Context     | <b>configure</b> <a href="#">system security management-access-filter</a>   |
| Tree        | <a href="#">management-access-filter</a>  |
| Description | Commands in this context configure the attributes for management access filters.<br>Management access filters control all traffic in and out of the CPM. The filters can be used to restrict management of the router by other nodes outside of specific networks (or sub-networks) or through designated ports.<br>Management filters are enforced by the system software. |
| Introduced  | 16.0.R4   |
| Platforms   | All   |

**ip-filter**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ip-filter</b> context  |
| Context    | <b>configure</b> <a href="#">system security management-access-filter ip-filter</a> |
| Tree       | <a href="#">ip-filter</a>   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**admin-state** *keyword*

|          |  |
|----------|--|
| Synopsis | Administrative state of management-access filters  |
| Context  | <b>configure</b> <a href="#">system security management-access-filter ip-filter admin-state</a> <i>keyword</i> |

|            |                             |
|------------|-----------------------------|
| Tree       | <a href="#">admin-state</a> |
| Options    | enable, disable             |
| Default    | enable                      |
| Introduced | 16.0.R4                     |
| Platforms  | All                         |

### **default-action** *keyword*

|             |  |
|-------------|--|
| Synopsis    | Default action for the management access filter  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ip-filter</a> <b>default-action</b> <i>keyword</i> |
| Tree        | <a href="#">default-action</a>   |
| Description | This command specifies the default action for management access in the absence of a specific management access filter match.   |
| Options     | ignore-match, accept, drop, reject   |
| Default     | ignore-match   |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

### **entry** [[entry-id](#)] *number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>entry</b> list instance   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ip-filter</a> <b>entry</b> <i>number</i> |
| Tree       | <a href="#">entry</a>  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **[entry-id]** *number*

|             |  |
|-------------|--|
| Synopsis    | Entry ID to identify the match criteria and the action   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ip-filter</a> <b>entry</b> <i>number</i>   |
| Tree        | <a href="#">entry</a>  |
| Description | This command specifies the entry ID to identify the match criteria and the corresponding action. It is recommended that entries are numbered in staggered increments. This allows users to insert a new entry in an existing policy without having to renumber the existing entries. |
| Range       | 1 to 9999  |

|            |                                     |
|------------|-------------------------------------|
| Notes      | This element is part of a list key. |
| Introduced | 16.0.R4                             |
| Platforms  | All                                 |

### **action** *keyword*

|             |  |
|-------------|--|
| Synopsis    | Action associated with the management access filter  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <b>action</b> <i>keyword</i>         |
| Tree        | <a href="#">action</a>   |
| Description | This command specifies the action associated with the management access filter match criteria entry.<br><br>If the packet does not meet any of the match criteria, the configured default action is applied. |
| Options     | ignore-match, accept, drop, reject   |
| Default     | ignore-match   |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

### **description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R4  |
| Platforms     | All  |

### **log-events** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Enable match logging   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <b>log-events</b> <i>boolean</i> |
| Tree        | <a href="#">log-events</a>   |
| Description | When configured to <b>true</b> , this command enables match logging. When enabled, matches on the entry cause the Security event mafEntryMatch to be raised.   |

When configured to **false**, match logging is disabled.

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R4 |
| Platforms  | All     |

## match

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>match</b> context   |
| Context     | <b>configure</b> <a href="#">system security management-access-filter ip-filter entry</a> <i>number</i> <b>match</b> |
| Tree        | <a href="#">match</a>  |
| Description | Commands in this context specify match criteria for the entry.   |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

## dst-port

|             |  |
|-------------|--|
| Synopsis    | Enable the <b>dst-port</b> context   |
| Context     | <b>configure</b> <a href="#">system security management-access-filter ip-filter entry</a> <i>number</i> <b>match</b> <b>dst-port</b> |
| Tree        | <a href="#">dst-port</a>   |
| Description | Commands in this context specify match criteria based on the destination port.   |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

## mask *number*

|            |  |
|------------|--|
| Synopsis   | IP address mask as the match criterion   |
| Context    | <b>configure</b> <a href="#">system security management-access-filter ip-filter entry</a> <i>number</i> <b>match</b> <b>dst-port</b> <b>mask</b> <i>number</i> |
| Tree       | <a href="#">mask</a>   |
| Range      | 1 to 65535   |
| Default    | 65535  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **port number**

|            |  |
|------------|--|
| Synopsis   | TCP or UDP port number as the match criterion  |
| Context    | <b>configure</b> <a href="#">system security management-access-filter ip-filter entry</a> <i>number</i> <a href="#">match dst-port port number</a> |
| Tree       | <a href="#">port</a>   |
| Range      | 1 to 65535   |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **mgmt-port**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>mgmt-port</b> context  |
| Context     | <b>configure</b> <a href="#">system security management-access-filter ip-filter entry</a> <i>number</i> <a href="#">match mgmt-port</a> |
| Tree        | <a href="#">mgmt-port</a>   |
| Description | Commands in this context specify match criteria based on the Ethernet port.   |
| Introduced  | 16.0.R4   |
| Platforms   | All   |

### **cpm**

|            |   |
|------------|---|
| Synopsis   | Match any traffic received on any Ethernet port   |
| Context    | <b>configure</b> <a href="#">system security management-access-filter ip-filter entry</a> <i>number</i> <a href="#">match mgmt-port cpm</a> |
| Tree       | <a href="#">cpm</a>   |
| Notes      | The following elements are part of a choice: <b>cpm</b> , ( <b>lag</b> and <b>lag-id</b> ), or <b>port-id</b> .                             |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **lag string**

|          |  |
|----------|--|
| Synopsis | LAG ID as the match criterion  |
| Context  | <b>configure</b> <a href="#">system security management-access-filter ip-filter entry</a> <i>number</i> <a href="#">match mgmt-port lag string</a> |
| Tree     | <a href="#">lag</a>  |

|               |   |
|---------------|---|
| String Length | 1 to 27   |
| Notes         | The following elements are part of a choice: <b>cpm</b> , ( <b>lag</b> and <b>lag-id</b> ), or <b>port-id</b> . |
| Introduced    | 21.2.R1   |
| Platforms     | All   |

**port-id string**

|            |   |
|------------|---|
| Synopsis   | Port ID as the match criterion  |
| Context    | <b>configure system security management-access-filter ip-filter entry number match mgmt-port port-id string</b> |
| Tree       | <a href="#">port-id</a>   |
| Notes      | The following elements are part of a choice: <b>cpm</b> , ( <b>lag</b> and <b>lag-id</b> ), or <b>port-id</b> . |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**protocol (number | keyword)**

|            |   |
|------------|---|
| Synopsis   | IP protocol as the match criterion  |
| Context    | <b>configure system security management-access-filter ip-filter entry number match protocol (number   keyword)</b>  |
| Tree       | <a href="#">protocol</a>  |
| Range      | 0 to 255  |
| Options    | tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**router-instance string**

|            |   |
|------------|---|
| Synopsis   | Router instance as the match criterion  |
| Context    | <b>configure system security management-access-filter ip-filter entry number match router-instance string</b> |
| Tree       | <a href="#">router-instance</a>   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**src-ip**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>src-ip</b> context  |
| Context     | <b>configure</b> <a href="#">system security management-access-filter ip-filter entry</a> <i>number</i> <a href="#">match src-ip</a> |
| Tree        | <a href="#">src-ip</a>   |
| Description | Commands in this context specify match criteria based on the source IP address.  |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

**address** (*ipv4-prefix* | *ipv4-address*)

|            |   |
|------------|---|
| Synopsis   | IP address or IP prefix as the match criterion  |
| Context    | <b>configure</b> <a href="#">system security management-access-filter ip-filter entry</a> <i>number</i> <a href="#">match src-ip address</a> ( <i>ipv4-prefix</i>   <i>ipv4-address</i> ) |
| Tree       | <a href="#">address</a>   |
| Notes      | The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**ip-prefix-list** *reference*

|            |   |
|------------|---|
| Synopsis   | IP prefix list as the match criterion   |
| Context    | <b>configure</b> <a href="#">system security management-access-filter ip-filter entry</a> <i>number</i> <a href="#">match src-ip ip-prefix-list reference</a> |
| Tree       | <a href="#">ip-prefix-list</a>  |
| Reference  | <b>configure</b> <a href="#">filter match-list ip-prefix-list</a> <i>string</i>   |
| Notes      | The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .  |
| Introduced | 20.7.R1   |
| Platforms  | All   |

**mask** *string*

|          |   |
|----------|---|
| Synopsis | IP address mask as the match criterion  |
| Context  | <b>configure</b> <a href="#">system security management-access-filter ip-filter entry</a> <i>number</i> <a href="#">match src-ip mask</a> <i>string</i> |
| Tree     | <a href="#">mask</a>  |

|            |  |
|------------|--|
| Notes      | The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> . |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **src-port**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>src-port</b> context   |
| Context    | <b>configure system security management-access-filter ip-filter entry <i>number</i> match src-port</b> |
| Tree       | <a href="#">src-port</a>   |
| Introduced | 21.7.R1  |
| Platforms  | All  |

### **mask *number***

|            |   |
|------------|---|
| Synopsis   | IP address mask as the match criterion  |
| Context    | <b>configure system security management-access-filter ip-filter entry <i>number</i> match src-port mask <i>number</i></b> |
| Tree       | <a href="#">mask</a>  |
| Range      | 1 to 65535  |
| Default    | 65535   |
| Introduced | 21.7.R1   |
| Platforms  | All   |

### **port *number***

|            |   |
|------------|---|
| Synopsis   | TCP or UDP port number as the match criterion   |
| Context    | <b>configure system security management-access-filter ip-filter entry <i>number</i> match src-port port <i>number</i></b> |
| Tree       | <a href="#">port</a>  |
| Range      | 1 to 65535  |
| Notes      | This element is mandatory.  |
| Introduced | 21.7.R1   |
| Platforms  | All   |



## ipv6-filter

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ipv6-filter</b> context  |
| Context    | <b>configure</b> <a href="#">system security management-access-filter ipv6-filter</a> |
| Tree       | <a href="#">ipv6-filter</a>   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

## admin-state *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of management-access filters   |
| Context    | <b>configure</b> <a href="#">system security management-access-filter ipv6-filter admin-state keyword</a> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

## default-action *keyword*

|             |  |
|-------------|--|
| Synopsis    | Default action for the management access filter  |
| Context     | <b>configure</b> <a href="#">system security management-access-filter ipv6-filter default-action keyword</a>                 |
| Tree        | <a href="#">default-action</a>   |
| Description | This command specifies the default action for management access in the absence of a specific management access filter match. |
| Options     | ignore-match, accept, drop, reject   |
| Default     | ignore-match   |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

## entry [[entry-id](#)] *number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>entry</b> list instance   |
| Context    | <b>configure</b> <a href="#">system security management-access-filter ipv6-filter entry number</a> |
| Tree       | <a href="#">entry</a>  |
| Introduced | 16.0.R4  |

Platforms All

### **[entry-id]** *number*

Synopsis Entry ID to identify the match criteria and the action

Context **configure** [system security management-access-filter ipv6-filter entry](#) *number*

Tree [entry](#)

Description This command specifies the entry ID to identify the match criteria and the corresponding action. It is recommended that entries are numbered in staggered increments. This allows users to insert a new entry in an existing policy without having to renumber the existing entries.

Range 1 to 9999

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms All

### **action** *keyword*

Synopsis Action associated with the management access filter

Context **configure** [system security management-access-filter ipv6-filter entry](#) *number* **action** *keyword*

Tree [action](#)

Description This command specifies the action associated with the management access filter match criteria entry.

If the packet does not meet any of the match criteria, the configured default action is applied.

Options ignore-match, accept, drop, reject

Default ignore-match

Introduced 16.0.R4

Platforms All

### **description** *string*

Synopsis Text description

Context **configure** [system security management-access-filter ipv6-filter entry](#) *number* **description** *string*

Tree [description](#)

---

|               |         |
|---------------|---------|
| String Length | 1 to 80 |
| Introduced    | 16.0.R4 |
| Platforms     | All     |

### **log-events** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Enable match logging   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <b>log-events</b> <i>boolean</i>                   |
| Tree        | <a href="#">log-events</a>   |
| Description | When configured to <b>true</b> , this command enables match logging. When enabled, matches on the entry cause the Security event mafEntryMatch to be raised.<br>When configured to <b>false</b> , match logging is disabled. |
| Default     | false  |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

### **match**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>match</b> context   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <b>match</b> |
| Tree        | <a href="#">match</a>  |
| Description | Commands in this context specify match criteria for the entry.   |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

### **dst-port**

|             |   |
|-------------|---|
| Synopsis    | Enable the <b>dst-port</b> context  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <b>dst-port</b> |
| Tree        | <a href="#">dst-port</a>  |
| Description | Commands in this context specify match criteria based on the destination port.  |
| Introduced  | 16.0.R4   |
| Platforms   | All   |

### **mask** *number*

|            |   |
|------------|---|
| Synopsis   | IP address mask as the match criterion  |
| Context    | <b>configure</b> <a href="#">system security management-access-filter ipv6-filter entry</a> <i>number</i> <a href="#">match dst-port mask</a> <i>number</i> |
| Tree       | <a href="#">mask</a>  |
| Range      | 1 to 65535  |
| Default    | 65535   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **port** *number*

|            |   |
|------------|---|
| Synopsis   | TCP or UDP port number as the match criterion   |
| Context    | <b>configure</b> <a href="#">system security management-access-filter ipv6-filter entry</a> <i>number</i> <a href="#">match dst-port port</a> <i>number</i> |
| Tree       | <a href="#">port</a>  |
| Range      | 1 to 65535  |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **flow-label** *number*

|            |  |
|------------|--|
| Synopsis   | Flow identifier used to discriminate traffic flows   |
| Context    | <b>configure</b> <a href="#">system security management-access-filter ipv6-filter entry</a> <i>number</i> <a href="#">match flow-label</a> <i>number</i> |
| Tree       | <a href="#">flow-label</a>   |
| Range      | 0 to 1048575   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **mgmt-port**

|          |                                    |
|----------|------------------------------------|
| Synopsis | Enter the <b>mgmt-port</b> context |
|----------|------------------------------------|

|             |   |
|-------------|---|
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">mgmt-port</a> |
| Tree        | <a href="#">mgmt-port</a>   |
| Description | Commands in this context specify match criteria based on the Ethernet port.   |
| Introduced  | 16.0.R4   |
| Platforms   | All   |

## cpm

|            |   |
|------------|---|
| Synopsis   | Match any traffic received on any Ethernet port   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">mgmt-port</a> <a href="#">cpm</a> |
| Tree       | <a href="#">cpm</a>   |
| Notes      | The following elements are part of a choice: <b>cpm</b> , ( <b>lag</b> and <b>lag-id</b> ), or <b>port-id</b> .   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

## lag string

|               |  |
|---------------|--|
| Synopsis      | LAG ID as the match criterion  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">mgmt-port</a> <a href="#">lag</a> <a href="#">string</a> |
| Tree          | <a href="#">lag</a>  |
| String Length | 1 to 27  |
| Notes         | The following elements are part of a choice: <b>cpm</b> , ( <b>lag</b> and <b>lag-id</b> ), or <b>port-id</b> .  |
| Introduced    | 21.2.R1  |
| Platforms     | All  |

## port-id string

|            |  |
|------------|--|
| Synopsis   | Port ID as the match criterion   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">mgmt-port</a> <a href="#">port-id</a> <a href="#">string</a> |
| Tree       | <a href="#">port-id</a>  |
| Notes      | The following elements are part of a choice: <b>cpm</b> , ( <b>lag</b> and <b>lag-id</b> ), or <b>port-id</b> .  |
| Introduced | 16.0.R4  |

Platforms All

### **next-header** (*number* | *keyword*)

Synopsis IP protocol to match

Context **configure** [system](#) [security](#) [management-access-filter](#) [ipv6-filter](#) [entry](#) *number* [match](#) [next-header](#) (*number* | *keyword*)

Tree [next-header](#)

Range 0 to 255

Options tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp

Introduced 16.0.R4

Platforms All

### **router-instance** *string*

Synopsis Router instance as the match criterion

Context **configure** [system](#) [security](#) [management-access-filter](#) [ipv6-filter](#) [entry](#) *number* [match](#) [router-instance](#) *string*

Tree [router-instance](#)

Introduced 16.0.R4

Platforms All

### **src-ip**

Synopsis Enter the **src-ip** context

Context **configure** [system](#) [security](#) [management-access-filter](#) [ipv6-filter](#) [entry](#) *number* [match](#) [src-ip](#)

Tree [src-ip](#)

Description Commands in this context specify match criteria based on the source port.

Introduced 16.0.R4

Platforms All

### **address** (*ipv6-prefix* | *ipv6-address*)

Synopsis IPv6 address or IPv6 prefix to match

|            |  |
|------------|--|
| Context    | <b>configure system security management-access-filter ipv6-filter entry</b> <i>number match src-ip address</i> ( <i>ipv6-prefix   ipv6-address</i> ) |
| Tree       | <a href="#">address</a>  |
| Notes      | The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### ipv6-prefix-list *reference*

|            |   |
|------------|---|
| Synopsis   | IPv6 prefix list as the match criterion   |
| Context    | <b>configure system security management-access-filter ipv6-filter entry</b> <i>number match src-ip ipv6-prefix-list reference</i> |
| Tree       | <a href="#">ipv6-prefix-list</a>  |
| Reference  | <b>configure filter match-list ipv6-prefix-list</b> <i>string</i>   |
| Notes      | The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .                      |
| Introduced | 20.7.R1   |
| Platforms  | All   |

### mask *string*

|            |  |
|------------|--|
| Synopsis   | IP address mask as the match criterion   |
| Context    | <b>configure system security management-access-filter ipv6-filter entry</b> <i>number match src-ip mask string</i> |
| Tree       | <a href="#">mask</a>   |
| Notes      | The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .       |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### src-port

|             |  |
|-------------|--|
| Synopsis    | Enable the <b>src-port</b> context   |
| Context     | <b>configure system security management-access-filter ipv6-filter entry</b> <i>number match src-port</i> |
| Tree        | <a href="#">src-port</a>   |
| Description | Commands in this context specify match criteria based on the source port.                                |
| Introduced  | 21.7.R1  |

Platforms All

### **mask** *number*

Synopsis IP address mask as the match criterion

Context **configure** [system security management-access-filter ipv6-filter entry](#) *number match src-port mask number*

Tree [mask](#)

Range 1 to 65535

Default 65535

Introduced 21.7.R1

Platforms All

### **port** *number*

Synopsis TCP or UDP port number as the match criterion

Context **configure** [system security management-access-filter ipv6-filter entry](#) *number match src-port port number*

Tree [port](#)

Range 1 to 65535

Notes This element is mandatory.

Introduced 21.7.R1

Platforms All

### **mac-filter**

Synopsis Enter the **mac-filter** context

Context **configure** [system security management-access-filter mac-filter](#)

Tree [mac-filter](#)

Introduced 16.0.R4

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of management access MAC filter

Context **configure** [system security management-access-filter mac-filter admin-state](#) *keyword*



|            |                             |
|------------|-----------------------------|
| Tree       | <a href="#">admin-state</a> |
| Options    | enable, disable             |
| Default    | enable                      |
| Introduced | 16.0.R4                     |
| Platforms  | All                         |

### **default-action** *keyword*

|             |  |
|-------------|--|
| Synopsis    | Default action for the management access filter  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">mac-filter</a> <a href="#">default-action</a> <i>keyword</i> |
| Tree        | <a href="#">default-action</a>   |
| Description | This command specifies the default action for management access in the absence of a specific management access filter match.   |
| Options     | ignore-match, accept, drop   |
| Default     | ignore-match   |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

### **entry** [[entry-id](#)] *number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>entry</b> list instance   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> |
| Tree       | <a href="#">entry</a>  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **[entry-id]** *number*

|             |  |
|-------------|--|
| Synopsis    | Entry ID to identify the match criteria and the action   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i>   |
| Tree        | <a href="#">entry</a>  |
| Description | This command specifies the entry ID to identify the match criteria and the corresponding action. It is recommended that entries are numbered in staggered increments. This allows users to insert a new entry in an existing policy without having to renumber the existing entries. |
| Range       | 1 to 9999  |

|            |                                     |
|------------|-------------------------------------|
| Notes      | This element is part of a list key. |
| Introduced | 16.0.R4                             |
| Platforms  | All                                 |

### **action** *keyword*

|             |  |
|-------------|--|
| Synopsis    | Action associated with the management access filter  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <i>keyword</i> |
| Tree        | <a href="#">action</a>   |
| Description | This command specifies the action associated with the management access filter match criteria entry.<br><br>If the packet does not meet any of the match criteria, the configured default action is applied.   |
| Options     | ignore-match, accept, drop   |
| Default     | ignore-match   |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

### **description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 16.0.R4  |
| Platforms     | All  |

### **log-events** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Enable match logging   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">log-events</a> <i>boolean</i> |
| Tree        | <a href="#">log-events</a>   |
| Description | When configured to <b>true</b> , this command enables match logging. When enabled, matches on the entry cause the Security event mafEntryMatch to be raised.   |

|            |  |
|------------|--|
|            | When configured to <b>false</b> , match logging is disabled. |
| Default    | false  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

## match

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>match</b> context  |
| Context     | <b>configure</b> <a href="#">system security management-access-filter mac-filter entry</a> <i>number</i> <b>match</b> |
| Tree        | <a href="#">match</a>   |
| Description | Commands in this context specify match criteria for the entry.  |
| Introduced  | 16.0.R4   |
| Platforms   | All   |

## cfm-opcode

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>cfm-opcode</b> context   |
| Context     | <b>configure</b> <a href="#">system security management-access-filter mac-filter entry</a> <i>number</i> <b>match</b><br><a href="#">cfm-opcode</a> |
| Tree        | <a href="#">cfm-opcode</a>  |
| Description | Commands in this context specify match criteria based on the CFM opcode.  |
| Introduced  | 16.0.R4   |
| Platforms   | All   |

## eq *number*

|            |  |
|------------|--|
| Synopsis   | Equal to comparison operator for the CFM opcode  |
| Context    | <b>configure</b> <a href="#">system security management-access-filter mac-filter entry</a> <i>number</i> <b>match</b><br><a href="#">cfm-opcode eq</a> <i>number</i> |
| Tree       | <a href="#">eq</a>   |
| Range      | 0 to 255   |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **gt** *number*

|            |  |
|------------|--|
| Synopsis   | Greater than comparison operator for the CFM opcode  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">cfm-opcode</a> <a href="#">gt</a> <i>number</i> |
| Tree       | <a href="#">gt</a>   |
| Range      | 0 to 254   |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **lt** *number*

|            |  |
|------------|--|
| Synopsis   | Less than comparison operator for the CFM opcode   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">cfm-opcode</a> <a href="#">lt</a> <i>number</i> |
| Tree       | <a href="#">lt</a>   |
| Range      | 1 to 255   |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **range**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>range</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">cfm-opcode</a> <a href="#">range</a> |
| Tree       | <a href="#">range</a>   |
| Notes      | The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **end** *number*

|          |   |
|----------|---|
| Synopsis | Upper bound of the range for the OpCode to match  |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">cfm-opcode</a> <a href="#">range</a> <a href="#">end</a> <i>number</i> |

|            |                            |
|------------|----------------------------|
| Tree       | <a href="#">end</a>        |
| Range      | 1 to 255                   |
| Notes      | This element is mandatory. |
| Introduced | 16.0.R4                    |
| Platforms  | All                        |

### **start number**

|            |   |
|------------|---|
| Synopsis   | Lower bound of the range for the OpCode to match  |
| Context    | <b>configure</b> <a href="#">system security management-access-filter mac-filter entry number match cfm-opcode range start number</a> |
| Tree       | <a href="#">start</a>   |
| Range      | 0 to 254  |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **dot1p**

|             |   |
|-------------|---|
| Synopsis    | Enable the <b>dot1p</b> context   |
| Context     | <b>configure</b> <a href="#">system security management-access-filter mac-filter entry number match dot1p</a> |
| Tree        | <a href="#">dot1p</a>   |
| Description | Commands in this context specify match criteria based on the IEEE 802.1p value.                               |
| Introduced  | 16.0.R4   |
| Platforms   | All   |

### **mask number**

|            |   |
|------------|---|
| Synopsis   | 3-bit mask as the match criterion   |
| Context    | <b>configure</b> <a href="#">system security management-access-filter mac-filter entry number match dot1p mask number</a> |
| Tree       | <a href="#">mask</a>  |
| Range      | 1 to 7  |
| Default    | 7   |
| Introduced | 16.0.R4   |

Platforms All

### **priority number**

Synopsis IEEE 802.1p value as the match criterion

Context **configure system security management-access-filter mac-filter entry number match dot1p priority number**

Tree [priority](#)

Range 0 to 7

Notes This element is mandatory.

Introduced 16.0.R4

Platforms All

### **dst-mac**

Synopsis Enable the **dst-mac** context

Context **configure system security management-access-filter mac-filter entry number match dst-mac**

Tree [dst-mac](#)

Description Commands in this context specify match criteria based on the destination MAC.

Introduced 16.0.R4

Platforms All

### **address string**

Synopsis MAC address used as the match criterion

Context **configure system security management-access-filter mac-filter entry number match dst-mac address string**

Tree [address](#)

Notes This element is mandatory.

Introduced 16.0.R4

Platforms All

### **mask string**

Synopsis MAC address mask as the match criterion

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-mac</a> <a href="#">mask</a> <i>string</i> |
| Tree       | <a href="#">mask</a>  |
| Default    | ff:ff:ff:ff:ff:ff   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **etype** *string*

|               |  |
|---------------|--|
| Synopsis      | Ethernet type II Ethertype value as the match criterion  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">etype</a> <i>string</i> |
| Tree          | <a href="#">etype</a>  |
| Description   | This command specifies an Ethernet type II Ethertype value to be used as a MAC filter match criterion.<br><br>The Ethernet type field is used by the Ethernet version-II frames and does not apply to IEEE 802.3 Ethernet frames.  |
| String Length | 5 to 6   |
| Introduced    | 16.0.R4  |
| Platforms     | All  |

### **frame-type** *keyword*

|            |  |
|------------|--|
| Synopsis   | MAC frame type as the match criterion  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">frame-type</a> <i>keyword</i> |
| Tree       | <a href="#">frame-type</a>   |
| Options    | 802dot3, 802dot2-llc, 802dot2-snap, ethernet-ii, 802dot1-ag  |
| Default    | 802dot3  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **llc-dsap**

|          |   |
|----------|---|
| Synopsis | Enable the <b>llc-dsap</b> context  |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">llc-dsap</a> |

|             |   |
|-------------|---|
| Tree        | <a href="#">llc-dsap</a>  |
| Description | Commands in this context specify match criteria based on the Destination Service Access Point (DSAP). |
| Introduced  | 16.0.R4   |
| Platforms   | All   |

### **dsap number**

|            |  |
|------------|--|
| Synopsis   | 8-bit DSAP as the match criterion  |
| Context    | <b>configure</b> <a href="#">system security management-access-filter mac-filter entry number match llc-dsap dsap number</a> |
| Tree       | <a href="#">dsap</a>   |
| Range      | 0 to 255   |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **mask number**

|            |  |
|------------|--|
| Synopsis   | Mask for DSAP value as the match criterion   |
| Context    | <b>configure</b> <a href="#">system security management-access-filter mac-filter entry number match llc-dsap mask number</a> |
| Tree       | <a href="#">mask</a>   |
| Range      | 1 to 255   |
| Default    | 255  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **llc-ssap**

|             |  |
|-------------|--|
| Synopsis    | Enable the <b>llc-ssap</b> context   |
| Context     | <b>configure</b> <a href="#">system security management-access-filter mac-filter entry number match llc-ssap</a> |
| Tree        | <a href="#">llc-ssap</a>   |
| Description | Commands in this context specify match criteria based on the Source Service Access Point (SSAP).                 |



---

|            |         |
|------------|---------|
| Introduced | 16.0.R4 |
| Platforms  | All     |

### **mask number**

|            |  |
|------------|--|
| Synopsis   | Mask for SSAP value as the match criterion   |
| Context    | <b>configure</b> <a href="#">system security management-access-filter mac-filter entry number match llc-ssap mask number</a> |
| Tree       | <a href="#">mask</a>   |
| Range      | 1 to 255   |
| Default    | 255  |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **ssap number**

|            |  |
|------------|--|
| Synopsis   | 8-bit SSAP as the match criterion  |
| Context    | <b>configure</b> <a href="#">system security management-access-filter mac-filter entry number match llc-ssap ssap number</a> |
| Tree       | <a href="#">ssap</a>   |
| Range      | 0 to 255   |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### **service string**

|               |  |
|---------------|--|
| Synopsis      | Service ID used as the match condition   |
| Context       | <b>configure</b> <a href="#">system security management-access-filter mac-filter entry number match service string</a> |
| Tree          | <a href="#">service</a>  |
| String Length | 1 to 64  |
| Introduced    | 16.0.R4  |
| Platforms     | All  |

**snap-oui** *keyword*

|             |  |
|-------------|--|
| Synopsis    | IEEE 802.3 LLC SNAP Ethernet Frame OUI value for match   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security management-access-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">snap-oui</a> <i>keyword</i> |
| Tree        | <a href="#">snap-oui</a>   |
| Description | This command specifies the IEEE 802.3 LLC SNAP Ethernet Frame OUI value as the MAC filter match criterion.   |
| Options     | zero, non-zero   |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

**snap-pid** *number*

|             |   |
|-------------|---|
| Synopsis    | IEEE 802.3 LLC SNAP Ethernet Frame PID as the match   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security management-access-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">snap-pid</a> <i>number</i>   |
| Tree        | <a href="#">snap-pid</a>  |
| Description | This command specifies an IEEE 802.3 LLC SNAP Ethernet Frame PID value used as the MAC filter match criterion.<br><br>The SNAP PID match criterion is independent of the OUI field within the SNAP header. Two packets with different 3-byte OUI fields but the same PID field match the same filter entry based on a SNAP PID match criterion. |
| Range       | 0 to 65535  |
| Introduced  | 16.0.R4   |
| Platforms   | All   |

**src-mac**

|             |  |
|-------------|--|
| Synopsis    | Enable the <b>src-mac</b> context  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security management-access-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-mac</a> |
| Tree        | <a href="#">src-mac</a>  |
| Description | Commands in this context specify match criteria based on the source MAC.   |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

**address string**

|            |  |
|------------|--|
| Synopsis   | MAC address used as the match criterion  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-mac</a> <a href="#">address</a> <i>string</i> |
| Tree       | <a href="#">address</a>  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**mask string**

|            |   |
|------------|---|
| Synopsis   | MAC address mask as the match criterion   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-mac</a> <a href="#">mask</a> <i>string</i> |
| Tree       | <a href="#">mask</a>  |
| Default    | ff:ff:ff:ff:ff:ff   |
| Introduced | 16.0.R4   |
| Platforms  | All   |

**per-peer-queuing boolean**

|             |  |
|-------------|--|
| Synopsis    | Allow CPM hardware queuing per peer  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">per-peer-queuing</a> <i>boolean</i>   |
| Tree        | <a href="#">per-peer-queuing</a>   |
| Description | When configured to <b>true</b> , the router automatically allocates a separate CPM hardware queue for the peer when a peering session is established.<br>When configured to <b>false</b> , a separate CPM hardware queue is not allowed. |
| Introduced  | 16.0.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**pki**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>pki</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> |
| Tree       | <a href="#">pki</a>  |
| Introduced | 16.0.R1  |

Platforms All

### **ca-profile** [*ca-profile-name*] *string*

Synopsis Enter the **ca-profile** list instance  
Context **configure** [system](#) [security](#) [pki](#) [ca-profile](#) *string*  
Tree [ca-profile](#)  
Max. Instances 128  
Introduced 16.0.R1  
Platforms All

### **[ca-profile-name]** *string*

Synopsis CA profile name  
Context **configure** [system](#) [security](#) [pki](#) [ca-profile](#) *string*  
Tree [ca-profile](#)  
String Length 1 to 32  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the CA profile  
Context **configure** [system](#) [security](#) [pki](#) [ca-profile](#) *string* [admin-state](#) *keyword*  
Tree [admin-state](#)  
Options enable, disable  
Default disable  
Introduced 16.0.R1  
Platforms All

## auto-crl-update



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enable the <b>auto-crl-update</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <b>auto-crl-update</b> |
| Tree       | <a href="#">auto-crl-update</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## admin-state *keyword*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Administrative state of the automatic CRL update  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">auto-crl-update</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## crl-urls



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enter the <b>crl-urls</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">auto-crl-update</a> <b>crl-urls</b> |
| Tree       | <a href="#">crl-urls</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**url-entry** [[entry-id](#)] *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enter the <b>url-entry</b> list instance   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">auto-crl-update</a> <a href="#">crl-urls</a> <a href="#">url-entry</a> <i>number</i> |
| Tree       | <a href="#">url-entry</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[entry-id]** *number*

|            |  |
|------------|--|
| Synopsis   | URL on this system   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">auto-crl-update</a> <a href="#">crl-urls</a> <a href="#">url-entry</a> <i>number</i> |
| Tree       | <a href="#">url-entry</a>  |
| Range      | 1 to 8   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**transmission-profile** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | File transmission profile to update CRL  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">auto-crl-update</a> <a href="#">crl-urls</a> <a href="#">url-entry</a> <i>number</i> <a href="#">transmission-profile</a> <i>reference</i> |
| Tree       | <a href="#">transmission-profile</a>   |
| Reference  | <b>configure</b> <a href="#">system</a> <a href="#">transmission-profile</a> <i>string</i>   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**url** *http-url-path-loose***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Location of updated CRL  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">auto-crl-update</a> <a href="#">crl-urls</a> <a href="#">url-entry</a> <i>number</i><br><a href="#">url</a> <i>http-url-path-loose</i> |
| Tree          | <a href="#">url</a>  |
| String Length | 1 to 180   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**periodic-update-interval** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Interval between two consecutive CRL updates  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">auto-crl-update</a> <a href="#">periodic-update-interval</a><br><i>number</i> |
| Tree       | <a href="#">periodic-update-interval</a>  |
| Range      | 3600 to 31622400  |
| Units      | seconds   |
| Default    | 86400   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**pre-update-time** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Time prior to the next update time of the current CRL   |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">auto-crl-update</a> <a href="#">pre-update-time</a> <i>number</i> |
| Tree     | <a href="#">pre-update-time</a>   |

|            |               |
|------------|---------------|
| Range      | 0 to 31622400 |
| Units      | seconds       |
| Default    | 3600          |
| Introduced | 16.0.R1       |
| Platforms  | All           |

### **retry-interval** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Interval before retrying to update CRL   |
| Context    | <b>configure</b> <a href="#">system security pki ca-profile</a> <i>string auto-crl-update</i> <a href="#">retry-interval</a> <i>number</i> |
| Tree       | <a href="#">retry-interval</a>   |
| Range      | 0 to 31622400  |
| Units      | seconds  |
| Default    | 3600   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **schedule-type** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Time scheduler type for an automated CRL update  |
| Context    | <b>configure</b> <a href="#">system security pki ca-profile</a> <i>string auto-crl-update</i> <a href="#">schedule-type</a> <i>keyword</i> |
| Tree       | <a href="#">schedule-type</a>  |
| Options    | next-update-based, periodic  |
| Default    | next-update-based  |
| Introduced | 16.0.R1  |
| Platforms  | All  |



## cert-file *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Certificate file name  |
| Context       | <b>configure</b> <a href="#">system security pki ca-profile</a> <i>string</i> <b>cert-file</b> <i>string</i> |
| Tree          | <a href="#">cert-file</a>  |
| String Length | 1 to 95  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

## cmpv2

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enter the <b>cmpv2</b> context   |
| Context    | <b>configure</b> <a href="#">system security pki ca-profile</a> <i>string</i> <b>cmpv2</b> |
| Tree       | <a href="#">cmpv2</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## accept-unprotected-message

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Enter the <b>accept-unprotected-message</b> context  |
| Context    | <b>configure</b> <a href="#">system security pki ca-profile</a> <i>string</i> <b>cmpv2</b> <b>accept-unprotected-message</b> |
| Tree       | <a href="#">accept-unprotected-message</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**error-message** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Accept unprotected error messages   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">cmpv2</a> <a href="#">accept-unprotected-message</a> <a href="#">error-message</a> <i>boolean</i> |
| Tree       | <a href="#">error-message</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**pkiconf-message** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Accept unprotected PKI confirmation messages  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">cmpv2</a> <a href="#">accept-unprotected-message</a> <a href="#">pkiconf-message</a> <i>boolean</i> |
| Tree       | <a href="#">pkiconf-message</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**always-set-sender-for-ir** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Set subject name in CMPv2 header for all IR messages  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">cmpv2</a> <a href="#">always-set-sender-for-ir</a> <i>boolean</i> |
| Tree       | <a href="#">always-set-sender-for-ir</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |

Platforms All

## http



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **http** context

Context **configure** [system security pki ca-profile](#) *string cmpv2 http*

Tree [http](#)

Introduced 16.0.R1

Platforms All

## response-timeout *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis HTTP response timeout

Context **configure** [system security pki ca-profile](#) *string cmpv2 http response-timeout number*

Tree [response-timeout](#)

Range 1 to 3600

Units seconds

Default 30

Introduced 16.0.R1

Platforms All

## version *keyword*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis HTTP version for CMPv2 messages

Context **configure** [system security pki ca-profile](#) *string cmpv2 http version keyword*

Tree [version](#)

|            |          |
|------------|----------|
| Options    | 1.0, 1.1 |
| Default    | 1.1      |
| Introduced | 16.0.R1  |
| Platforms  | All      |

## key-list



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enter the <b>key-list</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">cmpv2</a> <b>key-list</b> |
| Tree       | <a href="#">key-list</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## key [[reference-number](#)] *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>key</b> list instance  |
| Context        | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">cmpv2</a> <a href="#">key-list</a> <b>key</b> <i>string</i> |
| Tree           | <a href="#">key</a>   |
| Max. Instances | 128   |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

## [[reference-number](#)] *string*

|               |   |
|---------------|---|
| Synopsis      | Unique identifier for the CA initial authentication key   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">cmpv2</a> <a href="#">key-list</a> <b>key</b> <i>string</i> |
| Tree          | <a href="#">key</a>   |
| String Length | 1 to 64   |

|            |                                     |
|------------|-------------------------------------|
| Notes      | This element is part of a list key. |
| Introduced | 16.0.R1                             |
| Platforms  | All                                 |

### **password** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Shared secret for this CA initial authentication key   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">cmpv2</a> <a href="#">key-list</a> <a href="#">key</a> <i>string</i> <b>password</b> <i>string</i> |
| Tree          | <a href="#">password</a>   |
| String Length | 1 to 115   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

### **recipient-subject** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | DN attributes for recipient subject of CMPv2 requests   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">cmpv2</a> <a href="#">recipient-subject</a> <i>string</i> |
| Tree          | <a href="#">recipient-subject</a>   |
| Description   | This command configures the recipient subject of CMPv2 requests.  |
| String Length | 1 to 256  |
| Notes         | The following elements are part of a choice: <b>recipient-subject</b> or <b>use-ca-subject</b> .  |
| Introduced    | 22.10.R1  |
| Platforms     | All   |

**response-signing-cert** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | File name of the certificate to verify CMPv2 responses  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">cmpv2</a> <a href="#">response-signing-cert</a> <i>string</i> |
| Tree          | <a href="#">response-signing-cert</a>   |
| Description   | This command specifies an imported certificate used to verify the CMP response message that they are protected by signature. If this command is not configured, then CA's certificate is used.          |
| String Length | 1 to 95   |
| Notes         | The following elements are part of a choice: <b>response-signing-cert</b> or <b>response-signing-use-extracert</b> .  |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**response-signing-use-extracert****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Use extraCerts certificate to verify response signature  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">cmpv2</a> <a href="#">response-signing-use-extracert</a> |
| Tree       | <a href="#">response-signing-use-extracert</a>   |
| Notes      | The following elements are part of a choice: <b>response-signing-cert</b> or <b>response-signing-use-extracert</b> .   |
| Introduced | 22.10.R1   |
| Platforms  | All  |

**same-recipient-nonce-for-poll-request** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |  |
|----------|--|
| Synopsis | Use same recipNonce as last CMPv2 response |
|----------|--|

|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">system security pki ca-profile</a> <i>string</i> <a href="#">cmpv2 same-recipient-nonce-for-poll-request</a> <i>boolean</i> |
| Tree       | <a href="#">same-recipient-nonce-for-poll-request</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## url



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enter the <b>url</b> context  |
| Context    | <b>configure</b> <a href="#">system security pki ca-profile</a> <i>string</i> <a href="#">cmpv2 url</a> |
| Tree       | <a href="#">url</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## service-name *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Administrative service name  |
| Context       | <b>configure</b> <a href="#">system security pki ca-profile</a> <i>string</i> <a href="#">cmpv2 url service-name</a> <i>string</i> |
| Tree          | <a href="#">service-name</a>   |
| String Length | 1 to 64  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

## url-string *http-optional-url-loose*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | URL for CMPv2   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">cmpv2</a> <a href="#">url</a> <a href="#">url-string</a> <i>http-optional-url-loose</i> |
| Tree          | <a href="#">url-string</a>  |
| String Length | 1 to 180  |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

## use-ca-subject



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Use subject DN in CA certificate as CMPv2 request recipient  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">cmpv2</a> <a href="#">use-ca-subject</a> |
| Tree       | <a href="#">use-ca-subject</a>   |
| Notes      | The following elements are part of a choice: <b>recipient-subject</b> or <b>use-ca-subject</b> .   |
| Introduced | 22.10.R1   |
| Platforms  | All  |

## crl-file *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |  |
|---------------|--|
| Synopsis      | Certificate Revocation List (CRL) file name  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">crl-file</a> <i>string</i> |
| Tree          | <a href="#">crl-file</a>   |
| String Length | 1 to 95  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

## description *string*

|          |   |
|----------|---|
| Synopsis | Text description  |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">description</a> <i>string</i> |



|               |                             |
|---------------|-----------------------------|
| Tree          | <a href="#">description</a> |
| String Length | 1 to 80                     |
| Introduced    | 16.0.R1                     |
| Platforms     | All                         |

## ocsp



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ocsp</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <b>ocsp</b> |
| Tree       | <a href="#">ocsp</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## responder-url *http-optional-url-loose*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|               |   |
|---------------|---|
| Synopsis      | HTTP URL of the OCSP responder for the CA   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <b>ocsp</b> <b>responder-url</b> <i>http-optional-url-loose</i> |
| Tree          | <a href="#">responder-url</a>   |
| String Length | 1 to 180  |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

## service-name *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Administrative service name   |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <b>ocsp</b> <b>service-name</b> <i>string</i> |

|               |                              |
|---------------|------------------------------|
| Tree          | <a href="#">service-name</a> |
| String Length | 1 to 64                      |
| Introduced    | 16.0.R1                      |
| Platforms     | All                          |

### **transmission-profile** *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Transmission profile for the OCSP  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">ocsp</a> <a href="#">transmission-profile</a> <i>reference</i> |
| Tree       | <a href="#">transmission-profile</a>   |
| Reference  | <b>configure</b> <a href="#">system</a> <a href="#">transmission-profile</a> <i>string</i>   |
| Introduced | 16.0.R6  |
| Platforms  | All  |

### **revocation-check** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Revocation method to check status of CA certificates  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">revocation-check</a> <i>keyword</i> |
| Tree       | <a href="#">revocation-check</a>  |
| Options    | crl, crl-optional   |
| Default    | crl   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **certificate-auto-update** [[certificate-file-name](#)] *string*

|          |  |
|----------|--|
| Synopsis | Enter the <b>certificate-auto-update</b> list instance   |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">certificate-auto-update</a> <i>string</i> |
| Tree     | <a href="#">certificate-auto-update</a>  |

|                |   |
|----------------|---|
| Description    | Commands in this context configure automatic certificate update associations. |
| Max. Instances | 256   |
| Introduced     | 22.10.R1  |
| Platforms      | All   |

### **[certificate-file-name] string**

|               |  |
|---------------|--|
| Synopsis      | Certificate file name  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">certificate-auto-update</a> <i>string</i> |
| Tree          | <a href="#">certificate-auto-update</a>  |
| String Length | 1 to 95  |
| Notes         | This element is part of a list key.  |
| Introduced    | 22.10.R1   |
| Platforms     | All  |

### **key-file-name string**

|               |  |
|---------------|--|
| Synopsis      | Imported key filename  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">certificate-auto-update</a> <i>string</i> <a href="#">key-file-name</a> <i>string</i> |
| Tree          | <a href="#">key-file-name</a>  |
| String Length | 1 to 95  |
| Introduced    | 22.10.R1   |
| Platforms     | All  |

### **profile reference**

|            |   |
|------------|---|
| Synopsis   | Certificate update profile name   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">certificate-auto-update</a> <i>string</i> <a href="#">profile</a> <i>reference</i> |
| Tree       | <a href="#">profile</a>   |
| Reference  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">certificate-update-profile</a> <i>string</i>                                       |
| Introduced | 22.10.R1  |
| Platforms  | All   |

**certificate-display-format** *keyword*

|            |  |
|------------|--|
| Synopsis   | Display format for Certificates and CRLs   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">certificate-display-format</a> <i>keyword</i> |
| Tree       | <a href="#">certificate-display-format</a>   |
| Options    | ascii, utf8  |
| Default    | ascii  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**certificate-expiration-warning**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>certificate-expiration-warning</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">certificate-expiration-warning</a> |
| Tree       | <a href="#">certificate-expiration-warning</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**hours** *number*

|            |   |
|------------|---|
| Synopsis   | Time before system generates certificate warning trap   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">certificate-expiration-warning</a> <a href="#">hours</a> <i>number</i> |
| Tree       | <a href="#">hours</a>   |
| Range      | 0 to 8760   |
| Units      | hours   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**repeat-hours** *number*

|          |  |
|----------|--|
| Synopsis | Time system repeats certificate expiration warning trap  |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">certificate-expiration-warning</a> <a href="#">repeat-hours</a> <i>number</i> |
| Tree     | <a href="#">repeat-hours</a>   |
| Range    | 0 to 8760  |
| Units    | hours  |
| Default  | 0  |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **certificate-update-profile** [[name](#)] *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>certificate-update-profile</b> list instance  |
| Context        | <b>configure</b> <a href="#">system security pki certificate-update-profile</a> <i>string</i>                                    |
| Tree           | <a href="#">certificate-update-profile</a>   |
| Description    | Commands in this context configure a certificate update profile that specifies the behavior of the automatic update certificate. |
| Max. Instances | 256  |
| Introduced     | 22.10.R1   |
| Platforms      | All  |

### **[name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Certificate update profile name   |
| Context       | <b>configure</b> <a href="#">system security pki certificate-update-profile</a> <i>string</i> |
| Tree          | <a href="#">certificate-update-profile</a>  |
| Description   | This command configures the certificate update profile name.                                  |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 22.10.R1  |
| Platforms     | All   |

### **after-issue** *number*

|             |   |
|-------------|---|
| Synopsis    | Time for scheduler updates after certificate issuance   |
| Context     | <b>configure</b> <a href="#">system security pki certificate-update-profile</a> <i>string</i> <a href="#">after-issue</a> <i>number</i> |
| Tree        | <a href="#">after-issue</a>   |
| Description | This command configures the time for scheduler updates after the certificate issue time.  |
| Range       | 864000 to 157680000   |
| Units       | seconds   |
| Notes       | The following elements are part of a choice: <b>after-issue</b> or <b>before-expiry</b> .   |

Introduced 22.10.R1  
 Platforms All

### **before-expiry** *number*

Synopsis Time scheduler updates before certificate expiry  
 Context **configure** [system security pki certificate-update-profile](#) *string* **before-expiry** *number*  
 Tree [before-expiry](#)  
 Description This command configures the time that the scheduler updates before the certificate expiration time.  
 Range 3600 to 157680000  
 Units seconds  
 Default 86400  
 Notes The following elements are part of a choice: **after-issue** or **before-expiry**.  
 Introduced 22.10.R1  
 Platforms All

### **cmpv2**

Synopsis Enter the **cmpv2** context  
 Context **configure** [system security pki certificate-update-profile](#) *string* **cmpv2**  
 Tree [cmpv2](#)  
 Notes The following elements are part of a choice: **cmpv2** or **est**.  
 Introduced 22.10.R1  
 Platforms All

### **ca-profile** *reference*

Synopsis CA profile name  
 Context **configure** [system security pki certificate-update-profile](#) *string* **cmpv2** [ca-profile](#) *reference*  
 Tree [ca-profile](#)  
 Description This command specifies the use of CMPv2 as the protocol to update the certificate. The CMPv2 configuration is derived from the referenced CA profile.  
 Reference **configure** [system security pki ca-profile](#) *string*  
 Introduced 22.10.R1

Platforms All

## dsa

Synopsis Enter the **dsa** context

Context **configure** [system](#) [security](#) [pki](#) [certificate-update-profile](#) *string* **dsa**

Tree [dsa](#)

Notes The following elements are part of a choice: **dsa**, **ecdsa**, **rsa**, or **same-as-existing-key**.

Introduced 22.10.R1

Platforms All

## key-size *number*

Synopsis Length of the generated DSA key

Context **configure** [system](#) [security](#) [pki](#) [certificate-update-profile](#) *string* **dsa** *key-size* *number*

Tree [key-size](#)

Description This command specifies that the newly generated key is an DSA key with the specified key length in bits.

Range 512 to 8192

Default 2048

Introduced 22.10.R1

Platforms All

## ecdsa

Synopsis Enter the **ecdsa** context

Context **configure** [system](#) [security](#) [pki](#) [certificate-update-profile](#) *string* **ecdsa**

Tree [ecdsa](#)

Notes The following elements are part of a choice: **dsa**, **ecdsa**, **rsa**, or **same-as-existing-key**.

Introduced 22.10.R1

Platforms All

## curve *keyword*

Synopsis Elliptic curve to be used in ECDSA key generation

|             |   |
|-------------|---|
| Context     | <b>configure system security pki certificate-update-profile</b> <i>string ecdsa curve keyword</i> |
| Tree        | <a href="#">curve</a>   |
| Description | This command specifies that the newly generated key is an ECDSA key with the specified curve.     |
| Options     | secp256r1, secp384r1, secp521r1   |
| Default     | secp256r1   |
| Introduced  | 22.10.R1  |
| Platforms   | All   |

## est

|            |   |
|------------|---|
| Synopsis   | Enter the <b>est</b> context  |
| Context    | <b>configure system security pki certificate-update-profile</b> <i>string est</i> |
| Tree       | <a href="#">est</a>   |
| Notes      | The following elements are part of a choice: <b>cmpv2</b> or <b>est</b> .         |
| Introduced | 22.10.R1  |
| Platforms  | All   |

## est-profile *reference*

|             |  |
|-------------|--|
| Synopsis    | EST profile name   |
| Context     | <b>configure system security pki certificate-update-profile</b> <i>string est est-profile reference</i>  |
| Tree        | <a href="#">est-profile</a>  |
| Description | This command specifies the use of EST as the protocol to update the certificate. The EST configuration is derived from the referenced EST profile. |
| Reference   | <b>configure system security pki est-profile</b> <i>string</i>   |
| Introduced  | 22.10.R1   |
| Platforms   | All  |

## hash-algorithm *keyword*

|             |  |
|-------------|--|
| Synopsis    | Hash algorithm for a certificate request   |
| Context     | <b>configure system security pki certificate-update-profile</b> <i>string hash-algorithm keyword</i> |
| Tree        | <a href="#">hash-algorithm</a>   |
| Description | This command specifies the hash algorithm used to generate a certificate request.                    |



|            |   |
|------------|---|
| Options    | md5, sha1, sha224, sha256, sha384, sha512 |
| Default    | sha256                                    |
| Introduced | 22.10.R1                                  |
| Platforms  | All                                       |

### **retry-interval** *number*

|             |   |
|-------------|---|
| Synopsis    | Retry interval after a failed update  |
| Context     | <b>configure</b> <a href="#">system security pki certificate-update-profile</a> <i>string</i> <b>retry-interval</b> <i>number</i> |
| Tree        | <a href="#">retry-interval</a>  |
| Description | This command configures the retry interval after the update fails.  |
| Range       | 60 to 36000   |
| Units       | seconds   |
| Default     | 3600  |
| Introduced  | 22.10.R1  |
| Platforms   | All   |

### **rsa**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>rsa</b> context   |
| Context    | <b>configure</b> <a href="#">system security pki certificate-update-profile</a> <i>string</i> <b>rsa</b>               |
| Tree       | <a href="#">rsa</a>  |
| Notes      | The following elements are part of a choice: <b>dsa</b> , <b>ecdsa</b> , <b>rsa</b> , or <b>same-as-existing-key</b> . |
| Introduced | 22.10.R1   |
| Platforms  | All  |

### **key-size** *number*

|             |  |
|-------------|--|
| Synopsis    | Length of the generated RSA key  |
| Context     | <b>configure</b> <a href="#">system security pki certificate-update-profile</a> <i>string</i> <b>rsa</b> <b>key-size</b> <i>number</i> |
| Tree        | <a href="#">key-size</a>   |
| Description | This command specifies that the newly generated key is a RSA key with the specified key length in bits.                                |
| Range       | 512 to 8192  |
| Default     | 2048   |

Introduced 22.10.R1  
 Platforms All

### same-as-existing-key

Synopsis Generate the new key to same type and key length  
 Context **configure** [system security pki certificate-update-profile](#) *string* [same-as-existing-key](#)  
 Tree [same-as-existing-key](#)  
 Description When configured, this command specifies that the newly generated key is the same type and key length as the existing key.  
 Notes The following elements are part of a choice: **dsa**, **ecdsa**, **rsa**, or **same-as-existing-key**.  
 Introduced 22.10.R1  
 Platforms All

### common-name-list [[cn-list-name](#)] *string*

Synopsis Enter the **common-name-list** list instance  
 Context **configure** [system security pki common-name-list](#) *string*  
 Tree [common-name-list](#)  
 Max. Instances 64  
 Introduced 16.0.R1  
 Platforms All

### [\[cn-list-name\]](#) *string*

Synopsis CN list name  
 Context **configure** [system security pki common-name-list](#) *string*  
 Tree [common-name-list](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

**common-name** [[cn-index](#)] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>common-name</b> list instance  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">common-name-list</a> <i>string</i> <a href="#">common-name</a> <i>number</i> |
| Tree       | <a href="#">common-name</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[cn-index]** *number*

|            |   |
|------------|---|
| Synopsis   | Common name index   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">common-name-list</a> <i>string</i> <a href="#">common-name</a> <i>number</i> |
| Tree       | <a href="#">common-name</a>   |
| Range      | 1 to 128  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**cn-type** *keyword*

|            |  |
|------------|--|
| Synopsis   | Common name type   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">common-name-list</a> <i>string</i> <a href="#">common-name</a> <i>number</i> <a href="#">cn-type</a> <i>keyword</i> |
| Tree       | <a href="#">cn-type</a>  |
| Options    | ip-address, domain-name  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**cn-value** *string*

|               |  |
|---------------|--|
| Synopsis      | Common name value  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">common-name-list</a> <i>string</i> <a href="#">common-name</a> <i>number</i> <a href="#">cn-value</a> <i>string</i> |
| Tree          | <a href="#">cn-value</a>   |
| String Length | 1 to 255   |

---

|            |                            |
|------------|----------------------------|
| Notes      | This element is mandatory. |
| Introduced | 16.0.R1                    |
| Platforms  | All                        |

### **crl-expiration-warning**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>crl-expiration-warning</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">crl-expiration-warning</a> |
| Tree       | <a href="#">crl-expiration-warning</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **hours** *number*

|            |  |
|------------|--|
| Synopsis   | Time before system generates CRL expiration warning trap   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">crl-expiration-warning</a> <b>hours</b> <i>number</i> |
| Tree       | <a href="#">hours</a>  |
| Range      | 0 to 8760  |
| Units      | hours  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **repeat-hours** *number*

|            |   |
|------------|---|
| Synopsis   | Time system repeats CRL expiration warning trap   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">crl-expiration-warning</a> <b>repeat-hours</b> <i>number</i> |
| Tree       | <a href="#">repeat-hours</a>  |
| Range      | 0 to 8760   |
| Units      | hours   |
| Default    | 0   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**est-profile** [*name*] *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>est-profile</b> list instance   |
| Context        | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">est-profile</a> <i>string</i> |
| Tree           | <a href="#">est-profile</a>  |
| Description    | Commands in this context configure an Enrollment over Secure Transport (EST) profile.  |
| Max. Instances | 128  |
| Introduced     | 21.10.R1   |
| Platforms      | All  |

**[name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Enrollment over Secured Transport profile name   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">est-profile</a> <i>string</i> |
| Tree          | <a href="#">est-profile</a>  |
| Description   | This command configures the EST profile name.  |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 21.10.R1   |
| Platforms     | All  |

**check-id-kp-cmcra-only** *boolean*

|            |  |
|------------|--|
| Synopsis   | Check id-kp-cmcra in the EST certificate   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">est-profile</a> <i>string</i> <a href="#">check-id-kp-cmcra-only</a> <i>boolean</i> |
| Tree       | <a href="#">check-id-kp-cmcra-only</a>   |
| Default    | false  |
| Introduced | 21.10.R1   |
| Platforms  | All  |

**client-tls-profile** *string*

|          |   |
|----------|---|
| Synopsis | TLS client profile assigned to applications   |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">est-profile</a> <i>string</i> <a href="#">client-tls-profile</a> <i>string</i> |
| Tree     | <a href="#">client-tls-profile</a>  |

|               |  |
|---------------|--|
| Description   | This command specifies the TLS client profile to be assigned to applications for encryption. The profile creates the TLS connection to the EST server. |
| String Length | 1 to 32  |
| Introduced    | 21.10.R1   |
| Platforms     | All  |

## http-authentication

|            |  |
|------------|--|
| Synopsis   | Enter the <b>http-authentication</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">est-profile</a> <i>string</i> <a href="#">http-authentication</a> |
| Tree       | <a href="#">http-authentication</a>  |
| Introduced | 21.10.R1   |
| Platforms  | All  |

## password *string*

|               |   |
|---------------|---|
| Synopsis      | Password for EST authentication   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">est-profile</a> <i>string</i> <a href="#">http-authentication</a> <a href="#">password</a> <i>string</i> |
| Tree          | <a href="#">password</a>  |
| String Length | 1 to 115  |
| Introduced    | 21.10.R1  |
| Platforms     | All   |

## username *string*

|               |   |
|---------------|---|
| Synopsis      | Username for the EST authentication   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">est-profile</a> <i>string</i> <a href="#">http-authentication</a> <a href="#">username</a> <i>string</i> |
| Tree          | <a href="#">username</a>  |
| String Length | 1 to 32   |
| Introduced    | 21.10.R1  |
| Platforms     | All   |

## server

|          |                                 |
|----------|---------------------------------|
| Synopsis | Enter the <b>server</b> context |
|----------|---------------------------------|

|             |  |
|-------------|--|
| Context     | <b>configure system security pki est-profile string server</b> |
| Tree        | <b>server</b>  |
| Description | Commands in this context configure EST server parameters.      |
| Introduced  | 21.10.R1   |
| Platforms   | All  |

### **fqdn string**

|               |   |
|---------------|---|
| Synopsis      | Fully Qualified Domain Name (FQDN) of the EST server                                      |
| Context       | <b>configure system security pki est-profile string server fqdn string</b>                |
| Tree          | <b>fqdn</b>   |
| Description   | This command specifies to use the FQDN of the EST server.                                 |
| String Length | 1 to 255  |
| Notes         | The following elements are part of a choice: <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> . |
| Introduced    | 21.10.R1  |
| Platforms     | All   |

### **ipv4 string**

|            |   |
|------------|---|
| Synopsis   | IPv4 address of the EST server  |
| Context    | <b>configure system security pki est-profile string server ipv4 string</b>                |
| Tree       | <b>ipv4</b>   |
| Notes      | The following elements are part of a choice: <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> . |
| Introduced | 21.10.R1  |
| Platforms  | All   |

### **ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)**

|            |   |
|------------|---|
| Synopsis   | IPv6 address of the EST server  |
| Context    | <b>configure system security pki est-profile string server ipv6 (ipv4-address-no-zone   ipv6-address-no-zone)</b> |
| Tree       | <b>ipv6</b>   |
| Notes      | The following elements are part of a choice: <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .                         |
| Introduced | 21.10.R1  |
| Platforms  | All   |

**port number**

|            |  |
|------------|--|
| Synopsis   | Port number of the EST server  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">est-profile</a> <i>string</i> <a href="#">server</a> <i>port number</i> |
| Tree       | <a href="#">port</a>   |
| Range      | 1 to 65535   |
| Default    | 443  |
| Introduced | 21.10.R1   |
| Platforms  | All  |

**transmission-profile string**

|               |   |
|---------------|---|
| Synopsis      | Transmission profile name for EST   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">est-profile</a> <i>string</i> <a href="#">transmission-profile</a> <i>string</i>   |
| Tree          | <a href="#">transmission-profile</a>  |
| Description   | This command associates a file transmission profile to the EST profile.<br>The transmission profile defines transport parameters for protocol such as HTTP, include routing instance, source address, timeout value, and so on. |
| String Length | 1 to 32   |
| Introduced    | 21.10.R1  |
| Platforms     | All   |

**imported-format keyword**

|            |   |
|------------|---|
| Synopsis   | The supported encrypted file formats  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">imported-format</a> <i>keyword</i> |
| Tree       | <a href="#">imported-format</a>   |
| Options    | any, secure   |
| Default    | any   |
| Introduced | 16.0.R6   |
| Platforms  | All   |

**maximum-cert-chain-depth number**

|          |   |
|----------|---|
| Synopsis | Maximum depth of certificate chain verification |
|----------|---|



|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">system security pki maximum-cert-chain-depth</a> <i>number</i> |
| Tree       | <a href="#">maximum-cert-chain-depth</a>  |
| Range      | 1 to 7  |
| Default    | 7   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## python-script

|            |  |
|------------|--|
| Synopsis   | Enter the <b>python-script</b> context                         |
| Context    | <b>configure</b> <a href="#">system security python-script</a> |
| Tree       | <a href="#">python-script</a>                                  |
| Introduced | 21.10.R1   |
| Platforms  | All  |

## authorization

|            |  |
|------------|--|
| Synopsis   | Enter the <b>authorization</b> context                                       |
| Context    | <b>configure</b> <a href="#">system security python-script authorization</a> |
| Tree       | <a href="#">authorization</a>  |
| Introduced | 21.10.R1   |
| Platforms  | All  |

## cron

|            |   |
|------------|---|
| Synopsis   | Enter the <b>cron</b> context   |
| Context    | <b>configure</b> <a href="#">system security python-script authorization cron</a> |
| Tree       | <a href="#">cron</a>  |
| Introduced | 21.10.R1  |
| Platforms  | All   |

## cli-user reference

|          |   |
|----------|---|
| Synopsis | User profile name when executing a Python application   |
| Context  | <b>configure</b> <a href="#">system security python-script authorization cron cli-user</a> <i>reference</i> |

|            |  |
|------------|--|
| Tree       | <a href="#">cli-user</a>   |
| Reference  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> |
| Introduced | 21.10.R1   |
| Platforms  | All  |

## event-handler

|            |  |
|------------|--|
| Synopsis   | Enter the <b>event-handler</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">python-script</a> <a href="#">authorization</a> <a href="#">event-handler</a> |
| Tree       | <a href="#">event-handler</a>  |
| Introduced | 21.10.R1   |
| Platforms  | All  |

## cli-user *reference*

|            |  |
|------------|--|
| Synopsis   | User profile name when executing a Python application  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">python-script</a> <a href="#">authorization</a> <a href="#">event-handler</a> <a href="#">cli-user</a> <i>reference</i> |
| Tree       | <a href="#">cli-user</a>   |
| Reference  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i>   |
| Introduced | 21.10.R1   |
| Platforms  | All  |

## snmp

|            |   |
|------------|---|
| Synopsis   | Enter the <b>snmp</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">snmp</a> |
| Tree       | <a href="#">snmp</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## **access** [[group](#)] *string* [context](#) *string* [security-model](#) *keyword* [security-level](#) *keyword*

|          |  |
|----------|--|
| Synopsis | Enter the <b>access</b> list instance  |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">snmp</a> <a href="#">access</a> <i>string</i> <a href="#">context</a> <i>string</i> <a href="#">security-model</a> <i>keyword</i> <a href="#">security-level</a> <i>keyword</i> |

|            |                        |
|------------|------------------------|
| Tree       | <a href="#">access</a> |
| Introduced | 16.0.R1                |
| Platforms  | All                    |

**[group] string**

|               |  |
|---------------|--|
| Synopsis      | Group name   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security snmp access string context string security-model keyword security-level keyword</a> |
| Tree          | <a href="#">access</a>   |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**context string**

|               |  |
|---------------|--|
| Synopsis      | String to match context name for access rights   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security snmp access string context string security-model keyword security-level keyword</a> |
| Tree          | <a href="#">access</a>   |
| String Length | 0 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**security-model keyword**

|            |  |
|------------|--|
| Synopsis   | Security model   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security snmp access string context string security-model keyword security-level keyword</a> |
| Tree       | <a href="#">access</a>   |
| Options    | snmpv1, snmpv2c, usm   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |

Platforms All

### **security-level** *keyword*

Synopsis Minimum security level required to gain access rights

Context **configure** [system](#) [security snmp access](#) *string* [context](#) *string* [security-model](#) *keyword* [security-level](#) *keyword*

Tree [access](#)

Options no-auth-no-privacy, auth-no-privacy, privacy

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **notify** *string*

Synopsis SNMP view for notification access

Context **configure** [system](#) [security snmp access](#) *string* [context](#) *string* [security-model](#) *keyword* [security-level](#) *keyword* [notify](#) *string*

Tree [notify](#)

Description This command specifies the SNMP view used to control which MIB objects can be accessed for notifications.

String Length 1 to 32

Introduced 16.0.R1

Platforms All

### **prefix-match** *keyword*

Synopsis Match type for the context

Context **configure** [system](#) [security snmp access](#) *string* [context](#) *string* [security-model](#) *keyword* [security-level](#) *keyword* [prefix-match](#) *keyword*

Tree [prefix-match](#)

Options exact, prefix

Introduced 16.0.R1

Platforms All

**read string**

|               |   |
|---------------|---|
| Synopsis      | SNMP view for read access   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security snmp access</a> <i>string context string security-model keyword security-level keyword read string</i> |
| Tree          | <a href="#">read</a>  |
| Description   | This command specifies the SNMP view used to control which MIB objects can be accessed using a read (get) operation.  |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**write string**

|               |  |
|---------------|--|
| Synopsis      | SNMP view for write access   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security snmp access</a> <i>string context string security-model keyword security-level keyword write string</i> |
| Tree          | <a href="#">write</a>  |
| Description   | This command specifies the SNMP view used to control which MIB objects can be accessed using a write (set) operation.  |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**attempts**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>attempts</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security snmp attempts</a> |
| Tree       | <a href="#">attempts</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**count number**

|          |  |
|----------|--|
| Synopsis | Unsuccessful attempts allowed within time period   |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">security snmp attempts count</a> <i>number</i> |
| Tree     | <a href="#">count</a>  |

|            |         |
|------------|---------|
| Range      | 1 to 64 |
| Default    | 20      |
| Introduced | 16.0.R1 |
| Platforms  | All     |

**lockout** *number*

|             |   |
|-------------|---|
| Synopsis    | Lockout period during which the host cannot log in  |
| Context     | <b>configure</b> <a href="#">system security snmp attempts lockout</a> <i>number</i>  |
| Tree        | <a href="#">lockout</a>   |
| Description | This command configures the time period during which the host cannot log in. When the host exceeds the attempted counts setting, the host is locked out from further login attempts for the configured time period. |
| Range       | 0 to 1440   |
| Units       | minutes   |
| Default     | 10  |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**time** *number*

|            |   |
|------------|---|
| Synopsis   | Time before host lockout after unsuccessful attempts                              |
| Context    | <b>configure</b> <a href="#">system security snmp attempts time</a> <i>number</i> |
| Tree       | <a href="#">time</a>  |
| Range      | 0 to 60   |
| Units      | minutes   |
| Default    | 5   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**community** [[community-string](#)] *string*

|          |   |
|----------|---|
| Synopsis | Enter the <b>community</b> list instance                                      |
| Context  | <b>configure</b> <a href="#">system security snmp community</a> <i>string</i> |
| Tree     | <a href="#">community</a>   |

Introduced 16.0.R1  
Platforms All

### **[community-string]** *string*

Synopsis SNMPv1 or SNMPv2c community string  
Context **configure** [system](#) [security snmp community](#) *string*  
Tree [community](#)  
String Length 1 to 114  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms All

### **access-permissions** *keyword*

Synopsis Access permissions for objects in the MIB  
Context **configure** [system](#) [security snmp community](#) *string* **access-permissions** *keyword*  
Tree [access-permissions](#)  
Options r, rw, rwa, mgmt, vpls-mgmt  
Notes This element is mandatory.  
Introduced 16.0.R1  
Platforms All

### **source-access-list** *reference*

Synopsis Source access list to validate received SNMP requests  
Context **configure** [system](#) [security snmp community](#) *string* **source-access-list** *reference*  
Tree [source-access-list](#)  
Reference **configure** [system](#) [security snmp source-access-list](#) *string*  
Introduced 16.0.R1  
Platforms All

### **version** *keyword*

Synopsis SNMP version

|            |   |
|------------|---|
| Context    | <b>configure system security snmp community</b> <i>string</i> <i>version</i> <i>keyword</i> |
| Tree       | <a href="#">version</a>   |
| Options    | v1, v2c, both   |
| Default    | both  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **source-access-list** [[list-name](#)] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>source-access-list</b> list instance   |
| Context        | <b>configure system security snmp source-access-list</b> <i>string</i>  |
| Tree           | <a href="#">source-access-list</a>  |
| Description    | Commands in this context configure SNMP source access lists.<br>SNMP source access lists are used to validate the source IP address of received SNMP requests. Multiple community (VPRN or Base router) and USM community instances can reference the same SNMP source access list. |
| Max. Instances | 16  |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

### **[list-name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Source access list name  |
| Context       | <b>configure system security snmp source-access-list</b> <i>string</i> |
| Tree          | <a href="#">source-access-list</a>                                     |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.                                    |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

### **source-host** [[host-name](#)] *string*

|          |   |
|----------|---|
| Synopsis | Enter the <b>source-host</b> list instance  |
| Context  | <b>configure system security snmp source-access-list</b> <i>string</i> <b>source-host</b> <i>string</i> |
| Tree     | <a href="#">source-host</a>   |



|                |         |
|----------------|---------|
| Max. Instances | 16      |
| Introduced     | 16.0.R1 |
| Platforms      | All     |

**[host-name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Source host entry name   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security snmp</a> <a href="#">source-access-list</a> <i>string</i> <a href="#">source-host</a> <i>string</i> |
| Tree          | <a href="#">source-host</a>  |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

|            |  |
|------------|--|
| Synopsis   | Source IP address entry used to validate SNMP requests   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security snmp</a> <a href="#">source-access-list</a> <i>string</i> <a href="#">source-host</a> <i>string</i> <a href="#">address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) |
| Tree       | <a href="#">address</a>  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**usm-community** [[community-string](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>usm-community</b> list instance  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security snmp</a> <a href="#">usm-community</a> <i>string</i> |
| Tree       | <a href="#">usm-community</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[community-string]** *string*

|          |  |
|----------|--|
| Synopsis | Community string associated with SNMPv3 access group |
|----------|--|

|               |   |
|---------------|---|
| Context       | <b>configure system security snmp usm-community</b> <i>string</i> |
| Tree          | <a href="#">usm-community</a>                                     |
| String Length | 1 to 114  |
| Notes         | This element is part of a list key.                               |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

### **group** *string*

|               |  |
|---------------|--|
| Synopsis      | Group to manage access rights of the community string  |
| Context       | <b>configure system security snmp usm-community</b> <i>string</i> <b>group</b> <i>string</i> |
| Tree          | <a href="#">group</a>  |
| String Length | 1 to 32  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

### **source-access-list** *reference*

|            |  |
|------------|--|
| Synopsis   | Source access list to validate received SNMP requests  |
| Context    | <b>configure system security snmp usm-community</b> <i>string</i> <b>source-access-list</b> <i>reference</i> |
| Tree       | <a href="#">source-access-list</a>   |
| Reference  | <b>configure system security snmp</b> <b>source-access-list</b> <i>string</i>                                |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **view** [[view-name](#)] *string* **subtree** *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>view</b> list instance  |
| Context    | <b>configure system security snmp</b> <b>view</b> <i>string</i> <b>subtree</b> <i>string</i> |
| Tree       | <a href="#">view</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[view-name] string**

|               |  |
|---------------|--|
| Synopsis      | View name  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security snmp view</a> <i>string</i> <a href="#">subtree</a> <i>string</i> |
| Tree          | <a href="#">view</a>   |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**subtree string**

|               |  |
|---------------|--|
| Synopsis      | Object Identifier (OID) value  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security snmp view</a> <i>string</i> <a href="#">subtree</a> <i>string</i> |
| Tree          | <a href="#">view</a>   |
| String Length | 1 to 256   |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**mask string**

|               |   |
|---------------|---|
| Synopsis      | Mask value as binary value, or hex value  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security snmp view</a> <i>string</i> <a href="#">subtree</a> <i>string</i> <a href="#">mask</a> <i>string</i> |
| Tree          | <a href="#">mask</a>  |
| String Length | 1 to 16   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**type keyword**

|            |  |
|------------|--|
| Synopsis   | Type of SNMP security view mask  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security snmp view</a> <i>string</i> <a href="#">subtree</a> <i>string</i> <a href="#">type</a> <i>keyword</i> |
| Tree       | <a href="#">type</a>   |
| Options    | included, excluded   |
| Introduced | 16.0.R1  |

Platforms All

## source-address

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>source-address</b> context  |
| Context     | <b>configure system security source-address</b>  |
| Tree        | <a href="#">source-address</a>   |
| Description | <p>Commands in this context configure the IP source address that is used in all unsolicited packets sent by the specified applications.</p> <p>This configuration applies to packets transmitted in-band (for example, a network port on an IOM) and does not apply to packets transmitted out-of-band on the management interface on the CPM Ethernet port. Packets transmitted using the CPM Ethernet port use the address of the CPM Ethernet port as the IP source address in the packet.</p> <p>When a source address is specified for the PTP application, the port-based 1588 hardware timestamping assist function is applied to PTP packets matching the IPv4 address of the router interface used to ingress the SR/ESS or IP address specified in this command. If the IP address is removed, the port-based 1588 hardware timestamping assist function is only applied to PTP packets matching the IPv4 address of the router interface.</p> |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

## ipv4 [[application](#)] *keyword*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>ipv4</b> list instance                                 |
| Context    | <b>configure system security source-address ipv4 <i>keyword</i></b> |
| Tree       | <a href="#">ipv4</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## [[application](#)] *keyword*

|          |   |
|----------|---|
| Synopsis | Application that uses the source IP address   |
| Context  | <b>configure system security source-address ipv4 <i>keyword</i></b>   |
| Tree     | <a href="#">ipv4</a>  |
| Options  | telnet, ftp, ssh, radius, tacplus, snmptrap, syslog, ping, traceroute, dns, sntp, ntp, cflowd, ptp, mcreporter, sflow, icmp-error, ldap |
| Notes    | This element is part of a list key.   |

Introduced 16.0.R1  
 Platforms All

### **address** *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Source IPv4 address  
 Context **configure** [system](#) [security](#) [source-address](#) [ipv4](#) *keyword* [address](#) *string*  
 Tree [address](#)  
 Notes The following elements are part of a mandatory choice: **address** or **interface-name**.  
 Introduced 16.0.R1  
 Platforms All

### **interface-name** *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis IP interface name  
 Context **configure** [system](#) [security](#) [source-address](#) [ipv4](#) *keyword* [interface-name](#) *string*  
 Tree [interface-name](#)  
 String Length 1 to 32  
 Notes The following elements are part of a mandatory choice: **address** or **interface-name**.  
 Introduced 16.0.R1  
 Platforms All

### **ipv6** [[application](#)] *keyword*

Synopsis Enter the **ipv6** list instance  
 Context **configure** [system](#) [security](#) [source-address](#) [ipv6](#) *keyword*  
 Tree [ipv6](#)  
 Introduced 16.0.R1

Platforms All

### [**application**] *keyword*

Synopsis Application which uses the source IPv6 address

Context **configure system security source-address ipv6 keyword**

Tree [ipv6](#)

Options telnet, ftp, radius, tacplus, snmptrap, syslog, ping, traceroute, dns, cflowd, ntp, sflow, icmp6-error, ldap

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **address string**



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Source IPv6 address

Context **configure system security source-address ipv6 keyword address string**

Tree [address](#)

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

### **ssh**

Synopsis Enter the **ssh** context

Context **configure system security ssh**

Tree [ssh](#)

Introduced 16.0.R1

Platforms All

**client-cipher-list-v2**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>client-cipher-list-v2</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <a href="#">client-cipher-list-v2</a> |
| Tree       | <a href="#">client-cipher-list-v2</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**cipher** [[index](#)] *number*

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>cipher</b> list instance   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <a href="#">client-cipher-list-v2</a> <a href="#">cipher</a> <i>number</i> |
| Tree        | <a href="#">cipher</a>  |
| Description | Commands in this context configure a client-cipher instance. Client-ciphers are used when the SR OS is acting as an SSH client.                                 |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**[index]** *number*

|            |   |
|------------|---|
| Synopsis   | Cipher index in the list  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <a href="#">client-cipher-list-v2</a> <a href="#">cipher</a> <i>number</i> |
| Tree       | <a href="#">cipher</a>  |
| Range      | 1 to 255  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**name** *keyword*

|            |   |
|------------|---|
| Synopsis   | Algorithm for performing encryption or decryption   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <a href="#">client-cipher-list-v2</a> <a href="#">cipher</a> <i>number</i> <a href="#">name</a> <i>keyword</i> |
| Tree       | <a href="#">name</a>  |
| Options    | 3des-cbc, aes128-cbc, aes192-cbc, aes256-cbc, aes128-ctr, aes192-ctr, aes256-ctr  |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |

Platforms All

## client-kex-list-v2

Synopsis Enter the **client-kex-list-v2** context

Context **configure** [system security ssh client-kex-list-v2](#)

Tree [client-kex-list-v2](#)

Introduced 19.10.R3

Platforms All

## **kex** [[index](#)] *number*

Synopsis Enter the **kex** list instance

Context **configure** [system security ssh client-kex-list-v2 kex number](#)

Tree [kex](#)

Description Commands in this context configure SSH Key Exchange (KEX) algorithms for SR OS as a client.

If a list is configured, SSH uses the list with the first-listed algorithm having the highest priority.

By default, the client list is empty. The default list contains the following:

- diffie-hellman-group16-sha512
- diffie-hellman-group14-sha256
- diffie-hellman-group14-sha1
- diffie-hellman-group1-sha1

Introduced 19.10.R3

Platforms All

## [\[index\]](#) *number*

Synopsis SSHv2 KEX algorithm index

Context **configure** [system security ssh client-kex-list-v2 kex number](#)

Tree [kex](#)

Description This command configures the index of the KEX algorithm in the list. The lowest index in the list is negotiated first on the SSH negotiation list, while the highest index is at the bottom of the SSH negotiation list.

Range 1 to 255



|            |                                     |
|------------|-------------------------------------|
| Notes      | This element is part of a list key. |
| Introduced | 19.10.R3                            |
| Platforms  | All                                 |

### **name** *keyword*

|            |  |
|------------|--|
| Synopsis   | KEX algorithm for computing a shared secret key  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <a href="#">client-kex-list-v2</a> <a href="#">kex</a> <i>number</i> <b>name</b> <i>keyword</i> |
| Tree       | <a href="#">name</a>   |
| Options    | diffie-hellman-group1-sha1, diffie-hellman-group14-sha1, diffie-hellman-group-exchange-sha1, diffie-hellman-group14-sha256, diffie-hellman-group16-sha512                            |
| Notes      | This element is mandatory.   |
| Introduced | 19.10.R3   |
| Platforms  | All  |

### **client-mac-list-v2**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>client-mac-list-v2</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <a href="#">client-mac-list-v2</a> |
| Tree       | <a href="#">client-mac-list-v2</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **mac** [[index](#)] *number*

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>mac</b> list instance  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <a href="#">client-mac-list-v2</a> <a href="#">mac</a> <i>number</i> |
| Tree        | <a href="#">mac</a>   |
| Description | Commands in this context configure SSH MAC algorithms for SR OS as a client.  |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### [[index](#)] *number*

|          |                     |
|----------|---------------------|
| Synopsis | MAC algorithm index |
|----------|---------------------|

---

|            |  |
|------------|--|
| Context    | <b>configure system security ssh client-mac-list-v2 mac number</b> |
| Tree       | <a href="#">mac</a>  |
| Range      | 1 to 255   |
| Notes      | This element is part of a list key.                                |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **name keyword**

|            |   |
|------------|---|
| Synopsis   | Algorithm for calculating message authentication code                           |
| Context    | <b>configure system security ssh client-mac-list-v2 mac number name keyword</b> |
| Tree       | <a href="#">name</a>  |
| Options    | hmac-sha2-512, hmac-sha2-256, hmac-sha1, hmac-sha1-96, hmac-md5, hmac-md5-96    |
| Notes      | This element is mandatory.  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **key-re-exchange**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>key-re-exchange</b> context             |
| Context    | <b>configure system security ssh key-re-exchange</b> |
| Tree       | <a href="#">key-re-exchange</a>                      |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **client**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>client</b> context                             |
| Context    | <b>configure system security ssh key-re-exchange client</b> |
| Tree       | <a href="#">client</a>                                      |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the key re-exchange   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <a href="#">key-re-exchange</a> <a href="#">client</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**mbytes** (*number* | *keyword*)

|            |  |
|------------|--|
| Synopsis   | Maximum bytes transmitted before key re-exchange begins  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <a href="#">key-re-exchange</a> <a href="#">client</a> <b>mbytes</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">mbytes</a>   |
| Range      | 1 to 64000   |
| Units      | megabytes  |
| Options    | infinite   |
| Default    | 1024   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**minutes** (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Maximum time before key re-exchange is initiated  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <a href="#">key-re-exchange</a> <a href="#">client</a> <b>minutes</b> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">minutes</a>   |
| Range      | 1 to 1440   |
| Units      | minutes   |
| Options    | infinite  |
| Default    | 60  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## server

|            |   |
|------------|---|
| Synopsis   | Enter the <b>server</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <a href="#">key-re-exchange</a> <a href="#">server</a> |
| Tree       | <a href="#">server</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the key re-exchange  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <a href="#">key-re-exchange</a> <a href="#">server</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | enable   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## mbytes (*number* | *keyword*)

|            |   |
|------------|---|
| Synopsis   | Maximum bytes transmitted before key re-exchange begins   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <a href="#">key-re-exchange</a> <a href="#">server</a> <a href="#">mbytes</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree       | <a href="#">mbytes</a>  |
| Range      | 1 to 64000  |
| Units      | megabytes   |
| Options    | infinite  |
| Default    | 1024  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## minutes (*number* | *keyword*)

|          |  |
|----------|--|
| Synopsis | Maximum time before key re-exchange is initiated   |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <a href="#">key-re-exchange</a> <a href="#">server</a> <a href="#">minutes</a> ( <i>number</i>   <i>keyword</i> ) |
| Tree     | <a href="#">minutes</a>  |
| Range    | 1 to 1440  |

|            |          |
|------------|----------|
| Units      | minutes  |
| Options    | infinite |
| Default    | 60       |
| Introduced | 16.0.R1  |
| Platforms  | All      |

### **permit-empty-passwords** *boolean*

|            |   |
|------------|---|
| Synopsis   | Permit users with empty password strings to log in  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <b>permit-empty-passwords</b> <i>boolean</i> |
| Tree       | <a href="#">permit-empty-passwords</a>  |
| Default    | true  |
| Introduced | 22.10.R1  |
| Platforms  | All   |

### **preserve-key** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Preserve keys and restore on system or server restart   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <b>preserve-key</b> <i>boolean</i>   |
| Tree        | <a href="#">preserve-key</a>  |
| Description | When configured to <b>true</b> , private, public, and host keys are saved by the server. The keys are restored following a system reboot or a restart of an SSH server.<br>When configured to <b>false</b> , the keys are held in memory by an SSH server but are not restored following a system reboot. |
| Default     | false   |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **server-admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the SSH server  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <b>server-admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">server-admin-state</a>  |
| Options    | enable, disable   |
| Default    | enable  |
| Introduced | 16.0.R1   |

Platforms All

## server-cipher-list-v2

Synopsis Enter the **server-cipher-list-v2** context  
 Context **configure system security ssh server-cipher-list-v2**  
 Tree [server-cipher-list-v2](#)  
 Introduced 16.0.R1  
 Platforms All

## cipher [[index](#)] *number*

Synopsis Enter the **cipher** list instance  
 Context **configure system security ssh server-cipher-list-v2 cipher *number***  
 Tree [cipher](#)  
 Description Commands in this context configure a server-cipher instance. Server-ciphers are used when SR OS is acting as an SSH server.  
 Introduced 16.0.R1  
 Platforms All

## [\[index\]](#) *number*

Synopsis Cipher index in the list  
 Context **configure system security ssh server-cipher-list-v2 cipher *number***  
 Tree [cipher](#)  
 Range 1 to 255  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

## **name** *keyword*

Synopsis Algorithm for performing encryption or decryption  
 Context **configure system security ssh server-cipher-list-v2 cipher *number* **name** *keyword***  
 Tree [name](#)

|            |  |
|------------|--|
| Options    | 3des-cbc, aes128-cbc, aes192-cbc, aes256-cbc, aes128-ctr, aes192-ctr, aes256-ctr |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## server-kex-list-v2

|            |   |
|------------|---|
| Synopsis   | Enter the <b>server-kex-list-v2</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <a href="#">server-kex-list-v2</a> |
| Tree       | <a href="#">server-kex-list-v2</a>  |
| Introduced | 19.10.R3  |
| Platforms  | All   |

## kex [[index](#)] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>kex</b> list instance  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <a href="#">server-kex-list-v2</a> <a href="#">kex</a> <i>number</i> |
| Tree       | <a href="#">kex</a>   |
| Introduced | 19.10.R3  |
| Platforms  | All   |

## [[index](#)] *number*

|             |   |
|-------------|---|
| Synopsis    | SSHv2 KEX algorithm index   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <a href="#">server-kex-list-v2</a> <a href="#">kex</a> <i>number</i>   |
| Tree        | <a href="#">kex</a>   |
| Description | This command configures the index of the KEX algorithm in the list. The lowest index in the list is negotiated first on the SSH negotiation list, while the highest index is at the bottom of the SSH negotiation list. |
| Range       | 1 to 255  |
| Notes       | This element is part of a list key.   |
| Introduced  | 19.10.R3  |
| Platforms   | All   |

**name** *keyword*

|            |  |
|------------|--|
| Synopsis   | KEX algorithm for computing a shared secret key  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <a href="#">server-kex-list-v2</a> <a href="#">kex</a> <i>number</i> <b>name</b> <i>keyword</i> |
| Tree       | <a href="#">name</a>   |
| Options    | diffie-hellman-group1-sha1, diffie-hellman-group14-sha1, diffie-hellman-group-exchange-sha1, diffie-hellman-group14-sha256, diffie-hellman-group16-sha512                            |
| Notes      | This element is mandatory.   |
| Introduced | 19.10.R3   |
| Platforms  | All  |

**server-mac-list-v2**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>server-mac-list-v2</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <a href="#">server-mac-list-v2</a> |
| Tree       | <a href="#">server-mac-list-v2</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**mac** [[index](#)] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mac</b> list instance  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <a href="#">server-mac-list-v2</a> <a href="#">mac</a> <i>number</i> |
| Tree       | <a href="#">mac</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[index]** *number*

|            |   |
|------------|---|
| Synopsis   | MAC algorithm index   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <a href="#">server-mac-list-v2</a> <a href="#">mac</a> <i>number</i> |
| Tree       | <a href="#">mac</a>   |
| Range      | 1 to 255  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |



Platforms All

### **name** *keyword*

Synopsis Algorithm for calculating message authentication code

Context **configure** [system](#) [security](#) [ssh](#) [server-mac-list-v2](#) [mac](#) *number* [name](#) *keyword*

Tree [name](#)

Options hmac-sha2-512, hmac-sha2-256, hmac-sha1, hmac-sha1-96, hmac-md5, hmac-md5-96

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

### **system-passwords**

Synopsis Enter the **system-passwords** context

Context **configure** [system](#) [security](#) [system-passwords](#)

Tree [system-passwords](#)

Description This command enters the context to configure system passwords.

Introduced 16.0.R1

Platforms All

### **admin-password** *string*

Synopsis Context to configure system passwords

Context **configure** [system](#) [security](#) [system-passwords](#) [admin-password](#) *string*

Tree [admin-password](#)

Description This command allows a user with administrative permissions to configure a password that enables a user to become an administrator.

This password is valid only for one session. When enabled, no authorization to TACACS + or RADIUS is performed and the user is locally regarded as an administrative user.

If the **admin-password** is configured in the **configure system security system-passwords admin-password** context, then any user can enter the special mode by entering the **enable** command.

**enable** is in the default profile. By default, all users are given access to this command.

After the **enable** command is entered, the user is prompted for a password. If the password matches, user is given unrestricted access to all commands.

The minimum length of the password is determined by the **minimum-length** command. The complexity requirements for the password are determined by the **complexity** command.

**Note:** This command applies to a local user, in addition to users on RADIUS, TACACS, and LDAP.

|               |          |
|---------------|----------|
| String Length | 3 to 136 |
| Introduced    | 16.0.R1  |
| Platforms     | All      |

### **vsd-password** *string*

|               |  |
|---------------|--|
| Synopsis      | Password that allows the user to assign VSD services   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">system-passwords</a> <b>vsd-password</b> <i>string</i>  |
| Tree          | <a href="#">vsd-password</a>   |
| Description   | This command configures the password required to access the classic CLI <b>enable-vsd-config</b> mode. The <b>enable-vsd-config</b> mode allows editing of services provisioned by the VSD in fully dynamic mode (or by the <b>tools perform service vsd evaluate-script</b> command). |
| String Length | 3 to 136   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

### **tech-support**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>tech-support</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <b>tech-support</b> |
| Tree       | <a href="#">tech-support</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **ts-location** (*ts-sat-url* | *cflash-url* | *string*)

|               |   |
|---------------|---|
| Synopsis      | Default file path for generated tech-support files  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <b>tech-support</b> <b>ts-location</b> ( <i>ts-sat-url</i>   <i>cflash-url</i>   <i>string</i> ) |
| Tree          | <a href="#">ts-location</a>   |
| String Length | 1 to 180  |
| Introduced    | 16.0.R1   |

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Platforms All

### **telnet-server** *boolean*

Synopsis Enable Telnet servers running on the system  
Context **configure** [system](#) [security](#) [telnet-server](#) *boolean*  
Tree [telnet-server](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **telnet6-server** *boolean*

Synopsis Enable Telnet IPv6 servers running on the system  
Context **configure** [system](#) [security](#) [telnet6-server](#) *boolean*  
Tree [telnet6-server](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **tls**

Synopsis Enter the **tls** context  
Context **configure** [system](#) [security](#) [tls](#)  
Tree [tls](#)  
Introduced 16.0.R1  
Platforms All

### **cert-profile** [[cert-profile-name](#)] *string*

Synopsis Enter the **cert-profile** list instance  
Context **configure** [system](#) [security](#) [tls](#) [cert-profile](#) *string*  
Tree [cert-profile](#)  
Max. Instances 16  
Introduced 16.0.R1

Platforms All

### **[cert-profile-name]** *string*

Synopsis TLS certificate profile name  
 Context **configure** [system](#) [security](#) [tls](#) [cert-profile](#) *string*  
 Tree [cert-profile](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the certificate profile  
 Context **configure** [system](#) [security](#) [tls](#) [cert-profile](#) *string* **admin-state** *keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 16.0.R1  
 Platforms All

### **entry** [[entry-id](#)] *number*

Synopsis Enter the **entry** list instance  
 Context **configure** [system](#) [security](#) [tls](#) [cert-profile](#) *string* **entry** *number*  
 Tree [entry](#)  
 Max. Instances 8  
 Introduced 16.0.R1  
 Platforms All

### **[entry-id]** *number*

Synopsis Certificate profile ID

|            |  |
|------------|--|
| Context    | <b>configure system security tls cert-profile</b> <i>string entry number</i> |
| Tree       | <a href="#">entry</a>  |
| Range      | 1 to 8   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **certificate-file** *string*

|               |  |
|---------------|--|
| Synopsis      | Certificate file name  |
| Context       | <b>configure system security tls cert-profile</b> <i>string entry number certificate-file string</i> |
| Tree          | <a href="#">certificate-file</a>   |
| String Length | 1 to 95  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

### **key-file** *string*

|               |  |
|---------------|--|
| Synopsis      | Key file name  |
| Context       | <b>configure system security tls cert-profile</b> <i>string entry number key-file string</i> |
| Tree          | <a href="#">key-file</a>   |
| String Length | 1 to 95  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

### **send-chain**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>send-chain</b> context   |
| Context    | <b>configure system security tls cert-profile</b> <i>string entry number send-chain</i> |
| Tree       | <a href="#">send-chain</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**ca-profile** [[ca-profile-name](#)] *reference*

|                |  |
|----------------|--|
| Synopsis       | Add a list entry for <b>ca-profile</b>   |
| Context        | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">cert-profile</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">send-chain</a> <a href="#">ca-profile</a> <i>reference</i> |
| Tree           | <a href="#">ca-profile</a>   |
| Max. Instances | 7  |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

**[ca-profile-name]** *reference*

|            |  |
|------------|--|
| Synopsis   | CA profile name  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">cert-profile</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">send-chain</a> <a href="#">ca-profile</a> <i>reference</i> |
| Tree       | <a href="#">ca-profile</a>   |
| Reference  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i>  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**client-cipher-list** [[client-cipher-list-name](#)] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>client-cipher-list</b> list instance   |
| Context        | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-cipher-list</a> <i>string</i> |
| Tree           | <a href="#">client-cipher-list</a>  |
| Max. Instances | 16  |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

**[client-cipher-list-name]** *string*

|          |   |
|----------|---|
| Synopsis | Client cipher list name   |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-cipher-list</a> <i>string</i> |
| Tree     | <a href="#">client-cipher-list</a>  |

|               |                                     |
|---------------|-------------------------------------|
| String Length | 1 to 32                             |
| Notes         | This element is part of a list key. |
| Introduced    | 16.0.R1                             |
| Platforms     | All                                 |

### **tls12-cipher** [[index](#)] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>tls12-cipher</b> list instance   |
| Context    | <b>configure system security tls client-cipher-list</b> <i>string</i> <b>tls12-cipher</b> <i>number</i> |
| Tree       | <a href="#">tls12-cipher</a>  |
| Introduced | 22.2.R1   |
| Platforms  | All   |

### [\[index\]](#) *number*

|            |   |
|------------|---|
| Synopsis   | Index of the cipher   |
| Context    | <b>configure system security tls client-cipher-list</b> <i>string</i> <b>tls12-cipher</b> <i>number</i> |
| Tree       | <a href="#">tls12-cipher</a>  |
| Range      | 1 to 255  |
| Notes      | This element is part of a list key.   |
| Introduced | 22.2.R1   |
| Platforms  | All   |

### **name** *keyword*

|            |  |
|------------|--|
| Synopsis   | Cipher suite code  |
| Context    | <b>configure system security tls client-cipher-list</b> <i>string</i> <b>tls12-cipher</b> <i>number</i> <b>name</b> <i>keyword</i>   |
| Tree       | <a href="#">name</a>   |
| Options    | tls-rsa-with3des-edc-cbc-sha, tls-rsa-with-aes128-cbc-sha, tls-rsa-with-aes256-cbc-sha, tls-rsa-with-aes128-cbc-sha256, tls-rsa-with-aes256-cbc-sha256, tls-rsa-with-aes128-gcm-sha256, tls-rsa-with-aes256-gcm-sha384 |
| Notes      | This element is mandatory.   |
| Introduced | 22.2.R1  |
| Platforms  | All  |

**tls13-cipher** [[index](#)] *number*

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>tls13-cipher</b> list instance  |
| Context     | <b>configure system security tls client-cipher-list</b> <i>string</i> <a href="#">tls13-cipher</a> <i>number</i> |
| Tree        | <a href="#">tls13-cipher</a>   |
| Description | Commands in this context configure the TLS 1.3-supported ciphers used by the client.                             |
| Introduced  | 22.7.R1  |
| Platforms   | All  |

**[index]** *number*

|            |  |
|------------|--|
| Synopsis   | Index number of the TLS 1.3 cipher   |
| Context    | <b>configure system security tls client-cipher-list</b> <i>string</i> <a href="#">tls13-cipher</a> <i>number</i> |
| Tree       | <a href="#">tls13-cipher</a>   |
| Range      | 1 to 255   |
| Notes      | This element is part of a list key.  |
| Introduced | 22.7.R1  |
| Platforms  | All  |

**name** *keyword*

|            |   |
|------------|---|
| Synopsis   | Name of the TLS 1.3 cipher suite code   |
| Context    | <b>configure system security tls client-cipher-list</b> <i>string</i> <a href="#">tls13-cipher</a> <i>number</i> <b>name</b> <i>keyword</i> |
| Tree       | <a href="#">name</a>  |
| Options    | tls-aes256-gcm-sha384, tls-aes128-gcm-sha256, tls-chacha20-poly1305-sha256, tls-aes128-ccm8-sha256, tls-aes128-ccm-sha256                   |
| Notes      | This element is mandatory.  |
| Introduced | 22.7.R1   |
| Platforms  | All   |

**client-group-list** [[client-group-list-name](#)] *string*

|          |  |
|----------|--|
| Synopsis | Enter the <b>client-group-list</b> list instance                     |
| Context  | <b>configure system security tls client-group-list</b> <i>string</i> |
| Tree     | <a href="#">client-group-list</a>                                    |



|                |   |
|----------------|---|
| Description    | Commands in this context configure the list of TLS 1.3-supported group suite codes that the client sends in a client Hello message. |
| Max. Instances | 16  |
| Introduced     | 22.7.R1   |
| Platforms      | All   |

### **[client-group-list-name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Name of the TLS client group list  |
| Context       | <b>configure</b> <a href="#">system security tls client-group-list</a> <i>string</i> |
| Tree          | <a href="#">client-group-list</a>  |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 22.7.R1  |
| Platforms     | All  |

### **tls13-group** [[index](#)] *number*

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>tls13-group</b> list instance  |
| Context     | <b>configure</b> <a href="#">system security tls client-group-list</a> <i>string</i> <a href="#">tls13-group</a> <i>number</i>  |
| Tree        | <a href="#">tls13-group</a>   |
| Description | Commands in this context configure the TLS 1.3-supported group suite codes sent by the client in its Hello messages.<br>SR OS supports the use of Elliptic-Curve Diffie-Hellman Ephemeral (ECDHE) groups. |
| Introduced  | 22.7.R1   |
| Platforms   | All   |

### **[index]** *number*

|            |  |
|------------|--|
| Synopsis   | Index number of the TLS 1.3 group  |
| Context    | <b>configure</b> <a href="#">system security tls client-group-list</a> <i>string</i> <a href="#">tls13-group</a> <i>number</i> |
| Tree       | <a href="#">tls13-group</a>  |
| Range      | 1 to 255   |
| Notes      | This element is part of a list key.  |
| Introduced | 22.7.R1  |

Platforms All

### **name** *keyword*

Synopsis Name of the TLS 1.3 group suite code

Context **configure** [system](#) [security](#) [tls](#) [client-group-list](#) *string* [tls13-group](#) *number* **name** *keyword*

Tree [name](#)

Options [tls-ecdhe-256](#), [tls-ecdhe-384](#), [tls-ecdhe-521](#), [tls-x25519](#), [tls-x448](#)

Notes This element is mandatory.

Introduced 22.7.R1

Platforms All

### **client-signature-list** [[client-signature-list-name](#)] *string*

Synopsis Enter the **client-signature-list** list instance

Context **configure** [system](#) [security](#) [tls](#) [client-signature-list](#) *string*

Tree [client-signature-list](#)

Description Commands in this context configure the list of TLS 1.3-supported signature suite codes that the client sends in a client Hello message.

Max. Instances 16

Introduced 22.7.R1

Platforms All

### **[client-signature-list-name]** *string*

Synopsis Name of the TLS 1.3 client signature list

Context **configure** [system](#) [security](#) [tls](#) [client-signature-list](#) *string*

Tree [client-signature-list](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 22.7.R1

Platforms All

**tls13-signature** [[index](#)] *number*

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>tls13-signature</b> list instance  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-signature-list</a> <i>string</i> <b>tls13-signature</b> <i>number</i> |
| Tree        | <a href="#">tls13-signature</a>   |
| Description | Commands in this context configure the TLS 1.3-supported signature suite codes sent by the client in its Hello messages.  |
| Introduced  | 22.7.R1   |
| Platforms   | All   |

**[index]** *number*

|            |   |
|------------|---|
| Synopsis   | Index number of the TLS 1.3 signature   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-signature-list</a> <i>string</i> <b>tls13-signature</b> <i>number</i> |
| Tree       | <a href="#">tls13-signature</a>   |
| Range      | 1 to 255  |
| Notes      | This element is part of a list key.   |
| Introduced | 22.7.R1   |
| Platforms  | All   |

**name** *keyword*

|            |   |
|------------|---|
| Synopsis   | Name of the TLS 1.3 signature suite code  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-signature-list</a> <i>string</i> <b>tls13-signature</b> <i>number</i> <b>name</b> <i>keyword</i>  |
| Tree       | <a href="#">name</a>  |
| Options    | tls-rsa-pkcs1-sha256, tls-ecdsa-secp256r1-sha256, tls-rsa-pkcs1-sha384, tls-ecdsa-secp384r1-sha384, tls-rsa-pkcs1-sha512, tls-ecdsa-secp521r1-sha512, tls-rsa-pss-rsae-sha256, tls-rsa-pss-rsae-sha384, tls-rsa-pss-rsae-sha512, tls-ed25519, tls-ed448, tls-rsa-pss-pss-sha256, tls-rsa-pss-pss-sha384, tls-rsa-pss-pss-sha512 |
| Notes      | This element is mandatory.  |
| Introduced | 22.7.R1   |
| Platforms  | All   |

**client-tls-profile** [[client-profile-name](#)] *string*

|          |   |
|----------|---|
| Synopsis | Enter the <b>client-tls-profile</b> list instance |
|----------|---|

|                |   |
|----------------|---|
| Context        | <b>configure system security tls client-tls-profile</b> <i>string</i> |
| Tree           | <a href="#">client-tls-profile</a>                                    |
| Max. Instances | 16  |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

### **[client-profile-name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Client TLS profile name   |
| Context       | <b>configure system security tls client-tls-profile</b> <i>string</i> |
| Tree          | <a href="#">client-tls-profile</a>                                    |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.                                   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the client TLS profile   |
| Context    | <b>configure system security tls client-tls-profile</b> <i>string admin-state</i> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **cert-profile** *reference*

|            |   |
|------------|---|
| Synopsis   | Certificate profile ID  |
| Context    | <b>configure system security tls client-tls-profile</b> <i>string cert-profile</i> <i>reference</i> |
| Tree       | <a href="#">cert-profile</a>  |
| Reference  | <b>configure system security tls cert-profile</b> <i>string</i>                                     |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **cipher-list** *reference*

|            |  |
|------------|--|
| Synopsis   | Cipher list for negotiation in the client Hello message  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-tls-profile</a> <i>string</i> <a href="#">cipher-list</a> <i>reference</i> |
| Tree       | <a href="#">cipher-list</a>  |
| Reference  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-cipher-list</a> <i>string</i>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **group-list** *reference*

|             |   |
|-------------|---|
| Synopsis    | Name of the list of supported group suite codes   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-tls-profile</a> <i>string</i> <a href="#">group-list</a> <i>reference</i> |
| Tree        | <a href="#">group-list</a>  |
| Description | This command assigns an existing TLS 1.3 group list to the TLS client profile.  |
| Reference   | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-group-list</a> <i>string</i>  |
| Introduced  | 22.7.R1   |
| Platforms   | All   |

### **protocol-version** *keyword*

|             |   |
|-------------|---|
| Synopsis    | TLS protocol version used by the TLS client profile   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-tls-profile</a> <i>string</i> <a href="#">protocol-version</a> <i>keyword</i>               |
| Tree        | <a href="#">protocol-version</a>  |
| Description | This command configures the TLS version to be negotiated between the client and the server.<br><br>The client adds the specified version as a supported version in its Hello message to the server. |
| Options     | <a href="#">tls-version-all</a> , <a href="#">tls-version-12</a> , <a href="#">tls-version-13</a>   |
| Default     | <a href="#">tls-version-12</a>  |
| Introduced  | 22.7.R1   |
| Platforms   | All   |

**signature-list** *reference*

|             |   |
|-------------|---|
| Synopsis    | Name of the list of supported signature suite codes   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-tls-profile</a> <i>string</i> <a href="#">signature-list</a> <i>reference</i> |
| Tree        | <a href="#">signature-list</a>  |
| Description | This command assigns an existing TLS 1.3 signature list to the TLS client profile.  |
| Reference   | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-signature-list</a> <i>string</i>  |
| Introduced  | 22.7.R1   |
| Platforms   | All   |

**trust-anchor-profile** *reference*

|            |   |
|------------|---|
| Synopsis   | Trust anchor profile  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-tls-profile</a> <i>string</i> <a href="#">trust-anchor-profile</a> <i>reference</i> |
| Tree       | <a href="#">trust-anchor-profile</a>  |
| Reference  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">trust-anchor-profile</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**server-cipher-list** [[server-cipher-list-name](#)] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>server-cipher-list</b> list instance   |
| Context        | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">server-cipher-list</a> <i>string</i> |
| Tree           | <a href="#">server-cipher-list</a>  |
| Max. Instances | 16  |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

**[server-cipher-list-name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Server cipher list name   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">server-cipher-list</a> <i>string</i> |
| Tree          | <a href="#">server-cipher-list</a>  |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |

Introduced 16.0.R1  
 Platforms All

### **tls12-cipher** [[index](#)] *number*

Synopsis Enter the **tls12-cipher** list instance  
 Context **configure** [system security tls server-cipher-list](#) *string* [tls12-cipher](#) *number*  
 Tree [tls12-cipher](#)  
 Introduced 22.2.R1  
 Platforms All

### **[index]** *number*

Synopsis Index of the cipher  
 Context **configure** [system security tls server-cipher-list](#) *string* [tls12-cipher](#) *number*  
 Tree [tls12-cipher](#)  
 Range 1 to 255  
 Notes This element is part of a list key.  
 Introduced 22.2.R1  
 Platforms All

### **name** *keyword*

Synopsis Cipher suite code  
 Context **configure** [system security tls server-cipher-list](#) *string* [tls12-cipher](#) *number* **name** *keyword*  
 Tree [name](#)  
 Options [tls-rsa-with3des-edc-cbc-sha](#), [tls-rsa-with-aes128-cbc-sha](#), [tls-rsa-with-aes256-cbc-sha](#),  
[tls-rsa-with-aes128-cbc-sha256](#), [tls-rsa-with-aes256-cbc-sha256](#),  
[tls-rsa-with-aes128-gcm-sha256](#), [tls-rsa-with-aes256-gcm-sha384](#)  
 Notes This element is mandatory.  
 Introduced 22.2.R1  
 Platforms All

**tls13-cipher** [[index](#)] *number*

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>tls13-cipher</b> list instance   |
| Context     | <b>configure system security tls server-cipher-list</b> <i>string</i> <b>tls13-cipher</b> <i>number</i> |
| Tree        | <a href="#">tls13-cipher</a>  |
| Description | Commands in this context configure the TLS 1.3-supported ciphers used by the server.                    |
| Introduced  | 22.7.R1   |
| Platforms   | All   |

**[index]** *number*

|            |   |
|------------|---|
| Synopsis   | Index number of the TLS 1.3 cipher  |
| Context    | <b>configure system security tls server-cipher-list</b> <i>string</i> <b>tls13-cipher</b> <i>number</i> |
| Tree       | <a href="#">tls13-cipher</a>  |
| Range      | 1 to 255  |
| Notes      | This element is part of a list key.   |
| Introduced | 22.7.R1   |
| Platforms  | All   |

**name** *keyword*

|            |  |
|------------|--|
| Synopsis   | Name of the TLS 1.3 cipher suite code  |
| Context    | <b>configure system security tls server-cipher-list</b> <i>string</i> <b>tls13-cipher</b> <i>number</i> <b>name</b> <i>keyword</i> |
| Tree       | <a href="#">name</a>   |
| Options    | tls-aes256-gcm-sha384, tls-aes128-gcm-sha256, tls-chacha20-poly1305-sha256, tls-aes128-ccm8-sha256, tls-aes128-ccm-sha256          |
| Notes      | This element is mandatory.   |
| Introduced | 22.7.R1  |
| Platforms  | All  |

**server-group-list** [[server-group-list-name](#)] *string*

|          |  |
|----------|--|
| Synopsis | Enter the <b>server-group-list</b> list instance                     |
| Context  | <b>configure system security tls server-group-list</b> <i>string</i> |
| Tree     | <a href="#">server-group-list</a>                                    |



|                |   |
|----------------|---|
| Description    | Commands in this context configure the list of TLS 1.3-supported group suite codes that the server sends in a server Hello message. |
| Max. Instances | 16  |
| Introduced     | 22.7.R1   |
| Platforms      | All   |

### **[server-group-list-name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Name of the TLS server group list  |
| Context       | <b>configure</b> <a href="#">system security tls server-group-list</a> <i>string</i> |
| Tree          | <a href="#">server-group-list</a>  |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 22.7.R1  |
| Platforms     | All  |

### **tls13-group** [[index](#)] *number*

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>tls13-group</b> list instance  |
| Context     | <b>configure</b> <a href="#">system security tls server-group-list</a> <i>string</i> <a href="#">tls13-group</a> <i>number</i>  |
| Tree        | <a href="#">tls13-group</a>   |
| Description | Commands in this context configure the TLS 1.3-supported group suite codes sent by the server in its Hello messages.<br>SR OS supports the use of Elliptic-Curve Diffie-Hellman Ephemeral (ECDHE) groups. |
| Introduced  | 22.7.R1   |
| Platforms   | All   |

### **[index]** *number*

|            |  |
|------------|--|
| Synopsis   | Index number of the TLS 1.3 group  |
| Context    | <b>configure</b> <a href="#">system security tls server-group-list</a> <i>string</i> <a href="#">tls13-group</a> <i>number</i> |
| Tree       | <a href="#">tls13-group</a>  |
| Range      | 1 to 255   |
| Notes      | This element is part of a list key.  |
| Introduced | 22.7.R1  |

Platforms All

### **name** *keyword*

Synopsis Name of the TLS 1.3 group suite code

Context **configure** [system](#) [security](#) [tls](#) [server-group-list](#) *string* [tls13-group](#) *number* **name** *keyword*

Tree [name](#)

Options [tls-ecdhe-256](#), [tls-ecdhe-384](#), [tls-ecdhe-521](#), [tls-x25519](#), [tls-x448](#)

Notes This element is mandatory.

Introduced 22.7.R1

Platforms All

### **server-signature-list** [[server-signature-list-name](#)] *string*

Synopsis Enter the **server-signature-list** list instance

Context **configure** [system](#) [security](#) [tls](#) [server-signature-list](#) *string*

Tree [server-signature-list](#)

Description Commands in this context configure the list of TLS 1.3-supported signature suite codes for the digital signature that the server sends in a server Hello message.

Max. Instances 16

Introduced 22.7.R1

Platforms All

### **[server-signature-list-name]** *string*

Synopsis Name of the TLS 1.3 server signature list

Context **configure** [system](#) [security](#) [tls](#) [server-signature-list](#) *string*

Tree [server-signature-list](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 22.7.R1

Platforms All

**tls13-signature** [[index](#)] *number*

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>tls13-signature</b> list instance   |
| Context     | <b>configure</b> <a href="#">system security tls server-signature-list</a> <i>string</i> <a href="#">tls13-signature</a> <i>number</i> |
| Tree        | <a href="#">tls13-signature</a>  |
| Description | Commands in this context configure the TLS 1.3-supported signature suite codes sent by the server in its Hello messages.               |
| Introduced  | 22.7.R1  |
| Platforms   | All  |

**[index]** *number*

|            |  |
|------------|--|
| Synopsis   | Index number of the TLS 1.3 signature  |
| Context    | <b>configure</b> <a href="#">system security tls server-signature-list</a> <i>string</i> <a href="#">tls13-signature</a> <i>number</i> |
| Tree       | <a href="#">tls13-signature</a>  |
| Range      | 1 to 255   |
| Notes      | This element is part of a list key.  |
| Introduced | 22.7.R1  |
| Platforms  | All  |

**name** *keyword*

|            |   |
|------------|---|
| Synopsis   | Name of the TLS 1.3 signature suite code  |
| Context    | <b>configure</b> <a href="#">system security tls server-signature-list</a> <i>string</i> <a href="#">tls13-signature</a> <i>number</i> <b>name</b> <i>keyword</i>   |
| Tree       | <a href="#">name</a>  |
| Options    | tls-rsa-pkcs1-sha256, tls-ecdsa-secp256r1-sha256, tls-rsa-pkcs1-sha384, tls-ecdsa-secp384r1-sha384, tls-rsa-pkcs1-sha512, tls-ecdsa-secp521r1-sha512, tls-rsa-pss-rsae-sha256, tls-rsa-pss-rsae-sha384, tls-rsa-pss-rsae-sha512, tls-ed25519, tls-ed448, tls-rsa-pss-pss-sha256, tls-rsa-pss-pss-sha384, tls-rsa-pss-pss-sha512 |
| Notes      | This element is mandatory.  |
| Introduced | 22.7.R1   |
| Platforms  | All   |

**server-tls-profile** [[server-profile-name](#)] *string*

|          |   |
|----------|---|
| Synopsis | Enter the <b>server-tls-profile</b> list instance |
|----------|---|

|                |   |
|----------------|---|
| Context        | <b>configure system security tls server-tls-profile</b> <i>string</i> |
| Tree           | <a href="#">server-tls-profile</a>                                    |
| Max. Instances | 16  |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

### **[server-profile-name]** *string*

|               |   |
|---------------|---|
| Synopsis      | TLS server profile name   |
| Context       | <b>configure system security tls server-tls-profile</b> <i>string</i> |
| Tree          | <a href="#">server-tls-profile</a>                                    |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.                                   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the server TLS profile  |
| Context    | <b>configure system security tls server-tls-profile</b> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **authenticate-client**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>authenticate-client</b> context   |
| Context    | <b>configure system security tls server-tls-profile</b> <i>string</i> <b>authenticate-client</b> |
| Tree       | <a href="#">authenticate-client</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **common-name-list** *reference*

|            |   |
|------------|---|
| Synopsis   | Common name list for client certificate authentication  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">server-tls-profile</a> <i>string</i> <a href="#">authenticate-client</a> <a href="#">common-name-list</a> <i>reference</i> |
| Tree       | <a href="#">common-name-list</a>  |
| Reference  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">common-name-list</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **trust-anchor-profile** *reference*

|            |   |
|------------|---|
| Synopsis   | Trust anchor profile for client authentication  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">server-tls-profile</a> <i>string</i> <a href="#">authenticate-client</a> <a href="#">trust-anchor-profile</a> <i>reference</i> |
| Tree       | <a href="#">trust-anchor-profile</a>  |
| Reference  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">trust-anchor-profile</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **cert-profile** *reference*

|            |   |
|------------|---|
| Synopsis   | Certificate profile ID  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">server-tls-profile</a> <i>string</i> <a href="#">cert-profile</a> <i>reference</i> |
| Tree       | <a href="#">cert-profile</a>  |
| Reference  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">cert-profile</a> <i>string</i>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **cipher-list** *reference*

|            |  |
|------------|--|
| Synopsis   | Cipher list used by the TLS server profile   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">server-tls-profile</a> <i>string</i> <a href="#">cipher-list</a> <i>reference</i> |
| Tree       | <a href="#">cipher-list</a>  |
| Reference  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">server-cipher-list</a> <i>string</i>  |
| Introduced | 16.0.R1  |

Platforms All

### **group-list** *reference*

Synopsis Name of the list of supported group suite codes

Context **configure** [system](#) [security](#) [tls](#) [server-tls-profile](#) *string* [group-list](#) *reference*

Tree [group-list](#)

Description This command assigns an existing TLS 1.3 group list to the TLS server profile.

Reference **configure** [system](#) [security](#) [tls](#) [server-group-list](#) *string*

Introduced 22.7.R1

Platforms All

### **protocol-version** *keyword*

Synopsis TLS protocol version used by the TLS server profile

Context **configure** [system](#) [security](#) [tls](#) [server-tls-profile](#) *string* [protocol-version](#) *keyword*

Tree [protocol-version](#)

Description This command configures the TLS version to be negotiated between the server and the client.  
The server adds the specified version as a supported version in its Hello message to the client.

Options [tls-version-all](#), [tls-version-12](#), [tls-version-13](#)

Default [tls-version-12](#)

Introduced 22.7.R1

Platforms All

### **signature-list** *reference*

Synopsis Name of the list of supported signature suite codes

Context **configure** [system](#) [security](#) [tls](#) [server-tls-profile](#) *string* [signature-list](#) *reference*

Tree [signature-list](#)

Description This command assigns an existing TLS 1.3 signature list to the TLS server profile.

Reference **configure** [system](#) [security](#) [tls](#) [server-signature-list](#) *string*

Introduced 22.7.R1

Platforms All

**tls-re-negotiate-timer** *number*

|            |   |
|------------|---|
| Synopsis   | TLS HELLO request timer   |
| Context    | <b>configure</b> <a href="#">system security tls server-tls-profile</a> <i>string</i> <b>tls-re-negotiate-timer</b> <i>number</i> |
| Tree       | <a href="#">tls-re-negotiate-timer</a>  |
| Range      | 0 to 65000  |
| Units      | minutes   |
| Default    | 0   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**trust-anchor-profile** [[trust-anchor-profile-name](#)] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>trust-anchor-profile</b> list instance                                     |
| Context        | <b>configure</b> <a href="#">system security tls trust-anchor-profile</a> <i>string</i> |
| Tree           | <a href="#">trust-anchor-profile</a>  |
| Max. Instances | 16  |
| Introduced     | 16.0.R1   |
| Platforms      | All   |

**[trust-anchor-profile-name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Trust anchor profile name   |
| Context       | <b>configure</b> <a href="#">system security tls trust-anchor-profile</a> <i>string</i> |
| Tree          | <a href="#">trust-anchor-profile</a>  |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**trust-anchor** [[ca-profile-name](#)] *reference*

|          |  |
|----------|--|
| Synopsis | Add a list entry for <b>trust-anchor</b>   |
| Context  | <b>configure</b> <a href="#">system security tls trust-anchor-profile</a> <i>string</i> <b>trust-anchor</b> <i>reference</i> |

|                |                              |
|----------------|------------------------------|
| Tree           | <a href="#">trust-anchor</a> |
| Max. Instances | 8                            |
| Introduced     | 16.0.R1                      |
| Platforms      | All                          |

### [ca-profile-name] *reference*

|            |   |
|------------|---|
| Synopsis   | Trusted CA profile name   |
| Context    | <b>configure</b> <a href="#">system security tls trust-anchor-profile</a> <i>string</i> <a href="#">trust-anchor</a> <i>reference</i> |
| Tree       | <a href="#">trust-anchor</a>  |
| Reference  | <b>configure</b> <a href="#">system security pki ca-profile</a> <i>string</i>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### user-params

|            |  |
|------------|--|
| Synopsis   | Enter the <b>user-params</b> context                         |
| Context    | <b>configure</b> <a href="#">system security user-params</a> |
| Tree       | <a href="#">user-params</a>                                  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### attempts

|            |   |
|------------|---|
| Synopsis   | Enter the <b>attempts</b> context                                     |
| Context    | <b>configure</b> <a href="#">system security user-params attempts</a> |
| Tree       | <a href="#">attempts</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### count *number*

|          |                                       |
|----------|---------------------------------------|
| Synopsis | Number of unsuccessful login attempts |
|----------|---------------------------------------|



---

|            |   |
|------------|---|
| Context    | <b>configure system security user-params attempts count</b> <i>number</i> |
| Tree       | <a href="#">count</a>   |
| Range      | 1 to 64   |
| Default    | 3   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **lockout** *number*

|            |   |
|------------|---|
| Synopsis   | Lockout period after unsuccessful login attempts                            |
| Context    | <b>configure system security user-params attempts lockout</b> <i>number</i> |
| Tree       | <a href="#">lockout</a>   |
| Range      | 0 to 1440   |
| Units      | minutes   |
| Default    | 10  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **time** *number*

|            |  |
|------------|--|
| Synopsis   | Time frame of unsuccessful login attempts                                |
| Context    | <b>configure system security user-params attempts time</b> <i>number</i> |
| Tree       | <a href="#">time</a>   |
| Range      | 0 to 60  |
| Units      | minutes  |
| Default    | 5  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **authentication-order**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>authentication-order</b> context                     |
| Context    | <b>configure system security user-params authentication-order</b> |
| Tree       | <a href="#">authentication-order</a>                              |
| Introduced | 16.0.R1   |

Platforms All

### **exit-on-reject** *boolean*

Synopsis Ignore subsequent AAA methods after a reject  
Context **configure** [system](#) [security](#) [user-params](#) [authentication-order](#) **exit-on-reject** *boolean*  
Tree [exit-on-reject](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **order** *keyword*

Synopsis Preferred order of password authentication  
Context **configure** [system](#) [security](#) [user-params](#) [authentication-order](#) **order** *keyword*  
Tree [order](#)  
Options local, radius, tacplus, ldap  
Max. Instances 4  
Notes This element is ordered by the user.  
Introduced 16.0.R1  
Platforms All

### **local-user**

Synopsis Enter the **local-user** context  
Context **configure** [system](#) [security](#) [user-params](#) **local-user**  
Tree [local-user](#)  
Introduced 16.0.R1  
Platforms All

### **password**

Synopsis Enter the **password** context  
Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) **password**

---

|            |                          |
|------------|--------------------------|
| Tree       | <a href="#">password</a> |
| Introduced | 16.0.R1                  |
| Platforms  | All                      |

### **aging** *number*

|            |   |
|------------|---|
| Synopsis   | Maximum time during which a user password is valid  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">password</a> <i>aging</i> <i>number</i> |
| Tree       | <a href="#">aging</a>   |
| Range      | 1 to 500  |
| Units      | days  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **complexity-rules**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>complexity-rules</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">password</a> <a href="#">complexity-rules</a> |
| Tree       | <a href="#">complexity-rules</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **allow-user-name** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow the username to be used as part of the password  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">password</a> <a href="#">complexity-rules</a> <a href="#">allow-user-name</a> <i>boolean</i> |
| Tree       | <a href="#">allow-user-name</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **credits**

|          |   |
|----------|---|
| Synopsis | Enter the <b>credits</b> context  |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">password</a> <a href="#">complexity-rules</a> <a href="#">credits</a> |

---

|            |  |
|------------|--|
| Tree       | <a href="#">credits</a>  |
| Notes      | The following elements are part of a choice: <b>credits</b> or <b>required</b> . |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **lowercase** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum credits for the use of lowercase letters   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">password</a> <a href="#">complexity-rules</a> <a href="#">credits</a><br><a href="#">lowercase</a> <i>number</i> |
| Tree       | <a href="#">lowercase</a>  |
| Range      | 1 to 10  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **numeric** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum credits for the use of numeric characters  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">password</a> <a href="#">complexity-rules</a> <a href="#">credits</a><br><a href="#">numeric</a> <i>number</i> |
| Tree       | <a href="#">numeric</a>  |
| Range      | 1 to 10  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **special-character** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum credits for the use of special characters  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">password</a> <a href="#">complexity-rules</a> <a href="#">credits</a><br><a href="#">special-character</a> <i>number</i> |
| Tree       | <a href="#">special-character</a>  |
| Range      | 1 to 10  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**uppercase** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum credits for the use of uppercase letters   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">password</a> <a href="#">complexity-rules</a> <a href="#">credits</a><br><a href="#">uppercase</a> <i>number</i> |
| Tree       | <a href="#">uppercase</a>  |
| Range      | 1 to 10  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**minimum-classes** *number*

|            |   |
|------------|---|
| Synopsis   | Minimum number of different character classes to use  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">password</a> <a href="#">complexity-rules</a> <a href="#">minimum-classes</a> <i>number</i> |
| Tree       | <a href="#">minimum-classes</a>   |
| Range      | 2 to 4  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**minimum-length** *number*

|            |  |
|------------|--|
| Synopsis   | Minimum length required for local passwords  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">password</a> <a href="#">complexity-rules</a> <a href="#">minimum-length</a> <i>number</i> |
| Tree       | <a href="#">minimum-length</a>   |
| Range      | 6 to 50  |
| Default    | 6  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**repeated-characters** *number*

|          |   |
|----------|---|
| Synopsis | Number of times same character can repeat consecutively   |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">password</a> <a href="#">complexity-rules</a> <a href="#">repeated-characters</a> <i>number</i> |
| Tree     | <a href="#">repeated-characters</a>   |

---

|            |         |
|------------|---------|
| Range      | 2 to 8  |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **required**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>required</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">password</a> <a href="#">complexity-rules</a> <a href="#">required</a> |
| Tree       | <a href="#">required</a>   |
| Notes      | The following elements are part of a choice: <b>credits</b> or <b>required</b> .   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **lowercase number**

|            |  |
|------------|--|
| Synopsis   | Number of lowercase letters required   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">password</a> <a href="#">complexity-rules</a> <a href="#">required</a> <a href="#">lowercase</a> <i>number</i> |
| Tree       | <a href="#">lowercase</a>  |
| Range      | 1 to 10  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **numeric number**

|            |  |
|------------|--|
| Synopsis   | Number of numeric characters required  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">password</a> <a href="#">complexity-rules</a> <a href="#">required</a> <a href="#">numeric</a> <i>number</i> |
| Tree       | <a href="#">numeric</a>  |
| Range      | 1 to 10  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **special-character number**

|          |                                       |
|----------|---------------------------------------|
| Synopsis | Number of special characters required |
|----------|---------------------------------------|

|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">password</a> <a href="#">complexity-rules</a> <a href="#">required</a> <a href="#">special-character</a> <i>number</i> |
| Tree       | <a href="#">special-character</a>  |
| Range      | 1 to 10  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **uppercase** *number*

|            |  |
|------------|--|
| Synopsis   | Number of uppercase letters required   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">password</a> <a href="#">complexity-rules</a> <a href="#">required</a> <a href="#">uppercase</a> <i>number</i> |
| Tree       | <a href="#">uppercase</a>  |
| Range      | 1 to 10  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **hashing** *keyword*

|            |   |
|------------|---|
| Synopsis   | Hashing algorithm for user passwords  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">password</a> <a href="#">hashing</a> <i>keyword</i> |
| Tree       | <a href="#">hashing</a>   |
| Options    | bcrypt, sha2-pbkdf2, sha3-pbkdf2  |
| Default    | bcrypt  |
| Introduced | 20.7.R1   |
| Platforms  | All   |

### **history-size** *number*

|            |   |
|------------|---|
| Synopsis   | Number of previous passwords to compare against   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">password</a> <a href="#">history-size</a> <i>number</i> |
| Tree       | <a href="#">history-size</a>  |
| Range      | 0 to 20   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**minimum-age** *number*

|            |  |
|------------|--|
| Synopsis   | Minimum age required for a password before changing it   |
| Context    | <b>configure</b> <a href="#">system security user-params local-user password minimum-age</a> <i>number</i> |
| Tree       | <a href="#">minimum-age</a>  |
| Range      | 0 to 86400   |
| Units      | seconds  |
| Default    | 600  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**minimum-change** *number*

|            |   |
|------------|---|
| Synopsis   | Minimum character differences between passwords   |
| Context    | <b>configure</b> <a href="#">system security user-params local-user password minimum-change</a> <i>number</i> |
| Tree       | <a href="#">minimum-change</a>  |
| Range      | 1 to 20   |
| Default    | 5   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**user** [[user-name](#)] *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>user</b> list instance  |
| Context    | <b>configure</b> <a href="#">system security user-params local-user user</a> <i>string</i> |
| Tree       | <a href="#">user</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[user-name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Local user name  |
| Context       | <b>configure</b> <a href="#">system security user-params local-user user</a> <i>string</i> |
| Tree          | <a href="#">user</a>   |
| String Length | 1 to 32  |



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|            |                                     |
|------------|-------------------------------------|
| Notes      | This element is part of a list key. |
| Introduced | 16.0.R1                             |
| Platforms  | All                                 |

### **access**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>access</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <b>access</b> |
| Tree       | <a href="#">access</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **console** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow console port, Telnet, and SSH access  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">access</a> <b>console</b> <i>boolean</i> |
| Tree       | <a href="#">console</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **ftp** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow FTP access  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">access</a> <b>ftp</b> <i>boolean</i> |
| Tree       | <a href="#">ftp</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **grpc** *boolean*

|          |  |
|----------|--|
| Synopsis | Allow gRPC access  |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">access</a> <b>grpc</b> <i>boolean</i> |
| Tree     | <a href="#">grpc</a>   |

---

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **li** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow access to LI   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">access</a> <b>li</b> <i>boolean</i> |
| Tree       | <a href="#">li</a>   |
| Default    | false  |
| Introduced | 19.10.R1   |
| Platforms  | All  |

### **netconf** *boolean*

|            |   |
|------------|---|
| Synopsis   | Allow NETCONF access  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">access</a> <b>netconf</b> <i>boolean</i> |
| Tree       | <a href="#">netconf</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **snmp** *boolean*

|            |  |
|------------|--|
| Synopsis   | Allow SNMP access  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">access</a> <b>snmp</b> <i>boolean</i> |
| Tree       | <a href="#">snmp</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **cli-engine** *keyword*

|          |   |
|----------|---|
| Synopsis | User level override for CLI engine access   |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <b>cli-engine</b> <i>keyword</i> |

|                |                                      |
|----------------|--------------------------------------|
| Tree           | <a href="#">cli-engine</a>           |
| Options        | classic-cli, md-cli                  |
| Default        | md-cli                               |
| Max. Instances | 2                                    |
| Notes          | This element is ordered by the user. |
| Introduced     | 16.0.R1                              |
| Platforms      | All                                  |

## console

|            |   |
|------------|---|
| Synopsis   | Enter the <b>console</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <b>console</b> |
| Tree       | <a href="#">console</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## cannot-change-password *boolean*

|            |  |
|------------|--|
| Synopsis   | Change password privileges   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <b>console</b> <b>cannot-change-password</b> <i>boolean</i> |
| Tree       | <a href="#">cannot-change-password</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## login-exec (*sat-url* | *cflash-url* | *ftp-tftp-url* | *filename*)

|               |  |
|---------------|--|
| Synopsis      | File to execute when a user successfully logs in   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <b>console</b> <b>login-exec</b> ( <i>sat-url</i>   <i>cflash-url</i>   <i>ftp-tftp-url</i>   <i>filename</i> ) |
| Tree          | <a href="#">login-exec</a>   |
| String Length | 1 to 200   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**member** *reference*

|                |  |
|----------------|--|
| Synopsis       | User profiles for this user  |
| Context        | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">console</a> <a href="#">member</a> <i>reference</i> |
| Tree           | <a href="#">member</a>   |
| Reference      | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i>  |
| Max. Instances | 8  |
| Notes          | This element is ordered by the user.   |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

**new-password-at-login** *boolean*

|            |   |
|------------|---|
| Synopsis   | Prompt a user to change password at next console login  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">console</a> <a href="#">new-password-at-login</a> <i>boolean</i> |
| Tree       | <a href="#">new-password-at-login</a>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**home-directory** (*sat-url* | *cflash-without-slot-url*)

|               |   |
|---------------|---|
| Synopsis      | Home directory for the user   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">home-directory</a> ( <i>sat-url</i>   <i>cflash-without-slot-url</i> ) |
| Tree          | <a href="#">home-directory</a>  |
| String Length | 1 to 200  |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**password** *string*

|          |  |
|----------|--|
| Synopsis | User password for console and FTP access |
|----------|--|

|               |   |
|---------------|---|
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">password</a> <i>string</i> |
| Tree          | <a href="#">password</a>  |
| String Length | 3 to 136  |
| Notes         | This element is mandatory.  |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

## public-keys

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>public-keys</b> context   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">public-keys</a> |
| Tree        | <a href="#">public-keys</a>  |
| Description | Commands in this context configure public keys for SSH.  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

## ecdsa

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>ecdsa</b> context   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">public-keys</a> <a href="#">ecdsa</a> |
| Tree        | <a href="#">ecdsa</a>  |
| Description | Commands in this context configure Elliptic Curve Digital Signature Algorithm (ECDSA) public keys.   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

## ecdsa-key [[ecdsa-public-key-id](#)] *number*

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>ecdsa-key</b> list instance   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">public-keys</a> <a href="#">ecdsa</a> <a href="#">ecdsa-key</a> <i>number</i> |
| Tree        | <a href="#">ecdsa-key</a>  |
| Description | Commands in this context configure an ECDSA public key and associate the key with a username. A user can associate multiple public keys with a username. The key ID identifies these keys for the user.  |
| Introduced  | 16.0.R1  |

Platforms All

### **[ecdsa-public-key-id] number**

Synopsis ECDSA public key identifier

Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [user](#) *string* [public-keys](#) [ecdsa](#) [ecdsa-key](#) *number*

Tree [ecdsa-key](#)

Range 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **description string**

Synopsis Text description

Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [user](#) *string* [public-keys](#) [ecdsa](#) [ecdsa-key](#) *number* [description](#) *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

### **key-value string**

Synopsis ECDSA public key value

Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [user](#) *string* [public-keys](#) [ecdsa](#) [ecdsa-key](#) *number* [key-value](#) *string*

Tree [key-value](#)

Description This command configures a value for the ECDSA public key. The public key must be enclosed in quotation marks. For ECDSA, the key is between 1 and 1024 bits.

String Length 1 to 255

Introduced 16.0.R1

Platforms All

**rsa**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>rsa</b> context   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">public-keys</a> <a href="#">rsa</a> |
| Tree        | <a href="#">rsa</a>  |
| Description | Commands in this context configure RSA public keys.  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**rsa-key** [[rsa-public-key-id](#)] *number*

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>rsa-key</b> list instance   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">public-keys</a> <a href="#">rsa</a> <a href="#">rsa-key</a> <i>number</i> |
| Tree        | <a href="#">rsa-key</a>  |
| Description | Commands in this context configure an RSA public key and associate the key with a username. A user can associate multiple public keys with a username. The key ID identifies these keys for the user.  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**[rsa-public-key-id]** *number*

|            |  |
|------------|--|
| Synopsis   | RSA public key identifier  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">public-keys</a> <a href="#">rsa</a> <a href="#">rsa-key</a> <i>number</i> |
| Tree       | <a href="#">rsa-key</a>  |
| Range      | 1 to 32  |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**description** *string*

|          |  |
|----------|--|
| Synopsis | Text description   |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">public-keys</a> <a href="#">rsa</a> <a href="#">rsa-key</a> <i>number</i> <a href="#">description</a> <i>string</i> |

|               |                             |
|---------------|-----------------------------|
| Tree          | <a href="#">description</a> |
| String Length | 1 to 80                     |
| Introduced    | 16.0.R1                     |
| Platforms     | All                         |

### **key-value** *string*

|               |   |
|---------------|---|
| Synopsis      | RSA public key value  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">public-keys</a> <a href="#">rsa</a> <a href="#">rsa-key</a> <a href="#">number</a> <a href="#">key-value</a> <i>string</i> |
| Tree          | <a href="#">key-value</a>   |
| Description   | This command configures a value for the RSA public key. The public key must be enclosed in quotation marks. For RSA, the key is between 768 and 4096 bits.  |
| String Length | 1 to 800  |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

### **restricted-to-home** *boolean*

|            |  |
|------------|--|
| Synopsis   | Restrict file access to the home directory of the user   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">restricted-to-home</a> <i>boolean</i> |
| Tree       | <a href="#">restricted-to-home</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **save-when-restricted** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Save configurations when the user is restricted to home  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">save-when-restricted</a> <i>boolean</i>   |
| Tree        | <a href="#">save-when-restricted</a>   |
| Description | When configured to <b>true</b> , the system permits all configuration save operations (such as <b>admin save</b> ) via any management interface (such as CLI and NETCONF) even if <b>restricted-to-home</b> is set to <b>true</b> . The home directory does not need to be configured. |
| Default     | false  |



|            |          |
|------------|----------|
| Introduced | 22.10.R1 |
| Platforms  | All      |

## snmp

|            |  |
|------------|--|
| Synopsis   | Enter the <b>snmp</b> context  |
| Context    | <b>configure</b> <a href="#">system security user-params local-user user string snmp</a> |
| Tree       | <a href="#">snmp</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## authentication

|             |  |
|-------------|--|
| Synopsis    | Enable the <b>authentication</b> context   |
| Context     | <b>configure</b> <a href="#">system security user-params local-user user string snmp authentication</a>  |
| Tree        | <a href="#">authentication</a>   |
| Description | <p>Commands in this context configure the SNMPv3 authentication and privacy protocols for the user to communicate with the router. The keys are stored in an encrypted format in the configuration.</p> <p>The keys configured with these commands must be localized keys, which are a hash of the SNMP engine ID and a password. The password is not entered directly in this command. Use the <b>tools perform system management-interface snmp generate-key</b> command to generate localized authentication and privacy keys.</p> <p>If authentication is not configured, only the username is required to allow and authenticate SNMPv3 operations.</p> |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

## authentication-key *string*

|             |  |
|-------------|--|
| Synopsis    | Localized authentication key   |
| Context     | <b>configure</b> <a href="#">system security user-params local-user user string snmp authentication authentication-key string</a>  |
| Tree        | <a href="#">authentication-key</a>   |
| Description | <p>This command specifies the authentication key for the authentication protocol. The key must be a localized key, which is a hash of the SNMP engine ID and a password. The password is not entered directly in this command. Use the <b>tools perform system</b></p> |

**management-interface snmp generate-key** command to generate a localized authentication key.

|               |          |
|---------------|----------|
| String Length | 1 to 115 |
| Introduced    | 16.0.R1  |
| Platforms     | All      |

### **authentication-protocol** *keyword*

|            |   |
|------------|---|
| Synopsis   | Authentication protocol   |
| Context    | <b>configure</b> <a href="#">system security user-params local-user user</a> <i>string</i> <a href="#">snmp authentication authentication-protocol</a> <i>keyword</i> |
| Tree       | <a href="#">authentication-protocol</a>   |
| Options    | hmac-md5-96, hmac-sha1-96, hmac-sha2-224, hmac-sha2-256, hmac-sha2-384, hmac-sha2-512   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **privacy**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>privacy</b> context  |
| Context    | <b>configure</b> <a href="#">system security user-params local-user user</a> <i>string</i> <a href="#">snmp authentication privacy</a> |
| Tree       | <a href="#">privacy</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **privacy-key** *string*

|               |   |
|---------------|---|
| Synopsis      | Localized privacy key   |
| Context       | <b>configure</b> <a href="#">system security user-params local-user user</a> <i>string</i> <a href="#">snmp authentication privacy privacy-key</a> <i>string</i>  |
| Tree          | <a href="#">privacy-key</a>   |
| Description   | This command specifies the privacy key for the privacy protocol. The key must be a localized key, which is a hash of the SNMP engine ID and a password. The password is not entered directly in this command. Use the <b>tools perform system management-interface snmp generate-key</b> command to generate a localized privacy key. |
| String Length | 1 to 71   |

|            |                            |
|------------|----------------------------|
| Notes      | This element is mandatory. |
| Introduced | 16.0.R1                    |
| Platforms  | All                        |

### privacy-protocol *keyword*

|            |  |
|------------|--|
| Synopsis   | Privacy protocol   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">snmp</a> <a href="#">authentication</a> <a href="#">privacy</a> <a href="#">privacy-protocol</a> <i>keyword</i> |
| Tree       | <a href="#">privacy-protocol</a>   |
| Options    | cbc-des, cfb128-aes-128, cfb128-aes-192, cfb128-aes-256  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### group *string*

|               |   |
|---------------|---|
| Synopsis      | User to associate with a group name   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">snmp</a> <a href="#">group</a> <i>string</i> |
| Tree          | <a href="#">group</a>   |
| String Length | 1 to 32   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

### vprn-network-exceptions

|             |   |
|-------------|---|
| Synopsis    | Enable the <b>vprn-network-exceptions</b> context   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">vprn-network-exceptions</a>  |
| Tree        | <a href="#">vprn-network-exceptions</a>   |
| Description | <p>Commands in this context configure the rate limiting attributes for processing packets with label TTL expiry received within an LSP shortcut or VPRN instances in the system and from all network IP interfaces. This includes labeled user and control plan packets, ping, and traceroute packets within GRT and VPRN, and ICMP replies.</p> <p>These commands do not rate limit MPLS or service OAM packets.</p> |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**count** *number*

|             |  |
|-------------|--|
| Synopsis    | Limit of exception messages received   |
| Context     | <b>configure</b> <a href="#">system security vprn-network-exceptions count</a> <i>number</i>   |
| Tree        | <a href="#">count</a>  |
| Description | This command specifies the threshold limit of exception messages. If the threshold value is exceeded within the configured time interval, packets are dropped. |
| Range       | 10 to 1000   |
| Default     | 100  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**window** *number*

|             |   |
|-------------|---|
| Synopsis    | Time interval to measure exception messages   |
| Context     | <b>configure</b> <a href="#">system security vprn-network-exceptions window</a> <i>number</i>   |
| Tree        | <a href="#">window</a>  |
| Description | This command configures the time interval within which exception messages are counted. If the threshold value is exceeded within the configured time interval, packets are dropped. |
| Range       | 1 to 60   |
| Units       | seconds   |
| Default     | 10  |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

**selective-fib** *boolean*

|            |  |
|------------|--|
| Synopsis   | FIB assigned to the system   |
| Context    | <b>configure</b> <a href="#">system selective-fib</a> <i>boolean</i> |
| Tree       | <a href="#">selective-fib</a>  |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS         |

**software-repository** [[repository-name](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>software-repository</b> list instance  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">software-repository</a> <i>string</i> |
| Tree       | <a href="#">software-repository</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                              |

**[repository-name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Software repository name  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">software-repository</a> <i>string</i> |
| Tree          | <a href="#">software-repository</a>   |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                              |

**description** *string*

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">software-repository</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**primary-location** *string*

|               |  |
|---------------|--|
| Synopsis      | Primary location for files in the software repository  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">software-repository</a> <i>string</i> <a href="#">primary-location</a> <i>string</i> |
| Tree          | <a href="#">primary-location</a>   |
| String Length | 1 to 180   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **secondary-location** *string*

|               |  |
|---------------|--|
| Synopsis      | Secondary location for files in the software repository  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">software-repository</a> <i>string</i> <a href="#">secondary-location</a> <i>string</i> |
| Tree          | <a href="#">secondary-location</a>   |
| String Length | 1 to 180   |
| Introduced    | 16.0.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **tertiary-location** *string*

|               |   |
|---------------|---|
| Synopsis      | Tertiary location for files in the software repository  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">software-repository</a> <i>string</i> <a href="#">tertiary-location</a> <i>string</i> |
| Tree          | <a href="#">tertiary-location</a>   |
| String Length | 1 to 180  |
| Introduced    | 16.0.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **switch-fabric**

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>switch-fabric</b> context   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">switch-fabric</a>                    |
| Tree        | <a href="#">switch-fabric</a>  |
| Description | Commands in this context configure system level attributes related to the switch fabric. |
| Introduced  | 20.5.R1  |
| Platforms   | 7450 ESS, 7750 SR-7, 7750 SR-7s, 7750 SR-14s, 7950 XRS-20, 7950 XRS-40                   |

### **failure-recovery**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>failure-recovery</b> context   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">switch-fabric</a> <a href="#">failure-recovery</a>  |
| Tree        | <a href="#">failure-recovery</a>  |
| Description | Commands in this context configure the attributes related to the automatic switch fabric recovery process. This process is triggered when there are two resets of an IOM/XCM due to ICC failures within a small time frame. The recovery process involves the sequential resetting of SFM in case the issues are due to one of the SFM in the ICC |

communication path. As the final step in the recovery process, a CPM switchover is triggered to reset the active CPM.

|            |   |
|------------|---|
| Introduced | 21.2.R1                                       |
| Platforms  | 7450 ESS, 7750 SR-7, 7950 XRS-20, 7950 XRS-40 |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the failure recovery process   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">switch-fabric</a> <a href="#">failure-recovery</a> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 21.2.R1  |
| Platforms  | 7450 ESS, 7750 SR-7, 7950 XRS-20, 7950 XRS-40  |

### **sfm-loss-threshold** *number*

|             |  |
|-------------|--|
| Synopsis    | Number of SFMs that can fail before SFM overload state   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">switch-fabric</a> <b>sfm-loss-threshold</b> <i>number</i>  |
| Tree        | <a href="#">sfm-loss-threshold</a>   |
| Description | This command specifies the number of SFMs that are permitted to fail before the system goes into SFM overload state.<br><br>The default value for the 7750 SR-7s is 1 and the default value for the 7750 SR-14s is 2. Users can select the SFM limit based on the number possible for the system minus one. For the 7750 SR-7s, the limit is 3 and the limit for the 7750 SR-14s is 7. |
| Range       | 1 to 7   |
| Introduced  | 20.5.R1  |
| Platforms   | 7750 SR-7s, 7750 SR-14s  |

### **telemetry**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>telemetry</b> context  |
| Context     | <b>configure</b> <a href="#">system</a> <b>telemetry</b>                                    |
| Tree        | <a href="#">telemetry</a>   |
| Description | Commands in this context configure the parameters for the dial-out telemetry functionality. |

|            |         |
|------------|---------|
| Introduced | 20.2.R1 |
| Platforms  | All     |

### **destination-group** [*name*] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>destination-group</b> list instance  |
| Context        | <b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">destination-group</a> <i>string</i> |
| Tree           | <a href="#">destination-group</a>   |
| Description    | Commands in this context configure parameters for destination groups.   |
| Max. Instances | 225   |
| Introduced     | 20.5.R1   |
| Platforms      | All   |

### **[name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Destination group name  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">destination-group</a> <i>string</i> |
| Tree          | <a href="#">destination-group</a>   |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 20.5.R1   |
| Platforms     | All   |

### **allow-unsecure-connection**

|             |  |
|-------------|--|
| Synopsis    | Allow connection without secured transport protocol  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">destination-group</a> <i>string</i> <a href="#">allow-unsecure-connection</a>      |
| Tree        | <a href="#">allow-unsecure-connection</a>  |
| Description | When configured, this command allows an unsecured connection to remote managers; TCP connections are not encrypted, including username and password information. |
| Notes       | The following elements are part of a choice: <b>allow-unsecure-connection</b> or <b>tls-client-profile</b> .   |
| Introduced  | 20.5.R1  |
| Platforms   | All  |



**description string**

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure</b> <a href="#">system telemetry destination-group</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 20.5.R1   |
| Platforms     | All   |

**destination** [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *fully-qualified-domain-name*) [port](#) *number*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>destination</b> list instance  |
| Context        | <b>configure</b> <a href="#">system telemetry destination-group</a> <i>string</i> <a href="#">destination</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>   <i>fully-qualified-domain-name</i> ) <a href="#">port</a> <i>number</i> |
| Tree           | <a href="#">destination</a>   |
| Max. Instances | 4   |
| Notes          | This element is ordered by the user.  |
| Introduced     | 20.5.R1   |
| Platforms      | All   |

**[address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *fully-qualified-domain-name*)

|               |   |
|---------------|---|
| Synopsis      | Address of the destination within the destination group   |
| Context       | <b>configure</b> <a href="#">system telemetry destination-group</a> <i>string</i> <a href="#">destination</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>   <i>fully-qualified-domain-name</i> ) <a href="#">port</a> <i>number</i> |
| Tree          | <a href="#">destination</a>   |
| String Length | 1 to 255  |
| Notes         | This element is part of a list key.   |
| Introduced    | 20.5.R1   |
| Platforms     | All   |

**port number**

|          |                                     |
|----------|-------------------------------------|
| Synopsis | TCP port number for the destination |
|----------|-------------------------------------|

|            |   |
|------------|---|
| Context    | <b>configure system telemetry destination-group</b> <i>string</i> <b>destination</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone   fully-qualified-domain-name</i> ) <b>port</b> <i>number</i> |
| Tree       | <a href="#">destination</a>   |
| Range      | 0   1 to 65535  |
| Notes      | This element is part of a list key.   |
| Introduced | 20.5.R1   |
| Platforms  | All   |

### **router-instance** *string*

|            |  |
|------------|--|
| Synopsis   | Router name or VPRN service name   |
| Context    | <b>configure system telemetry destination-group</b> <i>string</i> <b>destination</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone   fully-qualified-domain-name</i> ) <b>port</b> <i>number</i> <b>router-instance</b> <i>string</i> |
| Tree       | <a href="#">router-instance</a>  |
| Introduced | 20.5.R1  |
| Platforms  | All  |

### **tcp-keepalive**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>tcp-keepalive</b> context   |
| Context    | <b>configure system telemetry destination-group</b> <i>string</i> <b>tcp-keepalive</b> |
| Tree       | <a href="#">tcp-keepalive</a>  |
| Introduced | 20.5.R1  |
| Platforms  | All  |

### **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the TCP keep-alive algorithm   |
| Context    | <b>configure system telemetry destination-group</b> <i>string</i> <b>tcp-keepalive</b> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 20.5.R1  |
| Platforms  | All  |

**idle-time** *number*

|            |   |
|------------|---|
| Synopsis   | Time until the first TCP keepalive probe is sent  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">telemetry destination-group</a> <i>string</i> <a href="#">tcp-keepalive</a> <a href="#">idle-time</a> <i>number</i> |
| Tree       | <a href="#">idle-time</a>   |
| Range      | 1 to 100000   |
| Units      | seconds   |
| Default    | 600   |
| Introduced | 20.5.R1   |
| Platforms  | All   |

**interval** *number*

|            |  |
|------------|--|
| Synopsis   | Time between TCP keepalive probes  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">telemetry destination-group</a> <i>string</i> <a href="#">tcp-keepalive</a> <a href="#">interval</a> <i>number</i> |
| Tree       | <a href="#">interval</a>   |
| Range      | 1 to 100000  |
| Units      | seconds  |
| Default    | 15   |
| Introduced | 20.5.R1  |
| Platforms  | All  |

**retries** *number*

|             |   |
|-------------|---|
| Synopsis    | Number of probe retries before closing the connection   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">telemetry destination-group</a> <i>string</i> <a href="#">tcp-keepalive</a> <a href="#">retries</a> <i>number</i>                 |
| Tree        | <a href="#">retries</a>   |
| Description | This command configures the number of missed TCP keepalive probes before closing the TCP connection and attempting to reach the other destinations within the same destination group. |
| Range       | 3 to 100  |
| Default     | 4   |
| Introduced  | 20.5.R1   |
| Platforms   | All   |

**tls-client-profile** *reference*

|            |   |
|------------|---|
| Synopsis   | TLS client profile assigned to the destination group  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">destination-group</a> <i>string</i> <a href="#">tls-client-profile</a> <i>reference</i> |
| Tree       | <a href="#">tls-client-profile</a>  |
| Reference  | <b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-tls-profile</a> <i>string</i>                                 |
| Notes      | The following elements are part of a choice: <b>allow-unsecure-connection</b> or <b>tls-client-profile</b> .  |
| Introduced | 20.5.R1   |
| Platforms  | All   |

**notification-bundling**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>notification-bundling</b> context  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">notification-bundling</a> |
| Tree        | <a href="#">notification-bundling</a>   |
| Description | Commands in this context configure the bundling of multiple notifications into one telemetry message.   |
| Introduced  | 21.10.R1  |
| Platforms   | All   |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of notification bundling  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">notification-bundling</a> <a href="#">admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 21.10.R1   |
| Platforms  | All  |

**max-msg-count** *number*

|          |   |
|----------|---|
| Synopsis | Maximum notifications count in telemetry message bundle   |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">notification-bundling</a> <a href="#">max-msg-count</a> <i>number</i> |
| Tree     | <a href="#">max-msg-count</a>   |

|            |           |
|------------|-----------|
| Range      | 2 to 1000 |
| Default    | 100       |
| Introduced | 21.10.R1  |
| Platforms  | All       |

### **max-time-granularity** *number*

|             |  |
|-------------|--|
| Synopsis    | Maximum interval when bundling of notifications occurs   |
| Context     | <b>configure</b> <a href="#">system telemetry notification-bundling max-time-granularity</a> <i>number</i>   |
| Tree        | <a href="#">max-time-granularity</a>   |
| Description | This command sets the maximum time interval during which telemetry notifications are bundled. All bundled notifications have the same timestamp, which is the timestamp of the bundle. |
| Range       | 1 to 1000  |
| Units       | milliseconds   |
| Default     | 100  |
| Introduced  | 21.10.R1   |
| Platforms   | All  |

### **persistent-subscriptions**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>persistent-subscriptions</b> context                          |
| Context    | <b>configure</b> <a href="#">system telemetry persistent-subscriptions</a> |
| Tree       | <a href="#">persistent-subscriptions</a>                                   |
| Introduced | 20.5.R1  |
| Platforms  | All  |

### **subscription** [[name](#)] *string*

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>subscription</b> list instance   |
| Context        | <b>configure</b> <a href="#">system telemetry persistent-subscriptions subscription</a> <i>string</i> |
| Tree           | <a href="#">subscription</a>  |
| Max. Instances | 225   |
| Introduced     | 20.5.R1   |
| Platforms      | All   |

**[name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Persistent subscription name  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">persistent-subscriptions</a> <a href="#">subscription</a> <i>string</i> |
| Tree          | <a href="#">subscription</a>  |
| String Length | 1 to 32   |
| Notes         | This element is part of a list key.   |
| Introduced    | 20.5.R1   |
| Platforms     | All   |

**admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the persistent subscription   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">persistent-subscriptions</a> <a href="#">subscription</a> <i>string</i> <b>admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 20.5.R1   |
| Platforms  | All   |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">persistent-subscriptions</a> <a href="#">subscription</a> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 20.5.R1  |
| Platforms     | All  |

**destination-group** *reference*

|          |   |
|----------|---|
| Synopsis | Name of the destination group used in the subscription  |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">persistent-subscriptions</a> <a href="#">subscription</a> <i>string</i> <b>destination-group</b> <i>reference</i> |

|            |   |
|------------|---|
| Tree       | <a href="#">destination-group</a>   |
| Reference  | <b>configure</b> <a href="#">system telemetry destination-group</a> <i>string</i> |
| Introduced | 20.5.R1   |
| Platforms  | All   |

### **encoding** *keyword*

|             |  |
|-------------|--|
| Synopsis    | Encoding used for telemetry notifications  |
| Context     | <b>configure</b> <a href="#">system telemetry persistent-subscriptions subscription</a> <i>string encoding keyword</i> |
| Tree        | <a href="#">encoding</a>   |
| Description | This command specifies the encoding used for telemetry notifications as defined by the gNMI OpenConfig standard.       |
| Options     | json, bytes, proto, json-ietf  |
| Default     | json   |
| Introduced  | 20.5.R1  |
| Platforms   | All  |

### **local-source-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)

|            |  |
|------------|--|
| Synopsis   | Local IP address of packets sent from the source   |
| Context    | <b>configure</b> <a href="#">system telemetry persistent-subscriptions subscription</a> <i>string local-source-address (ipv4-address-no-zone   ipv6-address-no-zone)</i> |
| Tree       | <a href="#">local-source-address</a>   |
| Introduced | 20.5.R1  |
| Platforms  | All  |

### **mode** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Mode for telemetry notifications  |
| Context     | <b>configure</b> <a href="#">system telemetry persistent-subscriptions subscription</a> <i>string mode keyword</i>      |
| Tree        | <a href="#">mode</a>  |
| Description | This command specifies the subscription path mode for telemetry notifications sent out for the persistent subscription. |
| Options     | target-defined, on-change, sample   |
| Introduced  | 20.5.R1   |

Platforms All

### **originated-qos-marking** *keyword*

Synopsis QoS marking used for telemetry notification packets

Context **configure** [system](#) [telemetry](#) [persistent-subscriptions](#) [subscription](#) *string* **originated-qos-marking** *keyword*

Tree [originated-qos-marking](#)

Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Introduced 20.5.R1

Platforms All

### **sample-interval** *number*

Synopsis Sampling interval for the persistent subscription

Context **configure** [system](#) [telemetry](#) [persistent-subscriptions](#) [subscription](#) *string* **sample-interval** *number*

Tree [sample-interval](#)

Description This command configures the sampling interval for the persistent subscription. The interval applies only in sampling or target-defined modes.

Range 1000 to 18446744073709551615

Units milliseconds

Default 10000

Introduced 20.5.R1

Platforms All

### **sensor-group** *reference*

Synopsis Sensor group used in the persistent subscription

Context **configure** [system](#) [telemetry](#) [persistent-subscriptions](#) [subscription](#) *string* **sensor-group** *reference*

Tree [sensor-group](#)



|             |  |
|-------------|--|
| Description | This command specifies the sensor group to be used in the persistent subscription. If no valid paths exist in the sensor group, the configuration is accepted, however, no gRPC connection is established when persistent subscription is activated. |
| Reference   | <b>configure</b> <a href="#">system telemetry sensor-groups sensor-group</a> <i>string</i>   |
| Introduced  | 20.5.R1  |
| Platforms   | All  |

## sensor-groups

|            |   |
|------------|---|
| Synopsis   | Enter the <b>sensor-groups</b> context                          |
| Context    | <b>configure</b> <a href="#">system telemetry sensor-groups</a> |
| Tree       | <a href="#">sensor-groups</a>                                   |
| Introduced | 20.5.R1   |
| Platforms  | All   |

## sensor-group [[name](#)] *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>sensor-group</b> list instance  |
| Context        | <b>configure</b> <a href="#">system telemetry sensor-groups sensor-group</a> <i>string</i> |
| Tree           | <a href="#">sensor-group</a>   |
| Max. Instances | 225  |
| Introduced     | 20.5.R1  |
| Platforms      | All  |

## [[name](#)] *string*

|               |  |
|---------------|--|
| Synopsis      | Sensor group name  |
| Context       | <b>configure</b> <a href="#">system telemetry sensor-groups sensor-group</a> <i>string</i> |
| Tree          | <a href="#">sensor-group</a>   |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 20.5.R1  |
| Platforms     | All  |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">sensor-groups</a> <a href="#">sensor-group</a> <i>string</i> <a href="#">description</a> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |
| Introduced    | 20.5.R1  |
| Platforms     | All  |

**path** [[xpath](#)] *string*

|                |   |
|----------------|---|
| Synopsis       | Add a list entry for <b>path</b>  |
| Context        | <b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">sensor-groups</a> <a href="#">sensor-group</a> <i>string</i> <a href="#">path</a> <i>string</i> |
| Tree           | <a href="#">path</a>  |
| Max. Instances | 4500  |
| Introduced     | 20.5.R1   |
| Platforms      | All   |

**[xpath]** *string*

|               |   |
|---------------|---|
| Synopsis      | gNMI path to be streamed  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">sensor-groups</a> <a href="#">sensor-group</a> <i>string</i> <a href="#">path</a> <i>string</i> |
| Tree          | <a href="#">path</a>  |
| Description   | The command specifies the path from which data is streamed to the collector. Streamed data includes all descendants of the tree indicated by the path.                        |
| String Length | 1 to 512  |
| Notes         | This element is part of a list key.   |
| Introduced    | 20.5.R1   |
| Platforms     | All   |

**thresholds**

|          |  |
|----------|--|
| Synopsis | Enter the <b>thresholds</b> context                                |
| Context  | <b>configure</b> <a href="#">system</a> <a href="#">thresholds</a> |
| Tree     | <a href="#">thresholds</a>   |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **cflash-cap-alarm-percent** [[cflash-id](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>cflash-cap-alarm-percent</b> list instance   |
| Context    | <b>configure</b> <a href="#">system thresholds</a> <a href="#">cflash-cap-alarm-percent</a> <i>string</i> |
| Tree       | <a href="#">cflash-cap-alarm-percent</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **[cflash-id]** *string*

|               |   |
|---------------|---|
| Synopsis      | cflash device name monitored for capacity   |
| Context       | <b>configure</b> <a href="#">system thresholds</a> <a href="#">cflash-cap-alarm-percent</a> <i>string</i> |
| Tree          | <a href="#">cflash-cap-alarm-percent</a>  |
| String Length | 1 to 200  |
| Notes         | This element is part of a list key.   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

### **falling-threshold** *number*

|             |  |
|-------------|--|
| Synopsis    | Falling threshold for the sampled statistic  |
| Context     | <b>configure</b> <a href="#">system thresholds</a> <a href="#">cflash-cap-alarm-percent</a> <i>string</i> <a href="#">falling-threshold</a> <i>number</i>  |
| Tree        | <a href="#">falling-threshold</a>  |
| Description | <p>This command specifies a falling threshold for the sampled statistic. When the current sampled value is less than or equal to this threshold, and the value at the last sampling interval was greater than this threshold, a single threshold-crossing event is generated. A single threshold-crossing event is also generated if the first sample taken is less than or equal to this threshold and the associated <b>startup-alarm</b> command is equal to the <b>falling</b> or <b>either</b> values.</p> <p>After a falling threshold-crossing event is generated, another such event is not generated until the sampled value rises above this threshold and reaches greater than or equal to the <b>rising-threshold</b> command.</p> |
| Range       | 0 to 100   |
| Units       | percent  |

|            |         |
|------------|---------|
| Introduced | 16.0.R4 |
| Platforms  | All     |

### **interval** *number*

|             |   |
|-------------|---|
| Synopsis    | Polling period over which data is sampled and compared  |
| Context     | <b>configure</b> <b>system</b> <b>thresholds</b> <b>cflash-cap-alarm-percent</b> <i>string</i> <b>interval</b> <i>number</i>    |
| Tree        | <b>interval</b>   |
| Description | This command specifies the polling interval over which the data is sampled and compared with the rising and falling thresholds. |
| Range       | 1 to 2147483647   |
| Notes       | This element is mandatory.  |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### **rising-threshold** *number*

|             |   |
|-------------|---|
| Synopsis    | Rising threshold for the sampled statistic  |
| Context     | <b>configure</b> <b>system</b> <b>thresholds</b> <b>cflash-cap-alarm-percent</b> <i>string</i> <b>rising-threshold</b> <i>number</i>  |
| Tree        | <b>rising-threshold</b>   |
| Description | <p>This command specifies a rising threshold for the sampled statistic. When the current sampled value is greater than or equal to this threshold, and the value at the last sampling interval was less than this threshold, a single threshold-crossing event is generated. A single threshold crossing event is also generated if the first sample taken is greater than or equal to this threshold and the associated <b>startup-alarm</b> command is equal to the <b>rising</b> or <b>either</b> values.</p> <p>After a rising threshold-crossing event is generated, another such event is not generated until the sampled value falls below this threshold and reaches less than or equal the <b>falling-threshold</b> command.</p> |
| Range       | 0 to 100  |
| Units       | percent   |
| Notes       | This element is mandatory.  |
| Introduced  | 16.0.R4   |
| Platforms   | All   |

**rmon-event-type** *keyword*

|            |   |
|------------|---|
| Synopsis   | Notification type specifying action when event occurs   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">thresholds</a> <a href="#">cflash-cap-alarm-percent</a> <i>string</i> <b>rmon-event-type</b> <i>keyword</i> |
| Tree       | <a href="#">rmon-event-type</a>   |
| Options    | none, log, trap, both   |
| Default    | both  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**startup-alarm** *keyword*

|             |  |
|-------------|--|
| Synopsis    | Alarm type when the alarm is first created   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">thresholds</a> <a href="#">cflash-cap-alarm-percent</a> <i>string</i> <b>startup-alarm</b> <i>keyword</i>  |
| Tree        | <a href="#">startup-alarm</a>  |
| Description | This command specifies the alarm type that may be sent when this alarm is first created.<br><br>If the first sample is greater than or equal to the rising threshold value and <b>startup-alarm</b> is equal to <b>rising</b> or <b>either</b> , a single rising threshold crossing event is generated.<br><br>If the first sample is less than or equal to the falling threshold value and <b>startup-alarm</b> is equal to <b>falling</b> or <b>either</b> , a single falling threshold crossing event is generated. |
| Options     | rising, falling, either  |
| Default     | either   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**cflash-cap-warn-percent** [[cflash-id](#)] *string*

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>cflash-cap-warn-percent</b> list instance   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">thresholds</a> <a href="#">cflash-cap-warn-percent</a> <i>string</i>   |
| Tree        | <a href="#">cflash-cap-warn-percent</a>  |
| Description | Commands in this context configure the capacity monitoring of the compact flash. The usage is monitored as a percentage of the capacity of the compact flash. The severity level is warning. Both a rising and falling threshold can be specified. |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

**[cflash-id]** *string*

|               |  |
|---------------|--|
| Synopsis      | cflash device name monitored for capacity  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">thresholds</a> <a href="#">cflash-cap-warn-percent</a> <i>string</i> |
| Tree          | <a href="#">cflash-cap-warn-percent</a>  |
| String Length | 1 to 200   |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**falling-threshold** *number*

|             |  |
|-------------|--|
| Synopsis    | Falling threshold for the sampled statistic  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">thresholds</a> <a href="#">cflash-cap-warn-percent</a> <i>string</i> <a href="#">falling-threshold</a> <i>number</i>   |
| Tree        | <a href="#">falling-threshold</a>  |
| Description | <p>This command specifies a falling threshold for the sampled statistic. When the current sampled value is less than or equal to this threshold, and the value at the last sampling interval was greater than this threshold, a single threshold-crossing event is generated. A single threshold-crossing event is also generated if the first sample taken is less than or equal to this threshold and the associated <b>startup-alarm</b> command is equal to the <b>falling</b> or <b>either</b> values.</p> <p>After a falling threshold-crossing event is generated, another such event is not generated until the sampled value rises above this threshold and reaches greater than or equal to the <b>rising-threshold</b> command.</p> |
| Range       | 0 to 100   |
| Units       | percent  |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

**interval** *number*

|             |   |
|-------------|---|
| Synopsis    | Polling period over which data is sampled and compared  |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">thresholds</a> <a href="#">cflash-cap-warn-percent</a> <i>string</i> <a href="#">interval</a> <i>number</i> |
| Tree        | <a href="#">interval</a>  |
| Description | This command specifies the polling interval over which the data is sampled and compared with the rising and falling thresholds.                                 |
| Range       | 1 to 2147483647   |
| Notes       | This element is mandatory.  |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **rising-threshold** *number*

|             |   |
|-------------|---|
| Synopsis    | Rising threshold for the sampled statistic  |
| Context     | <b>configure</b> <b>system</b> <b>thresholds</b> <b>cflash-cap-warn-percent</b> <i>string</i> <b>rising-threshold</b> <i>number</i>   |
| Tree        | <b>rising-threshold</b>   |
| Description | <p>This command specifies a rising threshold for the sampled statistic. When the current sampled value is greater than or equal to this threshold, and the value at the last sampling interval was less than this threshold, a single threshold-crossing event is generated. A single threshold crossing event is also generated if the first sample taken is greater than or equal to this threshold and the associated <b>startup-alarm</b> command is equal to the <b>rising</b> or <b>either</b> values.</p> <p>After a rising threshold-crossing event is generated, another such event is not generated until the sampled value falls below this threshold and reaches less than or equal the <b>falling-threshold</b> command.</p> |
| Range       | 0 to 100  |
| Units       | percent   |
| Notes       | This element is mandatory.  |
| Introduced  | 16.0.R4   |
| Platforms   | All   |

### **rmon-event-type** *keyword*

|            |   |
|------------|---|
| Synopsis   | Notification type specifying action when event occurs   |
| Context    | <b>configure</b> <b>system</b> <b>thresholds</b> <b>cflash-cap-warn-percent</b> <i>string</i> <b>rmon-event-type</b> <i>keyword</i> |
| Tree       | <b>rmon-event-type</b>  |
| Options    | none, log, trap, both   |
| Default    | both  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **startup-alarm** *keyword*

|          |   |
|----------|---|
| Synopsis | Alarm type when the alarm is first created  |
| Context  | <b>configure</b> <b>system</b> <b>thresholds</b> <b>cflash-cap-warn-percent</b> <i>string</i> <b>startup-alarm</b> <i>keyword</i> |

|             |   |
|-------------|---|
| Tree        | <a href="#">startup-alarm</a>   |
| Description | <p>This command specifies the alarm type that may be sent when this alarm is first created.</p> <p>If the first sample is greater than or equal to the rising threshold value and <b>startup-alarm</b> is equal to <b>rising</b> or <b>either</b>, a single rising threshold crossing event is generated.</p> <p>If the first sample is less than or equal to the falling threshold value and <b>startup-alarm</b> is equal to <b>falling</b> or <b>either</b>, a single falling threshold crossing event is generated.</p> |
| Options     | rising, falling, either   |
| Default     | either  |
| Introduced  | 16.0.R1   |
| Platforms   | All   |

### kb-memory-use-alarm

|            |  |
|------------|--|
| Synopsis   | Enable the <b>kb-memory-use-alarm</b> context                          |
| Context    | <b>configure</b> <a href="#">system thresholds kb-memory-use-alarm</a> |
| Tree       | <a href="#">kb-memory-use-alarm</a>                                    |
| Introduced | 16.0.R4  |
| Platforms  | All  |

### falling-threshold *number*

|             |  |
|-------------|--|
| Synopsis    | Falling threshold for the sampled statistic  |
| Context     | <b>configure</b> <a href="#">system thresholds kb-memory-use-alarm falling-threshold</a> <i>number</i>   |
| Tree        | <a href="#">falling-threshold</a>  |
| Description | <p>This command specifies a falling threshold for the sampled statistic. When the current sampled value is less than or equal to this threshold, and the value at the last sampling interval was greater than this threshold, a single threshold-crossing event is generated. A single threshold-crossing event is also generated if the first sample taken is less than or equal to this threshold and the associated <b>startup-alarm</b> command is equal to the <b>falling</b> or <b>either</b> values.</p> <p>After a falling threshold-crossing event is generated, another such event is not generated until the sampled value rises above this threshold and reaches greater than or equal to the <b>rising-threshold</b> command.</p> |
| Range       | -2147483648 to 2147483647  |
| Introduced  | 16.0.R4  |
| Platforms   | All  |



**interval** *number*

|             |   |
|-------------|---|
| Synopsis    | Polling period over which data is sampled and compared  |
| Context     | <b>configure</b> <a href="#">system thresholds kb-memory-use-alarm interval</a> <i>number</i>                                   |
| Tree        | <a href="#">interval</a>  |
| Description | This command specifies the polling interval over which the data is sampled and compared with the rising and falling thresholds. |
| Range       | 1 to 2147483647   |
| Notes       | This element is mandatory.  |
| Introduced  | 16.0.R4   |
| Platforms   | All   |

**rising-threshold** *number*

|             |   |
|-------------|---|
| Synopsis    | Rising threshold for the sampled statistic  |
| Context     | <b>configure</b> <a href="#">system thresholds kb-memory-use-alarm rising-threshold</a> <i>number</i>   |
| Tree        | <a href="#">rising-threshold</a>  |
| Description | <p>This command specifies a rising threshold for the sampled statistic. When the current sampled value is greater than or equal to this threshold, and the value at the last sampling interval was less than this threshold, a single threshold-crossing event is generated. A single threshold crossing event is also generated if the first sample taken is greater than or equal to this threshold and the associated <b>startup-alarm</b> command is equal to the <b>rising</b> or <b>either</b> values.</p> <p>After a rising threshold-crossing event is generated, another such event is not generated until the sampled value falls below this threshold and reaches less than or equal the <b>falling-threshold</b> command.</p> |
| Range       | -2147483648 to 2147483647   |
| Notes       | This element is mandatory.  |
| Introduced  | 16.0.R4   |
| Platforms   | All   |

**rmon-event-type** *keyword*

|          |   |
|----------|---|
| Synopsis | Notification type specifying action when event occurs   |
| Context  | <b>configure</b> <a href="#">system thresholds kb-memory-use-alarm rmon-event-type</a> <i>keyword</i> |
| Tree     | <a href="#">rmon-event-type</a>   |
| Options  | none, log, trap, both   |
| Default  | both  |

|            |         |
|------------|---------|
| Introduced | 16.0.R4 |
| Platforms  | All     |

### **startup-alarm** *keyword*

|             |  |
|-------------|--|
| Synopsis    | Alarm type when the alarm is first created   |
| Context     | <b>configure</b> <a href="#">system thresholds kb-memory-use-alarm startup-alarm</a> <i>keyword</i>  |
| Tree        | <a href="#">startup-alarm</a>  |
| Description | This command specifies the alarm type that may be sent when this alarm is first created.<br>If the first sample is greater than or equal to the rising threshold value and <b>startup-alarm</b> is equal to <b>rising</b> or <b>either</b> , a single rising threshold crossing event is generated.<br>If the first sample is less than or equal to the falling threshold value and <b>startup-alarm</b> is equal to <b>falling</b> or <b>either</b> , a single falling threshold crossing event is generated. |
| Options     | rising, falling, either  |
| Default     | either   |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

### **kb-memory-use-warn**

|            |   |
|------------|---|
| Synopsis   | Enable the <b>kb-memory-use-warn</b> context                          |
| Context    | <b>configure</b> <a href="#">system thresholds kb-memory-use-warn</a> |
| Tree       | <a href="#">kb-memory-use-warn</a>                                    |
| Introduced | 16.0.R4   |
| Platforms  | All   |

### **falling-threshold** *number*

|             |  |
|-------------|--|
| Synopsis    | Falling threshold for the sampled statistic  |
| Context     | <b>configure</b> <a href="#">system thresholds kb-memory-use-warn falling-threshold</a> <i>number</i>  |
| Tree        | <a href="#">falling-threshold</a>  |
| Description | This command specifies a falling threshold for the sampled statistic. When the current sampled value is less than or equal to this threshold, and the value at the last sampling interval was greater than this threshold, a single threshold-crossing event is generated. A single threshold-crossing event is also generated if the first sample taken is less than or equal to this threshold and the associated <b>startup-alarm</b> command is equal to the <b>falling</b> or <b>either</b> values. |

After a falling threshold-crossing event is generated, another such event is not generated until the sampled value rises above this threshold and reaches greater than or equal to the **rising-threshold** command.

|            |                           |
|------------|---------------------------|
| Range      | -2147483648 to 2147483647 |
| Introduced | 16.0.R4                   |
| Platforms  | All                       |

### **interval** *number*

|             |   |
|-------------|---|
| Synopsis    | Polling period over which data is sampled and compared  |
| Context     | <b>configure system thresholds kb-memory-use-warn interval</b> <i>number</i>  |
| Tree        | <a href="#">interval</a>  |
| Description | This command specifies the polling interval over which the data is sampled and compared with the rising and falling thresholds. |
| Range       | 1 to 2147483647   |
| Notes       | This element is mandatory.  |
| Introduced  | 16.0.R4   |
| Platforms   | All   |

### **rising-threshold** *number*

|             |   |
|-------------|---|
| Synopsis    | Rising threshold for the sampled statistic  |
| Context     | <b>configure system thresholds kb-memory-use-warn rising-threshold</b> <i>number</i>  |
| Tree        | <a href="#">rising-threshold</a>  |
| Description | <p>This command specifies a rising threshold for the sampled statistic. When the current sampled value is greater than or equal to this threshold, and the value at the last sampling interval was less than this threshold, a single threshold-crossing event is generated. A single threshold crossing event is also generated if the first sample taken is greater than or equal to this threshold and the associated <b>startup-alarm</b> command is equal to the <b>rising</b> or <b>either</b> values.</p> <p>After a rising threshold-crossing event is generated, another such event is not generated until the sampled value falls below this threshold and reaches less than or equal the <b>falling-threshold</b> command.</p> |
| Range       | -2147483648 to 2147483647   |
| Notes       | This element is mandatory.  |
| Introduced  | 16.0.R4   |
| Platforms   | All   |

**rmon-event-type** *keyword*

|            |  |
|------------|--|
| Synopsis   | Notification type specifying action when event occurs  |
| Context    | <b>configure</b> <a href="#">system thresholds kb-memory-use-warn</a> <a href="#">rmon-event-type</a> <i>keyword</i> |
| Tree       | <a href="#">rmon-event-type</a>  |
| Options    | none, log, trap, both  |
| Default    | both   |
| Introduced | 16.0.R4  |
| Platforms  | All  |

**startup-alarm** *keyword*

|             |  |
|-------------|--|
| Synopsis    | Alarm type when the alarm is first created   |
| Context     | <b>configure</b> <a href="#">system thresholds kb-memory-use-warn</a> <a href="#">startup-alarm</a> <i>keyword</i>   |
| Tree        | <a href="#">startup-alarm</a>  |
| Description | This command specifies the alarm type that may be sent when this alarm is first created.<br>If the first sample is greater than or equal to the rising threshold value and <b>startup-alarm</b> is equal to <b>rising</b> or <b>either</b> , a single rising threshold crossing event is generated.<br>If the first sample is less than or equal to the falling threshold value and <b>startup-alarm</b> is equal to <b>falling</b> or <b>either</b> , a single falling threshold crossing event is generated. |
| Options     | rising, falling, either  |
| Default     | either   |
| Introduced  | 16.0.R4  |
| Platforms   | All  |

**rmon**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>rmon</b> context   |
| Context    | <b>configure</b> <a href="#">system thresholds</a> <a href="#">rmon</a> |
| Tree       | <a href="#">rmon</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**alarm** [[rmon-alarm-id](#)] *number*

|          |                                      |
|----------|--------------------------------------|
| Synopsis | Enter the <b>alarm</b> list instance |
|----------|--------------------------------------|

|                |  |
|----------------|--|
| Context        | <b>configure system thresholds rmon alarm number</b> |
| Tree           | <a href="#">alarm</a>                                |
| Max. Instances | 1200   |
| Introduced     | 16.0.R1  |
| Platforms      | All  |

### **[rmon-alarm-id] number**

|            |  |
|------------|--|
| Synopsis   | Index ID for an entry in the alarm table             |
| Context    | <b>configure system thresholds rmon alarm number</b> |
| Tree       | <a href="#">alarm</a>                                |
| Range      | 0 to 65400   |
| Notes      | This element is part of a list key.                  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **falling-event number**

|            |   |
|------------|---|
| Synopsis   | RMON event ID for falling threshold crossing event                        |
| Context    | <b>configure system thresholds rmon alarm number falling-event number</b> |
| Tree       | <a href="#">falling-event</a>   |
| Range      | 0 to 65400  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **falling-threshold number**

|             |   |
|-------------|---|
| Synopsis    | Falling threshold for the sampled statistic   |
| Context     | <b>configure system thresholds rmon alarm number falling-threshold number</b>   |
| Tree        | <a href="#">falling-threshold</a>   |
| Description | This command specifies a falling threshold for the sampled statistic. When the current sampled value is less than or equal to this threshold and the value at the last sampling interval was greater than this threshold, a single threshold crossing event is generated. A single threshold crossing event is also generated if the first sample taken is less than or equal to this threshold and the associated <b>startup-alarm</b> command is set to <b>falling</b> or <b>either</b> . |

After a falling threshold crossing event is generated, another such event is not generated until the sampled value exceeds this threshold and reaches or exceeds the **rising-threshold** command setting.

|            |                           |
|------------|---------------------------|
| Range      | -2147483648 to 2147483647 |
| Introduced | 16.0.R1                   |
| Platforms  | All                       |

### **interval** *number*

|             |  |
|-------------|--|
| Synopsis    | Polling period over which data is sampled and compared   |
| Context     | <b>configure system thresholds rmon alarm</b> <i>number interval number</i>  |
| Tree        | <a href="#">interval</a>   |
| Description | This command specifies the polling interval over which the data is sampled and compared with the rising and falling thresholds |
| Range       | 1 to 2147483647  |
| Notes       | This element is mandatory.   |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **owner** *string*

|               |  |
|---------------|--|
| Synopsis      | Owner that created this entry and uses the resources                     |
| Context       | <b>configure system thresholds rmon alarm</b> <i>number owner string</i> |
| Tree          | <a href="#">owner</a>  |
| String Length | 1 to 80  |
| Default       | TIMOS CLI  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

### **rising-event** *number*

|            |   |
|------------|---|
| Synopsis   | RMON event ID for rising threshold crossing event                               |
| Context    | <b>configure system thresholds rmon alarm</b> <i>number rising-event number</i> |
| Tree       | <a href="#">rising-event</a>  |
| Range      | 0 to 65400  |
| Introduced | 16.0.R1   |

Platforms All

### **rising-threshold** *number*

Synopsis Rising threshold for the sampled statistic

Context **configure** [system](#) [thresholds](#) [rmon](#) [alarm](#) *number* [rising-threshold](#) *number*

Tree [rising-threshold](#)

Description This command specifies the rising threshold for the sampled statistic. When the current sampled value is greater than or equal to this threshold and the value at the last sampling interval was below this threshold, a single threshold crossing event is generated. A single threshold crossing event is also generated if the first sample taken is greater than or equal to this threshold and the associated **startup-alarm** command is set to **rising** or **either**.

After a rising threshold crossing event is generated, another such event is not generated until the sampled value falls below this threshold and reaches or falls below the **falling-threshold** command setting.

Range -2147483648 to 2147483647

Introduced 16.0.R1

Platforms All

### **sample-type** *keyword*

Synopsis Sampling type for value comparison with thresholds

Context **configure** [system](#) [thresholds](#) [rmon](#) [alarm](#) *number* [sample-type](#) *keyword*

Tree [sample-type](#)

Options absolute, delta

Default absolute

Introduced 16.0.R1

Platforms All

### **startup-alarm** *keyword*

Synopsis Alarm to send when this entry is first set to valid

Context **configure** [system](#) [thresholds](#) [rmon](#) [alarm](#) *number* [startup-alarm](#) *keyword*

Tree [startup-alarm](#)

Options rising, falling, either

Default either

Introduced 16.0.R1  
Platforms All

### **variable-oid** *string*

Synopsis Object identifier to sample the specific variable  
Context **configure system thresholds rmon alarm number variable-oid string**  
Tree **variable-oid**  
String Length 1 to 255  
Notes This element is mandatory.  
Introduced 16.0.R1  
Platforms All

### **event** [**rmon-event-id**] *number*

Synopsis Enter the **event** list instance  
Context **configure system thresholds rmon event number**  
Tree **event**  
Max. Instances 1200  
Introduced 16.0.R1  
Platforms All

### **[rmon-event-id]** *number*

Synopsis Index ID for an entry in the event table  
Context **configure system thresholds rmon event number**  
Tree **event**  
Range 1 to 65400  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms All



**description string**

|               |   |
|---------------|---|
| Synopsis      | Text description  |
| Context       | <b>configure system thresholds rmon event number description string</b> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**event-type keyword**

|            |   |
|------------|---|
| Synopsis   | Notification action to be taken when the event occurs                   |
| Context    | <b>configure system thresholds rmon event number event-type keyword</b> |
| Tree       | <a href="#">event-type</a>  |
| Options    | none, log, trap, both   |
| Default    | both  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**owner string**

|               |   |
|---------------|---|
| Synopsis      | Owner that created this entry and uses the resources              |
| Context       | <b>configure system thresholds rmon event number owner string</b> |
| Tree          | <a href="#">owner</a>   |
| String Length | 1 to 80   |
| Default       | TiMOS CLI   |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**time**

|            |                               |
|------------|-------------------------------|
| Synopsis   | Enter the <b>time</b> context |
| Context    | <b>configure system time</b>  |
| Tree       | <a href="#">time</a>          |
| Introduced | 16.0.R1                       |
| Platforms  | All                           |

**dst-zone** [[summer-time-zone](#)] *string*

|                |  |
|----------------|--|
| Synopsis       | Enter the <b>dst-zone</b> list instance      |
| Context        | <b>configure system time dst-zone string</b> |
| Tree           | <a href="#">dst-zone</a>                     |
| Max. Instances | 1  |
| Introduced     | 16.0.R1                                      |
| Platforms      | All  |

**[summer-time-zone]** *string*

|               |  |
|---------------|--|
| Synopsis      | Summer time zone name                        |
| Context       | <b>configure system time dst-zone string</b> |
| Tree          | <a href="#">dst-zone</a>                     |
| String Length | 1 to 5                                       |
| Notes         | This element is part of a list key.          |
| Introduced    | 16.0.R1                                      |
| Platforms     | All  |

**end**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>end</b> context                     |
| Context    | <b>configure system time dst-zone string end</b> |
| Tree       | <a href="#">end</a>                              |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**day** *keyword*

|          |  |
|----------|--|
| Synopsis | Day of the week to end Daylight Savings Time                   |
| Context  | <b>configure system time dst-zone string end day keyword</b>   |
| Tree     | <a href="#">day</a>  |
| Options  | sunday, monday, tuesday, wednesday, thursday, friday, saturday |
| Default  | sunday   |

Introduced 16.0.R1  
Platforms All

### **hours-minutes** *string*

Synopsis Time to end Daylight Savings Time in hh:mm format  
Context **configure** [system time dst-zone](#) *string* **end** [hours-minutes](#) *string*  
Tree [hours-minutes](#)  
String Length 5  
Default 00:00  
Introduced 16.0.R1  
Platforms All

### **month** *keyword*

Synopsis Month to end Daylight Savings Time  
Context **configure** [system time dst-zone](#) *string* **end** [month](#) *keyword*  
Tree [month](#)  
Options january, february, march, april, may, june, july, august, september, october, november, december  
Default january  
Introduced 16.0.R1  
Platforms All

### **week** *keyword*

Synopsis Week of the month to end Daylight Savings Time  
Context **configure** [system time dst-zone](#) *string* **end** [week](#) *keyword*  
Tree [week](#)  
Options first, second, third, fourth, last  
Default first  
Introduced 16.0.R1  
Platforms All

**offset number**

|            |  |
|------------|--|
| Synopsis   | Offset for Daylight Savings Time                           |
| Context    | <b>configure system time dst-zone string offset number</b> |
| Tree       | <a href="#">offset</a>                                     |
| Range      | 0 to 60  |
| Units      | minutes  |
| Default    | 60   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**start**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>start</b> context                     |
| Context    | <b>configure system time dst-zone string start</b> |
| Tree       | <a href="#">start</a>                              |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**day keyword**

|            |  |
|------------|--|
| Synopsis   | Day of the week to start Daylight Savings Time                 |
| Context    | <b>configure system time dst-zone string start day keyword</b> |
| Tree       | <a href="#">day</a>  |
| Options    | sunday, monday, tuesday, wednesday, thursday, friday, saturday |
| Default    | sunday   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**hours-minutes string**

|               |   |
|---------------|---|
| Synopsis      | Time to start Daylight Savings Time in hh:mm format                     |
| Context       | <b>configure system time dst-zone string start hours-minutes string</b> |
| Tree          | <a href="#">hours-minutes</a>   |
| String Length | 5   |
| Default       | 00:00   |

Introduced 16.0.R1  
Platforms All

### **month** *keyword*

Synopsis Month to start Daylight Savings Time  
Context **configure** [system time dst-zone](#) *string* **start month** *keyword*  
Tree [month](#)  
Options january, february, march, april, may, june, july, august, september, october, november, december  
Default january  
Introduced 16.0.R1  
Platforms All

### **week** *keyword*

Synopsis Week of the month to start Daylight Savings Time  
Context **configure** [system time dst-zone](#) *string* **start week** *keyword*  
Tree [week](#)  
Options first, second, third, fourth, last  
Default first  
Introduced 16.0.R1  
Platforms All

### **ntp**

Synopsis Enable the **ntp** context  
Context **configure** [system time ntp](#)  
Tree [ntp](#)  
Introduced 16.0.R1  
Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of NTP execution  
Context **configure** [system time ntp admin-state](#) *keyword*

---

|            |                             |
|------------|-----------------------------|
| Tree       | <a href="#">admin-state</a> |
| Options    | enable, disable             |
| Default    | disable                     |
| Introduced | 16.0.R1                     |
| Platforms  | All                         |

### **authentication-check** *boolean*

|            |  |
|------------|--|
| Synopsis   | Authenticate NTP PDUs and reject mismatches  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">time ntp authentication-check</a> <i>boolean</i> |
| Tree       | <a href="#">authentication-check</a>   |
| Default    | true   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **authentication-key** [[key-id](#)] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>authentication-key</b> list instance   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">time ntp authentication-key</a> <i>number</i> |
| Tree       | <a href="#">authentication-key</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **[key-id]** *number*

|            |   |
|------------|---|
| Synopsis   | Authentication key ID used for NTP packets  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">time ntp authentication-key</a> <i>number</i> |
| Tree       | <a href="#">authentication-key</a>  |
| Range      | 1 to 255  |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**key string**

|               |  |
|---------------|--|
| Synopsis      | Key to authenticate NTP packets  |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">time ntp authentication-key</a> <i>number</i> <a href="#">key string</a> |
| Tree          | <a href="#">key</a>  |
| String Length | 1 to 71  |
| Notes         | This element is mandatory.   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**type keyword**

|            |  |
|------------|--|
| Synopsis   | Authentication method to authenticate NTP packet   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">time ntp authentication-key</a> <i>number</i> <a href="#">type keyword</a> |
| Tree       | <a href="#">type</a>   |
| Options    | des, message-digest  |
| Notes      | This element is mandatory.   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**broadcast** [[router-instance](#)] [reference interface-name string](#)

|            |  |
|------------|--|
| Synopsis   | Enter the <b>broadcast</b> list instance   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">time ntp broadcast</a> <a href="#">reference interface-name string</a> |
| Tree       | <a href="#">broadcast</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[[router-instance](#)] reference**

|           |  |
|-----------|--|
| Synopsis  | Router name  |
| Context   | <b>configure</b> <a href="#">system</a> <a href="#">time ntp broadcast</a> <a href="#">reference interface-name string</a> |
| Tree      | <a href="#">broadcast</a>  |
| Reference | <b>configure</b> <a href="#">router</a> <a href="#">string</a>   |
| Notes     | This element is part of a list key.  |

Introduced 16.0.R1  
Platforms All

### **interface-name** *string*

Synopsis Interface to transmit or receive NTP broadcast packets  
Context **configure** [system](#) [time](#) [ntp](#) [broadcast](#) *reference* [interface-name](#) *string*  
Tree [broadcast](#)  
String Length 1 to 32  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms All

### **key-id** *reference*

Synopsis Authentication key and type used by the node  
Context **configure** [system](#) [time](#) [ntp](#) [broadcast](#) *reference* [interface-name](#) *string* [key-id](#) *reference*  
Tree [key-id](#)  
Reference **configure** [system](#) [time](#) [ntp](#) [authentication-key](#) *number*  
Introduced 16.0.R1  
Platforms All

### **ttl** *number*

Synopsis TTL of messages transmitted by the broadcast address  
Context **configure** [system](#) [time](#) [ntp](#) [broadcast](#) *reference* [interface-name](#) *string* [ttl](#) *number*  
Tree [ttl](#)  
Range 1 to 255  
Default 127  
Introduced 16.0.R1  
Platforms All

### **version** *number*

Synopsis NTP version number generated by the node



|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">time ntp broadcast</a> <i>reference</i> <a href="#">interface-name</a> <i>string</i> <a href="#">version</a> <i>number</i> |
| Tree       | <a href="#">version</a>  |
| Range      | 2 to 4   |
| Default    | 4  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **broadcast-client** [[router-instance](#)] *string* [interface-name](#) *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>broadcast-client</b> list instance  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">time ntp broadcast-client</a> <i>string</i> <a href="#">interface-name</a> <i>string</i> |
| Tree       | <a href="#">broadcast-client</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **[router-instance]** *string*

|            |  |
|------------|--|
| Synopsis   | Router name or VPRN service name   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">time ntp broadcast-client</a> <i>string</i> <a href="#">interface-name</a> <i>string</i> |
| Tree       | <a href="#">broadcast-client</a>   |
| Notes      | This element is part of a list key.  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **interface-name** *string*

|               |  |
|---------------|--|
| Synopsis      | Interface to transmit or receive NTP broadcast packets   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">time ntp broadcast-client</a> <i>string</i> <a href="#">interface-name</a> <i>string</i> |
| Tree          | <a href="#">broadcast-client</a>   |
| String Length | 1 to 32  |
| Notes         | This element is part of a list key.  |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

### **authenticate** *boolean*

|            |   |
|------------|---|
| Synopsis   | Enforce authentication of NTP PDUs  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">time ntp broadcast-client</a> <i>string</i> <a href="#">interface-name</a> <i>string</i> <b>authenticate</b> <i>boolean</i> |
| Tree       | <a href="#">authenticate</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **multicast**

|            |  |
|------------|--|
| Synopsis   | Enable the <b>multicast</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">time ntp multicast</a> |
| Tree       | <a href="#">multicast</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **key-id** *reference*

|            |  |
|------------|--|
| Synopsis   | Authentication key and type used by the node   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">time ntp multicast key-id</a> <i>reference</i> |
| Tree       | <a href="#">key-id</a>   |
| Reference  | <b>configure</b> <a href="#">system</a> <a href="#">time ntp authentication-key</a> <i>number</i>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **version** *number*

|             |  |
|-------------|--|
| Synopsis    | NTP version number generated by the node   |
| Context     | <b>configure</b> <a href="#">system</a> <a href="#">time ntp multicast version</a> <i>number</i>   |
| Tree        | <a href="#">version</a>  |
| Description | This command specifies the NTP version number that is generated by the node. This command does not need to be configured when in client mode, in which case all three versions are accepted. |
| Range       | 2 to 4   |
| Default     | 4  |

Introduced 16.0.R1  
Platforms All

### **multicast-client**

Synopsis Enable the **multicast-client** context  
Context **configure** [system](#) [time](#) [ntp](#) [multicast-client](#)  
Tree [multicast-client](#)  
Introduced 16.0.R1  
Platforms All

### **authenticate** *boolean*

Synopsis Enforce authentication of NTP PDUs  
Context **configure** [system](#) [time](#) [ntp](#) [multicast-client](#) [authenticate](#) *boolean*  
Tree [authenticate](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **ntp-server**

Synopsis Enable the **ntp-server** context  
Context **configure** [system](#) [time](#) [ntp](#) [ntp-server](#)  
Tree [ntp-server](#)  
Introduced 16.0.R1  
Platforms All

### **authenticate** *boolean*

Synopsis Authentication of NTP PDUs when acting as a server  
Context **configure** [system](#) [time](#) [ntp](#) [ntp-server](#) [authenticate](#) *boolean*  
Tree [authenticate](#)  
Default false  
Introduced 16.0.R1

Platforms All

### **peer** [*ip-address*] (*ipv4-address-no-zone* | *ipv6-address-no-zone*) *router-instance string*

Synopsis Enter the **peer** list instance

Context **configure system time ntp peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) *router-instance string*

Tree [peer](#)

Introduced 16.0.R1

Platforms All

### **[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP address of the peer for a peering relationship

Context **configure system time ntp peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) *router-instance string*

Tree [peer](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **router-instance string**

Synopsis Router name or VPRN service name

Context **configure system time ntp peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) *router-instance string*

Tree [peer](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **key-id reference**

Synopsis Authentication key and type used by the node

Context **configure system time ntp peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) *router-instance string key-id reference*

|            |   |
|------------|---|
| Tree       | <a href="#">key-id</a>  |
| Reference  | <b>configure system time ntp authentication-key</b> <i>number</i> |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **prefer** *boolean*

|            |  |
|------------|--|
| Synopsis   | Set NTP server as preferred to receive time  |
| Context    | <b>configure system time ntp peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">router-instance</a> <i>string</i> <b>prefer</b> <i>boolean</i> |
| Tree       | <a href="#">prefer</a>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **version** *number*

|             |  |
|-------------|--|
| Synopsis    | NTP version number generated by the node   |
| Context     | <b>configure system time ntp peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">router-instance</a> <i>string</i> <b>version</b> <i>number</i>               |
| Tree        | <a href="#">version</a>  |
| Description | This command specifies the NTP version number that is generated by the node. This command does not need to be configured when in client mode, in which case all three versions are accepted. |
| Range       | 2 to 4   |
| Default     | 4  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **server** [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *keyword*) [router-instance](#) *string*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>server</b> list instance  |
| Context    | <b>configure system time ntp server</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>   <i>keyword</i> ) <a href="#">router-instance</a> <i>string</i> |
| Tree       | <a href="#">server</a>   |
| Introduced | 16.0.R1  |

Platforms All

### [ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *keyword*)

Synopsis IP address of an external NTP server

Context **configure system time ntp server** (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *keyword*) **router-instance string**

Tree **server**

Options ptp

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **router-instance string**

Synopsis Router name or VPRN service name

Context **configure system time ntp server** (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *keyword*) **router-instance string**

Tree **server**

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **key-id reference**

Synopsis Authentication key and type used by the node

Context **configure system time ntp server** (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *keyword*) **router-instance string key-id reference**

Tree **key-id**

Reference **configure system time ntp authentication-key number**

Introduced 16.0.R1

Platforms All

### **prefer boolean**

Synopsis Set NTP server as preferred to receive time

|            |   |
|------------|---|
| Context    | <b>configure system time ntp server</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone   keyword</i> ) <i>router-instance string prefer boolean</i> |
| Tree       | <a href="#">prefer</a>  |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **version number**

|             |  |
|-------------|--|
| Synopsis    | NTP version number generated by the node   |
| Context     | <b>configure system time ntp server</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone   keyword</i> ) <i>router-instance string version number</i>  |
| Tree        | <a href="#">version</a>  |
| Description | This command specifies the NTP version number that is generated by the node. This command does not need to be configured when in client mode, in which case all three versions are accepted. |
| Range       | 2 to 4   |
| Default     | 4  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

### **prefer-local-time boolean**

|             |   |
|-------------|---|
| Synopsis    | Use local time over UTC time in the system  |
| Context     | <b>configure system time prefer-local-time</b> <i>boolean</i>   |
| Tree        | <a href="#">prefer-local-time</a>   |
| Description | <p>When configured to <b>true</b>, the system uses local time. This preference is applied to objects such as log file names, created and completed times reported in log files, NETCONF and gRPC date-and-time leafs, and rollback times displayed in <b>show</b> command outputs.</p> <p>When configured to <b>false</b>, the system uses UTC time.</p> <p><b>Note:</b> The timezone used for <b>show</b> command outputs during a CLI session can be controlled using the <b>environment time-display</b> command.</p> <p><b>Note:</b> The format used for the date-time strings may change, depending on the command setting. For example, when this command is set to <b>true</b>, all date-time strings include a suffix of three to five characters that indicates the timezone used.</p> <p><b>Note:</b> The time format for timestamps on log events is controlled on a per-log basis, using the <b>configure log log-id time-format</b> command.</p> |

|            |         |
|------------|---------|
| Default    | false   |
| Introduced | 16.0.R1 |
| Platforms  | All     |

## sntp

|            |                                   |
|------------|-----------------------------------|
| Synopsis   | Enter the <b>sntp</b> context     |
| Context    | <b>configure system time sntp</b> |
| Tree       | <a href="#">sntp</a>              |
| Introduced | 16.0.R1                           |
| Platforms  | All                               |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of SNTP                                 |
| Context    | <b>configure system time sntp admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>                                  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## server [[ip-address](#)] (*ipv4-address-no-zone | ipv6-address-no-zone*)

|            |   |
|------------|---|
| Synopsis   | Enter the <b>server</b> list instance   |
| Context    | <b>configure system time sntp server</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) |
| Tree       | <a href="#">server</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## [\[ip-address\]](#) (*ipv4-address-no-zone | ipv6-address-no-zone*)

|          |   |
|----------|---|
| Synopsis | IP address of the SNTP server   |
| Context  | <b>configure system time sntp server</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) |
| Tree     | <a href="#">server</a>  |



|            |                                     |
|------------|-------------------------------------|
| Notes      | This element is part of a list key. |
| Introduced | 16.0.R1                             |
| Platforms  | All                                 |

### **interval** *number*

|            |  |
|------------|--|
| Synopsis   | Frequency of querying the server   |
| Context    | <b>configure system time sntp server</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )<br><b>interval</b> <i>number</i> |
| Tree       | <b>interval</b>  |
| Range      | 64 to 1024   |
| Units      | seconds  |
| Default    | 64   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **prefer** *boolean*

|            |   |
|------------|---|
| Synopsis   | Preference value for this SNTP server   |
| Context    | <b>configure system time sntp server</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )<br><b>prefer</b> <i>boolean</i> |
| Tree       | <b>prefer</b>   |
| Default    | false   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **version** *number*

|            |   |
|------------|---|
| Synopsis   | SNTP version supported by this server   |
| Context    | <b>configure system time sntp server</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )<br><b>version</b> <i>number</i> |
| Tree       | <b>version</b>  |
| Range      | 1 to 3  |
| Default    | 3   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**sntp-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Mode for Simple Network Time Protocol (SNTP)  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">time</a> <a href="#">sntp</a> <a href="#">sntp-state</a> <i>keyword</i> |
| Tree       | <a href="#">sntp-state</a>  |
| Options    | unicast, broadcast  |
| Default    | unicast   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**zone**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>zone</b> context   |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">time</a> <a href="#">zone</a> |
| Tree       | <a href="#">zone</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**non-standard**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>non-standard</b> context  |
| Context    | <b>configure</b> <a href="#">system</a> <a href="#">time</a> <a href="#">zone</a> <a href="#">non-standard</a> |
| Tree       | <a href="#">non-standard</a>   |
| Notes      | The following elements are part of a choice: <b>non-standard</b> or <b>standard</b> .                          |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**name** *string*

|               |   |
|---------------|---|
| Synopsis      | Non-standard time zone name   |
| Context       | <b>configure</b> <a href="#">system</a> <a href="#">time</a> <a href="#">zone</a> <a href="#">non-standard</a> <a href="#">name</a> <i>string</i> |
| Tree          | <a href="#">name</a>  |
| String Length | 1 to 5  |
| Introduced    | 16.0.R1   |
| Platforms     | All   |

**offset string**

|               |  |
|---------------|--|
| Synopsis      | Offset from UTC  |
| Context       | <b>configure system time zone non-standard offset string</b> |
| Tree          | <a href="#">offset</a>                                       |
| String Length | 5 to 6   |
| Introduced    | 16.0.R1  |
| Platforms     | All  |

**standard**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>standard</b> context   |
| Context    | <b>configure system time zone standard</b>  |
| Tree       | <a href="#">standard</a>  |
| Notes      | The following elements are part of a choice: <b>non-standard</b> or <b>standard</b> . |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**name keyword**

|            |  |
|------------|--|
| Synopsis   | Standard time zone name  |
| Context    | <b>configure system time zone standard name keyword</b>  |
| Tree       | <a href="#">name</a>   |
| Options    | hst, akst, pst, mst, cst, est, ast, nst, utc, gmt, wet, cet, eet, msk, msd, awst, acst, aest, nzst |
| Default    | utc  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**transmission-profile [[name](#)] string**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>transmission-profile</b> list instance |
| Context    | <b>configure system transmission-profile string</b> |
| Tree       | <a href="#">transmission-profile</a>                |
| Introduced | 16.0.R4   |

Platforms All

### **[name]** *string*

Synopsis File transmission profile name  
Context **configure** [system](#) [transmission-profile](#) *string*  
Tree [transmission-profile](#)  
String Length 1 to 32  
Notes This element is part of a list key.  
Introduced 16.0.R4  
Platforms All

### **ipv4-source-address** *string*

Synopsis IPv4 source address used for the transport protocol  
Context **configure** [system](#) [transmission-profile](#) *string* [ipv4-source-address](#) *string*  
Tree [ipv4-source-address](#)  
Introduced 16.0.R4  
Platforms All

### **ipv6-source-address** *string*

Synopsis IPv6 source address used for the transport protocol  
Context **configure** [system](#) [transmission-profile](#) *string* [ipv6-source-address](#) *string*  
Tree [ipv6-source-address](#)  
Introduced 16.0.R4  
Platforms All

### **redirection** *number*

Synopsis Maximum level of redirection  
Context **configure** [system](#) [transmission-profile](#) *string* [redirection](#) *number*  
Tree [redirection](#)  
Range 1 to 8  
Introduced 16.0.R4

---

Platforms All

### **retry** *number*

Synopsis Number of attempts to reconnecting to the server  
Context **configure** [system](#) [transmission-profile](#) *string* **retry** *number*  
Tree [retry](#)  
Range 1 to 256  
Introduced 16.0.R4  
Platforms All

### **router-instance** *string*

Synopsis Router instance used by the transport protocol  
Context **configure** [system](#) [transmission-profile](#) *string* **router-instance** *string*  
Tree [router-instance](#)  
String Length 1 to 64  
Default Base  
Introduced 16.0.R4  
Platforms All

### **timeout** *number*

Synopsis Timeout for a response from the server  
Context **configure** [system](#) [transmission-profile](#) *string* **timeout** *number*  
Tree [timeout](#)  
Range 1 to 3600  
Units seconds  
Default 60  
Introduced 16.0.R4  
Platforms All

### **usb** [[usb-cflash](#)] *keyword*

Synopsis Enter the **usb** list instance

---

|             |  |
|-------------|--|
| Context     | <b>configure system usb</b> <i>keyword</i>   |
| Tree        | <b>usb</b>   |
| Description | Commands in this context configure the operational state of the USB port.  |
| Introduced  | 22.10.R1   |
| Platforms   | 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se |

**[usb-cflash]** *keyword*

|            |  |
|------------|--|
| Synopsis   | Specifies the compact flash ID   |
| Context    | <b>configure system usb</b> <i>keyword</i>   |
| Tree       | <b>usb</b>   |
| Options    | cf2  |
| Notes      | This element is part of a list key.  |
| Introduced | 22.10.R1   |
| Platforms  | 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se |

**admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of the USB port   |
| Context    | <b>configure system usb</b> <i>keyword</i> <b>admin-state</b> <i>keyword</i>   |
| Tree       | <b>admin-state</b>   |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 22.10.R1   |
| Platforms  | 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se |

### 3.47 test-oam commands

```

configure
- test-oam
  - apply-groups reference
  - apply-groups-exclude reference
  - icmp
    - ipv6
      - apply-groups reference
      - apply-groups-exclude reference
      - length-field boolean
      - maximum-original-datagram boolean
    - ping-template string
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - dot1p number
      - dscp keyword
      - failure-threshold number
      - interval number
      - reactivation-failure-threshold number
      - reactivation-interval number
      - reactivation-threshold number
      - reactivation-timeout number
      - size number
      - timeout number
      - ttl number
  - link-measurement
    - measurement-template string
      - admin-state keyword
      - aggregate-sample-window
        - multiplier number
        - threshold
          - absolute number
          - relative number
        - window-integrity number
      - apply-groups reference
      - apply-groups-exclude reference
      - delay keyword
      - description string
      - interval number
      - last-reported-delay-hold number
      - reporting boolean
      - sample-window
        - multiplier number
        - threshold
          - absolute number
          - relative number
        - window-integrity number
      - twamp-light
        - allow-egress-remark-dscp boolean
        - allow-ipv6-udp-checksum-zero boolean
        - dest-udp-port number
        - dscp keyword
        - fc keyword
        - ipv6-destination-discovery
          - admin-state keyword
          - discovery-interval number
          - discovery-timer number
          - update-interval number
        - pad-tlv-size number

```

configure test-oam link-measurement measurement-template twamp-light profile

- **profile** *keyword*
- **return-path**
  - **link** *boolean*
- **src-udp-port** *number*
- **timestamp-format** *keyword*
- **ttl** *number*
- **unidirectional-measurement** *keyword*
- **mpls-dm**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **twamp**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **server**
    - **admin-state** *keyword*
    - **allow-ipv6-udp-checksum-zero** *boolean*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **inactivity-timeout** *number*
    - **max-connections** *number*
    - **max-sessions** *number*
    - **prefix** (*ipv4-prefix | ipv6-prefix*)
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **description** *string*
      - **max-connections** *number*
      - **max-sessions** *number*
- **twamp-light**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **inactivity-timeout** *number*
  - **source-udp-port-pools**
    - **port** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **pool-type** *keyword*



### 3.47.1 test-oam command descriptions

#### test-oam

|            |                                   |
|------------|-----------------------------------|
| Synopsis   | Enter the <b>test-oam</b> context |
| Context    | <b>configure test-oam</b>         |
| Tree       | <a href="#">test-oam</a>          |
| Introduced | 16.0.R4                           |
| Platforms  | All                               |

#### icmp

|            |                                |
|------------|--------------------------------|
| Synopsis   | Enter the <b>icmp</b> context  |
| Context    | <b>configure test-oam icmp</b> |
| Tree       | <a href="#">icmp</a>           |
| Introduced | 20.10.R1                       |
| Platforms  | All                            |

#### ipv6

|            |                                     |
|------------|-------------------------------------|
| Synopsis   | Enter the <b>ipv6</b> context       |
| Context    | <b>configure test-oam icmp ipv6</b> |
| Tree       | <a href="#">ipv6</a>                |
| Introduced | 22.7.R1                             |
| Platforms  | All                                 |

#### length-field *boolean*

|            |  |
|------------|--|
| Synopsis   | Use length field in ICMPv6 responses                     |
| Context    | <b>configure test-oam icmp ipv6 length-field boolean</b> |
| Tree       | <a href="#">length-field</a>                             |
| Default    | false  |
| Introduced | 22.7.R1  |
| Platforms  | All  |

**maximum-original-datagram** *boolean*

|             |   |
|-------------|---|
| Synopsis    | ICMPv6 traceroute responses with largest datagram   |
| Context     | <b>configure test-oam icmp ipv6 maximum-original-datagram</b> <i>boolean</i>  |
| Tree        | <a href="#">maximum-original-datagram</a>   |
| Description | When configured to <b>true</b> , this command enables the original datagram field of the ICMPv6 error message to be a maximum of 1232 bytes.<br><br>When configured to <b>false</b> , the original datagram field of the ICMPv6 error message smaller than 1232 bytes be built smaller. |
| Default     | false   |
| Introduced  | 22.7.R1   |
| Platforms   | All   |

**ping-template** [[name](#)] *string*

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>ping-template</b> list instance   |
| Context     | <b>configure test-oam icmp ping-template</b> <i>string</i>   |
| Tree        | <a href="#">ping-template</a>  |
| Description | Commands in this context define ping timers and thresholds that verify connectivity and the the operational state of the IP interface. |
| Introduced  | 20.10.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**[name]** *string*

|               |  |
|---------------|--|
| Synopsis      | Ping template name   |
| Context       | <b>configure test-oam icmp ping-template</b> <i>string</i>   |
| Tree          | <a href="#">ping-template</a>                                |
| String Length | 1 to 64  |
| Notes         | This element is part of a list key.                          |
| Introduced    | 20.10.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

**description** *string*

|          |                  |
|----------|------------------|
| Synopsis | Text description |
|----------|------------------|

|               |   |
|---------------|---|
| Context       | <b>configure test-oam icmp ping-template</b> <i>string description string</i> |
| Tree          | <a href="#">description</a>   |
| String Length | 1 to 80   |
| Introduced    | 20.10.R1  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                  |

### **dot1p** *number*

|            |   |
|------------|---|
| Synopsis   | Dot1p in Ethernet header of outgoing ping packets                       |
| Context    | <b>configure test-oam icmp ping-template</b> <i>string dot1p number</i> |
| Tree       | <a href="#">dot1p</a>   |
| Range      | 0 to 7  |
| Default    | 7   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS            |

### **dscp** *keyword*

|            |   |
|------------|---|
| Synopsis   | DSCP value used in the outgoing ping packet   |
| Context    | <b>configure test-oam icmp ping-template</b> <i>string dscp keyword</i>   |
| Tree       | <a href="#">dscp</a>  |
| Options    | be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63 |
| Default    | nc1   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **failure-threshold** *number*

|          |   |
|----------|---|
| Synopsis | Failure threshold to declare inter-connectivity down                                |
| Context  | <b>configure test-oam icmp ping-template</b> <i>string failure-threshold number</i> |
| Tree     | <a href="#">failure-threshold</a>   |
| Range    | 2 to 10   |

|            |  |
|------------|--|
| Default    | 3  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **interval** *number*

|            |   |
|------------|---|
| Synopsis   | Packet transmit interval  |
| Context    | <b>configure</b> <a href="#">test-oam icmp ping-template</a> <i>string</i> <a href="#">interval</a> <i>number</i> |
| Tree       | <a href="#">interval</a>  |
| Range      | 1 to 60   |
| Units      | seconds   |
| Default    | 60  |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **reactivation-failure-threshold** *number*

|             |   |
|-------------|---|
| Synopsis    | Threshold of consecutive failures at reactivation   |
| Context     | <b>configure</b> <a href="#">test-oam icmp ping-template</a> <i>string</i> <a href="#">reactivation-failure-threshold</a> <i>number</i>   |
| Tree        | <a href="#">reactivation-failure-threshold</a>  |
| Description | This command configures the number of consecutive failures that must occur when transmitting at the reactivation interval without success before the transmission interval is changed to the standard interval. |
| Range       | 1 to 10   |
| Default     | 4   |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **reactivation-interval** *number*

|             |  |
|-------------|--|
| Synopsis    | Ping reactivation interval   |
| Context     | <b>configure</b> <a href="#">test-oam icmp ping-template</a> <i>string</i> <a href="#">reactivation-interval</a> <i>number</i>   |
| Tree        | <a href="#">reactivation-interval</a>  |
| Description | This command configures the packet transmit interval used when the IP interface becomes operationally down because of a ping template failure after receiving a successful response to the previous ICMP echo request. |

|            |  |
|------------|--|
| Range      | 1 to 60  |
| Units      | seconds  |
| Default    | 1  |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **reactivation-threshold** *number*

|             |   |
|-------------|---|
| Synopsis    | Success threshold to declare inter-connectivity up  |
| Context     | <b>configure</b> <a href="#">test-oam icmp ping-template</a> <i>string</i> <a href="#">reactivation-threshold</a> <i>number</i>   |
| Tree        | <a href="#">reactivation-threshold</a>  |
| Description | This command configures the minimum number of consecutive successful responses of ICMP replies that must occur before the IP interface transitions from operationally down (due to ping validation failure) to operationally up. This value is a stability metric intended to prevent flapping. |
| Range       | 1 to 10   |
| Default     | 3   |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **reactivation-timeout** *number*

|            |   |
|------------|---|
| Synopsis   | Reactivation wait time before packet is declared lost   |
| Context    | <b>configure</b> <a href="#">test-oam icmp ping-template</a> <i>string</i> <a href="#">reactivation-timeout</a> <i>number</i> |
| Tree       | <a href="#">reactivation-timeout</a>  |
| Range      | 1 to 60   |
| Units      | seconds   |
| Default    | 1   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **size** *number*

|          |   |
|----------|---|
| Synopsis | Data field size of the outgoing ICMP echo packet  |
| Context  | <b>configure</b> <a href="#">test-oam icmp ping-template</a> <i>string</i> <a href="#">size</a> <i>number</i> |
| Tree     | <a href="#">size</a>  |

|            |  |
|------------|--|
| Range      | 12 to 9786   |
| Units      | octets   |
| Default    | 56   |
| Introduced | 20.10.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **timeout** *number*

|            |   |
|------------|---|
| Synopsis   | Wait time before ICMP echo request is declared lost   |
| Context    | <b>configure</b> <a href="#">test-oam icmp ping-template</a> <i>string</i> <b>timeout</b> <i>number</i> |
| Tree       | <a href="#">timeout</a>   |
| Range      | 1 to 60   |
| Units      | seconds   |
| Default    | 5   |
| Introduced | 20.10.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **ttl** *number*

|             |   |
|-------------|---|
| Synopsis    | TTL value for the outgoing ping packet  |
| Context     | <b>configure</b> <a href="#">test-oam icmp ping-template</a> <i>string</i> <b>tll</b> <i>number</i>   |
| Tree        | <a href="#">ttl</a>   |
| Description | This command configures the TTL value used in the outgoing ping packet. The tested interface must be directly connected on the same subnet. |
| Range       | 1 to 255  |
| Default     | 1   |
| Introduced  | 20.10.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **link-measurement**

|          |  |
|----------|--|
| Synopsis | Enter the <b>link-measurement</b> context                  |
| Context  | <b>configure</b> <a href="#">test-oam link-measurement</a> |
| Tree     | <a href="#">link-measurement</a>                           |

|             |   |
|-------------|---|
| Description | Commands in this context configure the link measurement template attributes that are inherited on associated IP interfaces for delay reporting to the routing engine. |
| Introduced  | 21.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **measurement-template** [[template-name](#)] *string*

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>measurement-template</b> list instance   |
| Context     | <b>configure</b> <a href="#">test-oam</a> <a href="#">link-measurement</a> <a href="#">measurement-template</a> <i>string</i>   |
| Tree        | <a href="#">measurement-template</a>  |
| Description | <p>Commands in this context configure the attributes of the measurement template that can be assigned to an IP interface.</p> <p>Changes can be made without disabling the template, although some modifications cause the test on associated IP interfaces to terminate and restart.</p> <p>A measurement template can be removed if no interfaces reference it.</p> |
| Introduced  | 21.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **[template-name]** *string*

|               |   |
|---------------|---|
| Synopsis      | Measurement template name   |
| Context       | <b>configure</b> <a href="#">test-oam</a> <a href="#">link-measurement</a> <a href="#">measurement-template</a> <i>string</i> |
| Tree          | <a href="#">measurement-template</a>  |
| String Length | 1 to 64   |
| Notes         | This element is part of a list key.   |
| Introduced    | 21.7.R1   |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **admin-state** *keyword*

|          |  |
|----------|--|
| Synopsis | Administrative state of the measurement template   |
| Context  | <b>configure</b> <a href="#">test-oam</a> <a href="#">link-measurement</a> <a href="#">measurement-template</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i> |
| Tree     | <a href="#">admin-state</a>  |
| Options  | enable, disable  |
| Default  | disable  |

|            |  |
|------------|--|
| Introduced | 21.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

## aggregate-sample-window

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>aggregate-sample-window</b> context  |
| Context     | <b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">aggregate-sample-window</a>   |
| Tree        | <a href="#">aggregate-sample-window</a>   |
| Description | Commands in this context configure the attributes of the aggregate sample window used with the measurement template assigned to an IP interface. The aggregate sample window is the collection of sample windows. |
| Introduced  | 21.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## multiplier *number*

|            |  |
|------------|--|
| Synopsis   | Number of sample windows in the aggregate sample window  |
| Context    | <b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">aggregate-sample-window multiplier</a> <i>number</i> |
| Tree       | <a href="#">multiplier</a>   |
| Range      | 1 to 12  |
| Default    | 12   |
| Introduced | 21.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## threshold

|            |   |
|------------|---|
| Synopsis   | Enter the <b>threshold</b> context  |
| Context    | <b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">aggregate-sample-window threshold</a> |
| Tree       | <a href="#">threshold</a>   |
| Introduced | 21.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |



**absolute number**

|             |   |
|-------------|---|
| Synopsis    | Absolute delta for delay measurement reporting  |
| Context     | <b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">aggregate-sample-window threshold absolute number</a>   |
| Tree        | <a href="#">absolute</a>  |
| Description | This command configures the absolute minimum delta by which a new delay measurement must differ from the previously reported measurement to be reported to the routing engine.<br><br>If an absolute value is not configured the threshold is disabled. |
| Range       | 1 to 100000   |
| Units       | microseconds  |
| Introduced  | 21.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**relative number**

|             |   |
|-------------|---|
| Synopsis    | Relative delta for measurement reporting  |
| Context     | <b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">aggregate-sample-window threshold relative number</a>   |
| Tree        | <a href="#">relative</a>  |
| Description | This command configures the relative minimum delta by which a new delay measurement must differ from the previously reported measurement to be reported to the routing engine.<br><br>If a relative value is not configured, the threshold is disabled. |
| Range       | 1 to 100  |
| Units       | percent   |
| Introduced  | 21.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**window-integrity number**

|             |  |
|-------------|--|
| Synopsis    | Sample percentage required for window integrity report   |
| Context     | <b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">aggregate-sample-window window-integrity number</a>  |
| Tree        | <a href="#">window-integrity</a>   |
| Description | This command configures the percentage value that is used to determine whether the aggregate sample window is integral, by comparing the number of samples received from the sample window to the percentage configured. |

The configured percentage translates to a required sample window count that must be included in the aggregate sample window. The number of samples is computed as follows:

$$(\text{window-integrity (\%)}) \times (((\text{aggregate-sample-window length (s)}) / (\text{sample-window length (s)}))$$

If the number of samples in the aggregate sample window is equal to or greater than the computed number of required samples, the sample window has integrity and the aggregate sample window result is compared to the configured sample window thresholds.

If the count is less than the computed number of required samples, the aggregate sample window does not have integrity and the value is not considered as representative. In this case the aggregate sample window results are not compared to the configured sample window thresholds.

If this parameter is not configured, integrity checking is disabled and all results are compared to the configured thresholds.

|            |  |
|------------|--|
| Range      | 1 to 100   |
| Units      | percent  |
| Introduced | 21.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **delay** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Delay measurement statistic type  |
| Context     | <b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <b>delay</b> <i>keyword</i> |
| Tree        | <a href="#">delay</a>   |
| Description | This command configures the type of delay measurement statistic used in the sample window and aggregate sample window.    |
| Options     | min, max, avg   |
| Default     | min   |
| Introduced  | 21.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <b>description</b> <i>string</i> |
| Tree          | <a href="#">description</a>  |
| String Length | 1 to 80  |

|            |  |
|------------|--|
| Introduced | 21.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **interval** *number*

|            |   |
|------------|---|
| Synopsis   | Interval between test packet transmissions  |
| Context    | <b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string interval number</i> |
| Tree       | <a href="#">interval</a>  |
| Range      | 1 to 10   |
| Units      | seconds   |
| Default    | 1   |
| Introduced | 21.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **last-reported-delay-hold** *number*

|             |   |
|-------------|---|
| Synopsis    | Time to wait to flush the last reported delay   |
| Context     | <b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string last-reported-delay-hold number</i>   |
| Tree        | <a href="#">last-reported-delay-hold</a>  |
| Description | <p>This command configures the timer that specifies the wait time before the last reported delay measurement is flushed after a link measurement test enters the operationally down state.</p> <p>The aging timer delays the flushing of the last reported delay metric to the routing engine. This timer starts a countdown to zero when an administrative function causes the operational state of the test on that specific interface to transition from up to down. If the timer expires before the operational state transitions to up, the previously reported value is flushed. The Delay Measurement Last Reported indicates “Cleared”. The timestamp indicates the time of the clear event. The Triggered By indicates “Expired”. If the administrative state recovers to operationally up before the expiration of the timer, the previous reported value is not flushed.</p> <p>The aging timer does not apply to failure conditions that do not affect the administrative state of the interface, for example interface failure or routing changes.</p> |
| Range       | 0   1 to 86400  |
| Units       | seconds   |
| Default     | 86400   |
| Introduced  | 21.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**reporting** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Report behavior for values for the configured threshold  |
| Context     | <b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">reporting</a> <i>boolean</i>   |
| Tree        | <a href="#">reporting</a>  |
| Description | <p>When configured to <b>true</b>, the system reports a reached threshold to the routing engine. Reaching a configured <b>sample-window</b> or <b>aggregate-sample-window</b> indicates a value of interest.</p> <p>When configured to <b>false</b>, values reaching thresholds are not reported to the routing engine. In both enabled and disabled cases, the sample-window and aggregate-sample-window information and computed values are stored on the node until overwriting occurs.</p> |
| Default     | true   |
| Introduced  | 22.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**sample-window**

|             |   |
|-------------|---|
| Synopsis    | Enter the <b>sample-window</b> context  |
| Context     | <b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">sample-window</a>   |
| Tree        | <a href="#">sample-window</a>   |
| Description | Commands in this context configure sample window attributes used when the measurement template is assigned to an IP interface. The sample window is the collection of individual probe results over a defined period. |
| Introduced  | 21.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**multiplier** *number*

|             |   |
|-------------|---|
| Synopsis    | Multiplier of interval used for sample window length  |
| Context     | <b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">sample-window</a> <a href="#">multiplier</a> <i>number</i>  |
| Tree        | <a href="#">multiplier</a>  |
| Description | This command configures the number of probe results that should be in the sample window. For example, a multiplier of 10 and an interval of 5 equals 50 probes being transmitted from an individual sample window. Consequently, 50 probe results are expected within the 50 second duration that the sample window is "In-progress". |
| Range       | 1 to 900  |

|            |  |
|------------|--|
| Default    | 10   |
| Introduced | 21.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

## threshold

|            |   |
|------------|---|
| Synopsis   | Enter the <b>threshold</b> context  |
| Context    | <b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">sample-window threshold</a> |
| Tree       | <a href="#">threshold</a>   |
| Introduced | 21.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## absolute *number*

|             |   |
|-------------|---|
| Synopsis    | Absolute delta for delay measurement reporting  |
| Context     | <b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">sample-window threshold absolute</a> <i>number</i>  |
| Tree        | <a href="#">absolute</a>  |
| Description | This command configures the absolute minimum delta by which a new delay measurement must differ from the previously reported measurement to be reported to the routing engine.<br><br>If an absolute value is not configured the threshold is disabled. |
| Range       | 1 to 100000   |
| Units       | microseconds  |
| Introduced  | 21.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

## relative *number*

|             |  |
|-------------|--|
| Synopsis    | Relative delta for delay measurement reporting   |
| Context     | <b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">sample-window threshold relative</a> <i>number</i>                   |
| Tree        | <a href="#">relative</a>   |
| Description | This command configures the relative minimum delta by which a new delay measurement must differ from the previously reported measurement to be reported to the routing engine. |

|            |   |
|------------|---|
|            | If a relative value is not configured, the threshold is disabled. |
| Range      | 1 to 500  |
| Units      | percent   |
| Introduced | 21.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS      |

### **window-integrity** *number*

|             |  |
|-------------|--|
| Synopsis    | Sample percentage required for window integrity report   |
| Context     | <b>configure</b> <b>test-oam</b> <b>link-measurement</b> <b>measurement-template</b> <i>string</i> <b>sample-window</b> <b>window-integrity</b> <i>number</i>  |
| Tree        | <a href="#">window-integrity</a>   |
| Description | <p>This command configures the percentage value that is used to determine whether the sample window has enough samples to be considered representative for that window (integrity), by comparing the number of samples received from the sample window to the percentage configured.</p> <p>The configured percentage considers the interval of probes and the length of the sample window to determine the number of packets required in the sample:</p> $(\text{window-integrity } (\%)) \times ((\text{sample-window length } (s)) / \text{pps per test (interval)})$ <p>If the count is less than the computed number of required samples, the sample window does not have integrity and the sample window results are not compared to configured sample window thresholds.</p> <p>If the count is equal to or greater than the computed number of required samples, the sample window has integrity and the aggregate sample window result is compared to the configured sample window thresholds.</p> <p>If the count is less than the computed number of required samples, the sample window does not have integrity and the value is not considered as representative. In this case the sample window results are not compared to the configured sample window thresholds.</p> <p>If this parameter is not configured, integrity checking is disabled and all results are compared to the configured thresholds.</p> |
| Range       | 1 to 100   |
| Units       | percent  |
| Introduced  | 21.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **twamp-light**

|          |                                      |
|----------|--------------------------------------|
| Synopsis | Enter the <b>twamp-light</b> context |
|----------|--------------------------------------|

|             |   |
|-------------|---|
| Context     | <b>configure</b> <a href="#">test-oam</a> <a href="#">link-measurement</a> <a href="#">measurement-template</a> <i>string</i> <a href="#">twamp-light</a> |
| Tree        | <a href="#">twamp-light</a>   |
| Description | Commands in this context configure TWAMP Light attributes that are used with the measurement template when assigned to IP interfaces.                     |
| Introduced  | 21.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **allow-egress-remark-dscp** *boolean*

|             |   |
|-------------|---|
| Synopsis    | Allow overwrite of DSCP value by the egress QoS policy  |
| Context     | <b>configure</b> <a href="#">test-oam</a> <a href="#">link-measurement</a> <a href="#">measurement-template</a> <i>string</i> <a href="#">twamp-light</a> <a href="#">allow-egress-remark-dscp</a> <i>boolean</i>   |
| Tree        | <a href="#">allow-egress-remark-dscp</a>  |
| Description | <p>When configured to <b>true</b>, the egress QoS process is able to modify the DSCP based on the egress QoS configuration and expose the DSCP to egress DSCP processing rules.</p> <p>When configured to <b>false</b>, the egress QoS process uses the DSCP as configured and bypasses egress QoS DSCP marking.</p> <p>If the <b>configure qos network egress remark-trusted force-egress-marking</b> command is configured for the network egress QoS profile, the egress QoS process is applied and the DSCP can be overwritten regardless of the <b>allow-egress-remark-dscp</b> configuration.</p> |
| Default     | false   |
| Introduced  | 21.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **allow-ipv6-udp-checksum-zero** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Process IPv6 packets with UDP check sum zero   |
| Context     | <b>configure</b> <a href="#">test-oam</a> <a href="#">link-measurement</a> <a href="#">measurement-template</a> <i>string</i> <a href="#">twamp-light</a> <a href="#">allow-ipv6-udp-checksum-zero</a> <i>boolean</i>  |
| Tree        | <a href="#">allow-ipv6-udp-checksum-zero</a>   |
| Description | <p>When configured to <b>true</b>, processing of IPv6 packets that arrive with a UDP checksum of zero is allowed. The destination UDP ports that are registered as TWAMP Test packets in the template allow this behavior.</p> <p>When configured to <b>false</b>, IPv6 packets that arrive with a UDP checksum of zero are discarded.</p> |
| Default     | false  |
| Introduced  | 21.7.R1  |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **dest-udp-port** *number*

Synopsis Destination UDP port used by link measurement tests

Context **configure** [test-oam link-measurement measurement-template](#) *string* [twamp-light dest-udp-port](#) *number*

Tree [dest-udp-port](#)

Description This command configures the destination UDP port on outbound TWAMP Light measurement packets sent from the session controller. The destination UDP port must match the UDP port value configured on the TWAMP Light reflector that responds to this specific TWAMP Light test.

Range 1 to 65535

Default 862

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **dscp** *keyword*

Synopsis DSCP copied to TWAMP Light echo request packet header

Context **configure** [test-oam link-measurement measurement-template](#) *string* [twamp-light dscp](#) *keyword*

Tree [dscp](#)

Description This command configures the DSCP to be copied into the IP header of each TWAMP Light echo request packet launched for the test.

Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Default nc1

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fc** *keyword*

Synopsis Forwarding class name for the TWAMP Light packets



|            |  |
|------------|--|
| Context    | <b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">twamp-light</a> <i>fc</i> <i>keyword</i> |
| Tree       | <a href="#">fc</a>   |
| Options    | be, l2, af, l1, h2, ef, h1, nc   |
| Default    | h1   |
| Introduced | 21.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## ipv6-destination-discovery

|             |  |
|-------------|--|
| Synopsis    | Enter the <b>ipv6-destination-discovery</b> context  |
| Context     | <b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">twamp-light</a> <a href="#">ipv6-destination-discovery</a> |
| Tree        | <a href="#">ipv6-destination-discovery</a>   |
| Description | Commands in this context configure IPv6 discovery of a directly-connected IPv6 peer address.   |
| Introduced  | 22.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## admin-state *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of IPv6 auto destination discovery  |
| Context    | <b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">twamp-light</a> <a href="#">ipv6-destination-discovery</a> <i>admin-state</i> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 22.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

## discovery-interval *number*

|          |  |
|----------|--|
| Synopsis | Transmission frequency for discovery packets   |
| Context  | <b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">twamp-light</a> <a href="#">ipv6-destination-discovery</a> <i>discovery-interval</i> <i>number</i> |
| Tree     | <a href="#">discovery-interval</a>   |

|             |   |
|-------------|---|
| Description | This command configures transmission frequency of the discovery packet to the all-routers multicast group (ff02::2) to discover the link-local address of the peer. This frequency is used during the <b>discover-timer</b> interval. |
| Range       | 1 to 10   |
| Units       | seconds   |
| Default     | 10  |
| Introduced  | 22.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

### **discover-timer** *number*

|             |  |
|-------------|--|
| Synopsis    | Maximum time to remain in the discovery phase  |
| Context     | <b>configure</b> <a href="#">test-oam</a> <a href="#">link-measurement</a> <a href="#">measurement-template</a> <i>string</i> <a href="#">twamp-light ipv6-destination-discovery</a> <b>discover-timer</b> <i>number</i>   |
| Tree        | <a href="#">discover-timer</a>   |
| Description | This command configures the amount of time to transmit peer discovery packets at the <b>discover-interval</b> .<br><br>The timer starts when the IPv6 protocols is enabled under the <b>configure router interface if-attribute delay dynamic twamp-light ipv6</b> context. At the expiration of the <b>discover-interval</b> or when a peer is discovered, whichever comes first, the probe interval changes to the value configured for the <b>update-interval</b> . |
| Range       | 1 to 1800  |
| Units       | seconds  |
| Default     | 60   |
| Introduced  | 22.7.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **update-interval** *number*

|            |   |
|------------|---|
| Synopsis   | Transmission frequency to maintain the peer address   |
| Context    | <b>configure</b> <a href="#">test-oam</a> <a href="#">link-measurement</a> <a href="#">measurement-template</a> <i>string</i> <a href="#">twamp-light ipv6-destination-discovery</a> <b>update-interval</b> <i>number</i> |
| Tree       | <a href="#">update-interval</a>   |
| Range      | 0   1 to 3600   |
| Units      | seconds   |
| Default    | 600   |
| Introduced | 22.7.R1   |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **pad-tlv-size** *number*

Synopsis Optional PAD TLV size

Context **configure** [test-oam link-measurement measurement-template](#) *string* [twamp-light pad-tlv-size](#) *number*

Tree [pad-tlv-size](#)

Description This command enables a STAMP PDU to include the PAD TLV. This increases the size of the STAMP PDU by the size of the added TLV. The PAD TLV includes an all zeros pattern.

Range 4 to 9714

Units bytes

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **profile** *keyword*

Synopsis QoS profile for packet treatment in local node

Context **configure** [test-oam link-measurement measurement-template](#) *string* [twamp-light profile](#) *keyword*

Tree [profile](#)

Description This command specifies if the packets should be treated as in or out of profile as they move through the local node.

Options in, out

Default in

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **return-path**

Synopsis Enter the **return-path** context

Context **configure** [test-oam link-measurement measurement-template](#) *string* [twamp-light return-path](#)

Tree [return-path](#)

Description Commands in this context configure the return-path TLV carried in the STAMP PDU.

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### link *boolean*

Synopsis The Return Path sub-TLV specifying link

Context **configure test-oam link-measurement measurement-template** *string twamp-light return-path link* *boolean*

Tree [link](#)

Description When configured to **true**, the system includes the **return-path** TLV link. The link sub-tlv instructs a Session-Reflector configured for type **stamp** to use the receiving logical IP interface for the transmission of the response packet from the reflector to the **session-sender**. The destination of the reflected packet must be installed in the forwarding table and reachable out the IP interface or the packet is dropped by the Session-Reflector. When there are parallel non-equal cost return paths between the Session-Reflector and the Session-Sender the response packet can only be returned on the lowest cost path.

When configured to **false**, the Return Path TLV carried in the STAMP PDU is not included with the test packet.

Default false

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### src-udp-port *number*

Synopsis Fixed source UDP port for link measurement tests

Context **configure test-oam link-measurement measurement-template** *string twamp-light src-udp-port* *number*

Tree [src-udp-port](#)

Description This command specifies a source UDP port for link measurement tests.

Unless required, Nokia suggests that the link measurement dynamically select an available source UDP port from the dynamic range. Before a UDP port in the configurable range can be configured as a source it must be owned by the application. Use the **configure test-oam twamp twamp-light source-udp-port-pools port pool-type** command to map the port range to the application.

By default a source UDP port allocates from the dynamic range. The configuration of the source port should only be configured when required for interoperability. When the source IP, destination IP, and destination UPD port are the same for a test, the source UDP port must be different in order to uniquely identify the session.

Range 64374 to 64383

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**timestamp-format** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Format of the timestamp used in TWAMP Light PDU   |
| Context     | <b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">twamp-light timestamp-format</a> <i>keyword</i>   |
| Tree        | <a href="#">timestamp-format</a>  |
| Description | This command configures the format of the timestamp used in the TWAMP Light PDU and places the requested timestamp format in the packet using the appropriate epoch. This is unrelated to any time distribution protocol used to synchronize time between clocks. |
| Options     | ntp, ptp  |
| Default     | ntp   |
| Introduced  | 21.7.R1   |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**tll** *number*

|            |   |
|------------|---|
| Synopsis   | Time to live value used in the TWAMP Light test packet  |
| Context    | <b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">twamp-light tll</a> <i>number</i> |
| Tree       | <a href="#">tll</a>   |
| Range      | 1 to 255  |
| Default    | 1   |
| Introduced | 21.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS  |

**unidirectional-measurement** *keyword*

|             |   |
|-------------|---|
| Synopsis    | Method used to compute the unidirectional delay value   |
| Context     | <b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">unidirectional-measurement</a> <i>keyword</i>   |
| Tree        | <a href="#">unidirectional-measurement</a>  |
| Description | This command specifies the unidirectional delay computation method as the actual forward delay (calculated using T2-T1 timestamps) or as derived using the round-trip delay divided by two (required if nodal clocks are not synchronized using an accurate time-synchronization method or protocol such as PTP). |
| Options     | derived, actual   |

---

|            |  |
|------------|--|
| Default    | derived  |
| Introduced | 21.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

## **mpls-dm**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>mpls-dm</b> context                             |
| Context    | <b>configure test-oam mpls-dm</b>                            |
| Tree       | <a href="#">mpls-dm</a>                                      |
| Introduced | 16.0.R6  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

## **admin-state** *keyword*

|            |  |
|------------|--|
| Synopsis   | Administrative state of MPLS DM packet processing            |
| Context    | <b>configure test-oam mpls-dm admin-state</b> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>                                  |
| Options    | enable, disable  |
| Default    | disable  |
| Introduced | 16.0.R6  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

## **twamp**

|            |                                 |
|------------|---------------------------------|
| Synopsis   | Enter the <b>twamp</b> context  |
| Context    | <b>configure test-oam twamp</b> |
| Tree       | <a href="#">twamp</a>           |
| Introduced | 16.0.R4                         |
| Platforms  | All                             |

## **server**

|          |  |
|----------|--|
| Synopsis | Enter the <b>server</b> context        |
| Context  | <b>configure test-oam twamp server</b> |
| Tree     | <a href="#">server</a>                 |

|            |  |
|------------|--|
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **admin-state** *keyword*

|            |   |
|------------|---|
| Synopsis   | Administrative state of the TWAMP server  |
| Context    | <b>configure</b> <a href="#">test-oam twamp server admin-state</a> <i>keyword</i> |
| Tree       | <a href="#">admin-state</a>   |
| Options    | enable, disable   |
| Default    | disable   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                      |

### **allow-ipv6-udp-checksum-zero** *boolean*

|             |  |
|-------------|--|
| Synopsis    | Process IPv6 packets with a zero UDP checksum  |
| Context     | <b>configure</b> <a href="#">test-oam twamp server allow-ipv6-udp-checksum-zero</a> <i>boolean</i>   |
| Tree        | <a href="#">allow-ipv6-udp-checksum-zero</a>   |
| Description | <p>When configured to <b>true</b>, this command configures the acceptance of IPv6 packets with UDP checksums of 0. This optional configuration allows the router to process arriving IPv6 TWAMP Test packets that contain IPv6 UDP checksum of 0x0000. The UDP port specific to this TWAMP Light test bypasses the default discard IPv6 UDP checksum 0x0000. If this optional command is not configured, IPv6 UDP checksum 0x0000 arriving packets are discarded.</p> <p>When configured to <b>false</b>, packets that arrive with an IPv6 UDP checksum of 0x0000 are discarded.</p> |
| Default     | false  |
| Introduced  | 22.2.R1  |
| Platforms   | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **inactivity-timeout** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|          |   |
|----------|---|
| Synopsis | Inactivity timeout for TWAMP control connections  |
| Context  | <b>configure</b> <a href="#">test-oam twamp server inactivity-timeout</a> <i>number</i> |

|            |  |
|------------|--|
| Tree       | <a href="#">inactivity-timeout</a>                           |
| Range      | 60 to 3600   |
| Units      | seconds  |
| Default    | 900  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **max-connections** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |  |
|------------|--|
| Synopsis   | Limit of concurrent TWAMP server control connections                                 |
| Context    | <b>configure</b> <a href="#">test-oam twamp server max-connections</a> <i>number</i> |
| Tree       | <a href="#">max-connections</a>  |
| Range      | 0 to 64  |
| Default    | 32   |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                         |

### **max-sessions** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

|            |   |
|------------|---|
| Synopsis   | Maximum number of concurrent TWAMP server test sessions                           |
| Context    | <b>configure</b> <a href="#">test-oam twamp server max-sessions</a> <i>number</i> |
| Tree       | <a href="#">max-sessions</a>  |
| Range      | 0 to 128  |
| Default    | 32  |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                      |



**prefix** [**ip-prefix**] (*ipv4-prefix* | *ipv6-prefix*)

|                |   |
|----------------|---|
| Synopsis       | Enter the <b>prefix</b> list instance   |
| Context        | <b>configure test-oam twamp server prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) |
| Tree           | <b>prefix</b>   |
| Max. Instances | 100   |
| Introduced     | 16.0.R4   |
| Platforms      | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                              |

**[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

|            |   |
|------------|---|
| Synopsis   | Prefix to match against TWAMP client address  |
| Context    | <b>configure test-oam twamp server prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) |
| Tree       | <b>prefix</b>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R4   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                              |

**description** *string*

|               |  |
|---------------|--|
| Synopsis      | Text description   |
| Context       | <b>configure test-oam twamp server prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>description</b> <i>string</i> |
| Tree          | <b>description</b>   |
| String Length | 1 to 80  |
| Introduced    | 16.0.R4  |
| Platforms     | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

**max-connections** *number*

|          |  |
|----------|--|
| Synopsis | Maximum number of control connections for TWAMP prefix   |
| Context  | <b>configure test-oam twamp server prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>max-connections</b> <i>number</i> |
| Tree     | <b>max-connections</b>   |
| Range    | 0 to 64  |
| Default  | 32   |

|            |  |
|------------|--|
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **max-sessions** *number*

|            |  |
|------------|--|
| Synopsis   | Maximum concurrent TWAMP test sessions based on prefix   |
| Context    | <b>configure</b> <a href="#">test-oam twamp server prefix (ipv4-prefix   ipv6-prefix)</a> <a href="#">max-sessions</a> <i>number</i> |
| Tree       | <a href="#">max-sessions</a>   |
| Range      | 0 to 128   |
| Default    | 32   |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **twamp-light**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>twamp-light</b> context                         |
| Context    | <b>configure</b> <a href="#">test-oam twamp twamp-light</a>  |
| Tree       | <a href="#">twamp-light</a>                                  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

### **inactivity-timeout** *number*

|            |  |
|------------|--|
| Synopsis   | Time to maintain stale state on the session reflector  |
| Context    | <b>configure</b> <a href="#">test-oam twamp twamp-light inactivity-timeout</a> <i>number</i> |
| Tree       | <a href="#">inactivity-timeout</a>   |
| Range      | 10 to 100  |
| Units      | seconds  |
| Default    | 100  |
| Introduced | 16.0.R4  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                                 |

### **source-udp-port-pools**

|          |  |
|----------|--|
| Synopsis | Enter the <b>source-udp-port-pools</b> context |
|----------|--|

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">test-oam twamp twamp-light source-udp-port-pools</a> |
| Tree       | <a href="#">source-udp-port-pools</a>   |
| Introduced | 22.7.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS                      |

### **port** [[port-number](#)] *number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>port</b> list instance  |
| Context    | <b>configure</b> <a href="#">test-oam twamp twamp-light source-udp-port-pools</a> <a href="#">port</a> <i>number</i> |
| Tree       | <a href="#">port</a>   |
| Introduced | 22.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **[port-number]** *number*

|            |  |
|------------|--|
| Synopsis   | Source UDP port pools port number  |
| Context    | <b>configure</b> <a href="#">test-oam twamp twamp-light source-udp-port-pools</a> <a href="#">port</a> <i>number</i> |
| Tree       | <a href="#">port</a>   |
| Range      | 64374 to 64383   |
| Notes      | This element is part of a list key.  |
| Introduced | 22.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS   |

### **pool-type** *keyword*

|             |  |
|-------------|--|
| Synopsis    | Pool type of an application pool   |
| Context     | <b>configure</b> <a href="#">test-oam twamp twamp-light source-udp-port-pools</a> <a href="#">port</a> <i>number</i> <a href="#">pool-type</a> <i>keyword</i>  |
| Tree        | <a href="#">pool-type</a>  |
| Description | <p>This command maps the specified source UDP port to the TWAMP Light application allowed to configure the source UDP port. OAM-PM IP tests can only configure the source UDP port when the port pool UDP source port is configured with a <b>pool-type oam-pm</b>. The <b>test-oam link-measurement measurement-template</b> can only configure the <b>src-udp-port</b> when the port pool UDP source port is configured with <b>pool-type link-measurement</b>.</p> <p>This command maps the specified source UDP port to the application allowed to configure the source UDP port. The OAM-PM IP family of tests can only configure the source UDP port when the port pool UDP source port is configured with a pool-type</p> |

---

oam-pm. The test-oam link-measurement measurement-template can only configure the src-udp-port when the port pool UDP source port is configured with a pool-type link-measurement. A pool-type cannot be changed if its current application is a test (either an oam-pm session or link-measurement template) and is configured to use the specified port, regardless of the administrative or operational state. The configuration reference linking to the source UDP prevents the change.

|            |  |
|------------|--|
| Options    | oam-pm, link-measurement                                     |
| Default    | oam-pm   |
| Introduced | 22.7.R1  |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

## 3.48 vrrp commands

```

configure
- vrrp
- apply-groups reference
- apply-groups-exclude reference
- policy number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- context string
- delta-in-use-limit number
- description string
- priority-event
- host-unreachable (ipv4-address-with-zone | ipv6-address-with-zone)
- apply-groups reference
- apply-groups-exclude reference
- drop-count number
- hold-clear number
- hold-set number
- padding-size number
- priority
- event-type keyword
- priority-level number
- request-interval number
- timeout number
- lag-port-down string
- apply-groups reference
- apply-groups-exclude reference
- hold-clear number
- hold-set number
- number-down number
- apply-groups reference
- apply-groups-exclude reference
- priority
- event-type keyword
- priority-level number
- weight-down number
- apply-groups reference
- apply-groups-exclude reference
- priority
- event-type keyword
- priority-level number
- mc-ipsec-non-forwarding number
- apply-groups reference
- apply-groups-exclude reference
- hold-clear number
- hold-set number
- priority
- event-type keyword
- priority-level number
- port-down string
- apply-groups reference
- apply-groups-exclude reference
- hold-clear number
- hold-set number
- priority
- event-type keyword
- priority-level number
- route-unknown (ipv4-prefix | ipv6-prefix)
- apply-groups reference

```

---

configure vrrp policy priority-event route-unknown apply-groups-exclude

- **apply-groups-exclude** *reference*
- **hold-clear** *number*
- **hold-set** *number*
- **less-specific**
  - **allow-default** *boolean*
- **next-hop** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
- **priority**
  - **event-type** *keyword*
  - **priority-level** *number*
- **protocol** *keyword*

### 3.48.1 vrrp command descriptions

#### **vrrp**

|            |                               |
|------------|-------------------------------|
| Synopsis   | Enter the <b>vrrp</b> context |
| Context    | <b>configure vrrp</b>         |
| Tree       | <a href="#">vrrp</a>          |
| Introduced | 16.0.R1                       |
| Platforms  | All                           |

#### **policy** [[policy-id](#)] *number*

|            |                                       |
|------------|---------------------------------------|
| Synopsis   | Enter the <b>policy</b> list instance |
| Context    | <b>configure vrrp policy number</b>   |
| Tree       | <a href="#">policy</a>                |
| Introduced | 16.0.R1                               |
| Platforms  | All                                   |

#### **[policy-id]** *number*

|            |                                     |
|------------|-------------------------------------|
| Synopsis   | Policy ID                           |
| Context    | <b>configure vrrp policy number</b> |
| Tree       | <a href="#">policy</a>              |
| Range      | 1 to 9999                           |
| Notes      | This element is part of a list key. |
| Introduced | 16.0.R1                             |
| Platforms  | All                                 |

#### **admin-state** *keyword*

|          |   |
|----------|---|
| Synopsis | Administrative state of VRRP priority control policy    |
| Context  | <b>configure vrrp policy number admin-state keyword</b> |
| Tree     | <a href="#">admin-state</a>                             |
| Options  | enable, disable   |
| Default  | enable  |

Introduced 16.0.R1  
Platforms All

### **context** *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Service name to which this policy applies  
Context **configure vrrp policy number context string**  
Tree [context](#)  
String Length 1 to 64  
Introduced 16.0.R1  
Platforms All

### **delta-in-use-limit** *number*

Synopsis Limit on the delta priority control events  
Context **configure vrrp policy number delta-in-use-limit number**  
Tree [delta-in-use-limit](#)  
Range 1 to 254  
Default 1  
Introduced 16.0.R1  
Platforms All

### **description** *string*

Synopsis Text description  
Context **configure vrrp policy number description string**  
Tree [description](#)  
String Length 1 to 80  
Introduced 16.0.R1  
Platforms All



## priority-event

|            |  |
|------------|--|
| Synopsis   | Enter the <b>priority-event</b> context            |
| Context    | <b>configure vrrp policy number priority-event</b> |
| Tree       | <a href="#">priority-event</a>                     |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## host-unreachable [[ip-address](#)] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

|            |   |
|------------|---|
| Synopsis   | Enter the <b>host-unreachable</b> list instance   |
| Context    | <b>configure vrrp policy number priority-event host-unreachable</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) |
| Tree       | <a href="#">host-unreachable</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## [[ip-address](#)] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

|             |  |
|-------------|--|
| Synopsis    | Host IP address that receives a constant ping probe  |
| Context     | <b>configure vrrp policy number priority-event host-unreachable</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> )                                      |
| Tree        | <a href="#">host-unreachable</a>   |
| Description | This command configures the host IP address for which the specific host unreachable priority event monitors connectivity with a continuous ICMP echo request (ping) probe. |
| Notes       | This element is part of a list key.  |
| Introduced  | 16.0.R1  |
| Platforms   | All  |

## drop-count *number*

|          |  |
|----------|--|
| Synopsis | Threshold for consecutive message send attempts  |
| Context  | <b>configure vrrp policy number priority-event host-unreachable</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>drop-count number</b> |
| Tree     | <a href="#">drop-count</a>   |
| Range    | 1 to 60  |
| Default  | 3  |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **hold-clear** *number*

|            |   |
|------------|---|
| Synopsis   | Delay time for a cleared event on the router instance   |
| Context    | <b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event host-unreachable</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>hold-clear</b> <i>number</i> |
| Tree       | <a href="#">hold-clear</a>  |
| Range      | 1 to 86400  |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **hold-set** *number*

|            |   |
|------------|---|
| Synopsis   | Hold time before transitioning to cleared state   |
| Context    | <b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event host-unreachable</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>hold-set</b> <i>number</i> |
| Tree       | <a href="#">hold-set</a>  |
| Range      | 1 to 86400  |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **padding-size** *number*

|            |   |
|------------|---|
| Synopsis   | Packet length padding of the ICMP packet  |
| Context    | <b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event host-unreachable</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>padding-size</b> <i>number</i> |
| Tree       | <a href="#">padding-size</a>  |
| Range      | 0 to 16384  |
| Units      | bytes   |
| Default    | 56  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## priority

|            |  |
|------------|--|
| Synopsis   | Enter the <b>priority</b> context  |
| Context    | <b>configure</b> <a href="#">vrrp policy number</a> <a href="#">priority-event host-unreachable</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">priority</a> |
| Tree       | <a href="#">priority</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## event-type *keyword*

|            |   |
|------------|---|
| Synopsis   | Effect of priority-level value on base priority value   |
| Context    | <b>configure</b> <a href="#">vrrp policy number</a> <a href="#">priority-event host-unreachable</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">priority event-type keyword</a> |
| Tree       | <a href="#">event-type</a>  |
| Options    | delta, explicit   |
| Default    | delta   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## priority-level *number*

|            |  |
|------------|--|
| Synopsis   | Priority level associated with this event  |
| Context    | <b>configure</b> <a href="#">vrrp policy number</a> <a href="#">priority-event host-unreachable</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">priority priority-level number</a> |
| Tree       | <a href="#">priority-level</a>   |
| Range      | 1 to 254   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## request-interval *number*

|          |   |
|----------|---|
| Synopsis | Time interval between consecutive ICMP echo requests  |
| Context  | <b>configure</b> <a href="#">vrrp policy number</a> <a href="#">priority-event host-unreachable</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">request-interval number</a> |
| Tree     | <a href="#">request-interval</a>  |

|            |         |
|------------|---------|
| Range      | 1 to 60 |
| Units      | seconds |
| Default    | 1       |
| Introduced | 16.0.R1 |
| Platforms  | All     |

**timeout** *number*

|            |  |
|------------|--|
| Synopsis   | Timeout for ICMP echo request messages   |
| Context    | <b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event</a> <a href="#">host-unreachable</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">timeout</a> <i>number</i> |
| Tree       | <a href="#">timeout</a>  |
| Range      | 1 to 60  |
| Units      | seconds  |
| Default    | 1  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**lag-port-down** [[lag-name](#)] *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>lag-port-down</b> list instance  |
| Context    | <b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event</a> <a href="#">lag-port-down</a> <i>string</i> |
| Tree       | <a href="#">lag-port-down</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**[lag-name]** *string*

|               |   |
|---------------|---|
| Synopsis      | LAG name  |
| Context       | <b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event</a> <a href="#">lag-port-down</a> <i>string</i> |
| Tree          | <a href="#">lag-port-down</a>   |
| String Length | 1 to 27   |
| Notes         | This element is part of a list key.   |
| Introduced    | 21.2.R1   |
| Platforms     | All   |

**hold-clear** *number*

|            |   |
|------------|---|
| Synopsis   | Delay time for a cleared event on the router instance   |
| Context    | <b>configure</b> <i>vrp policy number priority-event lag-port-down string hold-clear number</i> |
| Tree       | <a href="#">hold-clear</a>  |
| Range      | 1 to 86400  |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**hold-set** *number*

|            |   |
|------------|---|
| Synopsis   | Hold time before transitioning to cleared state   |
| Context    | <b>configure</b> <i>vrp policy number priority-event lag-port-down string hold-set number</i> |
| Tree       | <a href="#">hold-set</a>  |
| Range      | 1 to 86400  |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**number-down** [[number-of-lag-ports-down](#)] *number*

|            |  |
|------------|--|
| Synopsis   | Enter the <b>number-down</b> list instance   |
| Context    | <b>configure</b> <i>vrp policy number priority-event lag-port-down string number-down number</i> |
| Tree       | <a href="#">number-down</a>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**[number-of-lag-ports-down]** *number*

|          |  |
|----------|--|
| Synopsis | Threshold of down LAG ports that create a set event  |
| Context  | <b>configure</b> <i>vrp policy number priority-event lag-port-down string number-down number</i> |
| Tree     | <a href="#">number-down</a>  |
| Range    | 1 to 64  |
| Notes    | This element is part of a list key.  |

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

## priority

|            |   |
|------------|---|
| Synopsis   | Enter the <b>priority</b> context   |
| Context    | <b>configure</b> <a href="#">vrrp policy number</a> <a href="#">priority-event lag-port-down string</a> <a href="#">number-down number</a> <a href="#">priority</a> |
| Tree       | <a href="#">priority</a>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## event-type *keyword*

|            |  |
|------------|--|
| Synopsis   | Effect of priority-level value on base priority value  |
| Context    | <b>configure</b> <a href="#">vrrp policy number</a> <a href="#">priority-event lag-port-down string</a> <a href="#">number-down number</a> <a href="#">priority event-type keyword</a> |
| Tree       | <a href="#">event-type</a>   |
| Options    | delta, explicit  |
| Default    | delta  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## priority-level *number*

|            |   |
|------------|---|
| Synopsis   | Priority level associated with this event   |
| Context    | <b>configure</b> <a href="#">vrrp policy number</a> <a href="#">priority-event lag-port-down string</a> <a href="#">number-down number</a> <a href="#">priority priority-level number</a> |
| Tree       | <a href="#">priority-level</a>  |
| Range      | 1 to 254  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## weight-down [[lag-ports-down-weight](#)] *number*

|          |  |
|----------|--|
| Synopsis | Enter the <b>weight-down</b> list instance |
|----------|--|

|            |   |
|------------|---|
| Context    | <b>configure</b> <i>vrrp policy number priority-event lag-port-down string weight-down number</i> |
| Tree       | <a href="#">weight-down</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **[lag-ports-down-weight]** *number*

|            |   |
|------------|---|
| Synopsis   | LAG name for the reduced LAG ports  |
| Context    | <b>configure</b> <i>vrrp policy number priority-event lag-port-down string weight-down number</i> |
| Tree       | <a href="#">weight-down</a>   |
| Range      | 1 to 64   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **priority**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>priority</b> context  |
| Context    | <b>configure</b> <i>vrrp policy number priority-event lag-port-down string weight-down number priority</i> |
| Tree       | <a href="#">priority</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

### **event-type** *keyword*

|            |   |
|------------|---|
| Synopsis   | Effect of priority-level value on base priority value   |
| Context    | <b>configure</b> <i>vrrp policy number priority-event lag-port-down string weight-down number priority event-type keyword</i> |
| Tree       | <a href="#">event-type</a>  |
| Options    | delta, explicit   |
| Default    | delta   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**priority-level** *number*

|            |   |
|------------|---|
| Synopsis   | Priority level associated with this event   |
| Context    | <b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event lag-port-down</a> <i>string</i> <a href="#">weight-down</a> <i>number</i> <a href="#">priority</a> <a href="#">priority-level</a> <i>number</i> |
| Tree       | <a href="#">priority-level</a>  |
| Range      | 1 to 254  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

**mc-ipsec-non-forwarding** [[tunnel-group-id](#)] *number*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>mc-ipsec-non-forwarding</b> list instance  |
| Context    | <b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event mc-ipsec-non-forwarding</a> <i>number</i> |
| Tree       | <a href="#">mc-ipsec-non-forwarding</a>   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**[tunnel-group-id]** *number*

|            |   |
|------------|---|
| Synopsis   | IPSEC tunnel group monitored by priority control event  |
| Context    | <b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event mc-ipsec-non-forwarding</a> <i>number</i> |
| Tree       | <a href="#">mc-ipsec-non-forwarding</a>   |
| Range      | 1 to 16   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

**hold-clear** *number*

|          |  |
|----------|--|
| Synopsis | Delay time for a cleared event on the router instance  |
| Context  | <b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event mc-ipsec-non-forwarding</a> <i>number</i> <a href="#">hold-clear</a> <i>number</i> |
| Tree     | <a href="#">hold-clear</a>   |
| Range    | 1 to 86400   |
| Units    | seconds  |



|            |  |
|------------|--|
| Introduced | 16.0.R1                                      |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

### **hold-set** *number*

|            |   |
|------------|---|
| Synopsis   | Hold time before transitioning to cleared state   |
| Context    | <b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event mc-ipsec-non-forwarding</a> <i>number</i> <b>hold-set</b> <i>number</i> |
| Tree       | <a href="#">hold-set</a>  |
| Range      | 1 to 86400  |
| Units      | seconds   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **priority**

|            |   |
|------------|---|
| Synopsis   | Enter the <b>priority</b> context   |
| Context    | <b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event mc-ipsec-non-forwarding</a> <i>number</i> <b>priority</b> |
| Tree       | <a href="#">priority</a>  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **event-type** *keyword*

|            |   |
|------------|---|
| Synopsis   | Event type  |
| Context    | <b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event mc-ipsec-non-forwarding</a> <i>number</i> <b>priority</b> <a href="#">event-type</a> <i>keyword</i> |
| Tree       | <a href="#">event-type</a>  |
| Options    | delta, explicit   |
| Default    | delta   |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **priority-level** *number*

|          |   |
|----------|---|
| Synopsis | Priority level associated with this event |
|----------|---|

|            |   |
|------------|---|
| Context    | <b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event mc-ipsec-non-forwarding</a> <i>number</i> <a href="#">priority</a> <a href="#">priority-level</a> <i>number</i> |
| Tree       | <a href="#">priority-level</a>  |
| Range      | 1 to 254  |
| Introduced | 16.0.R1   |
| Platforms  | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR  |

### **port-down** [\[port-id\]](#) *string*

|            |   |
|------------|---|
| Synopsis   | Enter the <b>port-down</b> list instance  |
| Context    | <b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event</a> <a href="#">port-down</a> <i>string</i> |
| Tree       | <a href="#">port-down</a>   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **[port-id]** *string*

|            |   |
|------------|---|
| Synopsis   | Port ID for the reduced LAG ports   |
| Context    | <b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event</a> <a href="#">port-down</a> <i>string</i> |
| Tree       | <a href="#">port-down</a>   |
| Notes      | This element is part of a list key.   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

### **hold-clear** *number*

|            |  |
|------------|--|
| Synopsis   | Delay time for a cleared event on the router instance  |
| Context    | <b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event</a> <a href="#">port-down</a> <i>string</i> <a href="#">hold-clear</a> <i>number</i> |
| Tree       | <a href="#">hold-clear</a>   |
| Range      | 1 to 86400   |
| Units      | seconds  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**hold-set** *number*

|            |  |
|------------|--|
| Synopsis   | Hold time before transitioning to cleared state  |
| Context    | <b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event</a> <a href="#">port-down</a> <i>string</i> <a href="#">hold-set</a> <i>number</i> |
| Tree       | <a href="#">hold-set</a>   |
| Range      | 1 to 86400   |
| Units      | seconds  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**priority**

|            |  |
|------------|--|
| Synopsis   | Enter the <b>priority</b> context  |
| Context    | <b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event</a> <a href="#">port-down</a> <i>string</i> <a href="#">priority</a> |
| Tree       | <a href="#">priority</a>   |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**event-type** *keyword*

|            |  |
|------------|--|
| Synopsis   | Effect of priority-level value on base priority value  |
| Context    | <b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event</a> <a href="#">port-down</a> <i>string</i> <a href="#">priority</a> <a href="#">event-type</a> <i>keyword</i> |
| Tree       | <a href="#">event-type</a>   |
| Options    | delta, explicit  |
| Default    | delta  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

**priority-level** *number*

|            |   |
|------------|---|
| Synopsis   | Priority level associated with this event   |
| Context    | <b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event</a> <a href="#">port-down</a> <i>string</i> <a href="#">priority</a> <a href="#">priority-level</a> <i>number</i> |
| Tree       | <a href="#">priority-level</a>  |
| Range      | 1 to 254  |
| Introduced | 16.0.R1   |

Platforms All

### **route-unknown** [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Enter the **route-unknown** list instance

Context **configure** [vrrp policy](#) *number* [priority-event](#) [route-unknown](#) (*ipv4-prefix* | *ipv6-prefix*)

Tree [route-unknown](#)

Introduced 16.0.R1

Platforms All

### **[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis IP prefix of route monitored by priority control event

Context **configure** [vrrp policy](#) *number* [priority-event](#) [route-unknown](#) (*ipv4-prefix* | *ipv6-prefix*)

Tree [route-unknown](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **hold-clear** *number*

Synopsis Delay time for a cleared event on the router instance

Context **configure** [vrrp policy](#) *number* [priority-event](#) [route-unknown](#) (*ipv4-prefix* | *ipv6-prefix*)  
[hold-clear](#) *number*

Tree [hold-clear](#)

Range 1 to 86400

Units seconds

Introduced 16.0.R1

Platforms All

### **hold-set** *number*

Synopsis Hold time before transitioning to cleared state

Context **configure** [vrrp policy](#) *number* [priority-event](#) [route-unknown](#) (*ipv4-prefix* | *ipv6-prefix*)  
[hold-set](#) *number*

Tree [hold-set](#)

|            |            |
|------------|------------|
| Range      | 1 to 86400 |
| Units      | seconds    |
| Introduced | 16.0.R1    |
| Platforms  | All        |

## less-specific

|            |   |
|------------|---|
| Synopsis   | Enable the <b>less-specific</b> context   |
| Context    | <b>configure vrrp policy number priority-event route-unknown</b> ( <i>ipv4-prefix   ipv6-prefix</i> )<br><b>less-specific</b> |
| Tree       | <b>less-specific</b>  |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## allow-default *boolean*

|            |  |
|------------|--|
| Synopsis   | Match on default route   |
| Context    | <b>configure vrrp policy number priority-event route-unknown</b> ( <i>ipv4-prefix   ipv6-prefix</i> )<br><b>less-specific allow-default <i>boolean</i></b> |
| Tree       | <b>allow-default</b>   |
| Default    | false  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## next-hop [*ip-address*] (*ipv4-address-with-zone | ipv6-address-with-zone*)

|            |   |
|------------|---|
| Synopsis   | Add a list entry for <b>next-hop</b>  |
| Context    | <b>configure vrrp policy number priority-event route-unknown</b> ( <i>ipv4-prefix   ipv6-prefix</i> )<br><b>next-hop</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) |
| Tree       | <b>next-hop</b>   |
| Introduced | 19.5.R1   |
| Platforms  | All   |

## [*ip-address*] (*ipv4-address-with-zone | ipv6-address-with-zone*)

|          |   |
|----------|---|
| Synopsis | Next-hop IP address for a returned route prefix |
|----------|---|

|             |   |
|-------------|---|
| Context     | <b>configure vrrp policy number priority-event route-unknown</b> ( <i>ipv4-prefix   ipv6-prefix</i> )<br><b>next-hop</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) |
| Tree        | <b>next-hop</b>   |
| Description | This command configures the next-hop IP address used to match the route prefix being monitored by the priority control event with the results of a route table lookup.              |
| Notes       | This element is part of a list key.   |
| Introduced  | 19.5.R1   |
| Platforms   | All   |

## priority

|            |  |
|------------|--|
| Synopsis   | Enter the <b>priority</b> context  |
| Context    | <b>configure vrrp policy number priority-event route-unknown</b> ( <i>ipv4-prefix   ipv6-prefix</i> )<br><b>priority</b> |
| Tree       | <b>priority</b>  |
| Introduced | 16.0.R1  |
| Platforms  | All  |

## event-type keyword

|            |   |
|------------|---|
| Synopsis   | Effect of priority-level value on base priority value   |
| Context    | <b>configure vrrp policy number priority-event route-unknown</b> ( <i>ipv4-prefix   ipv6-prefix</i> )<br><b>priority event-type keyword</b> |
| Tree       | <b>event-type</b>   |
| Options    | delta, explicit   |
| Default    | delta   |
| Introduced | 16.0.R1   |
| Platforms  | All   |

## priority-level number

|          |  |
|----------|--|
| Synopsis | Priority level associated with this event  |
| Context  | <b>configure vrrp policy number priority-event route-unknown</b> ( <i>ipv4-prefix   ipv6-prefix</i> )<br><b>priority priority-level number</b> |
| Tree     | <b>priority-level</b>  |
| Range    | 1 to 254   |

---

|            |         |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms  | All     |

### **protocol** *keyword*

|                   |   |
|-------------------|---|
| Synopsis          | Routing protocol as match criterion   |
| Context           | <b>configure</b> <b>vrp policy</b> <i>number</i> <b>priority-event</b> <b>route-unknown</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )<br><b>protocol</b> <i>keyword</i> |
| Tree              | <b>protocol</b>   |
| Options           | bgp, ospf, isis, rip, static, bgp-vpn   |
| Max.<br>Instances | 6   |
| Introduced        | 16.0.R1   |
| Platforms         | All   |

## 4 Deprecated and obsolete commands

This section lists the deprecated and obsolete commands in this major release.



## 4.1 Deprecated commands

This chapter provides a list of commands that are marked as “status deprecated” in the Nokia YANG models and the MD-CLI and should no longer be used. Only releases in which commands are initially deprecated are included in this section. If applicable, the equivalent configuration groups command is also deprecated (but not explicitly listed).

See the SR OS Software Release Notes for more information.

### 4.1.1 22.7.R1

#### router commands:

- configure router nat inside large-scale dual-stack-lite deterministic policy-map
- configure router nat inside large-scale dual-stack-lite deterministic policy-map admin-state
- configure router nat inside large-scale dual-stack-lite deterministic policy-map apply-groups
- configure router nat inside large-scale dual-stack-lite deterministic policy-map apply-groups-exclude
- configure router nat inside large-scale dual-stack-lite deterministic policy-map map
- configure router nat inside large-scale dual-stack-lite deterministic policy-map map apply-groups
- configure router nat inside large-scale dual-stack-lite deterministic policy-map map apply-groups-exclude
- configure router nat inside large-scale dual-stack-lite deterministic policy-map map first-outside-address
- configure router nat inside large-scale dual-stack-lite deterministic policy-map map from
- configure router nat inside large-scale dual-stack-lite deterministic policy-map map to
- configure router nat inside large-scale dual-stack-lite deterministic policy-map nat-policy
- configure router nat inside large-scale dual-stack-lite deterministic policy-map source-prefix
- configure router nat inside large-scale nat44 deterministic policy-map
- configure router nat inside large-scale nat44 deterministic policy-map admin-state
- configure router nat inside large-scale nat44 deterministic policy-map apply-groups
- configure router nat inside large-scale nat44 deterministic policy-map apply-groups-exclude
- configure router nat inside large-scale nat44 deterministic policy-map map
- configure router nat inside large-scale nat44 deterministic policy-map map apply-groups
- configure router nat inside large-scale nat44 deterministic policy-map map apply-groups-exclude
- configure router nat inside large-scale nat44 deterministic policy-map map first-outside-address
- configure router nat inside large-scale nat44 deterministic policy-map map from
- configure router nat inside large-scale nat44 deterministic policy-map map to
- configure router nat inside large-scale nat44 deterministic policy-map nat-policy
- configure router nat inside large-scale nat44 deterministic policy-map source-prefix

#### service commands:

- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map admin-state
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map apply-groups
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map apply-groups-exclude
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map map
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map map apply-groups
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map map apply-groups-exclude
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map map first-outside-address
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map map from
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map map to
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map nat-policy
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map source-prefix
- configure service vprn nat inside large-scale nat44 deterministic policy-map
- configure service vprn nat inside large-scale nat44 deterministic policy-map admin-state
- configure service vprn nat inside large-scale nat44 deterministic policy-map apply-groups
- configure service vprn nat inside large-scale nat44 deterministic policy-map apply-groups-exclude
- configure service vprn nat inside large-scale nat44 deterministic policy-map map
- configure service vprn nat inside large-scale nat44 deterministic policy-map map apply-groups
- configure service vprn nat inside large-scale nat44 deterministic policy-map map apply-groups-exclude
- configure service vprn nat inside large-scale nat44 deterministic policy-map map first-outside-address
- configure service vprn nat inside large-scale nat44 deterministic policy-map map from
- configure service vprn nat inside large-scale nat44 deterministic policy-map map to
- configure service vprn nat inside large-scale nat44 deterministic policy-map nat-policy
- configure service vprn nat inside large-scale nat44 deterministic policy-map source-prefix

#### 4.1.2 22.10.R1

##### lag commands:

- configure lag port-weight-speed
- configure lag weight-threshold
- configure lag weight-threshold action
- configure lag weight-threshold cost
- configure lag weight-threshold value

### 4.1.3 22.10.R3

**isa commands:**

- configure isa video-group ad-insert
- configure isa video-group rt-client

**service commands:**

- configure service ies video-interface adi
- configure service ies video-interface adi scte30
- configure service ies video-interface adi scte30 ad-server
- configure service ies video-interface adi scte30 ad-server address
- configure service ies video-interface adi scte30 local-address
- configure service ies video-interface adi scte30 local-address apply-groups
- configure service ies video-interface adi scte30 local-address apply-groups-exclude
- configure service ies video-interface adi scte30 local-address control
- configure service ies video-interface adi scte30 local-address data
- configure service ies video-interface rt-client
- configure service ies video-interface rt-client apply-groups
- configure service ies video-interface rt-client apply-groups-exclude
- configure service ies video-interface rt-client src-address
- configure service vprn video-interface adi
- configure service vprn video-interface adi scte30
- configure service vprn video-interface adi scte30 ad-server
- configure service vprn video-interface adi scte30 ad-server address
- configure service vprn video-interface adi scte30 local-address
- configure service vprn video-interface adi scte30 local-address apply-groups
- configure service vprn video-interface adi scte30 local-address apply-groups-exclude
- configure service vprn video-interface adi scte30 local-address control
- configure service vprn video-interface adi scte30 local-address data
- configure service vprn video-interface rt-client
- configure service vprn video-interface rt-client apply-groups
- configure service vprn video-interface rt-client apply-groups-exclude
- configure service vprn video-interface rt-client src-address

## 4.2 Obsolete commands

This chapter provides a list of commands that are marked as “status obsolete” in the Nokia YANG models and the MD-CLI. These commands can no longer be used and are considered invalid. Only releases in which commands are initially obsoleted are included in this section. If applicable, the equivalent configuration groups command is also obsoleted (but not explicitly listed).

See the SR OS Software Release Notes for more information.

### 4.2.1 22.2.R1

#### card commands:

- configure card mda access egress pool
- configure card mda access egress pool amber-alarm-threshold
- configure card mda access egress pool apply-groups
- configure card mda access egress pool apply-groups-exclude
- configure card mda access egress pool name
- configure card mda access egress pool red-alarm-threshold
- configure card mda access egress pool resv-cbs
- configure card mda access egress pool resv-cbs amber-alarm-action
- configure card mda access egress pool resv-cbs amber-alarm-action max
- configure card mda access egress pool resv-cbs amber-alarm-action step
- configure card mda access egress pool resv-cbs cbs
- configure card mda access egress pool slope-policy
- configure card mda access ingress pool
- configure card mda access ingress pool amber-alarm-threshold
- configure card mda access ingress pool apply-groups
- configure card mda access ingress pool apply-groups-exclude
- configure card mda access ingress pool name
- configure card mda access ingress pool red-alarm-threshold
- configure card mda access ingress pool resv-cbs
- configure card mda access ingress pool resv-cbs amber-alarm-action
- configure card mda access ingress pool resv-cbs amber-alarm-action max
- configure card mda access ingress pool resv-cbs amber-alarm-action step
- configure card mda access ingress pool resv-cbs cbs
- configure card mda access ingress pool slope-policy
- configure card mda network egress pool
- configure card mda network egress pool amber-alarm-threshold

- configure card mda network egress pool apply-groups
- configure card mda network egress pool apply-groups-exclude
- configure card mda network egress pool name
- configure card mda network egress pool red-alarm-threshold
- configure card mda network egress pool resv-cbs
- configure card mda network egress pool resv-cbs amber-alarm-action
- configure card mda network egress pool resv-cbs amber-alarm-action max
- configure card mda network egress pool resv-cbs amber-alarm-action step
- configure card mda network egress pool resv-cbs cbs
- configure card mda network egress pool slope-policy

**fwd-path-ext commands:**

- configure fwd-path-ext fpe application pw-port
- configure fwd-path-ext fpe application vxlan-termination
- configure fwd-path-ext fpe application vxlan-termination router-instance

**log commands:**

- configure log accounting-policy custom-record override-counter
- configure log accounting-policy custom-record override-counter apply-groups
- configure log accounting-policy custom-record override-counter apply-groups-exclude
- configure log accounting-policy custom-record override-counter e-counters
- configure log accounting-policy custom-record override-counter e-counters in-profile-octets-discarded-count
- configure log accounting-policy custom-record override-counter e-counters in-profile-octets-forwarded-count
- configure log accounting-policy custom-record override-counter e-counters in-profile-packets-discarded-count
- configure log accounting-policy custom-record override-counter e-counters in-profile-packets-forwarded-count
- configure log accounting-policy custom-record override-counter e-counters out-profile-octets-discarded-count
- configure log accounting-policy custom-record override-counter e-counters out-profile-octets-forwarded-count
- configure log accounting-policy custom-record override-counter e-counters out-profile-packets-discarded-count
- configure log accounting-policy custom-record override-counter e-counters out-profile-packets-forwarded-count
- configure log accounting-policy custom-record override-counter i-counters
- configure log accounting-policy custom-record override-counter i-counters all-octets-offered-count
- configure log accounting-policy custom-record override-counter i-counters all-packets-offered-count
- configure log accounting-policy custom-record override-counter i-counters high-octets-discarded-count

- configure log accounting-policy custom-record override-counter i-counters high-packets-discarded-count
- configure log accounting-policy custom-record override-counter i-counters in-profile-octets-forwarded-count
- configure log accounting-policy custom-record override-counter i-counters in-profile-packets-forwarded-count
- configure log accounting-policy custom-record override-counter i-counters low-octets-discarded-count
- configure log accounting-policy custom-record override-counter i-counters low-packets-discarded-count
- configure log accounting-policy custom-record override-counter i-counters out-profile-octets-forwarded-count
- configure log accounting-policy custom-record override-counter i-counters out-profile-packets-forwarded-count
- configure log accounting-policy custom-record override-counter id
- configure log accounting-policy custom-record ref-override-counter
- configure log accounting-policy custom-record ref-override-counter all
- configure log accounting-policy custom-record ref-override-counter e-counters
- configure log accounting-policy custom-record ref-override-counter e-counters in-profile-octets-discarded-count
- configure log accounting-policy custom-record ref-override-counter e-counters in-profile-octets-forwarded-count
- configure log accounting-policy custom-record ref-override-counter e-counters in-profile-packets-discarded-count
- configure log accounting-policy custom-record ref-override-counter e-counters in-profile-packets-forwarded-count
- configure log accounting-policy custom-record ref-override-counter e-counters out-profile-octets-discarded-count
- configure log accounting-policy custom-record ref-override-counter e-counters out-profile-octets-forwarded-count
- configure log accounting-policy custom-record ref-override-counter e-counters out-profile-packets-discarded-count
- configure log accounting-policy custom-record ref-override-counter e-counters out-profile-packets-forwarded-count
- configure log accounting-policy custom-record ref-override-counter i-counters
- configure log accounting-policy custom-record ref-override-counter i-counters all-octets-offered-count
- configure log accounting-policy custom-record ref-override-counter i-counters all-packets-offered-count
- configure log accounting-policy custom-record ref-override-counter i-counters high-octets-discarded-count
- configure log accounting-policy custom-record ref-override-counter i-counters high-packets-discarded-count
- configure log accounting-policy custom-record ref-override-counter i-counters in-profile-octets-forwarded-count

- configure log accounting-policy custom-record ref-override-counter i-counters in-profile-packets-forwarded-count
- configure log accounting-policy custom-record ref-override-counter i-counters low-octets-discarded-count
- configure log accounting-policy custom-record ref-override-counter i-counters low-packets-discarded-count
- configure log accounting-policy custom-record ref-override-counter i-counters out-profile-octets-forwarded-count
- configure log accounting-policy custom-record ref-override-counter i-counters out-profile-packets-forwarded-count
- configure log accounting-policy custom-record ref-override-counter id

**port commands:**

- configure port dwdm channel
- configure port dwdm coherent channel
- configure port dwdm rxdtv-adjust
- configure port dwdm wavetracker
- configure port dwdm wavetracker apply-groups
- configure port dwdm wavetracker apply-groups-exclude
- configure port dwdm wavetracker encode
- configure port dwdm wavetracker encode key1
- configure port dwdm wavetracker encode key2
- configure port dwdm wavetracker power-control
- configure port dwdm wavetracker power-control target-power
- configure port dwdm wavetracker report-alarm
- configure port dwdm wavetracker report-alarm encoder-degrade
- configure port dwdm wavetracker report-alarm encoder-failure
- configure port dwdm wavetracker report-alarm missing-pluggable-voa
- configure port dwdm wavetracker report-alarm power-control-degrade
- configure port dwdm wavetracker report-alarm power-control-failure
- configure port dwdm wavetracker report-alarm power-control-high-limit
- configure port dwdm wavetracker report-alarm power-control-low-limit
- configure port ethernet access ingress queue-group queue-overrides queue monitor-depth

**service commands:**

- configure service cpipe sap ingress qos sap-ingress overrides queue monitor-depth
- configure service epipe sap ingress qos sap-ingress overrides queue monitor-depth
- configure service ies interface sap ingress qos sap-ingress overrides queue monitor-depth
- configure service ipipe sap ingress qos sap-ingress overrides queue monitor-depth
- configure service vpls sap ingress qos sap-ingress overrides queue monitor-depth

- configure service vprn interface sap ingress qos sap-ingress overrides queue monitor-depth

**subscriber-mgmt commands:**

- configure subscriber-mgmt radius-accounting-policy custom-record override-counter
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter apply-groups
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter apply-groups-exclude
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter e-counters
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter e-counters in-profile-octets-discarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter e-counters in-profile-octets-forwarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter e-counters in-profile-packets-discarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter e-counters in-profile-packets-forwarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter e-counters out-profile-octets-discarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter e-counters out-profile-octets-forwarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter e-counters out-profile-packets-discarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter e-counters out-profile-packets-forwarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter i-counters
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter i-counters all-octets-offered-count
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter i-counters all-packets-offered-count
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter i-counters high-octets-discarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter i-counters high-packets-discarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter i-counters in-profile-octets-forwarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter i-counters in-profile-packets-forwarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter i-counters low-octets-discarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter i-counters low-packets-discarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter i-counters out-profile-octets-forwarded-count



- configure subscriber-mgmt radius-accounting-policy custom-record override-counter i-counters out-profile-packets-forwarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter id
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter all
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter e-counters
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter e-counters in-profile-octets-discarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter e-counters in-profile-octets-forwarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter e-counters in-profile-packets-discarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter e-counters in-profile-packets-forwarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter e-counters out-profile-octets-discarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter e-counters out-profile-octets-forwarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter e-counters out-profile-packets-discarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter e-counters out-profile-packets-forwarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter i-counters
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter i-counters all-octets-offered-count
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter i-counters all-packets-offered-count
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter i-counters high-octets-discarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter i-counters high-packets-discarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter i-counters in-profile-octets-forwarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter i-counters in-profile-packets-forwarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter i-counters low-octets-discarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter i-counters low-packets-discarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter i-counters out-profile-octets-forwarded-count

- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter i-counters out-profile-packets-forwarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter id

**system commands:**

- configure system security tls client-cipher-list cipher
- configure system security tls client-cipher-list cipher apply-groups
- configure system security tls client-cipher-list cipher apply-groups-exclude
- configure system security tls client-cipher-list cipher index
- configure system security tls client-cipher-list cipher name
- configure system security tls server-cipher-list cipher
- configure system security tls server-cipher-list cipher apply-groups
- configure system security tls server-cipher-list cipher apply-groups-exclude
- configure system security tls server-cipher-list cipher index
- configure system security tls server-cipher-list cipher name

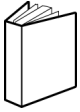
#### 4.2.2 22.10.R1

**system commands:**

- configure system security ssh client-cipher-list-v1
- configure system security ssh client-cipher-list-v1 apply-groups
- configure system security ssh client-cipher-list-v1 apply-groups-exclude
- configure system security ssh client-cipher-list-v1 cipher
- configure system security ssh client-cipher-list-v1 cipher apply-groups
- configure system security ssh client-cipher-list-v1 cipher apply-groups-exclude
- configure system security ssh client-cipher-list-v1 cipher index
- configure system security ssh client-cipher-list-v1 cipher name
- configure system security ssh server-cipher-list-v1
- configure system security ssh server-cipher-list-v1 apply-groups
- configure system security ssh server-cipher-list-v1 apply-groups-exclude
- configure system security ssh server-cipher-list-v1 cipher
- configure system security ssh server-cipher-list-v1 cipher apply-groups
- configure system security ssh server-cipher-list-v1 cipher apply-groups-exclude
- configure system security ssh server-cipher-list-v1 cipher index
- configure system security ssh server-cipher-list-v1 cipher name
- configure system security ssh version



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